Town of North Collins

Agricultural and Farmland Protection Plan

APPENDIX

JANUARY 2023

APPENDIX
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Public Participation

TOWN OF NORTH COLLINS.. SUPPORTING AGRICULTURE

The Town of North Collins is in the process of developing an ***Agricultural and Farmland Protection Plan*** that provides background on the agricultural community along with recommendations that includes guidance, resources, and other tools for the future. It's essentially a Comprehensive Plan that's exclusively centered around agriculture. This plan is being developed with a $25,000 grant from the NYS Department of Agriculture and Markets and a local match from North Collins.

Among other things, the plan helps both the general community and the agricultural community to…

- Demonstrate the local importance of agriculture
  (Environmentally, economically, rural character, etc.)
- Establish a vision for the future of farming
  (Get everyone "on the same page")
- Strengthen economic opportunities for farms and related businesses
- Identify resources for assisting new and old farmers
  (New technologies, trends, markets, processes, etc.)
- Review and recommend policy and land use changes to support agriculture *(Is the Town "farm friendly?")*
- Encourage the long-term viability of farming and food production
- Support positive relationships between farmers, the community, and local government

How can I get involved/learn more?

The Town has a Steering Committee and technical consultant working on the plan, but this is YOUR plan. We'll need your input through the process, so check the Town website for details and documents, attend meetings, participate in surveys, and share your thoughts with us on the future of farming in North Collins!


Phillips Family Farm


Gabel Farms


Awald Farms


Koester Hops


Bowman Farms

Town of North Collins Agricultural and Farmland Protection Plan
Agriculture Advisory Committee Meeting – April 2, 2019

Attendees:

☑	John Tobia, Supervisor	☑	Jeff Keogh, NYSDAM
☑	Bill Gabel	☑	Bernie Rotella (by telephone)
☑	Phil Tremblay	☑	Anthony Rotella
☑	Dylan Stefan	☑	Wendy Salvati, WWS Planning
☑	Charles Richmond	☑	Justin Steinbach, CPL (by telephone)
☑	Mary Richmond		

Survey of Activities/Conditions in North Collins

1. **What things are grown or raised in the Town of North Collins?**

   Soy, corn (feed), Bowman's (veggies), hay, grapes (vineyards), apples, pumpkins/gourds, hops, seasonal berries

2. **What other agricultural pursuits occur within the Town?**

   Horses (boarding/stables for equestrian), goats, cows (dairy/beef), chickens (eggs). Southern Tier Trail member (round barn), wine trail. No formal agricultural tourism.

   Should consider providing "wayfinding" for local markets, especially the Eden Grower's Association Co-op in Eden.

3. **Where does farming occur in the Town?**

   Outside of Main Street/SR 62, everywhere

4. **Does farming or other agricultural activity occur year-round in the Town?**

   Yes. Dairy, beef, equestrian, chickens (eggs).

5. **What do farmers do in the off-season to generate income?**

   Most farmers earn enough during growing season to support themselves through winter; many sell their stored products (soybeans, hay, corn, etc.). They also do equipment repair/maintenance.

6. **Who/What are the markets for agricultural products produced in the Town?**

   Farmers sell hay to dairy farms statewide. Milk is also sold statewide and to New York City. Soybeans are sold statewide. Farmstands operate in town; there is no formal farmer's market, but local farmers sell their products at markets in other locations.

7. **Are markets changing/farming trends changing in the Town?**

   Markets change in response to federal/state/county programs and actions. There is increasing reliance on foreign markets (sometimes Canada), which are affected by foreign demand and the value of the US dollar.

   Per Jeff Kehoe (NYSDAM), there is an industrial hemp pilot program that is being undertaken in New York. He noted that hemp has numerous uses (fiber, protein, oil) and is something that the State is likely to see more of in the future. This activity, however, is highly labor intensive.

8. **What, if any, support services exist in the Town? If none in Town, where do local farmers get supplies, etc.**

   None. Tractor Supply Company has a store located in the Village of North Collins. Springville, Eden, Brant are usual places for supplies/feed.

   Because of competition in other nearby locations, it is hard for local, smaller support businesses to succeed on Route 62.

9. **Are any areas of the Town threatened by residential development?**

   Where Supervisor lives (School Street), Wiser Way/Court (proposal for development available, not built though); these are areas closer to the village.

   As there is not a lot of pressure for development, the town does not average very many new homes in the Town per year.

10. **What areas of the Town should be protected for agricultural activity?**

    Most all upland areas away from Route 62; areas that are currently being farmed.'

    Could consider modifications to the zoning to build in more protection for agriculture (lend preference to farms over residential uses). Could restrict residential to uses that have an accompanying agricultural use.

11. What do you envision for the future of agriculture and farming in the Town?

- No pressure now, but many people rent land and there's always the risk of land being sold resulting in development in the middle of a farm field.
- Want to keep the land in active use. When farm owner dies, what happens to the land? Does it go to another farmer or just lay fallow and wait? Depends on history.
  Per Jeff Kehoe – large lot zoning with proximity to metropolitan areas may threaten agriculture.

12. What would you like the Agricultural and Farmland Protection Plan to accomplish?

Want to keep land in active farm use.

The town has a Right-to-Farm law and signs posted throughout the community that indicate "North Collins is a Right-to-Farm Community".

It is important to do a "farm friendly" analysis of the Town Code to identify land use regulations that might place unreasonable restrictions on farming activities.

13. Should the size of the County Agricultural District be increased in the Town? If so, what areas should be included?

Not really; already big enough.

14. Do you work directly with any County, State or local agencies or organizations for assistance or support (e.g., County Farm Bureau or Soil and Water Conservation Service)? If so, who?

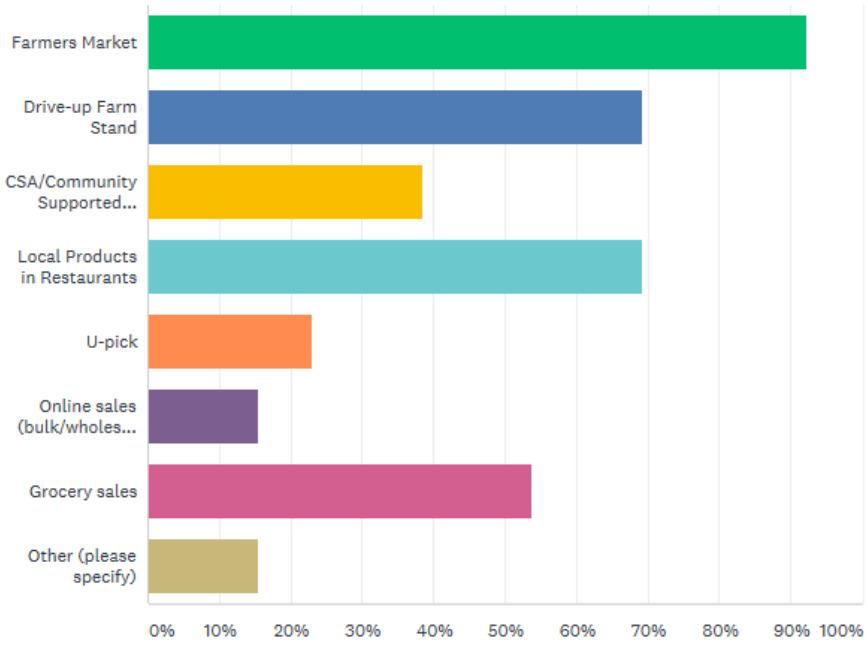
USDA, Erie County Farm Bureau, County Soil and Water, Cooperative Extension (usual cast of characters).

Town of North Collins

Agricultural and Farmland Protection Plan

An online survey is available to gather additional details and feedback from the North Collins community to help develop a better understanding of the current state of agriculture and direction for the future. This survey has been available online and, to date, has received over 20 responses. Of those that responded to the questions, a cursory summary of the data collected is below.

1. 60% of respondents undertake agricultural activities
2. Farming activities include grazing dairy cows & sheep, raising chickens, hay, horses, family garden, vegetables, pumpkins, and berry/apple picking.
3. Over 60% conducted activities year-round
4. As far as being aware of other farming activities in Town, respondents indicated they knew of: greenhouses, dairy farms, berry farms, produce farms, equestrian/riding stables, vineyards, vegetables, timber, snowmobile trails, sheep, nurseries, dog raising kennel, hay, and hops.
5. All respondents (14 of 20 answered) indicated they buy produce/products at local farmers markets or farm stands.
6. Over 90% indicated they would support more opportunities to buy local produce and agricultural products.
7. More places to buy local produce include:



*Other places include the ability to have chickens in the Village

8. Problems that exist with agricultural activities include neighbors complaining, strict Village rules, and no chickens allowed in the Village (only 3 responses overall).
9. Threats to agricultural activities (real or perceived) include a lack of knowledge of agriculture, laws to increase minimum wage, "city people" moving to the Town and complaining of smells/dirty roads, spreading manure, and use of Ag lands for apartment complexes and non-Ag retail.
10. Though most respondents are not aware of any new opportunities for agricultural activities, a few ideas included farmers markets and neighborhood gardens to share work and benefits (harvest).
11. To strengthen the link between food and farms, ideas include:
    - Public knowledge
    - More promotion from local gov't supporting farms
    - Getting kids involved with growing crops and eating produce they helped grow
12. Half of the respondents are aware about farming operations and practices and the benefits associated with farming.
13. Support services requested for existing and future farming activities include:
    - Educational (x5)
    - Financial/funding for current farmers (x7)
    - New technology training (x5)
    - Community support
    - Information on organic farming practices
14. Over 60% are aware of/agree with the statement that "farming preserves open space"
15. Those that indicated that residential development is threatening farms identified the following areas:
    - Route 20
    - Route 62 next to the "old folks home"
16. The vision for the future of farming in North Collins includes:
    - More small, local farms
    - A return of the strawberry festival and market local products
    - Solar
    - Maintaining existing farms

- Don’t overdevelop the Town
- Encouraging new/younger farmers
- Growth in farming opportunities
- Continue to flourish
- More small, organic farms
- Continued farm protection and support
- No unionization of workforce

Appendix B
Town of North Collins Land Use Regulations

Town of North Collins, NY
Tuesday, September 22, 2020

Chapter 128. Farming

[HISTORY: Adopted by the Town Board of the Town of North Collins 6-1-2005 by L.L. No. 2-2005. Amendments noted where applicable.]

GENERAL REFERENCES
Noise — See Ch. **160.**
Subdivision of land — See Ch. **220.**
Zoning — See Ch. **265.**

§ 128-1. Legislative intent and purpose.

A. The Town Board recognizes that farming is an essential enterprise and an important industry which enhances the economic base, natural environment and quality of life in North Collins. Therefore, the Town Board of North Collins finds and declares that this Town encourages its agriculture and urges understanding of and cooperation with the necessary day-to-day operations involved in farming.[1]
[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

B. It is the general purpose and intent of this chapter to maintain and preserve the rural traditions and character of the Town, to permit the continuation of agricultural practices, to protect the existence and operation of farms, to encourage the initiation and expansion of farms and agribusinesses, and to promote new ways to resolve disputes concerning agricultural practices and farm operations. In order to maintain a viable farming economy in North Collins, it is necessary to limit the circumstances under which farming may be deemed to be a nuisance and to allow agricultural practices inherent to and necessary for the business of farming to proceed and be undertaken free of unreasonable and unwarranted interference or restriction.

§ 128-2. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

AGRICULTURAL PRACTICES
Those practices necessary for the on-farm production, preparation and marketing of agricultural commodities. Examples of such practices include, but are not limited to, operation of farm equipment, proper use of agricultural chemicals and other crop-protection methods, manure application and construction and use of farm structures and fences.

AGRICULTURAL PRODUCTS
Those products as defined in § 301, Subdivision 2, of Article 25-AA of the State Agriculture and Markets Law, including but not limited to:

A. Field crops, including corn, wheat, rye, barley, hay, potatoes and dry beans.

B. Fruits, including apples, peaches, grapes, cherries and berries.

C. Vegetables, including tomatoes, snap beans, cabbage, carrots, beets, and onions.

D. Horticultural specialties, including nursery stock, ornamental shrubs, ornamental trees and flowers.

E. Livestock and livestock products, including cattle, sheep, hogs, goats, horses, poultry, farmed deer, farmed buffalo, fur-bearing animals, milk, eggs, and furs.

F. Woodland products, including maple sap, logs, lumber, posts and firewood.

G. Christmas trees derived from a managed Christmas tree operation whether dug for transplanting or cut from the stump.

H. Aquaculture products, including fish, fish products, water plants and shellfish.

I. Woody biomass, which means short rotation woody crops raised for bioenergy and shall not include farm woodland.

FARMER
Any person, organization, entity, association, partnership; limited liability company, or corporation engaged in the business of agriculture, whether for profit or otherwise, including the cultivation of land, the raising of crops, or the raising of livestock.

FARMLAND
Land used in agricultural production, as defined in § 301, Subdivision 4, of Article 25-AA of the State Agriculture and Markets Law.

FARM OPERATION
Shall be defined in § 301, Subdivision 11, of Article 25-AA of the State Agriculture and Markets Law.

FARM WOODLAND
Includes land used for production and sale of woodland products, including but not limited to logs, lumber, posts and firewood.

§ 128-3. Right-to-farm declaration.

A. Farmers, as well as those employed, retained, or otherwise authorized to act on behalf of farmers, may lawfully engage in agricultural practices within this Town at all such times and all such locations as are reasonably necessary to conduct the business of agriculture. For any agricultural practice, in determining the reasonableness of the time, place, and methodology of such practice, due weight and consideration shall be given to both traditional customs and procedures in the farming industry, as well as to advances resulting from increased knowledge and improved technologies.

B. Agricultural practices conducted on farmland shall not be found to be public or private nuisance if such agricultural practices are:

(1) Reasonable and necessary to the particular farm or farm operation;

(2) Conducted in a manner which is not negligent or reckless;

(3) Conducted in conformity with generally accepted and sound agricultural practices;

(4) Conducted in conformity with all local, state, and federal laws and regulations;

(5) Conducted in a manner which does not constitute a threat to public health and safety or cause injury to the health or safety of any person; and

(6) Conducted in a manner which does not unreasonably obstruct the free passage or use of navigable waters or public roadways.

C. Nothing in this chapter shall be construed to prohibit an aggrieved party from recovering from damages for bodily injury or wrongful death due to a failure to follow sound agricultural practices, as outlined in this section.

D. All farmers shall be required to comply with sound agricultural practices as established by the laws of the State of New York and any rules and regulations promulgated by the Commissioner of Agriculture and Markets and/or the State of New York.

§ 128-4. Notice to real estate buyers and prospective neighbors.

A. In order to promote harmony between farmers and their neighbors, the Town requires landholders and/or their agents and assigns to comply with § 310 of Article 25-AA of the State Agriculture and Markets Law and provide notice to prospective purchasers and occupants as follows: "It is the policy of this State and this Community to conserve, protect and encourage the development and improvement of agricultural land for the production of food and other products and also for its natural and ecological value. This notice is to inform prospective residents that farming activities occur within the Town. Such farming activities may include, but not be limited to, activities that cause noise, dust, smoke and odors."

B. A copy of this notice shall be included as an addendum to the purchase and sale contract at the time an offer to purchase is made.

Town of North Collins, NY
Tuesday, November 17, 2020

Chapter 265. Zoning

[HISTORY: Adopted by the Town Board of the Town of North Collins 11-20-1970 (Ch. 185 of the 1991 Code). Amendments noted where applicable.]

GENERAL REFERENCES
Joint Planning Board — See Ch. **42.**
Zoning Board of Appeals — See Ch. **76.**
Adult uses — See Ch. **87.**
Uniform construction codes — See Ch. **121.**
Farming — See Ch. **128.**
Junkyards — See Ch. **144.**
Mobile homes — See Ch. **153.**
Signs — See Ch. **200.**
Site plan review — See Ch. **206.**
Subdivision of land — See Ch. **220.**
Telecommunications facilities — See Ch. **237.**
Wind energy conversion systems — See Ch. **258.**

Article I. General Provisions

§ 265-1. Title.

This chapter shall be known and may be cited as the "Zoning Ordinance of the Town of North Collins, New York."

§ 265-2. Purpose and scope.

A comprehensive zoning plan is hereby established for the area of the Town of North Collins outside the incorporated area of the Village of North Collins by dividing the territory thereof into certain districts and prescribing regulations for buildings or other structures and the use of land therein. The comprehensive zoning plan set forth in the text and map which constitute this chapter is adopted in order to promote and protect the public health, safety, comfort, convenience and prosperity and other aspects of the general welfare. These general goals include, among others, the following specific purposes: to provide for adequate light, air and convenience of access; to prevent undue concentration of population and overcrowding of land; to lessen congestion in the streets; to secure safety from fire, flood, panic and other dangers; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements. The comprehensive zoning plan also gives consideration to the recommendations contained in the Master Plan for the Town of North Collins prepared in 1969.

Article II. Terminology

§ 265-3. Word usage.

Rules of construction of language in this chapter shall be as follows:

A. Words used in the present tense include the future tense.

B. Words used in the singular include the plural, and words used in the plural include the singular.

C. The word "lot" includes the word "plot" or "parcel."

D. The word "person" includes an individual, firm or corporation.

E. The word "shall" is always mandatory.

F. The words "used" or "occupied," as applied to any land or building, shall be construed to include the words "intended, arranged or designed to be used or occupied."

G. Any reference to an "R District" shall be interpreted to mean R-1, R-2, R-A and R-C Districts.

H. Any reference to a "C District" shall be interpreted to mean C-1 and C-2 Districts.

I. Any reference to an "M District" shall be interpreted to mean M-1 and M-2 Districts.

§ 265-4. Definitions.

For the purpose of this chapter, certain terms or words used herein shall be interpreted or defined as follows:

ACCESSORY BUILDING OR STRUCTURE

A building or structure, the use of which is incidental to that of the main building and which is located on the same premises.

ACCESSORY USE

A use customarily incidental and subordinate to the principal use or building and located on the same lot with such principal use or building, except as otherwise provided for off-street parking.

ALTERATION

Any change, rearrangement or addition to or any relocation of a building or structure or any modification in construction or equipment.

BED-AND-BREAKFAST

A lodging facility, including a tourist home, in a residential dwelling property for lodging only or lodging and breakfast, for short-term, transient guests, with any stay not to exceed 14 days in duration.
[Added 12-4-1991 by L.L. No. 2-1991]

BUILDING

A combination of any materials, whether portable or fixed, having a roof, to form a structure affording shelter for persons, animals or property. The word "building" shall be construed, when used herein, as though followed by the words "or part or parts thereof," unless the context clearly requires a different meaning.

BUILDING HEIGHT

The vertical distance measured from the average elevation of the proposed finished grade at the front of the building to the highest point of the roof for flat roofs, to the deckline of mansard (a roof with a double pitch on all sides) roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs.

DWELLING

A building used as the living quarters for one or more families.

A. **DWELLING UNIT**
One or more rooms designed for occupancy by one family for cooking, living and sleeping purposes.

B. **SINGLE-FAMILY DWELLING**
A building containing one dwelling unit and designed or used exclusively for occupancy by one family.

C. **TWO-FAMILY DWELLING**
A building containing two dwelling units and designed or used exclusively for occupancy by two families living independently of each other or two one-family dwellings having a party wall in common.

D. **MULTIFAMILY DWELLING**
A building or portion thereof containing three or more dwelling units and designed or used for occupancy by three or more families living independently of each other.

DWELLING GROUP
A group of two or more dwellings located on the same lot and having any yard or open space in common.

ENLARGEMENT
An increase in floor area of an existing building or an increase in size of an existing structure or an increase in the area of land used for an existing open use.

EXTENSION
An increase in the amount of existing floor area used for an existing use in an existing building.

FAMILY
One or more persons living together in one dwelling unit and maintaining a common household, including domestic servants and gratuitous guests, together with boarders, roomers or lodgers not in excess of the number allowed by this chapter as an accessory use.

GARAGE, PRIVATE
An accessory building or portion of a main building used for the storage of self-propelled vehicles, including commercial vehicles having a rated capacity of not more than 3/4 ton used by the occupants of the premises, and may include space for not more than one passenger vehicle used by others.

GASOLINE STATION
Any area of land, including structures thereon, that is used for the sale of gasoline, other motor vehicle fuel, oil or other lubricating substances or motor vehicle accessories and which may or may not include facilities for lubricating, washing or otherwise servicing motor vehicles, but not including the painting thereof or the storage of vehicles for any purpose other than servicing with fuel, lubricants, antifreeze, tire repair and other emergency repairs of a temporary nature.

HOTEL
A building containing sleeping rooms in which lodging is provided primarily for transient guests for compensation and which may include public dining facilities.

JUNKYARD
A place where junk, waste, discarded or salvaged materials are bought, sold, exchanged, sorted, stored, baled, packed, disassembled, handled or abandoned; but not including pawnshops, antique shops, establishments for the sale, purchase or storage of used furniture, household equipment, clothing, used motor vehicles capable of being registered or machinery to be reused for the purpose for which originally manufactured.

KENNEL

An establishment for the breeding, treatment, keeping, harboring or care of 10 or more dogs and/or cats for commercial purposes.
[Amended 11-5-1997 by L.L. No. 2-1997]

LOT

A parcel of land occupied or capable of being occupied by a principal building or use, or a group of principal buildings or uses that are united by a common interest or customary accessory buildings or uses, and including such open spaces to be used in connection with such buildings or uses. A "lot" may or may not be a lot of record.

LOT, CORNER

A lot at the junction of and fronting on two or more intersecting streets.

LOT DEPTH

The mean horizontal distance between the front and rear lot lines.

LOT, INTERIOR

A lot other than a corner lot.

LOT LINE, FRONT

Where a lot abuts upon only one street, the street line shall be the "front lot line." Where a lot abuts upon more than one street, the assessment roll of the Town of North Collins shall determine the "front lot line."

LOT LINE, REAR

Any lot line which is opposite and more or less parallel with the front lot line. In the case of a lot which comes to a point at the rear, the "rear lot line" shall be an imaginary line 10 feet in length, entirely within the lot, parallel to and most distant from the front lot line.

LOT LINES

The property lines bounding a lot. Where any property line parallels a street and is not coincident with the street line, the street line shall be construed as the property line for the purpose of complying with the area and setback regulations of this chapter.

LOT LINE, SIDE

Any lot line which is not a front lot line or a rear lot line.

LOT, THROUGH

A lot in which the front lot line and rear lot line abut a street.

LOT WIDTH

The least horizontal distance across the lot between side lot lines, measured at the front of a main building erected or to be erected on such lot or at a distance from the front lot line equal to the required depth of the front yard.

MOTEL

A building or group of buildings, whether detached or in connected units, used as individual sleeping or dwelling units, designed primarily for transient automobile travelers and providing accessory off-street parking facilities. The term "motel" includes buildings designated as "motor lodges," "auto courts" and similar appellations.

NONCONFORMING USE

Any lawful use of land, premises, building or structure which does not conform to the regulations of this chapter for the district in which such use is located either at the effective date of this chapter or as a result of subsequent amendments thereto.

NURSERY SCHOOL

A school designed to provide daytime care or instruction for two or more children from two to five years of age, inclusive, and operated on a regular basis.

NURSING OR CONVALESCENT HOME

Any building where persons are housed or lodged and furnished with meals and nursing care for hire.

PUBLIC GARAGE or REPAIR GARAGE

Any garage other than a private garage and which is used for storage, repair, rental, greasing, washing, servicing, adjusting or equipping of automobiles or other motor vehicles.

REPAIR

Replacement or renewal, excluding additions, of any part of a building, structure, device or equipment with like or similar materials or parts for the purpose of maintenance of such building, structure, device or equipment.

SETBACK

The least horizontal distance from any existing or proposed building or structure to the nearest point in an indicated lot line or street line.

SIGN

Any structure or part thereof or any device attached to, painted on or represented on a building or other structure upon which is displayed or included any letter, work, model, banner, flag, pennant, insignia, decoration, device or representation used as or which is in the nature of an announcement, direction, advertisement or other attention-directing device. A "sign" shall not include a similar structure or device located within a building except for illuminated signs within show windows. A "sign" includes any billboard but does not include the flag, pennant or insignia of any nation or association of nations or of any state, city or other political unit or of any political, charitable, educational, philanthropic, civic, professional, religious or like campaign, drive, movement or event.

SIGN, ADVERTISING OR BILLBOARD

A sign which directs attention to a business, commodity, service or entertainment conducted, sold or offered elsewhere than upon the same zoning lot.

SIGN, FLASHING

Any moving or animated sign or any illuminated sign on which the artificial or reflected light is not maintained stationary and constant in intensity and color at all times when in use. Any revolving illuminated sign shall be considered a "flashing sign."

SIGN, ILLUMINATED

Any sign designed to give forth any artificial light or designed to reflect light from one or more sources, natural or artificial.

STORY

That portion of a building between the surface of any floor and the surface of the floor next above it or, if there is no floor above it, then the space between any floor and the ceiling next above it. A basement shall be counted as a "story" for purposes of height measurement if the ceiling is more than five feet above the average adjoining ground level or if used for business or dwelling purposes.

A. **HALF-STORY**

A story under a sloping roof having a ceiling height of seven feet or more for an area not exceeding 1/2 the floor area of the next lower full story in the building.

STREET

Any road, avenue, lane, alley or other way which is an existing public way or which is shown on an approved plat or any private right-of-way or easement approved by the Town Board.

STREET LINE
A line separating a lot from a street. In any case where a future street line has been established or approved by the Town Board, such future street line shall be considered as a "street line" for the purposes of determining lot area and setback requirements.

STRUCTURAL ALTERATION
Any change in the supporting members of a building or other structure, such as bearing walls, columns, beams or girders.

STRUCTURE
Anything constructed or erected which requires permanent location on the ground or attachment to something having such location, but not including a trailer.

TOURIST HOME
A dwelling in which overnight accommodations are provided or offered for transient guests for compensation.

TRAILER (MOBILE HOME)
A vehicle used for living or sleeping purposes and standing on wheels or on rigid supports.

USE
The specific purpose for which land or a building is designed, arranged or intended or for which it is or may be occupied or maintained.

YARD
That portion of a lot extending open and unobstructed from the ground upward along a lot line.

YARD, FRONT
A yard extending the full length of the front lot line between side lot lines. The front yard depth of a lot located on a curve shall be measured from the cord connecting the arc of the front lot line.

YARD, FRONT EQUIVALENT
That portion of a rear yard of a through lot extending along a street line and from the street line for a depth equal to a required front yard. Any front yard equivalent shall be subject to the regulations of this chapter which apply to front yards.

YARD, REAR
On an interior lot, a yard extending for the full length of the rear lot line between side lot lines; on a corner lot, a yard extending along a rear lot line between an interior side line and a side yard which abuts a street.

YARD, REQUIRED
A yard having a depth or width set forth in the applicable district regulations. Such depth or width shall be measured perpendicular to lot lines.

YARD, SIDE
A yard extending along a side lot line from the required front yard to the required rear yard, except that on a corner lot where the side lot line abuts a street, the side yard shall extend from the required front yard to the rear lot line.

A. **EXTERIOR SIDE YARD**
A side yard extending along a street line.

B. **INTERIOR SIDE YARD**
A side yard extending along a lot line of an adjoining lot.

Article III. Zoning Districts

§ 265-5. Establishment of districts.

[Amended 4-9-1975 by L.L. No. 1-1975]
The area of the Town of North Collins outside the incorporated area of the Village of North Collins is hereby divided into the following zoning districts:

A. Residence districts:

R-1	Single-Family Residence District
R-2	General Residence District
R-M	Residence-Mobile Home Court District
R-A	Residence-Agricultural District
R-C	Residence-Restricted Business District

B. Business districts:

C-1	Local Retail Business District
C-2	General Commercial District

C. Industrial districts:

M-1	Planned Light Industrial District
M-2	General Industrial District

§ 265-6. Zoning Map.

The location and boundaries of any or all of the aforementioned zoning districts are shown on the map entitled "Town of North Collins Zoning Map," which, with all explanatory matter thereon, is hereby incorporated into this chapter and shall be as much a part of this chapter as if fully set forth and described herein.[1] As evidence of the authenticity of the Zoning Map, said map and all amendments thereto shall be duly certified by the Town Clerk and shall be posted and filed according to Article 16 of the Town Law. The Town Board shall determine which, if not all, of the aforesaid zoning districts mentioned in the text of this chapter shall appear, by location and boundaries, on the Zoning Map at any given time.

[1] *Editor's Note: The Zoning Map is on file in the Town offices.*

§ 265-7. Interpretation of district boundaries.

Where uncertainty exists with respect to the boundaries of any of the aforesaid districts as shown on the Town of North Collins Zoning Map, the following rules shall apply:

A. Where district boundaries are indicated as approximately following the center lines of streets or highways, street lines or highway right-of-way lines such center lines, street lines or highway right-of-way lines shall be construed to be such boundaries.

B. Where district boundaries are so indicated that they approximately follow the lot lines, such lot lines shall be construed to be said boundaries.

C. Where district boundaries are so indicated that they are approximately parallel to the center lines or street lines of streets or the center lines or right-of-way lines of highways, such district boundaries shall be construed as being parallel thereto and at such distance therefrom as

indicated on the Zoning Map. If no distance is given, such dimension shall be determined by the use of the scale shown on said Zoning Map.

D. Where the boundary of a district follows a railroad line, such boundary shall be deemed to be located in the middle of the main tracks of said railroad line.

§ 265-8. Applicability.

Except as hereinafter provided:

A. No building, other structure or land shall hereafter be used or occupied and no building or other structure or part thereof shall be erected, relocated, altered, extended or enlarged unless in conformity with the use, height and area regulations specified herein for the district in which such building, other structure or land is located and in conformity with all other regulations of this chapter.

B. No lot area shall be reduced or diminished so that the yards or other open space thereon shall be less than prescribed by this chapter, nor shall the density of population be increased in any manner except in conformity with area requirements herein established. If, at the time of adoption of this chapter or of any subsequent amendment increasing the area or open space requirements, the lot area or required open spaces are less than the minimum required by this chapter, such area or open space shall not be further reduced.

C. No yard or other open space provided on one lot for the purpose of complying with the provisions of this chapter shall be considered as providing a yard or open space required on any other lot.

§ 265-9. Certain public uses excluded.

[Amended 12-4-1991 by L.L. No. 2-1991]
The regulations of this chapter shall not be so construed as to limit or interfere with the dedication, development or use of any land or building for public parks, public playgrounds or public schools required for compulsory education; or with the use of land or buildings owned by the United States Government, the State of New York, the County of Erie or the Town of North Collins and used for governmental purposes; or with the construction, installation, operation and maintenance for public utility purposes of water or gas pipes, mains or conduits, electric light or electric power transmission or distribution lines, telephone or telegraph lines, oil pipelines, sewers, sewer mains or incidental appurtenances; or with any highway or railroad right-of-way existing or hereafter authorized by the State of New York, duly constituted public authorities of the State of New York, the County of Erie or the Town of North Collins. These exceptions, however, shall not be interpreted to permit yards, garages or other buildings for service or storage by said public utilities which are otherwise prohibited by this chapter in appropriate districts.

§ 265-10. Prior approved building permits.

Nothing contained in this chapter shall prevent the construction of a building or other structure for which a building permit has been lawfully issued and which is made nonconforming by this chapter or subsequent amendments thereto, provided that either:

A. Construction of the foundation shall have commenced prior to the nonconforming date and construction thereafter is diligently prosecuted; or

B. The Zoning Board of Appeals makes a finding that substantial expenditures have been made or substantial financial obligations have been incurred for such nonconforming building or structure prior to the nonconforming date.

§ 265-11. Construal as minimum provisions; conflict with other provisions.

A. In their interpretation and application, the provisions of this chapter shall be considered to be minimum requirements to promote and protect the public health, safety, comfort, convenience and prosperity and other aspects of the general welfare.

B. Whenever any provision of this chapter is at variance or conflict with any other provision of this chapter or any other statute, local ordinance or regulation covering any of the same subject matter, the most restrictive provision or the one imposing the higher standard shall govern.

Article IV. Use Groups

§ 265-12. Classification by use groups.

[Amended 4-9-1975 by L.L. No. 1-1975]
In order to carry out the provisions of this chapter, the uses of buildings or other structures and of land are hereby classified and combined into use groups, listed below. The lower number indicates the more-restricted use group.

A. Use Group 1 uses are first permitted in the R-1 District.

B. Use Group 2 uses are first permitted in the R-2 District.

C. Use Group 2A uses are first permitted in the R-M District.

D. Use Group 3 uses are first permitted in the R-A District.

E. Use Group 4 uses are first permitted in the R-C District.

F. Use Group 5 uses are first permitted in the C-1 District.

G. Use Group 6 uses are first permitted in the C-2 District.

H. Use Group 7 uses are first permitted in the M-1 District.

I. Use Group 8 uses are first permitted in the M-2 District.

§ 265-13. Interpretation of uses.

Unless otherwise provided:

A. When a use is first, included in any use group, such use shall be interpreted as being excluded from any use group with a lower number.

B. A use which is not specifically listed in any zoning district shall be interpreted as being a special permit use until this chapter has been amended listing such use as a permitted use in the appropriate district.
[Amended 12-4-1991 by L.L. No. 2-1991]

Article V. Residence District Regulations

§ 265-14. R-1 Single-Family Residence District.

A. Permitted principal uses and structures shall be as follows:

(1) Single-family dwellings.

(2) Churches or other places of worship or religious education, parish houses, convents, rectories or parsonages.

(3) Private, nonprofit, elementary or secondary schools accredited by the New York State Department of Education.

(4) Public libraries.

(5) Fire stations without club facilities.

(6) Golf courses, except miniature golf courses and practice driving ranges operated as individual commercial enterprises, including accessory buildings, structures and uses which are necessary for or customary to golf course operation; provided, further, that no building or structure shall be less than 100 feet from any street line or any other lot in an R District.

B. Permitted accessory uses and structures shall be as follows:

(1) Accessory uses and structures customarily incidental to permitted principal uses.

(2) Private garages or off-street parking spaces (See Article **VIII**.), including the parking of not more than one commercial vehicle, provided that the vehicle is used by the occupant of the premises, does not exceed 3/4 ton's rated capacity and is stored within a completely enclosed building.

(3) Storage, only in an enclosed building, of house trailers, utility trailers or boats owned by the occupant of the premises for his personal use.

(4) Buildings for private horticultural purposes.

(5) Private swimming pools, provided that they are located in the rear of the front setback line and do not occupy any part of a required side yard. In the case of any private, nonmovable swimming pool more than 24 inches in depth, the pool deck or the immediate surrounding yard shall be completely enclosed by a chain-link fence or a substitute type of fence approved by the Code Enforcement Officer which offers the same degree of security against accidental or unauthorized entry. Such fence shall be at least five feet in height, and entrance gates shall be kept locked when no one is on the premises.

(6) Offices or studios of resident medical or osteopathic physicians, dentists, physiotherapists, chiropodists, podiatrists, chiropractors, lawyers, engineers, architects, accountants, insurance agents, real estate agents, artists, musicians and teachers, provided that:
[Amended 12-4-1991 by L.L. No. 2-1991]

(a) Such use shall be located within a dwelling and shall be clearly incidental to the primary residential use.

(b) Not more than one additional person shall be employed on said premises as an assistant to the occupant.

(c) Such use shall not include the confinement of any person under care or treatment.

(7) The storage of gasoline or similar flammable liquids in quantities not to exceed 10 gallons. Such limitation shall not apply to fuel oil used for heating purposes on the premises.

(8) Signs, as follows and in accordance with Chapter **200**, Signs:
[Amended 12-4-1991 by L.L. No. 2-1991]

(a) Identification signs. One nonilluminated sign not exceeding two square feet in area and indicating only the name and address of the occupant or a permitted occupation. Such sign may be attached to a building or may be on a separate support not more than four feet in height and shall be at least five feet from any property line or street line.

(b) Real estate signs.

[1] One nonilluminated sign not exceeding six square feet in area and advertising only the prospective sale or rental of the premises on which such sign is located. Such sign shall not be placed within 10 feet of any property line or street line.

[2] One nonilluminated sign not exceeding 50 square feet in area in connection with the development or subdivision of real property. Such sign shall be permitted for a period of not to exceed one year and shall not be placed within 25 feet of any lot line or street line.

(c) Institutional signs. One nonilluminated church, school or other institutional bulletin board or identification sign not exceeding 16 square feet in area. Such sign shall not be placed within 10 feet of any property line or street line.

(d) Public signs. Any signs placed by any governmental agency for a public purpose.

C. Minimum lot size. Unless otherwise provided, the minimum lot size shall be as specified in this subsection:

(1) The lot area shall be as follows:

(a) Eight thousand five hundred square feet where the lot is served by a public sewer.

(b) Twenty thousand square feet where the lot is not served by a public sewer.

(2) The lot width at the building line shall be as follows:

(a) Eighty-five feet where a lot is served by a public sewer.

(b) One hundred feet where a lot is not served by a public sewer.

D. Maximum height of buildings. Unless otherwise provided, the maximum permitted height of buildings shall be as specified in this subsection:

(1) Single-family dwelling: 2 1/2 stories, not to exceed 30 feet.

(2) Other principal buildings: as regulated by yard requirements.

(3) Accessory buildings: one story, not to exceed 12 feet.

E. Required yards. Unless otherwise provided, the minimum required yards and other open spaces shall be as specified in this subsection:

(1) Front yard: 40 feet.

(2) Side yards (two required):

(a) Single-family dwellings. The minimum width of any side yard shall equal 10% of the lot width but need not exceed 10 feet. The total width of both side yards shall equal 25% of the lot width, but the total width of side yards need not exceed 25 feet.

(b) Other principal buildings. Except as otherwise provided, each side yard shall equal 30 feet or a distance equal to the height of the principal building, whichever is greater; provided, however, that when a side yard adjoins a lot in any district other than an R District, such side yard shall equal 15 feet or a distance equal to 1/2 the height of the principal building, whichever is greater.

(3) Rear yard. Except as otherwise provided, a rear yard equal to 25% of the lot depth shall be required; provided, however, that no rear yard shall have a depth less than 20 feet or a distance equal to the height of the principal building, whichever is greater.

(4) Open space between principal buildings on a single lot. No vertical wall of a principal building shall be nearer to a vertical wall of any other principal building than a distance of 30 feet or a distance equal to the average height of such vertical walls measured from the adjoining finished grade, whichever is greater.

F. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

G. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

§ 265-15. R-2 General Residence District.

A. Permitted principal uses and structures shall be as follows:

(1) Principal uses and structures permitted in the R-1 District.

(2) Two-family dwellings.

(3) Multifamily dwellings.

(4) Dwelling groups, subject to a site plan approved by the Town Board.

(5) Hospitals or institutions of a religious, charitable or philanthropic nature, provided that they are not used primarily for contagious diseases, mental patients, epileptics, drug or liquor addicts or for penal or correctional purposes. Such principal buildings shall be at least 50 feet from any other lot in any R District.

(6) Nursery schools, subject to side yard requirements for other principal buildings.

(7) Nursing or convalescent homes, subject to side yard requirements for other principal buildings.

B. Permitted accessory uses and structures shall be as follows:

(1) Accessory uses permitted and as regulated in the R-1 District.

(2) Accessory uses and structures customarily incidental to permitted principal uses.

(3) Accommodations for not more than three roomers or lodgers within a dwelling.

C. Minimum lot size. Unless otherwise provided, the minimum lot size shall be as specified in this subsection:

(1) The lot area shall be as follows:

(a) Minimum lot area.

[1] Seven thousand two hundred square feet where the lot is served by a public sewer.

[2] Twenty thousand square feet where a lot is not served by a public sewer.

(b) Two-or-more-family dwellings:

[1] Five thousand square feet per dwelling unit where the lot is served by a public sewer.

[2] Ten thousand square feet per dwelling unit where the lot is not served by a public sewer.

(2) The lot width at the building line shall be as follows:

(a) Where a lot is served by a public sewer: 60 feet for one dwelling unit, plus an additional 20 feet for each dwelling unit over one, but it need not exceed 100 feet.

(b) Where a lot is not served by a public sewer: 100 feet.

D. Maximum height of buildings. Unless otherwise provided, the maximum height of buildings shall be as specified in this subsection:

(1) Single-family or two-family dwellings: the same as the R-1 District.

(2) Other principal buildings: as regulated by side yard requirements.

(3) Accessory buildings: the same as the R-1 District.

E. Required yards. Unless otherwise provided, the minimum required yards and other open spaces shall be as specified in this subsection:

(1) Front yard: 30 feet.

(2) Side yards (two required):

(a) Dwellings up to 30 feet in height. The minimum width of any side yard shall equal 10% of the lot width but need not exceed 10 feet. The total width of both side yards shall equal 25% of the lot width, but the total width of side yards need not exceed 25 feet.

(b) Other principal buildings. Each side yard shall equal 15 feet or a distance equal to 1/2 the height of the principal building, whichever is greater; provided, however, that when a side yard adjoins a lot in an R District, such side yard shall equal 30 feet or a distance equal to the height of the principal building, whichever is greater.

(3) Rear yard: the same as required in the R-1 District.

(4) Open space between principal buildings on a single lot: the same as required in the R-1 District.

F. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

G. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

§ 265-16. R-M Residence-Mobile Home Court District.

[Added 4-9-1975 by L.L. No. 1-1975]

A. Permitted principal uses and structures shall be as follows:

(1) Principal uses and structures permitted in the R-2 District.

(2) Licensed mobile home courts as defined by the Town of North Collins pursuant to the local laws and regulations of the Town of North Collins[1] and as amended by the Town Board of the Town of North Collins.

[1] *Editor's Note: See also Ch. **153**, Mobile Homes.*

B. Permitted accessory uses and structures shall be as follows:

(1) Other than in a licensed mobile home court, accessory uses and structures permitted and as regulated in the R-2 District.

(2) In a licensed mobile home court, accessory uses and structures as defined and provided for in the mobile home court regulations and local laws of the Town of North Collins.[2]

[2] *Editor's Note: See also Ch. **153**, Mobile Homes.*

C. Minimum lot sizes. Unless otherwise provided, the minimum lot sizes shall be as specified in this subsection:

(1) The lot area shall be as follows:

(a) For permitted uses and structures other than in a licensed mobile home court, as regulated in the R-2 District.

(b) In a licensed mobile home court, as provided for in the mobile home court regulations and local laws of the Town of North Collins.

(2) The lot width at the building line shall be as follows:

(a) For permitted uses and structures other than in a licensed mobile home court, as regulated in the R-2 District.

(b) In a licensed mobile home court, as provided for in the mobile home court regulations and local laws of the Town of North Collins.[3]

[3] *Editor's Note: See also Ch. **153**, Mobile Homes.*

D. Maximum height of buildings. Unless otherwise provided, the maximum height of buildings shall be as specified in this subsection:

(1) For permitted uses and structures other than in a licensed mobile home court, as regulated in the R-2 District.

(2) In a licensed mobile home court, as provided for in the mobile home court regulations and local laws of the Town of North Collins.

E. Required yards. Unless otherwise provided, the minimum required yards and other open spaces shall be as specified in this subsection:

(1) For permitted uses and structures other than in a licensed mobile home court, as regulated in the R-2 District for front yard, side yards, rear yard and open space between principal buildings on a single lot.

(2) In a licensed mobile home court, as provided for in the mobile home court regulations and local laws of the Town of North Collins.[4]

[4] *Editor's Note: See also Ch. **153**, Mobile Homes.*

F. Off-street parking reference.

(1) For applicable off-street parking regulations pertaining to permitted uses and structures other than in a licensed mobile home court, see Article **VIII**.

(2) For applicable off-street parking regulations pertaining to a licensed mobile home court, refer to the mobile home court regulations[5] and local laws of the Town of North Collins.
[5] *Editor's Note: See also Ch.* ***153****, Mobile Homes.*

G. Supplemental regulations reference.

(1) For applicable supplemental regulations pertaining to use, height, area or open space for permitted uses and structures other than in a licensed mobile home court, see Article **IX**.

(2) For applicable supplemental regulations pertaining to a mobile home court, refer to the mobile home court regulations and local laws of the Town of North Collins.[6]
[6] *Editor's Note: See also Ch.* ***153****, Mobile Homes.*

§ 265-17. R-A Residence-Agricultural District.

A. Permitted principal uses and structures shall be as follows:
[Amended 4-9-1975 by L.L. No. 1-1975]

(1) Principal uses and structures permitted in the R-1 District.

(2) Two-family dwellings.

(3) Agricultural, floricultural and horticultural pursuits, including but not limited to general farms, greenhouses, plant nurseries, truck gardens, dairy husbandry and the raising of bees, poultry and livestock, together with all customary buildings and other structures necessary for the production and storage of the products of such pursuits, provided that buildings, pens and runways for the confinement of livestock or poultry shall be at least 100 feet from any property line in an R District and no manure or other odor- or dust-producing substance shall be stored within 100 feet of any lot line.

(4) Forest farming.

(5) Veterinarians, small-animal hospitals, riding stables, and the keeping of small animals, including fur-bearing animal farms; provided, however, that buildings, pens or runways for the confinement of animals shall be at least 100 feet from any property line in an R District and no manure or other odor- or dust- producing substance shall be stored within 100 feet of any lot line. The above- mentioned distance restriction shall not apply to pasture or exercise tracks for horses.
[Amended 11-5-1997 by L.L. No. 2-1997]

(6) Private wildlife reservations or conservation projects, including the customary buildings and structures therefor.

(7) Cemeteries, including mausoleums, provided that mausoleums shall be a distance of at least 200 feet from any street line in any adjoining R-1 or R-2 District and that any new cemetery shall contain a single continuous area of at least 15 acres.

(8) Picnic grounds or groves for which a fee or rental is charged for use of the premises, excluding all amusement devices other than customary playground apparatus.

(9) Nonprofit private clubs, including club swimming pools, catering exclusively to members and their guests.

(10) The following uses by special use permit authorized by the Town Board in accordance with the provisions of Article **XIII**:
[Added 8-6-1980 by L.L. No. 2-1980; amended 5-1-1996 by L.L. No. 2-1996; 11-5-1997 by L.L. No. 2-1997; 12-19-2003 by L.L. No. 2-2003]

(a) Ham or commercial radio or television transmission facilities where a federal license is required.

(b) Gun clubs.

(c) Recreational vehicle parks.

(d) Kennels.

B. Permitted accessory uses and structures shall be as follows:

(1) Accessory uses permitted and as regulated in the R-2 District.

(2) Accessory uses and structures customarily incidental to permitted principal uses.

(3) Refreshment stands dispensing food and nonalcoholic beverages incidental to the operation of a commercial picnic grove.

(4) Temporary stands for the sale and display of agricultural products grown on the premises. Any stand used for the sale and display of such products shall contain not more than 200 square feet of floor area and shall be set back at least 20 feet from the street line. Not more than two nonilluminated signs, each not exceeding six square feet in area, shall be permitted to advertise the sale of said products, in accordance with Chapter **200**, Signs.
[Amended 12-4-1991 by L.L. No. 2-1991]

C. Minimum lot size. Unless otherwise provided, the minimum lot size shall be as specified in this subsection:

(1) The lot area shall be as follows:

(a) Minimum: 20,000 square feet.

(b) Per dwelling unit: 5,000 square feet.

(2) The lot width at the building line shall be 100 feet.

D. Maximum height of buildings. Unless otherwise provided, the maximum height of buildings shall be as specified in this subsection:

(1) Dwellings: as regulated in the R-2 District.

(2) Other principal buildings: as regulated in the R-1 District.
[Amended 4-9-1975 L.L. No. 1-1975]

(3) Clubs: three stories, not to exceed 35 feet.

(4) Accessory buildings: same as the R-2 District.

(5) Farm buildings: no limit.

E. Required yards. Unless otherwise provided, the minimum required yards and other open spaces shall be as specified in this subsection:

(1) Front yard: 100 feet.
[Amended 12-4-1991 by L.L. No. 2-1991]

(2) Side yards (two required): as regulated in the R-1 District.

(3) Rear yard: as regulated in the R-1 District.

F. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

G. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

§ 265-18. R-C Residence-Restricted Business District.

A. Permitted principal uses and structures shall be as follows:

(1) Principal uses and structures permitted in the R-2 District.

(2) Where a lot in the R-C District abuts an R-A District boundary, principal uses and structures as permitted and regulated in the R-A District, excluding those uses and structures requiring a special use permit in the R-A District.

(3) Telephone exchanges.

(4) Real estate or insurance offices.

(5) Mortuaries.

(6) Art, dance, music or photographer studios.

(7) Opticians or optometrists.

(8) Bed-and-breakfast establishments.
[Amended 12-4-1991 by L.L. No. 2-1991]

(9) Fire stations with club facilities.

(10) Meeting rooms for private clubs, lodges or fraternal organizations.

(11) Medical and/or dental buildings, clinics and laboratories.

(12) Other administrative, professional or executive offices, but not including the handling, repairing, processing, keeping, displaying, selling, manufacturing, servicing or storing of any goods or merchandise upon the premises.

(13) Trade or industrial schools.

(14) Motels, provided that no eating or drinking establishment is included on the premises.

B. Permitted accessory uses and structures shall be as follows:

(1) Accessory uses permitted in the R-2 District without the limitations on accessory offices within a dwelling.

(2) Accessory uses to R-A principal uses permitted in the R-C District.

(3) Unless otherwise specified, accessory uses and structures customarily incidental to permitted principal uses.

(4) Restaurants, newsstands, pharmacies or other incidental services in connection with hospitals, medical buildings or nonprofit institutions, but only when conducted and entered from within the building, provided that no exterior display or advertising shall be permitted.

(5) Restaurants with or without bar facilities to dispense alcoholic beverages in connection with any club facilities, lodges or fraternal organizations.

(6) Signs, as regulated in the R-1 District and as regulated by Chapter **200**, Signs, except that one identification sign, not exceeding 10 square feet in area, for a business or profession conducted on the premises shall be permitted. Such sign may be illuminated by a nonflashing indirect source of light from a concealed location.
[Amended 12-4-1991 by L.L. No. 2-1991]

C. Minimum lot size. Unless otherwise provided, the minimum lot size shall be as specified in this subsection:

(1) The lot area shall be as follows:

(a) Dwellings: the same as the R-2 District.

(2) The lot width at the building line shall be as follows:

(a) Dwellings: the same as the R-2 District.

D. The maximum height of buildings shall be as regulated in the R-2 District.

E. Required yards shall be as regulated in the R-2 District, except that the minimum front yard shall be 40 feet.

F. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

G. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

Article VI. Business District Regulations

§ 265-19. C-1 Local Retail Business District.

A. Permitted principal uses and structures shall be as follows:

(1) Principal uses and structures permitted in the R-C District, except Use Group 3.

(2) The following uses when conducted entirely within an enclosed building:

(a) Retail sales, but not including any use first permitted in the C-2, M-1 or M-2 District.

(b) Personal service establishments, including but not limited to barbershops, beauty parlors and shoe or hat cleaning or repair.

(c) Hand laundries, laundromats or dry-cleaning or laundry-pickup stations.

(d) Dry-cleaning and pressing establishments, limited to 2,000 square feet of floor area per establishment, provided that only solvents with a flash point of not less than 138.2° F. shall be used and the total aggregate dry load of machines shall not exceed 60 pounds.

(e) Theaters.

(f) Eating or drinking establishments, provided that any entertainment shall be limited to television, radio or recorded music, and further provided that no sale of alcoholic beverages for consumption on the premises shall be permitted on any lot where a side lot line abuts any R District boundary.

(3) Hotels or motels, subject to the above restrictions on eating and drinking establishments.

(4) Drive-in banks, provided that at least five reservoir spaces are provided on the lot for each drive-in teller's window. Such reservoir spaces shall be exclusive of required parking spaces.

(5) Gasoline service stations, subject to the provisions of Article **IX**, provided that:

(a) Diesel fuel pumps shall be permitted, subject to a special use permit as provided in Article **XIII**.
[Amended 4-5-2000 by L.L. No. 1-2000]

(b) All servicing of vehicles, except fueling and minor emergency repairs, will be conducted in an enclosed building.

B. Permitted accessory uses and structures shall be as follows:

(1) Accessory uses permitted in the R-C District, except accessory uses included in Use Group 3.

(2) Unless otherwise provided, accessory uses and structures customarily incidental to permitted principal uses.

(3) Shops for the manufacture or processing of articles incidental to the conduct of a retail business lawfully conducted on the premises, provided that:

(a) All such articles manufactured or processed are sold at retail on the premises.

(b) Not more than four persons are engaged in such manufacturing or processing at any one time and in any one establishment.

(c) Such activity shall not produce offensive odors, noise, vibration, heat, glare or dust.

(4) Business signs, as regulated in Article **IX** and as regulated in Chapter **200**, Signs.
[Amended 12-4-1991 by L.L. No. 2-1991]

C. Minimum lot size. Unless otherwise provided, the minimum lot size shall be as specified in this subsection:

(1) The lot area shall be as follows:

(a) Single-family dwellings: the same as the R-2 District.

(b) Any other dwelling: 2,500 square feet per dwelling unit.

(2) The lot width at the building line shall be as follows:

(a) For dwellings: a minimum of 60 feet.

D. Maximum height of buildings. Unless otherwise provided, the maximum height of buildings shall be as specified in this subsection:

(1) The maximum building height shall be 35 feet.

E. Required yards. Unless otherwise provided, the minimum required yards and other open spaces shall be as specified in this subsection:

(1) Front yard: 40 feet.

(2) Side yards.

(a) For dwellings: the same as the R-2 District.

(b) Other principal buildings: none required, except:

[1] Where a side yard is provided, it shall be no less than five feet.

[2] Where a side yard abuts an R District boundary, it shall be not less than 20 feet or the height of the principal building, whichever is greater.

[3] Where a side yard is used for either vehicular ingress or egress, it shall be at least 12 feet.

[4] Where a side yard is used for vehicular ingress and egress, it shall not be less than 25 feet.

(3) Rear yard.

(a) Minimum: 10 feet.

(b) Along an R District boundary: the same distance as required for side yard along an R District boundary.

F. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

G. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

§ 265-20. C-2 General Commercial District.

A. Permitted principal uses and structures shall be as follows:

(1) Principal uses and structures permitted in the C-1 District; provided, however, that open retail sales shall be permitted unless otherwise specified in this section.

(2) New or used motor vehicle sales and service.

(3) Gasoline service stations, subject to Article **IX**.

(4) Eating or drinking establishments.

(5) Boat or marine sales and service.

(6) Laundry or dry-cleaning plants.

(7) Custom shops, including but not limited to printing, electrical, heating, plumbing or woodworking shops.

(8) Warehouses, but not including the storage of highly flammable or explosive materials.

(9) Billiard or pool halls, bowling alleys, skating rinks or dance halls and, subject to such local laws and regulations as may be enacted in regard thereto, video arcades and amusement game rooms.
[Amended 4-7-1982 by L.L. No. 2-1982]

(10) Dairies or the bottling of nonalcoholic beverages from previously prepared ingredients.

(11) Wholesale sales and distribution.

(12) Terminals for local trucking and delivery service, but not including any tractor, trailer or tractor-trailer combination or automobile conveyor, provided that all vehicle loading, unloading and parking is on the premises.

(13) The following uses, provided that they are conducted within a completely enclosed building or within an area enclosed by a solid wall or fence at least six feet in height:

(a) Public garages, but not including auto wrecking or the storage of motor vehicles not eligible for New York State motor vehicle inspection stickers.

(b) Building materials supply, including incidental millwork.

(c) Contractors' equipment and materials storage.

(d) Public utility storage, service buildings and yards.

(e) Small animal hospitals.

(f) Machine and tool sales, rentals and service.

(g) Storage and sale of solid fuel and feed for livestock.

(14) The following uses, subject to a plan for access drives and off-street parking, as provided for in Article **VIII**, approved by the Town Board after review thereof and recommendations thereon by the Town Highway Superintendent and the Town Planning Board:
[Amended 12-4-1991 by L.L. No. 2-1991]

(a) Commercial swimming pools.

(b) Amusement parks.

(c) Drive-in theaters.

(d) Drive-in restaurants.

(e) Golf driving ranges or miniature golf.

(f) Rapid car washes.

B. Permitted accessory uses and structures shall be as follows:

(1) Accessory uses permitted in the C-1 District.

(2) Accessory uses and structures customarily incidental to permitted principal uses.

(3) Business signs as regulated in Article **IX** and Chapter **200**, Signs.
[Amended 12-4-1991 by L.L. No. 2-1991]

C. The minimum lot size shall be as follows:

(1) For dwellings: as regulated in the C-1 District.

D. The maximum height of buildings shall be as regulated in the C-1 District.

E. Required yards shall be as regulated in the C-1 District.

F. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

G. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

Article VII. Industrial District Regulations

§ 265-21. M-1 Planned Light Industrial District.

Unless otherwise provided, the following principal uses and structures and accessory uses and structures as delineated in Subsections A and B are permitted subject to a plan or plans for the same approved by the Town Board after review thereof and recommendation thereon by the Town Planning Board. Such plan or plans for said uses or structures shall recognize, among others, the regulations contained in Article **VII** of this chapter for the establishment of said uses and structures on any given site within the M-1 District as delineated on the Zoning Map of the Town of North Collins.

A. Permitted uses and structures shall be as follows:

(1) Principal uses and structures:

(a) Principal uses and structures permitted in the C-2 and R-A Districts, except that, unless otherwise provided, no dwelling unit shall be allowed in the M-1 District.

(b) The following uses when conducted within a completely enclosed building:

[1] Laboratories engaged in research, testing and experimental work, including any process normal to laboratory practice and technique, provided that all necessary safeguards are employed to prevent hazard or annoyance to the community.

[2] The manufacture, compounding, assembling or treatment of articles or merchandise from previously prepared materials, but not including any use first permitted in the M-2 District.

(c) Truck terminals, provided that no vehicular loading, unloading or parking shall be permitted in a public right-of-way.

(d) Commercial billboards, provided that they shall not be located nearer than 150 feet to any street line or any R District boundary. Such billboard may be illuminated by a nonflashing source of light directed away from any street line or adjoining property line. See also Chapter **200**, Signs.
[Amended 12-4-1991 by L.L. No. 2-1991]

(2) Accessory uses and structures:

(a) Accessory uses permitted in the C-2 and R-A Districts.

(b) Accessory uses and structures customarily incidental to permitted principal uses.

(c) Quarters for a caretaker or watchman.

(d) Business signs, as regulated in Article **IX** and Chapter **200**, Signs.
[Amended 12-4-1991 by L.L. No. 2-1991]

(3) Limitations on permitted uses in the M-1 District are as follows:

(a) No use of land, building or structure shall be permitted, the operation of which normally results in any:

[1] Fire or explosive hazard; or

[2] Dissemination of atmospheric pollutant, noise, vibration or odor beyond the boundaries of the premises on which such use is located.

(b) No unneutralized refuse material shall be discharged into sewers, streams or ditches.

(c) Storage of flammable liquids shall be entirely underground and in storage tanks approved by the National Board of Fire Underwriters. Safety containers shall be used within any building or structure in which flammable liquids are handled.

(d) All side and rear lot lines abutting any R District or a C-1 District shall be fenced or screened by plantings. No fence other than one constructed of wire and commonly known as a "chain-link fence" shall be permitted. Such fence shall not be less than six feet nor more than 10 feet in height and shall not project into any required front yard.

(e) Unless otherwise provided, required side and rear yards shall be used only for landscaping and/or off-street parking of cars of employees, customers and visitors.

B. Minimum lot size. There is no requirement.

C. Maximum height of buildings. There is no requirement.

D. Required yards. Unless otherwise provided, the minimum required yards and other open spaces shall be as specified in this subsection:

(1) Front yard: 25 feet, except that, when opposite any R District or when used for accessory parking, it shall be not less than 50 feet.

(2) Side yards.

(a) A minimum of 10 feet.

(b) Where a side yard abuts any R District boundary, it shall be not less than 50 feet or the height of the principal building, whichever is greater.

(3) Rear yard.

(a) A minimum of 10 feet.

(b) Where a rear yard abuts any R District boundary, the same distance as for a side yard.

E. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

F. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

§ 265-22. M-2 General Industrial District.

A. Permitted uses and structures shall be as follows:

(1) Principal uses and structures:

(a) Principal uses and structures permitted in the M-1 District but without the requirement of being within a completely enclosed building.

(b) Lumberyards or coal yards.

(c) Auto wrecking and dismantling, junkyards or scrap metal yards.[1]

[1] *Editor's Note: Original Section 5-11A4, regarding dumps for rubbish, was repealed 12-4-1991 by L.L. No. 2-1991.*

(d) Incinerators.

(e) Railroad freightyards.

(f) Concrete products manufacture or concrete mixing plants.

(g) Storage of petroleum and petroleum products.

(h) Processing or treatment of bituminous products.

(i) Manufacture of heavy machinery.

(j) Metal casting and foundry products.

(k) Killing and dressing of fowl and rabbits.

(l) Canning factories.

(m) Open storage yards not otherwise limited in this section.

(2) Accessory uses and structures.

(a) Accessory uses permitted in the M-1 District.

(b) Accessory uses and structures customarily incidental to permitted principal uses.

(c) Business signs, as regulated in Article **IX**.

(3) Limitations on uses in the M-2 District:

(a) No use of land, building or structure shall be permitted, the operation of which normally results in any:

[1] Fire or explosive hazard beyond the boundaries of the district in which such use is located.

[2] Dissemination of any atmospheric pollutant, noise, vibration or odor into any R, C or M-1 District.

(b) No unneutralized refuse material shall be discharged into sewers, streams or ditches.

(c) All side and rear lot lines abutting any R District or a C-1 District shall be fenced or screened in the same manner as prescribed in the M-1 District.

(d) Unless otherwise provided, required side and rear yards shall be used only for landscaping and/or off-street parking of cars of employees, customers and visitors.

B. Minimum lot size. There is no requirement.

C. Maximum height of buildings. There is no requirement.

D. Required yards. Unless otherwise provided, the minimum required yards and other open spaces shall be as specified in this subsection:

(1) Front yard: the same as the M-1 District.

(2) Side yards.

(a) A minimum of 10 feet.

(b) Where a side yard abuts any R District boundary, it shall be not less than 75 feet or the height of the principal building, whichever is greater.

(c) Where a side yard abuts a C-1 District boundary, it shall be not less than 25 feet in width.

(3) Rear yard.

(a) A minimum of 10 feet.

(b) Where a rear yard abuts the boundary of any R or C-1 District, the same distance as for a side yard.

E. Off-street parking reference. For applicable off-street parking regulations, see Article **VIII**.

F. Supplemental regulations reference. For applicable supplemental regulations pertaining to use, height, area or open space, see Article **IX**.

Article VIII. Off-Street Parking Regulations

§ 265-23. Required parking spaces.

A. After the effective date of this chapter, off-street parking spaces shall be provided as hereinafter specified at the time a building or structure is erected or at the time a new use of open land is established. In the case of an enlargement of any existing building, structure or use after the effective date of this chapter, off-street parking spaces shall be provided as hereinafter specified for the enlarged portion of such building, structure or use.

B. No existing off-street parking area shall be reduced in capacity so as to be less than required by this chapter; or, if such parking capacity is already less than herein required, such parking area shall not be further reduced; provided, however, that a reduction in such existing parking area shall be allowed if equivalent parking space is provided for the use involved.

(1) Dwellings. Parking requirements shall be as follows:

(a) Single-family or two-family dwellings: one space for each dwelling unit.

(b) Multifamily dwellings: two spaces for each dwelling unit.

(c) Bed-and-breakfast establishments, motels, hotels or rooming or lodging houses: one space for each unit of accommodation.
[Amended 12-4-1991 by L.L. No. 2-1991]

(d) Additional spaces for accessory uses:

[1] Offices for treatment of humans: five spaces for each office.

[2] Other offices: two spaces for each office.

(2) Institutional uses. Parking requirements shall be as follows:

(a) Hospitals: 1 1/2 spaces for each bed.

(b) Sanitariums and convalescent homes: one space for each five beds.

(c) Homes for the aged or orphanages: one space for each five persons in residence.

(3) Places of assembly. Parking requirements shall be as follows:

(a) Schools: one space for each classroom plus one space for each five seats in the auditorium or stadium, whichever is greater.

(b) Churches, principal or accessory auditoriums, theaters, stadiums or sports arenas: one space for each five seats.

(c) Libraries, museums or art galleries: one space for each 300 square feet of gross floor area.

(d) Bowling alleys: 10 spaces per alley.

(e) Dance halls or studios or skating rinks: one space for each 100 square feet of gross floor area.

(f) Eating or drinking establishments, principal or accessory:

[1] Drive-in types: three spaces for each 25 square feet of gross floor area.

[2] Other types: two spaces for each five seats.

(g) Clubs or lodges: one space for each 100 square feet of floor area used for club or lodge purposes plus one space for each sleeping room.

(h) Mortuaries or funeral parlors: 10 spaces for each parlor.

(i) Swimming pools, principal or accessory, other than private pools: one space for each 25 square feet of pool area.

(4) Business or industrial uses. Parking requirements shall be as follows:

(a) Furniture, floor covering or appliance stores, custom shops or wholesale businesses: one space for each 700 square feet of gross floor area.

(b) New or used car sales: one space for each 700 square feet of sales area. Such space shall be clearly marked and shall not be used for unregistered motor vehicles.

(c) Gasoline stations, public garages or repair garages, principal or accessory: three spaces for each service bay.

(d) Food stores, shopping centers or groups of stores over 20,000 square feet of gross floor area: one space for each 100 square feet of gross floor area.

(e) Individual retail stores: one space for each 175 square feet of gross floor area.

(f) Doctor, dentist or real estate offices: five spaces for each office.

(g) Other businesses or professional offices or banks: one space for each 175 square feet of gross floor area.

(h) Manufacturing, storage or other industrial floor area: one space for each 1,000 square feet of gross area used for such purpose, but there shall not be less than one space for each two employees.

(i) All other principal uses not above enumerated or excepted: one space for each 350 square feet of gross floor area.[1]

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

(5) Mixed uses. Except as otherwise provided in § **265-25**, where any building or lot is occupied by two or more uses having different parking requirements, the parking requirement for each use shall be computed separately to determine the total off-street parking requirement.

§ 265-24. Units of measurement.

A. Size of parking space. For the purpose of computing gross parking area for required off-street parking, 350 square feet of unobstructed net standing, maneuvering or access area shall be considered as one parking space. However, a lesser area may be considered as one space if the Code Enforcement Officer certifies that the layout and design of the parking area are adequate to permit convenient access and maneuvering. In any event, the size of a parking space shall be at least 20 feet long and 10 feet wide, exclusive of access or maneuvering area.

B. Gross floor area. Gross floor area shall include all areas of a building used or occupied by any traffic generator mentioned in § **265-23**; provided, however, that basement or cellar floor area not used for processing, servicing or sale of goods or merchandise shall not be counted as gross floor area.

C. Seats. In places of assembly where bench-type seats are provided or where standing patrons are served at a counter or bar, each 20 linear inches of such seating or standing space shall be considered as one seat for the purpose of determining off-street parking requirements.

D. Employees. In any case where there is more than one work shift, the total number of employees used to compute off-street parking requirements shall include the maximum number of employees on two shifts.

E. Fractional units. When application of the units of measurement to determine required off-street parking spaces results in a fractional parking space of 1/2 or more, one parking space shall be required.

§ 265-25. Waiver of required off-street parking.

A. Accessory uses.

(1) No off-street parking shall be required for uses accessory to any institutional use specified in § **265-23B(2)** or for an accessory restaurant used primarily for students, patients, tenants or employees occupying a principal use.

(2) In the case of accessory retail sales, restaurants or swimming pools, the lesser parking requirement for either the accessory use or the principal use, whichever requirement is less, shall be reduced by 50%.

B. Joint facilities.

(1) In the case of a church and school on the same lot, the lesser parking requirement shall be waived.

(2) Where places of assembly specified in § **265-23B(3)** are located on the same lot with other uses, the Board of Appeals may permit a reduction in the number of required off-street parking spaces for such places of assembly.

(3) Where public off-street parking facilities are available, other than off-street parking provided for a public building, the Board of Appeals may permit a reduction in the number of required off-street parking spaces for uses located on any lot within 600 feet of such public parking facility.

§ 265-26. Site requirements for off-street parking spaces.

Site requirements for off-street parking spaces shall be as follows:

A. Location of required parking spaces.

(1) General provisions. All required off-street parking spaces shall be provided on the same lot with the building or use they serve, except as provided in the following Subsection **A(2)**, Group facilities.

(2) Group facilities. In any C or M District, required off-street parking spaces may be provided in group parking facilities designed to serve two or more buildings or uses on different lots, provided that:

(a) The total parking spaces in such group facility shall not be less than the sum of the requirements for the various uses computed separately.

(b) All required parking spaces shall be not more than 600 feet from the boundary of the lot on which such buildings or uses are located.

B. Setback for all off-street parking spaces.

(1) In any R District:

(a) Enclosed off-street parking spaces shall be subject to the regulations for accessory buildings (§ **265-32G**).

(b) No open off-street parking space shall be permitted in a required front yard or exterior side yard.

(c) No open off-street parking area for five or more motor vehicles shall be located within five feet of any side or rear lot line of an adjoining lot in any R District.

(2) In any C or M District, no open or enclosed off-street parking space shall be permitted within 10 feet of any street line or within 10 feet of any side lot line or rear lot line of a lot used for residential purposes or in any R District. See also § **265-32G(1)**.
[Amended 12-4-1991 by L.L. No. 2-1991]

§ 265-27. Encroachment of required parking spaces prohibited.

All areas counted as required off-street parking areas shall be unobstructed and free of other uses except off-street loading or unloading.

§ 265-28. Guaranty for off-site parking spaces.

In any case where required off-street parking spaces are provided in group facilities or in specific cases when required by the Board of Appeals in approving off-site joint facilities, such off-site parking spaces shall be subject to deed, lease or contract restrictions acceptable to the Town Attorney of the Town of North Collins, binding the owner, his heirs or assigns to maintain the required number of spaces available throughout the life of such use.

§ 265-29. Additional requirements.

All open off-street parking spaces shall be considered as automotive use areas and shall be subject to the requirements of § **265-30E** in addition to the provisions of this section.

Article IX. Supplemental Regulations

§ 265-30. Use regulations.

A. Plans required in R-C, C-1, C-2 and M-2 Districts.

(1) Notwithstanding any other provisions of this chapter, the establishment of any new use, building or structure or the conversion, enlargement or extension of any existing use, building or structure for other than residential or public purposes in the R-C, C-1, C-2 and M-2 Districts shall be permitted only upon the basis of a plan therefor approved by the Town Board after review thereof and recommendation thereon by the Town Planning Board and the Code Enforcement Officer of the Town of North Collins. This subsection shall only pertain to uses, buildings and structures permitted in the R-C, C-1, C-2 and M-2 Districts under this chapter other than residential or public uses. This subsection shall not authorize the establishment of any use in any district where said use is prohibited in any way by any other provision of this chapter.

(2) The plan mentioned above shall recognize all of the requirements of the zoning district in which the property encompassed by the plan is situated. In addition, the plan shall indicate the specific treatment of property ingress and egress to a public right-of-way, the on-site location of required off-street parking, if any, and such other considerations required for plan approval as may be stipulated by the Town Board before any building permit or occupancy certificate shall be granted.

B. Temporary structures or uses.

(1) The following temporary structures shall be deemed to be permitted uses in all zoning districts:

(a) Temporary structures or uses incidental to construction work, including a nonilluminated sign not exceeding 12 square feet in area of any contractor, engineer or architect, for a period of time not to exceed one year, provided that any such structure shall be removed forthwith upon the completion or abandonment of the construction work. Any extension of said time limit shall require the approval of the Board of Appeals. See also Chapter **200**, Signs.
[Amended 12-4-1991 by L.L. No. 2-1991]

(b) The temporary use of a dwelling as a model home, for a period of time not to exceed three months.

(c) Any temporary structure or use permitted by the Board of Appeals as authorized in Article **XII**.
[Amended 12-4-1991 by L.L. No. 2-1991]

C. Accessory business signs in C or M Districts.

(1) Nonflashing signs which direct attention to a profession, business, service, entertainment or commodity conducted, offered, sold or manufactured upon the same lot (including for-rent or for-sale signs), shall be permitted in any C or M District, subject to the following restrictions:

(a) Location.

[1] Illuminated signs, except for gasoline brand name signs, shall be attached to the building. Illuminated gasoline brand name signs shall not be located in the corner visibility area defined in § **265-32E**.

[2] No sign shall project across a street line.

[3] No sign shall be located in a required interior side yard or within 10 feet of any R District boundary.

[4] Signs attached to a building shall be attached to a wall.

(b) Size.

[1] No illuminated sign attached to a wall facing an interior side yard or rear yard along an R District boundary shall have a surface area, in square feet, larger than its distance, in linear feet, from such R District boundary.

[2] No sign within 100 feet of any R District boundary shall have a surface area, in square feet, larger than its distance, in linear feet, from such R District boundary, unless such sign is perpendicular to such R District boundary or is attached to a wall pierced by a primary business entrance of the use to which such sign is accessory.

[3] No sign shall exceed 60 square feet in size.
[Added 12-4-1991 by L.L. No. 2-1991]

(c) Height.

[1] Any sign attached to a building wall shall not extend above such wall.

[2] Any sign not attached to a building shall not extend more than 25 feet above the adjoining ground level.

(2) One nonflashing sign which identifies a group of stores as a shopping center or shopping plaza shall be permitted when the location, size, height and type of illumination, if any, of such sign is approved by the Planning Board.
[Amended 12-4-1991 by L.L. No. 2-1991]

D. Limitations on gasoline service stations and public garages shall be as follows:

(1) No part of any building used as a gasoline service station or public garage and no filling pump, lift or other service appliance shall be erected within 25 feet of any R District boundary.

(2) No gasoline or oil pump, no oiling or greasing mechanism and no other service appliance shall be installed in connection with any gasoline service station or public garage within 20 feet of any street line.

(3) Two reservoir spaces for each gasoline pump shall be provided on the lot for waiting vehicles. Such reservoir space shall not include space at the pump or required parking space.

(4) Storage of gasoline shall be in accordance with the provisions of the New York State Uniform Fire Prevention and Building Code.[1]
[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

(5) There shall be no use of the lot, except for landscaping or screening, within 20 feet of any R District boundary.

(6) All portions of the lot not enclosed in a building and used for a reservoir space or for storage, parking or servicing of a motor vehicle shall be subject to the provisions of Subsection **E**.

E. Limitations on automotive use areas. Except for farms and one-family or two-family residences, any portion of a lot used for open off-street parking or reservoir space or for open sales, service or storage areas for motor vehicles, contractors' equipment or boats shall be deemed to be an automotive use area and shall be subject to the following requirements:

(1) Surfacing. Every automotive use area and access driveway thereto shall be surfaced with a durable and dustless material and shall be so graded and drained so as to dispose of surface water accumulation.

(2) Lighting. Any fixture used to illuminate any automotive use area shall be so arranged as to direct the light away from the street and away from adjoining premises in any R District.

(3) Screening. Every automotive use area, except off-street parking areas for fewer than five vehicles, shall be screened from any adjoining lot in any R District, including lots situated across the street, as follows:

(a) Along a street line, by a planting strip five feet wide; provided, however, that no shrub planting or tree foliage shall be placed or maintained which obstructs vision at an elevation between three feet and seven feet above the street level. Such screening may be interrupted by normal entrances and exits.

(b) Along a rear lot line or an interior side lot line which abuts an existing or future rear yard or side yard on such adjoining lot, by a compact evergreen hedge which will reach a height of five feet within three years or by a solid uniformly painted fence or an unpierced masonry wall five feet in height. Such screening shall be maintained in good condition at all times.

(4) Access.

(a) No entrance or exit to any automotive use area shall be permitted within 30 feet of any intersecting street lines; and, except for off-street parking areas for uses permitted in any R District requiring fewer than 10 parking spaces, no entrance or exit shall be permitted within 15 feet of a lot in any R District.

(b) Access to automotive use areas, except for off-street parking areas in R Districts for fewer than five vehicles, shall be approved by the Town Highway Superintendent and shall be so arranged that vehicles shall not back into a street.

(5) Restriction on use. No automotive use area shall be used for auto wrecking or for the storage of wrecked, partially dismantled or junked vehicles or equipment or motor vehicles which do not qualify for New York State motor vehicle registration.

F. Lots divided by district boundaries.

(1) Where a lot is divided by any zoning district boundary so as to be in more than one zoning district and where such lot was an existing lot when such district boundary was established, a conforming use, occupying 50% or more of the area of said lot and having street frontage in the district where permitted, may be extended on such lot not more than 25 feet, measured perpendicular to the district boundary, into any district where such use is not permitted.

(2) Such use shall be subject to all regulations applicable to the district where permitted.

G. Lot frontage on streets for dwellings. No dwelling shall be erected on any lot which lot does not have immediate frontage on a street as defined in this chapter.

H. Screening of service entrances in C or M Districts. Where a loading or unloading platform or any service entrance in a C or M District faces any lot line which coincides with any R District boundary, such platform or service entrance shall be effectively screened from such R District in a manner approved by the Town Code Enforcement Officer.

§ 265-31. Height regulations.

Height exceptions and limitations. The height limitations of this chapter shall not apply to:

A. Chimneys, flues, spires or belfries.

B. Elevator or stair bulkheads, roof water tanks or cooling towers, including enclosures, provided that such structures, in the aggregate, do not occupy more than 10% of the roof area.

C. Flagpoles, radio or television antennas, masts or aerials located on a building and extending not more than 20 feet above the roof of such building.

§ 265-32. Lot size and open space regulations.

A. Lot size exception for existing small lots. The lot width or area requirements of this chapter shall be automatically waived to permit the erection of a single-family dwelling or the restoration, enlargement (but no additional dwelling units), moving, repair or alteration of an existing single-family dwelling on any lot of record which was owned separately and individually from all other tracts of land on the effective date of this chapter or on the effective date of any subsequent amendment increasing the lot size requirements for such lot, provided that:

(1) Such use is permitted in the district where such lot is located.

(2) All other regulations prescribed in this chapter shall apply thereto; provided, however, that no side yard shall be less than five feet and the total width of both side yards shall be not less than 13 feet.

(3) The lot area is large enough for adequate sewage disposal where individual private sewage systems are employed.

B. Front yard modification.

(1) In all districts, except M Districts, where there are existing principal buildings on adjoining lots on each side of a parcel of land less than 100 feet in width having a front yard setback or exterior side yard setback less than the required front yard depth of said parcel, the required front yard depth of said parcel shall equal the average setback from the street line of such existing buildings on said adjoining lots. This modification shall not permit any front yard depth less than 15 feet.

(2) In M Districts where there are existing principal commercial or industrial buildings on adjoining lots on each side of a parcel of land less than 100 feet in width and these buildings have a front yard setback or exterior side yard setback less than the required front yard depth, the required front yard depth of said parcel shall equal the average setback from the street line of such existing buildings on said adjoining lots.

C. Side yard modification for corner lots.

(1) In R Districts:

(a) On a corner lot where the rear lot line coincides with the rear lot line of the adjoining lot for a distance from the street line, the required width of the exterior side yard for any building shall equal 10% of the lot width but need not be more than 10 feet.

(b) On a corner lot where the rear lot line coincides with a side lot line of the adjoining lot for a distance from the street line:

[1] The required width of the exterior side yard for buildings up to 30 feet in height shall equal 30% of the lot width but need not exceed 40 feet and shall not be less than 18 feet.

[2] The required width of the exterior side yard for buildings over 30 feet in height shall equal the required front yard depth of said adjoining lot but need not exceed 40 feet.

(2) In C or M Districts:

(a) On a corner lot where the rear lot line coincides with the rear lot line of the adjoining lot for a distance from the street line, the required width of the exterior side yard of said

corner lot shall be not less than:

[1] For dwellings, the same as in Subsection **C(1)(a)** of this section.

[2] Other principal buildings: 30 feet when the exterior side yard abuts any R District boundary or 10 feet in any other case.

(b) On a corner lot where the rear lot line coincides with a side lot line of an adjoining lot, the width of the exterior side yard of said corner lot shall be not less than the depth of the required front yard of said adjoining lot.

(3) In any district, the regulations of this subsection may be varied by the Zoning Board of Appeals as provided in Article **XII**.

D. Rear yard modification for through lots. On a through lot, where the rear lot line coincides with a street line, a front yard equivalent shall be provided. The rear yard depth requirements in the district regulations shall not apply on that portion of a through lot where a front yard equivalent is required.

E. Visibility at intersections. In any district where a front yard of 25 feet or more is required by this chapter, no sign, fence, wall, hedge, shrub planting or tree foliage which obstructs vision at elevations between three feet and seven feet above the street level shall be placed or maintained within the triangular area formed by two intersecting street lines and a line connecting points on such street lines 30 feet distant from their point of intersection. This regulation shall not apply to any necessary retaining wall or to buildings existing on the effective date of this chapter.

F. Permitted obstructions in required open space. None of the following uses, structures or parts of structures shall be considered as obstructions when located as specified:

(1) In any required open space:

(a) Access drives or walks.

(b) Fences or walls not exceeding 3 1/2 feet in height, except as otherwise provided in § **265-30E** for screening.

(c) Flagpoles not exceeding 20 feet in height.

(d) Retaining walls of any necessary height.

(e) Permitted signs.

(f) Unenclosed steps or terraces not extending more than one foot above the adjoining finished grade.

(g) Projections from a principal building as follows, provided that no projection is nearer than five feet to a side lot line:

[1] Awnings or canopies.

[2] Chimneys or roofs projecting not more than two feet into a required open space.

[3] Windowsills and architectural features projecting not more than four inches into a required open space.

[4] Unenclosed steps not extending above the first-floor level.

(h) In any C or M District, open accessory off-street parking spaces.

(2) In any required interior side yard:

(a) A one-story attached garage not more than 12 feet in height projecting not more than three feet into a required interior side yard, provided that such garage shall not be nearer to any side lot line than a distance equal to 1/2 the height of said garage or five feet, whichever is greater.

(b) An open fire escape projecting not more than four feet into a required interior side yard but not nearer to any side lot line than five feet.

(3) In any rear yard, not a front yard equivalent, or in any part of an interior side yard which exceeds a required side yard:

(a) Fences or walls not to exceed six feet in height, or eight feet in height when approved by the Board of Appeals.

(b) Any accessory use or structure permitted in the district regulations, subject to Subsection **G**, Limitations on obstructions in required open space.

(c) Projections. Balconies, bay windows, nonweatherproofed porches or breezeways or attached garages not exceeding 12 feet in height may extend into a required rear yard for a distance not to exceed 1/3 the required depth of such yard.

(d) Flagpoles or accessory radio or television antennas of any height, provided that such structure shall be set back from any property line a distance equal to its height.

G. Limitations on obstructions in required open space are as follows:

(1) In C or M Districts, no storage, truck parking, loading or unloading or processing of any kind shall be permitted in any required yard in any C or M District. This provision shall not apply to uses accessory to a permitted dwelling, but such accessory uses shall be subject to the following limitations on obstructions in required open spaces in the R Districts.

(2) In R Districts:

(a) Accessory buildings and roofed projections shall not occupy more than 30% of a required rear yard of an interior lot or more than 40% of a required rear yard of a corner lot.

(b) No part of an accessory building shall be nearer than three feet to a rear or side lot line, except that, where such lot line abuts a side yard of an adjoining lot in any R District, the setback shall not be less than a distance equal to 1/2 the height of the accessory building or five feet, whichever is greater.

(c) Detached accessory buildings shall be at least 10 feet from any dwelling and five feet from any other building.

Article X. Nonconforming Uses

§ 265-33. Continuation of use.

Any use which is made a nonconforming use by this chapter or by any subsequent amendments thereto may be continued, except as hereinafter provided.

§ 265-34. Change in use.

A nonconforming use may be changed to a use in the same use group or in a use group with a lower number; provided, however, that no nonconforming residential dwelling or dwelling unit situated in an M District shall be altered, enlarged or changed in such manner as to create additional nonconforming dwelling units. Once a nonconforming use is changed to a conforming use or to a more-restricted use, such use thereafter shall not revert to a less-restricted use.

§ 265-35. Extension or enlargement.

Unless otherwise provided in this article, a nonconforming use shall not be enlarged or extended, except that, in any C or M District, any nonconforming building may be enlarged to an extent not exceeding 25%, in the aggregate, of the gross floor area devoted to such nonconforming use. In no case shall such enlargement extend beyond the lot occupied by such nonconforming use nor violate any height, yard, parking area or other open space requirements of this chapter. When the total of all enlargements equals 25% of the gross floor area existing at the time such use became a nonconforming use, no further enlargements shall be permitted.

§ 265-36. Repair or alteration.

A. Nothing herein shall be deemed to prevent normal maintenance of a building or other structure containing a nonconforming use, including nonstructural repairs and incidental alterations not extending the nonconforming use.

B. No structural alterations shall be made in a building or other structure containing a nonconforming use except:

   (1) When required by law.

   (2) To restore to a safe condition any building or structure declared unsafe by the Code Enforcement Officer.

   (3) To accomplish permitted enlargements.

   (4) To accomplish a change to a conforming use or to a use in a use group with a lower number.

§ 265-37. Restoration.

Unless granted a variance by the Zoning Board of Appeals, no nonconforming building or structure which has been damaged by fire or other causes to the extent of 50% or more of its equalized assessed value, as determined by a Town Assessor of the Town of North Collins, shall be rebuilt or repaired except in conformance with the regulations of this chapter. In such reconstruction, neither the floor area nor the cubical content shall be increased from the original nonconforming building.

§ 265-38. Discontinuance.

In any district, whenever a nonconforming use of land, premises, building or structure, or any part or portion thereof, has been discontinued for a period of one year, such nonconforming use shall not thereafter be reestablished, and all future use shall be in conformity with the provisions of this chapter. Such discontinuance of the active and continuous operation of such nonconforming use, or a part or portion thereof, for such period of one year is hereby construed and considered to be an abandonment of such nonconforming use regardless of any reservation of an intent not to abandon the same or of an intent to resume active operations. If actual abandonment in fact is evidenced by the removal of buildings, structures, machinery, equipment and other evidences of such nonconforming use of the land and premises, the abandonment shall be construed and considered to be completed within a

period of less than one year, and all rights to reestablish or continue such nonconforming use shall thereupon terminate.[1]

[1] *Editor's Note: Original Section 8-07, Cessation, which immediately followed this section, was repealed 12-4-1991 by L.L. No. 2-1991.*

Article XI. Administration and Enforcement

§ 265-39. Administrative and enforcement officer.

Unless otherwise provided, the provisions of this chapter shall be administered and enforced by the Code Enforcement Officer of the Town of North Collins. The Code Enforcement Officer shall keep a complete file of all applications, permits, orders, certificates, requirements and decisions affecting each and every application filed with the Town of North Collins pursuant to this chapter.

§ 265-40. Building permit required.

A. The provisions of the New York State Uniform Fire Prevention and Building Code and other applicable regulations of the Town of North Collins shall control the issuance of building permits. In addition to such provisions, every application for a building permit shall be accompanied by a plat, in duplicate, drawn to scale, showing the dimensions of the plot to be built upon, the size and location of the building on the plot and such other information as may be necessary to provide for the enforcement of the regulations contained in this chapter. Each application for a building permit shall also be accompanied by the required fee, as set forth from time to time by resolution of the Town Board.

   [Amended 12-4-1991 by L.L. No. 2-1991[1]]

   [1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

B. No building permit shall be issued unless the provisions of this chapter are complied with.

§ 265-41. Certificate of zoning compliance required.

A. No permit for excavation for or the erection or alteration of or repairs to any building shall be issued until an application has been made for a certificate of zoning compliance.

B. No land shall be occupied or used and no building hereafter erected, altered or extended shall be used or changed in use until a certificate of zoning compliance shall have been issued by the Code Enforcement Officer stating that the building or proposed use thereof complies with the provisions of this chapter.

C. All applications for a certificate of zoning compliance shall be in writing, signed by the property owner or his duly authorized agent, on forms furnished by the Code Enforcement Officer, and shall contain the following information:

   (1) The nature and definite purpose of the building or use.

   (2) A description of the property and the buildings thereon and to be placed thereon.

   (3) A statement of any restrictions by deed or other instrument of record.

   (4) An agreement to comply with this chapter and all other laws, ordinances and regulations that may be applicable.

D. In addition, upon written request by the property owner or his duly authorized agent, the Code Enforcement Officer shall inspect any building, other structure or tract of land existing on the effective date of this chapter and shall issue a certificate of zoning compliance therefor, certifying:

(1) The use of the building, other structure or tract of land.

(2) Whether such use conforms to all the provisions of this chapter.

§ 265-42. Inspections.

The Code Enforcement Officer is hereby empowered to cause any building, other structure or tract of land to be inspected and examined and to order, in writing, the remedying of any condition found to exist therein or thereat in violation of any provision of this chapter. After any such order has been served, no work shall proceed on any building, other structure or tract of land covered by such order except to correct the violation or to comply with such order.

§ 265-43. Penalties for offenses.

A. Penalties.

(1) A violation of this chapter or any regulation adopted hereunder is hereby declared to be an offense, punishable by a fine not exceeding $350 or imprisonment for a period not to exceed six months, or both, for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than $350 nor more than $700 or imprisonment for a period not to exceed six months, or both; and, upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than $700 nor more than $1,000 or imprisonment for a period not to exceed six months, or both. However, for the purpose of conferring jurisdiction upon courts and judicial officers generally, violations of this chapter or any regulation adopted hereunder shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

[Amended 12-4-1991 by L.L. No. 2-1991[1]]

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

(2) A person shall be subject to the penalties imposed by this section and § 268 of Article 16 of the Town Law in any case where an order to remove any violation of any of the provisions of this chapter has been served by the Code Enforcement Officer upon the owner, general agent, lessee or tenant of the building, other structure or tract of land, or any part thereof, or upon the architect, builder, contractor or anyone who commits or assists in any such violation and such person shall fail to comply with such order within 10 days after the service thereof. Each weeks continued violation shall constitute a separate additional violation and shall be punishable hereunder.

B. Other remedies. In addition to the foregoing remedies, the Town of North Collins may institute any appropriate action or proceeding to prevent or restrain any violation of this chapter.

Article XII. Board of Appeals

§ 265-44. Creation and organizations.

[Amended 12-4-1991 by L.L. No. 2-1991; 9-4-1996 by L.L. No. 3-1996]

A Board of Appeals consisting of five members, as constituted and empowered under § 267 of Article 16 of the Town Law, shall be established. Vacancies occurring in such Board shall be filled in accordance with the Town Law. The Board of Appeals shall have all the powers and perform all the duties prescribed by statute and by this chapter.

§ 265-45. Powers and duties.

A. Appellate jurisdiction.

(1) Appeals for interpretation. The Board of Appeals shall hear and decide appeals where it is alleged that there is an error or misinterpretation in any order, requirement, decision or determination by any administrative official of the Town of North Collins charged with the enforcement of the provisions of this chapter. The Board of Appeals may reverse, modify or affirm, in whole or in part, any such appealed order, requirement, decision or determination appealed from and may make such order, requirement, decision or determination as, in its opinion, ought to be made in strictly applying and interpreting the provisions of this chapter and for such purposes shall have all the powers of the officer from whom the appeal is taken.

(2) Appeals for variances.

(a) On an appeal from an order, requirement, decision or determination of any administrative official charged with the enforcement of this chapter, where it is alleged by the appellant that there are practical difficulties or unnecessary hardship in the way of carrying out the strict application of any provision of this chapter, the Board of Appeals may grant a use or area variance in the strict application of such provisions in accordance with Town Law § 267-b.[1]

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

(b) The following types of cases shall be construed as eligible for consideration within the meaning of this chapter:

[1] Unusual size or shape of lot: where, by reason of exceptional narrowness, shallowness or shape of a specific piece of property at the time of the effective date of this chapter or by reason of exceptional topographic conditions or other exceptional physical difficulties in the development of such piece of property, the literal enforcement of the requirements of this chapter pertaining to yards or other space relationships would result in peculiar practical difficulties or exceptional undue hardship upon the owner of such property. No use variance shall be granted in such case, in accordance with the provisions of § 267-b of the Town Law.

[Amended 12-4-1991 by L.L. No. 2-1991[2]]

[2] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

[2] Adjacent nonconforming uses:

[a] Where, adjacent to a lot on both sides in the case of an interior lot or on both the side and rear of the lot or on all other corners of an intersection in the case of a corner lot, there are buildings or uses which do not conform to regulations prescribed in this chapter for the zoning district in which said lot is located.

[b] In considering such appeal, the Board of Appeals shall give due regard to the nature and conditions of all adjacent uses and structures; and in granting any such appeal, the Board of Appeals may impose special requirements and conditions for the protection of conforming uses and the ultimate removal of nonconforming uses and structures. In any case, the variance as to the use or uses permitted on any lot, whether principal or accessory, shall not allow a use

or combination of uses more intensive or less restricted than any use which is legally existing on the premises immediately adjacent on either side of said lot or of premises on any other corner of the intersection in the case of a corner lot.

[3] Nonconforming building:

[a] Where, because the principal building on any premises was originally lawfully erected and intended for a principal use which would now be a nonconforming use in the zoning district in which located and the right to continue or reestablish such nonconforming use in such building is denied by the provisions of Article **X** of this chapter, the literal enforcement of such provisions would result in peculiar and exceptional practical difficulties or exceptional and undue hardship upon the owner of such property.

[b] In considering such appeal, the Board of Appeals shall give due regard to the age and condition of such building and its adaptability for or convertibility to a conforming use. In approving any such appeal, the Board of Appeals shall specify the time limit during which such grant of a variance shall be effective, which time limit shall in no case exceed the estimated useful life of such building. In case the building has been condemned by the Code Enforcement Officer and ordered to be demolished, the Board of Appeals shall not grant any such appeal.

[4] Any other case involving practical difficulties or unnecessary hardship in the way of carrying out any provision of this chapter pursuant to and in accord with the intent and purpose of Subdivision 5 of § 267-b of Article 16 of the Town Law.[3]

[3] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

(3) In granting a variance, the Board of Appeals may vary or modify the provisions of this chapter so that the spirit of the law shall be observed, public safety secured and substantial justice done. Toward this end, the Board of Appeals may prescribe such conditions or restrictions as it may deem necessary. Such conditions or restrictions shall be incorporated into the building permit and the certificate of zoning compliance.

B. Original jurisdiction.

(1) General provisions.

(a) The Board of Appeals shall hear and decide, in accordance with the provisions of this chapter, all applications for special permits or for modifications of provisions of this chapter in all such cases upon which the Board of Appeals is specifically authorized to pass or to make any other determination required by this chapter.

(b) In authorizing any specified special permit or specified modification or in making any required determination all required findings shall be made, and, in the case of special permits or modifications, the Board of Appeals may prescribe appropriate conditions to minimize adverse effects on the character of the surrounding area and to safeguard the public health, safety, convenience or general welfare.

(c) No special permit or modification of the provisions of this chapter shall be authorized by the Board of Appeals unless, in addition to other findings specified in this chapter, it finds that such special permit or modification:

[1] Will be in harmony with the general purposes and intent of this chapter.

[2] Will not tend to depreciate the value of adjacent property.

[3] Will not create a hazard to health, safety or the general welfare.

[4] Will not alter the essential character of the neighborhood nor be detrimental to the residents thereof.

[5] Will not otherwise be detrimental to the public convenience and welfare.

(2) Special permits.

(a) Temporary structures or uses. The Board of Appeals may authorize a temporary and revocable permit, for not more than two years, for uses or structures that do not conform with the regulations of this chapter for the district in which they are located, provided that the following findings are made:

[1] That such use is of a temporary nature and does not involve the erection or enlargement of any permanent structure.

[2] In case of a renewal of such permit, that all conditions and safeguards previously required have been complied with.

(b) Permitted temporary structures or uses, extension of time limit. The Board of Appeals may authorize the continuation of temporary structures or uses incidental to construction work, provided that the following findings are made:

[1] That the nature and scale of the construction is such as to require a longer period of time for completion.

[2] That such construction has been diligently prosecuted or that any delays have been unavoidable.

(c) Accessory business signs and institutional signs.

[1] The Board of Appeals may authorize one nonflashing business sign which identifies a group of stores or a shopping center and one nonflashing church or school bulletin board or other identification sign, provided that the following findings are made:

[a] That such sign will not constitute a traffic hazard.

[b] That such sign shall have a minimum adverse effect on adjacent residential properties, if any.

[2] In authorizing any such sign, the Board of Appeals shall determine the height, size and type of illumination as well as the location of such sign on the lot. See also Chapter **200**, Signs.
[Amended 12-4-1991 by L.L. No. 2-1991]

(3) Modification of regulations.

(a) Reduction of parking spaces for places of assembly. The Board of Appeals may authorize a reduction of not more than 50% in the number of required off-street parking spaces for places of assembly when located on the same lot with other uses, provided that the following findings are made: that, in accordance with times of operation and times of peak demand, there will be no conflict in the joint use of such off-street parking spaces.

(b) Reduction of parking spaces where public off-street parking facilities are available. Where public off-street parking facilities are available, other than parking provided for a public building, the Board of Appeals may reduce on a pro rata basis the parking requirements for all uses within 600 feet of any boundary of such public parking facility.

(c) Exception from exterior side yard requirement. The Board of Appeals may modify the exterior side yard requirements for principal buildings on deep corner lots, provided that

the following findings are made:

[1] That the rear yard is at least 50 feet in depth.

[2] That such modification will not adversely affect the adjoining property.

(d) Exception from fence height limitations. The Board of Appeals may permit a fence up to eight feet in height in any rear yard, not a front yard equivalent, or in any side yard, not a required side yard, provided that such fence is at least 10 feet from any property line and that the following findings are made:

[1] That such fence shall not unduly shut out light or air to adjoining properties.

[2] That such a fence shall not create a fire hazard by reason of its construction or location.

§ 265-46. Procedures.

A. General provisions. The Board of Appeals, consistent with law and ordinance, may adopt rules of conduct and procedure.

B. Filing appeals. An appeal to the Board of Appeals from any ruling of any administrative officer charged with the enforcement of this chapter may be taken by any officer, department or board of the Town. Such appeal shall be taken, within such time as shall be prescribed by the Board by general rule, by filing with the officer from whom the appeal is taken and with the Board of Appeals a notice of appeal, specifying the grounds thereof. The officer from whom the appeal is taken shall forthwith transmit to the Board all the papers constituting the record upon which the action appealed from was taken.

C. Filing applications. An application for any matter upon which the Board of Appeals is required to pass may be made to the Code Enforcement Officer by the owner, the tenant of the property or a duly authorized agent for which such appeal or application is sought.

D. Meetings, witnesses and records.

(1) Meetings of the Board shall be held at the call of the Chairman and at such other times as the Board of Appeals may determine. All meetings shall be open to the public.

(2) The Chairman of the Board of Appeals or, in his absence, the Acting Chairman may administer oaths and compel the attendance of witnesses.

(3) The Board of Appeals shall keep minutes of its proceedings showing the vote of each member upon every question or, if absent or failing to vote, indicating such fact and shall keep records of its examinations and other official actions. Every rule or regulation, every amendment or repeal thereof and every order, requirement, decision or determination of the Board of Appeals shall immediately be filed in the office of the Town Clerk and shall be a public record.

E. Stay of proceedings. Any appeal to the Board of Appeals shall stay all proceedings in furtherance of the action appealed from, except as otherwise provided in Subdivision 6 of § 267-a of Article 16 of the Town Law.[1]

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

F. Public hearing and rehearing.[2]

(1) The Board of Appeals shall fix a reasonable time for a hearing of an appeal, applications for special permits or modifications of regulations or other matters referred to it and shall give

public notice thereof in accordance with the provisions of Subdivision 7 of § 267-a of Article 16 of the Town Law.

(2) There shall be no rehearing of an appeal or application by the Board of Appeals, except in accordance with Subdivision 12 of § 267-a of Article 16 of the Town Law.

[2] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

G. Decisions of the Board of Appeals.

(1) The concurring vote of a majority of the members of the Board of Appeals shall be necessary to reverse any order, requirement, decision or determination of the Code Enforcement Officer or to decide in favor of the applicant on any matter upon which it is required to pass under this chapter or to effect any variation in this chapter.

(2) Every decision of the Board of Appeals shall be by resolution. Where findings are required, the decision shall set forth each required finding, supported by substantial evidence or other data considered by the Board of Appeals in each specific case; or, in the case of denial, the decision shall include the findings which are not satisfied.

H. Violation of conditions or restrictions. Failure to comply with any condition or restriction prescribed by the Board of Appeals in approving any appeal for a variance or application for a special permit or a modification of regulations shall constitute a violation. Such violation may constitute the basis for revocation of a variance, special permit or modification or for penalties and other applicable remedies.

I. Lapse of authorization. Any variance, special permit or modification of regulations authorized by the Board of Appeals shall be automatically revoked unless a building permit conforming to all conditions and requirements established by the Board of Appeals is obtained within six months of the date of approval by the Board of Appeals and construction is commenced within one year of such date of approval.

Article XIII. Special Use Permits

§ 265-47. General provisions.

Unless otherwise provided, the special uses for which conformance to additional standards is required shall be deemed to be permitted uses in their respective districts subject to the satisfaction of the requirements and standards set forth herein, in addition to all other requirements of this chapter. All such uses are hereby declared to possess characteristics of such unique and special form that each specific use shall be considered as an individual case.

§ 265-48. Application procedure.

A. Applications for special use permits shall be acted on by the Town Board after a public hearing in relation thereto in accordance with Town Law § 274-b. Notice of such public hearing shall be published in the official newspaper of the Town of North Collins at least five days prior to the date thereof. Prior to such public hearing, the application shall be referred to the Town Planning Board for report and recommendation thereon to the Town Board.[1]

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

B. A plan for the proposed development of a site for a permitted special use shall be submitted with an application for a special permit, and such plan shall show the location of all buildings, parking areas, traffic access and circulation drives, open spaces, landscaping and other pertinent

information that may be necessary to determine if the proposed special use meets the requirements of this chapter.

C. In addition to any other requirements contained herein or imposed by the Town Board as a condition of a special use permit, the operation of kennels shall be conducted in accordance with the following general standards.
[Added 11-5-1997 by L.L. No. 2-1997]

(1) All facilities housing animals shall be maintained in enclosed structures which shall be of soundproof construction and so maintained as to minimize the production of dust, odors and noise. All facilities used in the kennel operation, including but not limited to all exercise pens and runways shall not be maintained within 100 feet of any property line and shall be so situated on the lot so as to be the greatest distance from structures on adjoining lots.

(2) Any special use permit issued shall be subject to annual review and amendment by the Town Board upon the advice and recommendation of the Code Enforcement Officer and Town Planning Board.

(3) Facilities housing animals after business hours shall be soundproofed so that noises emitted from the kennel building when measured at any individual property line, shall be minimized.

(4) In deciding whether or not to issue a special use permit, the Town Board shall consider the dimensions of the land owned by the petitioner; the number and type of animals the petitioner intends to keep on the premises; the proximity of residential housing in the vicinity; the proposed hours of operation of the kennel; the proposed landscaping and screening of the premises and particularly around the proposed kennel facilities; the proposed location of all buildings and kennel facilities to be situated on the premises; and such other issues as may be relevant to the application. The Town Board may, upon the advice and recommendation of the Planning Board, impose such conditions and restrictions upon said special use permit as are reasonably necessary to protect the public health, safety and general welfare of the adjoining landowners.

§ 265-49. Expiration.

A special use permit shall be deemed to authorize only one particular special use and shall expire if the special use shall cease for more than one year.

Article XIV. Amendment

§ 265-50. General provisions.

The Town Board may, from time to time, on its own motion or on petition or on recommendation of the Town Planning Board, after proper public notice and public hearing, amend, supplement or repeal the regulations, provisions or boundaries of this chapter.

§ 265-51. Provisional amendments.

In the case of a proposed amendment which involves the reclassification or transfer of any area of the Town of North Collins from an R District to any C or M District, the Town Board may require the petitioner to submit a development plan showing the extent, location and character of proposed structures and uses. The Town Board may require that such plan be modified to meet the objections raised by the Town Planning Board or at any public hearing thereon or subsequent thereto and may qualify its approval of any such amendment by attaching a special endorsement thereto. Within a

period of six months from the approval of such a provisional amendment, no building permit or certificate of zoning compliance shall be issued for any property within the area described by said amendment except in accordance with the approved development plan and with all conditions and limitations placed thereon by the Town Board or in accordance with the zoning regulations applicable prior to said reclassification action. Unless application for a building permit for such special development is made within six months from the Town Board's approval and unless development of the area included in such development plan is commenced within a period of one year after the Town Board's approval, said approval shall be null and void, and the zoning classification shall be as it was when the petition for amendment was filed.

§ 265-52. Procedure.

A. Petition for amendment.

(1) Filing of petition. A petition to amend, change or supplement the text portion of this chapter or any zoning district as designated on the Zoning Map portion of this chapter established herein shall be filed with the Town Clerk of the Town of North Collins on forms obtained from his office and shall be transmitted by him to the Town Board. On and after the effective date of this chapter, any petition to amend, change or supplement this chapter shall be accompanied by a filing fee in an amount as established by the Town Board.

(2) Protests. In case of a protest against any change signed by the owners of 20% or more either of the area of the land included in such proposed change or of that immediately adjacent extending 100 feet therefrom or of that directly opposite thereto extending 100 feet from the street frontage of such opposite land, such amendment shall not become effective except by the favorable vote of at least four members of the Town Board.

(3) Public hearings; official notice; recording. Unless otherwise provided, the provisions of § 265 of Article 16 of the Town Law, and subsequent amendments thereto, pertaining to public hearings, official notice and proper recording of zoning actions taken by the Town Board shall apply to all amendments to this chapter.

B. Referral to Planning Board. Each proposed amendment, except those initiated by the Town Planning Board, shall be referred to the Town Planning Board for an advisory report prior to the public hearing held by the Town Board. In reporting, the Town Planning Board shall fully state its reasons for recommending or opposing the adoption of such proposed amendment and, if it shall recommend adoption, shall describe any changes in conditions which it believes make the amendment desirable and shall state whether such amendment is in harmony with the Master Plan or Comprehensive Plan for land use in the Town.

C. Rehearing on petition. The disposition of a petition for amendment by the Town Board shall be final, and disapproval or denial of the proposed amendment shall void the petition. No new petition for an amendment which has been previously denied by the Town Board shall be considered by it, except for a vote to table or to receive and file, and no public hearing shall be held on such amendment within a period of one year from the date of such previous denial, unless the Town Planning Board shall submit a recommendation, with reasons stated therefor, certifying that there have been substantial changes in the situation which would merit a rehearing by the Town Board.

§ 265-53. Limitations on Planning Board.

A. Unless otherwise provided in this chapter, the Town Planning Board shall not have the power to increase the residential density patterns or to alter the minimum lot size requirements in any and all R Districts of this chapter in the exercise of its powers of plat approval or in the administration of Chapter **220**, Subdivision of Land, of the Town of North Collins, without prior approval of the

Town Board of North Collins in each and every instance where a request for said change is made to the Town Planning Board by a landowner, a private subdivider or his authorized agent.

B. If such specific request is made to the Town Planning Board and subsequently approved by the Town Board after proper public notice and public hearing thereon, the Town Planning Board is authorized to modify said density regulations in an R District of this chapter, in a specific case, to the extent approved by the Town Board, in the administration of Chapter **220**, Subdivision of Land, of the Town of North Collins, and pursuant to powers granted by state law.

Town of North Collins, NY
Tuesday, November 17, 2020

Chapter 220. Subdivision of Land

[HISTORY: Adopted by the Town Board of the Town of North Collins 5-11-1977 by L.L. No. 1-1977 (Ch. 160 of the 1991 Code). Amendments noted where applicable.]

GENERAL REFERENCES
Joint Planning Board — See Ch. **42.**
Zoning Board of Appeals — See Ch. **76.**
Farming — See Ch. **128.**
Mobile homes — See Ch. **153.**
Site plan review — See Ch. **206.**
Telecommunications facilities — See Ch. **237.**
Wind energy conversion systems — See Ch. **258.**
Zoning — See Ch. **265.**

§ 220-1. Authority of Planning Board to approve plats.

[Amended 12-4-1991 by L.L. No. 2-1991]
Pursuant to § 276 of Article 16 of the Town Law and further pursuant to a resolution of the Town Board of the Town of North Collins, as amended, the Planning Board of the Town of North Collins is authorized and empowered to approve plats showing lots, blocks or sites with or without roads, streets or highways within any part of the Town of North Collins and to pass and approve the development of plats already filed in the office of the County Clerk of the County of Erie if such plats are entirely or partially undeveloped. In asserting its authority and power to approve such plats, the Planning Board shall be deemed to possess all of the rights and powers to regulate the subdivision of land in the Town of North Collins as stated in Article 16 of the Town Law, including the establishment of Subdivision Regulations for the Town of North Collins which enact the following provisions.

§ 220-2. Definitions; word usage.

A. Whenever used in this chapter, the singular shall include the plural, and vice versa. The word "shall" is mandatory.

B. As used in this chapter, the following terms shall have the meanings indicated:

BLOCK
An area bounded by streets.

BUILDING LINE OR SETBACK
The line within a property defining the required minimum distance between any structure and the adjacent right-of-way.

DWELLING UNIT
One or more rooms designed for occupancy by one family for cooking, living and sleeping purposes.

EASEMENT
A right granted for the purpose of limited public or quasi-public uses across private land.

FINAL PLAT FOR RECORD

The final map or drawing on which the subdivider's plan of subdivision is presented to the Planning Board for approval and which, if approved, will be submitted to the County Clerk of the County of Erie for recording.

FRONT LOT LINE

Where a lot abuts upon only one street, the street line shall be the front lot line.

LOT

A plot or parcel of land which is or in the future may be offered for sale, conveyance, transfer or improvement.

LOT LINES

The property lines bounding the lot.

MASTER PLAN

A comprehensive development plan for the Town of North Collins prepared by the Planning Board pursuant to § 272-a of the Town Law and adopted by the Town Board of the Town of North Collins as a guide for future development. It includes recommendations for physical development in the Town, including new roadways, extension and realignment of existing roadways, general locations for future parks and playgrounds and a floodplain area.[1]

MINIMUM LOT AREA

The least amount of square footage with lot lines.

MINIMUM LOT WIDTH

The least horizontal distance across the lot between side lot lines, measured at the front of a main building to be erected on such lot.

OFFICIAL MAP

The map established by the Town Board under § 270 of the Town Law showing the streets, roads, highways and parks heretofore laid out, adopted and established by law, and any amendments thereto adopted by the Town Board, or additions thereto resulting from the approval of subdivision plats by the Planning Board and the subsequent filing of such approved plats with the County Clerk of the County of Erie. "Official Map" may also refer to an Official Map of Erie County, if any, adopted by the Board of Supervisors of Erie County pursuant to law.

OFFICIAL SUBMISSION DATE

The date when a final plat for record shall be considered submitted to the Planning Board, pursuant to § 276 of the Town Law, is hereby defined to be the date of the meeting of the Planning Board at which the Planning Board declares and reflects in its minutes that the subdivider's submission is complete in all respects pursuant to the method of filing a final plat for record with the Planning Board as enumerated in § **220-6** of this chapter.

PERSON

Every natural person, partnership, corporation, fiduciary, association or other entity. Whenever used in any clause prescribing, imposing or suggesting a penalty, the term "person," as applied to any partnership or association, shall mean the partner or members thereof, and as applied to any corporation, shall include the officers thereof.

PLANNING BOARD or TOWN PLANNING BOARD

The duly appointed Planning Board of the Town of North Collins, New York.

PRELIMINARY PLAN

The preliminary drawing or drawings indicating the proposed manner of layout of the subdivision to be submitted to the Planning Board for its consideration and tentative approval.

PROPERTY DATA MAP

A map showing all existing and planned conditions affecting the property to be subdivided, required prior to the submission of an application to the Planning Board for tentative approval of a preliminary plan for subdivision.

REAR LOT LINE

Any lot line which is opposite and more or less parallel with the front lot line.

RIGHT-OF-WAY

Land reserved for use as a street, interior walk or for other public purpose.

RIGHT-OF-WAY WIDTH

The distance between property lines that form a boundary between a lot and land used for vehicular and pedestrian travel and access to property.

SIDE LOT LINE

Any lot line which is not a front lot line or a rear lot line.

STREET

A strip of land, including the entire right-of-way, whether dedicated or not, intended for use as a means of vehicular and pedestrian traffic. "Street" shall be deemed to include avenue, boulevard, court, expressway, roadway, lane, road and the like.

STREET PAVEMENT or PAVEMENT

The wearing or exposed surface of the roadway used by vehicular traffic.

SUBDIVIDER

Any person, firm, corporation, partnership or association who shall lay out, for the purpose of sale or development, any subdivision or part thereof, as defined herein, either for himself or others.

SUBDIVISION

A division of any part, parcel or area of land by the owner or his agent into lots or parcels two or more in number for the purpose of conveyance, transfer, improvement or sale, fronting on a new street, road or way dedicated or intended to be dedicated to public use for the use of purchasers or owners of lots fronting thereon. The term "subdivision" includes resubdivision and, as appropriate, shall refer to the process of subdividing land or to the land so subdivided. [Amended 12-4-1991 by L.L. No. 2-1991]

SUBDIVISION REGULATIONS or REGULATIONS

Refers to the regulations and requirements governing the subdivision of land in the Town of North Collins as herein promulgated.

TOWN ATTORNEY

The duly appointed Town Attorney or retained legal counsel of the Town of North Collins, New York.

TOWN BOARD

The duly elected Town Board of the Town of North Collins, New York.

TOWN ENGINEER

The duly appointed or retained professional engineer employed by the Town of North Collins, New York.

TOWN HIGHWAY SUPERINTENDENT

The duly elected Highway Superintendent of the Town of North Collins, New York.

TOWN LAW

The Town Law of the State of New York.

ZONING ORDINANCE

The officially adopted Zoning Ordinance of the Town of North Collins, New York, together with any and all amendments thereto.[2]

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

[2] *Editor's Note: See also Ch. **265**, Zoning.*

§ 220-3. Purpose.

The purpose of the Subdivision Regulations in the Town of North Collins is to enable the Planning Board to implement its authority and power to approve subdivision plats in the public interest, to achieve the orderly, efficient and economical development of the Town through subdivision, to promote development in accordance with the Master Plan of the Town of North Collins and to promote and protect the health, safety and welfare of the entire community.

§ 220-4. Restriction on sale of lots.

No person or his agent shall sell, advertise for sale or in any way offer to sell any lot shown on any plat of a subdivision which requires final plat approval by the Planning Board until such final approval has been granted by the Planning Board and such approved subdivision is duly recorded in the office of the County Clerk of the County of Erie in a manner as prescribed by law. Any person or his agent found guilty of violating this provision shall be subject to penalties as provided in § **220-11** hereof, in addition to any other penalties prescribed by law.

§ 220-5. Fees.

[Amended 12-4-1991 by L.L. No. 2-1991]

A. The subdivider shall pay a subdivision filing fee in the proper amount, as determined from a schedule of fees as amended from time to time by resolution of the Town Board,[1] prior to submitting his final plat for record to the Planning Board for review, public hearing and Planning Board action thereon. Such fee shall be in the form of a certified check payable to the Town of North Collins and deposited with the Town Clerk. The purpose of the subdivision filing fee is to help defray, wholly or in part, the expense incurred by the Town for advertisement and professional planning services rendered in reviewing the subdivider's various submissions to the Planning Board in regard to compliance with the Subdivision Regulations. Under certain conditions, the subdivider may be obligated to additional costs and fees for inspection, professional engineering services rendered to the Town and possible readvertisement costs aside from the subdivision filing fees listed in the schedule.

   [1] *Editor's Note: The fee schedule is on file in the Town offices.*

B. Each filing of a final plat for record, whether or not a final plat for the same property has been filed previously, shall be subject to the same requirements and fees as specified for filing of a final plat for record.

§ 220-6. Procedural steps for plat approval and recording.

The Planning Board hereby establishes procedures for the administration of the Subdivision Regulations as they pertain to the manner in which a subdivision will be considered for processing by the Planning Board. The subdivider or his authorized agent will be expected to adhere to the prescribed steps as follows:

A. Step 1: Subdivider becomes familiar with rules. The subdivider obtains a copy of the adopted and approved Subdivision Regulations of the Town of North Collins. Copies of such regulations may be obtained from the Town Clerk, together with all amendments thereto, at no cost. The subdivider reads the Subdivision Regulations thoroughly and in their entirety before proceeding further in the subdivision administration process.

B. Step 2: Subdivider's informal meeting with Planning Board. The subdivider requests, in writing, an informal meeting with the Planning Board to discuss the possible design of his proposed subdivision. Included in this discussion are considerations involving requirements for reservations of land, street improvements, sidewalks, drainage, sewerage, water, fire protection, tree planting and similar aspects as well as the availability of existing services. To this informal meeting the subdivider brings two copies of the property data map, as described in the Subdivision Regulations, and files said copies with the Planning Board. The subdivider's request for such an informal meeting is made to the Chairman of the Planning Board, except during the months of July and August, unless regular meetings of the Planning Board are scheduled in July and August. If the Planning Board is in recess from its regularly scheduled meetings during July and August, the Chairman may call a special meeting of the Planning Board upon request of a subdivider, provided that a quorum of members of the Planning Board is available for such special meeting.

C. Step 3: Preparation of preliminary plan and request for tentative approval.

(1) In consideration of the discussion at the informal meeting, especially as it pertains to site development requirements specified by the Planning Board, the subdivider prepares a preliminary plan of his proposed subdivision, as described in the Subdivision Regulations. The subdivider then files with the Chairman of the Planning Board, or his designee, together and at the same time and at least seven days prior to a regular meeting of the Planning Board, the following to be considered by the Planning Board at said regular meeting:

(a) Four copies of the preliminary plan.

(b) Such supplemental information as may be required by the Subdivision Regulations or the Planning Board.

(c) A written application for tentative approval of the preliminary plan by the Planning Board on forms, if any, as prescribed by the Planning Board and available from the Town Clerk.

(2) If desired by the subdivider, upon his request approved by the Chairman of the Planning Board, the two meetings between the subdivider and the Planning Board as outlined in Subsections **B** and **C** may be combined at one regular meeting of the Planning Board with the provision that all documentation as prescribed and required in Subsections **B** and **C** are filed properly as stipulated and the timing of such filing as outlined in Subsections **B** and **C** is observed by the subdivider.

D. Step 4: Action by Planning Board on preliminary plan.

(1) The Planning Board does not approve, modify or disapprove the subdivider's application for tentative approval of the preliminary plan at the meeting when such application and plan are formally presented to and filed with the Planning Board. The main purpose of said meeting is to afford the subdivider an opportunity to discuss his preliminary plan with the Planning Board in detail.

(2) The Planning Board will carefully study the practicability of the preliminary plan, taking into consideration the arrangement, location and width of streets, their relation to the topography of the land, water supply, sewage disposal, provision for storm drainage, lot sizes and arrangement, the future development of adjoining lands as yet unsubdivided and the requirements for community development as indicated in the Master Plan, if any, of the Town of North Collins and the Official Map of the Town of North Collins and/or the County of Erie.

(3) A public hearing will be held, after publication of notice of the hearing, within 62 days of receipt of the preliminary plat; and within 62 days after said hearing, the Planning Board will convene, either at a regular or special session, and act on the application of the subdivider by approving, modifying and approving or disapproving the preliminary plan as submitted. It is at this point in the subdivision administration process that the subdivider is notified, in writing, by the Planning Board of any specific changes the Planning Board will require in the preliminary plan and the character and extent of required improvements and reservations which it will require as a prerequisite to approval of the final plat for record (pursuant to the powers of plat approval as stated in the Subdivision Regulations and the Town Law, especially § 277 thereof). All actions of the Planning Board in reviewing a preliminary plan and decisions reached by said Board will be communicated, in writing, to the subdivider involved.

[Amended 12-4-1991 by L.L. No. 2-1991[1]]

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

(4) Action by the Planning Board to approve a preliminary plan or action to approve subject to modifications stipulated by the Board shall constitute tentative approval of the preliminary plan, and the Town Engineer and the Town Highway Superintendent shall be notified of such Board action.

(5) If the Planning Board disapproves an application for tentative approval of a preliminary plan, it shall so state its reasons therefor, in writing, to the subdivider and inform him of deficiencies which must be resolved by the subdivider prior to his resubmission of an application for tentative approval based on a revised preliminary plan.

E. Step 5: Preparation of a final plat for record and utilities approval. After the preliminary plan is approved or approved subject to modifications by the Planning Board, the subdivider proceeds to prepare the final plat for record, as described in the Subdivision Regulations, and prepare all supporting documentation as required by the regulations and the Planning Board. The subdivider informs the Erie County Health Department that his proposed subdivision has received tentative approval or tentative approval subject to modifications. The subdivider must secure written approval from said Department for whatever system of water supply and sanitary facilities the subdivider contemplates to serve adequately his proposed subdivision. If water is to be supplied from a public water district, the subdivider should receive the district's written approval. If connection with a public sanitary sewer district is contemplated, the subdivider should receive the district's written approval.

F. Step 6: Filing of final plat for record and action by the Planning Board.

(1) The subdivider has 12 months from the date of tentative approval of the preliminary plan, with or without modifications, by the Planning Board in which to file with the Planning Board a final plat for record; otherwise the Planning Board's approval or approval subject to modifications of the preliminary plan is null and void. If the subdivider chooses, he may submit as a final plat for record only that portion of the preliminary plan, as approved or approved subject to modifications by the Planning Board, that the subdivider intends to have approved and filed in the office of the County Clerk of the County of Erie.

(2) When the subdivider has completed all of the requirements of the Subdivision Regulations and the Planning Board prerequisite to filing a final plat for record, he files the following together and at the same time with the Chairman of the Planning Board, or his designee, at least 14 days prior to a regular or special meeting of the Planning Board at which said filing will be considered by the Planning Board:

(a) Twelve copies of the final plat for record.

(b) A written application for approval of the final plat for record by the Planning Board on forms, if any, prescribed by the Planning Board and available from the Town Clerk.

(c) A written statement from the Town Clerk that all filing fees payable as stated in the regulations have been paid in their entirety to the Town of North Collins.

(d) A written statement from the Erie County Health Department and from public water and public sanitary sewer districts, if applicable, approving the subdivider's proposed system of water and sanitary facilities.

(e) All supplemental information and documentation as required by the regulations and all supplemental information and documentation as required by the Planning Board at the time the Board granted tentative approval, with or without modifications, of the preliminary plan.

(f) A written statement from the subdivider indicating whether or not the final plat for record complies in all respects with the preliminary plan as tentatively approved by the Planning Board. The subdivider should indicate specifically what changes, if any, were made in the plat subsequent to tentative approval of the preliminary plan, other than changes required by the regulations prior to submission of a final plat for record.

(g) A written statement from the subdivider listing the names and known addresses of all land surveyors, engineers, lawyers and other persons employed or retained by the subdivider to assist him in the preparation of any map, plan, plat or other document pertaining to a proposed subdivision filed with the Planning Board. If any such person named is also employed, retained, elected or appointed to serve the Town of North Collins, with or without remuneration, and is required in any way to review, supervise, inspect, approve, pass upon or attest to the acceptability of any such map, plan, plat or document so filed in the subdivision review process or who must approve, inspect, supervise or pass judgment on the installation of required improvements within an approved final plat for record, including the construction of any roadway or street to be offered for dedication, the Planning Board shall require the employment of independent experts to advise the Board as may be necessary and may also recommend to the Town Board that it employ independent experts prior to the dedication and acceptance of any roadway or street as a Town road or street. In such cases, the entire expense of employment of such experts as may be required by either the Planning Board or the Town Board, or both, shall be borne by the subdivider.

(h) A written statement from the Town Engineer or the Town Highway Superintendent that all public improvements for a proposed subdivision, including but not limited to roads, streets and sidewalks, as required by the regulations and/or as required by the Planning Board have been completed and are acceptable according to minimum standards, if any, of the Town of North Collins for such improvements or a written statement from the Town Attorney, or comparable legal counsel employed by the Town, of the Town of North Collins, approved by the Town Board, attesting to the adequacy in amount and proper form of a performance bond(s) tendered by the subdivider to the Town to cover the total estimated cost of such required improvements for the purpose of protecting and indemnifying the Town of North Collins in case of default by the subdivider in providing such required improvements in accordance with minimum standards, if any, of the Town of North Collins.

(3) Upon filing of the final plat for record and all required supplemental data by the subdivider, the Planning Board checks the subdivider's submission for completeness with the regulations and other requirements as prescribed by the Planning Board. If in any way the subdivider's filing is incomplete, the Planning Board will so note in its meeting minutes and inform the subdivider, in writing, this his subdivision is not officially submitted and what is required of the subdivider to have his final plat for record submitted officially prior to the Planning Board's scheduling of a public hearing thereon. If the subdivider's submission is complete, the Planning Board notes such in its meeting minutes by declaring the subdivider's filing an official submission. The Planning Board proceeds to schedule a public hearing thereon and so notifies the subdivider, in writing.

G. Step 7: Public hearing on final plat for record. Pursuant to § 276 of the Town Law, the Planning Board holds a public hearing within 62 days after the Board has so declared the subdivider's filing an official submission. Such public hearing is advertised in the Town's official newspaper at least five days before such hearing.[2]

[2] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

H. Step 8: Planning Board action subsequent to public hearing. Pursuant to § 276 of the Town Law, after the public hearing on the subdivider's final plat for record, the Planning Board meets within 62 days and either approves, approves with modification or disapproves said plat. If said plat is disapproved, the Planning Board states its reasons therefor in the minutes of said meeting and communicates the same to the subdivider, in writing, along with a detailed listing of deficiencies causing such disapproval which, if corrected and submitted properly again to the Planning Board in accordance with its procedures, including, if deemed necessary by legal counsel, another public hearing, could result in the Planning Board's approval of a revised final plat for record. If the final plat for record is approved by the Planning Board, the Planning Board notes such approval in its minutes and affixes its official approval stamp on 12 copies of the final plat for record. The date of such approval is also placed on each of said copies, along with the signature of the Chairman of the Planning Board or his designee. Thereupon, the Planning Board returns three copies of said final plat for record to the subdivider. No changes, erasures, modifications or revisions shall be made in any final plat for record after approval has been given by the Planning Board and such approval has been attested by the Board's official stamp with signature and date on the plat. In the event that any final plat for record, when recorded, contains any such changes, the plat shall be considered null and void, and the Planning Board shall institute proper proceedings to have said plat stricken from the records of the County Clerk.

[Amended 12-4-1991 by L.L. No. 2-1991[3]]

[3] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

I. Step 9: Filing of final plat for record with the County Clerk. Pursuant to § 276 of the Town Law, the subdivider files the approved final plat for record with the County Clerk of the County of Erie in a manner as prescribed by law or pursuant to any additional procedures of the County Clerk. Such filing is required to take place within 62 days after the Planning Board has officially approved a final plat for record; otherwise such Planning Board approval shall expire.

[Amended 12-4-1991 by L.L. No. 2-1991[4]]

[4] *Editor's Note: Amended at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

J. Compliance with State Environmental Quality Review Act. In approving subdivision plats, the Planning Board shall comply with the provisions of the State Environmental Quality Review Act under Article 8 of the Environmental Conservation Law and its implementing regulations.[5]

[5] *Editor's Note: Added at time of adoption of Code (see Ch. **1**, General Provisions, Art. **I**).*

§ 220-7. Data required on maps, plans and plats.

A. General. The property data map, the preliminary plan and the final plat for record shall be clearly and legibly drawn at a scale of 100 feet or less to one inch. Said map, plan and plat shall be on uniform-sized sheets not larger than 36 by 48 inches. Whenever any project is of such size that more than one sheet is required, then an index map on the same size sheet shall accompany these sheets.

B. Property data map. The following information shall be shown on the property data map:

(1) A key map or sketch showing the location and boundaries of the tract proposed to be subdivided as related to existing roadways in the Town of North Collins within one square mile of the subdivision site. This can be done by a small insert at a reduced scale on the property data map.

(2) The name of the subdivider.

(3) The name of the registered property owner.

(4) The North point, scale and date.

(5) The name of the engineer, architect, surveyor or other qualified person responsible for the map.

(6) Tract boundaries with bearings and distances.

(7) The topography, with elevations based on datum approved by the Town Engineer (United States Geologic Survey recommended) and showing contours at vertical intervals of five feet.

(8) The approximate location of watercourses, tree masses, rock outcrops and existing buildings and the actual location of sewers, water mains, easements, fire hydrants and existing or platted streets of record and their established grades within the area proposed for subdivision by the applicant and within 500 feet of the applicant's property.

(9) The names of all adjoining property owners of record or the names of adjoining developments within 500 feet of the applicant's property.

C. Preliminary plan. The preliminary plan shall indicate, in sketch form on the property data map, the following information:

(1) The proposed street layout, street names, lot lines and lot identification numbers for all building lots. Lots shall show approximate dimensions, and the area of each lot shall be calculated in square feet. If appropriate, such listing of lot areas for each lot may be presented in tabular form on a separate sheet(s) of paper 8 1/2 inches by 11 inches in size, as long as such separate tabular sheet is secured firmly to the preliminary plan map.

(2) Streets shall indicate the proposed pavement and right-of-way widths, approximate radii of curvature and approximate grades. As part of the addenda to the preliminary plan, the Planning Board may require the subdivider to prepare profiles showing existing ground surface and proposed street grades, including extensions for a reasonable distance beyond the limits of the proposed subdivision; typical cross-sections of the proposed grading, roadway and sidewalk; and preliminary designs of any bridges and culverts which may be required.

(3) A preliminary plan of proposed water mains to connect with existing public water supply or alternative means of water supply for the proposed subdivision that the subdivider will request the Erie County Health Department to approve.

(4) A preliminary plan of proposed sanitary sewers, with grades and sizes indicated, connecting with existing sanitary sewerage systems or alternative means of treatment and disposal of sewage that the subdivider will request the Erie County Health Department to approve.

(5) A preliminary plan for collecting and discharging storm drainage.

(6) When required by the Planning Board, the subdivider shall submit data on subsoil conditions; including the location and results of tests made to ascertain subsurface soil, rock and groundwater conditions. Such submission, if required, would be part of the addenda to the preliminary plan.

(7) Sites, if any, to be reserved or dedicated for parks, playgrounds or other public uses, including the calculated acreage thereof.

(8) Sites, if any, for dwellings other than single-family dwellings, shopping areas, industry, churches or other nonpublic uses.

(9) As part of the addenda to the preliminary plan, a draft of any protective covenants whereby the subdivider proposes to regulate land use in the subdivision and otherwise protect the proposed development.

D. Final plat for record.

(1) The final plat for record shall indicate the following information:

(a) The name and address of the subdivider and the owner in whose name the plat is to be recorded.

(b) The proposed subdivision name or identifying title, which shall not duplicate or resemble too closely that of any other development in North Collins.

(c) The North point, scale and date.

(d) The name and seal of a registered professional engineer or surveyor or other qualified person.

(e) Primary control points, approved by the Town Engineer, or ties to such control points, to which all dimensions, angles, bearings and similar engineering data on the plat shall be referred.

(f) Boundaries, with distances, bearings and location of monuments. Such dimensions shall be in feet and hundredths of a foot. The material and approximate size of all monuments shall be stated. The location of monuments indicating rights-of-way shall be shown on the plat at intervals of not more than 500 feet. The subdivider shall supply and install such monuments as shown on the plat with the approval of the Town Engineer.

(g) The location, names and widths of existing streets, roads, highways and easements, building lines, parks and other public properties.

(h) The location and width of all streets and sidewalks, together with street names, and the location, dimensions and purpose of all easements and other land divisions proposed by the subdivider.

(i) Lot lines with accurate dimensions and bearings of angles.

(j) Lot identification numbers and lot areas in square feet on each lot or on a tabular sheet attached to the plat as an integral part thereof.

(k) Radii of all curves and lengths of arcs as approved by the Town Engineer.

(l) The accurate outline of all property which is offered or to be offered for dedication for public use, with the purpose indicated thereon, and of all property that is proposed to be reserved by deed covenant for the common use of the property owners of the subdivision.

(m) Building lines or street setback lines. The Planning Board shall consider minimum frontage for a building lot at the building line.

(n) The location and an outline of all existing structures to remain.

(o) The location of all watercourses.

(p) Unless waived by the Planning Board with the approval of the Town's Engineer, the following information shall also be submitted by the subdivider as addenda to the final plat for record:

[1] Profiles showing existing and proposed elevations along the center line of all streets. Where a proposed street intersects an existing street or streets, the elevation along the center line of the existing street or streets within 100 feet of the intersection shall be shown.

[2] Plans and profiles showing the location and a typical section of street pavement, including curbs and gutters, sidewalks, manholes and catch basins; the locations of street trees and street signs; the location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants; and the exact location and size of all water, gas or other underground utilities.

(2) All plans shall conform to the Town minimum road specifications and shall be subject to the approval of the Town's Engineer.

§ 220-8. Design standards.

In considering an application for the subdivision of land in the Town of North Collins, the Planning Board shall be guided by the following considerations and standards:

A. General. Land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace. Subdivisions shall conform to the streets and parks shown on the Official Map, if any, of the Town of North Collins and/or the Official Map, if any, of the County of Erie. Subdivisions shall be properly related to the Master Plan, if any, of the Town of North Collins as adopted by the Planning Board.

B. Streets generally. Streets shall be logically related to the topography, and all streets shall be arranged so as to obtain as many as possible of the building lots or sites at or above the grades of the streets. Grades of streets shall conform as closely as possible to the original topography. A combination of steep grades and sharp curves shall be avoided. Streets shall be suitably located, of sufficient width and adequately improved to accommodate the prospective traffic and to afford satisfactory access to police, fire-fighting, snow-removal and other road-maintenance equipment and shall be coordinated into a convenient system. Residential streets shall be so laid out as to discourage through traffic.

C. Street standards. Unless higher standards are prescribed by the Town Board by ordinance or resolution establishing requirements and specifications for the laying out and construction of streets, the following requirements shall be observed by a subdivider in the street design within a subdivision:

(1) Minimum width of right-of-way: 60 feet.

(2) Minimum width of pavement: 24 feet.

(3) Minimum length of tangents between reverse curves: 100 feet.

(4) Maximum grade: 10%.

(5) Minimum grade: 0.5%.

(6) Minimum sight distance: 150 feet.

D. Blocks. Block width shall be at least twice the minimum lot depth, calculated on the basis of minimum area and width requirements as prescribed in these Subdivision Regulations or of the Zoning Ordinance,[1] if any, whichever may be more restrictive, but need not exceed 400 feet. Block length shall be at least 400 feet but generally not more than 12 times the minimum lot width. In long blocks, the Planning Board may require the reservation through the block of a twenty-foot easement to accommodate utilities or pedestrian traffic.

[1] *Editor's Note: See also Ch.* ***265****, Zoning.*

E. Street intersections. Intersections with major trafficways, as delineated in the Master Plan, if any, should be held to a minimum and preferably be spaced at least 1,000 feet apart. Streets shall be laid out so as to intersect as nearly as possible at right angles, and no street shall intersect any other street at less than 75°. Street jogs and center-line offsets of less than 125 feet shall be avoided. Property lines at street intersections shall be rounded with a radius of 10 feet or with a greater radius where the Planning Board may deem it necessary. Curb radii at intersections shall not be less than 28 feet.

F. Continuation of streets into adjacent property. The arrangement of streets shall provide for the continuation of principal streets between adjacent properties where such continuation is necessary for convenient movement of traffic, effective fire protection, efficient provision of utilities and particularly where such continuation is in accordance with the Master Plan, if any. If the adjacent property is undeveloped and a street must be a dead-end street temporarily, the right-of-way therefor shall be extended to the property line. A temporary circular turnaround of a minimum of 50 feet in radius shall be provided on all temporary dead-end streets, with the notation on the plat that land outside the street right-of-way shall revert to abutters whenever the street is continued. The Planning Board may limit temporary dead-end streets to a length not more than double the permitted length of permanent dead-end streets.

G. Permanent dead-end streets. Where a street does not extend to the boundary of the subdivision and its continuation is not needed for access to adjoining property, it shall be separated from such boundary by a distance not less than the minimum lot depth prescribed in this chapter or in the Zoning Ordinance,[2] if any, for the zoning district in which the street is located, as calculated in respect to minimum area and width requirements for such lot. In case of a discrepancy in the regulation of such minimum distance between these Subdivision Regulations and the Zoning Ordinance, if any, the Zoning Ordinance requirements shall prevail. Reserve strips of land shall not be left between the end of a proposed street and an adjacent piece of property. However, the Planning Board may require the reservation of a twenty-foot-wide easement to accommodate pedestrian traffic or utilities. In general, permanent dead-end streets shall be limited in length to six times the minimum lot width for the zoning district involved. A circular turnaround of a minimum right-of-way radius of 65 feet shall be provided at the end of a permanent dead-end street.

[2] *Editor's Note: See also Ch.* ***265****, Zoning.*

H. Street names. All streets shall be named, and such names shall be subject to the approval of the Planning Board. Names shall be sufficiently different in sound and in spelling from other street names in the Town of North Collins so as not to cause confusion. A street which is a continuation of an existing street shall bear the same name.

I. Street improvements.

(1) On written request for waiver by the subdivider, approved by the Planning Board pursuant to § **220-9** of the regulations, the following requirements for street improvements may be waived; otherwise they shall apply. In taking action to waive such requirements, the Planning Board shall state its reasons therefor in the minutes of the Planning Board. In consideration of waiver of any of the street improvements otherwise required, the Planning Board may consider and cite the following: interest of the public health, safety and general welfare; existing ordinances or resolutions passed by the Town Board pertaining to the design and construction of streets or roads; Town Board policy; other methods available or currently in use in the Town of North Collins to provide such improvements; and minimum requirements for the approval of plats previously recorded. The Planning Board shall not waive, vary or modify these requirements when specifically prohibited from doing so by the regulations.

(2) Streets shall be graded and improved with pavement, street signs, sidewalks, streetlighting standards, curbs, gutters, water mains, sanitary sewers, storm drains and fire hydrants. If placed in the street right-of-way, underground utilities required by the Planning Board shall be placed between the paved roadway and street line to simplify location and repair of the lines.

The subdivider shall install underground service connections to the property line of each lot before the street is paved. Such grading and improvements shall not be less than the Town of North Collins' minimum road construction specifications and shall be approved by the Town's Engineer.

(3) In the interest of public safety, especially the safety of children in development situations of an urban nature, the Planning Board shall not cause a waiver, variation or modification of the following provisions of the regulations concerning sidewalks:

(a) Where sidewalks are required in any part of a subdivision for building lots fronting on a new or proposed street, sidewalks shall be required throughout the entire subdivision, regardless of any density or lot frontage or lot width standards affecting the requirement of sidewalks.

(b) For all building lots, regardless of area contained therein, fronting on a new or proposed street where such lots are designed for residential usage and occupancy by two or more families per lot, sidewalks shall be provided.

(c) For all building lots fronting on a new street or proposed street, which lots are designed and intended for single-family residential usage and occupancy, whose minimum lot width is less than 100 feet, measured at the building line, and whose minimum lot area is 20,000 square feet or whose lot width is more than 100 feet but whose lot area is less than 20,000 square feet, sidewalks shall be provided.

J. Lots. The arrangement of lots shall be such that there will be no foreseeable difficulties in securing building permits to build on all building lots designated in the subdivision and in providing access to buildings on such lots from an approved street. Where a watercourse separates the buildable area of a lot from the street intended to provide access thereto, provision shall be made for installation of a culvert or other structure of a design approved by the Town's Engineer. Lot dimensions shall at least comply with the minimum standards of these Subdivision Regulations or of the Zoning Ordinance,[3] whichever is more restrictive. Side lot lines shall be at right angles to street lines, unless a variation from this rule will provide a better street or lot plan. For the purpose of beautifying the Town of North Collins and to provide comfort to the potential residents of a subdivision, a shade tree shall be provided on each building lot. Such shade tree may be an existing live shade tree or a new live shade tree installed by the subdivider.

[3] *Editor's Note: See also Ch.* ***265****, Zoning.*

K. Lot dimensions. Unless the Zoning Ordinance,[4] if any, would specify minimum lot dimensions for residential developments concerning area, width, depth and yard requirements more restrictive than the lot dimensions herein stated, which Zoning Ordinance's lot dimensions would prevail in all plat submissions in North Collins from the effective date of the adoption of said Zoning Ordinance, the following minimum lot dimensions shall be observed in the design of residential subdivision plats in the Town of North Collins:

(1) Single-family residential developments:

(a) The lot area shall be:

[1] Eight thousand five hundred square feet where the lot is served by a public sewer.

[2] Twenty thousand square feet where a lot is not served by a public sewer.

(b) The lot width at the building line shall be:

[1] Eighty-five feet where a lot is served by a public sewer.

[2] One hundred feet where a lot is not served by a public sewer.

(2) Other than single-family residential developments. For proposed subdivision plats wherein the intended lot usage is for other than single-family residential purposes, minimum lot dimensions shall be prescribed by the Planning Board prior to Planning Board review of a preliminary plat for tentative approval.

[4] *Editor's Note: See also Ch.* ***265****, Zoning.*

L. Parks and playgrounds. The Planning Board may require adequate, convenient and suitable areas for parks and playgrounds or other recreational purposes to be reserved on the subdivision plat but in no case more than 10% of the gross area of any subdivision. Ownership shall be clearly indicated on all reservations for parks and playground purposes, and the area involved in such reservations shall be clearly marked on the plat "reserved for park or playground purposes."

M. Utility and drainage easements. Where topography or other conditions are such as to make impractical the inclusion of utilities or drainage facilities within street rights-of-way, perpetual unobstructed easements at least 20 feet in width for such utilities shall be provided across property outside such rights-of-way and with satisfactory access to the street. Easements shall be indicated on the subdivision plat.

N. Pedestrian access easements. Where it deems necessary, the Planning Board may require, in order to facilitate pedestrian access from streets to schools, parks, playgrounds or other nearby streets, perpetual unobstructed easements at least 20 feet in width. Easements shall be indicated on the subdivision plat.

O. Self-imposed restrictions. The owner of the land included in a proposed subdivision may place restrictions on the private development of lands included therein greater than those imposed by the Zoning Ordinance,[5] if any. Such restrictions, if any, shall be indicated on the final plat for record or as addenda thereto securely attached to the final plat for record.
[5] *Editor's Note: See also Ch.* ***265****, Zoning.*

P. Modifications of design standards. Unless otherwise prohibited by the regulations, the Planning Board may modify the specified requirements of this section of the regulations in any individual case where, in the Board's judgment, such modification is in the public interest or will avoid the imposition of unnecessary individual hardship. An example of where such Board action might apply is in the design of so-called "cluster developments."

§ 220-9. Variances.

Where there are practical difficulties or unnecessary hardships in the way of carrying out the strict letter of these regulations, the Planning Board may, by a unanimous vote of a quorum of its members present at any regular or special meeting, waive, vary or modify the application of the requirements of the regulations, with the exception of procedural provisions as stated in § **220-6**, so that the spirit of the regulations shall be observed, public safety and welfare secured and substantial justice done. This section shall not be construed to permit such waiver, variation or modification of the regulations wherein such action by the Planning Board is specifically prohibited. In instances where the Planning Board waives, varies or modifies the application of the regulations, it shall so state its reasons therefor in the minutes of the meeting of the Planning Board.

§ 220-10. Open space.

[Added 12-4-1991 by L.L. No. 2-1991]

A. Consideration shall be given to the allocation of areas suitably located for community purposes as indicated on the general plan, and such areas shall be made available by one of the following methods:

(1) Reservation of land for the use of property owners by deed or covenant.

(2) Reservation for acquisition by the Town within a reasonable period of time. Said reservation shall be made in such manner as to provide for a release of the land to the subdivider in the event that the Town does not proceed with the purchase.

(3) If the Planning Board determines that suitable park or parks of adequate size cannot be properly located in the plat or are otherwise not practical, the Board may require as a condition to approval of the plat a payment to the Town of a sum to be determined by the Town Board, which sum shall constitute a trust fund to be used by the Town exclusively for neighborhood park, playground or recreational purposes, including the acquisition of property.

B. The Planning Board may require the reservation of such other areas or sites of a character, extent and location suitable to the needs of the Town as water plants, sewage treatment plants and other community purposes not anticipated in the general plan.

§ 220-11. Penalties for offenses.

[Amended 12-4-1991 by L.L. No. 2-1991]
Any person, corporation, partnership, association or other legal entity who shall violate any of the provisions of this chapter or any conditions imposed by a permit issued pursuant hereto shall be guilty of a violation and subject to a fine of not more than $250 or 15 days' imprisonment, or both such fine and imprisonment. Each day that such a violation continues to exist may further be declared to be a separate and additional violation.

§ 220-12. Compliance required.

[Added 12-4-1991 by L.L. No. 2-1991]
No building permit, change of use permit, certificate of occupancy, temporary certificate of occupancy, certificate of compliance, certificate of completion or other authorization for any construction, reconstruction, alteration or enlargement of a building, structure or use or for the moving of a building or structure from one site to another shall be issued and no variance or special permit shall be granted by the Zoning Board of Appeals, the Town Board or the Planning Board and no site plan shall be approved by the Planning Board unless the provisions of this chapter and all other statutes, laws, ordinances, rules and regulations affecting the property involved are fully complied with.

Town of North Collins, NY
Tuesday, November 17, 2020

Chapter 212. Solar Energy Systems

[HISTORY: Adopted by the Town Board of the Town of Collins 11-8-2017 by L.L. No. 1-2017.[1] Amendments noted where applicable.]

GENERAL REFERENCES
Joint Planning Board — See Ch. **42.**
Zoning Board of Appeals — See Ch. **76.**
Uniform construction codes — See Ch. **121.**
Site plan review — See Ch. **206.**
Subdivision of land — See Ch. **220.**
Zoning — See Ch. **265.**

[1] *Editor's Note: This local law was adopted as Ch. 158, but was renumbered to maintain the organization of the Code.*

§ 212-1. Authority.

This chapter is adopted pursuant to §§ 261 through 263 of the Town Law of the State of New York, which authorizes the Town of North Collins to adopt laws which advance and protect the health, safety and welfare of the community and to make provisions for the accommodation of solar energy systems and equipment.

§ 212-2. Findings.

The Town Board of the Town of North Collins makes the following findings:

A. Solar energy is a clean, readily available and renewable energy source that decreases energy costs and provides local business and job opportunities.

B. However, there is a growing need to properly site solar energy systems within the boundaries of the Town of North Collins in order to protect residential, business areas and other land uses, to preserve the overall beauty, nature and character of the Town of North Collins and to promote the effective and efficient use of solar energy resources as well as the health, safety and general welfare of the citizens of the Town of North Collins.

C. Prior to the adoption of this chapter, no specific procedures existed to address the siting of solar energy systems. Accordingly, the Town Board finds that the promulgation of this chapter is necessary to govern the location and construction of these systems.

D. Solar energy systems need to be regulated for removal when no longer utilized.

§ 212-3. Definitions.

The following definitions shall apply to this chapter:

APPLICANT

The person or entity filing an application and seeking an approval under this chapter; the owner of a solar energy system or a proposed solar energy system project; the operator of solar energy system or a proposed solar energy system project; any person acting on behalf of an applicant, solar energy system or proposed solar energy system.

BUILDING-INTEGRATED SOLAR ENERGY SYSTEM

A solar energy and/or thermal heat system, including but not limited to photovoltaic building components, such as vertical facades, including glass and other facade material, semitransparent skylight systems, roofing materials and shading over windows.

BUILDING-MOUNTED SOLAR ENERGY SYSTEM

A solar energy and/or thermal heat system that is affixed to the side(s) of a building or other structure, either directly or by means of support structures or other mounting devices, but not including those mounted to the roof or top surface of a building. Said system is designed and intended to generate electricity or heat primarily for use on said lot, but potentially for multiple tenants.

GROUND-MOUNTED SOLAR ENERGY SYSTEM

A solar energy and/or thermal heat system that is affixed to the ground either directly or by support structures or other mounting devices. Said system is an accessory structure, designed and intended to generate electricity or heat primarily for use on said lot, but potentially for multiple tenants. Ground-mounted solar energy systems not meeting the definition as outlined in this chapter will be treated as utility-scale solar energy systems and the requirements of such.

ROOFTOP-MOUNTED SOLAR ENERGY SYSTEM

Any solar energy and/or thermal heat system that is affixed to the roof of a building and wholly contained within the limits of the roof surface. Said system is designed and intended to generate electricity or heat solely for use on said lot, but potentially for multiple tenants.

SOLAR ENERGY SYSTEM FOR AGRICULTURAL USE

Any solar energy and/or thermal heat system that is used solely for agricultural production as defined in Agriculture and Markets Law § 301(4).

UTILITY-SCALE SOLAR ENERGY SYSTEM

Any solar energy system that is designed and intended to supply energy exceeding 50 kw primarily into a utility grid for sale to the general public or to any utility.

§ 212-4. Applicability.

The requirements of this chapter shall apply to all solar energy systems installed or modified after the effective date, excluding general maintenance and repair of solar energy systems. Subject to the provisions of this chapter, solar energy systems shall be allowed in the Town of North Collins as follows:

A. Rooftop-mounted and building-mounted solar energy systems are permitted in all zoning districts within the Town through the building permit application process.

B. Building-integrated solar energy systems are permitted in all zoning districts within the Town under the building permit application process for new building construction or building renovations.

C. Ground-mounted solar energy systems.

(1) Ground-mounted solar energy systems which comply with all of the requirements and criteria of this chapter, and are located on lots of two or more acres, are permitted in all zoning districts within the Town under the building permit application process.

(2) Ground-mounted solar energy systems which exceed any of the stated requirements or criteria of this chapter, or which are proposed upon lots which are less than two acres, shall require site plan approval by the Town Planning Board in addition to the building permit application process.

D. Utility-scale solar energy systems are permitted only in the R-A (Residence Agricultural) District and require a special permit from the Town Board, site plan approval from the Planning Board and a building permit.

E. Any inconsistent provisions contained in any other provision of the Town Code are hereby superseded by this chapter.

§ 212-5. General regulations.

The placement, construction and/or major modification of all solar energy systems within the boundaries of the Town of North Collins shall be permitted as follows:

A. Residential solar energy systems up to 12 kw shall be permitted in all zoning districts upon issuance of a building permit, subject to compliance with the requirements and criteria of this chapter. Any residential solar energy system exceeding 12 kw, but less than 25 kw, may be permitted upon issuance of a building permit, provided the applicant first obtains a variance and site plan approval from the Town Planning Board and otherwise complies with the requirements of this chapter.

B. Commercial solar energy systems up to 25 kw shall be permitted in all commercial zoning districts upon issuance of a building permit, subject to compliance with the requirements and criteria of this chapter. Any commercial solar energy system exceeding 25 kw, but less than 100 kw, may be permitted upon issuance of a building permit, provided the applicant first obtains a variance and site plan approval from the Town Planning Board and otherwise complies with the requirements of this chapter.

C. Rooftop-mounted and building-mounted solar energy systems shall be allowed in all zoning districts upon issuance of a building permit, subject to compliance with the requirements and criteria of this chapter.

D. Ground-mounted solar energy systems situate on lots of two or more acres in size and which otherwise comply with all of the requirements and criteria of this chapter shall be allowed in all zoning districts upon issuance of a building permit.

E. Ground-mounted solar energy systems situate on lots less than two acres in size may be allowed in all zoning districts, conditioned upon site plan approval by the Town Planning Board and upon issuance of a building permit, subject to compliance with all provisions of this chapter as determined by the Town Planning Board. The Town Planning Board shall have the sole discretion as part of the site plan review process to determine whether a variance from the requirements of this chapter may be allowed.

F. Utility-scale solar energy systems shall be allowed only by special permit and only in the R-A (Residence-Agricultural) District in accordance with the criteria established in this chapter, after SEQRA review and concurrent site plan approval by the Town Planning Board and upon issuance of a building permit.

G. All solar energy systems existing on the effective date of this chapter shall be allowed to continue usage as they presently exist. Routine maintenance (including replacement with a new system of like construction and size) shall be permitted on such existing systems. New construction other than routine maintenance shall comply with the requirements of this chapter.

H. Any application for a solar energy system which is pending on the effective date of this chapter shall be subject to the provisions of this chapter.

I. This chapter shall take precedence over any inconsistent provision contained in any other provision of the Town Code of the Town of North Collins.

§ 212-6. General Criteria.

A. Rooftop-mounted and building-mounted solar energy systems shall not be more than three feet higher than the finished roof to which they are mounted and in no instance shall any part of the system extend within three feet of the edge of the roof. All rooftop-mounted and building-mounted solar energy systems shall meet all building permit requirements, including the New York State Uniform Fire Prevention and Building Code standards.

B. Ground-mounted solar energy systems.

(1) Ground-mounted solar energy systems (not utility-grade systems) shall be subject to the following requirements:

(a) The location of the solar energy system shall be located in the side or rear yard of the property and not in the front yard.

(b) The location of the solar energy system shall be placed at least 50 feet from any side yard property line and at least 50 feet from any rear property line.

(c) The location of the solar energy system shall be placed at least 200 feet from any structure which is regularly occupied by humans, including accessory structures, regardless of whether said structure(s) are located on the applicant's lot or on any adjoining lot.

(d) The location of the solar energy system shall be placed at least 200 feet from any roadway, right-of-way, school, playground or park.

(e) A remote disconnect shall be provided and shown on the site plan.

(f) The height of the solar energy system shall not exceed 15 feet when oriented at maximum tilt.

(g) The total surface area of the solar panels on the solar energy system shall not exceed 500 square feet.

(h) The total area occupied by the solar energy system on a lot shall not exceed 10% of the total area of the lot upon which the system is proposed.

(i) The design, construction, operation and maintenance of the proposed system shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads, parks, schools and rights-of-way in excess of that which already exists.

(j) The application should include evidence that the system shall be used solely to reduce the on-site consumption of electricity. Remote net metering shall be permitted if all locations (host and satellite) are geographically located within North Collins.

(2) Any proposed solar energy system that meets all of the above general criteria shall be allowed upon issuance of a building permit. Any proposed solar energy system that does not meet all of the above criteria shall be allowed only upon site plan approval by the Town Planning Board and issuance of a building permit.

C. Site plan requirements for a ground-mounted solar energy system.

(1) If site plan approval is required by this chapter for a ground-mounted solar energy system, the applicant shall submit a site plan application, including the following:

(a) Plans and drawings of the solar energy system showing the proposed layout of the solar energy system along with a description of all components, existing vegetation, any proposed clearing and grading of the lot involved, any stormwater or erosion disturbances, and utility lines, both above and below ground, on the site and adjacent to the site;

(b) A recently dated (within one year) survey of the property showing all lot lines and the location and dimensions of all existing structures and uses on the property;

(c) The location of any residence or structure on any other property located within 300 feet of the proposed solar panels or of any park, school, playground or public roadway within 300 feet of the proposed solar panels;

(d) Copies of the owner's deed and property tax bill;

(e) Any proposed fencing and/or screening for the project; and

(f) Any such additional information as may be required by the Town's professional engineer or consultant, Town Planning Board, Building Inspector or other agent/employee of the Town.

(2) The design, construction, operation and maintenance of ground-mounted solar energy systems shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads, parks, schools and roadways in excess of that which already exists.

D. Solar storage batteries. When solar batteries are included as part of any solar energy system, they shall be placed in a secure container or enclosure meeting the requirements of the New York State Building Code.

E. All solar energy systems shall adhere to all applicable federal, state, county and Town laws, regulations and building, plumbing, electrical and fire codes.

F. All solar energy systems shall be accessible for all emergency service vehicles and personnel.

G. All structures and devices used to support solar collectors shall be nonreflective and/or painted a subtle or earth tone color. The design, construction, operation and maintenance of any solar energy system shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads and public parks in excess of that which already exists.

H. The development and operation of a solar energy system shall not have a significant adverse impact on fish, wildlife, or plant species or their critical habitats, or other significant habitats identified by the federal, state or local governments or their agencies.

I. Artificial lighting of any solar energy systems shall be limited to lighting required for safety and operational purposes and shall be shielded from all neighboring properties and public roads.

J. If the use of an approved solar energy system is discontinued, the owner or operator shall notify the Building Inspector within 30 days of such discontinuance. If a solar energy system is to be retained and reused, the owner or operator shall further inform the Building Inspector of this, in writing, at such time and obtain any necessary approvals within one year; otherwise, it shall automatically be deemed abandoned (and removed per this chapter).

K. In deciding whether to issue a site plan approval of the proposed solar energy system, the Planning Board shall have the discretion to vary from and/or waive stated criteria where

appropriate in meeting the goals and objectives of this chapter.

L. The Planning Board shall meet in public, and any person interested in the application may attend said meetings. The Town Clerk shall make legal posting and advertising of the public meetings. Additionally, the Town Clerk shall provide written notice (by regular first-class mail to the address contained on the Town tax bill) of said meetings to all adjoining property owners at least 10 days prior to said meeting. All persons shall have the right to speak in favor or against said application.

§ 212-7. Special permit requirements.

Applications for special permits for utility-scale solar energy systems under this chapter shall be made as follows: Applicants for a special permit to place, construct, or to make a major modification to a utility-scale solar energy system within the Town of North Collins shall submit six sets of the following information to the Building Inspector, who shall first present the application to the Town Board. The Town Board shall initially review the application and shall then refer the matter to the Town Planning Board for review and recommendation and for concurrent site plan review. At any time in the process, the Building Inspector, the Town Board or the Planning Board may request that a professional engineer or consultant review the matter and act as consultant to the Town in the permitting process. The Planning Board may make such additional referrals and requests as it deems appropriate. No such application shall be deemed filed until all required application fees and related costs have been paid by the applicant. In the event a consultant is hired by the Town, the applicant shall pay the costs thereof. The following information shall be contained in the initial application:

A. A completed full environmental assessment form (EAF) under the State Environmental Quality Review Act (SEQRA)[1] which shall fully describe the proposed system, its location, purpose and potential environmental impact. The Town Planning Board shall be designated as the lead agency for the SEQRA process.

[1] *Editor's Note: See Environmental Conservation Law § 8-0101 et seq.*

B. The following additional information shall be required:

(1) Name, address, telephone number of the property owner and the section, block, lot (SBL) tax number of the parcel(s) involved. Copies of the deed and a current survey shall be included. If the property owner is not the applicant, the application shall include the name, address and telephone number of the applicant and a letter of authorization signed by the property owner authorizing the applicant to represent the property owner; and

(2) Documentation of access to the project site, including location of all access roads, gates, parking areas, etc.; and

(3) Documentation of the clearing, grading, stormwater and erosion control plans; and

(4) Utility interconnection data and a copy of written notification to the utility of the proposed interconnection; and

(5) One- or three-line electrical diagram detailing the solar energy system installation, associated components, and electrical interconnection methods, with all disconnects and over-current devices; and

(6) A property owner or applicant who has installed or intends to install a utility-scale solar energy system may choose to negotiate with other property owners in the vicinity for any necessary solar skyspace easements or other applicable easements. The issuance of a special use permit does not constitute solar skyspace rights, and the Town shall not be responsible for ensuring impermissible obstruction to the solar skyspace as a result of uses or development performed in accordance with the Town Code.

C. A site plan drawn in sufficient detail as follows:

(1) Plans and drawings of the solar energy system installation signed by a professional engineer registered in New York State showing the proposed layout of the entire solar energy system along with a description of all components, whether on site or off site, existing vegetation and proposed clearing and grading of all sites involved, and utility lines, both above and below ground, on the site and adjacent to the site; and

(2) Property lot lines and the location and dimension of all existing structures and uses on site and off site which are within 500 feet of the solar panels; and

(3) Proposed fencing and/or screening for said project; and

(4) All other relevant information as required in § **212-6**.

D. A decommissioning plan to ensure the proper removal of utility-scale solar energy systems. The decommissioning plan is to be submitted as part of the special permit application to the Building Inspector for approval and must specify that after the utility-scale solar energy system is no longer in use (as determined by the owner/operator or the Building Inspector), it shall be removed by the applicant or any subsequent owner. The decommissioning plan shall identify the anticipated life of the project. The plan shall demonstrate how the removal of all infrastructure and restoration shall be conducted to return the parcel to its original state prior to construction. The plan shall also include an expected time line for execution and a cost estimate for decommissioning prepared by a professional engineer or qualified contractor. Cost estimates shall take inflation into consideration and be revised every five years during the operation of the system and include any salvage value. Removal of the large-scale solar energy system must be completed in accordance with the approved decommissioning plan and the standards provided as follows:

(1) All structures and foundations associated with the large-scale solar energy systems shall be removed;

(2) All disturbed ground surfaces shall be restored to original conditions, including topsoil and seeding as necessary; and

(3) All electrical systems shall be properly disconnected, and all buried cables and wiring shall be removed.

E. A bond or other approved security shall be provided to cover the cost of removal and restoration of the area impacted by the solar system. Security shall be in an amount equal to 150% of the estimated cost to restore the property as presented in the approved decommissioning plan.

F. Any such additional information as may be required by the Town's professional engineer or consultant, Town Planning Board or other agent or employee of the Town.

§ 212-8. Special permit criteria.

Special permits issued for a utility-scale solar energy system shall meet the following minimum conditions:

A. Minimum lot area: The minimum lot area shall be 25 acres.

B. Maximum lot area: none.

C. Setbacks: Any utility-scale solar energy system shall adhere to the following setbacks:

(1) A minimum of 300 feet from all property lot lines.

(2) From all buildings or structures: a minimum of 300 feet from any inhabited building or structure, except for buildings and structures located on the proposed project lot.

(3) From any public roadway, park, playground or school: a minimum of 300 feet from any public roadway, park, playground or school.

D. Maximum overall height: The height of a utility-scale energy system shall not exceed 20 feet when oriented at maximum tilt.

E. A utility-scale solar energy system shall only be located in a rear yard if there is a principal structure or dwelling on said lot. It shall not be allowed in the front yard.

F. A utility-scale solar energy system shall adhere to all applicable federal, state, county and Town of North Collins laws, regulations, building, plumbing, electrical and fire codes.

G. Development and operation of a utility-scale solar energy system shall not have a significant adverse impact on adjoining property owners, wildlife, fish or plant species or their critical habitats or other significant habitats.

H. The design, construction, operation and maintenance of a utility-scale solar energy system shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads and public parks in excess of that which already exists.

I. All structures and devices used to support solar collectors shall be nonreflective and/or painted in a subtle or earth tone color.

J. All transmission lines and wiring associated with a utility-scale or solar energy system shall be buried and include necessary encasements in accordance with the National Electric Code and state and local code requirements. The applicant is required to show the locations of all proposed overhead and underground electric utility lines, including substations and junction boxes and other electrical components for the project on the site plan.

K. All transmission lines and electrical wiring shall be in compliance with the utility company's requirements for interconnection.

L. Lighting on any structure associated with the system shall not be allowed, except to the extent it may be required by state or federal law.

M. No advertising signs shall be permitted on the solar energy system. Signage shall be included which provides twenty-four-hour emergency contact phone numbers to the owner of the system and in accordance with state or federal law.

N. Any site containing a utility-scale solar energy system shall contain fencing or other device acceptable to the Town enclosing all solar energy system components.

O. A berm, landscape screen or other opaque enclosure, or any combination thereof acceptable to the Town capable of screening the site may be required along any property line that abuts an existing roadway or residence.

P. After completion of a utility-scale solar energy system, the applicant shall provide a post-construction certification from a professional engineer registered in New York State that the project complies with all applicable codes and industry practices and is operating according to the design plans.

Q. The applicant is required to obtain all necessary and required regulatory approvals and permits from all federal, state, county and local agencies having jurisdiction and approval related to the completion of a utility-scale solar energy system.

R. A bond or other appropriate form of security shall be offered by the applicant as part of the decommissioning plan to cover the cost of the removal and site restoration, and said proof of

appropriate form of security shall be filed prior to construction and on an annual basis with the Town Clerk.

S. Clearing, grading, stormwater and erosion control. Before the Town of North Collins shall issue a building permit for a utility-scale solar energy system, the applicant shall submit a stormwater and erosion control plan to the Town Planning Board for its review and approval. The plan shall minimize the potential adverse impacts on wetlands and Class I and Class II streams and the banks and vegetation along those streams and wetlands and minimize erosion or sedimentation.

§ 212-9. Maintenance, procedures and fees.

A. Within 30 days after completion of its review of the application and completion of the site plan review process, the Planning Board shall send the Town Board written findings and recommendations and site plan approval, disapproval or approval with conditions. Following receipt of the Planning Board's written recommendations on the application, together with a final site plan approval, at the next regularly scheduled meeting of the Town Board, the Town Board shall schedule a public hearing on the application. The purpose of the public hearing shall be on the topic of whether or not to issue a special permit to construct a utility-scale solar energy system. The public hearing before the Town Board shall be held within 60 days after receipt of the written recommendations of the Town Planning Board. Legal posting and advertising of the public hearing shall be made by the Town Clerk. Written notice (by regular first-class mail to the address contained on the Town tax bill) of said public hearing shall be given to all adjoining property owners by the Town Clerk at least 10 days prior to said public hearing. Within 60 days after completion of the public hearing, the Town Board shall render a final decision, in writing, to the applicant. The Town Board may vote to grant a special permit, deny a special permit, or grant a special permit with stated conditions. The Town Board may, but is not required to, follow the recommendations of the Town Planning Board.

B. Time limit on completion. After the granting of a special permit of a utility-scale solar energy system by the Town Board, the applicant shall obtain a building permit within six months after the date the special permit was approved. The project shall be completed within 12 months after issuance of the building permit. A six-month extension to obtain a building permit and/or the completion time may be approved by the Planning Board upon request by the applicant. If the system is not constructed within the above time frame, or if no application for extension is filed, the special permit, building permit and site plan approval shall automatically lapse 12 months after the date of the approval of the special permit by the Town Board.

C. Inspections. Upon reasonable notice, the Town Building Inspector may enter a lot on which a solar energy system has been approved for the purpose of ensuring compliance with any requirements or conditions. Twenty-four hours' advance notice by telephone shall be deemed reasonable notice. Furthermore, a utility-scale solar energy system shall be inspected annually by the Town Building Inspector or a licensed professional engineer that has been designated by the Town, and a copy of the inspection report shall be submitted to the Town Building Inspector. Any fee or expense associated with this inspection shall be borne entirely by the permit holder.

D. General complaint process. During construction, the Town Building Inspector can issue a stop order at any time for any violations of a special permit or building permit. After construction is complete, the permit holder shall designate a contact person, including name, address and phone number, for receipt of any complaint concerning any permit or operational issues.

E. Continued operation. A solar energy system shall be maintained in operational condition at all times, subject to reasonable maintenance and repair outages. "Operational condition" includes meeting all approval requirements and conditions. Furthermore, the Building Inspector shall also have the right to request documentation from the owner for a solar energy system regarding the system's usage at any time.

F. Removal. All solar energy systems shall be dismantled and removed immediately from a lot when the special permit or approval has been revoked by the Town of North Collins Planning Board or the solar energy system has been deemed inoperative or abandoned by the Building Inspector for a period of more than 365 days, at the cost of the owner. If the owner does not dismantle and remove the said solar energy system as required, the Town Board may, after a hearing at which the owner shall be given an opportunity to be heard and present evidence, dismantle and remove said facility and place the cost of removal as a tax lien on said parcel.

G. Determination of abandonment or inoperability. A determination of the abandonment of or inoperability of a solar energy system shall be made by the Town Building Inspector, who shall provide the owner with written notice by personal service or certified mail. Any appeal by the owner of the Building Inspector's determination of abandonment or inoperability shall be filed with the Town Board within 30 days of the Building Inspector causing personal service or mailing by certified mail his written determination, and the Board shall hold a hearing on same. The filing of an appeal does not stay the following time frame unless the Town Board or a court of competent jurisdiction grants a stay or reverses said determination. At the earlier of the 365 days from the date of determination of abandonment or inoperability without reactivation or upon completion of dismantling and removal, any approvals for the solar energy system shall automatically expire.

H. Application and annual fees.

(1) Utility-scale solar energy system. The applicant shall pay an initial application fee in an amount as set by the Town Board, upon filing its special permit and site plan application, to cover the cost of processing and reviewing the application. If approved, the owner shall thereafter pay an annual fee in the amount as set by the Town Board to cover the cost of processing and reviewing the annual inspection report and for administration, inspections and enforcement.

(2) Site plan application for freestanding and ground-mounted solar energy systems. An applicant shall pay the standard site plan review fee as determined and established from time to time by the Town Board.

(3) The Town of North Collins reserves the right to provide, by local law or otherwise, that no exemption pursuant to the provisions of the New York State Real Property Tax Law (RPTL) § 487 shall be applicable within its jurisdiction.

I. Upon completion of its deliberations, the Town Planning Board shall send a written recommendation to the Town Board. The Planning Board may recommend that a special permit be issued, or may recommend a denial of a special permit, or may recommend that a special permit be issued subject to conditions, as determined by the Planning Board. The Planning Board's recommendations shall be in writing and shall include all findings and conclusions deemed relevant by the Planning Board. Special permits for utility-scale solar energy systems granted under this article shall be issued by the Town Clerk at the direction of the Town Board, following a public hearing held by the Town Board, as required for all special use permits under Chapter **265**, Article **XIII**, of the Town Code.

J. The Town Board shall conduct a public hearing on the application. Within 60 days after the conclusion of the public hearing, the Town Board may vote to grant a special permit, deny a special permit or grant a special permit with written stated conditions. The decision of the Town Board shall be by written decision based upon substantial evidence considered by the Board. Special permits for utility-scale solar energy systems granted under this chapter shall be issued by the Town Clerk after approval and at the direction of the Town Board. Upon issuance of a special permit, the applicant shall then obtain a building permit from the Building Inspector for the construction of a utility-scale solar energy system.

K. Any changes or alterations post-construction to any solar energy system shall be done only by amendment to the applicable special permit and/or site plan (if required) subject to all requirements of this chapter.

L. Special permits for utility-scale solar energy systems shall be assignable or transferrable so long as the applicable system is in full compliance with this article and all of the conditions imposed thereon, and the Building Inspector is notified, in writing, of the proposed assignment or transfer at least 30 days prior thereto.

M. In addition to the requirements of this chapter, the special permit application shall be subject to any other site plan approval requirements set forth in the Town Code.

§ 212-10. Solar energy systems for agricultural use.

Applications for solar energy systems which are to be used solely for agricultural production [as defined in Agriculture and Markets Law § 301(4)] located in a state or county agricultural district shall include the following information:

A. Name and address of the applicant.

B. Evidence that the applicant is the owner of the property involved or has the written permission of the owner to make such application.

C. A drawing or diagram drawn in sufficient detail to show the following:

(1) Location of the proposed system on the site.

(2) Property lot lines and the location and dimensions of all existing structures and uses within 500 feet of the proposed system.

(3) Dimensional representation of the various structural components of the proposed solar energy system.

D. Environmental assessment form (short form) pursuant to 6 NYCRR 617.

E. Such additional information as may be reasonably requested by the Town Planning Board for a complete understanding of the proposed system.

F. The Planning Board may determine that not all of these requirements are necessary for a particular proposed project.

G. A permit fee, in an amount as established by the Town Board from time to time.

H. The applicant shall include evidence that the system will be used solely to reduce the on-site consumption of electricity. Remote net metering shall be permitted if all agricultural locations (host and satellite) are geographically located within North Collins.

I. Evidence that the electrical output from the solar energy system will not exceed 110% of the farm's anticipated electrical needs.

§ 212-11. Revocation of permits or approvals.

If the applicant and/or owner of any solar energy system violates any of the conditions of its special permit or site plan approval or violates any other federal, state, county or local law, rule or regulation, this shall be grounds for the revocation of the applicable special permit, site plan approval or building permit previously issued to the applicant. Revocation may occur after the applicant and/or owner is notified, in writing, of the violations and the Town Planning Board holds a hearing on same.

§ 212-12. Interpretation and conflicts.

In the interpretation and application of this chapter, the provisions of this article shall be held to be minimum requirements, adopted for the promotion of the public health, safety and general welfare of the residents of the Town of North Collins. It is not intended to interfere with, abrogate, or annul other rules, regulations or laws, provided that whenever the requirements of this article are at variance with the requirements of any other lawfully adopted law, rule or regulation, the most restrictive, or those which impose the highest standards, shall govern.

§ 212-13. Severability.

If any section, subsection, phrase, sentence or other portion of this article is for any reason held invalid, void, unconstitutional or otherwise unenforceable by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions thereof.

§ 212-14. Tax exemption; payments in lieu of taxes.

Solar energy systems shall be exempt from assessment/taxation as provided under Real Property Tax Law § 487. However, the Town of North Collins reserves the right to require the owner of a utility scale solar energy system to enter into a contract for payments in lieu of taxes (PILOT) as a requirement for receiving a special permit under § **212-7**.

Town of North Collins, NY
Tuesday, November 17, 2020

Chapter 258. Wind Energy Conversion Systems

[HISTORY: Adopted by the Town Board of the Town of North Collins 4-8-2015 by L.L. No. 1-2015. Amendments noted where applicable.]

GENERAL REFERENCES
Joint Planning Board — See Ch. **42.**
Zoning Board of Appeals — See Ch. **76.**
Uniform construction codes — See Ch. **121.**
Noise — See Ch. **160.**
Site plan review — See Ch. **206.**
Subdivision of land — See Ch. **220.**
Zoning — See Ch. **265.**

§ 258-1. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

ACCESSORY FACILITIES OR EQUIPMENT
Any structure other than a wind turbine related to the use and purpose of deriving, collecting or distributing energy from such wind turbines, located on or associated with a wind energy conversion system, small wind energy conversion system or wind measurement tower.

NACELLE
The covering or housing that holds the turbine.

PERMIT
A permit issued pursuant to this chapter granting the holder the right to construct, maintain and operate a wind energy conversion system or wind measurement tower.

PROPERTY LOT LINE
The perimeter lines of a separate parcel of land as appearing on the tax rolls of the Town of North Collins.

PUBLIC ROAD
Any federal, state, county, city, Town or village road which is open to the public, or any private road regularly used by multiple persons for access to separate off-site parcels of land, access to which is unrestricted by the owner(s) of such private road.

RESIDENCE
Any dwelling located off site which is suitable for habitation on the date a permit application is received by the Town for a wind energy conversion system, small wind energy conversion system or wind measurement tower. A residence may be part of a single or multifamily dwelling or multipurpose building and shall include buildings such as hotels, motels, and day-care centers.

SETBACK AGREEMENT
Any agreement, contract, easement, covenant or right in land which burdens land for the benefit of an applicant or permittee, such that the burdened land is similar in character to land on which any wind energy conversion system is situated. A setback agreement must expressly release any right

which the owner(s) of such burdened land may have in the enforcement of this chapter, and acknowledge the applicable requirements of this chapter. All setback agreements shall run with the land and be publicly recorded in order to inform any potential purchasers of such land of the same or at least for as long as any permit issued under this chapter shall remain in effect. In the event a setback agreement lapses prior to the full decommissioning of a wind energy conversion system, small wind energy conversion system or wind measurement tower, the previously burdened land shall be considered off site and the applicant, permittee or owner of the same shall be required to bring the project into compliance with the requirements of this chapter.

SITE

The parcel(s) of land where a wind energy conversion system, small wind energy conversion system or wind measurement tower is to be placed. The site can be publicly or privately owned by an individual or group of individuals controlling single or multiple adjacent parcels. Where multiple lots are in joint ownership, the combined lots shall be considered as one for purposes of applying setback requirements. Any property which has a utility-scale wind energy conversion system, small wind energy conversion system or wind measurement tower or has entered an agreement for said facility or a setback agreement shall not be considered as "off site."

SMALL-SCALE WIND ENERGY CONVERSION SYSTEM

A wind energy conversion system consisting of a wind turbine, a tower, and/or associated control or conversion electronics and electrical collection and distribution equipment, and accessory facilities or equipment, which has a nameplate capacity of not more than 100 kilowatts.

TOTAL HEIGHT

The highest point above ground level of any improvement related to a utility-scale wind energy conversion system, small wind energy conversion system or wind measurement tower. Total height as applied to wind turbines shall include the highest point of any wind turbine blade above the tower.

UTILITY-SCALE WIND ENERGY CONVERSION SYSTEM

Any wind turbine or array of wind turbines designed to deliver electricity to the power grid for sale with a combined production capacity of more than 100 kilowatts of energy, including all related infrastructure, electrical collection and distribution lines and substations, access roads and accessory structures, including accessory facilities or equipment.

WIND MEASUREMENT TOWER

A tower used for the measurement of meteorological data such as temperature, wind speed and direction.

WIND TURBINE

A wind energy conversion system consisting of a tower, nacelle and associated control or conversion electronics and equipment contained within or atop the tower together with associated control or conversion electronics and equipment.

§ 258-2. Utility-scale systems.

Any WECS which shall have one or more turbines taller than 150 feet as measured from the surface of the ground at the base of the tower to the apex of the blade, and/or whose maximum combined output, as shown by the manufacturer's rated capacity, exceeds 10 kW per hour, shall be required to comply with the regulations for utility-scale wind energy conversion systems.

A. Utility-scale WECS application process.

(1) Wind energy permit and building permit required.

(a) Prior to construction of any utility-scale WECS, the applicant shall first obtain a site plan recommendation from the North Collins Planning Board of the Town of North Collins, a

building permit from the Town's Code Enforcement Officer, and, finally, a wind energy permit from the North Collins Town Board.

(b) All applications shall be initially presented to the Town Code Enforcement Officer who shall review the application to ensure it is complete. The Code Enforcement Officer shall then present the application to the Town Board at the next scheduled Board meeting. Upon initial review by the Town Board, the application shall be referred to the Planning Board for a site plan recommendation and overall recommendation(s) on the application. Upon receipt of the site plan approval and recommendation(s) of the Planning Board, the Town Board shall then schedule a public hearing which shall be held within 60 days after receipt of the Planning Board's recommendation(s). At the conclusion of all public hearings on the application, the Town Board shall vote upon issuance of a wind energy permit to the applicant.

(2) Application materials. All applications for a utility-scale WECS wind energy permit shall include the following information ("Initial Application Materials"):

(a) Name and address of applicant.

(b) Evidence that the applicant is the lawful owner of any private property upon which the WECS is proposed to be constructed (the "site") or has written permission from the owner to make such application.

(c) A proposed site plan in sufficient detail to show the following:

[1] Location of the tower(s) on the site including tower height, blade size and height, rotor diameter and ground clearance.

[2] Utility lines (above and below the ground).

[3] Property lot lines and the location and dimensions of all existing structures and uses on the site within 1,500 feet of the WECS.

[4] Surrounding land use and all off-site structures within 1,500 feet of the WECS.

[5] Description of the structural components of the tower construction, including the base and footing as well as all related structures.

[6] Existing topography, including bodies of water.

[7] Proposed plan for grading and removal of natural vegetation.

(d) SEQRA full environmental assessment form.

(e) Such additional information as may be required by the Town for an adequate review of the proposed project.

(f) The Town may, upon request of the applicant, and for good cause demonstrated by the applicant, determine that not all of the above materials are necessary for a particular proposed project.

(3) Subsequent application materials. Upon receipt of the above initial application materials, the Town Planning Board may determine if the proposed project concept may be appropriate based upon the materials submitted. Such screening determination shall not constitute an approval of the project nor bind the Town to eventual approval of the project. In the course of its review and recommendation process, if the Planning Board determines it to be helpful, the Planning Board may provide further direction to the applicant on the methodologies and parameters of further studies to be provided including:

(a) Proposed plan for site restoration after construction, prepared according to the New York State Department of Agriculture and Markets and the New York State Department of Environmental Conservation guidelines.

(b) Plan for ingress and egress to the proposed project site, including a description of the access route from the nearest roadway; road surface materials to be used; width and length of access route; dust-control procedures during construction and transportation, and road maintenance schedule or program.

(c) Detailed construction plans, including, but not limited to, construction schedule; hours of operation; designation of heavy haul routes en route to the project site; lists of materials and equipment and loads to be transported; identification of temporary facilities to be constructed; and the contact representative in the field with his/her name and phone number.

(d) Erosion and sediment control plan.

(e) Specific information on the type, size, height, rotor material, rated power output, performance, safety and noise characteristics of each utility-scale wind turbine model, tower and electrical transmission equipment.

(f) Photographs and/or detailed drawings of each wind turbine model including the tower and foundation.

(g) Visual assessment, including a detailed or photographic simulation showing the site fully developed with all proposed wind turbines and accessory structures from the nearest public highway and residence.

(h) A noise analysis shall be furnished which shall include the following:

[1] A description and map of the project's noise-producing features, including the range of noise levels expected and the tonal and frequency characteristics expected. The noise report shall include low-frequency, infra sound, pure tone and repetitive/impulsive sound.

[2] A description and map of the noise-sensitive environment, including any sensitive noise receptors which shall include residences, churches, farms, barns and similar structures within 2,000 feet from the site.

[3] A survey and report prepared by a qualified professional that analyzes the preexisting ambient sound levels on the site compared with the ambient sound levels on the site following construction of the WECS.

[4] A description and map showing the potential noise impacts including estimates of noise impacts from both construction and operation and estimates of expected noise levels at sensitive receptor locations.

[5] A description of the project's proposed noise-control features including measures proposed to protect workers and measures proposed to mitigate noise impacts for sensitive receptors.

[6] The manufacturer's noise design and field testing data, both audible (dBA) and low frequency (deep bass vibration) for all proposed structures.

(i) A geotechnical report which shall include information relative to soils and geologic characteristics evidencing assessment of the soil suitability for the construction of the proposed WECS; foundation criteria for all proposed structures; slope stability analysis and grading criteria for ground preparation, cuts and fills, and soil compaction.

(j) Engineering report prepared by a New York licensed professional engineer providing relevant information regarding the following potential risks. The report shall be used to determine the adequacy of setbacks from the property line to mitigate any effects from potential ice throw, tower failure or blade throw issues.

[1] Ice throw calculations: a report that calculates the maximum distance that ice from the turbine blades could be thrown and the potential risk assessment for nearby inhabitants and structures.

[2] Blade throw calculations: a report that calculates the maximum distance that pieces of the turbine blades could be thrown and the potential risk assessment for nearby inhabitants and structures.

[3] Fall zone: a report noting any rail lines, public trails and parks within the project site and fall zones, including existing structures.

[4] Catastrophic tower failure: a report from the turbine manufacturer stating the wind speed and conditions that the turbine is designed to withstand and the potential risk assessment for nearby inhabitants and structures.

[5] Certificate by licensed New York State professional engineer that the tower's design is sufficient to withstand any generally acceptable wind-loading requirements for structures including as established by the New York State Building Code.

(k) Lighting plan. The applicant shall submit a lighting plan that describes all lighting that will be required, including any lighting that may be required by the FAA. Such plan shall include the planned number and location of all lights, light color and whether any such lights will be flashing and mitigation measures planned to control the light so that it does not spill over onto neighboring properties.

(l) Shadow flicker study. The applicant shall conduct a study on potential shadow flicker. The study shall identify locations where shadow flicker may be caused by the WECS and the expected durations of the flicker at these locations. The study shall identify areas where shadow flicker may interfere with residences and describe measures that shall be taken to eliminate or mitigate the problem.

(m) Study of potential impacts to birds and bats using methodology approved by the NYSDEC or other agencies acceptable to the Town.

(n) Decommissioning and site restoration plan.

(o) FAA notification: a copy of written notification to the Federal Aviation Administration.

(p) Utility notification: utility and NYISO interconnection data and a copy of a written notification to the utility or NYISO of the proposed interconnection.

(q) Study of electromagnetic interference with microwave or other communications or broadcast sources. An application that includes any wind turbine which is located within two miles of any microwave communications link shall be accompanied by a study which identifies any potential impact on microwave or other communications or broadcast services and shall describe all measures that shall be taken to eliminate or mitigate any problems.

(r) Other information: such additional information as may be required by the Town for an adequate assessment of the proposed project. Such information may include a detailed property value study of the surrounding areas.

(s) The Town may determine that all or not all of these application materials are necessary for a particular proposed project.

(4) SEQRA review. Pursuant to the New York State Environmental Quality Review Act, the Town may hire consultants to assist the Town in its review of the potential impacts of a proposed utility-scale WECS project. The Town will require that a sum sufficient to reimburse the Town for these expenses be deposited into an escrow account to be held by the Town upon execution of an escrow agreement providing that the funds will be used for such purpose as negotiated between the Town and the project applicant.

(5) Application fee. Prior to the Town undertaking a review of the initial application materials, the applicant shall deposit with the Town Clerk a sum representing a combined fee for site plan review, building permit application and wind energy permit. The amount of the fee shall be established by resolution of the Town Board from time to time, as set forth in the official schedule of fees of the Town of North Collins. In setting such fee, the Town Board shall consider a reasonable estimation by the Town of the personnel costs, public notice provisions, professional engineering, legal and other expenses that may be incurred by the Town in processing the application. The fee shall be nonrefundable and shall be in addition to any escrow amount under Subsection **A(4)** above and also in addition to any amounts allowed by 6 NYCRR 617 et seq.

B. Standards of operation. The Town shall use the following criteria to evaluate all utility-scale wind energy conversion systems:

(1) Setbacks. All utility-scale WECS shall comply with the following setback provisions:

(a) All wind turbines and towers shall be set back from property lines a minimum of 1,500 feet or 3.25 times the height of the tower, including the tip of the blade, whichever is greater, excluding adjoining lot lines where both are part of the proposed project.

(b) All wind turbines and towers shall be set back from all existing buildings and structures, or any buildings or structures for which a building permit has been issued, a minimum of 1,500 feet or 3.25 times the height of the tower, including the tip of the blade, whichever is greater. The Town may, in its discretion, exempt buildings which are not meant for regular human or animal occupancy such as tool sheds and storage barns and similar structures.

(c) All wind turbines and towers shall be set back from any public road right-of-way a minimum of 750 feet or 1.5 times the height of the tower, including the tip of the blade, whichever is greater.

(d) The Town Planning Board, as part of its review, may in individual cases waive or amend any of the setback provisions upon a factual finding that the setbacks are not required for specific turbines or towers in order to achieve the goals of this chapter to protect neighboring property owners from unreasonable interference with the quiet use and enjoyment of neighboring or nearby properties. Such waiver shall include a written finding by the Town Planning Board for the factual basis for providing such a waiver or amendment of any setback. This waiver process shall not require the Zoning Board of Appeals approval, but rather, shall be treated as part of the application review and recommendation process before the Town Planning Board.

(2) Noise. All utility-scale WECS applications shall require the applicant to demonstrate that the proposed project complies with the following noise requirements. In order to enable the Town to make this determination, the applicant shall submit the noise assessment required in Subsection **A(3)(h)**.

(a) Audible noise standards.

[1] Audible noise due to wind turbine operations shall not exceed 45 dBA for more than five minutes out of any one-hour time period nor exceed 50 dBA for any time period, at any property line of any lots which are part of the proposed project site.

[2] The sound level from the operation of a utility-scale WECS shall not increase by more than three dBA the nighttime or daytime ambient sound level at any sensitive noise receptors (e.g., residences, libraries, schools, places of worship and similar facilities), within 1,500 feet or 3.25 times the height of the proposed turbine, whichever is greater.

(b) Low-frequency noise: A utility-scale WECS shall not be operated so that impulsive sound below 20 Hz affects the habitability or use of any sensitive noise receptor.

(c) Noise setbacks: The Town may impose a noise setback that exceeds the other setbacks set for this section if it deems that such greater setbacks are necessary to protect the public health, safety and welfare of the community.

(d) Within one year after the commencement of commercial operations, the project proponent shall submit a noise study of operational conditions to ensure that the project is in compliance with the standards of this section. The study shall be based upon receptor points identified during the application review process. In addition to this initial noise study, the Town may require periodic additional noise studies.

(3) Noise and setback easements. In the event that a utility-scale WECS does not meet a setback requirement or exceeds the noise criteria above, the Town Board may grant a waiver of the setback and/or noise criteria [except for the setback requirement of Subsection **B(1)(a)**] in the following circumstances:

(a) Written consent from the affected property owners is presented to the Town stating they are aware of the WECS and the noise and/or setback limitations contained in the law and that they grant consent to allow noise and/or setback provisions which exceed the limits otherwise allowable or required; and

(b) In order to advise all subsequent owners of the burdened property, the consent, in the form required for a written easement agreement, shall be recorded in the Erie County Clerk's office within 30 days after issuance of the wind energy permit describing the benefited and burdened properties. Such easements shall be permanent and shall state that they may not be revoked without the consent of the burdened property owner(s) and the Town, which consent may be granted upon the decommissioning of the benefited WECS in accord with this chapter or the acquisition of the burdened parcel by the owner of the benefited parcel or the WECS.

(4) Interference with television, microwave and radio reception. The applicant shall submit information that the proposed construction of the utility-scale WECS will not cause interference with microwave transmissions, cellular transmissions, residential television interference or radio reception of domestic or foreign signals. The applicant shall include specific measures proposed to prevent interference and a complaint procedure and specific measures proposed to mitigate interference impacts.

(5) Interference with aviation and aviation navigational systems.

(a) The applicant shall provide documentation that the proposed WECS will not cause interference with the operation of any aviation facility.

(b) The applicant shall provide documentation that the proposed WECS complies with all Federal Aviation Administration (FAA) regulations.

(c) Locking mechanisms to limit radar interference required. All utility-scale WECS shall include a locking mechanism designed to prevent the blades from rotating when not producing power in order to limit airport radar interference. This provision does not apply while the WECS is free wheeling during start-up and shutdown. The Town may modify or eliminate the requirement for a locking mechanism if sufficient evidence is presented that no significant airport radar interference will be caused by the proposed utility-scale WECS.

(6) Safety and security requirements.

(a) Safety shutdown. Each wind turbine shall be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor. A manual electrical and/or overspeed-shutdown-disconnect switches shall be provided and clearly labeled on the wind turbine structure. No wind turbine shall be permitted that lacks an automatic braking, governing or feathering system to prevent uncontrolled rotation, over speeding and excessive pressure on the tower structure, rotor blades and turbine components.

(b) Grounding. All structures shall be grounded according to applicable electrical codes.

(c) Wiring. All wiring between the wind turbines and the WECS substation shall be placed underground unless the Town determines this would not be prudent or practicable due to site-specific constraints. The application shall include site plan drawings showing the locations of all overhead and underground electric utility lines including substations for the project.

(d) Ground clearance. The blade tip of any wind turbine shall have ground clearance of not less than 50 feet.

(e) Climbability. Wind turbine towers shall not be climbable up to 25 feet above ground level.

(f) Access doors locked. All access doors to wind turbine towers and electrical equipment shall be lockable and shall remain locked at all times when operator personnel are not present.

(g) Signage. Appropriate warning signage shall be placed on wind turbine towers, electrical equipment and WECS entrances. Signage shall include two twenty-four-hour emergency contact numbers to the owner of the wind turbine in accordance with state and federal codes.

(7) Ice throw. The Town Board shall determine the acceptable ice throw range based upon the activities in the area, location and calculations of ice throw. The Board shall review, but not be bound by, the calculations and information presented by the applicant herein.

(8) Fire hazard protection. The applicant shall submit a fire control and prevention program that is appropriate and adequate for the proposed facility. The proposed program may include the following: fireproof or fire-resistant building materials; buffers or fire-retardant landscaping; availability of water; an automatic fire extinguishing system for all buildings or equipment enclosures containing control panels, switching equipment or transmission equipment; provision of training and fire-fighting equipment for local fire protection personnel and/or other emergency responders.

(9) Impact on wildlife and habitat. Development and operation of a utility-scale WECS shall be evaluated for any significant adverse impact on endangered or threatened wildlife or plant species or their critical habitats based upon criteria established by the federal or state regulatory agencies and as determined by the Town during the SEQRA review.

(10) Visual impacts.

(a) No advertising sign or logo, unrelated to the WECS itself, shall be placed or painted on any part of any utility-scale WECS.

(b) Wind turbines shall be painted an unobtrusive (e.g., white, gray or beige) color that is nonreflective. In order to reduce any daytime lighting requirements by the FAA, the Town Board may require consultation with the FAA to determine appropriate color and/or lighting requirements.

(c) When more than one wind turbine is proposed, the project shall use wind turbines whose appearance is similar throughout the project to provide reasonable uniformity in terms of overall size, geometry and rotational speed.

(d) Unless required by the FAA or by the Town, no lighting shall be installed on the WECS turbine or tower except for ground level security lighting.

(11) Shadow flicker. The WECS shall be designed such that the project shall minimize shadow flicker onto adjacent existing residences. Mitigation measures, which may include landscaping, shall be incorporated into any site plan and/or wind energy permit approval. The required shadow flicker study shall identify areas where shadow flicker may interfere with residences and describe measures that shall be taken to eliminate or minimize the problem.

C. Decommissioning and site restoration plan and bond.

(1) The applicant shall submit a decommissioning and site restoration plan, including cost estimate, to the Town for its review and approval prior to the approval of any wind energy permit. The restoration plan shall identify the specific properties it applies to and shall indicate removal of all buildings, structures, wind turbines, hazardous materials, access roads and/or driveways and foundations to 3.5 feet below finish grade. Road repair costs, if any shall be indicated, and all revegetation necessary to return the subject property to the condition existing prior to the installation of the WECS. The restoration plan shall reflect the site-specific character, including topography, vegetation, drainage and any other unique environmental features. The plan shall include a detailed estimate of the total cost (by element) of implementing the removal and restoration plan. The decommissioning plan shall include information regarding the anticipated life of the project.

(2) As a condition of permit approval, the Town shall require the project sponsor to execute and file with the Town Clerk a bond or other acceptable form of security in an amount sufficient to ensure the faithful performance of the removal of the WECS and the restoration of the site to original condition in accord with the decommissioning and site restoration plan.

(3) The sufficiency of such bond shall be confirmed at least every five years by analysis and report of the cost of removal and site restoration. Such report shall be procured by the sponsor and filed with the Town every five years. If the report demonstrates that the amount of the bond is insufficient, the bond amount shall be increased to the amount necessary to cover such cost within 10 days after the applicant's receipt of such report and the increased bond shall be filed with the Town Clerk.

(4) All bond requirements shall be fully funded before a building permit is issued.

(5) The decommissioning and site restoration bond shall be in effect for the entire duration of the permit.

(6) The applicant and his/her successors or assigns in interest, shall maintain the required bond funds for the duration of the wind energy permit.

D. Road bond.

(1) Construction of WECS poses risk of damage to local roads due to the large size of construction and transport vehicles and their impact upon roads and traffic safety. Construction and delivery vehicles shall use traffic routes established as part of the application review process. Factors in establishing such corridors shall include minimizing traffic impacts from construction and delivery vehicles; minimizing WECS-related traffic during times of school bus activity; minimizing wear and tear upon local roads and minimizing impact upon local traffic and business operations. Permit conditions may be imposed upon WECS to specific or limited routes.

(2) The applicant shall be responsible for remediation of damage to public roads caused by WECS-related traffic after completion of the installation of the WECS. To ensure that this remediation occurs, prior to issuance of a building permit, the sponsor shall post a public improvement bond in an amount determined by the Town to be sufficient to repair any damage that may occur to local roads during the construction phase of the project. The Town Attorney shall approve the form of the bond.

(3) In the event that any post-construction maintenance or replacement of WECS components which could affect local roads is necessary, the project sponsor shall notify the Town and a new bond for any potential damage related thereto shall be posted.

E. Certifications. The applicant shall provide the following certifications as part of the application. Said certifications shall certify compliance with good engineering practices and shall be provided prior to issuance of the wind energy permit:

(1) Certification of structural components. The foundation, tower and compatibility of the tower with the rotor and related equipment shall be certified in writing by a structural engineer licensed in New York. This certification shall be provided to the Town Code Enforcement Officer and shall be maintained in a permanent file.

(2) Certification of electrical systems. The electrical system shall be certified by a licensed electrical engineer in New York. The engineer shall certify compliance with good engineering practices and with the appropriate provisions of the electrical code that has been adopted by New York State. This certification shall be provided to the Town Code Enforcement Officer and shall be maintained in a permanent file.

(3) Certification of rotor overspeed control. The rotor overspeed control system shall be certified by a licensed New York mechanical engineer. This certification shall be provided to the Town Code Enforcement Officer and shall be maintained in a permanent file.

(4) Certification of seismic design. The applicant shall provide post-construction certification from a licensed New York engineer that the design and construction of the WECS protects against anticipated seismic hazards. This certification shall be provided to the Town Code Enforcement Officer and shall be maintained in a permanent file.

(5) Post-construction certification. After completion of construction of the WECS, the applicant shall provide a post-construction certification from a New York licensed engineer that the project complies with applicable codes and industry practices and has been complete according to design plans. This certification shall be provided to the Town Code Enforcement Officer and shall be maintained in a permanent file.

F. Liability insurance. Prior to issuance of the building permit, the project sponsor shall provide proof in the form of an insurance certificate or policy issued by an insurance company, that liability insurance has been obtained to cover damage or injury which may result from the failure of the tower, turbine or other components of the WECS. Such insurance policy shall provide coverage of not less than $5,000,000 and shall name the Town of North Collins as an additional named insured. Upon request, the sponsor shall provide updated proofs of coverage to the Town on any WECS constructed on Town property or Town rights-of-way.

G. Transfer of ownership.

(1) If ownership of the WECS facility, or ownership of the underlying land upon which the WECS facility is located, should change hands, the original holder of the wind energy permit, and subsequent owners, shall provide notification to the Town Clerk 90 days prior to the change of ownership.

(2) The new owner of the WECS facility shall present proof to the Town Clerk prior to taking ownership that the required bonds and insurance policies remain in full force and effect. The new owner shall provide a written statement to the Town Clerk that he/she is aware of the conditions and requirements of the wind energy permit which continue to govern the operation of the facility.

H. Inspections. Unless waived by the Town Board, wind turbines or towers over 150 feet in height shall be inspected by a New York State licensed engineer annually or at any other time upon request by the Town's Code Enforcement Officer that the wind turbine, tower or pole may have sustained structural damage. A copy of the inspection report shall be submitted to the Town's Code Enforcement Officer. Any fee or expense associated with this inspection shall be borne by the permit holder.

I. Permit revocation.

(1) A WECS shall be maintained in operational condition at all times, subject to reasonable maintenance and repair outages. "Operational condition" includes meeting all noise requirements and all other standards and requirements of this chapter and the wind energy permit conditions.

(2) Should a WECS become inoperative or should any part of the WECS be damaged or become unsafe or should a WECS violate a permit condition, the owner/operator shall remedy the situation within 90 days after written notice from the Code Enforcement Officer. Upon request, the Code Enforcement Officer may extend this period for an additional 90 days.

(3) Upon notice from the Code Enforcement Officer that the WECS is not repaired or made operational or otherwise not in compliance with the permit conditions, and the time frame provided in Subsection **I(2)** above has expired, the Town Board may hold a public hearing at which both the public and operator/owner are provided the opportunity to be heard and present evidence, including a plan to bring the WECS into compliance. Following the close of the public hearing, the Town Board may either order compliance within a reasonable time frame; or revoke the wind energy permit and order the removal of the WECS to commence within 90 days and the site remediation pursuant to the approved decommissioning and site restoration plan.

J. Decommissioning.

(1) Nonfunctional and/or inoperative utility-scale WECS defined.

(a) If any utility-scale WECS, or turbines remain nonfunctional or inoperative for a continuous period of one year, the permit holder shall remove the WECS at the permit holder's own expense and restore the site, in accordance with the approved decommissioning and site restoration plan. A utility-scale WECS shall be deemed nonfunctional and/or inoperative if it has not generated 20% of its original capacity of commercial power within the preceding 12 months.

(b) The Code Enforcement Officer may request that the applicant periodically submit documentation reporting the power output generated by the WECS.

(2) Use of decommissioning bond.

(a) Any nonfunctional or inoperative utility-scale WECS, or any utility-scale WECS for which the permit has been revoked, shall be removed from the site and the site restored in accordance with the approved decommissioning and site restoration plan within 90 days of the date on which the facility becomes nonfunctional or inoperative, as defined above, or of the revocation of the permit.

(b) If removal of the WECS is required and the applicant, permittee or successors fail to remove the WECS and restore the site in accordance with the approved decommissioning and site restoration plan, the permit holder by accepting the permit authorizes the Town Board to contract for such removal and restoration and to pay for the removal and restoration from the posted decommissioning and site restoration bond.

(c) If the bond is not sufficient, the Town shall charge the permit holder for the costs over and above the amount of the bond.

K. Town board action. Upon receipt of the Planning Board site plan approval and recommendation(s) upon the application, the Town Board shall hold a public hearing on the application. Upon completion of all public hearings, the Town Board may grant the wind energy permit, deny the wind energy permit or grant the wind energy permit with written stated conditions. Denial of the wind energy permit shall be in written form containing a decision based upon substantial evidence submitted to the Town. Upon issuance of the wind energy permit, the applicant shall obtain a building permit for each structure as required. Prior to issuing a wind energy permit for a utility-scale WECS, the Town Board shall make all of the following findings:

(1) The proposed utility-scale WECS project is consistent with the laws of the Town of North Collins.

(2) The proposed utility-scale WECS project will not unreasonably interfere with the orderly land use and master development plans of the Town of North Collins.

(3) The benefits to the applicant and the public of the proposed utility-scale WECS project will exceed any burdens to the Town and residents therein.

(4) That the proposed utility-scale WECS project will not be detrimental to the public health, safety or welfare of the community.

L. Amendments to approved use permit. Any changes or alterations to the WECS, after approval of the wind energy permit and site plan, other than routine repair or maintenance of the original towers and turbines installed, shall require amendment to the wind energy permit. Such amendment shall only be made in the discretion of the Town Board after a public hearing. The amendment shall be subject to all of the requirements of this section and any additional requirements reasonably related to the changes or alterations.

M. Host community agreement. All wind energy permits allowed under this chapter will be conditioned on the approval by the Town Board of a host community agreement to be negotiated between the Town and the applicant.

§ 258-3. Small-scale systems.

Any WECS which shall have only one turbine and such turbine shall not be taller than 155 feet as measured from the base of the pole at the surface of the ground to the apex of the blade, and or whose maximum combined output, as shown by the manufacturer's rated capacity, shall not exceed 10 kW shall be required to comply with the regulations for small-scale wind energy conversion systems.

A WECS whose capacity is between 10 kW and 100 kWh and/or has a proposed height between 155 feet and 200 feet, may apply for permission to be treated as a small-scale WECS for purposes of this

application process for a wind energy permit under this section, provided that such WECS exceeding 155 feet must obtain a height variance and to be approved by the Planning Board.

A. Application process.

(1) Prior to any construction of any small-scale wind energy conversion system, the project proponent shall obtain a site plan approval from the Town of North Collins Planning Board, a building permit from the Town's Code Enforcement Officer, and a wind energy permit from the North Collins Town Board.

(2) All applications shall be initially presented to the Town Board by the Code Enforcement Officer. Upon initial review by the Town Board, the application shall be referred to the Town Planning Board for a site plan approval and overall recommendation(s) on the application. Upon receipt of the site plan approval and recommendation(s) of the Planning Board, the Town Board shall then schedule a public hearing which shall be held within 60 days after receipt of the Planning Board's recommendations. At the conclusion of all public hearings on the application, the Town Board shall vote upon issuance of a wind energy permit to the applicant.

(a) All applications for small-scale WECS wind energy permit shall include the following information:

[1] Name and address of the applicant.

[2] Evidence that the applicant is the owner of the property involved or has the written permission of the owner to make such application.

[3] A site plan drawing or diagram drawn in sufficient detail to show the following:

[a] Location of the proposed tower on the site and the tower height, including blades, rotor diameter and ground clearance.

[b] Property lot lines and the location and dimensions of all existing structures and uses on site within 300 feet of the wind energy conversion system.

[c] Dimensional representation of the various structural components of the tower construction, including the base and footing.

[d] Compliance with current version of AWEA standards for small wind energy systems, and utilizing a small wind energy conversion system on the current list of ITAC-certified wind turbines.

[4] Evidence that the proposed tower height does not exceed the height recommended by the manufacturer or the distributor of the system.

[5] Turbine information: specific information on the type, size, height, rotor material, rated power output, performance, safety and noise characteristics of the wind turbine and tower.

[6] Sufficient information demonstrating the system will be used primarily to reduce on-site consumption of electricity from the public electrical grid. Remote net metering shall be allowed if all locations ("host" and "satellite") are geographically within North Collins.

[7] Written evidence that the electric utility service provider that serves the proposed site has been informed of the applicant's intent to install an interconnected, customer-owned electricity generator, unless the applicant does not plan, and so states in the application, to connect the system to the electricity grid.

[8] Environmental assessment form (short form) pursuant to 6 NYCRR 617.

[9] Such additional information as may be reasonably requested by the Town Board for a complete understanding of the proposed project.

[10] The Town Board may determine that not all of these requirements are necessary for a particular proposed project.

[11] A permit fee, in an amount as established by the Town Board from time to time.

B. Permit issued by the Town Board. Pursuant to the procedures and standards contained in this subsection, the Town Board may issue a wind energy permit to allow a small-scale WECS where the maximum turbine output, as shown by the manufacturer's rated capacity, exceeds 10 kW per hour, but does not exceed 100 kW per hour.

C. Application requirements. An applicant for a small-scale WECS that has an output exceeding 10 kW per hour but less than 100 kW per hour shall apply to the Town Board for a wind energy permit. Application material shall include:

(1) All the information listed in Subsection **A** above.

(2) An environmental assessment form (short form) pursuant to 6 NYCRR 617.

(3) Any additional information that may be reasonably required by the Town Board for an understanding of the project.

D. Application review. The Code Enforcement Officer shall review the application for compliance with the required conditions and the concerns set forth in this part. When the application is complete, the Code Enforcement Officer shall present the same to the Town Board for initial review. Upon initial review by the Town Board, the application shall be referred to the Town Planning Board for a site plan approval and overall recommendation(s) on the application. Upon receipt of the site plan approval and recommendation(s) of the Planning Board, the Town Board shall then schedule a public hearing which shall be held within 60 days after receipt of the Planning Board's recommendations. At the conclusion of all public hearings on the application, the Town Board shall vote upon issuance of a wind energy permit to the applicant. Standards for small-scale WECS:

(1) Minimum lot size. A small-scale WECS shall be located on a lot that is a minimum of five acres in size.

(2) Significant ridgelines. A WECS shall not be located on any ridgeline designated as "significant" on the Town of North Collins Map.

(3) Only one small-scale WECS shall be allowed per prime lot. The system shall be primarily used to reduce the on-site consumption of electricity. Remote net metering shall be allowed if all locations ("host" and "satellite") are geographically located within North Collins.

(4) Height. The turbine, measured to the apex of the blade, is not taller than 155 feet.

(5) Capacity. The maximum turbine output, as shown by the manufacturer's rated capacity, shall not exceed 100 kW.

(6) Setbacks. All components of the small-scale WECS shall be set back a minimum of 1.5 times the total height of the WECS from:

(a) Any residence in existence at the time the application is made, except for the residence on the owner's lot.

(b) Property lines of the site on which the structure is located.

(c) The right-of-way of public roads.

(7) Visual impact. In order to reduce visual impact, the WECS shall be painted a nonreflective, unobtrusive color that blends the system and its components into the surrounding landscape to the greatest extent possible.

(8) Lighting. Exterior lighting on any structure associated with the system shall not be allowed, except lighting that is specifically required by the Federal Aviation Administration (FAA).

(9) Signage. No advertising sign or logo unrelated to the WECS itself, shall be placed or painted on any turbine or tower. The Town Board may allow the placement of the manufacturer's logo on a ground-level structure in an unobtrusive manner.

(10) Safety and security requirements. All small-scale WECS shall adhere to the following safety and security requirements:

(a) Safety shutdown. Each wind turbine shall be equipped with both manual and automatic controls to limit the rotational speed of the blade within the design limits of the rotor. The conformance of rotor and overspeed control design and fabrication with good engineering practices shall be certified by the manufacturer.

(b) Grounding. All structures which may be charged by lightning shall be grounded according to applicable electrical codes.

(c) Wiring. All wiring associated with the WECS system shall be installed underground within the fall zone. This standard may be modified by the Town Board if the terrain is determined to be unsuitable due to reasons of excessive grading, biological impacts or similar forces.

(d) Ground clearance. The blade tip of any turbine shall, at its lowest point, have ground clearance of not less than 30 feet.

(e) Climbability. Wind turbine towers shall not be climbable up to 15 feet above ground level and/or other appropriate methods of access control shall be provided.

(f) Anchor points for guy wires. Anchor points for any guy wires for a system tower shall be located on the property that the system is located on and not on or across any above ground electric transmission or distribution lines. The point of attachment for the guy wires to the ground shall be enclosed by a fence six feet high or sheathed in bright orange or yellow covering from three to eight feet above the ground. The minimum setback for the guy wire anchors shall be 10 feet from the property boundary.

(g) Signage. Appropriate warning signage shall be placed on wind turbine towers and electrical equipment. Signage shall also include one twenty-four-hour emergency contact number to the owner of the wind turbine, as well as signage warning of electrical shock or high voltage and harm from revolving machinery.

(11) Compliance with regulatory agencies. The applicant is required to obtain all necessary regulatory approvals and permits from all federal, state, county and local agencies having jurisdiction related to the construction of the small-scale WECS. If all such approvals have not been received at the time that the Town Board considers the application for a permit, receipt of these other agency approvals shall be a condition to be completed prior to the issuance of a building permit.

(12) Noise standard.

(a) Audible noise standard. Wind turbine operations shall not cause the noise level at the boundary of the proposed project site to exceed 45 dB(A) for any time period at the

nearest property line. If the ambient noise level in the vicinity of the WECS already exceeds this standard, the operation of the WECS shall not increase the nighttime or daytime ambient sound level at an adjacent residence by more than 3 dB(A).

(b) Low-frequency noise. A small-scale WECS shall not be operated so that impulsive sound below 20 Hz adversely affects the habitability or use of any dwelling unit, hospital, school, library, nursing home or other sensitive noise receptor.

(13) Interference with television, microwave and radio reception. The WECS shall be operated such that no disruptive electromagnetic interference is caused. If it is demonstrated that a system is causing harmful interference, the system operator shall promptly mitigate the harmful interference or cease operation of the system.

(14) Erosion control. Prior to granting a permit for a small-scale WECS, the Town Board shall determine that the erosion and sedimentation control plan is adequate.

E. Town Board action on application. The Town Board shall receive a report from the Code Enforcement Officer on any application for a small-scale WECS permit as well as the site plan and recommendation of the Planning Board as provided in Subsection **A** above. After consideration of the application and relevant recommendations, the Town Board may grant the wind energy permit, deny the wind energy permit or grant the wind energy permit with written stated conditions. Denial of the wind energy permit shall be by written decision based upon the substantial evidence submitted to the Board. Upon issuance of the wind energy permit, the applicant shall obtain a building permit for the small-scale WECS prior to installation. Prior to issuing a wind energy permit for a small-scale WECS, the Town Board shall make the following findings:

(1) The proposed WECS project will not unreasonably interfere with the orderly land use development plans of the Town of North Collins.

(2) The proposed WECS project will not be detrimental to the public health, safety or welfare of the community.

F. Amendment to approved use permit. Any changes or alterations to the WECS, after approval of the permit, other than routine repair or maintenance of the original towers and turbines installed, shall require amendment to the permit by the Town Board. Such amendment shall be subject to all the procedural requirements and standards of this section

G. Permit revocation. Failure to abide by and faithfully comply with the standards of this section and with any and all conditions that may be attached to the granting of the wind energy permit shall constitute grounds for the revocation of the permit, after a public hearing. Construction must begin within one year after issuance of permit and be completed within two years after issuance of permit. The applicant may apply once for a six-month extension.

H. Abandonment of use.

(1) All small-scale WECS shall be maintained in good condition and in accordance with all requirements of this section

(2) Any WECS which is not used for 12 consecutive months shall be deemed abandoned and shall be dismantled and removed from the property at the owner's expense. The Town reserves the right to dismantle the structure and to charge back the cost of removal to the property owner. If unpaid, this cost will be added as a charge to the tax levy of the property. The owner shall have three months to remove the abandoned WECS.

(3) Failure to abide by and faithfully comply with the standards of this section and with any and all conditions that may be attached to the granting of the wind energy permit shall constitute grounds for the revocation of the permit, after a public hearing.

I. Assessment. A small-scale WECS shall not be subject to an assessment by the Town of North Collins.

J. WECS for agricultural use.

(1) Applications for WECS permits which are to be used solely for agricultural production (as defined in Agriculture and Markets Law § 301, Subdivision 4) located in a state or county agricultural district shall include the following information:

(a) Name and address of the applicant.

(b) Evidence that the applicant is the owner of the property involved or has the written permission of the owner to make such application.

(c) A drawing or diagram drawn in sufficient detail to show the following:

[1] Location of the proposed tower on the site and the tower height, including blades, rotor diameter and ground clearance.

[2] Property lot lines and the location and dimensions of all existing structures and uses on site within 300 feet of the wind energy conversion system.

[3] Dimensional representation of the various structural components of the tower construction, including the base and footing.

[4] Compliance with current version of AWEA standards for small wind energy systems, and utilizing a small wind energy conversion system on the current list of ITAC-certified wind turbines.

(d) Evidence that the proposed tower height does not exceed the height recommended by the manufacturer or the distributor of the system.

(e) Turbine information: specific information on the type, size, height, rotor material, rated power output, performance, safety and noise characteristics of the wind turbine and tower.

(f) Environmental assessment form (short form) pursuant to 6 NYCRR 617.

(g) Such additional information as may be reasonably requested by the Town Board or Planning Board for a complete understanding of the proposed project.

(h) The Town Board may determine that not all of these requirements are necessary for a particular proposed project.

(i) A permit fee, in an amount as established by the Town Board from time to time.

(j) Only one small-scale WECS shall be allowed per five acres of agricultural land. The system shall be used solely to reduce the on-site consumption of electricity. Remote net metering shall be permitted if all agricultural locations ("host" and "satellite") are geographically located within North Collins.

(2) Upon receipt and review of the above, the Planning Board shall make appropriate recommendation(s) to the Town Board. The Town Board shall then schedule a public hearing which shall be held within 60 days after receipt of the Planning Board's recommendations. At the conclusion of all public hearings on the application, the Town Board shall vote upon issuance of a wind energy permit to the applicant.

§ 258-4. Payments in lieu of taxes.

Real Property Tax Law § 487. The Town of North Collins reserves the right to require the owner of a WECS to enter into a contract for payments in lieu of taxes as a requirement of receiving a wind energy permit. Such payment is and addition to, and not in lieu of, any payment required under a host community agreement.

Appendix C

NYS Department of Agriculture and Markets Circulars and Information

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- Circular 1150: Article 25AA - Agricultural Districts
- Circular 1500: Article 25AA - Agriculture and Farmland protection Programs
- Section 305-a: Processing and Agricultural Data Statement

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New York State
Department of Agriculture and Markets
10B Airline Drive
Albany, New York 12235
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CIRCULAR 1150

ARTICLE 25AA -- AGRICULTURAL DISTRICTS

AGRICULTURE AND MARKETS LAW
(AS AMENDED THROUGH January 1, 2009)
AGRICULTURAL DISTRICTS LAW

Summary of **1999 Amendments** to the Agricultural Districts Law

Section Amended:§301(4)(e) and §301(9)(e)
Description: Provides that land set aside through participation in a federal conservation program, regardless of the income derived from the land, shall be eligible for an agricultural assessment.
Effective Date: 9/7/99

Section Amended:§301(9)(e)
Description: Adds a new paragraph (e) to allow payments received for land set aside under a federal conservation reserve program to be included in calculating the average gross sales value of products produced in determining whether land used as a single farm operation qualifies as "land used in agricultural production."
Effective Date: 9/7/99

Section Amended:§303-a(4)
Description: Renumbers subdivision (4) to subdivision (5)
Effective Date: 7/20/99

Section Amended:§303-a(4)
Description: Adds a new subdivision (4) that states that if the county legislative body does not review a district upon its anniversary date, the agricultural district remains as originally constituted or until such time that the agricultural district is modified or terminated.
Effective Date: 7/20/99

Section Amended:§305(7)
Description: Provides that the real property tax exemption for agricultural land which is used solely for the purpose of replanting or crop expansion as part of an orchard or vineyard may be greater than 20% of the total acreage of such orchard or vineyard when such orchard or vineyard is located within an area declared by the Governor to be a disaster emergency.
Effective Date: 9/7/99 and shall apply to assessment rolls prepared on the basis of taxable status dates occurring on or after 9/7/99.

Section Amended:§308(3)
Description: Renumbers subdivision (3), which was added by Chapter 362 of the Laws of 1998, to subdivision (4)
Effective Date: 4/6/99

Section Repealed: §309(8) & (9)
Description: Repeals the two subdivisions
Effective Date: 7/20/99

Section Amended:§309(10)
Description: Renumbers subdivision (10) to subdivision (8)
Effective Date: 7/20/99

Section Amended §310(1)

Description: Adds language to the agricultural district disclosure statement to notify a prospective buyer of land within an agricultural district that under certain circumstances, the availability of water and sewer services may be limited.
Effective Date: 7/1/00

Summary of **2000 Amendments** to the Agricultural Districts Law

Section Amended: §305(1)(d)(v) and §306(2)(b)(iii)
Description: Revises reporting requirement of assessors to the State Board of Real Property Services when land receiving an agricultural assessment is converted to non-agricultural uses.
Effective Date: 7/11/00

Section Amended: §308(1)(b)
Description: Requires the Commissioner to give consideration to a practice conducted under the Agricultural Environmental Management (AEM) Program when making a sound agricultural practice determination.
Effective Date: 11/8/00

Summary of **2001 Amendments** to the Agricultural Districts Law

Section Amended: §301(11)
Description: Includes manure processing and handling facilities as part of a "farm operation" for purposes of administering the Agricultural Districts Law.
Effective Date: 10/23/01

Section Amended: §301(11)
Description: Includes "commercial horse boarding operations" as part of a "farm operation" for purposes of administering the Agricultural Districts Law.
Effective Date: 10/31/01

Summary of **2002 Amendments** to the Agricultural Districts Law

Section Amended: §301(4)
Description: Eliminates county legislative body approval for the designation of eligible horse boarding operations as land used in agricultural production.
Effective Date: 1/30/03

Sections Amended: §301(4), §301(4)(b), and §301(4)(f)
Description: Reduces the number of acres needed to qualify for agricultural real property assessment from ten acres to 7 or more acres as long as the value of crops produced exceeds $10,000 on average in the preceding two years. The size of rented land eligible for an agricultural assessment is reduced from 10 acres to 7 acres as long as the smaller parcel yields at least $10,000 in average annual gross sales independently or in conjunction with land owned by the farmer renting the parcel. The amendment also reduces the number of acres needed to qualify as land used in agricultural production from not less than ten acres to seven or more acres and average gross sales of $10,000 or

more in the preceding two years or less than seven acres and average gross sales $50,000 or more in the preceding two years.

Effective Date: 1/1/03

Section Added: §301(9)(f)
Description: Allows payments received by thoroughbred breeders pursuant to Section 247 of the racing pari-mutuel wagering and breeding law to be included in the definition of "gross sales value" for agricultural assessment purposes.
Effective Date: 9/17/02

Section Amended: §301(11)
Description: Amends the definition of farm operation to indicate that such operation may consist of one or more parcels of owned or rented land and such parcels may or may not be contiguous to each other.
Effective Date: 1/1/03

Section Amended: §301(13)
Description: Reduces the minimum acreage required for a commercial horse boarding operation from ten to seven acres.
Effective Date: 1/1/03

Sections Amended: §303(2)(a)(1), §303(4), §303(5)(a) and (b), §303(6)(a) and (b), §303(7) and §303(8)
Description: Amends various sections of the law to allow a landowner to include viable agricultural land within a certified agricultural district prior to its eight, twelve or twenty year review period.
Effective Date: 12/20/02

Summary of **2003 Amendments** to the Agricultural Districts Law

Section Added: §301(4)(h)
Description: Adds a new paragraph (h) to allow first year farmers to receive an agricultural assessment if they meet the gross sales value requirements during their first year of operation.
Effective Date: 9/9/03

Sections Amended: §301(5), §305(1)(d)(iv), and §306(2)(c)
Description: Amends various sections of the law so that conversion penalties are not assessed on farmland that is being used in agricultural production and receives an agricultural assessment when such land is converted to wind energy generation facilities.
Effective Date: 9/22/03

Sections Amended: §303-b, §303(2)(a)(1) and §303(4)

Description: Adds a new section 303-b to establish an annual 30-day period during which a farmer can submit proposals to include viable land within a certified agricultural district.
Effective Date: 9/17/03

Sections Amended: §303(5)(b), §303(6)(b) and §303(8)
Description: Repeals various sections of the law to conform with the provisions of a new section 303-b.
Effective Date: 9/17/03

Summary of **2004 Amendment** to the Agricultural Districts Law

Section Amended:§301(4)(h)
Description: Amends paragraph (h) to allow a farm operation to receive an agricultural assessment if it meets the acreage and gross sales value requirements during its first or second year of agricultural production.
Effective Date: 2/24/04

Section Amended:§301(4)(i)
Description: Adds a new paragraph (i) to allow start-up farm operations that plant orchard or vineyard crops to immediately become eligible to receive an agricultural assessment in its first, second, third or fourth year of production.
Effective Date: 1/1/05

Summary of **2005 Amendments** to the Agricultural Districts Law

Section Amended:§301(2)(e)
Description: Amends paragraph (e) by adding wool bearing animals, such as alpacas and llamas, to the definition of “livestock and livestock products.”
Effective Date: 7/12/05

Section Amended:§301(4)(h) and §301(13)
Description: Amends paragraph (h) to allow a “commercial horse boarding operation” to receive an agricultural assessment if it meets the acreage and gross sales value requirements during its first or second year of agricultural production. The definition of “commercial horse boarding operation” is amended by stating that such operations may qualify as a “farm operation” in its first or second year of operation if it meets the acreage and number of horse requirements.
Effective Date: 8/23/05

Section Amended:§301(11) and §301(14)
Description: Includes “timber processing” as part of a “farm operation” for purposes of administering the Agricultural Districts Law and adds a new section by defining the term “timber processing.”
Effective Date: 8/23/05

Section Amended:§305-b

Description: Adds a new section that authorizes the Commissioner to review and comment upon the proposed rules and regulations of other State agencies which may have an adverse impact on agriculture and farming operations in the State.

Effective Date: 10/4/05 (Shall apply to proposed rules and regulations publicly noticed 60 or more days following the effective date.)

Summary of **2006 Amendments** to the Agricultural Districts Law

Section Amended:§301(4)

Description: Adds a new section (j) to allow newly planted Christmas tree farms to be eligible for agricultural assessment in their first through fifth years of agricultural production.

Effective Date: 1/1/07 and applies to assessment rolls prepared on the basis of taxable status dates occurring on or after such date.

Section Amended:§§301 and 308(1)

Description: Adds a new subdivision (15) to §301 to define “agricultural tourism” and amends §308(1) to add “agricultural tourism” to the list of examples of activities which entail practices the Commissioner may consider for sound agricultural practice opinions.

Effective Date: 8/16/06

Section Amended:§305(1)(a)

Description: Amends paragraph (1)(a) to allow filing of an application after taxable status date where failure to timely file resulted from a death of applicant’s spouse, child, parent, brother or sister or illness of the applicant or applicant’s spouse, child, parent, brother or sister which prevents timely filing, as certified by a licensed physician.

Effective Date: 9/13/06 and applies to assessment rolls prepared on the basis of a taxable status date occurring on or after such date.

Section Amended:§305(7)

Description: Amends paragraph (7) to extend the 100% exemption for newly planted orchards and vineyards from 4 to 6 years.

Effective Date: 9/13/06 and applies to assessment rolls prepared on the basis of a taxable status date occurring on or after 1/1/06.

Section Amended:§310(1), §308(5)

Description: Amends AML §§310(1), 308(5) and RPL §333-c(1) relative to the disclosure notice required for prospective purchasers of property within an agricultural district.

Effective Date: 7/26/06

Summary of **2007 Amendments** to the Agricultural Districts Law

Section Amended: §§303, 303-a & 304-b, repeals §303-a(2)(b) and (c)
Description: Amends AML §§303, 303-a and 304-b concerning the review of agricultural districts and the reporting of agricultural district data and repeals certain provisions of such law relating thereto.
Effective Date: 7/3/07

Section Amended: §304-a
Description: Amends AML §304-a to limit an increase in the base agricultural assessment values for any given year to 10 percent or less of the assessment value of the preceding year.
Effective Date: 6/4/07

Section Amended: §305(1)(a)
Description: Amends AML §305(1)(a) in relation to authorizing the filing of an application for an agricultural assessment after the taxable status date in the event of a natural disaster or destruction of farm structures.
Effective Date: 8/15/07

Summary of **2008 Amendments** to the Agricultural Districts Law

Section Amended: §§301(2)(j), 301(4)(k) and 301(16)
Description: Adds a new paragraph (j) to §301(2) to add "apiary products" to the definition of "crops, livestock and livestock products," adds a new paragraph (k) to §301(4) to independently qualify apiaries for an agricultural assessment and adds a new subdivision (16) to define "apiary products operation."
Effective Date: 7/21/08 and applies to assessment rolls prepared on the basis of a taxable status date occurring on or after 7/21/08 .

Section Amended: §§301(11) and 308(1)(b)
Description: Amends subdivision (11) of §301 to add the "production, management and harvesting of 'farm woodland'" to the definition of "farm operation" and amends §308(1)(b) to add the "production, management and harvesting of 'farm woodland'" to the list of examples of activities which entail practices the Commissioner may consider for sound agricultural practice opinions.
Effective Date: 9/4/08

Section Amended: §§301(9), 301(11), and 301(16)
Description: Adds a new paragraph (g) to §301(9) to allow up to $5,000 from the sale of "compost, mulch or other organic biomass crops" to help meet the eligibility requirements for an agricultural assessment; amends subdivision (11) of §301 to add "compost, mulch or other biomass crops" to the definition of "farm operation" and adds a new subdivision (16) to define "compost, mulch or other organic biomass crops."
Effective Date: 9/4/08

ARTICLE 25AA - AGRICULTURAL DISTRICTS

Sec.

300. Declaration of legislative findings and intent

It is hereby found and declared that many of the agricultural lands in New York state are in jeopardy of being lost for any agricultural purposes. When nonagricultural development extends into farm areas, competition for limited land resources results. Ordinances inhibiting farming tend to follow, farm taxes rise, and hopes for speculative gains discourage investments in farm improvements, often leading to the idling or conversion of potentially productive agricultural land.

The socio-economic vitality of agriculture in this state is essential to the economic stability and growth of many local communities and the state as a whole. It is, therefore, the declared policy of the state to conserve, protect and encourage the development and improvement of its agricultural land for production of food and other agricultural products. It is also the declared policy of the state to conserve and protect agricultural lands as valued natural and ecological resources which provide needed open spaces for clean air sheds, as well as for aesthetic purposes.

The constitution of the state of New York directs the legislature to provide for the protection of agricultural lands. It is the purpose of this article to provide a locally-initiated mechanism for the protection and enhancement of New York state's agricultural land as a viable segment of the local and state economies and as an economic and environmental resource of major importance.

301. Definitions

When used in this article:

1. "Agricultural assessment value" means the value per acre assigned to land for assessment purposes determined pursuant to the capitalized value of production procedure prescribed by section three hundred four-a of this article.
2. "Crops, livestock and livestock products" shall include but not be limited to the following:
   a. Field crops, including corn, wheat, oats, rye, barley, hay, potatoes and dry beans.
   b. Fruits, including apples, peaches, grapes, cherries and berries.
   c. Vegetables, including tomatoes, snap beans, cabbage, carrots, beets and onions.
   d. Horticultural specialties, including nursery stock, ornamental shrubs, ornamental trees and flowers.
   e. Livestock and livestock products, including cattle, sheep, hogs, goats, horses, poultry, ratites, such as ostriches, emus, rheas and kiwis, farmed deer, farmed buffalo, fur bearing animals, wool bearing animals, such as alpacas and llamas, milk, eggs and furs.
   f. Maple sap.
   g. Christmas trees derived from a managed Christmas tree operation whether dug for transplanting or cut from the stump.
   h. Aquaculture products, including fish, fish products, water plants and shellfish.
   i. Woody biomass, which means short rotation woody crops raised for bioenergy, and shall not include farm woodland.
   j. Apiary products, including honey, beeswax, royal jelly, bee pollen, propolis, package bees, nucs and queens. For the purposes of this paragraph, “nucs” shall mean small honey bee colonies created from larger colonies including the nuc box, which is a smaller version of a beehive, designed to hold up to five frames from an existing colony.
3. "Farm woodland" means land used for the production for sale of woodland products, including but not limited to logs, lumber, posts and firewood. Farm woodland shall not include land used to produce Christmas trees or land used for the processing or retail merchandising of woodland products.
4. "Land used in agricultural production" means not less than seven acres of land used as a single operation in the preceding two years for the production for sale of crops, livestock or livestock products of an average gross sales value of ten thousand dollars or more; or, not less than seven acres of land used in the preceding two years to support a commercial horse boarding operation with annual gross receipts of ten thousand dollars or more. Land used in agricultural production shall not include land or portions thereof used for processing or retail merchandising of such crops, livestock or livestock products. Land used in agricultural production shall also include:
   a. Rented land which otherwise satisfies the requirements for eligibility for an agricultural assessment.
   b. Land of not less than seven acres used as a single operation for the production for sale of crops, livestock or livestock products, exclusive of woodland products, which does not independently satisfy the gross sales value requirement, where such land was used in such production for the preceding two years and currently is being so used under a written rental arrangement of five or more years in conjunction with land which is eligible for an agricultural assessment.
   c. Land used in support of a farm operation or land used in agricultural production, constituting a portion of a parcel, as identified on the assessment roll, which also contains land qualified for an agricultural assessment.

d. Farm woodland which is part of land which is qualified for an agricultural assessment, provided, however, that such farm woodland attributable to any separately described and assessed parcel shall not exceed fifty acres.

e. Land set aside through participation in a federal conservation program pursuant to title one of the federal food security act of nineteen hundred eighty-five or any subsequent federal programs established for the purposes of replenishing highly erodible land which has been depleted by continuous tilling or reducing national surpluses of agricultural commodities and such land shall qualify for agricultural assessment upon application made pursuant to paragraph a of subdivision one of section three hundred five of this article, except that no minimum gross sales value shall be required.

f. Land of not less than seven acres used as a single operation in the preceding two years for the production for sale of crops, livestock or livestock products of an average gross sales value of ten thousand dollars or more, or land of less than seven acres used as a single operation in the preceding two years for the production for sale of crops, livestock or livestock products of an average gross sales value of fifty thousand dollars or more.

g. Land under a structure within which crops, livestock or livestock products are produced, provided that the sales of such crops, livestock or livestock products meet the gross sales requirements of paragraph f of this subdivision.

h. Land that is owned or rented by a farm operation in its first or second year of agricultural production, or, in the case of a commercial horse boarding operation in its first or second year of operation, that consists of (1) not less than seven acres used as a single operation for the production for sale of crops, livestock or livestock products of an annual gross sales value of ten thousand dollars or more; or (2) less than seven acres used as a single operation for the production for sale of crops, livestock or livestock products of an annual gross sales value of fifty thousand dollars or more; or (3) land situated under a structure within which crops, livestock or livestock products are produced, provided that such crops, livestock or livestock products have an annual gross sales value of (i) ten thousand dollars or more, if the farm operation uses seven or more acres in agricultural production, or (ii) fifty thousand dollars or more, if the farm operation uses less than seven acres in agricultural production; or (4) not less than seven acres used as a single operation to support a commercial horse boarding operation with annual gross receipts of ten thousand dollars or more.

i. Land of not less than seven acres used as a single operation for the production for sale of orchard or vineyard crops when such land is used solely for the purpose of planting a new orchard or vineyard and when such land is also owned or rented by a newly established farm operation in its first, second, third or fourth year of agricultural production.

j. Land of not less than seven acres used as a single operation for the production and sale of Christmas trees when such land is used solely for the purpose of planting Christmas trees that will be made available for sale, whether dug for transplanting or cut from the stump and when such land is owned or rented by a newly established farm operation in its first, second, third, fourth or fifth year of agricultural production.

k. Land used to support an apiary products operation which is owned by the operation and consists of (i) not less than seven acres nor more than ten acres used as a single operation in the preceding two years for the production for sale of crops, livestock or livestock products of an average gross sales value of ten thousand dollars or more or (ii) less than seven acres used as a single operation in

the preceding two years for the production for sale of crops, livestock or livestock products of an average gross sales value of fifty thousand dollars or more. The land used to support an apiary products operation shall include, but not be limited to, the land under a structure within which apiary products are produced, harvested and stored for sale; and a buffer area maintained by the operation between the operation and adjacent landowners. Notwithstanding any other provision of this subdivision, rented land associated with an apiary products operation is not eligible for an agricultural assessment based on this paragraph.

5. "Oil , gas or wind exploration, development or extraction activities" means the installation and use of fixtures and equipment which are necessary for the exploration, development or extraction of oil, natural gas or wind energy, including access roads, drilling apparatus, pumping facilities, pipelines, and wind turbines.
6. "Unique and irreplaceable agricultural land" means land which is uniquely suited for the production of high value crops, including, but not limited to fruits, vegetables and horticultural specialties.
7. "Viable agricultural land" means land highly suitable for agricultural production and which will continue to be economically feasible for such use if real property taxes, farm use restrictions, and speculative activities are limited to levels approximating those in commercial agricultural areas not influenced by the proximity of non-agricultural development.
8. "Conversion" means an outward or affirmative act changing the use of agricultural land and shall not mean the nonuse or idling of such land.
9. "Gross sales value" means the proceeds from the sale of:
    a. Crops, livestock and livestock products produced on land used in agricultural production provided, however, that whenever a crop is processed before sale, the proceeds shall be based upon the market value of such crop in its unprocessed state;
    b. Woodland products from farm woodland eligible to receive an agricultural assessment, not to exceed two thousand dollars annually;
    c. Honey and beeswax produced by bees in hives located on an otherwise qualified farm operation but which does not independently satisfy the gross sales requirement; and
    d. Maple syrup processed from maple sap produced on land used in agricultural production in conjunction with the same or an otherwise qualified farm operation.
    e. Or payments received by reason of land set aside pursuant to paragraph e of subdivision four of this section.
    f. Or payments received by thoroughbred breeders pursuant to section two hundred forty-seven of the racing, pari-mutuel wagering and breeding law.
    g. Compost, mulch or other organic biomass crops as defined in subdivision sixteen of this section produced on land used in agricultural production, not to exceed five thousand dollars annually.
11. "Farm operation" means the land and on-farm buildings, equipment, manure processing and handling facilities, and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise, including a “commercial horse boarding operation” as defined in subdivision thirteen of this section and “timber processing” as defined in subdivision fourteen of this section and “compost, mulch or other biomass crops” as defined in subdivision sixteen of this section. For the purposes of this section, such farm operation shall also include the production, management and harvesting of “farm woodland”, as defined in subdivision

three of this section. Such farm operation may consist of one or more parcels of owned or rented land, which parcels may be contiguous or noncontiguous to each other.[1]

12. "Agricultural data statement" means an identification of farm operations within an agricultural district located within five hundred feet of the boundary of property upon which an action requiring municipal review and approval by the planning board, zoning board of appeals, town board, or village board of trustees pursuant to article sixteen of the town law or article seven of the village law is proposed, as provided in section three hundred five-a of this article.
13. "Commercial horse boarding operation" means an agricultural enterprise, consisting of at least seven acres and boarding at least ten horses, regardless of ownership, that receives ten thousand dollars or more in gross receipts annually from fees generated either through the boarding of horses or through the production for sale of crops, livestock, and livestock products, or through both such boarding and such production. Under no circumstances shall this subdivision be construed to include operations whose primary on site function is horse racing. Notwithstanding any other provision of this subdivision, a commercial horse boarding operation that is proposed or in its first or second year of operation may qualify as a farm operation if it is an agricultural enterprise, consisting of at least seven acres, and boarding at least ten horses, regardless of ownership, by the end of the first year of operation.
14. “Timber processing” means the on-farm processing of timber grown on a farm operation into woodland products, including but not limited to logs, lumber, posts and firewood, through the use of a readily moveable, nonpermanent saw mill, provided that such farm operation consists of at least seven acres and produces for sale crops, livestock or livestock products of an annual gross sales value of ten thousand dollars or more and that the annual gross sales value of such processed woodland products does not exceed the annual gross sales value of such crops, livestock or livestock products.
15. “Agricultural tourism” means activities conducted by a farmer on-farm for the enjoyment or education of the public, which primarily promote the sale, marketing, production, harvesting or use of the products of the farm and enhance the public’s understanding and awareness of farming and farm life.
16. “Apiary products operation” means an agricultural enterprise, consisting of land owned by the operation, upon which bee hives are located and maintained for the purpose of producing, harvesting and storing apiary products for sale.
16. “Compost, mulch or other organic biomass crops” means the on-farm processing, mixing, handling or marketing of organic matter that is grown or produced by such farm operation to rid such farm operation of its excess agricultural waste; and the on-farm processing, mixing or handling of off-farm generated organic matter that is transported to such farm operation and is necessary to facilitate the composting of such farm operation’s agricultural waste. This shall also include the on-farm processing, mixing or handling of off-farm generated organic matter for use only on that farm operation. Such organic matter shall include, but not be limited to, manure, hay, leaves, yard waste, silage, organic farm waste, vegetation, wood biomass or by-products of agricultural products that have been processed on such farm operation. The resulting products shall be converted into compost, mulch or other organic biomass crops that can be used as fertilizers, soil enhancers or supplements, or bedding materials. For purposes of this section, “compost” shall be processed by the aerobic, thermophilic decomposition of solid organic constituents of solid waste to produce a stable, humus-like material.

[1] The definition of "farm operation" was separately amended by Chapters 374 and 388 of the Laws of 2001 to add "manure processing and handling facilities" (Chapter 374) and "commercial horse boarding operations" (Chapter 388) and in 2005, “timber processing” (Chapter 573).

302. County agricultural and farmland protection board

1. (a) A county legislative body may establish a county agricultural and farmland protection board which shall consist of eleven members, at least four of whom shall be active farmers. At least one member of such board shall represent agribusiness and one member may represent an organization dedicated to agricultural land preservation. These six members of the board shall reside within the county which the respective board serves. The members of the board shall also include the chairperson of the county soil and water conservation district's board of directors, a member of the county legislative body, a county cooperative extension agent, the county planning director and the county director of real property tax services. The chairperson shall be chosen by majority vote. Such board shall be established in the event no such board exists at the time of receipt by the county legislative body of a petition for the creation or review of an agricultural district pursuant to section three hundred three of this article, or at the time of receipt by the county of a notice of intent filing pursuant to subdivision four of section three hundred five of this article. The members of such board shall be appointed by the chairperson of the county legislative body, who shall solicit nominations from farm membership organizations except for the chairperson of the county soil and water conservation district's board of directors, the county planning director and director of real property tax services, who shall serve ex officio. The members shall serve without salary, but the county legislative body may entitle each such member to reimbursement for actual and necessary expenses incurred in the performance of official duties.

   (b) After the board has been established, the chairperson of the county legislative body shall appoint to it two qualified persons for terms of two years each, two qualified persons for terms of three years each and two qualified persons for a term of four years. Thereafter, the appointment of each member shall be for a term of four years. Appointment of a member of the county legislative body shall be for a term coterminous with the member's term of office. Appointment of the county planning director and county director of real property tax services shall be coterminous with their tenure in such office. The appointment of the chairperson of the county soil and water conservation district's board of directors shall be for a term coterminous with his or her designation as chairperson of the county soil and water conservation district's board of directors. Any member of the board may be reappointed for a succeeding term on such board without limitations as to the number of terms the member may serve.

   (c) The county agricultural and farmland protection board shall advise the county legislative body and work with the county planning board in relation to the proposed establishment, modification, continuation or termination of any agricultural district. The board shall render expert advice relating to the desirability of such action, including advice as to the nature of farming and farm resources within any proposed or established area and the relation of farming in such area to the county as a whole. The board may review notice of intent filings pursuant to subdivision four of section three hundred five of this article and make findings and recommendations pursuant to that section as to the effect and reasonableness of proposed actions involving the advance of public funds or acquisitions of farmland in agricultural districts by governmental entities. The board shall also assess and approve county agricultural and farmland protection plans.

(d) A county agricultural and farmland protection board may request the commissioner of agriculture and markets to review any state agency rules and regulations which the board identifies as affecting the agricultural activities within an existing or proposed agricultural district. Upon receipt of any such request, the commissioner of agriculture and markets shall, if the necessary funds are available, submit in writing to the board (i) notice of changes in such rules and regulations which he or she deems necessary, (ii) a copy of correspondence with another agency if such rules and regulations are outside his or her jurisdiction, including such rules and regulations being reviewed, and his or her recommendations for modification, or (iii) his or her reasons for determining that existing rules and regulations be continued without modification.

(e) The county agricultural and farmland protection board shall notify the commissioner and the commissioner of the department of environmental conservation of any attempts to propose the siting of solid waste management facilities upon farmland within an agricultural district.

2. Upon the request of one or more owners of land used in agricultural production the board may review the land classification for such land established by the department of agriculture and markets, consulting with the district soil and water conservation office, and the county cooperative extension service office. After such review, the board may recommend revisions to the classification of specific land areas based on local soil, land and climatic conditions to the department of agriculture and markets.

303. Agricultural districts; creation

1. Any owner or owners of land may submit a proposal to the county legislative body for the creation of an agricultural district within such county, provided that such owner or owners own at least five hundred acres or at least ten per cent of the land proposed to be included in the district, whichever is greater. Such proposal shall be submitted in such manner and form as may be prescribed by the commissioner, shall include a description of the proposed district, including a map delineating the exterior boundaries of the district which shall conform to tax parcel boundaries, and the tax map identification numbers for every parcel in the proposed district. The proposal may recommend an appropriate review period of either eight, twelve or twenty years.
2. Upon the receipt of such a proposal, the county legislative body:
   a. shall thereupon provide notice of such proposal by publishing a notice in a newspaper having general circulation within the proposed district and by posting such notice in five conspicuous places within the proposed district. The notice shall contain the following information:
      (1) a statement that a proposal for an agricultural district has been filed with the county legislative body pursuant to this article;
      (2) a statement that the proposal will be on file open to public inspection in the county clerk's office;
      (3) a statement that any municipality whose territory encompasses the proposed district or any landowner who owns at least ten per cent of the land proposed to be included within the proposed modification of the proposed district may propose a modification of the proposed district in such form and manner as may be prescribed by the commissioner of agriculture and markets;
      (4) a statement that the proposed modification must be filed with the county clerk and the clerk of the county legislature within thirty days after the publication of such notice;

(5) a statement that at the termination of the thirty day period, the proposal and proposed modifications will be submitted to the county planning board and county agricultural and farmland protection board and that thereafter a public hearing will be held on the proposal, proposed modifications and recommendations of the planning board and county agricultural and farmland protection board;

b. shall receive any proposals for modifications of such proposal which may be submitted by such landowners or municipalities within thirty days after the publication of such notice;

c. shall, upon the termination of such thirty day period, refer such proposal and proposed modifications to the county planning board, which shall, within forty-five days, report to the county legislative body the potential effect of such proposal and proposed modifications upon the county's planning policies and objectives;

d. shall simultaneously, upon the termination of such thirty day period, refer such proposal and proposed modifications to the county agricultural and farmland protection board, which shall, within forty-five days report to the county legislative body its recommendations concerning the proposal and proposed modifications, and;

e. shall hold a public hearing in the following manner:

(1) The hearing shall be held at a place within the proposed district or otherwise readily accessible to the proposed district;

(2) The notice shall contain the following information:

(a) a statement of the time, date and place of the public hearing;

(b) a description of the proposed district, any proposed additions and any recommendations of the county planning board or county agricultural and farmland protection board;

(c) a statement that the public hearing will be held concerning:

(i) the original proposal;

(ii) any written amendments proposed during the thirty day review period;

(iii) any recommendations proposed by the county agricultural and farmland protection board and/or the county planning board.

(3) The notice shall be published in a newspaper having a general circulation within the proposed district and shall be given in writing to those municipalities whose territory encompasses the proposed district and any proposed modifications, owners of real property within such a proposed district or any proposed modifications who are listed on the most recent assessment roll, the commissioner, the commissioner of environmental conservation and the advisory council on agriculture.

3. The following factors shall be considered by the county planning board, the county agricultural and farmland protection board, and at any public hearing:

(i) the viability of active farming within the proposed district and in areas adjacent thereto;

(ii) the presence of any viable farm lands within the proposed district and adjacent thereto that are not now in active farming;

(iii) the nature and extent of land uses other than active farming within the proposed district and adjacent thereto;

(iv) county developmental patterns and needs; and

(v) any other matters which may be relevant.

In judging viability, any relevant agricultural viability maps prepared by the commissioner of agriculture and markets shall be considered, as well as soil, climate, topography,

other natural factors, markets for farm products, the extent and nature of farm improvements, the present status of farming, anticipated trends in agricultural economic conditions and technology, and such other factors as may be relevant.

4. The county legislative body, after receiving the reports of the county planning board and the county agricultural and farmland protection board and after such public hearing, may adopt as a plan the proposal or any modification of the proposal it deems appropriate, and shall adopt as part of the plan an appropriate review period of either eight, twelve or twenty years. The plan as adopted shall, to the extent feasible, include adjacent viable farm lands, and exclude, to the extent feasible, nonviable farm land and non-farm land. The plan shall include only whole tax parcels in the proposed district. The county legislative body shall act to adopt or reject the proposal, or any modification of it, no later than one hundred eighty days from the date the proposal was submitted to this body. Upon the adoption of a plan, the county legislative body shall submit it to the commissioner. The commissioner may, upon application by the county legislative body and for good cause shown, extend the period for adoption and submission once for an additional thirty days. Where he or she does so, the county legislative body may extend the period for the report from the county planning board and/or the period for the report from the county agricultural and farmland protection board.

5. a. The commissioner shall have sixty days after receipt of the plan within which to certify to the county legislative body whether the proposal, or a modification of the proposal, is eligible for districting, whether the area to be districted consists predominantly of viable agricultural land, and whether the plan of the proposed district is feasible, and will serve the public interest by assisting in maintaining a viable agricultural industry within the district and the state. The commissioner shall submit a copy of such plan to the commissioner of environmental conservation, who shall have thirty days within which to report his or her determination to the commissioner. A copy of such plan shall also be provided to the advisory council on agriculture. The commissioner shall not certify the plan as eligible for districting unless the commissioner of environmental conservation has determined that the area to be districted is consistent with state environmental plans, policies and objectives.

   b. [repealed]

6. a. Within sixty days after the certification by the commissioner that the proposed area is eligible for districting, and that districting would be consistent with state environmental plans, policies and objectives, the county legislative body may hold a public hearing on the plan, except that it shall hold a public hearing if the plan was modified by the commissioner or was modified by the county legislative body after they held the public hearing required by paragraph e of subdivision two of this section and such modification was not considered at the original hearing. Notice of any such hearing shall be in a newspaper having general circulation in the area of the proposed district and individual notice, in writing, to those municipalities whose territories encompass the proposed district modifications, the persons owning land directly affected by the proposed district modifications, the commissioner, the commissioner of environmental conservation and the advisory council on agriculture. The proposed district, if certified without modification by the commissioner, shall become effective thirty days after the termination of such public hearing or, if there is no public hearing, ninety days after such certification unless its creation is disapproved by the county legislative body within such period. Provided, however, that if, on a date within the thirty days after the termination of such public hearing or, if there is no public hearing, within the ninety days after such certification, the county legislative body approves creation of the district, such district shall become effective

on such date. Provided further, that notwithstanding any other provision of this subdivision, if the commissioner modified the proposal, the district shall not become effective unless the county legislative body approves the modified district; such approval must be given on a date within the thirty days after termination of the public hearing; and the district, if approved, shall become effective on such date. Before approving or disapproving any proposal modified by the commissioner, the county legislative body may request reports on such modified proposal, from the county planning board and the county agricultural and farmland protection board.

b. [repealed]

7. Upon the creation of an agricultural district, the description thereof, which shall include tax map identification numbers for all parcels within the district, plus a map delineating the exterior boundaries of the district in relation to tax parcel boundaries, shall be filed by the county legislative body with the county clerk, the county director of real property tax services, and the commissioner. For all existing agricultural districts, the county clerk shall also file with the commissioner upon request the tax map identification numbers for tax parcels within those districts. The commissioner, on petition of the county legislative body, may, for good cause shown, approve the correction of any errors in materials filed pursuant to a district creation at any time subsequent to the creation of any agricultural district.
8. [repealed]

303-a. Agricultural districts; review.

1. The county legislative body shall review any district created under this section eight, twelve or twenty years after the date of its creation, consistent with the review period set forth in the plan creating such district and at the end of every eight, twelve or twenty year period thereafter, whichever may apply. In counties with multiple districts with review dates in any twelve month period, the commissioner, on petition of the county legislative body, may, for good cause shown, approve an extension of up to four years for a district review. Thereafter, the extended review date shall be deemed the creation date for purposes of subsequent reviews by the county legislative body in accordance with this section. The review date of a district may not be extended more than four years. The petition of the county legislative body for an extension shall be submitted to the commissioner at least six months prior to the review date.
2. In conducting a district review the county legislative body shall;
   a. Provide notice of such district review by publishing a notice in a newspaper having general circulation within the district and by posting such notice in at least five conspicuous places within the district. The notice shall identify the municipalities in which the district is found and the district's total area; indicate that a map of the district will be on file and open to public inspection in the office of the county clerk and such other places as the legislative body deems appropriate; and notify municipalities and land owners within the district that they may propose a modification of the district by filing such proposal with the county clerk of the county legislature within thirty days after the publication of such notice;
   b. Direct the county agricultural and farmland protection board to prepare a report concerning the following:
      (1) The nature and status of farming and farm resources within such district, including the total number of acres of land and the total number of acres of land in farm operations in the district;
      (2) The extent to which the district has achieved its original objectives;

(3) The extent to which county and local comprehensive plans, policies and objectives are consistent with and support the district;
(4) The degree of coordination between local laws, ordinances, rules and regulations that apply to farm operations in such district and their influence on farming; and;
(5) Recommendations to continue terminate or modify such district.

c. Hold a public hearing at least one hundred twenty days prior to the district review date and not more than one hundred eighty days prior to such date, in the following manner:
(1) The hearing shall be held at a place within the district or other-wise readily accessible to the proposed district;
(2) A notice of public hearing shall be published in a newspaper having a general circulation within the district and shall be given in writing to those municipalities whose territories encompass the district and any proposed modifications to the district; to persons, as listed on the most recent assessment roll, whose land is the subject of a proposed modification; and to the commissioner;
(3) The notice of hearing shall contain the following information:
(a) a statement of the time, date and place of the public hearing; and
(b) a description of the district, any proposed modifications and any recommendations of the county agricultural and farmland protection board.

3. The county legislative body, after receiving the report and recommendation of the county agricultural and farmland protection board, and after public hearing, shall make a finding whether the district should be continued, terminated or modified. If the county legislative body finds that the district should be terminated, it may do so at the end of such eight, twelve or twenty year period, whichever may be applicable, by filing a notice of termination with the county clerk and the commissioner. If the county legislative body finds that the district should be continued or modified, it shall submit a district review plan to the commissioner. The district review plan shall include a description of the district, including a map delineating the exterior boundaries of the district which shall conform to tax parcel boundaries; the tax map identification numbers for every parcel in the district; a copy of the report of the county agricultural and farmland protection board required by paragraph b of subdivision two of this section; and a copy of the testimony given at the public hearing required by subdivision two of this section or a copy of the minutes of such hearing.
4. If the county legislative body does not act, or if a modification of a district is rejected by the county legislative body, the district shall continue as originally constituted, unless the commissioner, after consultation with the advisory council on agriculture, terminates such district, by filing a notice thereof with the county clerk, because:
a. The area in the district is no longer predominantly viable agricultural land; or
b. The commissioner or environmental conservation has determined that the continuation of the district would not be consistent with state environmental plans, policies and objectives; provided, however, that if the commissioner certifies to the county legislative body that he or she will not approve the continuance of the district unless modified, the commissioner shall grant the county an extension as provided in subdivision one of this section to allow the county to prepare a modification of the district in the manner provided in this section.
5. Plan review, certification and filing shall be conducted in the same manner prescribed for district creation in subdivisions five, six and seven of section three hundred three of this article.

303-b. Agricultural districts; inclusion of viable agricultural land

1. The legislative body of any county containing a certified agricultural district shall designate an annual thirty-day period within which a land owner may submit to such body a request for inclusion of land which is predominantly viable agricultural land within a certified agricultural district prior to the county established review period. Such request shall identify the agricultural district into which the land is proposed to be included, describe such land, and include the tax map identification number and relevant portion of the tax map for each parcel of land to be included.
2. Upon the termination of such thirty-day period, if any requests are submitted, the county legislative body shall:
   a. refer such request or requests to the county agricultural and farmland protection board, which shall, within thirty days report to the county legislative body its recommendations as to whether the land to be included in the agricultural district consists predominantly of "viable agricultural land" as defined in subdivision seven of section three hundred one of this article and the inclusion of such land would serve the public interest by assisting in maintaining a viable agricultural industry within the district; and
   b. publish a notice of public hearing in accordance with subdivision three of this section.
3. The county legislative body shall hold a public hearing upon giving notice in the following manner:
   a. The notice of public hearing shall contain a statement that one or more requests for inclusion of predominantly viable agricultural land within a certified agricultural district have been filed with the county legislative body pursuant to this section; identify the land, generally, proposed to be included; indicate the time, date and place of the public hearing, which shall occur after receipt of the report of the county agricultural and farmland protection board; and include a statement that the hearing shall be held to consider the request or requests and recommendations of the county agricultural and farmland protection board.
   b. The notice shall be published in a newspaper having a general circulation within the county and shall be given in writing directly to those municipalities whose territory encompasses the lands which are proposed to be included in an agricultural district and to the commissioner.
4. After the public hearing, the county legislative body shall adopt or reject the inclusion of the land requested to be included within an existing certified agricultural district. Such action shall be taken no later than one hundred twenty days from the termination of the thirty day period described in subdivision one of this section. Any land to be added shall consist of whole tax parcels only. Upon the adoption of a resolution to include predominantly viable agricultural land, in whole or in part, within an existing certified agricultural district, the county legislative body shall submit the resolution, together with the report of the county agricultural and farmland protection board and the tax map identification numbers and tax maps for each parcel of land to be included in an agricultural district to the commissioner.
5. Within thirty days after receipt of a resolution to include land within a district, the commissioner shall certify to the county legislative body whether the inclusion of predominantly viable agricultural land as proposed is feasible and shall serve the public interest by assisting in maintaining a viable agricultural industry within the district or districts.

6. If the commissioner certifies that the proposed inclusion of predominantly viable agricultural land within a district is feasible and in the public interest, the land shall become part of the district immediately upon such certification.

304. Unique and irreplaceable agricultural lands; creation of districts

1. The commissioner, after consulting with the advisory council on agriculture, may create agricultural districts covering any land in units of two thousand or more acres not already districted under section three hundred three of this article, if (a) the land encompassed in a proposed district is predominantly unique and irreplaceable agricultural land; (b) the commissioner of environmental conservation has determined that such district would further state environmental plans, policies and objectives; and (c) the director of the division of the budget has given approval of the establishment of such area.
2. Prior to creating an agricultural district under this section, the commissioner of agriculture and markets shall work closely, consult and cooperate with local elected officials, planning bodies, agriculture and agribusiness interests, community leaders, and other interested groups. The commissioner shall give primary consideration to local needs and desires, including local zoning and planning regulations as well as regional and local comprehensive land use plans. The commissioner shall file a map of the proposed district in the office of the clerk of any municipality in which the proposed district is to be located, and shall provide a copy thereof to the chief executive officer of any such municipality and the presiding officer of the local governing body, and, upon request, to any other person. The commissioner shall publish a notice of the filing of such proposed map and the availability of copies thereof in a newspaper of general circulation within the area of the proposed district, which notice shall also state that a public hearing will be held to consider the proposed district at a specified time and at a specified place either within the proposed district or easily accessible to the proposed district on a date not less than thirty days after such publication. In addition, the commissioner shall give notice, in writing, of such public hearing to persons owning land within the proposed district. The commissioner shall conduct a public hearing pursuant to such notice, and, in addition, any person shall have the opportunity to present written comments on the proposed district within thirty days after the public hearing. After due consideration of such local needs and desires, including such testimony and comments, if any, the commissioner may affirm, modify or withdraw the proposed district. Provided, however, that if the commissioner modifies the proposal to include any land not included in the proposal as it read when the public hearing was held, the commissioner shall hold another public hearing, on the same type of published and written notice, and with the same opportunity for presentation of written comments after the hearing. Then the commissioner may affirm, modify or withdraw the proposed district, but may not modify it to include land not included in the proposal upon which the second hearing was held.
3. Upon such affirmation or modification, a map of the district shall be filed by the commissioner of agriculture and markets with the county clerk of each county in which the district or a portion thereof is located, and publication of such filing shall be made in a newspaper of general circulation within the district to be created. The creation of the district shall become effective thirty days after such filing and publication.
4. The commissioner shall review any district created under this section, in consultation with the advisory council on agriculture, the commissioner of environmental conservation and the director of the division of the budget, eight, twelve or twenty years after the date of its creation, consistent with the review period set forth in the plan creating such district or every eight years if the district was adopted prior to August first, nineteen hundred eighty-three, and every eight, twelve or twenty year period thereafter, whichever may be

applicable. Each such review shall include consultations with local elected officials, planning bodies, agricultural and agribusiness interests, community leaders, county agricultural and farmland protection boards, and other interested groups, and shall also include a public hearing at a specified time and at a specified place either within the district or easily accessible to the proposed district, notice of such hearing to be published in a newspaper having general circulation within the district. In addition, the commissioner shall give notice, in writing, of such public hearing to persons owning land in the district. After any such review, the commissioner may modify such district so as to exclude land which is no longer predominantly unique and irreplaceable agricultural land or to include additional such land, provided: (a) such modification would serve the public interest by assisting in maintaining a viable agricultural industry within the district and the state; (b) the commissioner of environmental conservation has determined that such modification would further state environmental plans, policies and objectives; and (c) such modification has been approved by the director of the division of the budget; provided, further that if the commissioner modifies the district to include additional land, he or she shall hold another public hearing, on the same type of published and written notice. Then the commissioner may again modify or dissolve the district, but may not modify it to include land not included in the proposed modifications upon which the second hearing was held. After any such review the commissioner, after consultation with the advisory council on agriculture, shall dissolve any such district if (a) the land within the district is no longer predominantly unique and irreplaceable agricultural land, or (b) the commissioner of environmental conservation has determined that the continuation of the district would not further state environmental plans, policies and objectives. A modification or dissolution of a district shall become effective in the same manner as is provided for in subdivision three of this section, except that in the case of dissolution, a notice of dissolution shall be filed instead of a map.

304-a. Agricultural assessment values

1. Agricultural assessment values shall be calculated and certified annually in accordance with the provisions of this section.
2. a. The commissioner of agriculture and markets shall establish and maintain an agricultural land classification system based upon soil productivity and capability. The agricultural land classification system shall distinguish between mineral and organic soils. There shall be ten primary groups of mineral soils and such other subgroups as the commissioner determines necessary to represent high-lime and low-lime content. There shall be four groups of organic soils.
   b. The land classification system shall be promulgated by rule by the commissioner following a review of comments and recommendations of the advisory council on agriculture and after a public hearing. In making any revisions to the land classification system the commissioner may, in his or her discretion, conduct a public hearing. The commissioner shall foster participation by county agricultural and farmland protection boards, district soil and water conservation committees, and the cooperative extension service and consult with other state agencies, appropriate federal agencies, municipalities, the New York state college of agriculture and life sciences at Cornell university and farm organizations.
   c. The commissioner shall certify to the state board of real property services the soil list developed in accordance with the land classification system and any revisions thereto.

d. The commissioner shall prepare such materials as may be needed for the utilization of the land classification system and provide assistance to landowners and local officials in its use.

3. a. The state board of real property services shall annually calculate a single agricultural assessment value for each of the mineral and organic soil groups which shall be applied uniformly throughout the state. A base agricultural assessment value shall be separately calculated for mineral and organic soil groups in accordance with the procedure set forth in subdivision four of this section and shall be assigned as the agricultural assessment value of the highest grade mineral and organic soil group.

b. The agricultural assessment values for the remaining mineral soil groups shall be the product of the base agricultural assessment value and a percentage, derived from the productivity measurements determined for each soil and related soil group in conjunction with the land classification system, as follows:

Mineral Soil Group	Percentage of Base Agricultural Assessment Value
1A	
1B	
2A	89
2B	79
3A	79
3B	68
4A	68
4B	58
5A	58
5B	47
6A	47
6B	37
7	37
8	26
9	16
10	5

c. The agricultural assessment values for the remaining organic soil groups shall be the products of the base agricultural assessment value and a percentage, as follows:

Organic Soil Group	Percentage of Base Agricultural Assessment Value
A	100
B	65
C	55
D	35

d. The agricultural assessment value for organic soil group A shall be two times the base agricultural assessment value calculated for mineral soil group 1A.

e. The agricultural assessment value for farm woodland shall be the same as that calculated for mineral soil group seven.

f. Where trees or vines used for the production of fruit are located on land used in agricultural production, the value of such trees and vines, and the value of all posts, wires and trellises used for the production of fruit, shall be considered to be part of the agricultural assessment value of such land.

g. The agricultural assessment value for land and waters used in aquacultural enterprises shall be the same as that calculated for mineral soil group 1A.

4. a. The base agricultural assessment value shall be the average capitalized value of production per acre for the eight year period ending in the second year preceding the year for which the agricultural assessment values are certified. The capitalized value of production per acre shall be calculated by dividing the product of the value of production per acre and the percentage of net profit by a capitalization rate of ten percent, representing an assumed investment return rate of eight percent and an assumed real property tax rate of two percent.

b. The value of production per acre shall be the value of production divided by the number of acres harvested in New York state.

c. The percentage of net profit shall be adjusted net farm income divided by realized gross farm income.

(i) Adjusted net farm income shall be the sum of net farm income, taxes on farm real estate and the amount of mortgage interest debt attributable to farmland, less a management charge of one percent of realized gross farm income plus seven percent of adjusted production expenses.

(ii) The amount of mortgage interest debt attributable to farmland shall be the product of the interest on mortgage debt and the percentage of farm real estate value attributable to land.

(iii) The percentage of farm real estate value attributable to land shall be the difference between farm real estate value and farm structure value divided by farm real estate value.

(iv) Adjusted production expenses shall be production expenses, less the sum of the taxes on farm real estate and the interest on mortgage debt.

d. The following data, required for calculations pursuant to this subdivision, shall be as published by the United States department of agriculture for all farming in New York state:

(i) Farm real estate value shall be the total value of farmland and buildings, including improvements.

(ii) Farm structure value shall be the total value of farm buildings, including improvements.

(iii) Interest on mortgage debt shall be the total interest paid on farm real estate debt.

(iv) Net farm income shall be realized gross income less production expenses, as adjusted for change in inventory.

(v) Production expenses shall be the total cost of production.

(vi) Realized gross income shall be the total of cash receipts from farm marketings, government payments, nonmoney income and other farm income.

(vii) Taxes on farm real estate shall be the total real property taxes on farmland and buildings, including improvements.

(viii) Number of acres harvested including all reported crops.

(ix) Value of production shall be the total estimated value of all reported crops.

e. In the event that the data required for calculation pursuant to this subdivision is not published by the United States department of agriculture or is incomplete, such

required data shall be obtained from the New York state department of agriculture and markets.

f. Upon completion of the calculation of agricultural assessment values, the state board of real property services shall publish an annual report, which shall include a schedule of values, citations to data sources and presentation of all calculations. The state board of real property services shall transmit copies of the annual report to the governor and legislature, the advisory council on agriculture and other appropriate state agencies and interested parties. The state board of real property services shall thereupon certify the schedule of agricultural assessment values and the state board of real property services shall transmit a schedule of such certified values to each assessor.

g. Notwithstanding any other provision of this section to the contrary, in no event shall the change in the base agricultural assessment value for any given year exceed ten percent of the base agricultural assessment value of the preceding year.

5. a. In carrying out their responsibilities under this section, the state board of real property services and the commissioner shall keep the advisory council on agriculture fully apprised on matters relating to its duties and responsibilities.

b. In doing so, the state board of real property services and the commissioner shall provide, in a timely manner, any materials needed by the advisory council on agriculture to carry out its responsibilities under this section.

304-b. Agricultural district data reporting

1. The commissioner shall file a written report with the governor and the legislature on January first, two thousand eight and biennially thereafter, covering each prior period of two years, concerning the status of the agricultural districts program. Such report shall include, but not be limited to, the total number of agricultural districts, the total number of acres in agricultural districts, a list of the counties that have established county agricultural and farmland protection plans, and a summary of the agricultural protection planning grants program.
2. Between report due dates, the commissioner shall maintain the necessary records and data required to satisfy such report requirements and to satisfy information requests received from the governor and the legislature between such report due dates.

305. Agricultural districts; effects

1. Agricultural assessments.

a. Any owner of land used in agricultural production within an agricultural district shall be eligible for an agricultural assessment pursuant to this section. If an applicant rents land from another for use in conjunction with the applicant's land for the production for sale of crops, livestock or livestock products, the gross sales value of such products produced on such rented land shall be added to the gross sales value of such products produced on the land of the applicant for purposes of determining eligibility for an agricultural assessment on the land of the applicant. Such assessment shall be granted only upon an annual application by the owner of such land on a form prescribed by the state board of real property services. The applicant shall furnish to the assessor such information as the state board of real property services shall require, including classification information prepared for the applicant's land or water bodies used in agricultural production by the soil and water conservation district office within the county, and information demonstrating the eligibility for agricultural assessment of any land used in conjunction with

rented land as specified in paragraph b of subdivision four of section three hundred one of this article. Such application shall be filed with the assessor of the assessing unit on or before the appropriate taxable status date; provided, however, that (i) in the year of a revaluation or update of assessments, as those terms are defined in section one hundred two of the real property tax law, the application may be filed with the assessor no later than the thirtieth day prior to the day by which the tentative assessment roll is required to be filed by law; or (ii) an application for such an assessment may be filed with the assessor of the assessing unit after the appropriate taxable status date but not later than the last date on which a petition with respect to complaints of assessment may be filed, where failure to file a timely application resulted from: (a) a death of the applicant's spouse, child, parent, brother or sister, (b) an illness of the applicant or of the applicant's spouse, child, parent, brother or sister, which actually prevents the applicant from filing on a timely basis, as certified by a licensed physician, or (c) the occurrence of a natural disaster, including, but not limited to, a flood, or the destruction of such applicant's residence, barn or other farm building by wind, fire or flood. If the assessor is satisfied that the applicant is entitled to an agricultural assessment, the assessor shall approve the application and the land shall be assessed pursuant to this section. Not less than ten days prior to the date for hearing complaints in relation to assessments, the assessor shall mail to each applicant, who has included with the application at least one self-addressed, pre-paid envelope, a notice of the approval or denial of the application. Such notice shall be on a form prescribed by the state board of real property services which shall indicate the manner in which the total assessed value is apportioned among the various portions of the property subject to agricultural assessment and those other portions of the property not eligible for agricultural assessment as determined for the tentative assessment roll and the latest final assessment roll. Failure to mail any such notice or failure of the owner to receive the same shall not prevent the levy, collection and enforcement of the payment of the taxes on such real property.

b. That portion of the value of land utilized for agricultural production within an agricultural district which represents an excess above the agricultural assessment as determined in accordance with this subdivision shall not be subject to real property taxation. Such excess amount if any shall be entered on the assessment roll in the manner prescribed by the state board of real property services.

c. (i) The assessor shall utilize the agricultural assessment values per acre certified pursuant to section three hundred four-a of this article in determining the amount of the assessment of lands eligible for agricultural assessments by multiplying those values by the number of acres of land utilized for agricultural production and adjusting such result by application of the latest state equalization rate or a special equalization rate as may be established and certified by the state board of real property services for the purpose of computing the agricultural assessment pursuant to this paragraph. This resulting amount shall be the agricultural assessment for such lands.

(ii) Where the latest state equalization rate exceeds one hundred, or where a special equalization rate which would otherwise be established for the purposes of this section would exceed one hundred, a special equalization rate of one hundred shall be established and certified by the state board for the purpose of this section.

(iii) Where a special equalization rate has been established and certified by the state board for the purposes of this paragraph, the assessor is directed and authorized to recompute the agricultural assessment on the assessment roll

by applying such special equalization rate instead of the latest state equalization rate, and to make the appropriate corrections on the assessment roll, subject to the provisions of title two of article twelve of the real property tax law.

d. (i) If land within an agricultural district which received an agricultural assessment is converted parcels, as described on the assessment roll which include land so converted shall be subject to payments equaling five times the taxes saved in the last year in which the land benefited from an agricultural assessment, plus interest of six percent per year compounded annually for each year in which an agricultural assessment was granted, not exceeding five years. The amount of taxes saved for the last year in which the land benefited from an agricultural assessment shall be determined by applying the applicable tax rates to the excess amount of assessed valuation of such land over its agricultural assessment as set forth on the last assessment roll which indicates such an excess. If only a portion of a parcel as described on the assessment roll is converted, the assessor shall apportion the assessment and agricultural assessment attributable to the converted portion, as determined for the last assessment roll for which the assessment of such portion exceeded its agricultural assessment. The difference between the apportioned assessment and the apportioned agricultural assessment shall be the amount upon which payments shall be determined. Payments shall be added by or on behalf of each taxing jurisdiction to the taxes levied on the assessment roll prepared on the basis of the first taxable status date on which the assessor considers the land to have been converted; provided, however, that no payments shall be imposed if the last assessment roll upon which the property benefited from an agricultural assessment, was more than five years prior to the year for which the assessment roll upon which payments would otherwise be levied is prepared.

(ii) Whenever a conversion occurs, the owner shall notify the assessor within ninety days of the date such conversion is commenced. If the landowner fails to make such notification within the ninety day period, the assessing unit, by majority vote of the governing body, may impose a penalty on behalf of the assessing unit of up to two times the total payments owed, but not to exceed a maximum total penalty of five hundred dollars in addition to any payments owed.

(iii) (a) An assessor who determines that there is liability for payments and any penalties assessed pursuant to subparagraph (ii) of this paragraph shall notify the landowner by mail of such liability at least ten days prior to the date for hearing complaints in relation to assessments. Such notice shall indicate the property to which payments apply and describe how the payments shall be determined. Failure to provide such notice shall not affect the levy, collection or enforcement or payment of payments.

(b) Liability for payments shall be subject to administrative and judicial review as provided by law for review of assessments.

(iv) If such land or any portion thereof is converted to a use other than for agricultural production by virtue of oil, gas or wind exploration, development, or extraction activity or by virtue of a taking by eminent domain or other involuntary proceeding other than a tax sale, the land or portion so converted shall not be subject to payments. If the land so converted constitutes only a portion of a parcel described on the assessment roll, the assessor shall

apportion the assessment, and adjust the agricultural assessment attributable to the portion of the parcel not subject to such conversion by subtracting the proportionate part of the agricultural assessment attributable to the portion so converted. Provided further that land within an agricultural district and eligible for an agricultural assessment shall not be considered to have been converted to a use other than for agricultural production solely due to the conveyance of oil, gas or wind rights associated with that land.

(v) An assessor who imposes any such payments shall annually, and within forty-five days following the date on which the final assessment roll is required to be filed, report such payments to the state board of real property services on a form prescribed by the state board.

(vi) The assessing unit, by majority vote of the governing body, may impose a minimum payment amount, not to exceed one hundred dollars.

(vii) The purchase of land in fee by the city of New York for watershed protection purposes or the conveyance of a conservation easement by the city of New York to the department of environmental conservation which prohibits future use of the land for agricultural purposes shall not be a conversion of parcels and no payment shall be due under this section.

e. In connection with any district created under section three hundred four of this article, the state shall provide assistance to each taxing jurisdiction in an amount equal to one-half of the tax loss that results from requests for agricultural assessments in the district. The amount of such tax loss shall be computed annually by applying the applicable tax rate to an amount computed by subtracting the agricultural assessment from the assessed value of the property on the assessment roll completed and filed prior to July first, nineteen hundred seventy-one, taking into consideration any change in the level of assessment. The chief fiscal officer of a taxing jurisdiction entitled to state assistance under this article shall make application for such assistance to the state board of real property services on a form approved by such board and containing such information as the board shall require. Upon approval of the application by such board, such assistance shall be apportioned and paid to such taxing jurisdiction on the audit and warrant of the state comptroller out of moneys appropriated by the legislature for the purpose of this article; provided, however, that any such assistance payment shall be reduced by one-half the amount of any payments levied under subparagraph (i) of paragraph d of this subdivision, for land in any district created under section three hundred four of this article, unless one-half the amount of such payments has already been used to reduce a previous assistance payment under this paragraph.

f. Notwithstanding any inconsistent general, special or local law to the contrary, if a natural disaster, act of God, or continued adverse weather conditions shall destroy the agricultural production and such fact is certified by the cooperative extension service and, as a result, such production does not produce an average gross sales value of ten thousand dollars or more, the owner may nevertheless qualify for an agricultural assessment provided the owner shall substantiate in such manner as prescribed by the state board of real property services that the agricultural production initiated on such land would have produced an average gross sales value of ten thousand dollars or more but for the natural disaster, act of God or continued adverse weather conditions.

2. [repealed]

3. Policy of state agencies. It shall be the policy of all state agencies to encourage the maintenance of viable farming in agricultural districts and their administrative regulations

and procedures shall be modified to this end insofar as is consistent with the promotion of public health and safety and with the provisions of any federal statutes, standards, criteria, rules, regulations, or policies, and any other requirements of federal agencies, including provisions applicable only to obtaining federal grants, loans, or other funding.

4. Limitation on the exercise of eminent domain and other public acquisitions, and on the advance of public funds.
   a. Any agency of the state, any public benefit corporation or any local government which intends to acquire land or any interest therein, provided that the acquisition from any one actively operated farm within the district would be in excess of one acre or that the total acquisition within the district would be in excess of ten acres, or which intends to construct, or advance a grant, loan, interest subsidy or other funds within a district to construct, dwellings, commercial or industrial facilities, water or sewer facilities to serve non-farm structures, shall use all practicable means in undertaking such action to realize the policy and goals set forth in this article, and shall act and choose alternatives which, consistent with social, economic and other essential considerations, to the maximum extent practicable, minimize or avoid adverse impacts on agriculture in order to sustain a viable farm enterprise or enterprises within the district. The adverse agricultural impacts to be minimized or avoided shall include impacts revealed in the notice of intent process described in this subdivision.
   b. As early as possible in the development of a proposal of an action described in paragraph a of this subdivision, but in no event later than the date of any determination as to whether an environmental impact statement need be prepared pursuant to article eight of the environmental conservation law, the agency, corporation or government proposing an action described in paragraph a of this subdivision shall file a preliminary notice of its intent with the commissioner and the county agricultural and farmland protection board in such manner and form as the commissioner may require. Such preliminary notice shall include the following:
      (i) a brief description of the proposed action and its agricultural setting;
      (ii) a summary of any anticipated adverse impacts on farm operations and agricultural resources within the district; and
      (iii) such other information as the commissioner may require.
   c. The agency, corporation or government proposing the action shall also, at least sixty-five days prior to such acquisition, construction or advance of public funds, file a final notice of intent with the commissioner and the county agricultural and farmland protection board. Such final notice shall include a detailed agricultural impact statement setting forth the following:
      (i) a detailed description of the proposed action and its agricultural setting;
      (ii) the agricultural impact of the proposed action including short-term and long-term effects;
      (iii) any adverse agricultural effects which cannot be avoided should the proposed action be implemented;
      (iv) alternatives to the proposed action;
      (v) any irreversible and irretrievable commitments of agricultural resources which would be involved in the proposed action should it be implemented;
      (vi) mitigation measures proposed to minimize the adverse impact of the proposed action on the continuing viability of a farm enterprise or enterprises within the district;
      (vii) any aspects of the proposed action which would encourage non-farm development, where applicable and appropriate; and
      (viii) such other information as the commissioner may require.

The commissioner shall promptly determine whether the final notice is complete or incomplete. If the commissioner does not issue such determination within thirty days, the final notice shall be deemed complete. If the final notice is determined to be incomplete, the commissioner shall notify the party proposing the action in writing of the reasons for that determination. Any new submission shall commence a new period for department review for purposes of determining completeness.

d. The provisions of paragraphs b and c of this subdivision shall not apply and shall be deemed waived by the owner of the land to be acquired where such owner signs a document to such effect and provides a copy to the commissioner.

e. Upon notice from the commissioner that he or she has accepted a final notice as complete, the county agricultural and farmland protection board may, within thirty days, review the proposed action and its effects on farm operations and agricultural resources within the district, and report its findings and recommendations to the commissioner and to the party proposing the action in the case of actions proposed by a state agency or public benefit corporation, and additionally to the county legislature in the case of actions proposed by local government agencies.

f. Upon receipt and acceptance of a final notice, the commissioner shall thereupon forward a copy of such notice to the commissioner of environmental conservation and the advisory council on agriculture. The commissioner, in consultation with the commissioner of environmental conservation and the advisory council on agriculture, within forty-five days of the acceptance of a final notice, shall review the proposed action and make an initial determination whether such action would have an unreasonably adverse effect on the continuing viability of a farm enterprise or enterprises within the district, or state environmental plans, policies and objectives.

If the commissioner so determines, he or she may (i) issue an order within the forty-five day period directing the state agency, public benefit corporation or local government not to take such action for an additional period of sixty days immediately following such forty-five day period; and (ii) review the proposed action to determine whether any reasonable and practicable alternative or alternatives exist which would minimize or avoid the adverse impact on agriculture in order to sustain a viable farm enterprise or enterprises within the district.

The commissioner may hold a public hearing concerning such proposed action at a place within the district or otherwise easily accessible to the district upon notice in a newspaper having a general circulation within the district, and individual notice, in writing, to the municipalities whose territories encompass the district, the commissioner of environmental conservation, the advisory council on agriculture and the state agency, public benefit corporation or local government proposing to take such action. On or before the conclusion of such additional sixty day period, the commissioner shall report his or her findings to the agency, corporation or government proposing to take such action, to any public agency having the power of review of or approval of such action, and, in a manner conducive to the wide dissemination of such findings, to the public. If the commissioner concludes that a reasonable and practicable alternative or alternatives exist which would minimize or avoid the adverse impact of the proposed action, he or she shall propose that such alternative or alternatives be accepted. If the agency, corporation or government proposing the action accepts the commissioner's proposal, then the requirements of the notice of intent filing shall be deemed fulfilled. If the agency,

corporation or government rejects the commissioner's proposal, then it shall provide the commissioner with reasons for rejecting such proposal and a detailed comparison between its proposed action and the commissioner's alternative or alternatives.

g. At least ten days before commencing an action which has been the subject of a notice of intent filing, the agency, corporation or government shall certify to the commissioner that it has made an explicit finding that the requirements of this subdivision have been met, and that consistent with social, economic and other essential considerations, to the maximum extent practicable, adverse agricultural impacts revealed in the notice of intent process will be minimized or avoided. Such certification shall set forth the reasons in support of the finding.

h. The commissioner may request the attorney general to bring an action to enjoin any such agency, corporation or government from violating any of the provisions of this subdivision.

h-1. Notwithstanding any other provision of law to the contrary, no solid waste management facility shall be sited on land in agricultural production which is located within an agricultural district, or land in agricultural production that qualifies for and is receiving an agricultural assessment pursuant to section three hundred six of this article. Nothing contained herein, however, shall be deemed to prohibit siting when:

(i) The owner of such land has entered into a written agreement which shall indicate his consent for site consideration; or

(ii) The applicant for a permit has made a commitment in the permit application to fund a farm land protection conservation easement within a reasonable proximity to the proposed project in an amount not less than the dollar value of any such farm land purchased for the project; or

(iii) The commissioner in concurrence with the commissioner of environmental conservation has determined that any such agricultural land to be taken, constitutes less than five percent of the project site.

For purposes of this paragraph, "solid waste management facility" shall have the same meaning as provided in title seven of article twenty-seven of the environmental conservation law, but shall not include solid waste transfer stations or land upon which sewage sludge is applied, and determinations regarding agricultural district boundaries and agricultural assessments will be based on those in effect as of the date an initial determination is made, pursuant to article eight of the environmental conservation law, as to whether an environmental impact statement needs to be prepared for the proposed project.

i. This subdivision shall not apply to any emergency project which is immediately necessary for the protection of life or property or to any project or proceeding to which the department is or has been a statutory party.

j. The commissioner may bring an action to enforce any mitigation measures proposed by a public benefit corporation or a local government, and accepted by the commissioner, pursuant to a notice of intent filing, to minimize or avoid adverse agricultural impacts from the proposed action.

5. Limitation on power to impose benefit assessments, special ad valorem levies or other rates or fees in certain improvement districts or benefit areas. Within improvement districts or areas deemed benefited by municipal improvements including, but not limited to, improvements for sewer, water, lighting, non-farm drainage, solid waste disposal, including those solid waste management facilities established pursuant to section two hundred twenty-six-b of the county law, or other landfill operations, no benefit assessments, special ad valorem levies or other rates of fees charged for such

improvements may be imposed on land used primarily for agricultural production within an agricultural district on any basis, except a lot not exceeding one-half acre surrounding any dwelling or non-farm structure located on said land nor on any farm structure located in an agricultural district unless such structure benefits directly from the service of such improvement district or benefited area; provided, however, that if such benefit assessments, ad valorem levies or other rates of fees were imposed prior to the formation of the agricultural district, then such benefit assessments, ad valorem levies or other rates or fees shall continue to be imposed on such land or farm structure.

6. Use of assessment for certain purposes. The governing body of a fire, fire protection, or ambulance district for which a benefit assessment or a special ad valorem levy is made, may adopt a resolution to provide that the assessment determined pursuant to subdivision one of this section for such property shall be used for the benefit assessment or special ad valorem levy of such fire, fire protection, or ambulance district.
7. Notwithstanding any provision of law to the contrary, that portion of the value of land which is used solely for the purpose of replanting or crop expansion as part of an orchard or vineyard shall be exempt from real property taxation for a period of six successive years following the date of such replanting or crop expansion beginning on the first eligible taxable status date following such replanting or expansion provided the following conditions are met:
    a. The land used for crop expansion or replanting must be a part of an existing orchard or vineyard which is located on land used in agricultural production within an agricultural district or such land must be part of an existing orchard or vineyard which is eligible for an agricultural assessment pursuant to this section or section three hundred six of this chapter where the owner of such land has filed an annual application for an agricultural assessment;
    b. The land eligible for such real property tax exemption shall not in any one year exceed twenty percent of the total acreage of such orchard or vineyard which is located on land used in agricultural production within an agricultural district or twenty percent of the total acreage of such orchard or vineyard eligible for an agricultural assessment pursuant to this section and section three hundred six of this chapter where the owner of such land has filed an annual application for an agricultural assessment;
    c. The land eligible for such real property tax exemption must be maintained as land used in agricultural production as part of such orchard or vineyard for each year such exemption is granted; and
    d. When the land used for the purpose of replanting or crop expansion as part of an orchard or vineyard is located within an area which has been declared by the governor to be a disaster emergency in a year in which such tax exemption is sought and in a year in which such land meets all other eligibility requirements for such tax exemption set forth in this subdivision, the maximum twenty percent total acreage restriction set forth in paragraph b of this subdivision may be exceeded for such year and for any remaining successive years, provided, however, that the land eligible for such real property tax exemption shall not exceed the total acreage damaged or destroyed by such disaster in such year or the total acreage which remains damaged or destroyed in any remaining successive year. The total acreage for which such exemption is sought pursuant to this paragraph shall be subject to verification by the commissioner or his designee.

305-a. Coordination of local planning and land use decision-making with the agricultural districts program

1. Policy of local governments.
   a. Local governments, when exercising their powers to enact and administer comprehensive plans and local laws, ordinances, rules or regulations, shall exercise these powers in such manner as may realize the policy and goals set forth in this article, and shall not unreasonably restrict or regulate farm operations within agricultural districts in contravention of the purposes of this article unless it can be shown that the public health or safety is threatened.
   b. The commissioner, upon his or her own initiative or upon the receipt of a complaint from a person within an agricultural district, may bring an action to enforce the provisions of this subdivision.
2. Agricultural data statement; submission, evaluation. Any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval by a planning board, zoning board of appeals, town board, or village board of trustees pursuant to article sixteen of the town law or article seven of the village law, that would occur on property within an agricultural district containing a farm operation or on property with boundaries within five hundred feet of a farm operation located in an agricultural district, shall include an agricultural data statement. The planning board, zoning board of appeals, town board, or village board of trustees shall evaluate and consider the agricultural data statement in its review of the possible impacts of the proposed project upon the functioning of farm operations within such agricultural district. The information required by an agricultural data statement may be included as part of any other application form required by local law, ordinance or regulation.
3. Agricultural data statement; notice provision. Upon the receipt of such application by the planning board, zoning board of appeals, town board or village board of trustees, the clerk of such board shall mail written notice of such application to the owners of land as identified by the applicant in the agricultural data statement. Such notice shall include a description of the proposed project and its location, and may be sent in conjunction with any other notice required by state or local law, ordinance, rule or regulation for the said project. The cost of mailing said notice shall be borne by the applicant.
4. Agricultural data statement; content. An agricultural data statement shall include the following information: the name and address of the applicant; a description of the proposed project and its location; the name and address of any owner of land within the agricultural district, which land contains farm operations and is located within five hundred feet of the boundary of the property upon which the project is proposed; and a tax map or other map showing the site of the proposed project relative to the location of farm operations identified in the agricultural data statement.

305-b. Review of proposed rules and regulations of state agencies affecting the agricultural industry

1. Upon request of the state advisory council on agriculture, or upon his or her own initiative, the commissioner may review and comment upon a proposed rule or regulation by another state agency which may have an adverse impact on agriculture and farm operations in this state, and file such comment with the proposing agency and the administrative regulations review commission. Each comment shall be in sufficient detail to advise the proposing agency of the adverse impact on agriculture and farm operations and the recommended modifications. The commissioner shall prepare a status report of any actions taken in accordance with this section and include it in the department's annual report.

306. Agricultural lands outside of districts; agricultural assessments

1. Any owner of land used in agricultural production outside of an agricultural district shall be eligible for an agricultural assessment as provided herein. If an applicant rents land from another for use in conjunction with the applicant's land for the production for sale of crops, livestock or livestock products, the gross sales value of such products produced on such rented land shall be added to the gross sales value of such products produced on the land of the applicant for purposes of determining eligibility for an agricultural assessment on the land of the applicant.

   Such assessment shall be granted pursuant to paragraphs a, b and f of subdivision one of section three hundred five of this article as if such land were in an agricultural district, provided the landowner annually submits to the assessor an application for an agricultural assessment on or before the taxable status date. In the year of a revaluation or update of assessments, as those terms are defined in section one hundred two of the real property tax law, the application may be filed with the assessor no later than the thirtieth day prior to the day by which the tentative assessment roll is required to be filed by law. Nothing therein shall be construed to limit an applicant's discretion to withhold from such application any land, or portion thereof, contained within a single operation.

1-a [repealed]

2. a. (i) If land which received an agricultural assessment pursuant to this section is converted at any time within eight years from the time an agricultural assessment was last received, such conversion shall subject the land so converted to payments in compensation for the prior benefits of agricultural assessments. The amount of the payments shall be equal to five times the taxes saved in the last year in which land benefited from an agricultural assessment, plus interest of six percent per year compounded annually for each year in which an agricultural assessment was granted, not exceeding five years.

   (ii) The amount of taxes saved for the last year in which the land benefited from an agricultural assessment shall be determined by applying the applicable tax rates to the amount of assessed valuation of such land in excess of the agricultural assessment of such land as set forth on the last assessment roll which indicates such an excess. If only a portion of such land as described on the assessment roll is converted, the assessor shall apportion the assessment and agricultural assessment attributable to the converted portion, as determined for the last assessment roll on which the assessment of such portion exceeded its agricultural assessment. The difference between the apportioned assessment and the apportioned agricultural assessment shall be the amount upon which payments shall be determined. Payments shall be levied in the same manner as other taxes, by or on behalf of each taxing jurisdiction on the assessment roll prepared on the basis of the first taxable status date on which the assessor considers the land to have been converted; provided, however, that no payments shall be imposed if the last assessment roll upon which the property benefited from an agricultural assessment, was more than eight years prior to the year for which the assessment roll upon which payments would otherwise be levied is prepared.

   (iii) Whenever a conversion occurs, the owner shall notify the assessor within ninety days of the date such conversion is commenced. If the landowner fails to make such notification within the ninety day period, the assessing unit, by majority vote of the governing body, may impose a penalty on behalf of the assessing

unit of up to two times the total payments owed, but not to exceed a maximum total penalty of five hundred dollars in addition to any payments owed.

b. (i) An assessor who determines that there is liability for payments and any penalties pursuant to subparagraph (ii) of this paragraph shall notify the landowner of such liability at least ten days prior to the day for hearing of complaints in relation to assessments. Such notice shall specify the area subject to payments and shall describe how such payments shall be determined. Failure to provide such notice shall not affect the levy, collection, or enforcement of payments.

(ii) Liability for payments shall be subject to administrative and judicial review as provided by law for the review of assessments.

(iii) An assessor who imposes any such payments shall annually, and within forty-five days following the date on which the final assessment roll is required to be filed, report such payments to the state board of real property services on a form prescribed by the state board.

(iv) The assessing unit, by majority vote of the government body, may impose a minimum payment amount, not to exceed one hundred dollars.

c. If such land or any portion thereof is converted by virtue of oil, gas or wind exploration, development, or extraction activity or by virtue of a taking by eminent domain or other involuntary proceeding other than a tax sale, the land or portion so converted shall not be subject to payments. If land so converted constitutes only a portion of a parcel described on the assessment roll, the assessor shall apportion the assessment, and adjust the agricultural assessment attributable to the portion of the parcel not subject to such conversion by subtracting the proportionate part of the agricultural assessment attributable to the portion so converted. Provided further that land outside an agricultural district and eligible for an agricultural assessment pursuant to this section shall not be considered to have been converted to a use other than for agricultural production solely due to the conveyance of oil, gas or wind rights associated with that land.

d. The purchase of land in fee by the city of New York for watershed protection purposes or the conveyance of a conservation easement by the city of New York to the department of environmental conservation which prohibits future use of the land for agricultural purposes shall not be a conversion of parcels and no payment for the prior benefits of agricultural assessments shall be due under this section.

3. Upon the inclusion of such agricultural lands in an agricultural district formed pursuant to section three hundred three, the provisions of section three hundred five shall be controlling.

4. A payment levied pursuant to subparagraph (i) of paragraph a of subdivision two of this section shall be a lien on the entire parcel containing the converted land, notwithstanding that less than the entire parcel was converted.

5. Use of assessment for certain purposes. The governing body of a water, lighting, sewer, sanitation, fire, fire protection, or ambulance district for whose benefit a special assessment or a special ad valorem levy is imposed, may adopt a resolution to provide that the assessments determined pursuant to subdivision one of this section for property within the district shall be used for the special assessment or special ad valorem levy of such special district.

307. Promulgation of rules and regulations

The state board of real property services and the commissioner are each empowered to promulgate such rules and regulations and to prescribe such forms as each shall deem

necessary to effectuate the purposes of this article, and the commissioner is further empowered to promulgate such rules and regulations as are necessary to provide for the reasonable consolidation of existing agricultural districts with new agricultural districts or with other existing districts undergoing modification pursuant to section three hundred three of this article. Where a document or any other paper or information is required, by such rules and regulations, or by any provision of this article, to be filed with, or by, a county clerk or any other local official, such clerk or other local official may file such document, paper, or information as he deems proper, but he shall also file or record it in any manner directed by the state board of real property services, by rule or regulation. In promulgating such a rule or regulation, such board shall consider, among any other relevant factors, the need for security of land titles, the requirement that purchasers of land know of all potential tax and penalty liabilities, and the desirability that the searching of titles not be further complicated by the establishment of new sets of record books.

308. Right to farm

1. a. The commissioner shall, in consultation with the state advisory council on agriculture, issue opinions upon request from any person as to whether particular agricultural practices are sound.
   b. Sound agricultural practices refer to those practices necessary for the on-farm production, preparation and marketing of agricultural commodities. Examples of activities which entail practices the commissioner may consider include, but are not limited to, operation of farm equipment; proper use of agricultural chemicals and other crop protection methods; direct sale to consumers of agricultural commodities or foods containing agricultural commodities produced on-farm; agricultural tourism; production, management and harvesting of "farm woodland," as defined in subdivision three of section three hundred one of this article and construction and use of farm structures. The commissioner shall consult appropriate state agencies and any guidelines recommended by the advisory council on agriculture. The commissioner may consult as appropriate, the New York state college of agriculture and life sciences and the U.S.D.A. natural resources conservation service. The commissioner shall also consider whether the agricultural practices are conducted by a farm owner or operator as part of his or her participation in the AEM program as set forth in article eleven-A of this chapter. Such practices shall be evaluated on a case-by-case basis.
2. Upon the issuance of an opinion pursuant to this section, the commissioner shall publish a notice in a newspaper having a general circulation in the area surrounding the practice and notice shall be given in writing to the owner of the property on which the practice is conducted and any adjoining property owners. The opinion of the commissioner shall be final, unless within thirty days after publication of the notice a person affected thereby institutes a proceeding to review the opinion in the manner provided by article seventy-eight of the civil practice law and rules.
3. Notwithstanding any other provisions of law, on any land in an agricultural district created pursuant to section three hundred three or land used in agricultural production subject to an agricultural assessment pursuant to section three hundred six of this article, an agricultural practice shall not constitute a private nuisance, when an action is brought by a person, provided such agricultural practice constitutes a sound agricultural practice pursuant to an opinion issued upon request by the commissioner. Nothing in this section shall be construed to prohibit an aggrieved party from recovering damages for personal injury or wrongful death.

4. The commissioner, in consultation with the state advisory council on agriculture, shall issue an opinion within thirty days upon request from any person as to whether particular land uses are agricultural in nature. Such land use decisions shall be evaluated on a case-by-case basis.
5. The commissioner shall develop and make available to prospective grantors and purchasers of real property located partially or wholly within any agricultural district in this state and to the general public, practical information related to the right to farm as set forth in this article including, but not limited to right to farm disclosure requirements established pursuant to section three hundred ten of this article and section three hundred thirty-three-c of the real property law.

308-a. Fees and expenses in certain private nuisance actions.

1. Definitions. For purposes of this section:
   a. "Action" means any civil action brought by a person in which a private nuisance is alleged to be due to an agricultural practice on any land in an agricultural district or subject to agricultural assessments pursuant to section three hundred three or three hundred six of this article, respectively.
   b. "Fees and other expenses" means the reasonable expenses of expert witnesses, the reasonable cost of any study, analysis, consultation with experts, and like expenses, and reasonable attorney fees, including fees for work performed by law students or paralegals under the supervision of an attorney, incurred in connection with the defense of any cause of action for private nuisance which is alleged as part of a civil action brought by a person.
   c. "Final judgment" means a judgment that is final and not appealable, and settlement.
   d. "Prevailing party" means a defendant in a civil action brought by a person, in which a private nuisance is alleged to be due to an agricultural practice, where the defendant prevails in whole or in substantial part on the private nuisance cause of action.
2. Fees and other expenses in certain private nuisance actions.
   a. When awarded. In addition to costs, disbursements and additional allowances awarded pursuant to sections eight thousand two hundred one through eight thousand two hundred four and eight thousand three hundred one through eight thousand three hundred three-a of the civil practice law and rules, and except as otherwise specifically provided by statute, a court shall award to a prevailing party, other than the plaintiff, fees and other expenses incurred by such party in connection with the defense of any cause of action for private nuisance alleged to be due to an agricultural practice, provided such agricultural practice constitutes a sound agricultural practice pursuant to an opinion issued by the commissioner under section three hundred eight of this article, prior to the start of any trial of the action or settlement of such action, unless the court finds that the position of the plaintiff was substantially justified or that special circumstances make an award unjust. Fees shall be determined pursuant to prevailing market rates for the kind and quality of the services furnished, except that fees and expenses may not be awarded to a party for any portion of the litigation in which the party has unreasonably protracted the proceedings.
   b. Application for fees. A party seeking an award of fees and other expenses shall, within thirty days of final judgment in the action, submit to the court an application which sets forth
      (i) the facts supporting the claim that the party is a prevailing party and is eligible to receive an award under this section,
      (ii) the amount sought, and

(iii) an itemized statement from every attorney or expert witness for which fees or expenses are sought stating the actual time expended and the rate at which such fees and other expenses are claimed.

3. Interest. If the plaintiff appeals an award made pursuant to this section and the award is affirmed in whole or in part, interest shall be paid on the amount of the award. Such interest shall run from the date of the award through the day before the date of the affirmance.
4. Applicability.
   a. Nothing contained in this section shall be construed to alter or modify the provisions of the civil practice law and rules where applicable to actions other than actions as defined by this section.
   b. Nothing contained in this section shall affect or preclude the right of any party to recover fees or other expenses authorized by common law or by any other statute, law or rule.

309. Advisory council on agriculture

1. There shall be established within the department the advisory council on agriculture, to advise and make recommendations to the state agencies on state government plans, policies and programs affecting agriculture, as outlined below, and in such areas as its experience and studies may indicate to be appropriate. The department of agriculture and markets shall provide necessary secretariat and support services to the council.
2. The advisory council on agriculture shall consist of eleven members appointed by the governor with the advice and consent of the senate, selected for their experience and expertise related to areas of council responsibility. At least five members of the council shall be operators of a commercial farm enterprise and at least two members shall be representatives of local governments. The balance of the council shall be comprised of representatives of business or institutions related to agriculture. Members shall be appointed for a term of three years and may serve until their successors are chosen provided, however, that of the members first appointed, three shall serve for a term of one year, three shall serve for a term of two years, and three shall serve for a term of three years. Members shall serve without salary but shall be entitled to reimbursement of their ordinary and necessary travel expenses. The members of the council shall elect a chairman.
3. The duties and responsibilities of the advisory council on agriculture as they pertain to agricultural districts shall include, but not be limited to, providing timely advice, comments and recommendations to the commissioner in regard to:
   a. the establishment of agricultural districts;
   b. the eight year review of agricultural districts; and
   c. the establishment of and any revision to the land classification system used in connection with the determination of agricultural assessment values.

   The commissioner may delegate to the council such additional duties and responsibilities as he deems necessary.
4. The duties and responsibilities of the advisory council on agriculture shall include, but not be limited to, providing timely advice, comments and recommendations to the state board of real property services in regard to the establishment of agricultural assessment values.
5. The advisory council on agriculture shall advise the commissioner and other state agency heads on state government plans, policies and programs affecting farming and the agricultural industry of this state. Concerned state agencies shall be encouraged to

establish a working relationship with the council and shall fully cooperate with the council in any requests it shall make.

6. The advisory council on agriculture may ask other individuals to attend its meetings or work with it on an occasional or regular basis provided, however, that it shall invite participation by the chairman of the state soil and water conservation committee and the dean of the New York state college of agriculture and life sciences at Cornell university. The advisory council on agriculture shall set the time and place of its meetings, and shall hold at least four meetings per year.
7. The advisory council on agriculture shall file a written report to the governor and the legislature by April first each year concerning its activities during the previous year and its program expectations for the succeeding year.
8. The advisory council on agriculture shall advise the commissioner in regards to whether particular land uses are agricultural in nature.

310. Disclosure

1. When any purchase and sale contract is presented for the sale, purchase, or exchange of real property located partially or wholly within an agricultural district established pursuant to the provisions of this article, the prospective grantor shall present to the prospective grantee a disclosure notice which states the following:
"It is the policy of this state and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products, and also for its natural and ecological value. This disclosure notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust and odors. Prospective residents are also informed that the location of property within an agricultural district may impact the ability to access water and/or sewer services for such property under certain circumstances. Prospective purchasers are urged to contact the New York State Department of Agriculture and Markets to obtain additional information or clarification regarding their rights and obligations under article 25-AA of the Agriculture and markets Law."

1-a. Such disclosure notice shall be signed by the prospective grantor and grantee prior to the sale, purchase or exchange of such real property.

2. Receipt of such disclosure notice shall be recorded on a property transfer report form prescribed by the state board of real property services as provided for in section three hundred thirty-three of the real property law.

Local Laws and Agricultural Districts: How Do They Relate?

Counties, towns and villages in New York State have broad powers to enact laws to govern their own affairs. However, State laws impose certain restrictions on local government authority. One such restriction is found in Section 305-a of the Agriculture and Markets Law which contains the following mandate:

> "Local governments, when exercising their powers to enact and administer comprehensive plans and local laws, ordinances, rules or regulations, shall exercise these powers in such manner as may realize the policy and goals set forth in this article [*Article 25-AA of the Agriculture and Markets Law],* and shall not unreasonably restrict or regulate farm operations within agricultural districts in contravention of the purposes of this article unless it can be shown that the public health or safety is threatened."

This brochure has been prepared by the New York State Department of Agriculture and Markets to assist municipalities in drafting and administering local laws and ordinances which may affect farming in an agricultural district. It should not be substituted for legal advice from a municipality's attorney. The brochure also offers guidance to farmers and municipalities on the application of Section 305-a.

The Commissioner of Agriculture and Markets may independently initiate a review of a proposed or existing local law or ordinance or proceed upon the request of a farmer or municipality in an agricultural district. The following describes the procedure for requesting review, how the local requirements are analyzed, and remediated, if necessary.

PROCEDURE

Questions concerning the impact of local laws and ordinances on farm operations are solved far more easily at the drafting stage than after the provision is in place. Municipalities are, therefore, encouraged to contact the Department, either by phone or in writing, in advance of enacting a law or ordinance which may restrict farming in an agricultural district. The Department will provide a response to such inquiries. Similarly, a farmer or other affected party in a district may seek the Department's opinion on a proposed or existing law or ordinance without filing a complaint.

Farmers

A request for review must be provided in writing and include at least the following information:

- the location of the farm operation and identification of the agricultural district in which it is situated;
- a description of the affected farm operation (e.g. size of farm, type of enterprise, years in operation);
- a description of the specific farm buildings, equipment or practices involved and how they are affected;
- a copy of the complete local law or ordinance and identification of the specific section or sections involved;
- a listing of involved parties who can be contacted for further information (including addresses and phone numbers).

Subsequent to receiving a request for review of a local law or ordinance, the Department will contact the municipality involved and provide them with an opportunity to respond.

Municipalities

A request for review must be provided in writing and include at least the following information:

- the identification of the agricultural district(s) affected;
- a description of the specific law or proposed law and how farm buildings, equipment or practices are or may be affected
- a copy of the complete local law or ordinance and identification of the specific section or sections involved;
- a listing of involved parties who can be contacted for further information (including addresses and phone numbers).

ANALYSIS

The Department examines several factors in evaluating whether a local law or ordinance is in compliance with Section 305-a. Tests that must be met in each case are as follows:

- **Is the affected farm located within an agricultural district?**

  Section 305-a only applies to farm operations in an agricultural district.

David Paterson
Governor

Patrick Hooker
Commissioner

- **Does the regulated activity encompass farm operations?**

  Section 301(11) of the Agriculture and Markets Law defines "Farm Operation" as meaning: "...the land and on-farm buildings, equipment, manure processing and handling facilities, and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise, including a 'commercial horse boarding operation' as defined in subdivision thirteen of this section and 'timber processing' as defined in subdivision fourteen of this section. Such farm operation may consist of one or more parcels of owned or rented land, which parcels may be contiguous or noncontiguous to each other." The definition of "crops, livestock and livestock products" is found in Section 301(2).

  Only farm operations are protected by Section 305-a. The Department draws on the expertise of its program and legal staff, and other resources as needed, to make these determinations.

- **Does the local law or ordinance unreasonably restrict or regulate?**

  The evaluation of reasonableness consists of two parts: 1) whether the law or ordinance is unreasonably restrictive "on its face," and 2) whether it is unreasonably restrictive as applied to a particular situation.

  Some laws or ordinances are so vague that they inhibit farmers from undertaking certain activities or constructing certain buildings out of concern for violating the law or ordinance. In this case, it is possible that the law or ordinance, because of its vague construction, could be construed as unreasonably restricting a farm operation.

  An ordinance may also appear reasonable in the abstract, but may unreasonably restrict or regulate a particular farmer. For example, many zoning ordinances impose setback requirements for structures in the interest of public safety or even aesthetics. These setbacks may be entirely reasonable under usual conditions, but may be construed as being unreasonably restrictive if applied to a farmer who, for example, constructs a building on a dead-end street, shielded from view, and near the only available water source.

  A reasonable exercise of authority in one locality may translate into an unduly burdensome restriction on farming in another. In sum, reasonableness depends on the totality of circumstances in each case.

- **Is the public health or safety threatened by the regulated activity?**

  Even if the Department determines that a particular law or ordinance is unreasonably restrictive, it must also ask whether the public health or safety is threatened by the regulated activity. If so, it could withstand the limitations of Section 305-a.

REMEDIES

If the Department determines that a local law or ordinance unreasonably restricts or regulates farm operations in an agricultural district, it will notify the involved municipality to that effect and attempt to arrive at a mutually satisfactory resolution. In the case where a municipality rejects the Department's attempts at remediation, the Commissioner of Agriculture and Markets is explicitly authorized by law to bring an action to enforce Section 305-a. Alternatively, the Commissioner may issue an Order to comply, pursuant to Section 36 of the Agriculture and Markets Law.

Requests for general information or assistance, and formal written complaints alleging violations of Section 305-a, should be directed to:

Agricultural Districts Program Administrator
New York State Department of Agriculture and Markets
10B Airline Drive
Albany, NY 12235

Phone: (518) 457-2713

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New York State
Department of Agriculture and Markets
10B Airline Drive
Albany, New York 12235
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CIRCULAR 1500

ARTICLE 25AAA -- AGRICULTURAL AND FARMLAND PROTECTION PROGRAMS

AGRICULTURE AND MARKETS LAW
AS AMENDED by Chapter 527 of the Laws of 2005,
effective on February 12, 2006

ARTICLE 25AAA - AGRICULTURAL AND FARMLAND PROTECTION PROGRAMS

Sec.

321. Statement of legislative findings and intent

It is hereby found and declared that agricultural lands are irreplaceable state assets. In an effort to maintain the economic viability, and environmental and landscape preservation values associated with agriculture, the state must explore ways to sustain the state's valuable farm economy and the land base associated with it. External pressures on farm stability such as population growth in non-metropolitan areas and public infrastructure development pose a significant threat to farm operations, yet are the pressures over which farmers have the least control. Local initiatives in agricultural protection policy, facilitated by the agricultural districts program established in article twenty-five-AA of this chapter, have proved effective as a basic step in addressing these pressures. In an effort to encourage further development of agricultural and farmland protection programs, and to recognize both the crucial role that local government plays in developing these strategies, plus the state constitutional directive to the legislature to provide for the protection of agricultural lands, it is therefore declared the policy of the state to promote local initiatives for agricultural and farmland protection.

322. Definitions

When used in this article:

1. "Agricultural and farmland protection" means the preservation, conservation, management or improvement of lands which are part of viable farming operations, for the purpose of encouraging such lands to remain in agricultural production.

2. "Plan" means the county and municipal agricultural and farmland protection plan as provided for in this article.

3. "Program" means the state agricultural and farmland protection program created pursuant to the provisions of this article.

323. State agricultural and farmland protection program

The commissioner shall initiate and maintain a state agricultural and farmland protection program to provide financial and technical assistance, within funds available, to counties and municipalities for their agricultural and farmland protection efforts. Activities to be conducted by the commissioner shall include, but not be limited to:

1. developing guidelines for the creation by counties and municipalities of agricultural and farmland protection plans;

2. providing technical assistance to county agricultural and farmland protection boards, as established in article twenty-five-AA of this chapter, and municipalities;

3. administering state assistance payments to county agricultural and farmland protection boards and municipalities;

4. disseminating information to county and municipal governments, owners of agricultural lands and other agricultural interests about the state agricultural and farmland protection program established pursuant to this article;

5. reporting biennially to the governor and the legislature regarding the activities of the commissioner, the types of technical assistance rendered to county agricultural and farmland protection boards and municipalities, and the need to protect the state's agricultural economy and land resources.

324. County agricultural and farmland protection plans

1. County agricultural and farmland protection boards may develop plans, in cooperation with the local soil and water conservation district and soil conservation service, which shall include, but not be limited to:

a) the location of any land or areas proposed to be protected;

b) an analysis of the following factors concerning any areas and lands proposed to be protected:

i) value to the agricultural economy of the county;
ii) open space value;
iii) consequences of possible conversion; and
iv) level of conversion pressure on the lands or areas proposed to be protected; and

c) a description of the activities, programs and strategies intended to be used by the county to promote continued agricultural use.

2. The county agricultural and farmland protection board shall conduct at least one public hearing for public input regarding such agricultural and farmland protection plan, and shall thereafter submit such plan to the county legislative body for its approval.

3. The county agricultural protection plan must be submitted by the county to the commissioner for approval.

324-a. Municipal agricultural and farmland protection plans

1. Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers. These plans shall include, but not be limited to:
a) the location of any land or areas proposed to be protected;

b) an analysis of the following factors concerning any areas and lands proposed to be protected;

i) value to the agricultural economy of the municipality;
ii) open space value;
iii) consequences of possible conversion; and
iv) level of conversion pressure on the lands or areas proposed to be protected; and

c) a description of activities, programs and strategies intended to be used by the municipality to promote continued agricultural use, which may include but not be limited to revisions to the municipality's comprehensive plan pursuant to paragraph (a) of subdivision two of section two hundred seventy-two-a of the town law and land use regulations as defined in paragraph (b) of subdivision two of section two hundred seventy-two-a of the town law as appropriate.

2. The municipality shall conduct at least one public hearing for public input regarding such agricultural and farmland protection plan, and shall thereafter submit such plan to the municipal legislative body and the county agricultural farmland protection board for approval.

3. The municipal agricultural and farmland protection plan must be submitted by the municipality to the commissioner for approval.

325. Agricultural protection

1. Subject to the availability of funds, a program is hereby established to finance through state assistance payments the state share of the costs of county and municipal agricultural and farmland protection activities. State assistance payments for planning activities shall not exceed fifty thousand dollars to each county agricultural and farmland protection board or one hundred thousand dollars to two such boards applying jointly, and shall not exceed fifty percent of the cost of preparing an agricultural and farmland protection plan. State assistance payments for planning activities shall not exceed twenty-five thousand dollars to each municipality other than a county or fifty thousand dollars to two such municipalities applying jointly, and shall not exceed seventy-five percent of the cost of preparing an agricultural and farmland protection plan. State assistance payments for implementation of approved agricultural and farmland protection plans may fund up to seventy-five percent of the cost of implementing the county plan or a portion of the plan for which state assistance payments are requested.

2. a) A county agricultural and farmland protection board, two such boards acting jointly, a municipality or two such municipalities acting jointly shall make application to the commissioner in such manner as the commissioner may prescribe. Application for state assistance payments for planning activities may be made at any time after the county agricultural and farmland protection board has formed and has elected a chairperson. A county agricultural and farmland protection board may make application for state assistance payments for plan implementation at any time after the commissioner has approved a county agricultural and farmland protection plan pursuant to section three hundred twenty-four of this article. Application made jointly by two county agricultural and

farmland protection boards may be made after such agricultural and farmland protection plan is approved by each county pursuant to the provisions of section three hundred twenty-four of this article.

b) Within a county, a municipality which has in place a local farmland protection plan may apply and shall be eligible for agricultural protection state assistance payments to implement its plan, or a portion of its plan, provided the proposed project is endorsed for funding by the agricultural and farmland protection board for the county in which the municipality is located and that any plan developed on or after January first, two thousand six complies with section three hundred twenty-four-a of this article. State assistance payments to such municipalities shall not exceed seventy-five percent of the cost of implementing the local plan or portion of the plan for which state assistance has been requested. The commissioner may require such information or additional planning as he or she deems necessary to evaluate such a request for state assistance.

c) In evaluating applications for funding, the commissioner shall give priority to projects intended to preserve viable agricultural land as defined in section three hundred one of this chapter; that are in areas facing significant development pressure; and that serve as a buffer for a significant natural public resource containing important ecosystem or habitat characteristics.

3. Upon receipt of a request for state assistance, the commissioner shall review the request, consult with the advisory council on agriculture and, within ninety days from the receipt of a complete application, shall make a determination as to whether or not such projects shall receive state assistance.

326. Promulgation of rules and regulations

The commissioner is empowered to promulgate such rules and regulations and to prescribe such forms as he or she deems necessary to effectuate the purposes of this article.

PROCESSING AN AGRICULTURAL DATA STATEMENT
(Pursuant to Section 305-a of the Agriculture and Markets Law)

- Any application requiring:

  Special use permit
  Site plan approval
  Use variance or
  Subdivision approval

  Which requires approval by:

  A Planning Board
  Zoning Board of Appeals
  Town Board or
  Village Board of Trustees

  Must submit an Agricultural Data Statement (ADS) if the proposed project occurs on property within an agricultural district containing a farm operation or on property with boundaries within 500 feet of a farm operation located within an agricultural district.

- Content of an Agricultural Data Statement requires:

  - Name and address of applicant,
  - Description of the proposed project and its location,
  - Name and address of any owner of land within the agricultural district, which land contains farm operations and is located within 500 feet of the boundaries of the property upon which the project is proposed
  - A tax map or other map showing the site of the proposed project relative to the location of the farm operations identified in the ADS.

- The Clerk of the appropriate governmental entity is required to mail a written notice containing a description of the proposed project and its location to owners of land as identified by the applicant in the ADS.

- The local reviewing board must evaluate and consider the ADS to determine the possible impacts of the proposed project may have on the functioning of farm operations within the subject agricultural district.

Procedural Considerations

- A map of the town's agricultural district(s) should be well displayed within the municipal office where land use applications are submitted. The map will benefit both the applicant and municipal review officer in determining the

location of the subject parcel. An Agricultural District map[1] can be obtained from either the County Planning Department or Clerk of the County Legislative Body.

- The local reviewing board should ascertain present and future farming conditions to ensure the proposed land use does not conflict with current or future farming activities. A farmer's knowledge of local agricultural conditions is fundamental for the local reviewing board's evaluation and determination of appropriate mitigation measures and whether the action proposed will conflict with farming practices.

- The County Agricultural and Farmland Protection Board may assist local reviewing boards in project evaluation. Members of the Board include the County Planning Directors, a County Cooperative Extension Agent and the Chair of the County Soil and Water Conservation District's Board of Directors.

- A copy of the completed ADS and action by the local reviewing board should be submitted to the County Agricultural and Farmland Protection Board for its records.

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1 Tax map identification numbers of all parcels within a district are listed and are on file at either the County Real Property Tax Office or the County Clerk's Office.

AGRICULTURAL DATA STATEMENT

1. Name and address of applicant:

_____

_____

_____

2. Location of the proposed action:

_____

3. Description of the proposed action to include: (1) Size of parcel or acreage to be acquired and tax map identification number of tax parcel(s) involved; (2) The type of action proposed (e.g., single-family dwelling or subdivision, multi-family development, apartment complex, commercial or industrial facility, school, community or public service facility, airport, etc.) and (3) project density. **[Please provide this information on the reverse side of this application and attach additional description as necessary.]**

4. Name, address, telephone number and type of farm of owner(s) of land within the agricultural district which land contains farm operation(s) and upon which the project is proposed or which is located within 500 feet of the boundary of the property upon which the project is proposed:

   A. Name:_____
   Address & Telephone #:_____
   Type of farm:_____

   B. Name:_____
   Address & Telephone #: _____
   Type of farm:_____

   C. Name:_____
   Address & Telephone #:_____
   Type of farm:_____

   D. Name:_____
   Address & Telephone #:_____
   Type of farm:_____

5. Tax map or other map showing the site of the proposed project relative to the location of farm operations identified in the ADS.

NYS Town Law

§ 283-a. Coordination with agricultural districts program.

1. Policy of local governments. Local governments shall exercise their powers to enact local laws, ordinances, rules or regulations that apply to farm operations in an agricultural district in a manner which does not unreasonably restrict or regulate farm structures or farming practices in contravention of the purposes of article twenty-five-AA of the agriculture and markets law, unless such restrictions or regulations bear a direct relationship to the maintenance of public health or safety.

2. Agricultural data statement; submission, evaluation. Any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval by the town board, planning board, or zoning board of appeals pursuant to this article, that would occur on property within an agricultural district containing a farm operation or on property with boundaries within five hundred feet of a farm operation located in an agricultural district, shall include an agricultural data statement. The town board, planning board, or zoning board of appeals shall evaluate and consider the agricultural data statement in its review of the possible impacts of the proposed project upon the functioning of farm operations within such agricultural district. The information required by an agricultural data statement may be included as part of any other application form required by local law, ordinance or regulation.

3. Agricultural data statement; notice provision. Upon the receipt of such application by the planning board, zoning board of appeals, or town board, the clerk of such board shall mail written notice of such application to the owners of land as identified by the applicant in the agricultural data statement. Such notice shall include a description of the proposed project and its location, and may be sent in conjunction with any other notice required by state or local law, ordinance, rule or regulation for the said project. The cost of mailing said notice shall be borne by the applicant.

4. Agricultural data statement; content. An agricultural data statement shall include the following information: the name and address of the applicant; a description of the proposed project and its location; the name and address of any owner of land within the agricultural district, which land contains farm operations and is located within five hundred feet of the boundary of the property upon which the project is proposed; and a tax map or other map showing the site of the proposed project relative to the location of farm operations identified in the agricultural data statement.

5. Notice to county planning board or agency or regional planning council. The clerk of the town board, planning board, or zoning board of appeals shall refer all applications requiring an agricultural data statement to the county planning board or agency or regional planning council as required by sections two hundred thirty- nine-m and two hundred thirty-nine-n of the general municipal law.

Agriculture and Markets Law
Article 25 AA – Agricultural Districts

305-a. Coordination of local planning and land use decision-making with the agricultural districts program

1. Policy of local governments.

   a. Local governments, when exercising their powers to enact and administer comprehensive plans and local laws, ordinances, rules or regulations, shall exercise these powers in such manner as may realize the policy and goals set forth in this article, and shall not unreasonably restrict or regulate farm operations within agricultural districts in contravention of the purposes of this article unless it can be shown that the public health or safety is threatened.

   b. The commissioner, upon his or her own initiative or upon the receipt of a complaint from a person within an agricultural district, may bring an action to enforce the provisions of this subdivision.

2. Agricultural data statement; submission, evaluation. Any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval by a planning board, zoning board of appeals, town board, or village board of trustees pursuant to article sixteen of the town law or article seven of the village law, that would occur on property within an agricultural district containing a farm operation or on property with boundaries within five hundred feet of a farm operation located in an agricultural district, shall include an agricultural data statement. The planning board, zoning board of appeals, town board, or village board of trustees shall evaluate and consider the agricultural data statement in its review of the possible impacts of the proposed project upon the functioning of farm operations within such agricultural district. The information required by an agricultural data statement may be included as part of any other application form required by local law, ordinance or regulation.

3. Agricultural data statement; notice provision. Upon the receipt of such application by the planning board, zoning board of appeals, town board or village board of trustees, the clerk of such board shall mail written notice of such application to the owners of land as identified by the applicant in the agricultural data statement. Such notice shall include a description of the proposed project and its location, and may be sent in conjunction with any other notice required by state or local law, ordinance, rule or regulation for the said project. The cost of mailing said notice shall be borne by the applicant.

4. Agricultural data statement; content. An agricultural data statement shall include the following information: the name and address of the applicant; a description of the proposed project and its location; the name and address of any owner of land within the agricultural district, which land contains farm operations and is located within five hundred feet of the boundary of the property upon which the project is proposed; and a tax map or other map showing the site of the proposed project relative to the location of farm operations identified in the agricultural data statement.

TOWN VILLAGE CITY OF _____ Application #_____
(circle one)

Agricultural Data Statement

Date _____

Instructions: This form must be completed for any application for a special use permit, site plan approval, use variance or a subdivision approval requiring municipal review that would occur on property within 500 feet of a farm operation located in a NYS Dept. of Ag & Markets certified Agricultural District.

Applicant	Owner if Different from Applicant
Name: _____ Address: _____ _____	Name: _____ Address: _____ _____

1. Type of Application: ☐ Special Use Permit; ☐ Site Plan Approval ; ☐ Use Variance;
   (circle one or more) ☐ Subdivision Approval

2. Description of proposed project:_____
_____
_____
_____

3. Location of project: Address: _____
   Tax Map Number (TMP) _____

4. Is this parcel within an Agricultural District? ☐ NO ☐ YES (Check with your local assessor if
5. If YES, Agricultural District Number_____ you do not know)
6. Is this parcel actively farmed? ☐ NO ☐ YES
7. List all farm operations within 500 feet of your parcel. Attach additional sheets if necessary.

Name: _____ Address: _____ _____ Is this parcel actively farmed? ☐ NO ☐ YES	Name: _____ Address: _____ _____ Is this parcel actively farmed? ☐ NO ☐ YES
Name: _____ Address: _____ _____ Is this parcel actively farmed? ☐ NO ☐ YES	Name: _____ Address: _____ _____ Is this parcel actively farmed? ☐ NO ☐ YES

_____ _____
Signature of Applicant Signature of Owner (if other than applicant)

Reviewed by: _____ _____
Signature of Municipal Official Date

NOTE TO REFERRAL AGENCY: County Planning Board review is required. A copy of the Agricultural Data Statement must be submitted along with the referral to the County Planning Department.

Appendix D
Solar Farm Considerations

Thinking About a Solar Lease? 5 Things You Should Consider

Katelyn Walley-Stoll, Farm Business Management Specialist with Cornell Cooperative Extension's Southwest New York Dairy, Livestock, and Field Crops Program

Rural landowners across the Southwest New York Region, and New York State in general, have been receiving invitations from solar companies to lease their land for utility scale solar arrays. While this has been around for several years, the general trend of increasing renewable energy sources has spurred lots of conversations about the potential benefits, pitfalls, and logistics of hosting solar arrays on your property.

One thing to note is that solar leases are rarely something landowners should feel pressured to rush right into. Careful consideration, consultation with legal counsel, and an evaluation of the role such a lease would play into a farm business plan are all important steps before signing on the dotted line. Here are 5 things to consider as you think about leasing your land for solar.

1. **The Benefits of Solar Leases**: Solar energy is an important part of reducing carbon emissions and meeting statewide, national, and global efforts of increasing renewable energy sources. As a landowner, a solar lease can also provide a steady income stream, ranging from $250 - $2500/acre/year. While this isn't as profitable on a per acre basis as other production options, for unused or marginal land, solar leases can help diversify farm revenues. There are several companies in our area recruiting land parcels for solar development, which could work to your advantage! Research and contact developers in your area for the best lease rates and agreements.

2. **Solar Leases and Your Farm Business Plan**: Having a farm business plan in place is so much more than a dusty binder sitting on a shelf in the farm office. A business plan tells you where you're going, why you're doing what you're doing, and what other types of opportunities you'd like to explore. Depending on your farm's business plan, stage in the business life cycle, and succession planning goals, solar may help spur new growth or hinder new investment opportunities. A solar lease can affect how you might use that land in the future, which could include mortgages, property sale, production diversification, expansion, or generational use.

3. **You'll Need Legal Counsel:** Lease agreements are living documents that can be adapted to meet your needs. This could range from including provisions that protect actively farming around the solar arrays (apiaries, small ruminant grazing and market garden production), hunting, right of ways, insurance and liability concerns, and more. Leases can range in length from 20 to 40+ years, and it's important to have a sound and fair lease in place from the beginning. There's very little chance of changing the lease terms once it's in place.

4. **Effect on Property Taxes:** If you're currently receiving an Agricultural Assessment, or other property tax reduction, taking the land out of production agriculture and into a solar array may require paying some of those reductions back and conversion penalties (you can typically negotiate that the solar company pays these costs). A solar array can sometimes increase the value of your property and your tax obligations. Once the land is in a lease, the solar developer should also be responsible for any real property taxes, PILOT payments, etc. There is a renewable energy tax

exemption that will protect increases for a 15 year period, but this often expires before the lease does – and many towns in our region have opted out of this program. Be sure to research potential tax implications prior to negotiating the lease agreement.

5. **"THE UGLY"**: You may have heard some horror stories related to array construction, maintenance, and disassembly. Much of this can be negotiated with sound legal counsel who is familiar with solar arrays into your lease agreement. However, things do (and probably will) happen and you should be prepared to handle these issues on your property. Some areas of concern include:

- Construction debris during the installation phase, traffic, and potential interruptions to your farming practices.

- Dismantling the solar equipment at the end of the lease and the oversight of that process, which should be laid out in very specific terms in the lease. Be sure to include specifications of the quality of the property (returning it back to production).

- Security, assurances, and/or bonds in place to cover the termination of the lease and equipment in the case of developer bankruptcy or missed payments.

- Company transitions with the nature of the renewable energy industry, your lease will likely change hands several times and you will need to navigate those ownership changes.

- Local zoning approvals may be a breeze or a community uproar depending on your area and could delay a potential project.

- Solar leases and their potential impact on our agricultural industry can be both and exciting and an intimidating topic of conversation. While the situation will vary from farm to farm, developer to developer, and community to community – the most important thing will be reaching out to sound legal counsel to negotiate a fair agreement and reflecting on your farm's business goals.

For more information, visit any of these great resources below:

- Leasing Your Farmland For Wind and Solar Energy Development from New York Farm Bureau.

- Utility Scale Solar – What You Should Know by Timothy X. Terry from Cornell PRO-DAIRY

- Landowner Considerations for Solar Land Leases from NYSERDA

- Solar Installations in Agricultural Districts from NYSERDA

- Solar Leasing Workshop Materials from CCE Herkimer County

Written by Katelyn Walley-Stoll, Cornell University Cooperative Extension, Southwest New York Dairy, Livestock, and Field Crops Program. For more information, contact 716-640-0522, kaw249@cornell.edu, https://swnydlfc.cce.cornell.edu/. SWNYDLFC is a partnership between Cornell University and the CCE Associations of Allegany, Cattaraugus, Chautauqua, Erie, and Steuben counties. CCE is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities. ■

MATT SIMON SCIENCE OCT 14, 2021 7:00 AM

Growing Crops Under Solar Panels? Now There's a Bright Idea

In the new scientific (and literal) field of agrivoltaics, researchers are showing how panels can increase yields and reduce water use on a warming planet.

COURTESY OF AARON BUGAJ

IN JACK'S SOLAR Garden in Boulder County, Colorado, owner Byron Kominek has covered 4 of his 24 acres with solar panels. The farm is growing a huge array of crops underneath them—carrots, kale, tomatoes, garlic, beets, radishes, lettuce, and more. It's also been generating enough electricity to power 300 homes. "We decided to go about this in terms of needing to figure out how to make more money for land that we thought should be doing more," Kominek says.

Rooftops are *so* 2020. If humanity's going to stave off the worst of climate change, people will need to get creative about where they put solar panels. Now scientists are thinking about how to cover canals with them, reducing evaporation while generating power. Airports are filling up their open space with sun-eaters. And space doesn't get much more open than on a farm: Why not stick a solar array in a field and plant crops underneath? It's a new scientific (and literal) field known as agrivoltaics—agriculture plus photovoltaics—and it's not as counterintuitive as it might seem.

Yes, plants need sunlight, but some need less than others, and indeed get stressed by too many photons. Shading those crops means they will require less water, which rapidly evaporates in an open field. Plus, plants "sweat," which cools the panels overhead and boosts their efficiency.

"It is a rare win-win-win," says Greg Barron-Gafford, an earth system scientist at University of Arizona who's studying agrivoltaics. "By growing these crops in the shade of solar arrays, we reduce the amount of that intense sunlight that bakes off the water and stresses out the plant." Barron-Gafford is among the recipients of a new $10 million grant from the USDA's National Institute of Food and Agriculture to research agrivoltaics for different regions, crops, and climates.

Barron-Gafford has been running experiments to quantify several variables—like growth, water use, and energy production—to determine which crops might benefit most. For instance, he's grown salsa ingredients—cilantro, peppers, and tomatoes—and found that they grow just as well, if not better, under solar panels than in the open. They also only use half the water. ("Think if you spilled your water bottle in the shade versus the sun," says Barron-Gafford.) He also found that the panels significantly reduce air temperatures, which would benefit farmworkers tending to

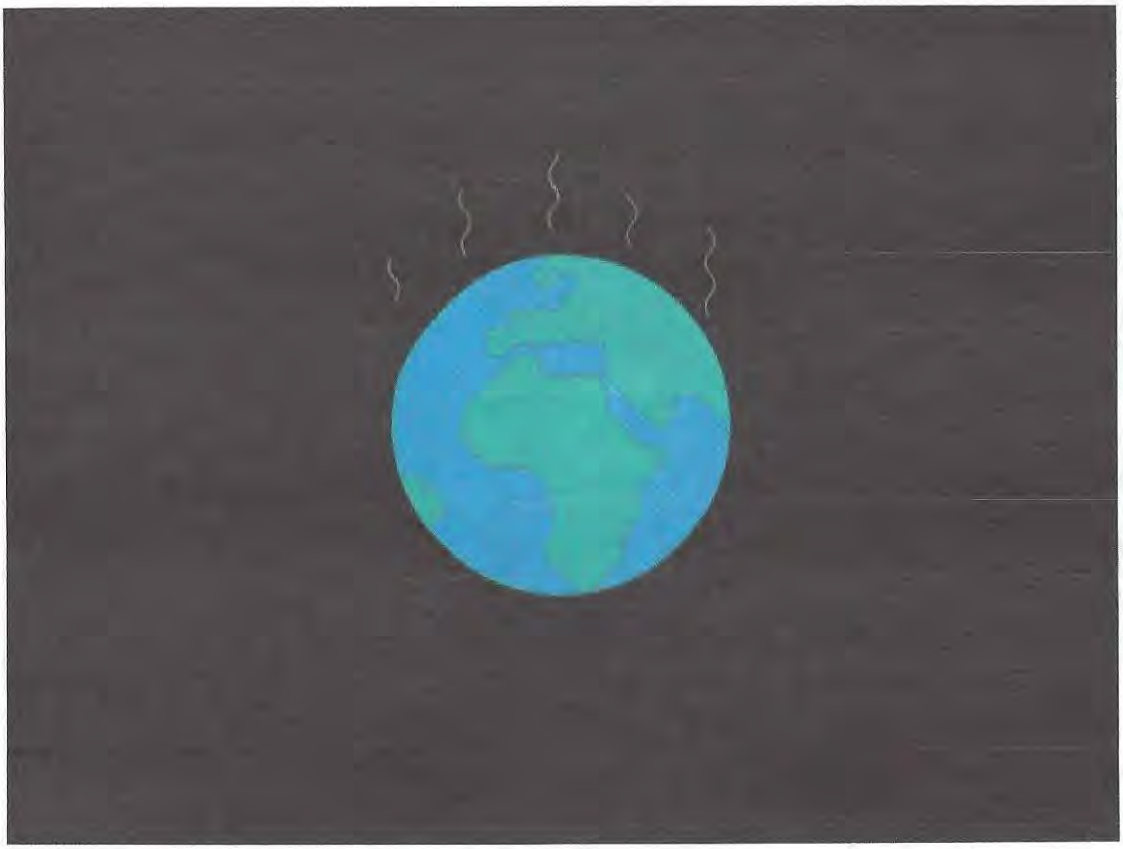
the plants. His work suggests that the panels might act as a protective bubble to shield crops from extreme heat associated with climate change, which overwhelms crops and decreases their yields.

COURTESY OF GREG BARRON-GAFFORD

Heavy precipitation that can damage crops is also on the rise, since a warmer atmosphere holds more moisture. "In times when there is extreme heat or extreme precipitation, by protecting plants in this manner, it can actually benefit them," says Madhu Khanna, an economist at the University of Illinois, Urbana-Champaign, who also won funding from the USDA's new agrivoltaics grant. "So that's another factor that we want to look at."

Khanna will be studying what the ideal solar array might be for a particular crop, for instance, if it needs bigger or smaller gaps between panels to let sunlight pass through. Height, too, is an issue: Corn and wheat would need taller panels, while shrubby soybeans would be fine with a more squat variety.

Thanks to those gaps, crops grown under solar panels aren't bathed in darkness. But, generally speaking, the light is more diffuse, meaning it's bouncing off of surfaces before striking the plants. This replicates a natural forest environment, in which all plants, save for the tallest trees, hang out in the shade, soaking up any sunbeams that break through.



The WIRED Guide to Climate Change

The world is getting warmer, the weather is getting worse. Here's everything you need to know about what humans can do to stop wrecking the planet.

BY KATIE M. PALMER AND MATT SIMON

Barron-Gafford has found that a forestlike shading under solar panels elicits a physiological response from plants. To collect more light, their leaves grow bigger than they would if planted in an open field. He's seen this happen in basil, which would increase that crop's yield. Barron-Gafford has also found that the pepper *Capsicum annuum*, which grows in the shade of trees in the wild, produces three times as much fruit in an agrivoltaic system. Tomato plants also grow more fruit. This is likely due to the plants being less stressed by the constant bombardment of sunlight, to which they're not evolutionarily adapted.

But every crop is going to be different, so scientists have to test each to see how they react to shade. "For example, we probably wouldn't recommend that somebody plant summer squash directly in the deepest shade, directly under a panel," says Mark Uchanski, a horticultural scientist at Colorado State University who's studying agrivoltaics and tested that exact scenario. "The better location for that might be further out toward the edges where it's more likely to get a little bit more sun, because we did see a yield decrease in that case."

While setting up the panels entails some up-front costs, they might actually make farmers some money, as Kominek told Grist in this 2020 story before his panels were in place. They'd produce energy to run the farm, and the farmer can sell any surplus back to a utility. And since some plants—like those salsa ingredients in Barron-Gafford's experiments—will use less water, that can reduce irrigation expenses. "If we can actually allow farmers to diversify their production and get more out of the same land, then that can benefit them," says Khanna. "Having crops and solar panels is more beneficial for the environment than solar panels alone."

This kind of setup also cools the solar panels in two ways: Water evaporating from the soil rises up towards the panels, and plants release their own water. This is dandy for the panels' efficiency, because they actually perform worse when they get too hot. They generate an electric current when the sun's photons knock electrons

out of atoms, but if they overheat, the electrons get overexcited and don't generate as much electricity when they're dislodged.

COURTESY OF GREG BARRON-GAFFORD

And as with putting solar panels above canals, using farmland pulls off the neat trick of not taking up any extra land. To deploy a traditional solar array, you'd need to clear space first. But canals and agricultural fields are already in use. "It's this big macro-trigger to kind of get people to the table and think about: What does rural economic development look like, and what's the future of agriculture?" says Andrea Gerlak, a social scientist at the University of Arizona, who's working with Barron-Gafford on the deployment of agrivoltaics. "If it allows smart agriculture, sustainable agriculture, and it uses less water, it's this big trigger to get people talking."

But agrivoltaics won't work for every farm. Solar panels remain a significant investment, especially on a field-sized scale. Maneuvering around them with heavy harvesting equipment will also be a challenge, so Khanna says the arrays should be designed as flexible systems. "The idea would be that you have these panels that are not just going to be fixed at a given angle and stationary," says Khanna. "They'll actually be able to rotate and become vertical, and let the equipment pass through."

Kominek adds that the United States is seeing a massive transfer of farmland from an older generation to a younger one, which has to decide what to do with their inheritance. Faced with the difficulties of drought and heat, the temptation might be to say, "To hell with crops," and cover a farm entirely with solar panels. But he and Barron-Gafford don't think it has to be an either-or proposition.

"The question for policymakers and landowners is, are we going to be taking out a lot of arable land—land where we could have chickens, cows, vegetables, perennials, and other things—and just putting in solar panels and having weeds grow underneath them?" Kominek asks. "Or are we going to create regulations that help to keep that soil active, to help it keep doing productive things, like it has been doing over the previous decades or centuries?"

Barron-Gafford also points out that agrivoltaics need not be limited to the kinds of crops people eat. A farmer might let native grasses grow wild under the panels, providing food for livestock, which would also benefit from the shade. Or they might promote the growth of plants for native pollinators like bees. With the right management, that land could pull double duty as a synthetic forest—just because it's shaded, doesn't mean life can't flourish underneath.

"I think everything likes a little bit of shade," says Kominek. "There's quite a variety of crops that enjoy it. And when it's 100 degrees outside, *I* enjoy the shade."

Agrivoltaics: Coming Soon to a Farm Near You?

In 2020, U.S. renewable energy production (and consumption) hit a record high. The increase was mainly driven by more solar and wind.

Despite this, renewable energy still only accounts for 12% of total U.S. energy consumption. Meeting the goal of "a net-zero emissions economy by 2050", will require much more. According to a recent U.S. Department of Energy report, *Solar Futures Study*, "it is now possible to envision—and chart a path toward—a future where solar provides 40% of the nation's electricity by 2035." In that future, farmers and farmland will play a key role. One issue with renewable power is that it requires far more land per unit of power produced than fossil fuels. While many may favor renewable energy in the U.S. – that sentiment often changes when projects are proposed close to home. An energy system built on renewables – like solar or wind – would mean locating sites and infrastructure a lot closer to where those resources are either abundant and/or easily distributed. And, in many cases, this would mean areas that have not yet seen energy production or infrastructure in their own community backyards before.

How much land is needed?

According to the *Solar Futures Study*, a lot of land will be needed. By 2050, ground-based solar could need about 0.5% of the land in the contiguous U.S. To put this into perspective, about 5% of land is already in urban areas and roads and another 0.1% in golf courses. Agriculture occupies about 43% of the lower forty-eight states surface area. The report points to prioritizing disturbed lands (8% of land) and dual-use land opportunities. Examples of disturbed lands include invasive species-impacted lands, non-vegetated lands such as quarries or gravel pits, and lands identified as contaminated but remediated for some forms of reuse. Agriculture will be an important dual-use case.

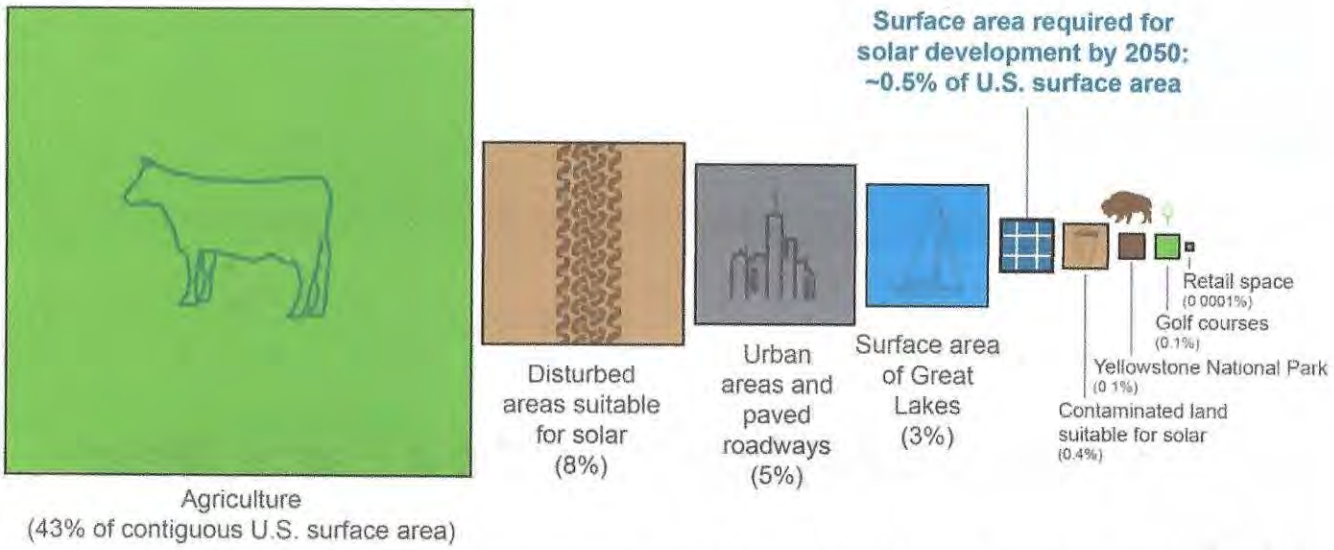


Figure 8 - 7. Maximum land use required for solar in 2050 in the *Solar Futures* scenarios compared with solar-suitable disturbed and contaminated areas and examples of other U.S. areas

Amounts of disturbed and contaminated lands depicted here represent the amounts suitable for solar energy development calculated in the *Solar Futures Study*. Sources: (EPA 2020; USDA 2014; LANDFIRE, n.d.).

The idea is called: Agrivoltaics

Agrivoltaics is the use of land for both agriculture and solar photovoltaic energy generation. It's also sometimes referred to as *agrisolar*, *dual use solar*, *low impact solar*. *Solar grazing* is a variation where livestock graze in and around solar panels. This system looks at agriculture and solar energy production as compliments to the other instead of as competitors. By allowing working lands to stay working, agrivoltaic systems could help farms diversify income. Other benefits include energy resilience, and a reduced carbon footprint.

A symbiotic 'cooling' relationship occurs when growing crops (or native grasses and forbs) under solar panels. Together, each helps keep the other cool. While all crops need sunlight to grow, too much can cause some to get stressed, especially cool season plants such as brassicas. Plants growing under the diffused shade of photovoltaic panels are buffered from the day's most intense rays. Shade reduces air temperature and the amount of water evaporating from soils; a win-win for both plants and farm workers on hot summer days. The plants in turn give off water vapor that helps to naturally cool the photovoltaic panels from below, which can increase panel efficiency.

Agrivoltaics in the Northeast

The largest agrivoltaics site in the U.S. is on a blueberry farm in Rockport, Maine. This new 10-acre, 4.2-megawatt project is the first of its kind in the state, and will offer critical insights and experience. Researchers from University of Maine Cooperative Extension are evaluating the impact of panel installation on the blueberry plants. They will also see how the crop fares over time under the solar array.

Another form of agrivoltaics seen across the Northeast integrates livestock and pastures. This concept is commonly referred to as 'solar grazing.' It has taken off in recent years as a win-win-win for farmers, solar companies, and the environment. Traditionally, the grasses that would grow up between solar panels need to be mowed to prevent the plants from shading the panels and reducing their efficiency. However, when sheep can be used, the high maintenance costs associated with mowing are eliminated for the solar company. At the same time, local shepherds can benefit from an added revenue stream to graze their

sheep at these sites. Removing mowing operations not only keeps grassy areas safer for wildlife (i.e., nesting ground birds), but means less fuels and emissions too.

Check out some of these news stories on solar grazing from around the Northeast:

- At Solar Farms, Sheep come back for Mower [Maine]
- How To Have Your Solar Farm And Keep Your Regular Farm, Too [New Jersey]
- Renewable energy growing among Vermont's animals and crops [Vermont]
- Sheep get to work maintaining Newfield solar array [New York]
- Solar + Sheep, A Love Story

Researchers and farmers around the country are currently experimenting and collecting data on what crops, pollinator plants, and/or livestock situations work best with photovoltaic setups. Agrivoltaic systems can offer farmers many exciting opportunities. How agricultural systems perform, and how project economics shake out is still to be determined. Also to be seen is how states and communities will decide to address policy regulations and/or zoning laws based on this dual land use option.

Agrivoltaics Research

The U.S. Department of Energy is supporting solar development and agriculture with their InSPIRE program. This program is managed by the National Renewable Energy Laboratory (NREL). It seeks to improve the mutual benefits of solar, agriculture, and native landscapes. Currently, there are 22 projects sites across the U.S. These bring together a wide array of researchers, farmers, and industry partners.

NREL research projects located in the Northeast:

- University of Massachusetts Amherst: Researchers are studying the effects of co-locating solar energy panels and agriculture operations at up to eight different farms across the state. This research will help farmers and communities make informed decisions about solar.

- Cornell University: Researchers are looking at the benefits of pollinator-friendly plantings on solar farms. One goal is to see if wildflower plantings on solar sites can increase pollinator populations. Another is to see if wildflower plantings on solar farms encourage pollinators to visit crop flowers. Other Cornell research is looking at how sheep grazing may influence pollinator habitat and sequestration of soil carbon.

Other regional agrivoltaic research projects of note:

- Rutgers University: In June 2021 the Dual-use Solar Act was passed in New Jersey. This act set up a pilot program "to enable a limited number of farmers to have agrivoltaic systems on their property while the technology is being tested, observed and refined." Funds also went to the New Jersey Agricultural Experiment Station to build and study agrivoltaic systems on their research farms.

- University of Vermont: This past fall, UVM Extension's Center for Sustainable Agriculture put on a workshop called, Solar Energy in Vermont's Working Landscape. The event brought together experts and stakeholders to address existing practices and barriers to solar grazing adoption as well as requirements for long-term success in the state. Before this, the Center's pasture program worked with Vermont Agency of Agriculture, Food & Markets and Two Rivers-Ottauquechee Regional Commission. They developed guides for how to "balance the needs of community and farm-scale energy needs with a shared commitment to protecting agricultural lands."

While a lot of research is underway, many questions about agrivoltaic systems persist. Various research and demonstration sites around the country are working to find answers to questions like: *What are the long-term impacts of solar energy infrastructure on soil quality? What crops, in what regions, are best suited for photovoltaic systems? How can both crop and energy systems be optimized? How will livestock (and wildlife) interact with solar energy equipment? What types of business agreements will work best between a solar developer or company and agricultural producer or landowner?*

Funds are available for renewable energy

USDA pilot program

Looking for more information on agrivoltaics?

Online Resources

- National Renewable Energy Laboratory
- UMass Amherst | Clean Energy Extension
- American Solar Grazing Association
- AgriSolar Clearinghouse
- Jack's Solar Garden

Guides, Factsheets, and Webinars

- Farmer's Guide to Going Solar
- A Guide to Solar Energy in Vermont's Working Landscape
- Guide to Farming Friendly Solar
- Solar PV and Agriculture Factsheets
- Agrivoltaics (Dual-Use Solar) Webinar

Media

- Beneath Solar Panels, the Seeds of Opportunity Sprout
- Solar Power and Birds
- Growing Crops Under Solar Panels? Now There's a Bright Idea
- Grassland bird survey poses obstacle for large-scale solar project in Middlebury
- How to Save a Plant Podcast: Sheep + Solar, A Love Story
- Solar Farms Shine a Ray of Hope on Bees and Butterflies
- At Solar Farms, Sheep come back for Mower
- How To Have Your Solar Farm And Keep Your Regular Farm, Too
- Renewable energy growing among Vermont's animals and crops
- Sheep get to work maintaining Newfield solar array
- This Colorado 'solar garden' is literally a farm under solar panels

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Growing Interest in Agrivoltaics

A new study from the College of Agricultural, Consumer and Environmental Sciences (ACES) at the University of Illinois, presents possible solutions and highlights the current challenges of application of agrivoltaics, based on historical data of agricultural land use and current zoning and taxation laws.

"Even if states are promoting policies supportive of the nexus of agriculture and renewable energy, there will often be local pushback," Guarino says. "Especially in rural areas, there can be a lot of **opposition to bringing in new technology on agricultural land,** which is highly valued. For the farmers working that land, it's usually a generational thing, so they are emotionally invested as well. That kind of social tension evolves into legal challenges for agrivoltaics."

Grazing presents yet another way to **lower the costs** of maintaining the solar field, instead of hiring a mowing company, making the sheep do all the work. Moreover, the conversion factor of agricultural land to renewable energy field is **more socially accepted**, since the land doesn't loose its "fertile" properties.

The paper, "Emerging agrivoltaic regulatory systems: A review of solar grazing," is published in the *Chicago-Kent Journal of Environmental and Energy Law*.

SCAPES

Agrivoltaics Project

1101 W. Peabody, Suite 350 (NSRC)

MC-635

Urbana, IL 61801

Agrivoltaics

Agrivoltaics, agrophotovoltaics, agrisolar, or **dual-use solar** is the simultaneous use of areas of land for both solar photovoltaic power generation and agriculture.[1] The coexistence of solar panels and crops implies a sharing of light between these two types of production,[2] so the design of agrivoltaic facilities may require trading off such objectives as optimizing crop yield, crop quality, and energy production. However, in some cases crop yield increases due to the shade of the solar panels mitigating some of the stress on plants caused by high temperatures and UV damage.[3]

The technique was originally conceived by Adolf Goetzberger and Armin Zastrow in 1981,[4] and the word *agrivoltaic* was coined in 2011. Today, agrivoltaic practices and the relevant law vary from one country to another. In Europe and Asia, where the concept was first pioneered, the term *agrivoltaics* is applied to dedicated dual-use technology, generally a system of mounts or cables to raise the solar array some five metres above the ground in order to allow the land to be accessed by farm machinery, or a system where solar paneling is installed on the roofs of greenhouses. The shade produced by such a system can reduce production of some crops, but such losses may be offset by the energy produced. Many experimental plots have been installed by various organisations around the world, but no such systems are known to be commercially viable outside China and Japan. The most important factor in the economic viability of agrivoltaics is the cost of installing the photovoltaic panels. It is calculated that in Germany, the subsidising of such projects' electricity generation by a bit more than 300% (feed-in tariffs (FITs)) can make agrivoltaic systems cost-effective for investors and thus may be part of the future mix of electricity generation.

By 2019, some authors had begun using the term *agrivoltaics* more broadly, so as to include any agricultural activity among existing conventional solar arrays. As an example, sheep can be grazed among conventional solar panels without any modification. And some small projects in the US where beehives are installed at the edge of an existing conventional solar array have been called agrivoltaic systems.[5] Likewise, some conceive agrivoltaics so broadly as to include the mere installation of solar panels on the roofs of barns or livestock sheds.[2]

Agricultural land is the most suitable for solar farms in terms of efficiency: the most profit/power can be generated by the solar industry by replacing farming land with fields of solar panels, as opposed to using barren land. This is primarily because photovoltaic systems in general decrease in efficiency at

higher temperatures, and farmland has generally been created in areas with moisture -the cooling effects of vapour pressure is an important factor in increasing panel efficiency. It is thus expected that future growth of solar power generation will increase competition for farmland in the near future. Assuming a median power potential of 28 W/m^2 as claimed by the California SolarCity power company, one report roughly estimates that covering less than 1% of the world's cropland with conventional solar arrays could generate all the world's present electricity demands.[6]

Sheep under solar panels in Lanai, Hawaii

History

Adolf Goetzberger, founder of the Fraunhofer Institute in 1981, together with Armin Zastrow, theorised about dual usage of arable land for solar energy production and plant cultivation in 1982, which would address the problem of competition for the use of arable land between solar energy production and crops.[4][7] The light saturation point is the maximum amount of photons absorbable by a plant species: more photons will not increase the rate of photosynthesis. Recognising this, Akira Nagashima also suggested combining photovoltaic (PV) systems and farming to use the excess light, and developed the first prototypes in Japan in 2004.[8]

Tomatoes under solar panels in Dornbirn, Austria

The term "agrivoltaic" may have been used for the first time in a 2011 publication.[9] The concept has been called "agrophotovoltaics" in a German report,[10][11] and a term translating as "solar sharing" has been used in Japanese.[8] Facilities such as photovoltaic greenhouses can be considered agrivoltaic systems.

Methods

There are three basic types of agrivoltaics that are being actively researched: solar arrays with space between for crops, stilted solar arrays above crops, and greenhouse solar arrays.[1] All three systems have several variables used to maximize solar energy absorbed in both the panels and the crops. The main variable taken into account for agrivoltaic systems is the tilt angle of the solar panels. Other variables taken into account for choosing the location of the agrivoltaic system are the crops chosen, panel heights, solar irradiance and climate of the area.[1]

System designs

In their initial 1982 paper, Goetzberger and Zastrow published a number of ideas on how to optimise future agrivoltaic installations.[4]

- orientation of solar panels in the south for fixed or east–west panels for panels rotating on an axis,
- spacing between solar panels for sufficient light transmission to ground crops,
- elevation of the supporting structure of the solar panels to homogenize the amounts of radiation on the ground.

Experimental facilities often have a control agricultural area. The control zone is exploited under the same conditions as the agrivoltaic device in order to study the effects of the device on the development of crops.

Fixed solar panels over crops

The most conventional systems install fixed solar panels on agricultural greenhouses, above open fields crops or between open fields crops. It is possible to optimize the installation by modifying the density of solar panels or the inclination of the panels.

Integrated systems

A standalone solar panel integrated system using a hydrogel can pull in water vapor (usually at night) to produce fresh water to irrigate crops which can be enclosed beneath the panel (alternatively it can cool the panel).[12][13]

Pilot plant at Heggelbach Farm in Germany, where different crops are grown under PV modules

Dynamic agrivoltaic

The simplest and earliest system was built in Japan using a rather flimsy set of panels mounted on thin pipes on stands without concrete footings. This system is dismountable and lightweight, and the panels can be moved around or adjusted manually during the seasons as the farmer cultivates the land. The spacing between the solar panels is wide in order to reduce wind resistance.[8]

Some newer agrivoltaic system designs use a tracking system to automatically optimize the position of the panels to improve agricultural production or electricity production.

In 2004 Günter Czaloun proposed a photovoltaic tracking system with a rope rack system. Panels can be oriented to improve power generation or shade crops as needed. The first prototype was built in 2007 in Austria.[14] The company REM TEC deployed several plants equipped with dual-axis tracking systems in Italy and China. They have also developed an equivalent system used for agricultural greenhouses.

In France, Sun'R and Agrivolta companies are developing single-axis tracking systems. According to them, their systems can be adapted to the plant needs. The Sun'R system is east–west axis tracking system. According to the company, complex plant growth models, weather forecasts, calculation and optimization software are used. The device from Agrivolta is equipped with south-facing solar panels that can be removed by a sliding system. A Japanese company has also developed a tracking system to follow the sun.[15]

In Switzerland, the company Insolight is developing translucent solar modules with an integrated tracking system that allows the modules to remain static. The module uses lenses to concentrate light onto solar cells and a dynamic light transmission system to adjust the amount of transmitted light and adapt to agricultural needs.[16]

The Artigianfer company developed a photovoltaic greenhouse whose solar panels are installed on movable shutters. The panels can follow the course of the sun along an east–west axis.[17]

In 2015 Wen Liu from the University of Science and Technology in Hefei, China, proposed a new agrivoltaic concept: curved glass panels covered with a dichroitic polymer film that selectively transmits blue and red wavelengths which are necessary for photosynthesis. All other wavelengths are reflected and concentrated on solar cells for power generation using a dual tracking system. Shadow effects arising from regular solar panels above the crop field are eliminated since the crops continue to receive the blue and red wavelength necessary for photosynthesis. Several awards have been granted for this new type of agrivoltaic, among others the R&D100 prize in 2017.[18]

The difficulty of such systems is to find the mode of operation to maintain the good balance between the two types of production according to the goals of the system. Fine control of the panels to adapt shading to the need of plants requires advanced agronomic skills to understand the development of plants. Experimental devices are usually developed in collaboration with research centers.

Greenhouses with spectrally selective solar modules

Potential new photovoltaic technologies which let through the colors of light needed by the interior plants, but use the other wavelengths to generate electricity, might one day have some future use in greenhouses. There are prototypes of such greenhouses.[19][20][21]

Other

Sheep can be allowed to graze around solar panels, and may sometimes be cheaper than mowing.[22] "Semi-Transparent" PV Panels used in AgriVoltaics,increase the spacing between Solar Cells and use clear backsheets enhance food production below. In this option, the fixed PV Panels enable the east–west movement of the sun to "spray sunlight" over the plants below.. thereby reducing "over-exposure" due to the day long sun.. as in transparent greenhouses... as they generate electricity above.

Effects

The solar panels of agrivoltaics remove light and space from the crops, but they also affect crops and land they cover in more ways. Two possible effects are water and heat.

In northern latitude climates, agrivoltaics are expected to change the microclimate for crops in both positive and negative manners with no net benefit, reducing quality by increasing humidity and disease, and requiring a higher expenditure on pesticides, but mitigating temperature fluctuations and thus increasing yields. In countries with low or unsteady precipitation, high temperature fluctuation and fewer opportunities for artificial irrigation, such systems are expected to beneficially affect the quality of the microclimate.[23]

Water

In experiments testing evaporation levels under solar panels for shade resistant crops cucumbers and lettuce watered by irrigation in a California desert, a 14–29% savings in evaporation was found,[1] and similar research in the Arizona desert demonstrated water savings of 50% for certain crops.[24]

Heat

A study was done on the heat of the land, air and crops under solar panels for a growing season. It was found that while the air beneath the panels stayed consistent, the land and plants had lower temperatures recorded.[1]

Advantages

Photovoltaic arrays in general produce much less carbon dioxide and pollutant emissions than traditional forms of power generation.

Dual use in land for agriculture and energy production could alleviate competition for land resources and allow for less pressure to convert natural areas into more farmland[4] or to develop farmland or natural areas into solar farms.

Initial simulations performed in a paper by Dupraz *et al.* in 2011, where the word 'agrivoltaics' was first coined, calculated that the land use efficiency may increase by 60–70% (mostly in terms of usage of solar irradiance).[1][9]

Dinesh *et al.*'s model claims that the value of solar generated electricity coupled to shade-tolerant crop production created an over 30% increase in economic value from farms deploying agrivoltaic systems instead of conventional agriculture.[25] It has been postulated that agrivoltaics would be beneficial for summer crops due to the microclimate they create and the side effect of heat and water flow control.[26]

Disadvantages

A disadvantage often cited as an important factor in photovoltaics in general is the substitution of food-producing farmland with solar panels.[6][23] Cropland is the type of land on which solar panels are the most efficient.[6] Despite allowing for some agriculture to occur on the solar power plant, agrivoltaics will be accompanied by in drop in production.[23] Although some crops in some situations, such as lettuce in California, do not appear to be affected by shading in terms of yield,[1][6] some land will be sacrificed for mounting structures and systems equipment.[23]

Agrivoltaics will only work well for plants that require shade and where sunlight is not a limiting factor. Shade crops represent only a tiny percentage of agricultural productivity.[1] For instance, wheat crops do not fare well in a low light environment and are not compatible with agrivoltaics.[1] A simulation by Dinesh *et al.* on agrivoltaics indicates electricity and shade-resistant crop production do not decrease significantly in productivity, allowing both to be simultaneously produced. They estimated lettuce output in agrivoltaics should be comparable to conventional farming.[1]

Agrivoltaic greenhouses are inefficient; in one study, greenhouses with half of the roof covered in panels were simulated, and the resulting crop output reduced by 64% and panel productivity reduced by 84%.[27]

A 2016 thesis calculated that investment in agrivoltaic systems cannot be profitable in Germany, with such systems losing some 80,000 euro per hectare per year. The losses are caused by the photovoltaics, with the costs primarily related to the high elevation of PV panels (mounting costs). The thesis calculated governmental subsidies in the form of feed-in tariffs could allow agrivoltaic

plants to be economically viable and were the best method to entice investors to fund such projects, where if the taxpayer paid producers a minimum additional €0.115 euro per kWh above market price (€0.05 in Germany) it would allow for the existence of future agrivoltaic systems.[23]

It requires a large investment, not only in the solar arrays, but in different farming machinery and electrical infrastructure. The potential for farm machinery to damage the infrastructure can also drive up insurance premiums as opposed to conventional solar arrays. In Germany, the high installation costs could make such systems difficult to finance for farmers based on convention farming loans, but it is possible that in the future governmental regulations, market changes and subsidies may create a new market for investors in such schemes, potentially giving future farmers completely different financing opportunities.[23]

Photovoltaic systems are technologically complex, meaning farmers will be unable to fix some things that may break down or be damaged, and requiring a sufficient pool of professionals. In the case of Germany the average increase in labour costs due to agrivoltaic systems are expected to be around 3%.[23] Allowing sheep to graze among the solar panels may be an attractive option to extract extra agriculture usage from conventional solar arrays, but there may not be enough shepherds available,[22] minimum wages are too high to make this idea commercially viable, or profit generated from such a system is too low to compete with conventional sheep farmers in a free market.

Agrivoltaics in the world

Asia

Japan

Japan was the first country to develop of open field agrivoltaics when in 2004 Akira Nagashima developed a demountable structure that he tested on several crops. Removable structures allow farmers to remove or move facilities based on crop rotations and their needs.[8] A number of larger facilities with permanent structures and dynamic systems, and with capacities of several MW, have since been developed.[28][29][30] A 35 MW power plant, installed on 54 ha, started operation in 2018. It consists of panels two metres above the ground at their lowest point, mounted on steel piles in a concrete foundation. The shading rate of this plant is over 50%, a value higher than the 30% shading usually found in the Nagashima systems. Under the panels farmers will cultivate ginseng, ashitaba and coriander in plastic tunnels; ginseng was selected because it requires deep shape. The area was previously used to grow lawn grass for golf courses, but due to golf becoming less popular in Japan, the farming land had begun to be abandoned.[31] A proposal for a solar power plant of 480 MW to be built on the island of Ukujima, part of which would be agrivoltaics, was tendered in 2013. The construction was supposed to begin in 2019.[32]

To obtain permission to exploit solar panels over crops, Japanese law requires farmers to maintain at least 80% of agricultural production. Farmers must remove panels if the municipality finds that they are shading out too much cropland. At the same time, the Japanese government gives out high

Appendix E

American Farmland Trust Cost of Services Study Fact Sheet

FARMLAND INFORMATION CENTER

FACT SHEET

COST OF COMMUNITY SERVICES STUDIES

American Farmland Trust

FARMLAND INFORMATION CENTER
(800) 370-4879
www.farmlandinfo.org

NRCS

DESCRIPTION

Cost of Community Services (COCS) studies are a case study approach used to determine the fiscal contribution of existing local land uses. A subset of the much larger field of fiscal analysis, COCS studies have emerged as an inexpensive and reliable tool to measure direct fiscal relationships. Their particular niche is to evaluate working and open lands on equal ground with residential, commercial and industrial land uses.

COCS studies are a snapshot in time of costs versus revenues for each type of land use. They do not predict future costs or revenues or the impact of future growth. They do provide a baseline of current information to help local officials and citizens make informed land use and policy decisions.

METHODOLOGY

In a COCS study, researchers organize financial records to assign the cost of municipal services to working and open lands, as well as to residential, commercial and industrial development. Researchers meet with local sponsors to define the scope of the project and identify land use categories to study. For example, working lands may include farm, forest and/or ranch lands. Residential development includes all housing, including rentals, but if there is a migrant agricultural work force, temporary housing for these workers would be considered part of agricultural land use. Often in rural communities, commercial and industrial land uses are combined. COCS studies findings are displayed as a set of ratios that compare annual revenues to annual expenditures for a community's unique mix of land uses.

COCS studies involve three basic steps:

1. Collect data on local revenues and expenditures.
2. Group revenues and expenditures and allocate them to the community's major land use categories.
3. Analyze the data and calculate revenue-to-expenditure ratios for each land use category.

The process is straightforward, but ensuring reliable figures requires local oversight. The most complicated task is interpreting existing records to reflect COCS land use categories. Allocating revenues and expenses requires a significant amount of research, including extensive interviews with financial officers and public administrators.

HISTORY

Communities often evaluate the impact of growth on local budgets by conducting or commissioning fiscal impact analyses. Fiscal impact studies project public costs and revenues from different land development patterns. They generally show that residential development is a net fiscal loss for communities and recommend commercial and industrial development as a strategy to balance local budgets.

Rural towns and counties that would benefit from fiscal impact analysis may not have the expertise or resources to conduct a study. Also, fiscal impact analyses rarely consider the contribution of working and other open lands, which is very important to rural economies.

American Farmland Trust (AFT) developed COCS studies in the mid-1980s to provide communities with a straightforward and inexpensive way to measure the contribution of agricultural lands to the local tax base. Since then, COCS studies have been conducted in at least 151 communities in the United States.

FUNCTIONS & PURPOSES

Communities pay a high price for unplanned growth. Scattered development frequently causes traffic congestion, air and water pollution, loss of open space and increased demand for costly public services. This is why it is important for citizens and local leaders to understand the relationships between residential and commercial growth, agricultural land use, conservation and their community's bottom line.

COCS studies help address three misperceptions that are commonly made in rural or suburban communities facing growth pressures:

1. Open lands—including productive farms and forests—are an interim land use that should be developed to their "highest and best use."
2. Agricultural land gets an unfair tax break when it is assessed at its current use value for farming or ranching instead of at its potential use value for residential or commercial development.
3. Residential development will lower property taxes by increasing the tax base.

While it is true that an acre of land with a new house generates more total revenue than an acre of hay or corn, this tells us little about

The **FARMLAND INFORMATION CENTER** (FIC) is a clearinghouse for information about farmland protection and stewardship.
The FIC is a public/private partnership between the USDA Natural Resources Conservation Service and American Farmland Trust.

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
Colorado				
Custer County	1 : 1.16	1 : 0.71	1 : 0.54	Haggerty, 2000
Sagauche County	1 : 1.17	1 : 0.53	1 : 0.35	Dirt, Inc., 2001
Connecticut				
Bolton	1 : 1.05	1 : 0.23	1 : 0.50	Geisler, 1998
Brooklyn	1 : 1.09	1 : 0.17	1 : 0.30	Green Valley Institute, 2002
Durham	1 : 1.07	1 : 0.27	1 : 0.23	Southern New England Forest Consortium, 1995
Farmington	1 : 1.33	1 : 0.32	1 : 0.31	Southern New England Forest Consortium, 1995
Hebron	1 : 1.06	1 : 0.47	1 : 0.43	American Farmland Trust, 1986
Lebanon	1 : 1.12	1 : 0.16	1 : 0.17	Green Valley Institute, 2007
Litchfield	1 : 1.11	1 : 0.34	1 : 0.34	Southern New England Forest Consortium, 1995
Pomfret	1 : 1.06	1 : 0.27	1 : 0.86	Southern New England Forest Consortium, 1995
Windham	1 : 1.15	1 : 0.24	1 : 0.19	Green Valley Institute, 2002
Florida				
Leon County	1 : 1.39	1 : 0.36	1 : 0.42	Dorfman, 2004
Georgia				
Appling County	1 : 2.27	1 : 0.17	1 : 0.35	Dorfman, 2004
Athens-Clarke County	1 : 1.39	1 : 0.41	1 : 2.04	Dorfman, 2004
Brooks County	1 : 1.56	1 : 0.42	1 : 0.39	Dorfman, 2004
Carroll County	1 : 1.29	1 : 0.37	1 : 0.55	Dorfman and Black, 2002
Cherokee County	1 : 1.59	1 : 0.12	1 : 0.20	Dorfman, 2004
Colquitt County	1 : 1.28	1 : 0.45	1 : 0.80	Dorfman, 2004
Columbia County	1 : 1.16	1 : 0.48	1 : 0.52	Dorfman, 2006
Dooly County	1 : 2.04	1 : 0.50	1 : 0.27	Dorfman, 2004
Grady County	1 : 1.72	1 : 0.10	1 : 0.38	Dorfman, 2003
Hall County	1 : 1.25	1 : 0.66	1 : 0.22	Dorfman, 2004
Jackson County	1 : 1.28	1 : 0.58	1 : 0.15	Dorfman, 2008
Jones County	1 : 1.23	1 : 0.65	1 : 0.35	Dorfman, 2004
Miller County	1 : 1.54	1 : 0.52	1 : 0.53	Dorfman, 2004
Mitchell County	1 : 1.39	1 : 0.46	1 : 0.60	Dorfman, 2004
Morgan County	1 : 1.42	1 : 0.25	1 : 0.38	Dorfman, 2008
Thomas County	1 : 1.64	1 : 0.38	1 : 0.67	Dorfman, 2003
Union County	1 : 1.13	1 : 0.43	1 : 0.72	Dorfman and Lavigno, 2006
Idaho				
Booneville County	1 : 1.06	1 : 0.84	1 : 0.23	Hartmans and Meyer, 1997
Canyon County	1 : 1.08	1 : 0.79	1 : 0.54	Hartmans and Meyer, 1997
Cassia County	1 : 1.19	1 : 0.87	1 : 0.41	Hartmans and Meyer, 1997
Kootenai County	1 : 1.09	1 : 0.86	1 : 0.28	Hartmans and Meyer, 1997
Kentucky				
Campbell County	1 : 1.21	1 : 0.30	1 : 0.38	American Farmland Trust, 2005
Kenton County	1 : 1.19	1 : 0.19	1 : 0.51	American Farmland Trust, 2005
Lexington-Fayette County	1 : 1.64	1 : 0.22	1 : 0.93	American Farmland Trust, 1999
Oldham County	1 : 1.05	1 : 0.29	1 : 0.44	American Farmland Trust, 2003
Shelby County	1 : 1.21	1 : 0.24	1 : 0.41	American Farmland Trust, 2005

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
Maine				
Bethel	1: 1.29	1 : 0.59	1 : 0.06	Good, 1994
Maryland				
Carroll County	1 : 1.15	1 : 0.48	1 : 0.45	Carroll County Dept. of Management & Budget, 1994
Cecil County	1 : 1.17	1 : 0.34	1 : 0.66	American Farmland Trust, 2001
Cecil County	1 : 1.12	1 : 0.28	1 : 0.37	Cecil County Office of Economic Development, 1994
Frederick County	1 : 1.14	1 : 0.50	1 : 0.53	American Farmland Trust, 1997
Harford County	1 : 1.11	1 : 0.40	1 : 0.91	American Farmland Trust, 2003
Kent County	1 : 1.05	1 : 0.64	1 : 0.42	American Farmland Trust, 2002
Wicomico County	1 : 1.21	1 : 0.33	1 : 0.96	American Farmland Trust, 2001
Massachusetts				
Agawam	1 : 1.05	1 : 0.44	1 : 0.31	American Farmland Trust, 1992
Becket	1 : 1.02	1 : 0.83	1 : 0.72	Southern New England Forest Consortium, 1995
Dartmouth	1 : 1.14	1 : 0.51	1 : 0.26	American Farmland Trust, 2009
Deerfield	1 : 1.16	1 : 0.38	1 : 0.29	American Farmland Trust, 1992
Deerfield	1 : 1.14	1 : 0.51	1 : 0.33	American Farmland Trust, 2009
Franklin	1 : 1.02	1 : 0.58	1 : 0.40	Southern New England Forest Consortium, 1995
Gill	1 : 1.15	1 : 0.43	1 : 0.38	American Farmland Trust, 1992
Leverett	1 : 1.15	1 : 0.29	1 : 0.25	Southern New England Forest Consortium, 1995
Middleboro	1 : 1.08	1 : 0.47	1 : 0.70	American Farmland Trust, 2001
Southborough	1 : 1.03	1 : 0.26	1 : 0.45	Adams and Hines, 1997
Sterling	1 : 1.09	1 : 0.26	1 : 0.34	American Farmland Trust, 2009
Westford	1 : 1.15	1 : 0.53	1 : 0.39	Southern New England Forest Consortium, 1995
Williamstown	1 : 1.11	1 : 0.34	1 : 0.40	Hazler et al., 1992
Michigan				
Marshall Twp., Calhoun County	1 : 1.47	1 : 0.20	1 : 0.27	American Farmland Trust, 2001
Newton Twp., Calhoun County	1 : 1.20	1 : 0.25	1 : 0.24	American Farmland Trust, 2001
Scio Twp., Washtenaw County	1 : 1.40	1 : 0.28	1 : 0.62	University of Michigan, 1994
Minnesota				
Farmington	1 : 1.02	1 : 0.79	1 : 0.77	American Farmland Trust, 1994
Independence	1 : 1.03	1 : 0.19	1 : 0.47	American Farmland Trust, 1994
Lake Elmo	1 : 1.07	1 : 0.20	1 : 0.27	American Farmland Trust, 1994
Montana				
Carbon County	1 : 1.60	1 : 0.21	1 : 0.34	Prinzing, 1997
Flathead County	1 : 1.23	1 : 0.26	1 : 0.34	Citizens for a Better Flathead, 1999
Gallatin County	1 : 1.45	1 : 0.16	1 : 0.25	Haggerty, 1996
New Hampshire				
Brentwood	1 : 1:17	1 : 0.24	1 : 0.83	Brentwood Open Space Task Force, 2002
Deerfield	1 : 1.15	1 : 0.22	1 : 0.35	Auger, 1994
Dover	1 : 1.15	1 : 0.63	1 : 0.94	Kingsley, et al., 1993
Exeter	1 : 1.07	1 : 0.40	1 : 0.82	Niebling, 1997
Fremont	1 : 1.04	1 : 0.94	1 : 0.36	Auger, 1994
Groton	1 : 1.01	1 : 0.12	1 : 0.88	New Hampshire Wildlife Federation, 2001
Hookset	1 : 1.16	1 : 0.43	1 : 0.55	Innovative Natural Resource Solutions, 2008
Lyme	1 : 1.05	1 : 0.28	1 : 0.23	Pickard, 2000
Milton	1 : 1:30	1 : 0.35	1 : 0.72	Innovative Natural Resource Solutions, 2005

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
New Hampshire (continued)				
Mont Vernon	1 : 1.03	1 : 0.04	1 : 0.08	Innovative Natural Resource Solutions, 2002
Stratham	1 : 1.15	1 : 0.19	1 : 0.40	Auger, 1994
New Jersey				
Freehold Township	1 : 1.51	1 : 0.17	1 : 0.33	American Farmland Trust, 1998
Holmdel Township	1 : 1.38	1 : 0.21	1 : 0.66	American Farmland Trust, 1998
Middletown Township	1 : 1.14	1 : 0.34	1 : 0.36	American Farmland Trust, 1998
Upper Freehold Township	1 : 1.18	1 : 0.20	1 : 0.35	American Farmland Trust, 1998
Wall Township	1 : 1.28	1 : 0.30	1 : 0.54	American Farmland Trust, 1998
New York				
Amenia	1 : 1.23	1 : 0.25	1 : 0.17	Bucknall, 1989
Beekman	1 : 1.12	1 : 0.18	1 : 0.48	American Farmland Trust, 1989
Dix	1 : 1.51	1 : 0.27	1 : 0.31	Schuyler County League of Women Voters, 1993
Farmington	1 : 1.22	1 : 0.27	1 : 0.72	Kinsman et al., 1991
Fishkill	1 : 1.23	1 : 0.31	1 : 0.74	Bucknall, 1989
Hector	1 : 1.30	1 : 0.15	1 : 0.28	Schuyler County League of Women Voters, 1993
Kinderhook	1 : 1.05	1 : 0.21	1 : 0.17	Concerned Citizens of Kinderhook, 1996
Montour	1 : 1.50	1 : 0.28	1 : 0.29	Schuyler County League of Women Voters, 1992
North East	1 : 1.36	1 : 0.29	1 : 0.21	American Farmland Trust, 1989
Reading	1 : 1.88	1 : 0.26	1 : 0.32	Schuyler County League of Women Voters, 1992
Red Hook	1 : 1.11	1 : 0.20	1 : 0.22	Bucknall, 1989
Rochester	1 : 1.27	1 : 0.18	1 : 0.18	Bonner and Gray, 2005
North Carolina				
Alamance County	1 : 1.46	1 : 0.23	1 : 0.59	Renkow, 2006
Chatham County	1 : 1.14	1 : 0.33	1 : 0.58	Renkow, 2007
Henderson County	1 : 1.16	1 : 0.40	1 : 0.97	Renkow, 2008
Orange County	1 : 1.31	1 : 0.24	1 : 0.72	Renkow, 2006
Union County	1 : 1.30	1 : 0.41	1 : 0.24	Dorfman, 2004
Wake County	1 : 1.54	1 : 0.18	1 : 0.49	Renkow, 2001
Ohio				
Butler County	1 : 1.12	1 : 0.45	1 : 0.49	American Farmland Trust, 2003
Clark County	1 : 1.11	1 : 0.38	1 : 0.30	American Farmland Trust, 2003
Hocking Township	1 : 1.10	1 : 0.27	1 : 0.17	Prindle, 2002
Knox County	1 : 1.05	1 : 0.38	1 : 0.29	American Farmland Trust, 2003
Liberty Township	1 : 1.15	1 : 0.51	1 : 0.05	Prindle, 2002
Madison Village, Lake County	1 : 1.67	1 : 0.20	1 : 0.38	American Farmland Trust, 1993
Madison Twp., Lake County	1 : 1.40	1 : 0.25	1 : 0.30	American Farmland Trust, 1993
Madison Village, Lake County	1 : 1.16	1 : 0.32	1 : 0.37	American Farmland Trust, 2008
Madison Twp., Lake County	1 : 1.24	1 : 0.33	1 : .030	American Farmland Trust, 2008
Shalersville Township	1 : 1.58	1 : 0.17	1 : 0.31	Portage County Regional Planning Commission, 1997
Pennsylvania				
Allegheny Twp., Westmoreland County	1 : 1.06	1 : 0.14	1 : 0.13	Kelsey, 1997
Bedminster Twp., Bucks County	1 : 1.12	1 : 0.05	1 : 0.04	Kelsey, 1997
Bethel Twp., Lebanon County	1 : 1.08	1 : 0.17	1 : 0.06	Kelsey, 1992
Bingham Twp., Potter County	1 : 1.56	1 : 0.16	1 : 0.15	Kelsey, 1994
Buckingham Twp., Bucks County	1 : 1.04	1 : 0.15	1 : 0.08	Kelsey, 1996

SUMMARY OF COST OF COMMUNITY SERVICES STUDIES, REVENUE-TO-EXPENDITURE RATIOS IN DOLLARS

Community	Residential including farm houses	Commercial & Industrial	Working & Open Land	Source
Pennsylvania (continued)				
Carroll Twp., Perry County	1 : 1.03	1 : 0.06	1 : 0.02	Kelsey, 1992
Hopewell Twp., York County	1 : 1.27	1 : 0.32	1 : 0.59	The South Central Assembly for Effective Governance, 2002
Kelly Twp., Union County	1 : 1.48	1 : 0.07	1 : 0.07	Kelsey, 2006
Lehman Twp., Pike County	1 : 0.94	1 : 0.20	1 : 0.27	Kelsey, 2006
Maiden Creek Twp., Berks County	1 : 1.28	1 : 0.11	1 : 0.06	Kelsey, 1998
Richmond Twp., Berks County	1 : 1.24	1 : 0.09	1 : 0.04	Kelsey, 1998
Shrewsbury Twp., York County	1 : 1.22	1 : 0.15	1 : 0.17	The South Central Assembly for Effective Governance, 2002
Stewardson Twp., Potter County	1 : 2.11	1 : 0.23	1 : 0.31	Kelsey, 1994
Straban Twp., Adams County	1 : 1.10	1 : 0.16	1 : 0.06	Kelsey, 1992
Sweden Twp., Potter County	1 : 1.38	1 : 0.07	1 : 0.08	Kelsey, 1994
Rhode Island				
Hopkinton	1 : 1.08	1 : 0.31	1 : 0.31	Southern New England Forest Consortium, 1995
Little Compton	1 : 1.05	1 : 0.56	1 : 0.37	Southern New England Forest Consortium, 1995
West Greenwich	1 : 1.46	1 : 0.40	1 : 0.46	Southern New England Forest Consortium, 1995
Tennessee				
Blount County	1 : 1.23	1 : 0.25	1 : 0.41	American Farmland Trust, 2006
Robertson County	1 : 1.13	1 : 0.22	1 : 0.26	American Farmland Trust, 2006
Tipton County	1 : 1.07	1 : 0.32	1 : 0.57	American Farmland Trust, 2006
Texas				
Bandera County	1 : 1.10	1 : 0.26	1 : 0.26	American Farmland Trust, 2002
Bexar County	1 : 1.15	1 : 0.20	1 : 0.18	American Farmland Trust, 2004
Hays County	1 : 1.26	1 : 0.30	1 : 0.33	American Farmland Trust, 2000
Utah				
Cache County	1 : 1.27	1 : 0.25	1 : 0.57	Snyder and Ferguson, 1994
Sevier County	1 : 1.11	1 : 0.31	1 : 0.99	Snyder and Ferguson, 1994
Utah County	1 : 1.23	1 : 0.26	1 : 0.82	Snyder and Ferguson, 1994
Virginia				
Augusta County	1 : 1.22	1 : 0.20	1 : 0.80	Valley Conservation Council, 1997
Bedford County	1 : 1.07	1 : 0.40	1 : 0.25	American Farmland Trust, 2005
Clarke County	1 : 1.26	1 : 0.21	1 : 0.15	Piedmont Environmental Council, 1994
Culpepper County	1 : 1.22	1 : 0.41	1 : 0.32	American Farmland Trust, 2003
Frederick County	1 : 1.19	1 : 0.23	1 : 0.33	American Farmland Trust, 2003
Northampton County	1 : 1.13	1 : 0.97	1 : 0.23	American Farmland Trust, 1999
Washington				
Okanogan County	1 : 1.06	1 : 0.59	1 : 0.56	American Farmland Trust, 2007
Skagit County	1 : 1.25	1 : 0.30	1 : 0.51	American Farmland Trust, 1999
Wisconsin				
Dunn	1 : 1.06	1 : 0.29	1 : 0.18	Town of Dunn, 1994
Dunn	1 : 1.02	1 : 0.55	1 : 0.15	Wisconsin Land Use Research Program, 1999
Perry	1 : 1.20	1 : 1.04	1 : 0.41	Wisconsin Land Use Research Program, 1999
Westport	1 : 1.11	1 : 0.31	1 : 0.13	Wisconsin Land Use Research Program, 1999

Note: Some studies break out land uses into more than three distinct categories. For these studies, AFT requested data from the researcher and recalculated the final ratios for the land use categories listed in this table. The Okanogan County, Wash., study is unique in that it analyzed the fiscal contribution of tax-exempt state, federal and tribal lands.

American Farmland Trust's Farmland Information Center acts as a clearinghouse for information about Cost of Community Services studies. Inclusion in this table does not necessarily signify review or endorsement by American Farmland Trust.

COST OF COMMUNITY SERVICES STUDIES

For additional information on farmland protection and stewardship contact the Farmland Information Center. The FIC offers a staffed answer service and online library with fact sheets, laws, sample documents and other educational materials.

www.farmlandinfo.org

(800) 370-4879

American Farmland Trust

AFT National Office
1200 18th Street, NW, Suite 800
Washington, DC 20036
(202) 331-7300
www.farmland.org

NRCS

a community's bottom line. In areas where agriculture or forestry are major industries, it is especially important to consider the real property tax contribution of privately owned working lands. Working and other open lands may generate less revenue than residential, commercial or industrial properties, but they require little public infrastructure and few services.

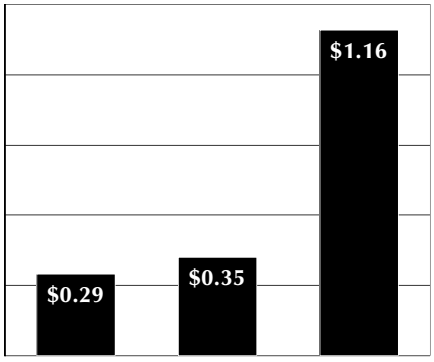
COCS studies conducted over the last 20 years show working lands generate more public revenues than they receive back in public services. Their impact on community coffers is similar to that of other commercial and industrial land uses. On average, because residential land uses do not cover their costs, they must be subsidized by other community land uses. Converting agricultural land to residential land use should not be seen as a way to balance local budgets.

The findings of COCS studies are consistent with those of conventional fiscal impact analyses, which document the high cost of residential development and recommend commercial and industrial development to help balance local budgets. What is unique about COCS studies is that they show that agricultural land is similar to other commercial and industrial uses. In nearly every community studied, farmland has generated a fiscal surplus to help offset the shortfall created by residential demand for public services. This is true even when the land is assessed at its current, agricultural use. However as more communities invest in agriculture this tendency may change. For example, if a community establishes a purchase of agricultural conservation easement program, working and open lands may generate a net negative.

Communities need reliable information to help them see the full picture of their land uses. COCS studies are an inexpensive way to evaluate the net contribution of working and open lands. They can help local leaders discard the notion that natural resources must be converted to other uses to ensure fiscal stability. They also dispel the myths that residential development leads to lower taxes, that differential assessment programs give landowners an "unfair" tax break and that farmland is an interim land use just waiting around for development.

One type of land use is not intrinsically better than another, and COCS studies are not meant to judge the overall public good or long-term merits of any land use or taxing structure. It is up to communities to balance goals such as maintaining affordable housing, creating jobs and conserving land. With good planning, these goals can complement rather than compete with each other. COCS studies give communities another tool to make decisions about their futures.

Median COCS Results



Median cost per dollar of revenue raised to provide public services to different land uses.

The **Farmland Information Center** (FIC) is a clearinghouse for information about farmland protection and stewardship. The FIC is a public/private partnership between the USDA Natural Resources Conservation Service and American Farmland Trust.

Appendix F
Purchase of Development Rights Information

FEATURE

Purchase of Development Rights:
Preserving Farmland and Open Space

by Gayle Miller & Douglas Krieger

The Growing Demand for Land Preservation

As strip malls and subdivisions eat away at undeveloped land, a growing number of communities are taking new steps to save their remaining farmland and open space. While land use tools such as zoning and cluster development facilitate land preservation, citizens are recognizing that these methods alone may not be enough.

Despite tough economic times, preserving open space is a top spending priority for many communities. Between 1999 and 2002, 544 successful state and local ballot measures generated approximately $16.7 billion in funds for land conservation programs. In 2003, voters approved an additional 99 measures with a total value of $1.3 billion. Overall, between 75 and 80 percent of initiatives and referendums that raise taxes or fees for land conservation have passed.[1]

While there are numerous reasons for preserving open space, the main benefits fall into four general categories: environmental (protecting groundwater, wildlife habitat, etc.); agricultural (preserving farming industries and communities); aesthetic (preserving rural character and scenic beauty); and managing growth.[2]

The specific benefits to any given community depend upon the area's growth patterns, geography, and economy. Preserving undeveloped land around cities can contain urban growth and direct development towards areas already served by infrastructure. Maintaining floodplains can benefit entire watersheds by reducing flood damage. Preserving woodlots or fallow fields can protect scenic vistas important to tourism. Retaining farmland can help support the local economy by maintaining a viable agricultural base.[3]

> PDR PROGRAMS ARE BECOMING INCREASINGLY POPULAR BECAUSE THEY OFFER SUBSTANTIAL BENEFITS TO BOTH COMMUNITIES AND LANDOWNERS.

In the past, communities have reaped these benefits "free of charge," thanks to the owners of undeveloped land. Yet as development pressures and land values have increased, the quantity of undeveloped land has shrunk. As a result, communities are recognizing the importance of preserving farmland and open space.

Preserving Land by Purchasing Development Rights

Purchase of development rights (PDR) programs are one viable approach that state and local governments are using to preserve farmland and open space.[4] *See An Array of Strategies, p.7.* The following discussion provides an introduction to PDR programs and discusses some of the issues that commonly arise in their implementation.

PDR programs provide a way to financially compensate willing landowners for not developing their land. When buying development rights, the community obtains a legal easement, sometimes referred to as a conservation easement, that restricts development on the land. The landowner, however, still owns the land and can use or sell it for purposes specified in the easement, such as farming, timber production, or hunting.

Since PDR programs are flexible, program administrators can customize purchases of development rights to meet the objectives of both landowners and communities. For example, an easement designed to preserve agricultural resources might allow the landowner to build an additional home or two as long as their placement does not limit the property's long-term agricultural potential.

Development rights are similar to mineral rights: they represent a portion of the land's total value. This amount can be estimated by appraisal. The value of development rights is the difference between the fair market value of the land without the easement and its value as restricted by the easement. For example, an 80 acre farm may be worth $10,000 per acre if sold for home sites, but only $2,500 if restricted, by an easement, to agricultural use. This means the parcel's development value would be $7,500 per acre (or $600,000 for the entire 80 acres) – that would be the cost to purchase the development rights.

PDR programs are becoming increasingly popular because they offer substantial benefits to both communities and

1 *LandVote 2002: Americans Invest in Parks and Open Space* and *LandVote 2003* (Trust for Public Land; Land Trust Alliance, Washington DC).

2 Jeffrey Kline & Dennis Wichelns, "Public Preferences Regarding the Goals of Farmland Preservation Programs," *Land Economics 72:4* (1986), pp. 538-549.

3 Agriculture is an important segment of the economy in many areas. To cite just one example, the Dutchess County, New York, "Agriculture and Farmland Protection Plan," (adopted in 1998) notes that: "The effects of the loss of farmland reach well beyond those farmers who are directly involved. … Businesses that supply farm equipment and services suffer and are forced to leave, making it difficult for the remaining farms to maintain their operations. … Farms [in Dutchess County] directly employ 1,500 people. Another 2,000 people are employed providing goods and services to farmers."

4 PDR programs in some parts of the country are called PACE (purchase of conservation easements) or APR (agricultural preservation restriction) programs.

landowners. Many agricultural landowners are cash-poor: that is, they have a great deal of equity in land, but little income. By selling only their development rights, owners can convert some of the wealth tied up in their land into cash, without relinquishing ownership of the land or use of its productive capacity.

Landowners may use proceeds from a sale of development rights in any way they choose – purchasing additional acreage, upgrading equipment, paying taxes, or investing for retirement. While proceeds of a PDR sale are taxable, depending upon state tax laws, selling development rights may offer significant tax savings by reducing the taxable value of the land, or by reducing future inheritance taxes.

For communities, PDR programs are a means to manage growth and provide the benefits of open space without the expense of purchasing, maintaining, and policing publicly-owned land. Preserving land can also save communities money in the long run, since development often costs more in public infrastructure and community services than the tax revenue realized by the growth. *Community Costs, p. 6.*

PDR programs recognize that owners of undeveloped land provide valuable amenities to the community. Buying development rights from willing landowners provides a market-driven and compensatory approach to preserving those amenities, and an attractive supplement to other forms of land management, such as zoning.

According to the American Farmland Trust, at least 44 counties and towns have adopted PDR programs for agricultural land preservation purposes. Among the communities establishing programs in the past two years: Kane County, Illinois; Albemarle County, Virginia; and Fayette County, Kentucky.[5]

At least 24 states also have state-level PDR programs. These state programs either allocate funds to counties, cities, and towns to purchase development rights / conservation easements (often on a matching basis), or provide for a state agency or board to purchase and hold development rights.

The American Farmland Trust estimates that approximately 1.3 million acres of land are currently held in conservation easements, with 234,000 acres of this total being held by local programs.[6]

Developing a PDR Program

While there is no one approach to developing a PDR program, some common "fundamentals" include: conducting background research; having a dedicated group to guide the process; involving the public in the program's development; establishing eligibility and scoring criteria for potential purchases; and ensuring adequate funding.

1. Laying the Groundwork

Before developing a PDR program, doing background research is essential. This includes an awareness of any state requirements,[7] knowledge of relevant local planning policies, and familiarity with a broad range of possible land preservation approaches used elsewhere – including PDRs.

Communities considering a PDR program should have an up-to-date comprehensive land use plan. The PDR program should be consistent with the comprehensive plan's goals and policies. When built upon this foundation, the PDR program will serve as a tool to implement the plan, rather than an isolated program of its own.

Identifying existing information and resources pertinent to the PDR

continued on next page

5 "Fact Sheet: Status of Local PACE Programs" (American Farmland Trust, Sept. 2003), 1-800-370-4879. AFT also maintains a very useful Web site: <www.farmlandinfo.org>.

6 "Fact Sheet: Status of State PACE Programs" (American Farmland Trust, Sept. 2003).

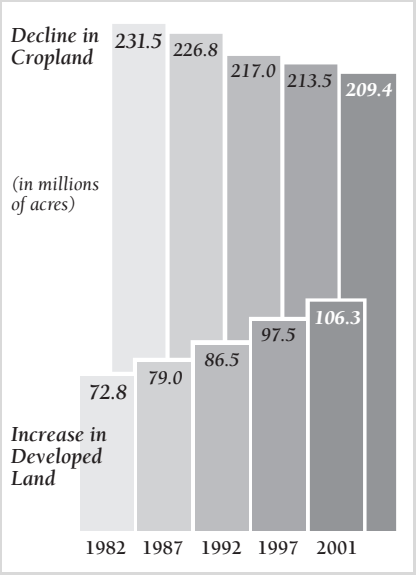
7 All states now have laws enabling conservation easements on agricultural lands through voluntary donations from landowners. U.S. Department of Agriculture, Economic Research Service, "Development at the Urban Fringe and Beyond …" (2001) p. 60. Your state's planning or agriculture department should be able to tell you whether there's a state-level program which can provide funds to support a local PDR program.

Land Trends

Nationwide data collected by the U.S. Department of Agriculture, in cooperation with Iowa State University, shows a steady increase in developed land and decline in farmland (especially cropland) over the past twenty years. Among the key findings reported in the 2001 National Resources Inventory:

- Between 1982 and 2001, about 34 million acres – an area the size of Illinois – was converted to developed land.
- Of this 34 million acres, about 10.4 million was considered prime farmland.
- The rate of farmland development increased from an average of 400,000 acres per year between 1982 and 1992 to 600,000 acres per year between 1992 and 2001.

U.S. Census data also indicates that average per capita land consumption increased by 22.6 percent between 1970 and 1990 in the nation's 100 largest metropolitan areas, while the total urbanized land area increased by an average of 51.5 percent during this same time period. "Weighing Sprawl Factors in Large U.S. Cities," by Leon Kolankiewicz and Roy Beck (March 2001), pp. 17-24. Available at:<www.sprawlcity.org/studyUSA/index.html>.



Derived from the 2001 National Resources Inventory.

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program's development is also important. Mapping of soil types, microclimates, and land cover may be necessary when agricultural productivity is a priority. Having an inventory of historic, cultural, and environmental features may also be important in identifying features such as burial mounds, floodplains, key habitat areas, or scenic vistas of special value.

Designers of local PDR programs should also be aware of existing land preservation initiatives. For example, federal and state agencies buy easements to preserve wildlife habitat, restore wetlands, preserve farmland, and create erosion control buffers. Local or regional non-profit land conservancies also obtain easements to meet their goals.

Easements held by other organizations can provide critical links in meeting overall preservation objectives, particularly if larger tracts of land are desired for agricultural preservation, greenbelts, or wildlife habitat preservation. These organizations may also have valuable expertise to lend to the community's efforts, such as legal services, mapping capabilities, natural features inventories, or experience in monitoring easements.

2. A Guiding Force

The inspiration and "guiding force" behind a local PDR program will vary from community to community. It may come from the local planning commission, the county board of commissioners, a parks and recreation board, a grassroots citizen's organization, or even just one individual with a vision. Regardless of who is the prime mover, early involvement by planning commissioners and planning staff is important, and will help ensure that the PDR program meshes with the community's comprehensive planning efforts.

Having a diverse and dedicated steering committee can be invaluable in developing, and then promoting, a local PDR program. Committee members might include farmers or ranchers, real estate appraisers, bankers, planning commissioners, parks and recreation board members, environmentalists, and local government officials. And it doesn't hurt to have someone skilled at public relations! As with many planning efforts, bringing many diverse interests into the process will increase the likelihood of gaining broad public support.

Based upon their knowledge of the community, steering committee members should be able to establish a draft mission statement and preservation objectives for the PDR program.

While it may seem more expeditious for the committee members to then simply design the PDR program and take it before the public for final comment, this approach could be the program's undoing. Thorough and credible two-way communication between the steering committee and the public is essential to creating a program the community will ultimately support.

3. Public Involvement

Communities need to go beyond minimum public participation requirements to ensure the PDR program proceeds on a firm foundation of public support – and that it appeals to the program's ultimate participants: landowners.

Designing a community-driven land preservation program requires research to determine public preferences, and skill in communicating with the public. Professional assistance with these two related tasks can be a sound investment. Agricultural extension offices, universities or colleges, state agencies, land

The Rationale for Public Funding

PDR programs are generally publicly funded. Why should public dollars be spent to help preserve farmland, ranches, and other open space? One answer is that in many areas preserving these lands actually saves local government money compared to the public infrastructure costs of supporting scattered, low-density residential development. *See Sidebar, "Community Costs."*

Another answer is that the public as a whole benefits by preserving these lands:

"The public has a stake in the preservation of working landscapes for a variety of reasons, including keeping locally-grown food and fiber available; maintaining scenic and historic landscapes; and protecting watersheds, wildlife habitat, and recreational opportunities. It would be unfair to expect landowners to bear the full cost and responsibility for open space protection … by voluntarily forgoing the development value of their land. PDR programs allow the costs of conserving private lands for agricultural and open space values to be shared by all the beneficiaries – landowners, their communities, and the public as a whole." *Purchase of Development Rights: Conserving Lands, Preserving Western Livelihoods* (Western Governors' Association, National Cattlemen's Beef Association, and Trust for Public Land, 2001).

Planners for Farmland Preservation

The American Planning Association's *Policy Guide on Agricultural Land Preservation*, adopted in 1999, offers strong support for programs such as purchase of development rights. Among the key points noted in the *Policy Guide*:

Most traditional zoning tools have minimal efficacy to protect against the development of agricultural lands.

Communities must develop, implement and enforce multiple mechanisms for the effective preservation of productive agricultural land (i.e. urban growth boundaries, purchase of development rights, exclusive agricultural zoning).

Agricultural land should be protected and preserved in large contiguous blocks in order to maintain a 'critical mass' of farms and agricultural land.

Agricultural land preservation programs, projects and policies are best implemented and enforced when they are done so at the local level with technical and financial support from state and federal sources.

trusts, and independent consultants are all potential sources of expertise, and can be extremely valuable in this critical stage of program development.

At a minimum, the public preferences research should address the following questions:

- How important is the preservation of open space in relation to other spending priorities?
- What are the community's main motivations for preserving open space?
- How should the community fund the program?
- How much is the public willing to pay?
- How much open space should the program seek to preserve?

Analysis of public preferences and the community's "willingness to pay" are central to the research process. Pretty brochures and flashy multi-media presentations are worth little if based upon inaccurate data or assumptions about public preferences.

Mail or telephone surveys of residents, focus groups, public forums, and hearings all facilitate public input. Outreach efforts can include press releases, radio talk shows, public presentations, and reports documenting survey results. Also quite helpful are fliers or brochures which clearly and succinctly describe the proposed program and its benefits to the community.

4. Establishing Eligibility and Scoring Criteria

PDR programs are like the "field of dreams" – if you build it, they will come. Once the program is in place, landowners will want to take part.

Eligibility requirements are threshold measures to identify land that would contribute to the program's goals. For example, a program designed to preserve agricultural productivity might consider only those parcels larger than forty acres which are actively being farmed.

Given that financial resources will likely be limited, scoring criteria allow program administrators to rank applications that meet the basic eligibility

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Peninsula Township, Michigan

Surrounded by the clear, blue waters of Grand Traverse Bay, Peninsula Township is a spectacular finger of rolling agricultural land in northwest lower Michigan. When development began eating away at the township's agricultural center – and threatening the peninsula's world renowned cherry industry – planning officials realized they needed to protect the agricultural and scenic integrity of their community.

During an update of their master land use plan in the late 1980s, the planning commission prepared maps which identified the township's prime agricultural areas and fourteen critical "viewsheds." These maps served as the foundation for future land protection activities, including one of the most active PDR programs in the Midwest.

Planning commission members were involved in all aspects of the program's development, including researching other PDR programs, evaluating the financial viability of the planned program, identifying preservation priorities, and overseeing extensive public input and outreach activities (including random surveys, one-on-one interviews with landowners, and community focus groups).

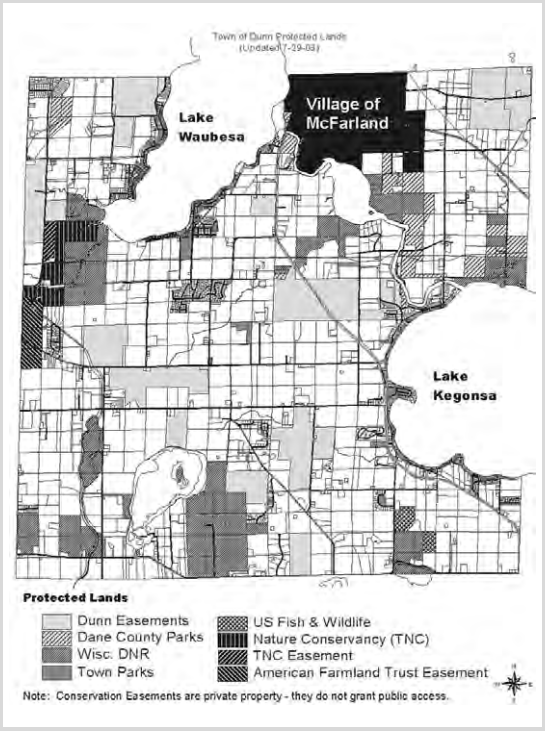
Since the PDR program's adoption in 1994, Peninsula Township has spent over $6 million to acquire development rights on approximately 2,000 acres. In 2002, voters increased the original 1.25 mil funding to 2 mils for the next 20 years. The township's next goal is to acquire 9,200 acres by 2008.

For more information contact Township Planner Gordon Hayward at: 231-223-7322, email: planner @peninsula township.com

Dunn, Wisconsin

Citizens in the Town of Dunn (population 5,270), located just south of Madison, began thinking about preserving open spaces and agricultural land more than twenty years ago. A two year building moratorium in 1977 provided time for the community to develop its first land use plan. The plan called for complete build-out of existing service areas and strict zoning to protect agricultural lands.

In 1993, a committee of residents and Plan Commission members began investigating methods of land protection that would accomplish preservation goals without total reliance on restrictive land use regulations.



In Dunn, land protection reflects the combined efforts of several agencies and organizations.

A survey asking residents about establishing a PDR program showed strong support. A cost of community services study suggested that preserving open space was also in the town's long-term financial interests.

In 1996, voters approved a half mil property tax increase, providing $160,000 in its first year for purchasing development rights. In 2000, residents approved a $2.4 million bond to expand the program. Since its inception, locally raised dollars have leveraged more than $2 million in additional funds from federal, state, and county agencies.

Town Land Use Manager Renee Lauber says the PDR program is popular because, prior to its establishment, a landowner's only option was to sell to developers.

In a cooperative agreement, the Town and the Natural Heritage Land Trust (a private non-profit organization) hold development rights easements jointly and share responsibility for monitoring compliance. Residents ratify development rights purchases at special town meetings. To date, the program has preserved some 15 farm parcels, totaling over 2,000 acres.

Details on the Town's PDR program can be foundat: <www.town. dunn. wi.us/>. For more information, contact town land use manager Renee Lauber at: rlauber@ town .dunn.wi.us; 608-255-4219.

PDRs: Preserving Farmland...

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requirements. For example, scoring criteria for a PDR program focused on protecting farmland might include measures of:

- Agricultural productivity (measured by soil types, economic value of crops, etc.).
- Development pressure.
- Contribution of a farm to the local agricultural industry.
- Compatibility of adjacent land to long-term agricultural use of a property.

In contrast, scoring criteria for a program designed to preserve the scenic beauty of a tourist community might take into consideration:

- Proximity of the land to a well-traveled road or scenic corridor.
- The historic or cultural significance of the land.
- Whether the land has accessible views of local water bodies or other vistas.
- Inclusion of the land in important and specifically targeted "viewsheds."

The eligibility requirements and scoring criteria are the essence of the PDR program. A good understanding of public preferences will ensure that the application and evaluation process for selecting participants meets the program objectives. This, in turn, will help the program gain acceptance – and funding support – from the community.

Paying for the Program

Two of the most important questions about a PDR program are: "How much will it cost?" and "Who is going to pay?" Developing a funding mechanism is often the greatest challenge in designing a PDR program. Many financing options exist, including bonds, property taxes, real estate transfer taxes, sales taxes on certain products or services, general appropriations, and other sources. State law may limit which funding mechanisms are available.

Possible supplemental funding sources include state and federal matching grants, private monetary donations, and foundation grants.

In order to leverage these additional

dollars, however, local PDR programs generally need a homegrown source of financing that can provide matching funds and sustain the program for the long run.

Promoting and passing a local funding mechanism is no less an undertaking than a new school millage or tax – and in some communities it will be far more controversial. Even in areas where the concept of open space preservation is vigorously supported, funding is almost invariably the most contentious issue.

The research process should identify public preferences for how to fund the program. The more closely the program's objectives and its related funding efforts align with public preferences, the more likely the funding effort will succeed.

Dealing With Opposition

No matter how laudable its goals, a PDR program will have its detractors. One of the most common objections is that it will interfere with private property rights. Quite the contrary is true. While a purchase of development rights does restrict future uses of a parcel, it is essential to make clear to potential participants that a PDR program is completely voluntary *and* provides fair compensation to those who participate. In fact, PDR programs give landowners a new ability to exercise their property rights by providing a means to sell a partial interest in their land.

General opposition over funding the program is a more challenging objection. The public involvement process should reveal whether or not a community has such pressing funding needs as to make the purchase of development rights unrealistic. However, a growing body of research has documented that land preservation programs, especially in rural areas, often end up costing taxpayers less than the conversion of farmland into low-density residential development. *Community Costs.*

One of the most ironic objections to PDR programs is the claim that buying development rights is "too permanent,"

continued on next page

Community Costs

Land in purchase of development rights programs will likely be assessed at lower rates since the use of the land is restricted. In most cases, a lower assessed value will reduce property taxes. Indeed, this reduction in property taxes is a large part of what makes PDR programs attractive to farmers. Like other programs which limit assessments on farmland, this property tax reduction makes it more feasible to continue farming, especially in areas where development pressures are causing land values to rise.

While the municipality will receive less tax revenue, this needs to be balanced against the substantial cost savings when farmland and open space is preserved. A number of "cost of community services" studies have found that these cost savings often exceed lost property tax revenue.

For example, in 1999 the Minnesota Department of Agriculture examined this question.

The Minnesota study found through an in-depth analysis of five counties (and the cities and townships in these counties) that: "For two of the four largest non-utility operating expenditure categories (public safety and general government), a strong agricultural sector correlates with lower per capita costs. … When viewed from the perspective of the combined impact on county and municipal budgets, the net fiscal impact of new residential development is negative in all five case studies for development in the townships, and negative in four of the five case studies for development in the cities." … *Cost of Public Services Study* (Duncan Associates for the Minnesota Dept. of Agriculture, 1999).

Editor's Note: For a comprehensive review of research in this area, see "The Impact of Parks and Open Space on Property Values and the Property Tax Base," by John L. Crompton (National Recreation and Parks Association, 2000). The American Farmland Trust is also a good source of information about cost of community services studies: <www.farmlandinfo.org>; 1-800-370-4879.

State & Local Funding

A wide variety of funding mechanisms are being used by states and localities to support PDR programs. Some examples:

Douglas County, Colorado – Approved a $25-million revenue bond backed by a sales/use tax to preserve open space in 1996.

Missoula and Helena, Montana – Each approved $5 million in bonds backed by property tax increases to fund parks, recreation, and open space programs.

Davis, California – Developers pay for PDR programs through a unique farmland mitigation program. They are allowed to develop properties in appropriate areas if they help pay for open space mitigation by funding PDR on properties in other areas.

Bernalillo County, New Mexico – Voters approved a two-year 1/2 of 1 percent sales tax increase to fund open space preservation in 1998.

Carson City, Nevada – Voters passed a 1/2 of 1 percent "quality of life" sales/use tax for parks, trails, and open space acquisition in 1996.

Kentucky – Counties may fund their PDR programs by: an *ad valorem* tax; a license fee on franchises, trades and professions, or room taxes; or a combination of those options, chosen by local referendum.

Maryland – Several counties use local real-estate transfer taxes supplemented by general fund appropriations to finance their PDR programs.

Virginia Beach, Virginia – raises approximately $450,000 annually for its PDR program from a cellular phone tax; a dedicated 1.5 percent increase in local property taxes; and county appropriations. The funds have been used to leverage an additional $3.2 million from a variety of granting agencies.

Source: "Purchase of Development Rights: Conserving Lands, Preserving Western Livelihoods." A report published by the Western Governors' Association, The Trust for Public Land, and National Cattlemen's Beef Association, January 2001.

continued from previous page

and that future options may be limited by restrictions against development. While most purchases of development rights *are* permanent, so is urbanization, whether in the form of new subdivisions, malls, or industrial parks.[8]

Summing Up:

PDR programs can help implement local land use plans by preserving farmland and other important open space for future generations. When used in conjunction with other land preservation techniques, PDR programs can be highly effective. While significant effort is often required to establish a PDR program, the long-term benefits to the community can be substantial. ◆

Gayle Miller works for the Michigan Sierra Club on issues of sprawl, air and water pollution, and solid waste. She previously served for twelve years as a county solid waste coordinator. Miller is a graduate of Central Michigan University.

Douglas Krieger is a natural resource/agricultural economist. He consults with local governments and non-profits to determine public preferences for land preservation, estimate willingness to pay for preservation, and design preservation programs consistent with preferences. Krieger earned his Ph.D. from Michigan State University's Department of Agricultural Economics. He can be reached at 989-834-0146 or <dkrieger@gocougs. wsu.edu>

Editor's Note:

An Array of Strategies:

As Gayle Miller and Douglas Krieger note at the start of this article, purchase of development rights is one of several tools planners can use to facilitate land preservation. Various strategies are often used in combination. For example, farmland preservation might be encouraged through a combination of purchase of development rights, agricultural zoning, and clustering of development.

Tom Daniels and Deborah Bowers note in their fine book, *Holding Our Ground: Protecting American's Farms and Farmland* (Island Press 1997), "The nation's best farmland preservation programs combine PDR with growth-management techniques …. The danger occurs when a purchase-of-development rights program is not backed up with effective agricultural zoning, and building rights are too numerous and therefore land values too high to make the purchase of development rights financially possible." p. 167.

Subdivision Regulation. Another important land preservation tool is subdivision regulation. Randall Arendt has focused on the principles of conservation subdivision design in his article, "Growing Greener: Conservation Subdivision Design," in *PCJ #33* (Winter 1999). Arendt explains how conservation-oriented subdivision regulations, when integrated with the comprehensive plan and zoning provisions, can promote "an interconnected network of conservation lands."

It is important to note that Arendt stresses the need for local plans to map out areas most important to preserve, laying the groundwork for the subdivision design process. This is similar to Gayle Miller and Douglas Krieger's emphasis on linking purchase of development rights programs to comprehensive plan goals and policies.

Transfer of Development Rights. A more complicated, though sometimes quite effective, tool for land preservation is transfer of development rights, or TDRs. Please keep in mind that *transfer* of development rights is quite different than *purchase* of development rights.

In a nutshell, TDR programs delineate "receiving" areas where development is desired and "sending" areas prioritized for preservation. Developers can purchase development rights from landowners in the sending areas, and then "transfer" those rights to land in designated receiving areas (allowing them to develop this land at a higher density than would otherwise be permitted).

For TDR programs to work there must be enough development to create an active market in transferable development rights. An excellent overview of TDRs can be found in Rick Pruetz's article, "Putting Growth In Its Place With Transfer of Development Rights," in *PCJ #31* (Summer 1998).

Land Trusts. One final aspect of land conservation deserves mention. That is the critically important role that private land trusts play in land preservation. While Miller and Krieger focus on the public acquisition of development rights, comparable efforts by non-profit land trusts are being carried out across the country. In fact, private and public land preservation efforts often work in tandem. The role of land trusts is explored in Joel Russell's "Land Trusts and Planning Commissions: Forging Strategic Alliances," in *PCJ #34* (Spring 1999).

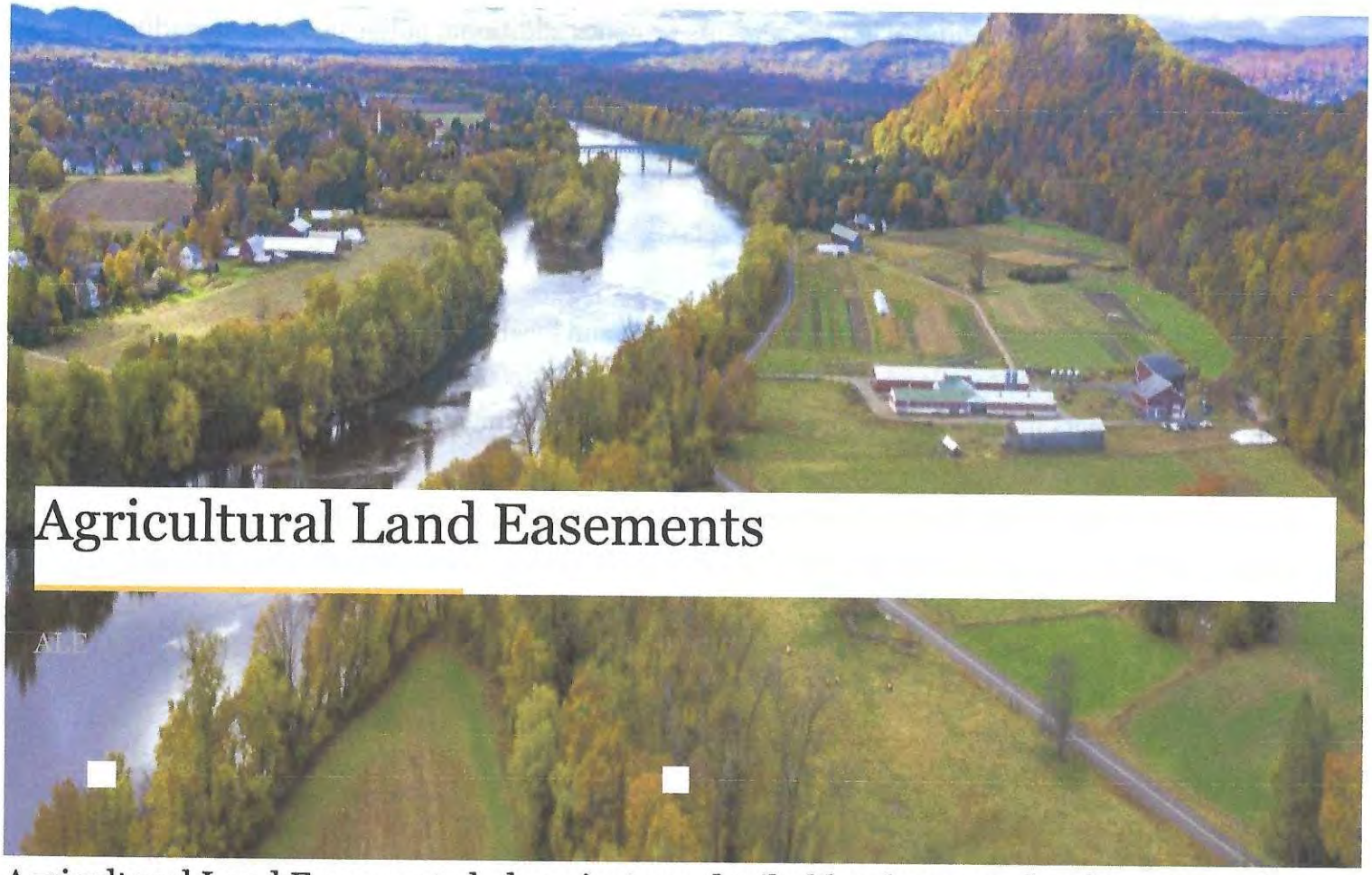
Resources

American Farmland Trust
1200 18th Street NW
Washington, D.C. 20036
202-331-7300
email: info@farmland.org
www.farmland.org

Trust for Public Land
116 New Montgomery St.,
4th Floor
San Francisco, CA 94105
415-495-4014
email: info@tpl.org
www.tpl.org

Land Trust Alliance
1331 H Street NW,
Suite 400
Washington DC
20005-4734
202-638-4725
email: lta@lta.org
www.lta.org

8 While unlikely, a local government holding a development right could, if it chose to, sell it back to the landowner.



Agricultural Land Easements

Agricultural Land Easements help private and tribal landowners, land trusts, and other entities such as state and local governments protect croplands and grasslands on working farms and ranches by limiting non-agricultural uses of the land through conservation easements.

On This Page

Benefits

The Agricultural Land Easements component of the Agricultural Conservation Easement Program (/programs-initiatives/acep-agricultural-conservation-easement-program) protects the long-term viability of the nation's food supply by preventing conversion of productive working lands to non-agricultural uses. Land protected by agricultural land easements provides additional public benefits, including environmental quality, historic preservation, wildlife habitat and protection of open space. Additionally, Agricultural Land Easements leverage local partnerships to match NRCS funding and local partners are responsible for the long-term stewardship of the easement.

Who is eligible?

- Eligible partners include American Indian tribes, state and local governments and non-governmental organizations that have farmland, rangeland or grassland protection programs.
- Eligible landowners include owners of privately held land including land that is held by tribes and tribal members.
- All landowners, including required members of landowner-legal entities, must meet adjusted gross income (AGI) limitations and must be compliant with the HEL/WC provisions of the Food Security Act of 1985.

What land is eligible?

Land eligible for agricultural easements includes private or Tribal land that is agricultural land, cropland, rangeland, grassland, pastureland and nonindustrial private forest land. NRCS will prioritize applications that protect agricultural uses and related conservation values of the land and those that maximize the protection of contiguous acres devoted to agricultural use, including land on a farm or ranch.

Eligible Land Types must also meet one of the four following land eligibility criteria:

- Parcels enrolled to protect Prime, Unique, or Other productive soil.
- Parcels enrolled to provide protection of grazing uses and related conservation values.
- Parcels containing historical or archeological resources.
- Land that furthers a state or local policy consistent with the purposes of ACEP-ALE.

How does it work?

NRCS provides financial assistance to eligible partners for purchasing Agricultural Land Easements that protect the agricultural use and conservation values of eligible land.

For working farms, the program helps farmers and ranchers keep their land in agriculture. Under the Agricultural Land Easement component, NRCS may contribute up to 50 percent of the fair market value of the agricultural land easement.

The program also protects grazing uses and related conservation values by conserving grassland, including rangeland, pastureland and shrubland. Where NRCS determines that grasslands of special environmental significance will be protected, NRCS may contribute up to 75 percent of the fair market value of the agricultural land easement.

Agricultural Land Easements are permanent or for the maximum term allowed by law.

How do I find an eligible partner to hold my Agricultural Land Easement?

Visit the following websites to learn how to find an eligible partner to hold conservation easements.

- Farmland Protection Directory (https://farmlandinfo.org/farmland-protection-directory/)
- Land Trust Alliance (https://www.findalandtrust.org/)

How to get started?

Landowners - To learn more about ALE, contact your local NRCS office (/contact/find-a-service-center). An NRCS conservationist will visit you and evaluate your land to help you determine eligibility for the various components of ACEP. If your land is eligible for ALE and you are looking for an eligible entity to hold your conservation easement; please visit ACEP-ALE for Landowners - FIC (https://farmlandinfo.org/acep-ale-for-landowners/).

Eligible Entities - To learn more about ALE, please contact your NRCS state office (/conservation-basics/conservation-by-state/state-offices) programs staff to inquire about how you can partner with NRCS to enroll conservation easements on eligible land.

- ACEP-ALE for Entities (https://farmlandinfo.org/acep-ale-for-entities/)

Additional Documents

Is ACEP Right for Me? fact sheet (/sites/default/files/2022-10/NRCS-ACEP-Factsheet_10.26_0.pdf) (988.5 KB)

Ensuring the Future of Agriculture booklet (/sites/default/files/2022-11/ALE_magazine_1.pdf) (8.95 MB)

Town of Clarence, New York

CLARENCE GREENPRINT PROGRAM

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

Presentation Outline

I. The Greenprint Project:

- Brief history and background

II. Estimated Costs and Anticipated Benefits

III. Greenspace Review

IV. Properties Purchased/Program Expenses

V. Actual Program Expenses

VI. Actual Program Benefits

VII. Achieving the Goals of Master Plan 2015

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

I. Project History/Origin

1998- The Clarence Recreation Advisory Committee ("Committee") began research and analysis of residents' concerns over sprawl, congestion and quality of life issues. The Committee undertook a review of efforts by other communities across New York State to preserve open space.

2002- The Committee formally proposed to the Town Board a plan to preserve open space and the town's rural character, protect property values and sustain the tax base through smart growth and balanced development.

The Committee recommended a Public Referendum to provide Greenprint Program funding.

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

2002- The Town Board accepts the Committee's recommendation and a Public Hearing was held. The Committee presented the Greenprint Program proposal and received public comment.

Late 2002- The Greenprint Program is approved in a public referendum by 2/3 vote of Town residents.

Bond funds of $12.5 million are secured as part of a 10 year Greenprint Preservation program. If after ten years the budget is not expended, the Town Board has the option to extend.

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

II. Estimated Costs and Anticipated Benefits

Estimated Costs

- The Committee estimated an increase of $52 in additional annual taxes for a property assessed at $100,000, assuming the full $12.5 million bond were spent at once.

Anticipated Benefits

- Increased property values.
- Reduction of municipal expenses through decreased demand on services.
- Balanced economic growth, tax stabilization, green space preservation and enhanced quality of life.

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

III. Greenspace Review

1) Preliminary Review

- Willing property owners complete a participation interest survey. The Committee, in conjunction with the Western New York Land Conservancy ("Land Conservancy") analyzes property data, screens interest of the applicant, assesses development potential, natural land, wetland, agricultural, open space, possible recreational use/bikepaths, size, and scenic considerations of the property.
- The Committee decides whether the property fits within the goals and parameters of the program and is suitable for further consideration.
- The Town Office of Planning and Zoning and Land Conservancy provide parcel data and an environmental review for the consideration of the Committee.

Town of Clarence, New York

Clarence Greenprint Program
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2) Matrix Evaluation and Property Ranking

❑ The Land Conservancy evaluates and ranks each property with a point matrix analysis form arranged in 2 categories:

-Natural Land Form- Analyzes natural land features: wetland and riparian corridors, scenic views, unique ecological communities, wildlife habitat, mature forests, open space, and creek corridors.

-Agricultural Land Form- Analyzes agricultural land: value to the local agricultural economy, soil type, size, and proximity to adjacent farms.

Town of Clarence, New York

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June 6, 2012

3) Fair Market Appraisal and Price Negotiation

- ❑ Based upon all data received and land rankings, the Committee decides whether to request a Fair Market Property Appraisal.
- ❑ The Committee reviews the Property Appraisal and discusses with the property owner whether to purchase outright and/or to place a conservation easement on the property or purchase development rights.
- ❑ The Committee provides the Town Attorney's Office with a not to exceed value and authorizes negotiations. The negotiated price may not exceed appraised value.

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

***4) Town Board Review and Approval*:**

- ❑ After agreement with the property owner, the Committee recommends acceptance by the Town Board.
- ❑ The Board decides whether to conduct a public hearing to receive public comment.
- ❑ The Town Board makes the final decision whether to contract with the property owner.
- ❑ If the Town Board decides to purchase, the property or development rights are acquired and the land is preserved as forever green.

Town of Clarence, New York

Clarence Greenprint Program

June 6, 2012

IV. Properties Purchased

PROPERTY ADDRESS	PDR/LAND PURCHASE (YEAR)	TOTAL LAND AREA	COST INCURRED	CURRENT OWNER
Salt Road/Greiner Road ("Eichorn Farm")	Land Purchase(2004)	184 acres	$780,000	Town of Clarence
Gunnville Road ("Nappo Preserve")	Land Purchase (2004)	22 acres	$42,800	Town of Clarence
10591 Rapids Road ("Krueger Preserve")	Land Purchase (2004)	57 acres	$128, 600	Town of Clarence
Goodrich Road ("Frey Preserve")	Land Purchase (2005)	16 acres	$400,000	Town of Clarence
Roll Road ("Ribbeck Farm")	PDR (2005)	62 acres	$431,368	Gregory C. Ribbeck
Parker Road ("Laubacher Preserve")	Land Purchase (2005)	30 acres	$36,000	Town of Clarence
Rapids Road ("Owen Farm")	Land Purchase (2008)	90 acres	$320,000	Town of Clarence
Salt Road ("Christner Farm")	Land Purchase (2009)	96 acres	$705,000	Town of Clarence
Lapp Road ("Spoth Farm")	PDR (2009)	102 acres	(TOC- $300,000) (NYS-$150,000) (FED- $150,000) TOTAL- $600,000	Greg Spoth
Keller Road ("Mosher Farm")	Land Purchase (2009)	41 acres	$331,280	Town of Clarence
Greiner Road ("Ball Farm")	Land Purchase (2010)	120 acres	$900,000	Town of Clarence
Rapids Road ("Baker Farm")	PDR (2011)	102 acres	$95,000	Gary Baker
Rapids Road ("Hedges Farm")	PDR (2011)	116 acres	$500,000	Melvyn C. Hedges
Harris Hill Road ("Deni Preserve")	Land Purchase (2011)	86 acres	$825,000	Town of Clarence
Shimerville Road/Roll Road ("Ribbeck Farm II")	PDR (2012)	84 acres	$754,110	Gregory C. Ribbeck
	TOTAL:	**1,236 acres**	**$6,802,328**	

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

V. Actual Program Expenses

Tax Impact- Property Acquisition and Purchase of Development Rights

- Resultant Tax Increase per $100,000 of Assessed Value:

Committee's Cost Estimate for full	$12,500,000 expenditure-	$52.00
Actual Cost of	$ 6,802,328 expenditure-	$14.10*
Actual Cost of	$12,500,000 expenditure-	$30.40

**As discussed later, cost reduction can be achieved by reselling purchased property with conservation easements in place ensuring continued protection of greenspace.*

VI. Actual Program Benefits

1) Protection of Property Values and Stabiliztion of Tax Rates

- The availability of open space directly affects quality of life which is a significant factor in the purchasing decisions of many consumers. Local sales data reflects an average 15% increase in property sale value of those properties directly adjacent to open space or permanently conserved property compared to similar non-adjacent housing.

- The average appreciation rate of existing property within the Town of Clarence is 5 times that of comparable Towns in the region. Furthermore, the Town has sustained an average 3% positive appreciation rate for the past decade. (*source: County Wide Equalization Change, 2009-2011*)

- When comparing the Town of Clarence to similar communities across the region, residents in other communities are paying an average of 30% more in total property taxes. (*source: 2010-2011 Erie County Real Property Tax Comparison*)

VI. Actual Program Benefits

1) Protection of Property Values and Stabiliztion of Tax Rates (Cont.)

- In 2011, the Town of Clarence had a 2.32% increase in existing property assessed valuations. This increase resulted in an additional $78,499,025 in assessed valuation within the community.

- Assuming only 10% of the overall assessed valuation increase of existing properties can be attributed to open space preservation, the program is responsible for $1,712,700 in additional tax revenue for the community over a 20 year period.

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

2) Optional Resale of Purchased Properties with Conservation Easement Protection

- If the Board exercised the option to resell properties protected by conservation easements, the Town would recoup approximately $1,250,000, while still ensuring the land is permanently protected as open space.

- Additional tax revenue from resold land over 20 years: $226,280.

- Therefore, the total potential Greenprint Program cost reduction that could be realized through resale of protected properties and additional tax revenues would total $3,188,980.

- Applying this cost reduction to the actual current expenditure of $6,802,328 would yield an actual cost to the taxpayers of only $6.60 per $100,000 of assessed valuation annually.

3) Reduced Costs of Required Services

- Since 1980, developed area in WNY increased 38 percent, households increased by only 5.5% and population declined by 5.8% (*source: Erie Niagara Framework for Regional Growth*). This suburban sprawl has caused a dramatic increase in demand for expensive municipal services while the tax base required to pay for the increased demand has decreased.

- The Greenprint Program is a significant tool in the battle against suburban sprawl by preserving open space, creating balanced growth patterns, reducing the demand for and costs of services and preserving the tax base by protecting property values.

4) Protection of Our Quality of Life

- The Greenprint Program supports a balanced growth pattern that impedes residential sprawl, reduces traffic and human congestion, noise, exhaust emissions, and protects aesthetic and scenic vistas.

- Lands protected thus far include working farms, forests, stream corridors, meadows, State and Federal wetlands, vernal pools, areas containing endangered flora and fauna, and other areas that provide habitat for fish and wildlife and act as filters to cleanse water, decrease flooding, and provide recreation and wildlife viewing opportunities for the general public.

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

VII. Master Plan 2015

Open Space preservation and balanced residential development were identified as primary concerns of local residents during the Master Plan visioning and drafting process. To accommodate the concerns of the public, the following considerations were made through the adoption of Master Plan 2015 in August of 2001:

- ❑ Development of an Open Space Preservation Plan, prioritizing parcels based upon their size, natural features, developmental pressure, current and potential utilization, etc.
- ❑ Consideration of creating a committee to analyze the cost and viability of a development rights acquisition program.
- ❑ Development of updated zoning laws and districts that take into account agricultural district considerations and uses.
- ❑ Development of subdivision laws that require Open Space and Recreational components through density regulations.

Town of Clarence, New York

Clarence Greenprint Program
June 6, 2012

This Program is considered a creative and successful partnership that serves as a model for other communities considering land preservation

CLARENCE

The Clarence Recreation Advisory Committee, Town Board members and Town residents have been instrumental in the development of the Greenprint program. Their vision and recognition of the benefits derived from land preservation have helped preserve our quality of life, stabilize our tax base and protect property values

The program is dependent upon willing landowners who are committed to open space preservation and the local agricultural economy. Those landowners who have voluntarily participated in the program have supported long term planning efforts while rejecting potential short term and short lived financial gain.

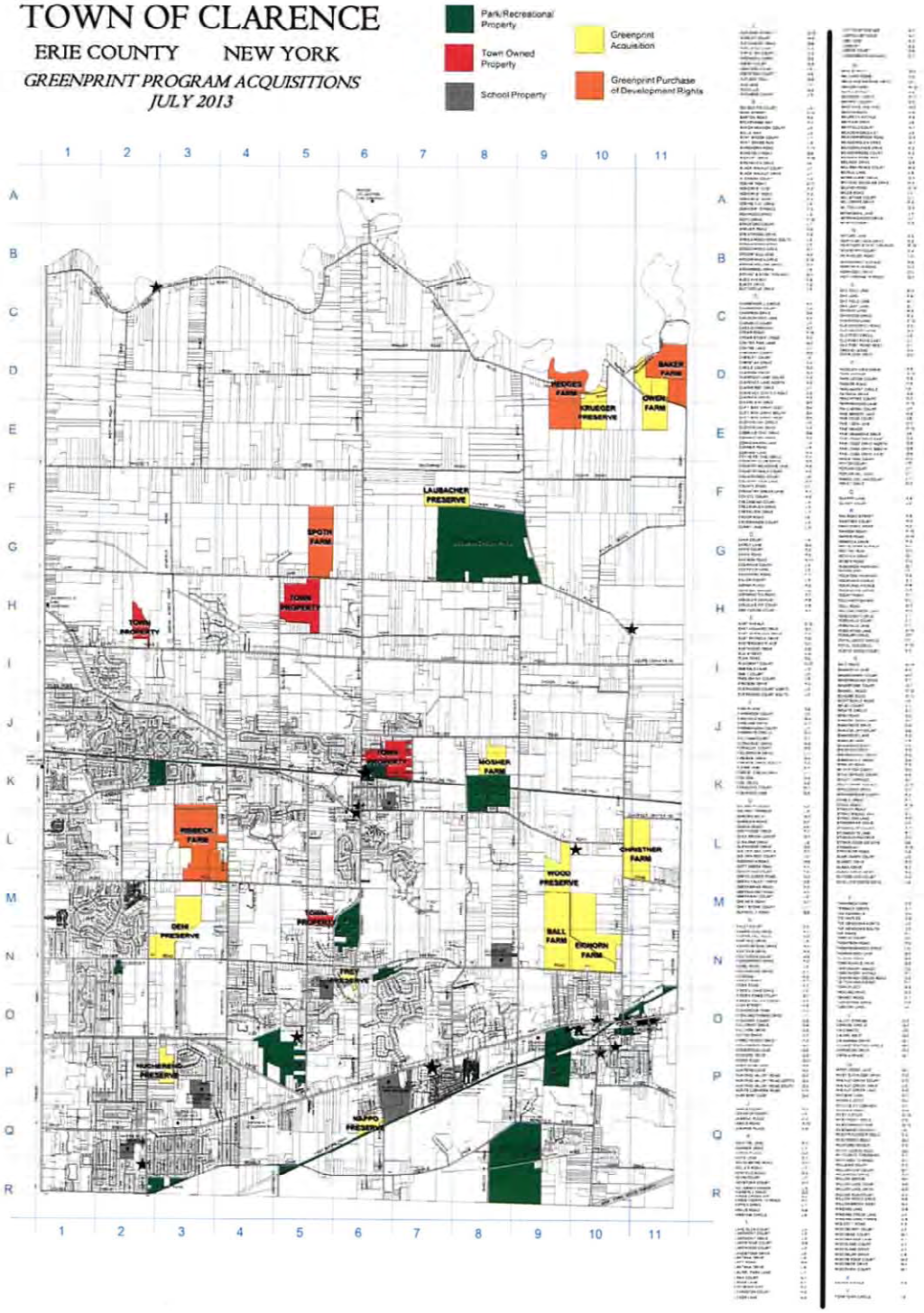
WESTERN NEW YORK
LAND CONSERVANCY

The Western New York Land Conservancy is a private, non-profit land trust dedicated to preserving our region's irreplaceable natural environments, farms, forestlands and open space in order to maintain wildlife habitat, economic resources, public recreation areas and the unique scenic character of Western New York. They are a critical resource for evaluating potential greenprint properties, structuring and co-holding conservation easements, and long term monitoring of protected properties.

TOWN OF CLARENCE

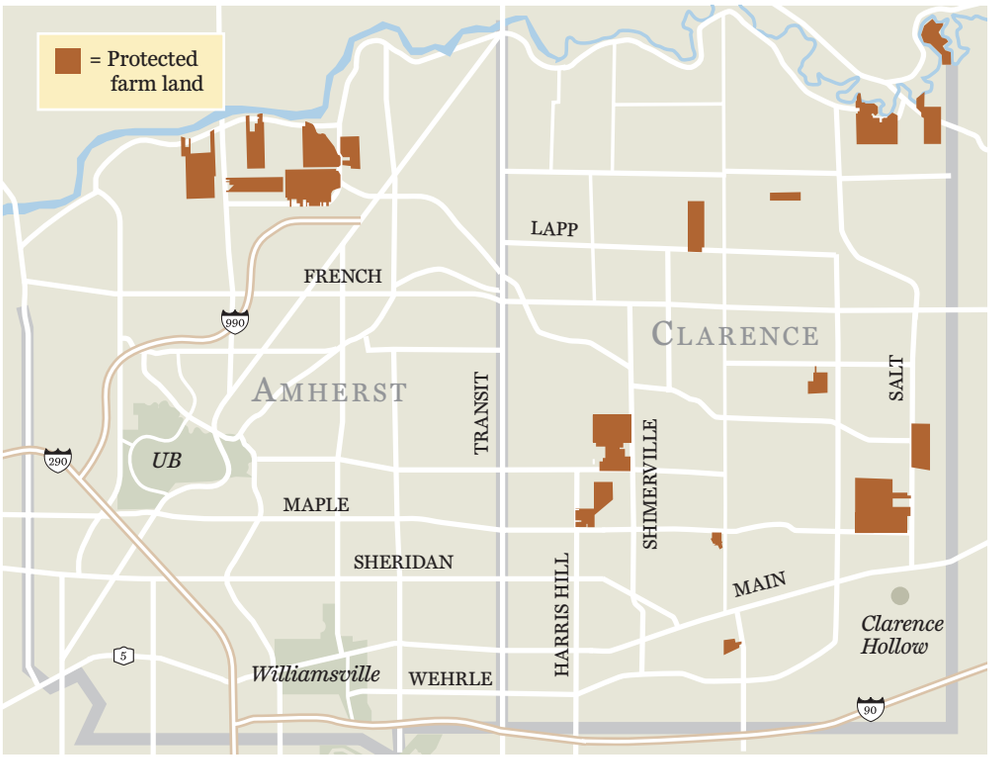
ERIE COUNTY NEW YORK

GREENPRINT PROGRAM ACQUISITIONS
JULY 2013



Amherst, Clarence in forefront of shielding farm landscape

There and in three other towns, more than 40 properties have come under protection



Town	Address	Acres	Year acquired	Purchase price	Price per acre	How land is protected
Amherst	2715-3100 Tonawanda Creek Road	141.6	1999	$288,756	$2,039.24	Development rights
Amherst	650 Schoelles Road	69.5	1999	$149,043	$2,144.50	Development rights
Amherst	2305 Tonawanda Creek Road	44.6	2000	$216,500	$4,854.26	Development rights
Marilla	12367 Bullis Road	55.6	2000	$82,650	$1,486.51	Development rights
Marilla	11828 Williston Road	63.8	2000	$96,315	$1,509.64	Development rights
Amherst	444 & 560 Schoelles Rd.	62.06	2001	$297,000	$4,785.69	Development rights
Amherst	1545 Campbell Blvd.	47.86	2001	$163,000	$3,405.77	Development rights
Marilla	Clinton Street-Coleman Road-Townline Road	91.2	2001	$127,500	$1,398.03	Development rights
Marilla	Coleman Road	16.4	2001	$23,392	$1,426.34	Development rights
Marilla	11882 Bullis Road	79.4	2002	N/A		Development rights
Marilla	3228 Two Rod Road	48.4	2003	$70,500	$1,456.61	Development rights
Amherst	Schoelles Road	50	2004	$217,906	$4,358.12	Development rights
Amherst	2401 Tonawanda Creek	51.93	2004	$233,000	$4,486.81	Development rights
Amherst	530 Schoelles Road	24.2	2004	$111,342	$4,600.91	Development rights
Clarence	Salt and Greiner roads	180.4	2004	$780,000	$4,323.73	Purchased by town
Clarence	Gunnville Road*	21.77	2004	$42,800	$1,966.01	Purchased by town
Clarence	10591 Rapids Road*	55.75	2004	$128,600	$2,306.73	Purchased by town
Clarence	Goodrich and Greiner roads*	15.54	2005	$400,000	$25,740.03	Purchased by town
Clarence	10640 Rapids Road	2.75	2005	$25,000	$9,090.91	Purchased by town
Marilla	2598 Two Rod Road	145.7	2005	$145,000	$995.20	Development rights
Clarence	8770 Roll Road	61.6	2006	$431,368	$7,002.73	Development rights
Marilla	11121 Jamison Road	86.2	2006	$109,200	$1,266.82	Development rights
Marilla	1138 Four Rod Road	100.7	2006	$145,770	$1,447.57	Development rights
Amherst	1995 Tonawanda Creek Road	130.16	2007	$1,038,000	$7,974.80	Development rights
Amherst	1801 & 1853 Tonawanda Creek Road	49.12	2007	$316,304	$6,439.41	Development rights
Clarence	Parker Road*	30	2007	$36,000	$1,200.00	Purchased by town
Marilla	Three Rod Road	80.7	2007	$186,324	$2,308.85	Development rights
Clarence	9270 Lapp Road	96	2008	$600,000	$6,250.00	Development rights
Clarence	Salt and Howe roads	95.9	2009	$705,000	$7,351.41	Purchased by town
Clarence	Keller Road	41.41	2009	$331,280	$8,000.00	Purchased by town
Elma	Jamison Road	61	2009	$216,000	$3,540.98	Development rights
Clarence	10800 & 10881 Rapids Road	89.9	2010	$320,000	$3,559.51	Purchased by town
Clarence	10460 Greiner Road	118.89	2010	$900,000	$7,570.02	Purchased by town
Clarence	10270 & 10450 Rapids Road	118	2010	$500,000	$4,237.29	Development rights
Amherst	1385 Campbell Blvd.	46.04	2011	$156,580	$3,400.96	Development rights
Clarence	Shimerville Road	83.79	2011	$754,110	$9,000.00	Development rights
Clarence	11044 Rapids Road	101	2011	$95,000	$940.59	Development rights
Clarence	5630 Shimerville Rd.	28	2011	$253,170	$9,041.79	Development rights
Clarence	5285 Harris Hill Road*	86	2011	$825,000	$9,593.02	Purchased by town
Eden	9500 Sandrock Road	102	2012	$247,000	$2,421.57	Development rights
Amherst	3155 Hopkins Road	66.94	PENDING	$432,627	$6,462.91	Development rights
TOTAL		**2,941.81**		**$12,197,037**		

* Open space

Sources: Town of Amherst, Town of Clarence, Western New York Land Conservancy

March 20, 1997, Thursday

BUSINESS/FINANCIAL DESK

Towns Are Slowing Invasion of Farms by Bulldozers

By BARNABY J. FEDER (NYT) 1917 words

Mark Greene's family has been farming in Pittsford, N.Y., since 1812, but until recently the prospects that his 400-acre farm would be in business for another generation looked dim. A local ordinance requires developers to set aside 50 percent of any new project for farming or open space, but even that did not knock land prices down enough to slow the relentless sprawl of Rochester, 10 miles to the northwest.

Last year, though, Pittsford issued $10 million in bonds so it could pay Mr. Greene and six other farmers for promises not to sell their 1,200 acres -- about 60 percent of the tillable land remaining in the town -- to developers.

"If we didn't do this," Mr. Greene said, "it would only be a matter of time."

It has long been an iron law of the real estate market that if farmland stands in the path of urban expansion, no crop is valuable enough to keep it out of developers' hands.

As Pittsford's bond issue highlights, though, that iron law can be bent a bit. By arguing that farms provide more than food and fiber -- the list includes environmental benefits, soul-soothing scenery, diversity for the local economy and especially tax savings -- advocates of farmland preservation are forging the political ties and financial tools to steer developers' backhoes away from farmland.

"You are going to see some very interesting alliances evolve," said Ralph Grossi, president of the American Farmland Trust, a lobbying group based in Washington that for nearly two decades has been charting both farmland losses and the efforts to halt them. He cited a coalition formed last year to channel new growth toward already-developed areas in and around Fresno, Calif., an alliance that includes the local Chamber of Commerce and the regional building industry association in addition to farm groups.

Despite America's unparalleled agricultural abundance, concern about disappearing farmland is clearly on the rise. Numerous states and communities have in recent years experimented with tax and zoning policies to encourage farmers at the urban edge to hang on. And both private and public programs to buy development rights are spreading.

At the Federal level, the Government in 1995 finally began applying a 1981 law that required it to look for alternatives to proposed highways, airports and other public projects that consume prime farmland. And in last year's farm bill, Congress authorized spending $35 million over six years to bolster state and local programs that pay farmers not to sell to developers, the first such Federal payments ever.

Federal officials say saving prime farmland not only has local benefits but also helps the nation's balance of trade and protects against volatility in food prices. "Land is the bank

supporting 15 percent to 20 percent of our economy," Dan Glickman, the Secretary of Agriculture, said. "Keeping it in agriculture is extremely important."

So far, though, such talk and the measures backing it up have been too restricted and modestly financed to have much effect. In the 20 years since Suffolk County, L.I., began the first program to buy development rights from farmers, such buyouts have preserved 450,000 acres in 18 states.

But that is a drop in the bucket. In a report to be issued today, the American Farmland Trust says that urban sprawl eats up two acres a minute -- a million acres a year, including 400,000 acres uniquely suited to certain crops.

Some of the best farmland being lost is around heartland cities like Indianapolis and Des Moines that tend to be overlooked because there is so much high-quality farmland in the Midwest.

"We lose a little bit every year," said Anthony Hession, who farms 3,000 acres just west of Indianapolis, most of it rented. Mr. Hession said he had won a statewide corn-growing contest in 1995 on a 160-acre field being torn up this month for a subdivision.

Still, Mr. Grossi said, conditions might be better than ever for slowing the loss of farmland, especially in 20 hot spots highlighted by the Farmland Trust report, like California's Central Valley, the northern Piedmont stretching from Virginia to New Jersey, the region bordering the Florida Everglades and the prairie land around the Illinois-Wisconsin border. The report focuses not just on soil quality but on areas where soil and climate together are uniquely suited for certain crops.

"We have a much better understanding of the cost of losing this land than even five years ago, a lot more examples of good local programs, and the Federal action legitimizes this effort," Mr. Grossi said.

Farmland preservation would be a much easier sell, of course, if the nation seemed in even remote danger of ever being hungry. At current development rates, the worst-case scenarios suggest that the nation's surplus food for export would not dry up until the middle of the next century, when 13 percent of the prime land being farmed would be gone. Some products now produced domestically would become imports, food prices could climb substantially, and other food-short regions of the world would be politically and economically less stable.

But blessed as it is with more than 300 million acres of prime agricultural land, the United States has paid about as much attention to such pessimistic visions as a billionaire to fliers suggesting it's time to open a savings account.

After all, decades of paving over farmland has not stopped farmers from producing such huge surpluses that Americans pay less of their income for food than anyone else in the world. And agricultural goods are the nation's largest export. The Federal Government has spent hundreds of billions of dollars on price-support programs intended to prevent the farm economy from drowning in its own abundance.

"We are losing good farmland needlessly, but we don't need it to feed ourselves," said Dennis Avery, an agriculture specialist at the Hudson Institute, a conservative research group. Ending excessive losses of American farmland to development might help feed other nations and slow the destruction of rain forests, Mr. Avery said, but not as much as increased spending on agricultural research or efforts to halt urban sprawl in developing countries.

Others note that each acre lost simply increases farmers' incentives to improve output on the remaining land. And biotechnology is very likely to provide previously unimagined opportunities, such as more drought-resistant strains of key crops like wheat and corn that would make marginal land far from cities more productive.

"Our concept of what is prime land has changed dramatically over time," said Philip Raup, a land economist at the University of Minnesota, who noted that pioneer farmers wanted land with exposed salt deposits for livestock nutrition. "Genetic engineering will change it again in the next 30 or 40 years."

Regardless of their long-range accuracy, such assessments encourage political leaders and voters to vastly underrate how much the nation might gain now from paying more attention to farmland, the Farmland Trust and its allies say. In the Central Valley of California alone, where the population is expected to triple by 2040 and today's sprawling development averages three homes an acre, a million acres of farmland will be lost and 2.6 million more will become harder to farm efficiently, according to a 1995 study.

Given the same population growth, the study projected, new laws forcing "compact growth" at an average of six homes an acre would save more than 500,000 acres of farmland, protect a million acres from encroachment, add nearly $70 billion to the agricultural economy and save taxpayers $29 billion that would be spent extending sewers and other services to newly developed areas.

Farmland losses are easy to dramatize. Farmers on the urban edge are often featured in news reports showing how the approach of suburbia can be more disruptive and nerve-racking than the eventual outright loss of the land, which, after all, can make millionaires of them if they are lucky enough to own it.

New homeowners often push local officials to halt normal farm practices, like noisy nighttime harvesting or planting, spreading manure to fertilize fields, importing swarms of bees to pollinate fruit trees and spraying pesticides. Subdivisions can cause crop losses by altering drainage patterns in nearby fields. Dogs chase cattle and other livestock. And vandalism of machinery and crops becomes commonplace.

"There was one kid who drove around in my alfalfa one night, got stuck in a creek and had the gall to come ask me to get my tractor to pull him out," said Jim Lehrer, a dairy farmer in Kaukauna, Wis. "He said he was just having fun."

Mr. Lehrer said he pulled the vehicle out after first demanding the teen-ager's address, then drove his tractor to the offender's home and rode around on the lawn until the teen-ager's father burst out furiously demanding to know what he was doing. Mr. Lehrer said he told him he was "just having fun like your son," and then took a spin through the

backyard before going home.

Most farmers never catch the vandals, though, and in many cases, they say, there are burdens even well-intentioned suburbanites do not perceive. Sayre Miller, co-owner of 300 acres of almond groves outside Clovis, Calif., said that suburban horse riders and the cross-country team from a new school to the west had worn enough of a trail through the groves to disrupt the path of her unmanned harvesting machines.

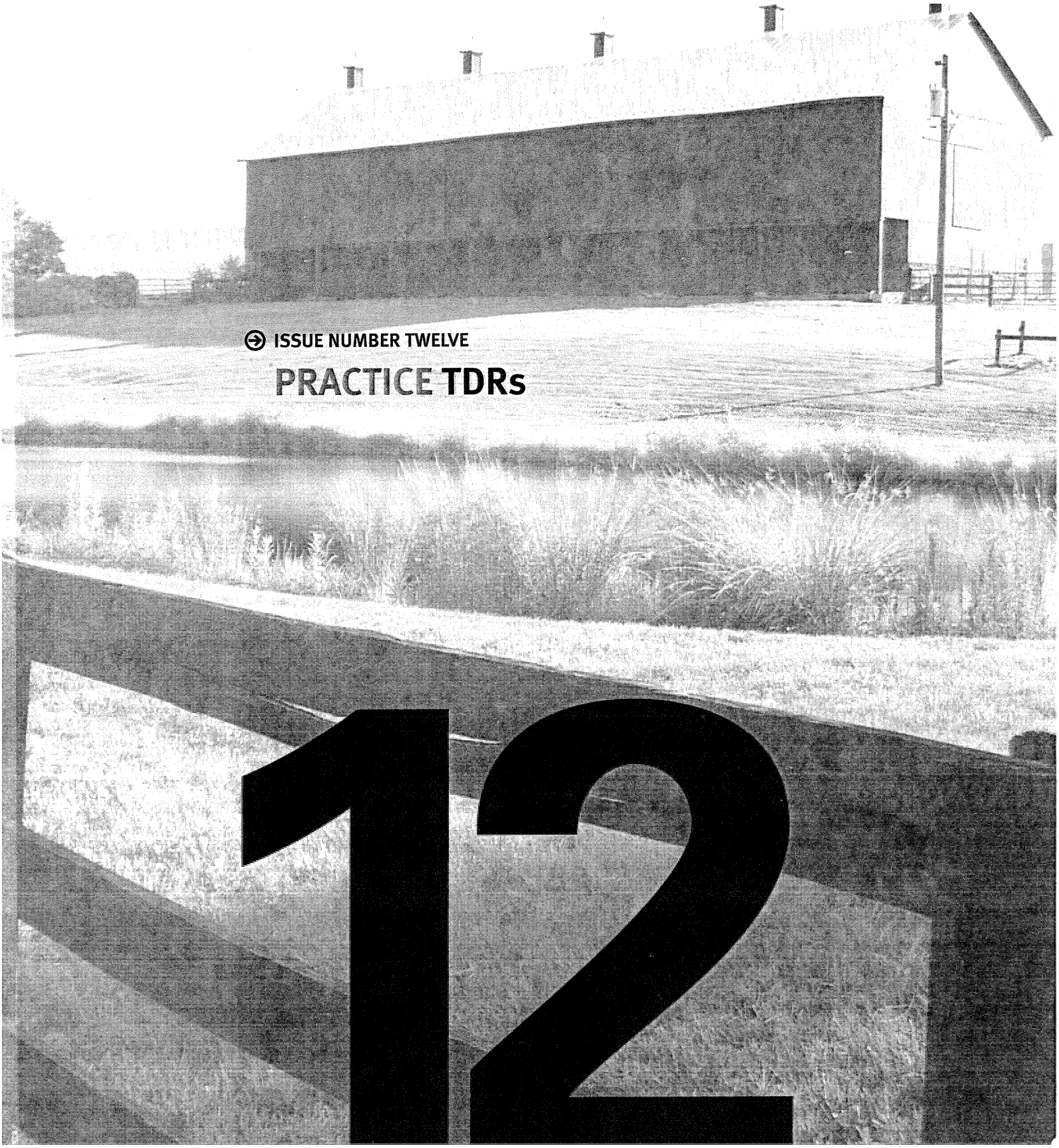
Such problems give a human dimension to issues of urban sprawl. But cataloguing such conflicts provides no rationale for treating farms differently from any other business. That leaves it to groups like the Farmland Trust and various national agriculture and environmental groups to assemble the larger arguments for zoning and tax changes that could limit the farmland losses.

Often the actual quality of the farmland is not decisive. In Pittsford, the cost of development was what impressed voters most. Pittsford planners calculated that providing services and schools to subdivisions on the 1,200 acres would have a net cost of $200 a taxpayer indefinitely, compared with $67 a year for 20 years to pay off the bonds.

Appendix G
Transfer of Development Rights

ZONINGPRACTICE December 2007

AMERICAN PLANNING ASSOCIATION



ISSUE NUMBER TWELVE

PRACTICE TDRs

Zoning for Successful Transferable Development Rights Programs

By Tom Daniels

Good development design and the protection of large areas of farmland, open space, and natural areas are two primary goals of smart growth.

Yet achieving these goals in a common process is often elusive. Since the late 1960s, the transfer of development rights has held considerable promise for preserving rural landscapes by moving development potential from the countryside into designated growth areas. To date, thousands of TDR transactions have occurred, but not as many as some proponents might have hoped.

A major obstacle to the creation of effective TDR programs has been local zoning. A local government's by-right zoning may allow ample development opportunities for developers who choose not to acquire TDRs, and local elected officials may choose to grant greater densities through bonus zoning without requiring that developers acquire and apply TDRs. Also, developers may be wary of encountering bureaucratic and procedural delays if they propose a development that uses TDRs, compared to a development that simply follows by-right zoning. Within designated growth areas, local residents may oppose increased densities that come with developments that use TDRs, for fear that the increased density will not be well designed, will result in more congestion, and will reduce property values. In areas designated for resource protection, rural landowners may resist suggested downzonings that may be used in conjunction with TDRs because they perceive a loss in property values.

There are several ways local governments can use the zoning ordinance to create effective TDR programs. But first it is important to understand how the TDR process works.

HOW THE TRANSFER OF DEVELOPMENT RIGHTS WORKS

Sending Area (zoned agrigulture)	Receiving Area (R-2, medium density residential)
Farm Parcel A sends TDRs Farm is preserved through a conservation easement.	***Housing Development Parcel B*** purchased TDRs allow more housing units.

Developer buys TDRs on Farm Parcel A and transfers them to Parcel B. Developer can then build more housing units than zoning ordinance would normally allow. Parcel A can no longer be developed, except for farming.

Source: Adapted from Daniels and Bowers, 1997, p. 173.

WHAT IS A TRANSFERABLE DEVELOPMENT RIGHT AND HOW DOES IT WORK?

A transferable development right is the right to create a residential building lot or to construct a dwelling unit or build additional square footage onto a commercial, industrial, or residential structure. A TDR is not one of the rights that come with property ownership. A TDR must be created through state enabling legislation and a local ordinance to allow a landowner to transfer a development right to another parcel owned by someone else. A local government creates a market in development rights between landowners in designated preservation areas (sellers) and developers (buyers) who can then use the TDRs to build at a higher density in the designated growth areas.

A local government creates a TDR program through four main steps. First, the local government identifies one or more sending areas from which TDR will be moved and gives landowners in the sending areas a certain number of TDRs. For instance, Montgomery County, Maryland, gave landowners in its sending area one TDR for every five acres owned. So a landowner who had 100 acres received 20 TDRs. This allocation formula, together with the size of the sending areas, determines the total potential number of TDRs available.

Next, the local government must identify one or more receiving areas that could accommodate higher density development than currently exists in the receiving area. Then the local government determines how many TDRs a developer must acquire from one or more landowners in the sending areas in order to receive approval for increased density. For instance, Montgomery County allowed one additional dwelling unit on an acre for each TDR a developer purchased and applied to a residential development project in the receiving area. The local government must set a maximum for the total potential number of TDRs that can be applied in the receiving areas, thus establishing the maximum amount of development those receiving areas can accommodate. Finally, the local government must set up a process for:

- confirming the use of TDRs by a developer;
- placing a conservation easement on lands in the sending area from which TDRs have been sold; and
- keeping track of how many TDRs landowners in the sending areas still have.

A developer will need to execute a deed of transferable development rights to show

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About the Author
Tom Daniels is a professor in the Department of City and Regional Planning at the University of Pennsylvania, where he teaches courses on land-use planning, growth management, and land preservation. He is the coauthor of The *Environmental Planning Handbook* (APA Planners Press, 2003) and *The Small Town Planning Handbook* (APA Planners Press, 1995).

that TDRs have been severed and purchased from a property in the sending area. A conservation easement is a legally binding contract between the landowner and the local government, stating the restrictions (for example, agricultural, forestry, or open space land uses) that apply to the property. The property is still privately owned, and there is usually no right of public access.

In sum, a local government creates a market for TDRs by assigning a certain number of TDRs to landowners in sending (or preservation) areas and requiring developers who want to build at higher than by-right densities in receiving (or growth) areas to purchase TDRs from landowners in the sending areas. The price of the TDRs is established through negotiations between a willing buyer and a willing seller, like an ordinary real estate transaction. A key feature of successful TDR programs is continued demand for TDRs from developers who see potential profits from purchasing TDRs and using them to develop projects in the receiving areas. One reason that TDR programs have not worked well in rural areas is that there is often insufficient development activity and little demand from developers for TDRs.

An overall rule of thumb is that at the start of a TDR program there should be twice as many receiving sites for TDRs as there are TDRs to send from the sending areas. This will help ensure that TDRs have a value. Another reason that TDR programs have a poor track record in rural areas is that there are usually many more TDRs in the sending areas than there are places to use them in the receiving area. This oversupply of TDRs drives down prices and discourages landowners in the sending areas from selling TDRs.

PUTTING THE TDR PROGRAM IN THE ZONING ORDINANCE

The local government can create a separate TDR ordinance, but a better approach is to include it as part of the local zoning code. Because a comprehensive plan sets the legal foundation for the zoning ordinance or TDR program, a local government should first amend its comprehensive plan to reflect the identified sending and receiving areas.

Although developers may prefer by-right zoning for the use of TDRs, the conditional use process allows the governing body to impose conditions for approval to address development impacts that may affect the community. The conditional use process also allows the local government greater discretion than simply subjecting a TDR receiving area development to subdivision and land development standards. In short, the zoning ordinance can require a conditional use process for new developments that use TDRs in the receiving areas, and describe the process for approval of a development that uses TDRs. For instance, once a conditional use permit has been granted, a local government could waive the preliminary land development plan and go straight to the final plan stage. This in effect grants the developer vested rights in the development, and final approval is mainly a formality.

A local government creates a market for TDRs by assigning a certain number of TDRs to landowners in sending areas and requiring developers in receiving areas to purchase TDRs from landowners in the sending areas.

To add a TDR program to the zoning ordinance involves several changes. First, new definitions must be added to reflect the language of the TDR program, such as definitions for transferable development rights, sending area, receiving area, deed of transferable development rights, and deed of easement. Next, the TDR option must be added to the list of permitted uses in the zoning districts that are the designated sending areas, along with the minimum size parcel eligible for TDRs, the TDR allocation method, and the procedures for legally severing TDR and using a conservation easement to permanently preserve the sending area property. Then the TDR option must be added to the list of permitted uses, special exceptions, or conditional uses within the zoning districts that comprise the receiving areas.

The zoning ordinance should include:

a. a purpose clause, explaining the reason for establishing the TDR ordinance;

b. the authorization for the TDR ordinance in the state enabling legislation, and a basic explanation of the TDR program;

c. the procedure for sale of TDRs from a sending area, including a definition of the send-

Developers need to recognize that their use of TDRs will result in better financial returns than developments that meet only by-right zoning.

ing area, how TDRs are calculated, procedures for severing TDRs from land in the sending area, and the conservation easement that is applied to land from which TDRs have been severed;

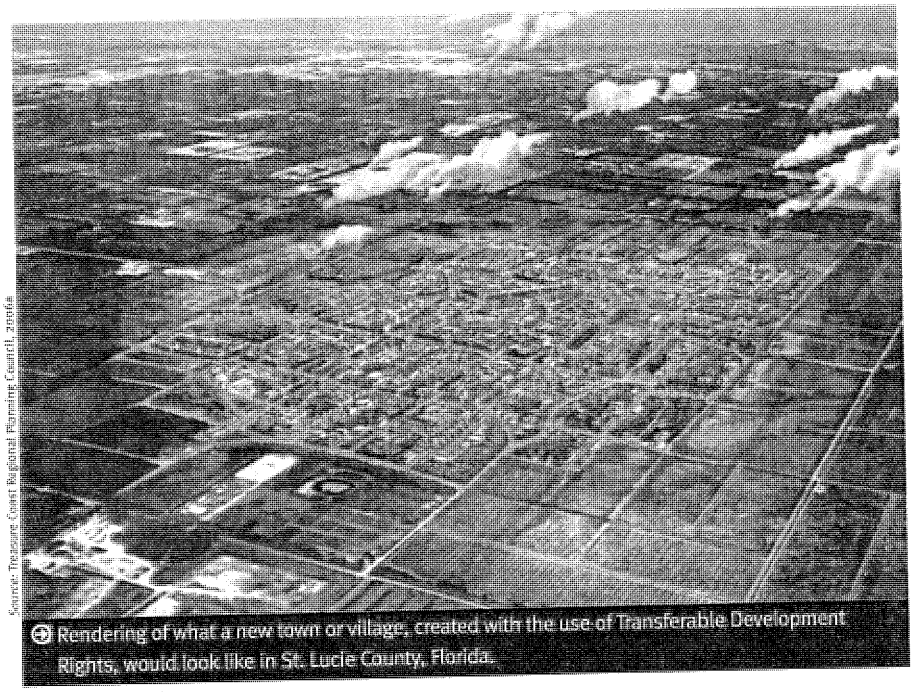
d. how TDRs can be used in a receiving area, including a definition of the receiving area, how the use of TDRs is calculated, design requirements and changes to base zoning standards (area and bulk standards), and the conditional use process and the land development and subdivision plan process for approval of a development that uses TDRs; and

e. definition in the ordinance spelling out whether the TDR program is mandatory or voluntary. Most are voluntary, allowing a landowner the choice of selling off a certain number of building lots and selling a certain number of TDRs. (Under a mandatory program, such as at Lake Tahoe, Nevada, a landowner may not be allowed to build on the property, but can still sell TDRs.)

HOW CAN THE TDR PROGRAM AVOID ZONING OBSTACLES?

A TDR program blends financial incentives with planning and zoning. For a TDR program to be effective, developers need to recognize that their use of TDRs will result in better financial returns than developments that meet only by-right zoning. Local officials are often eager to encourage development in designated growth areas and may grant developers bonus density in return for certain design features or infrastructure. For TDR programs to work, local officials cannot "give away" density in designated receiving areas. Any increase in density through a rezoning in a receiving area must require the developer to acquire and apply development rights. This requirement can be spelled out in the zoning ordinance.

Local governments may find that there is some trial and error involved in setting by-right zoning in the sending and receiving areas and as bonus densities in the receiving areas. Don't be afraid to make changes. Over time the TDR program may require occasional adjustments to the zoning ordinance to respond to changing conditions in the real estate market, changes in the comprehensive plan, or density or land-use provisions that did not produce the intended outcomes.



Source: Treasure Coast Regional Planning Council, 2002a

Rendering of what a new town or village, created with the use of Transferable Development Rights, would look like in St. Lucie County, Florida.

Calvert County, Maryland, began the nation's first county-level TDR program to preserve open space in 1978. Part of the program has featured a single-zone TDR in which the sending area and the receiving area are the same. Calvert County started with an existing zoning density standard that allowed one house per five acres and allowed one house per 2.5 acres in its Rural Community districts with the purchase of TDRs. In 1999 the county attempted to slow development by downzoning its Rural Community districts to one house per 10 acres, but allowed up to one house per two acres with the purchase of TDRs. Then, in 2003, in the face of continued growth pressures, the county again downzoned the Rural Community districts to one house per 20 acres, allowing only one house per four acres with the purchase of TDRs (see McConnell *et al*, 2007).

A TDR program can incorporate bonus zoning through the use of multipliers. Multipliers are bonus TDRs that reward developers for building desirable developments in the receiving areas. For example, St. Lucie County, Florida, gave one TDR per acre to landowners in its sending area because the underlying zoning is one dwelling unit per acre. A developer who buys a TDR can obtain a TDR bonus of 1.5 additional TDRs for each TDR purchased by building workforce housing (based on 80 to 120 percent of the median area household income), building higher education facilities, building a research and development park, or attracting a "targeted industry," such as an electronics manufacturer.

Developers want as much certainty as possible in the development process. Thus, expedited rezoning and subdivision and land development reviews are important to encourage developers to use TDRs. West Lampeter Township in Lancaster County, Pennsylvania, requires a developer to apply for a conditional use permit when proposing a development that uses TDRs. The conditional use process means that the elected officials will have to vote on the project. Once the project receives conditional use approval,

the township will waive the preliminary plan review and go straight to final plan review. This waiver in effect grants a developer vested rights in the project.

One way to keep property owners in receiving areas mollified is to use a form-based code. Ultimately, a form-based code is easier to do if the receiving area is a greenfield site. St. Lucie County has incorporated form-based code elements into its land development regulations, which relate to the TDR ordinance. The ordinance won an Award of Excellence from the Florida Chapter of the American Planning Association in 2006 and an award from the Form-Based Codes Institute in 2007.

The county's land development regulations include, for example:

- The development shall incorporate principles of Traditional Neighborhood Design, including a mix of land uses, a mix of building types, a mix of housing for different income levels, a pedestrian-friendly block and street network, and a significant amount of public open space.
- Neighborhood size shall be scaled upon a five-minute walk radius (approximately 0.25 mile) or a total area of 125 acres, as measured from the Neighborhood Center.
- Each neighborhood shall have well-defined edges, and range from 80 to 150 acres in size. The shape or form of the neighborhood is flexible, provided that the 0.25-mile radius benchmark for scale is maintained.
- A neighborhood shall provide a variety of dwelling unit types and prices that support a broad range of family sizes and incomes.
- A neighborhood shall contain at least one civic building, such as a school, social center, fire or police station.
- A neighborhood shall contain at least one local store.
- Blocks shall be scaled to accommodate a variety of building types.
- A neighborhood shall have an interconnected network of public streets designed to balance the needs of all users, including pedestrians, bicyclists, and motor vehicle operators (Treasure Coast Regional Planning Council, 2006b).

Warwick Township in Lancaster County, Pennsylvania, created a dual-zone TDR program to preserve farmland in the sending areas but tied it to the expansion of commercial and industrial space in its receiving area. The increased development in the receiving area thus expands the local property tax base without adding school-age children. This produces a net revenue gain for the township. The Campus Industrial Zone receiving area is 167 acres. The township zoning allows only 10 percent maximum lot coverage by-right. For each TDR that a landowner/developer acquires, another 4,000 square feet of lot coverage is allowed, up to a maximum of 70 percent coverage. The township has preserved nearly 1,000 acres of farmland through its TDR program, which got a major boost when a regional hospital decided to locate in the Campus Industrial Zone and needed to purchase more than 100 TDRs.

Downzoning in sending areas has been a major obstacle to creating effective TDR programs. One way that local governments have attempted to minimize the effects of downzoning is to create single zones that serve as both the sending and receiving areas. In a single-zone TDR, the transfer of development rights rearranges development, often to cluster the development and maintain some open space. This is primarily a rural residential strategy. The by-right zoning in a single-zone TDR program generally uses a density standard, so that one house lot may be developed for every certain number of acres. For instance, if the density standard is one house per five acres and a landowner has 20 acres, then the landowner could create four building lots by right. The landowner could purchase a TDR from another property and create an additional lot, for a total of five lots on the 20 acres, but some of the open land, such as 50 percent or 10 acres, would be placed under a conservation easement restricting future development. Farmland protection zoning of one house per 20 acres (or more) is rarely used in a single-zone TDR.

The single-zone TDR is not a recommended method for several reasons. First, it encourages more people to move out to the countryside and live in automobile-dependent developments. In other words, this new development adds to sprawl, though perhaps in a more attractive setting. Second, the additional development is likely to lead to increased conflicts with nearby farm operations. And third, it encourages greater use of on-site septic systems, which contribute to groundwater pollution. In Maryland, for example, there are 14 county TDR programs, of

THE LEGALITY OF TDRs

The concept of transferable development rights came into practice in 1968 when New York City adopted a TDR program in the form of transferable air rights to protect historic landmarks (Preutz 1997). In 1978, the U.S. Supreme Court upheld New York City's transferable air rights program and found that the owners of Grand Central Station could earn a reasonable profit by transferring development potential above the station to another site in the city. That is, the owners of Grand Central could build higher than the zoning height limit would normally allow on another site (see *Penn Central Transp. v. New York City*, 438 U.S. 104 (1978)).

TDRs have drawn the interest of elected local officials because of the potential to avoid the Fifth Amendment takings issue that has plagued proposals to downzone property as a way to manage growth. Thus far, the courts have not given definitive direction on the legality of using TDRs as just compensation. In *Suitum v. Tahoe Regional Planning Agency*, 96 U.S. 243 (1997), the U.S. Supreme Court ruled that the plaintiff, Mrs. Suitum, did not have a "ripe" situation because she had not tried to sell her TDRs and had not determined what they were worth.

In *Williamstown County Regional Planning Commission v. Hamilton Bank of Johnson City*, 473 U.S. 172 (1985), the Supreme Court ruled that "if a State provides an adequate procedure for seeking just compensation, the property owner cannot claim a violation of the Just Compensation Clause [of the Fifth Amendment] until it has used the procedure and been denied just compensation." In short, the role of TDRs as "just compensation" has not been fully resolved by the courts.

One way that local governments have attempted to minimize the effects of downzoning is to create single zones that serve as both the sending and receiving areas.

which only Montgomery County uses a dual zone that clearly separates sending and receiving areas. Montgomery County downzoned its rural area from one house per five acres to one per 25 and then gave each landowner in the sending area one TDR per five acres.

St. Lucie County adopted a single-zone TDR program, but requires that a landowner or two or more landowners have a minimum of 500 acres and develop their land in a new urbanist town or village. In return, the county agrees to provide central sewer and water service, even to new towns or villages outside the county's urban service boundary.

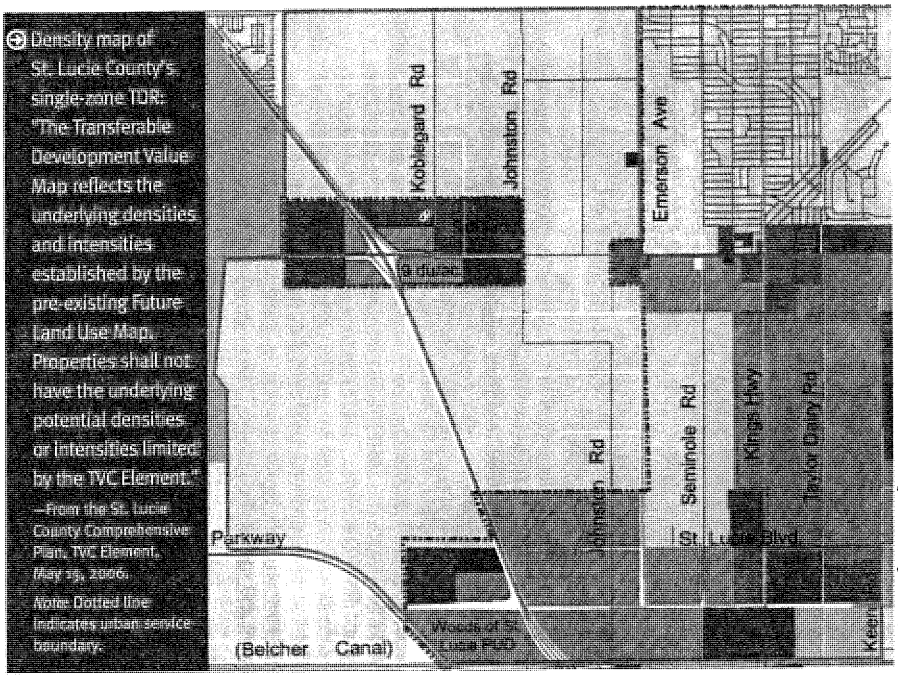
Take the case of an owner of a 500-acre parcel outside the USB who proposes to build a new village development:

- The landowner must set aside at least 75 percent of the site as open space.
- The minimum density is five dwelling units per acre, so the 125 acres of development land must support at least 625 dwelling units, of which 50 units (eight percent) must be Workforce Housing units.
- Transferable development rights moved from the open space for use as Workforce Housing receive a multiplier of 2.5. The remaining land set aside for open space receives a multiplier of 1.25.
- The landowner can receive additional TDR multipliers (bonuses) by attracting a target industry, institution of higher learning, or a research facility.

TDRS: THE NEXT GENERATION

The next generation of TDRs will feature the transfer of development rights across political jurisdictions and landscape-scale preservation. TDR programs may provide a way to encourage greater regional cooperation, especially in the Northeast, where townships control planning and zoning.

In 2000, the State of Pennsylvania authorized the use of TDRs across municipal boundaries if the municipalities have a written intergovernmental agreement or have adopted a multimunicipal plan. Even though dozens of multimunicipal plans have been completed, to date, no TDRs have moved from one municipality to another. An obvious problem: Why would one municipality want to provide space for another's development?



Density map of St. Lucie County's single-zone TDR: "The Transferable Development Value Map reflects the underlying densities and intensities established by the pre-existing Future Land Use Map. Properties shall not have the underlying potential densities or intensities limited by the TVC Element."
—From the St. Lucie County Comprehensive Plan, TVC Element, May 15, 2006.
Note: Dotted line indicates urban service boundary.

Treasure Coast Regional Planning Council (2006)

In 2004, the State of New Jersey passed legislation allowing the transfer of development rights not only across municipal boundaries but from a sending area anywhere in the state to a receiving area anywhere in the state. New Jersey is proposing to use transfer of development rights as a key tool in preserving the New Jersey Highlands in the northeast corner of the state.

King County, Washington, has preserved more than 92,000 acres since 1999, mainly through a single transaction that enabled it to put many TDRs in its bank. In 2004, the county paid $22 million for TDRs from a 90,000-acre tract owned by Hancock Timber Resource Group. Development rights can be transferred to inside Seattle's urban growth boundary to allow taller buildings in downtown Seattle, or for a 50 percent increase in the number of homes allowed in some unincorporated parts of the county. For instance, in 2006, R.C. Hedreen Co. paid $930,000 to King County's TDR Bank for 31 rural development rights. In exchange, the company was allowed to add 62,000 square feet of residential space and increase the height of a building it owned above 300 feet.

CONCLUSION

The transfer of development rights technique is nearly 40 years old. Local governments have used TDRs to protect historic sites, wetlands, and scenic areas in addition to farmland and forestland. A TDR program can be addressed in the local comprehensive plan and added to the local zoning ordinance. The zoning in both the sending areas and receiving areas should match the outcomes the local government is trying to achieve. And the procedures for operating the TDR program should be spelled out in the zoning ordinance.

A common mistake local governments make is giving away density for free in the rezoning process rather than requiring a developer to acquire TDRs to help preserve land in the community and thus maintain a balance between open space and development. Also, most TDR programs place a heavy emphasis on preserving open space and not enough attention to the appearance, density,

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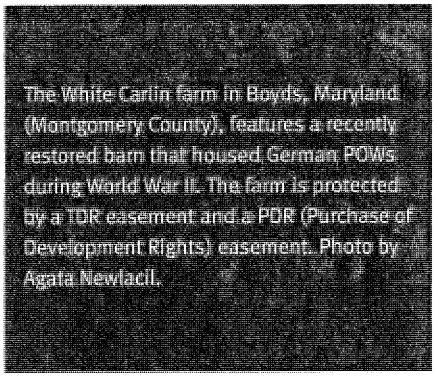

The White Carlin farm in Boyds, Maryland (Montgomery County), features a recently restored barn that housed German POWs during World War II. The farm is protected by a TDR easement and a PDR (Purchase of Development Rights) easement. Photo by Agata Newlacil.

and function of development that can be built in the receiving areas.

Intergovernmental cooperation, landscape-scale preservation, and form-based zoning codes for major developments will be needed to make transfer of development rights programs effective over the next few decades. Between now and 2050, the United States is projected to add more than 100 million people. TDRs can be a helpful tool to accommodate growth and preserve important natural and cultural resources, but getting the zoning and comprehensive plan right are important first steps.

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FARMLAND INFORMATION CENTER

FACT SHEET

TRANSFER OF DEVELOPMENT RIGHTS

American Farmland Trust

FARMLAND INFORMATION CENTER
One Short Street, Suite 2
Northampton, MA 01060
Tel: (413) 586-4593
Fax: (413) 586-9332
Web: www.farmlandinfo.org

NATIONAL OFFICE
1200 18th Street, NW, Suite 800
Washington, DC 20036
Tel: (202) 331-7300
Fax: (202) 659-8339
Web: www.farmland.org

DESCRIPTION

Transfer of development rights (TDR) programs enable the transfer of development potential from one parcel of land to another. TDR programs are typically established by local zoning ordinances. In the context of farmland protection, TDR is often used to shift development from agricultural land to designated growth zones located closer to municipal services. TDR is also known as transfer of development credits (TDC) and transferable development units (TDU).

TDR programs are based on the concept that landowners have a bundle of different property rights, including the right to use the land; lease, sell and bequeath it; borrow money using it as security; construct buildings on it; and mine it; subject to reasonable local land use regulations. When a landowner sells property, generally all the rights transfer to the buyer. TDR programs allow landowners to separate from their other property rights, and to sell, the right to develop land.

The parcel of land where the development rights originate is called the "sending" parcel. When the rights are transferred from the sending parcel, the land is typically protected with a permanent conservation easement. A few localities record transfer documents to track the number of rights transferred and to notify buyers and local officials of limited future development potential. This approach, however, offers less protection than a conservation easement because changes in local land use regulations—even if such changes require a comprehensive plan update—could alter the rules for determining the remaining development potential on sites in sending areas.

The parcel of land to which the rights are transferred is called the "receiving" parcel. Transferred rights generally allow the purchaser of the rights to build at a higher density than ordinarily permitted by the base zoning on the receiving parcel.

TDR is most suitable in places where large blocks of land remain in agricultural use. In communities with a fragmented agricultural land base, it may be difficult to find viable sending areas. Communities also must be able to identify receiving areas that can accommodate the development potential to be transferred. Well-planned receiving areas have the infrastructure needed to absorb additional density. They also respond to residents' concerns about increased residential density while taking advantage of market conditions.

Local officials in Chesterfield Township, New Jersey, for example, designed a mixed-use community, Old York Village, *outside* of previously developed areas to accommodate transferred development potential. Other communities have authorized, or are considering, alternate applications of development potential such as increases in non-residential floor area, impervious surface area, decreases in parking requirements and even *decreases* in residential density.

The most effective TDR programs help facilitate transactions between private landowners and developers. A few programs allow developers to make payments in lieu of actual transfers. The locality then buys conservation easements on land in the sending area, sometimes in partnership with established purchase of agricultural conservation easement (PACE) programs and/or local land trusts. Other programs maintain public lists of TDR sellers and buyers. Some buy and retire rights to stimulate the market and/or reduce overall building potential. Lastly, at least a dozen communities have established TDR banks that buy development rights with public funds and sell the rights to developers. Some banks finance loans using the rights as collateral.

Some states have enacted legislation explicitly authorizing local governments to create TDR programs. For example in 2004, the New Jersey Legislature enacted the State Transfer of Development Rights Act. The State TDR Act authorizes municipalities to develop and participate in intra-municipal and inter-municipal programs. This law also established a formal planning process to enact a TDR ordinance and authorized the State TDR Bank Board to provide planning grants to communities.

TDR programs are distinct from PACE programs because TDR programs harness private dollars to achieve permanent land protection. TDR programs also differ from PACE programs in that they permit development potential to be transferred to a more appropriate location while PACE programs permanently retire development potential.

The FARMLAND INFORMATION CENTER (FIC) is a clearinghouse for information about farmland protection and stewardship.
The FIC is a public/private partnership between the USDA Natural Resources Conservation Service and American Farmland Trust.

TRANSFER OF DEVELOPMENT RIGHTS

HISTORY

TDR is used predominantly by counties, towns and townships. The 1981 National Agricultural Lands Study reported that 12 localities had enacted TDR programs to protect farmland and open space, but very few of these programs had been implemented. In the 1980s and 1990s, many local governments adopted TDR ordinances. An American Farmland Trust (AFT) Farmland Information Center (FIC) survey in 2000 identified 50 jurisdictions with TDR ordinances on the books.

In 2007, the FIC identified 99 TDR programs that protect agricultural land. We collected information from 64 programs. Of these, 38 had protected land or received payments in lieu of transfers. This activity is summarized in the accompanying table. Seventeen programs had not protected any agricultural land to date. Nine programs had been discontinued.

As of January 2008, 12 programs had each protected more than 1,000 acres of agricultural land, compared to eight programs during our previous survey. Since 1980, Montgomery County, Maryland, has protected 51,489 acres using TDR, or 40 percent of the agricultural land protected by the programs that responded to our survey (129,810 acres). The county's share of protected agricultural land via TDR dropped significantly, down from 60 percent of the national total at the time of the 2000 survey. Two programs that permit payments in lieu of transfers have received a combined total of more than $1.4 million for agricultural land protection.

FUNCTIONS & PURPOSES

TDR programs can be designed to accomplish multiple goals including farmland protection, conservation of environmentally sensitive areas and preservation of historic landmarks. In the context of farmland protection, TDR programs prevent non-agricultural development of farmland, help keep farmland affordable and provide farmland owners with liquid capital that can be used to enhance farm viability.

TDR programs also offer a potential solution to the political and legal problems that many communities face when they try to restrict development of farmland. Landowners may oppose agricultural protection zoning (APZ) and other land use regulations because of their concern that such controls will reduce the value of their land. When more restrictive land use regulations are enacted in conjunction with a TDR program, communities can retain equity for landowners. For example, development rights for transfer may be allocated based on the "underlying" or prior zoning. Selling development rights enables landowners to recapture the equity available under the previous zoning.

When downzoning is combined with a TDR program, however, landowners can retain their equity by selling development rights.

ISSUES TO ADDRESS

In developing a TDR program, planners must address a variety of technical issues. These issues include:

- Which agricultural areas should be protected?
- What type of transfers should be permitted?
- How should development rights be allocated?
- Where should development potential be transferred, how should rights be applied, and at what densities?
- Should the zoning in the sending area be changed to create more of an incentive for landowners to sell development rights?
- Should the zoning in the receiving area be changed to create more of an incentive for developers to buy development rights?
- Should the local government buy and sell development rights through a TDR bank?

One of the most difficult aspects of implementing TDR is developing the right mix of incentives. Farmers must have incentives to sell development rights instead of building lots. Developers must benefit from buying development rights instead of building according to existing standards. Thus, local governments must predict the likely supply of, and demand for, development rights in the real estate market, which determines the price. TDR programs are sometimes created in conjunction with

APZ: New construction is restricted in the agricultural zone, and farmers are compensated with the opportunity to sell development rights.

Because the issues are so complex, TDR programs are usually the result of a comprehensive planning process. Comprehensive planning helps a community envision its future and generally involves extensive public participation. The process of developing a community vision may help build understanding of TDR and support for farmland protection.

BENEFITS OF TDR

- Most TDR programs protect farmland permanently, while keeping it in private ownership.
- Participation in TDR programs is voluntary—landowners are never required to sell their development rights.
- TDR can promote orderly growth by concentrating development in areas with adequate public services.
- TDR programs allow landowners in agricultural protection zones to retain their equity without developing their land.
- TDR programs are market-driven—private parties pay to protect farmland, and more land is protected when development pressure is high.
- TDR programs can accomplish multiple goals, including farmland protection, protection of environmentally sensitive areas, the development of compact urban areas, the promotion of downtown commercial growth and the preservation of historic landmarks.

DRAWBACKS

- TDR programs are technically complicated and require a significant investment of time and staff resources to implement.
- TDR is an unfamiliar concept. A lengthy and extensive public education campaign is generally required to explain TDR to citizens.
- The pace of transactions depends on the private market for development rights. If the real estate market is depressed, few rights will be sold, and little land will be protected.

TRANSFER OF DEVELOPMENT RIGHTS

For additional information on farmland protection and stewardship, contact the Farmland Information Center. The FIC offers a staffed answer service, online library, program monitoring, fact sheets and other educational materials.

www.farmlandinfo.org

(800) 370-4879

LOCAL GOVERNMENTS WITH TDR PROGRAMS FOR FARMLAND, 2008

Locality	Year of Inception	Rights Transferred	Agricultural Acres Protected	How Rights Are Used	Notes
California					
City of Livermore	2003	56 payments	$1,200,000	Increase residential density	Allows payments in lieu of transfers
Marin County	1981	11	660	Increase residential density	Multi-purpose program
Colorado					
Larimer County	1994	721	503	Increase residential density	Multi-purpose program
Mesa County	2003	10	50	Increase residential density	Multi-purpose program
Delaware					
Kent County	2004	157	157	Increase residential density Change permitted land use	Multi-purpose program
New Castle County	1998	93	300	Increase residential density	Multi-purpose program
Georgia					
City of Chattahoochee Hill Country	2003	21	21	Increase residential density Increase commercial square footage	Multi-purpose program Chattahoochee Hill Conservancy operates TDR bank
Idaho					
Payette County	1982	154	4,000	Permit development on substandard lots	Multi-purpose program
Maryland					
Calvert County	1978	UNK	13,260	Increase residential density	Multi-purpose program Purchases and retires rights
Caroline County	2006	136	1,500	Increase residential density	Multi-purpose program Maintains registry of interested buyers/sellers
Charles County	1992	1,110	3,330	Increase residential density	Multi-purpose program
Howard County	1993	NR	2,045	Increase residential density	Multi-purpose program Purchases and retires rights
Montgomery County	1987	9,630	51,489	Increase residential density	Operated bank but discontinued in 1990
Queen Anne's County	1987	UNK	8,032	Increase residential density Increase commercial square footage Increase impervious surface area	Multipurpose program Non-Contiguous Development activity included in county figures
St. Mary's County	1990	155	465	Increase residential density	
Massachusetts					
Town of Groton	1980	25	100	Increase residential density Increase rate of development	Multi-purpose program
Town of Hadley	2000	3 payments	$206,772	Increase commercial or industrial floor area Reduce parking requirements	Allows payments in lieu of transfers
Town of Plymouth	2004	13	118	Increase residential density	Multi-purpose program
Minnesota					
Blue Earth County	1996	150	6,000	Increase residential density	Multi-purpose program
Chisago County	2001	11	290	Increase residential density	Multi-purpose program
Rice County	2004	102	3,252	Increase residential density	Multi-purpose program
Nevada					
Churchill County	2006	200	688	Increase residential density	Multi-purpose program Operates TDR bank
Douglas County	1997	3,518	3,727	Increase residential density Increase commercial square footage	
New Jersey					
Chesterfield Twp., Burlington Co.	1998	652	2,231	Increase residential density Increase commercial square footage	Burlington County operates bank used by township
New Jersey Pinelands	1981	4,000	25,000	Increase residential density Permit development on substandard lots	Multi-purpose program Operates TDR bank Maintains registry of interested buyers/sellers

LOCAL GOVERNMENTS WITH TDR PROGRAMS FOR FARMLAND, 2008

Locality	Year of Inception	Rights Transferred	Agricultural Acres Protected	How Rights Are Used	Notes
New York					
Central Pine Barrens	1995	48	48	Increase residential density Increase commercial or industrial density/intensity All permitted increases in density or intensity relate to, and are capped by, increases in sewage flow	Multi-purpose program Commission operates bank Maintains registry of interested buyers/sellers
Town of Perinton	1993	68	174	Increase residential density	Multi-purpose program Purchases and retires rights
Pennsylvania					
Honey Brook Twp., Chester Co.	2003	18	50	Increase residential density Increase non residential square footage Increase impervious surface area	
Manheim Twp., Lancaster Co.	1991	422	476	Increase residential density Increase commercial square footage Increase impervious surface area	Operates TDR bank Purchases and retires rights
Shrewsbury Twp., York Co.	1976	30	60	Increase residential density Allowance of certain non-residential uses	Operates TDR bank
South Middleton Twp., Cumberland Co.	1999	8	135	Increase residential density	Multi-purpose program
Warrington Twp., Bucks Co.	1985	187	UNK	Increase residential density Increase commercial square footage Increase impervious surface area	Multi-purpose program
Warwick Twp., Lancaster Co.	1993	447	897	Increase commercial and light industrial square footage	Operates TDR bank Partners with Lancaster Farmland Trust
West Vincent Twp., Chester Co.	1998	162	NR	Increase residential density Increase commercial square footage	Multi-purpose program
Vermont					
South Burlington	1992	414	497	Increase residential density	Operates TDR bank
Washington					
King County	2000	8	80	Increase residential density	Multi-purpose program Operates TDR bank
Snohomish County	2004	49	70	Increase residential density Increase commercial square footage	Operates TDR bank
Wisconsin					
Cottage Grove Twp., Dane Co.	2000	3	105	Increase residential density	
TOTALS		**22,733**	**129,810**		

Most of the programs listed in this table protect multiple resources including agricultural land. For the purposes of this table, we only included transfers from agricultural land and acres of agricultural land protected by each program.

Two programs included in this table—Livermore, Calif., and Hadley, Mass.—allow payments in lieu of transfers. For these programs, the figure in "Rights Transferred" column represents the number of payments received to date and the figure in the "Agricultural Acres Protected" column equals the funds received to date. These numbers are not included in the totals at the bottom.

UNK means the program manager did not know. NR indicates that the program manager did not respond.

Surveys were sent to programs identified by staff and profiled in publications and reports about TDR programs, including *Transfer of Development Rights in U.S. Communities:Evaluating Program Design, Implementation, and Outcomes* by Margaret Wells and Virginia McConnell and *Beyond Takings and Givings: Saving Natural Areas, Farmland, and Historic Landmarks with Transfer of Development Rights and Density Transfer Charges* by Rick Pruetz.

Figures for St. Mary's County, Md., are from the Wells/McConnell report. Figures for Queen Anne's County, Md., are from a presentation posted on the county's Department of Land Use, Growth Management and Environment Web site.

(Draft Glenville ordinance, June 2008)

ARTICLE XXII

Transfer of Development Rights

§270-161. Purpose.

The primary purpose of establishing a transfer of development rights (TDR) program is to permanently preserve important farmland, forest land, sensitive natural areas, groundwater quality and rural community character that would be lost in the Town of Glenville if the land were developed. In addition, this Article is intended to protect property rights by allowing landowners whose land is intended for preservation to transfer their right to develop to other areas deemed appropriate for higher density development or other development incentives based on the availability of community facilities and infrastructure. Finally, this Article is intended to permit the establishment and administration of an intermunicipal TDR program between the Town and the Village of Scotia.

§270-162. Authority.

This ordinance is enacted pursuant to the authority granted by §261-a of New York Town Law for the creation of a transfer of development rights program, under the terms of which development rights are acknowledged to be severable and separately conveyable from a "sending area" to a "receiving area." This ordinance is further enacted pursuant to the authority granted by §284 of New York Town Law on intermunicipal cooperation that permits the development and implementation of intermunicipal planning and regulatory programs. The Town is therefore authorized to enter into an intermunicipal agreement with the Village of Scotia.

§270-163. Basic concept.

A. The provisions of this Article allow landowners (here "transferor") in areas of the Town proposed for conservation, called "sending areas," to voluntarily sell or convey the right to develop their land to other entities (here "transferee") for use in areas of the Town or Village proposed for additional development, called "receiving areas." Each transferor shall have the right to sever all or a portion of the rights to develop from a property in a sending area and to sell, trade, donate or barter all or a portion of those rights to a transferee consistent with the purposes of §270-161.

B. The transferee may retire the development rights, resell them, hold them or apply them to property in a receiving area in order to obtain approval for development at a density of use or for other development incentives greater than would otherwise be allowed on the land, up to the maximum density or incentive indicated in

§270-169.

C. When transferors sell or convey development rights, they must restrict that portion of land from which the rights are conveyed against any future development with a conservation easement, although the land may still be used for purposes that do not involve residential, commercial, industrial or institutional development, such as agriculture or forestry. Lands within sending areas that are restricted with conservation easements may be sold to others, but the restrictions apply to all future owners of the property. Conservation easements on lands in designated sending areas shall be held by an approved conservation organization defined as a charitable organization under §501(c)(3) of the Internal Revenue Code, or the Town or Village.

§270-164. Establishment of sending and receiving areas.

A. Sending Areas – The Town has established a large sending area in the northwest part of Town, two smaller sending areas in the south-central part of Town and a smaller sending area in the northeast part of Town. These areas include important farmland, sensitive natural areas, scenic viewsheds and public wellheads (defined by the wellhead protection zone and primary recharge zone) that the Town has identified as important to protect in the 2008 Open Space Plan. All of these areas are zoned RA Rural Residential and Agricultural, except for part of the public wellhead areas. An overlay district is hereby created to apply to these areas, to be entitled "TDR-S" and to be reflected on the official Zoning Map for the Town.

B. Receiving Areas. The Town has established three receiving areas in the eastern part of Town, two of which have been identified in the Town Center Plan and Freemans Bridge Road Plan as having good potential for redevelopment and mixed-use development, respectively. These areas are zoned Community Business/General Business and Mixed-Use Development, respectively. A third receiving area is a former brownfields site that is ready for redevelopment. An overlay district is hereby created to apply to these areas, to be entitled "TDR-R" and to be reflected on the official Zoning Map for the Town.

§270-165. Calculation of transferable development rights.

A. Sending area tract qualifications. A tract of land proposed for placement under easement for the purpose of acquiring transferable development rights shall:

(1) Be located within a Town or Village TDR-S Overlay.

(2) Comprise at least 80 percent of the ownership, which shall include all contiguous, commonly-held land within the sending area.

(3) Consist of a minimum of 20 acres of contiguous land, except along a stream or potential trail corridor, or where adjacent to already-preserved land.

B. Transferable development rights computation.

(1) The total number of development rights available on a sending area tract shall be determined by multiplying the net tract area by .5.

(2) The net tract area shall be determined by subtracting from the gross tract area all lands shown on the Town's GIS Constraints Map, which shall include a) FEMA floodplains, b) State-designated wetlands and steep slopes over 15%.

(3) Fractions of acres shall be rounded to the nearest whole number in computing assigned development rights.

(4) Land previously restricted against development by covenant, easement or deed restriction shall not be eligible for calculation of development rights.

§270-166. Issuance of TDR Certificate.

A. Any landowner in a Town or Village sending area may request a TDR Certificate from the Town that specifies the number of development rights that may be separated and transferred from a qualified sending area tract based on the provisions of §270-165 above. The Town planner shall be responsible for making this determination and issuing the certificate, for which no fee shall be charged.

B. An application for a TDR Certificate shall include:

(1) A new title search and legal description, including any existing boundary survey, of the sending area tract, and legal opinion of title affirming that the development rights being transferred have not been previously severed from or prohibited upon the sending area tract.

(2) An identification of lands previously restricted by development as described in §270-165.B.(4) above.

(3) Such additional information required by the Town planner as necessary to determine the number of development rights that qualify for transfer, but not including a plat map or new boundary survey.

C. A TDR Certificate shall:

(1) Identify the transferor.

(2) Include a legal description of the original sending area tract.

(3) Include a GIS map showing the original sending area tract, the portion of the tract on which the calculation of development rights is based and constrained or otherwise restricted areas as identified in §270.165.B.(2) and (4).

(4) Show a calculation for and statement of the number of development rights eligible for transfer.

(5) If only a portion of the total development rights are being transferred from the sending area tract, a statement both of the remaining transferable development rights or the remaining on-site development potential in number of dwelling units on the sending area tract.

(6) The date of issuance.

(7) The signature of the Town planner.

(8) A tracking number assigned by the Town planner

D. No transfer of development rights under this ordinance shall be recognized by the Town as valid unless the instrument of original transfer contains the Town planner's certification.

§270-167. Deed of Transferable Development Rights.

Transferable development rights that have been severed shall be conveyed by a Deed of Transferable Development Rights duly recorded with the Schenectady County Clerk. Such deeds shall include both the original instrument of transfer - "Original TDR Deed" and subsequent instruments of transfer - "Intermediate TDR Deed." All such deeds on land within the Town shall conform to the requirements of this Section.

A. An Original TDR Deed is required when development rights are initially separated from a sending area tract. The Original TDR Deed shall include or be accompanied by the following information:

(1) The names and signatures of the transferor and transferee.

(2) Either:
a. the identity of the tract of land to which the development rights will be attached, or
b. a statement that the rights are either being transferred to the Town, an approved conservation organization or other person, or
c. a statement that the rights are being retained by the owner of the

sending area tract.

(3) The date of transfer.

(4) A copy of the TDR Certificate described in §270-166 above.

(5) The number of development rights being transferred up to the number permitted on the TDR Certificate.

(6) The number of development rights remaining on the sending area tract (both for on-site and off-site use).

(7) A current title search of the sending area tract (or portion of the tract to be placed under easement) prepared within 30 days prior to submission of the deed, or a signed affidavit that title has not changed since issuance of the TDR Certificate under §270-166.

(8) A legal description and plat of the sending area tract or that portion of the tract to be placed under easement, prepared by a licensed surveyor.

(9) A conservation easement, which shall permanently restrict development of the sending area tract as provided in §270-168. below and which shall be recorded with the Schenectady County Clerk at the same time as the Original TDR Deed.

B. An Intermediate TDR Deed is required for any subsequent conveyance of development rights after the recording of the Original TDR Deed. An Intermediate TDR Deed shall include or be accompanied by the following Information:

(1) Items 1-7 above.

(2) Copies and a listing of all previous TDR deeds identified by the books and pages where they are recorded with the Schenectady County Clerk.

C. The Town planner shall, prior to their recording and within 30 days of receipt, review and endorse the Original TDR Deed and conservation easement after comparing them with the TDR Certificate to determine the accuracy of the representation of the number of development rights being transferred as well as the number of any remaining development rights that may later be used either on- or off-site. The Town planner shall also, within 30 days of receipt, review and endorse any Intermediate TDR Deeds at the time of submittal of any application for development under §270-169.B. of this Ordinance.

D. The Town legal counsel shall, prior to their recording and within 30 days of

receipt, review and endorse as to form and legal sufficiency the Original TDR Deed and conservation easement. The Town legal counsel shall also, within 30 days of receipt, review and endorse as to form and legal sufficiency any Intermediate TDR Deeds at the time of submittal of any application for development under §270-169.B. of this Ordinance.

E. No transfer of development rights under this Ordinance shall be recognized by the Town as valid until or unless a TDR Deed Endorsement Certificate signed by both the Town planner and Town legal counsel has been issued.

§270-168. Recording of conservation easement.

Any sending area tract from which development rights have been severed must be permanently restricted from future development by a conservation easement as defined in title three of Article 49 of the Environmental Conservation Law. Such easement must meet the following requirements:

A. Except where any development rights are retained, such as within an "acceptable development area," the conservation easement shall permanently restrict the land from future development for any purpose other than principal or accessory agricultural uses, forest uses, public parkland, conservation areas and similar uses, but excluding golf courses. Structural development for such permitted uses shall be allowed subject to compliance with the standards set forth in the Town's Zoning Ordinance.

B. The conservation easement shall designate the Town and/or a bona fide conservation organization acceptable to the Town at its sole discretion, as the beneficiary/grantee.

C. If the Town is to hold or be a party to the conservation easement, it shall be approved by the Town legal counsel with respect to form and legal sufficiency, within 30 days of its receipt and prior to its recording.

D. The conservation easement shall apply to the tract of land or portion thereof from which development rights are conveyed (sending area tract), and shall specify the number of development rights to be severed as well as any to be retained. No portion of the tract area used to calculate the number of development rights to be severed shall be used to satisfy minimum yard setbacks or lot area requirements for any development rights that are to be retained or for any other development except as permitted under §270-168.A above.

E. On any portion of a tract from which development rights are severed, retained development rights may not exceed one (1) dwelling unit per twenty (20) acres. Notwithstanding the foregoing, any tract within a designated sending area that is less than twenty (20) acres in area may retain no more than one development right.

F. On any tract from which development rights are severed, retained development rights may be developed with traditional farm/estate building groupings including one (1) residence and customary accessory structures. In order to be utilized, this option must be specified in the conservation easement as occurring within the "acceptable development area."

G. All owners of all legal and beneficial interest in the tract from which development rights are severed shall execute the conservation easement(s). All lienholders of the tract from which development rights are severed shall execute a subordination agreement or a release of lien.

H. The conservation easement must make permanent provision for the annual monitoring of the eased land to assure its continuing compliance with the terms of the easement.

I. Final approval for any subdivision or land development plan utilizing transferred development rights shall not be granted prior to the recording of the conservation easement with the Schenectady County Clerk and the New York Department of Environmental Conservation.

§270-169. Application of development rights to a receiving parcel.

A. Owners of tracts within a designated receiving area may use development rights that are purchased or conveyed from sending area landowners, the Town, an eligible conservation organization or intermediate transferor as described below and in Table 1's shaded spaces. Transferred development rights shall entitle the owner of those rights to a variety of development incentives that may be used either to increase development density or secure other development advantages within a receiving area.

(1) Development incentive A: For each TDR acquired, 3,000 square feet of additional lot coverage shall be allowed up to a maximum combined lot coverage of 70% in the CB/GB district and 60% in the MU district.

(2) Development incentive B: In the CB/GB and MU districts, for each TDR acquired, 10 required parking spaces shall be waived up to a maximum waiver of 20% of required parking.

(3) Development incentive C: In the MU district, for each TDR acquired, one additional single-family dwelling or duplex shall be allowed, up to a doubling of underlying permitted density, or 7,500 square feet for a single-family dwelling and 10,000 square feet for a duplex. In such case, the lot frontage requirement for a single-family dwelling shall be reduced to 60 feet and the side yard requirement reduced to five feet on each side.

(4) Development incentive D: In the MU district, for each TDR acquired, four additional dwelling units may be added to a senior complex or condo building, up to a doubling of the underlying permitted maximum per building, or 16 for a condo and 64 for a senior complex.

Table 1
Maximum Density and Development Incentives Allowed
Through Transfer of Development Rights

Existing/Incentivized (shaded) Development Standards	**Community Business District**	**General Business District**	**Mixed-Use District**	**Ratio of DRs to Incentives**
Max. lot coverage (1)	30%	30%	20%	
A. Max. combined lot coverage w/TDR (2)	*70%*	*70%*	*60%*	*3,000sf per DR*
Required parking spaces (3)	1 per 350FA	1 per 350FA	1 per 350 FA	
B. Parking space waiver w/TDR (4)	*20%*	*20%*	*20%*	*10 parking spaces per DR*
Max. density in SF dus & duplexes			15,000sf/ 20,000sf	
C. Max. density w/TDR (5)			*7,500sf/ 10,000sf*	*1 DU per DR*
Max. # units in structure			8 per condo 32 per senior	
D. Max. # units in structure w/TDR			*16 per condo 64 per senior*	*4 DUs per DR*

1) building lot coverage only
2) combined lot coverage for buildings, parking and loading areas, access drive and sidewalks
3) approximate average; actual number is variable depending on use
4) the 20% waiver is to actual parking standards in Schedule A of the Zoning Ordinance
5) for 7,500 sf lots, the lot frontage requirement shall be 60' and the side yard requirements five feet each

B. A landowner who wants to use development rights on a property in a receiving area up to the maximums specified in Table 1 above shall submit an application for the use of such rights on a receiving area tract as part of an application for a development permit. In addition to any other information required for the development permit, the application shall be accompanied by:

(1) An affidavit of intent to transfer development rights to the property.

(2) Either of the following:

(a) a certified copy of a recorded Original TDR Deed of the developments rights proposed to be used and any Intermediate TDR Deeds through which the applicant became a transferee of those rights; or

(b) a signed written agreement between the applicant and a proposed original transferor, which contains information required by §270-167.A above and in which the proposed transferor agrees to execute an Original TDR Deed for the proposed receiving parcel when the use of the development rights, as determined by the issuance of a development permit, is finally approved.

C. The Town may grant preliminary subdivision approval of a proposed development incorporating additional development rights upon proof of ownership of development rights and covenants on the sending parcel being presented to the Town as a condition of final subdivision approval.

D. The Town planner shall be responsible for maintaining permanent records of all certificates issued, instruments of transfer and conservation easements recorded and development rights transferred to specific properties or otherwise retired.

§270-170. Public acquisition.

The Town may purchase development rights, may accept ownership of development rights through transfer by gift, and may accept land in fee simple for the purpose of severing development rights, within designated sending areas in either the Town or Village. All such development rights may be held or resold by the Town for use within designated receiving areas in either the Town or Village. Any purchase or gift of development rights shall be accompanied by evidence of the recording of a conservation easement as specified in §270-168 above. Any gift of land in fee simple may be followed at any time by a conservation easement as specified in §270-168 above, should the Town decide to use said land for the purpose of generating transferable development rights; this provision shall be retroactive from January 1, 2007.

§270-171. Transfers of development rights to conservation organizations.

Development rights may be transferred by the owner of a sending area tract to an approved conservation organization that has as its primary purpose the preservation of land for historic, scenic, agricultural or open space purposes. If such organization purchases or acquires development rights by gift or otherwise, the organization shall be entitled to resell such rights only if the proceeds from the sale of the rights are used to contribute to an endowment fund to monitor existing easements or purchase development rights from other lands in Town- or Village-designated sending areas. A minimum of 20% of the revenues generated from the sale of TDRs from any preserved sending area tract shall be dedicated to the endowment fund; as each easement is unique and

monitoring requirements differ, the amount dedicated to the fund must be negotiated with the conservation organization to its satisfaction. Prior to dispersal of the funds, this amount must be ratified by the Town Board. The remaining revenues remaining from the sale of TDRs for a sending area tract shall be used for additional easement acquisition.

§270-172. TDR Bank.

The Town hereby authorizes the creation of a transfer of development rights (TDR) Bank to encourage the exchange of development rights in the private market, thereby promoting the preservation of open space land. The Bank is authorized to acquire and sell development rights through the creation of a revolving dedicated open space preservation fund that will be the repository both for development rights and dedicated revenues.

A. Acquisition of development rights.

(1) Any development rights acquired under §270.170 above, any revenues from the sale of development rights under §270-172.B(1) below, and any local revenues, grant monies or donations of money received in support of the TDR program shall be held in a revolving dedicated open space preservation fund.

(2) The Town may accept development rights transferred to it by any approved conservation organization. A minimum of 20% of the revenues generated from the sale of these TDRs shall be dedicated to the organization's endowment fund; as each easement is unique and monitoring requirements differ, the amount dedicated to the fund must be negotiated with the conservation organization to its satisfaction. Prior to dispersal of the funds, this amount must be ratified by the Town Board. The remaining revenues remaining from the sale of TDRs for a sending area tract shall be used by the Town for additional easement acquisition.

B. Sale of development rights.

(1) The Town may periodically sell development rights using a competitive bid process or any other method deemed fair and equitable by the Town Board.

(2) All offers to purchase development rights from the TDR bank shall be in writing and shall include a minimum 10% down payment with purchase option. Payment of the remaining 90% shall be at the time the development rights are transferred.

C. Program administration.

(1) The TDR Bank will be administered by the Town Planner, under the supervision of the Town Board. The Planner will set up a TDR webpage on the Town's website to: 1) provide information on the program, 2) provide applicable forms and contacts, and 3) create a registry for TDR buyers and sellers. The Planner will keep records of the dates, amounts and locations of development rights acquisitions and sales and provide periodic reports to the Town Board.

(2) The Town may use up to 10% of revenues generated from the sale of development rights to cover the administrative costs of the TDR program.

§270.173. Amendment

The Town reserves the right to amend this Article in the future, including the right to change the sending and receiving area boundaries, the right to change the manner in which the number of development rights are calculated and the manner in which the development rights can be conveyed and utilized. No owner of land or owner of development rights shall have any claim against the Town for damages resulting from a change in this Article. The Town further reserves the right to terminate its transferable development rights program at any time. If the program is abolished, holders of outstanding development rights shall have 12 months from the effective date of the termination of the program to apply to use their remaining development rights within formerly-designated receiving areas.

§270-174. Definitions

As used in this ordinance, the following words and terms shall have the meanings specified herein:

ACCEPTABLE DEVELOPMENT AREA -

COMBINED LOT COVERAGE –The proportion of a parcel that is covered by buildings as well as parking and loading areas, access driveways and sidewalks.

DEVELOPMENT RIGHTS – The rights permitted to a lot, parcel or area of land under a zoning ordinance or local law respecting permissible use, area, density, bulk or height of improvements executed thereon. Development rights may be calculated and allocated in accordance with such factors as area, floor area, floor area ratios, density, height limitations, or any other criteria that will effectively quantify a value for the development right in a reasonable and uniform manner that will carry out the objectives of this section.

INSTRUMENT OF TRANSFER – A Deed of Transferable Development Rights that permits a specified number of development rights to be legally transferred from one party to another. A Deed of Original Transfer is the original instrument

that is used to separate these development rights from a sending area tract.

LOT COVERAGE* – The proportion of a parcel that is covered by buildings, including covered porches and accessory buildings.

OVERLAY DISTRICT – A district superimposed over one or more underlying zoning districts or parts of districts that imposes additional or alternative requirements to those applicable for the underlying district.

RECEIVING AREA – One or more designated areas of land to which development rights generated from one or more sending areas may be transferred and in which increased development is permitted to occur by reason of such transfer.

RECEIVING AREA TRACT – A parcel or parcels of land in the receiving area that is the object of a transfer of development rights, where the owner of the parcel(s) is receiving development rights, directly or by intermediate transfers, from a sending area tract, and on which increased density or development incentives is allowed.

SENDING AREA – One or more designated areas of land in which development rights are designated for use in one or more receiving areas.

SENDING AREA TRACT – A parcel or parcels of land in the sending area that are the subject of a transfer of development rights, where the owner of the parcel(s) is conveying development rights of the parcel(s), and on which those rights so conveyed may no longer be used on the sending area tract.

TDR – A single transferable development right.

TDR CERTIFICATE – A Town-issued certificate for which prospective transferors may apply to determine the number of transferable development rights to which a potential sending area tract would be entitled.

TRANSFEREE – The person or legal entity, including one who may own property in a receiving area, who purchases or otherwise acquires development rights.

TRANSFEROR – The owner of either a sending area tract or development rights that originated from a sending area tract.

TRANSFER OF DEVELOPMENT RIGHTS – The process by which development rights are transferred from one lot, parcel or area of land in any sending area to another lot, parcel or area of land in one or more receiving areas.

* already defined in 2005 Zoning Ordinance

§270-175. Enforcement

For the purposes of enforcement of this Article, the provisions of Article XXI of the Zoning Ordinance – Violations and Enforcement – apply.

Appendix H

Miscellaneous Farm Program Information and Fact Sheets

Cornell University

Hosted by CampusPress

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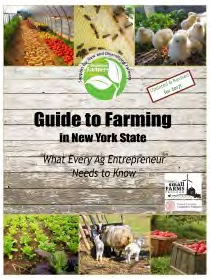
Small Farms Quarterly

Read articles about farming and the latest tools, tips and research.

GUIDE TO FARMING IN NY

This Guide is updated annually to provide answers to questions about taxes, business planning, labor law, zoning, regulations, marketing and many other topics that farmers need to know.



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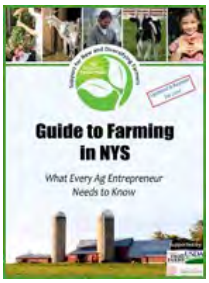

1. Download the entire Guide to Farming (PDF)
2. Browse in an Online Reader, or
3. Click on individual fact sheets below.

Explore How to Use this Guide here (PDF)

Getting Started

#1 Finding a Farm to Buy or Lease – revised 12/13/16
#2 Climate & Soil Considerations – revised 12/13/16
#3 Infrastructure Considerations – revised 12/13/16
#4 Financing a Farm Operation – revised 12/13/16
#5 Farm Risk Management – revised 12/13/16
#6 Farm Insurance – revised 12/13/16
#7 Farm Vehicles – revised 12/13/16
#8 Zoning Regulations & Farming – revised 12/13/16
#9 Legal Aspects of Rural Living – revised 12/13/16
#10 Environmental Regulations – revised 12/13/16
#11 Forest Land Resources – revised 6/8/12

Business Considerations

#12 Business Plans – revised 12/13/16
#13 Business Structures – revised 12/13/16
#14 Making Money – revised 12/13/16
#15 Record Keeping – revised 12/13/16
#16 Income Taxes – revised 12/13/16
#17 Sales Tax Exemptions/Refunds – revised 12/13/16
#18 Labor Laws – revised 12/13/16
#19 Payroll and Worker Documentation – revised 12/13/16
#20 Agricultural District Law Provisions – revised 12/13/16
#21 Ag Value Assessment for Farmland – revised 12/13/16
#22 Property Tax Exclusions for Buildings – revised 12/13/16

Marketing Considerations

#23 Assessing Your Market Potential – revised 12/13/16
#24 Pricing Farm Products – revised 12/13/16
#25 Finding Price Information – revised 12/13/16
#26 Direct Marketing Options – revised 12/13/16
#27 Marketing Regulations – revised 12/13/16
#28 Becoming a Small Scale Food Processor – revised 12/13/16
#29 Collecting Sales Tax on Farm Product Sales – revised 6/25/12
#30 Organic Certification– 6/26/12

Resources

#31 Grant Opportunities for Farmers – revised 12/13/16
#32 Opportunities for Veterans in Farming – revised 12/13/16
#33 Agricultural Agencies and Organizations – revised 12/13/16
#34 Information Sources for Getting Started – revised 12/13/16

Not Farming in NY?

Much of the information in the *Guide to Farming in NY* is applicable no matter where you live. But if you are seeking specific tax, legal, and regulatory information and you live outside of NY, check with your state Department of Agriculture, or download the following publications to find information for these states:

Massachusetts: MA Agricultural Resource Guide and other helpful guides available from the New Entry Sustainable Farming Project
Connecticut: Connecticut Agricultural Business Management Guide (PDF)
Vermont: Legal Guide to the Business of Farming in Vermont
Pennsylvania: Guide to Farming in Pen

NEW YORK STATE | Agriculture and Markets

American Farmland Trust
SAVING THE LAND THAT SUSTAINS US

FIND A FARM FIND A FARMER CREATE A PROFILE RESOURCES EVENTS ABOUT CONTACT LOGIN

Farmland for a New Generation NEW YORK

IN PARTNERSHIP WITH AMERICAN FARMLAND TRUST

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FIND A FARMER ▸

CREATE A PROFILE ▸

FIND A FARM JOB ▸

Sign up for the Farmland for a New Generation New York Newsletter!

This newsletter will feature articles and stories related to farmland access and transfer in New York.

Read more

ABOUT THE PROJECT

Farmland for a New Generation New York helps farmers seeking land and landowners wanting to keep their land in farming. On this website, you can register to post a farmer or a farm property profile, search for farmers or search for farmland, post or view farm job listings, learn about upcoming events, browse resources, and contact organizations throughout New York State.

The Farmers' School Property Tax Credit: *How can it work for YOU?*

New York Farm Bureau • 159 Wolf Rd, PO Box 5330, Albany, NY 12203 • 800-342-4143 • http://www.nyfb.org

What is the Farmers; School Property Tax Credit?

This property tax credit enables farmers to receive a tax credit from the state personal income tax or the corporation franchise tax to reimburse some or all of the school district property taxes paid by the farmer.

Am I eligible?

- An individual farmer or corporation must be defined as an "eligible farmer."
- The individual or corporation must own qualified agricultural property.
- The individual or corporation must pay eligible school taxes during the year.
- The individual's or corporation's income must be below the income limitation amount.

Who is an "eligible farmer"?

An individual or corporation that receives at least **2/3 of his or her excess federal gross income from farming**. *Excess* federal gross income is federal gross income, reduced by up to $30,000. ***In other words, take gross income and subtract $30,000. If 2/3 of the remaining amount is from the farm, you generally will qualify.***

CHANGES IMPROVE BENEFITS TO FARMERS:

New York Farm Bureau has successfully advocated for recent changes to the Farmer's School Property Tax Program that will address agriculture's changing needs.

- Land owned by immediate family members now qualifies for the program.
- Commercial Horse Boarding Operations are eligible for the program.
- Christmas Tree Operations and farms organized as C-corporations are now eligible for the program.
- Acre eligibility has increased from 250 acres to 350 acres.
- The modified adjusted gross income limit has increased from $150,000 to $250,000.

As an example: your federal gross income is $75,000. Included in that gross income is $25,000 from your spouse's job, $10,000 from your part-time job and $40,000 **gross income** from the farm. Your excess federal gross income would be $45,000 ($75,000-$30,000). 2/3 of $45,000 is $30,000 so your $40,000 **gross income** from farming would more than meet the 2/3 requirement and you would be considered an "eligible farmer".

Farming is defined as an individual or corporation that cultivates, operates or manages a farm for gain or profit, even though the operation may not produce a profit each year. Also included in the definition of farming are members of a limited liability company, a shareholder of an S or C corporation, and the beneficiary of an estate or trust that is engaged in the business of farming. Many commodities are included in the definition of farming as well, so check the IT-217-I form to be sure.

There may be years when, due to unforeseen circumstances such as crop failures, an eligible farmer does not meet the 2/3 requirement. When this occurs the eligible farmer is now allowed to use an ***average*** gross income from farming in calculating their excess federal gross income. The average gross income from

Over

farming is calculated using the gross income from farming of the respective taxable year and the gross incomes from farming of the two previous consecutive taxable years.

How is the amount of my deduction determined?

The credit equals 100% of the school taxes paid on qualified agricultural property where the acreage does not exceed the base acreage amount, and 50% of the school taxes paid on acres exceeding the base acreage amount. The base acreage amount for 2006 and thereafter is 350 acres.

What is defined as qualified agricultural property?

Qualified agricultural property includes land and land improvements in New York State that are used in agricultural production. Also included are structures and buildings that are located on the land and are used or occupied in order to perform agricultural production. In addition, land set aside in federal supply management programs or soil conservation programs are included.

Is my residential property considered qualified agricultural property?

No, residential property is not qualified agricultural property. This includes your personal house, mobile home, etc. and any buildings associated with the owner's residence (garage, shed). Housing that is provided for essential farm employees (not including the owner's) does meet the definition of qualified agricultural property and can receive the credit.

What about woodland?

Woodland property that is used for agricultural production or for the production of woodland products used in the farm operation is included as qualified agricultural property. So, woodland used for pasture does qualify, as does woodland adjacent to agricultural property because it provides erosion control or wind protection.

Does rented land qualify for the credit?

Land that you rent for agricultural purposes does not qualify; only land that you own qualifies for the credit. If you own land that you rent to someone else, and that person uses the land for agricultural purposes, then you may consider those acres as part of your qualified agricultural property.

In the case of a land contract, the buyer will be treated as the owner of the property as long as they are obligated under the land contract to pay the school district property tax and deduct those taxes as a tax expense for federal income tax purposes.

What is the income limitation amount?

The income limitation reduces or eliminates the credit for higher income taxpayers. The limitation is based on modified adjusted gross income (individuals) or modified entire net income (corporations). If your taxable income is between $200,000 and $250,000 your credit will be reduced by a percentage.

How do I apply & claim the credit?

You claim the credit on your personal income tax return or the corporation franchise tax return when you file each year. Individuals and estates/trusts complete the Form IT-217-I, *Claim for Farmers' School Tax Credit,* and corporations complete the Form CT-47, titled the same.

Where can I go for more information?

For tax information you can call 1-800-462-8100 or for forms and publications call 1-800-462-8100. New York's Claim for Farmers' School Tax Credit, form IT-217, is available at https://www.tax.ny.gov/pdf/current_forms/it/it217_fill_in.pdf. Instructions for the form are found at https://www.tax.ny.gov/pdf/current_forms/it/it217i.pdf. Questions and Answers on New York State's Farmers' School Tax Credit can be found at https://www.tax.ny.gov/pdf/publications/multi/pub51.pdf.

Historic Barn Rehabilitation Tax Credit Qualifications & Instructions

New York State Parks, Recreation and Historic Preservation

Owners of barns may qualify for the New York State Historic Barn Rehabilitation Tax Credit, which is a state income tax credit equal to 25% of Qualified Rehabilitation Expenditures

Qualifications:

- You must be a New York State taxpayer.
- The barn must have been constructed prior to 1946, OR
- The barn must be a contributing building to a property listed in the State or National Register of Historic Places.
- Your barn must have been used as an agricultural facility or for related purposes.
- Your qualified rehabilitation expenditures must amount to $5,000 or more.
- The rehabilitation project must not alter or change the historic appearance of the barn.
- The barn must not have been used as a residence within one year prior to applying for the credit.
- The project must not convert the barn to a residence.
- The credit may be applied to certain work that has already been completed.

Please contact the NYS Division for Historic Preservation (DHP) staff at (518) 237-8643 with questions about program qualifications. Additional program information and documents can be found online at https://parks.ny.gov/shpo/tax-credit-programs/.

The Application:

The application comprises three parts. Parts 1 and 2 are submitted together and may be submitted prior to work commencing on the property or during the rehabilitation project. Part 3 is submitted after the work is completed.

Part 1: Provides the baseline information about the applicant and barn. This helps the DHP establish that the barn meets the qualifications listed above.

Part 2: Establishes the proposed work and breaks down the work items into categories (roof, structural framing, etc.). Part 2 additionally requires a brief description of the barn's existing condition, the proposed rehabilitation, estimated costs, and references to images. *Note: you do not need formal estimates from a contractor to submit your application.*

Part 3: To be submitted after work is complete. The credit is claimed for the tax year in which the Part 3 is approved. Please submit a description of each complete work item and references to photos.

Note: the DHP does not require copies of invoices or receipts; please keep those for your tax records.

Images/Photographs:

- Please provide images/photographs of all visible exterior elevations of the barn. This helps DHP evaluate the condition of the structure and the proposed work.
- It is best to provide digital images on a CD or USB/thumb drive. Generally, emailed digital images will not be accepted unless authorized by DHP staff.
- All image files should be named with a number and location.
- Printed color photographs on photo paper are acceptable if a digital photo submission is not possible.

Part 1 and 2 Submissions Require:

- Exterior photos of all visible elevations of the barn.
- Photos of all areas where work will be or has been completed.
- If work has been completed, photos showing the barn before the work must be provided.
- Project worksheet(s) describing the proposed work *(if work has already been completed, submit Part 1 & 2 and Part 3 applications together and only include the Part 3 worksheet).*
- Manufacturer's Product Information (if applicable).
- Work completed within the last five years may qualify. Photos showing the barn before and after the work must be provided.

Part 3 Submissions Require:

- Exterior photos of all visible elevations showing completed work.
- Additional photos showing remaining areas where work has been completed.
- Part 3 project worksheet showing the amount of qualified rehabilitation expenditures.

Qualifying Rehabilitation Expenditures include, but are not limited to:

- Roofs; repair or replacement (with approved material), installation of gutters
- Siding/cladding/sheathing; repair or replacement in-kind, exterior painting
- Foundation repair or replacement
- Foundation drainage
- Masonry; repair or replacement in-kind
- Jacking, leveling, and other structural work, including cabling, bracing, and shoring
- Window & door repair or replacement in-kind
- Flooring repair or replacement in-kind, stair repair or replacement in-kind
- General carpentry
- Mechanical, Electrical and Plumbing (MEP) costs
- "Soft" or professional labor costs; architect, engineer, building/preservation consultant, permit fees
- ADA or OSHA-compliant upgrades, other components related to the building's operation
- Rehabilitation expenditures paid or incurred within the five years immediately preceding the year in which the tax credit shall be applied

Non-Qualifying Rehabilitation Expenditures:

- Building additions or extensions of the historic barn's footprint, except for reconstruction of missing historic wings/ additions that is based on physical evidence and other documentation of its appearance
- Enclosure of interior spaces with sheetrock or concealing materials
- Partitioning a substantial amount of interior space
- Removal of structurally sound framing or features, i.e., hay lofts, hay tracks/forks, silos
- Addition of interior mezzanine spaces
- Installation of salvaged architectural parts for decorative purposes
- Interior painting, staining and other cosmetic changes i.e., wallpaper
- Fixtures associated with new kitchens and bathrooms, i.e., cabinetry, appliances, toilets, etc.
- Landscaping
- Alarm systems
- Carpets
- Demolition costs, rubbish removal
- Fencing
- Financing fees, insurance fees, administrative costs, and processing fees
- Equipment such as scaffolding or bucket truck rental, furniture
- Labor completed by the barn owner, tools
- Routine cleaning and maintenance
- Outdoor lighting remote from the building
- Parking lots, walkways, patios, retaining walls not associated with original barn function
- Signage
- Work performed outside the barn's footprint

NEW YORK STATE | Department of Taxation and Finance

Tax Bulletin
Sales and Use Tax
TB-ST-244
April 8, 2019

Exemptions for Farmers and Commercial Horse Boarding Operators

Introduction

Farmers and commercial horse boarding operators can buy certain items and services without paying state and local sales or use taxes. This bulletin:

- identifies what purchases are exempt from tax,
- identifies what purchases are eligible for a refund or credit of tax, and
- describes what exemption or other documents should be used to make these purchases or apply for refunds or credits.

Definitions

The word *farming* covers many different activities, including:

- agriculture, floriculture, horticulture, aquaculture, viniculture, viticulture, and silviculture;
- stock, dairy, poultry, fruit or vegetable, graping, truck, and tree farming (e.g., maple trees or Christmas trees);
- ranching;
- raising fur-bearing animals;
- operating orchards;
- raising, growing, and harvesting crops, livestock, and livestock products; and
- raising, growing, and harvesting woodland products including logs, timber, lumber, pulpwood, posts, and firewood.

A *commercial horse boarding operation* is a business that:

- operates on at least seven acres;
- boards at least 10 horses (regardless of ownership); and
- receives $10,000 or more in gross receipts annually from fees generated from:
  - the boarding of horses; or
  - the production for sale of crops, livestock, and livestock products; or
  - both these activities.

A commercial horse boarding operation does not include any operation where the primary on-site function is horse racing.

Farm production begins with the preparation of the soil or other growing medium, or with the beginning of the life cycle for animals. Farm production ends when the product is ready for sale in its natural state. For farm products that will be converted into other products, farm production ceases when the normal development of the farm product has reached a stage where it will be processed or converted into another product.

> **Example:** *Production ends when cattle are ready to be processed into meat; raw milk into butter, cheese or bottled milk; grapes into wine or juice, etc.*

Exemption certificates and refunds

To make qualifying purchases, other than motor fuel and diesel motor fuel, without paying sales tax, a farmer or commercial horse boarding operator must fill out Form ST-125, *Farmer's and Commercial Horse Boarding Operator's Exemption Certificate*, and give it to the seller. See below for special rules for purchases of motor fuel and diesel motor fuel.

Any sales tax paid on a purchase that otherwise qualifies for the exemption can be refunded. See Tax Bulletins *How to Apply for a Refund of Sales and Use Tax* (TB-ST-350), and *Sales Tax Credits* (TB-ST-810).

Machinery, equipment, and supplies

A farmer's or commercial horse boarding operator's purchase of tangible personal property, such as machinery, equipment, and supplies, is exempt from sales tax if the property is used or consumed predominantly (more than 50% of the time) in farm production or in commercial horse boarding operations.

Property that can be purchased exempt from sales tax includes, but is not limited to:

- bale throwers
- barn cleaners
- barn ventilators
- beekeeping supplies
- blowers
- bulk milk tanks
- combines
- conveyors
- electrical systems
- farm wagons and carts
- feed and feed troughs
- fertilizers
- grain bins and tanks
- grain drills
- harvesters
- irrigation pipes and fittings
- livestock bedding
- manure spreaders
- parts and tools for farm equipment
- piping systems
- plants, seeds, and other propagative materials
- plows
- sprayers
- tack
- tractors

Computers

A computer that will be used predominantly in either farm production or in a commercial horse boarding operation, or in both, can be purchased without the payment of sales tax. This includes a computer used predominantly to:

- turn milking machines on and off;
- direct machinery and equipment used for measuring and delivering feed to livestock;
- turn irrigation systems on and off;
- maintain animal feed, weight, and health records; or
- perform agricultural research.

Vehicles

Motor vehicles, trailers, ATVs, boats, and snowmobiles that are used predominantly in farm production or in a commercial horse boarding operation, or in both, are exempt from sales and use taxes. In order to be exempt, the vehicle, trailer, ATV, boat, or snowmobile must be used for farm production on property actually farmed or on property actually used in a horse boarding operation, or both. Usage can be measured by hours of use or by miles traveled.

Building materials

Building materials that will be used to build, add to, improve, install, maintain or repair real property used predominantly in farm production or in a commercial horse boarding operation, or in both, can be purchased without paying sales tax. These tax-free purchases may be made by a farmer or commercial horse boarder, or by a contractor hired to do the work. **Note:** The exemption for purchases of building materials by contractors, subcontractors, or repairmen is available only if the materials become an integral component part of a building, structure, or real property used predominantly in farm production or in a commercial horse boarding operation, or in both.

Examples would be purchases of materials to build or repair:

- animal barns,
- hay and feed storage barns,
- barns or garages to park and store farm production equipment,
- fences,
- silos, and
- greenhouses.

A contractor, subcontractor or repairman should use Form ST-120.1, *Contractor Exempt Purchase Certificate*, to make qualifying exempt purchases.

Services

Charges for installing, maintaining, servicing, or repairing tangible personal property, or for maintaining, servicing, or repairing real property, used or consumed predominantly in farm production or in a commercial horse boarding operation, or in both, are also exempt from sales and use taxes.

> **Example:** *A commercial horse boarder hires a contractor to repair the roof on a stable used to house horses. This repair service is exempt.*
>
> **Example:** *A farmer hires a contractor to perform maintenance on the farm's irrigation system. This maintenance service is exempt.*
>
> **Example:** *A farmer hires a contractor to install a fence to keeps cows in a pasture. This installation service is exempt from tax.*

Utilities

Utilities used or consumed in farm production or in a commercial horse boarding operation, or in both, are also exempt from sales and use taxes. This includes:

- non-highway diesel motor fuel (but not motor fuel or highway diesel motor fuel);
- gas (natural gas, propane, etc.);
- electricity;
- refrigeration;
- steam; and
- gas, electric, refrigeration and steam services.

Non-highway diesel motor fuel that is used in farm production or in a commercial horse boarding operation, or in both, can be purchased exempt from sales and use taxes by giving the seller Form FT-1004, *Certificate of Purchases of Non-Highway Diesel Motor Fuel or Residual Petroleum Product for Farmers and Commercial Horse Boarding Operations*.

Motor fuel and highway diesel motor fuel

Motor fuel (gasoline) and *highway diesel motor fuel* cannot be purchased without paying sales tax. However, a farmer or commercial horse boarder can use Form FT-500, *Application for Refund of Sales Tax Paid on Petroleum Products*, to claim a refund of sales tax paid on these products when used in farm production or in a commercial horse boarding operation, or in both.

Additionally, a farmer (but not a commercial horse boarder) can use Form FT-420, *Refund Application for Farmers Purchasing Motor Fuel*, to claim a refund of the motor fuel excise tax, the petroleum business tax, and the sales tax on motor fuel (but not diesel motor fuel) used *directly and exclusively* in farm production.

Note: A Tax Bulletin is an informational document designed to provide general guidance in simplified language on a topic of interest to taxpayers. It is accurate as of the date issued. However, taxpayers should be aware that subsequent changes in the Tax Law or its interpretation may affect the accuracy of a Tax Bulletin. The information provided in this document does not cover every situation and is not intended to replace the law or change its meaning.

References and other useful information

Tax Law: Sections 1101(b)(19), 1101(b)(20), 1115(a)(6), (15) and (16), 1115(c)(2), and 1115(j)

Regulations: Section 528.7

Memoranda:
TSB-M-00(8)S, *Farmers and Commercial Horse Boarding Operations*
TSB-M-18(1)S, *Summary of Sales and Use Tax Changes Enacted in the 2018-2019 Budget Bill*

Bulletins:
How to Apply for a Refund of Sales and Use Tax (TB-ST-350)
Sales Tax Credits (TB-ST-810)

480-a Forest Tax Law Program Overview

What It Is

The New York Forest Tax Law Program (commonly called "480-a" after the section of the tax code relating to it) is a property tax reduction program. Participation is voluntary, and you must own at least 50 acres of woods in adjoining properties in New York to be eligible. 480-a lowers your taxes by exempting up to 80% of the assessed value of enrolled acreage from property taxes.

480-a offers the potential for you to save substantially on your property taxes every year. It can also help you look after your woodlot for the future and increase your long-term income from your land. However, it requires commitment to managing your woods for ten years. Consider the benefits and obligations carefully before you sign up. You may want to have a professional forester visit your property and provide a second opinion on whether enrollment makes sense for you prior to committing.

To enroll, you'll need a management plan for your woods prepared by a professional forester and approved by the New York State Department of Environmental Conservation. If your property is inside the New York City Watershed, you can apply to the Watershed Agricultural Council for funding to help offset the cost of getting that plan.

What You're Signing Up For To Get Your Tax Break

Once you enroll in 480-a, you must commit to following your management plan for ten years. 480-a has an annual recommitment, meaning that each year you receive your tax break, you commit to following your management plan for ten years afterward.

While you are enrolled in 480-a, you may not develop acreage that has had its assessed value exempted. You also may not subdivide your property into areas smaller than 50 acres. When your management plan requires you to harvest trees, you must pay a 6% tax on the value of what you sell. Failure to follow these requirements or your management plan may result in your removal from the program and the assessment of back taxes and penalties.

Frequently Asked Questions About 480-a

<u>What Are My Responsibilities While I'm Enrolled?</u>

Please note: Your forester can help you with all of these tasks.

1. Mark and maintain the boundary lines of your enrolled acreage.
2. File an annual commitment form with your Town Assessor and DEC Regional Forester.

3. Comply with your management plan's work schedule for a ten-year period after obtaining each annual exemption.
4. Submit an updated work schedule every five years.
5. When you're going to harvest trees, submit a notice of cutting to your DEC Regional Forester not less than 30 days prior to cutting. You will need to pay a 6 percent tax on the stumpage value to your County Treasurer within 30 days of the receipt of your trees' certification of value from DEC.

What's a Management Plan?

Management plans show the boundaries and size of your woodlot, what kinds and sizes of trees it contains, and what needs to be done to harvest trees. A plan identifies scheduled commercial harvests, noncommercial thinnings, road construction, and other management practices. These practices are listed in a work schedule that shows the work to be done each year for the next 15 years.

Who Writes the Management Plan? Can I Do It?

Because professional judgment is required to prepare a forest management plan, it must be prepared by a qualified forester. You must pay the cost of this service. Landowners in the New York City Watershed can apply for funding to help offset this cost. A directory of foresters who can help you write your plan is available here.

Do I Have to Follow My Management Plan?

Yes. Failure to adhere to your plan's work schedule will result in revocation of the certificate of approval by the Department of Environmental Conservation and the imposition of penalties and roll-back taxes.

Please note: Although you have to follow your plan, DEC will consider changes to your work schedule. If you need to adjust your plan for any reason, consult your forester for advice.

What Are The Penalties for Not Following the Program?

Properties removed from 480-a are subject to 2.5 times the tax savings, plus interest, for up to the past 10 years you've been enrolled in 480-a. When only portions of properties are removed (for example, if you choose to develop on enrolled land), the penalty is 5 times the tax savings, plus interest, for up to the past 10 years.

Can I Sell My Land While I'm Enrolled?

Yes, but the obligation to follow the management plan stays with the property for the remainder of the commitment period. Also, subdivisions of less than 50 acres will be subject to roll-back taxes if established within the commitment period.

What If I Decide I Don't Like 480-a? Can I Get Out Of It?

Each year you receive your tax break, you commit to following your management plan for the next ten years. If you decide to leave the program, you must still follow your plan for ten years after your tax break ends. If you choose not to follow that plan, you may be subject to back taxes and penalties.

UNITED STATES DEPARTMENT OF AGRICULTURE
FARM SERVICE AGENCY

ENERGY
FACT SHEET
November 2016

Biomass Crop Assistance Program for Fiscal Year 2017

OVERVIEW

The Biomass Crop Assistance Program (BCAP), created by the 2008 Farm Bill and reauthorized with modifications by the 2014 Farm Bill, is part of the national strategy to reduce U.S. reliance on foreign oil, improve domestic energy security and reduce carbon pollution, by developing more agricultural products made in rural America.

BCAP provides funds to assist farmers and forester landowners with growing, maintaining and harvesting biomass that can be used for energy or biobased products. BCAP provides assistance in three ways:

- Establishment payments. For growing new biomass crops, BCAP can cover up to 50 percent of the cost of establishing a new, perennial energy crop[1] or biomass crop;
- Maintenance payments (annual payments). To maintain the new biomass crop as it matures until harvest, BCAP can provide up to five years of assistance for an herbaceous crop, or up to 15 years for a woody crop; and
- Retrieval payments (matching payments). To collect existing biomass residues that are not economically retrievable, BCAP can help with the cost of sustainably harvesting and transporting agricultural or forest residues to an energy facility (biomass conversion facility).[2]

The 2014 Farm Bill reauthorized BCAP with an annual mandatory funding level of $25 million through fiscal year 2018, of which between 10 and 50 percent (no greater than $12.5 million) is reserved for matching payments. BCAP is administered by the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA). Annual appropriations acts may limit the BCAP funding level to less than $25 million. Consult your local FSA office for details.

PROJECT AREAS

A project area has specified boundaries approved by USDA and includes producers with contract acreage (i.e. crops under contract with USDA to receive establishment and maintenance payments) that, upon maturity, will be supplied to an existing or in-progress biomass conversion facility (BCF). A project area is physically located within an economically practicable distance from the BCF.

ELIGIBLE CROPS

For establishment and maintenance payments in project areas, eligible biomass (or "eligible crops") does not include plants that are invasive or noxious, as determined by USDA, or "conventional" crops (crops that are eligible to receive payments under Title I of the 2014 Farm Bill, such as barley, corn, grain, sorghum, oats, rice or wheat; honey; mohair; oilseeds (including canola, crambe, flaxseed, mustard seed, rapeseed, safflower seed, soybeans, sesame seed and sunflower seed); peanuts; pulse; chickpeas, lentils and dry peas; dairy products; sugar; and wool and cotton boll fiber).

Other restrictions may apply. For full details on eligible crops, please consult your local FSA county office or visit the web at **www.fsa.usda.gov/bcap**.

ELIGIBLE MATERIALS

For retrieval payments, eligible biomass (or "eligible materials," such as certain agricultural and forestry residues) include:

- Agricultural or crop residues (i.e. crop residues remaining in the field after harvest of conventional crops), woody agriculture residues, like orchard waste, that are removed directly from land, in accordance with an approved conservation plan; and

[1] Up to $750 per acre for underserved producers, or up to $500 per acre for other producers.
[2] At the rate of up to $1 for each $1 per ton delivered to an approved biomass conversion facility, not to exceed $20 per dry ton, for a period no longer than two years.

- Woody forest residues removed directly from that land that are byproducts of preventative treatments that reduce the threat of forest fires, disease or insect infestation; that do not have an existing market that are removed directly from the land, in accordance with an approved forest stewardship or equivalent plan.

Biomass that is ineligible for retrieval payments include:

- Conventional crops that are eligible to receive payments under Title I of the 2014 Farm Bill;
- Secondary agricultural or forest residues resulting from the processing activity of a delivered primary product of biomass;
- Animal waste or byproducts, bagasse, food and yard waste and algae; and
- Biomass that is economically retrievable.

Other limitations apply. For full details on eligible materials, please consult your local FSA county office or visit the web at **www.fsa.usda.gov/bcap**.

BIOMASS CONVERSION FACILITIES

A BCF is a facility that converts biomass into heat, power, biobased products, research (material conversion) or advanced liquid biofuels. BCFs themselves do not receive BCAP funding; rather, approved facilities are eligible to receive BCAP-funded biomass.

- Before biomass suppliers can receive retrieval payments, a BCF must be approved by FSA before receiving the deliveries.
- Before biomass suppliers can receive establish or maintenance payments, a BCF must be approved by FSA, or must demonstrate that it will be operational in time for when the biomass has reached maturity for delivery.
- FSA may prioritize the approval of facilities that best meet BCAP objectives.

Other restrictions may apply. For full details, please consult your local FSA county office or visit the web at **www.fsa.usda.gov/bcap**.

APPLICATION AND ENROLLMENT PERIODS FOR FISCAL YEAR 2017

Enrollment periods for BCAP funding will be announced by news release in November 2016. To enroll in electronic updates for upcoming BCAP announcements, visit **www.fsa.usda.gov/bcap**.

ADDITIONAL INFORMATION

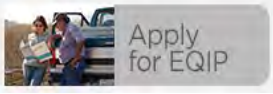
This fact sheet is intended for basic informational purposes only; other restrictions may apply. For full information on specific program requirements and eligibility, please consult USDA FSA or visit the web at **www.fsa.usda.gov/bcap**. To find your local FSA office, visit **http://offices.usda.gov**.

Programs

- Farm Bill
- Landscape Initiatives
- Financial Assistance
  - Agricultural Management Assistance
  - Conservation Innovation Grants
  - Conservation Stewardship Program
  - Environmental Quality Incentives Program
  - Regional Conservation Partnership Program
- Technical Assistance
- Easements
- Landscape Planning
- Alphabetical Listing & Archive

EQIP Nationwide

EQIP Payments



Apply for EQIP

High Tunnel System Initiative

A High Tunnel System, commonly called a "hoop house," is an increasingly popular conservation practice for farmers, and is available with financial assistance through the Environmental Quality Incentives Program (EQIP). With high tunnel systems, no summer is too short or winter too cold because high tunnels:

Extend the growing season
Improve plant quality and soil quality
Reduce nutrient and pesticide transportation
Improve air quality through reduced transportation inputs
Reduce energy use by providing consumers with a local source of fresh produce

High tunnels protect plants from severe weather and allow farmers to extend their growing seasons – growing earlier into the spring, later into the fall, and sometimes, year-round. And because high tunnels prevent direct rainfall from reaching plants, farmers can use precise tools like drip irrigation to efficiently deliver water and nutrients to plants. High tunnels also offer farmers a greater ability to control pests and can even protect plants from pollen and pesticide drift.

A number of soil health practices can be used in high tunnels, including cover crops and crop rotations, which also prevent erosion, suppress weeds, increase soil water content, and break pest cycles.

Perhaps the best thing about high tunnels is that they help farmers provide their communities with healthy local food for much of the year – food that requires less energy and transportation inputs.

Check out the high tunnel topic to learn more.

"We have really cold, wet springs with a lot of rain. High tunnels allow people to get into the ground and start producing crops earlier. They can also help people extend the growing season later as we go into the rains in the fall."

--Danny Perich, Full Plate Farm, WA

SUPPORTING PRACTICES

Supporting practices may be needed to ensure that resource concerns associated with implementing and managing high tunnel systems are addressed. These conservation practices may include:

Critical Area Planting
Diversion Grassed Waterway
Mulching

USDA

United States Department of Agriculture

Farm Service Agency

Microloans

FACT SHEET
August 2019

Overview

The Farm Service Agency (FSA) developed the microloan program to better serve the unique financial operating needs of new, niche, and small to mid-sized family farm operations.

Microloans offer more flexible access to credit and serve as an attractive loan alternative for smaller farming operations, like specialty crop producers and operators of community supported agriculture (CSA). These smaller farms, including non-traditional farm operations, often face limited financing options.

Types Of Microloans

Two types of microloans are available: Farm Operating Loans and Farm Ownership Loans. The microloans are issued to the applicant directly from FSA.

- Operating microloans can be used for all approved operating expenses authorized by the FSA Operating Loan (OL) Program, including but not limited to: initial start-up expenses; annual expenses such as seed, fertilizer, utilities, land rents; marketing and distribution expenses; family living expenses; purchase of livestock, equipment and other materials essential to farm operations; minor farm improvements such as wells and coolers; hoop houses to extend the growing season; essential tools; irrigation; and delivery vehicles.
- Ownership microloans can be used for all approved expenses authorized by the FSA Farm Ownership (FO) Loan Program, such as to purchase a farm or farm land, enlarge an existing farm, construct new farm buildings, improve existing farm buildings, pay closing costs, and implement soil and water conservation and protection practices.

Simplified Application Process

The microloan application process is simpler, requiring less paperwork to complete, consistent with a smaller loan amount. Requirements for managerial experience and loan security have been modified to accommodate veterans, smaller farm operations, and beginning farmers.

- Microloan applicants for operating loans will need to have some farm experience; however, FSA will consider an applicant's small business experience, as well as any experience with a self-guided apprenticeship, as a means to meet the farm management requirement. This will assist applicants who have limited farm skills by providing them with an opportunity to gain farm management experience while working with a mentor during the first production and marketing cycle.
- Microloan applicants for ownership loans need to have three years of farm experience out of the last 10 prior to the date of the application being submitted. One of the years can be substituted with any of the following experience:
  - Post-secondary education, that is at least 16 semester hours in agricultural business, horticulture, animal science, agronomy, or other agriculture-related fields

- Significant business management, that is at least one year of management experience in a non ag-related field where the applicant's day-to-day responsibilities included direct management experience, such as personnel decisions, payroll, and inventory ordering; however, not an individual who is a manager in title only
- Military leadership or management that is, as a general rule, any officer or E5 or above will have completed an acceptable military leadership course.
- If an applicant has successfully repaid an FSA youth loan, that experience may partially satisfy the experience requirement for a farm ownership loan.

Security Requirements

Operating microloans for annual operating expenses must be secured by a first lien on a farm property or agricultural products having a security value of at least 100 percent of the microloan amount, and up to 150 percent, when available. Operating microloans made for purposes other than annual operating expenses must be secured by a first lien on a farm property or agricultural products purchased with loan funds and having a security value of at least 100 percent of the microloan amount.

Ownership microloans are secured by the real estate being purchased or improved. The value of the real estate must be at least 100 percent of the loan amount.

Rates And Terms

Applicants may apply for microloans totaling a combined maximum of $100,000: Up to $50,000 for a farm ownership loan and up to $50,000 for an operating loan.

For operating microloans, eligible applicants may obtain up to $50,000. The repayment term may vary and will not exceed seven years. Annual operating loans are repaid within 12 months or when the agricultural commodities produced are sold. Interest rates are based on the regular FSA operating loan rates that are in effect at the time of the microloan approval or microloan closing, whichever is less.

For ownership microloans, eligible applicants may obtain a microloan for up to $50,000. The repayment term may vary and will not exceed 25 years. Interest rates are the regular FSA farm ownership rates in effect at the time of the loan approval or closing.

How To Apply

FSA microloan application forms can be obtained from the local FSA office or can be downloaded and printed from the USDA website at **fsa.usda.gov/microloans.** Applicants who are having problems gathering information or completing forms should contact their local FSA office for help. After completing the required paperwork, an applicant should submit the farm loan application to their local FSA office. To find your local FSA office, visit **farmers.gov**.

What Happens After A Loan Application Is Submitted?

After a loan application is submitted, FSA reviews the application and determines if the applicant is eligible for the requested loan. The applicant will receive written notification of each step in the process, such as when the application is received, determination is made and when a final decision is made. If the application is approved, FSA makes the loan and funds are distributed as needed. If the application is denied, the applicant is notified in writing of the specific reasons for the denial and provided reconsideration and appeal rights.

Who Is Eligible?

To qualify for assistance, the applicant must not be larger than a family-sized farmer, have a satisfactory history of meeting credit obligations, be unable to obtain credit elsewhere at reasonable rates and terms and meet all other loan eligibility requirements.

More Information

For more information, visit **fsa.usda.gov/farmloans** or **farmers.gov**. Find your local USDA Service Center at **farmers.gov/service-locator**.

Appendix I
USDA Environmental Management Program Information

Programs

- Farm Bill
- Landscape Initiatives
- Financial Assistance
  - Agricultural Management Assistance
  - Conservation Innovation Grants
  - Conservation Stewardship Program
  - Environmental Quality Incentives Program
  - Regional Conservation Partnership Program
- Technical Assistance
- Easements
- Landscape Planning
- Alphabetical Listing & Archive

Related Topics

Apply for AMA

- AMA Farm Bill 2018 Fact Sheet
- AMA Application Form

Additional Information

- AMA Interim Final Rule
- AMA Final Rule

Updates on highly erodible lands and wetlands compliance

Agricultural Management Assistance

The Agricultural Management Assistance (AMA) helps agricultural producers manage financial risk through diversification, marketing or natural resource conservation practices. NRCS administers the conservation provisions while Agricultural Marketing Service and Risk Management Agency implement the production diversification and marketing provisions.

How It Works

Producers may construct or improve water management structures or irrigation structures; plant trees for windbreaks or to improve water quality; and mitigate risk through production diversification or resource conservation practices, including soil erosion control, integrated pest management, or transition to organic farming.

AMA is available in 16 states where participation in the Federal Crop Insurance Program is historically low: Connecticut, Delaware, Hawaii, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Utah, Vermont, West Virginia, and Wyoming.

Program At A Glance

- AMA provides financial assistance up to 75 percent of the cost of installing conservation practices.
- Total AMA payments shall not exceed $50,000 per participant for any fiscal year.
- Participants are not subject to Highly Erodible Land and Wetland Conservation provisions of the Food Security Act of 1985.
- Participants are subject to Adjusted Gross Income provisions of the Food Security Act of 1985.
- AMA offers an additional higher cost-share for historically underserved producers.

Who Is Eligible

Producers must:

- Be engaged in livestock or agricultural production.
- Have an interest in the farming operation associated with the land being offered for AMA enrollment.
- Have control of the land for the term of the proposed contract.
- Be in compliance with the provisions for protecting the interests of tenants and sharecroppers, including the provisions for sharing AMA payments on a fair and equitable basis.
- Be within appropriate payment limitation requirements.

Environmental Quality Incentives Program (EQIP)

Is EQIP Right for Me?

Can You Answer 'Yes' to the Following?

Then EQIP may be a good fit for your operation

- ☑ I own or rent, and manage land for agricultural or forest production, such as cropland, rangeland, grassland or forestland.
- ☑ I have control of the land such as through ownership or a lease.
- ☑ I can prove irrigation history if my conservation work involves water conservation with irrigation system improvements.
- ☑ My land complies with highly erodible land and wetland conservation determination provisions (if unsure, ask your local USDA Service Center).
- ☑ I established or updated farm records with the Farm Service Agency for me and my operation.
- ☑ I have a social security number or employer identification number issued by the IRS.
- ☑ My average gross income is less than $900,000 (does not apply to Indian Tribes).
- ☑ If I am a member of an entity or joint operation, I have authority to make management decisions for the business.

What is EQIP?

The Environmental Quality Incentives Program (EQIP) offers technical and financial assistance for working lands, including field crops, specialty crops, organic, confined livestock and grazing, and non-industrial private forest land.

Rather than take land out of production, EQIP helps farmers maintain or improve production while conserving natural resources on working landscapes.

What Are the Benefits?

EQIP may provide many benefits, including improved water and air quality, conserved ground and surface water, increased soil health and reduced soil erosion and sedimentation, improved or created wildlife habitat, and mitigation against drought and increasing weather extremes.

For example, EQIP can help you:

- Reduce contamination from agricultural sources, such as animal feeding operations.
- Efficiently utilize nutrients, reduce input costs and reduce non-point source pollution.
- Increase soil health to help mitigate against increasing weather volatility and improved drought resiliency.

How Does EQIP Work?

EQIP supports producers who improve and sustain natural resources on their operation by implementing structural, vegetative, and management practices.

For example, if you want to use EQIP conservation practices to improve irrigation efficiency, renovate pastureland or nutrient and pest management on your eligible land,

NRCS offers technical assistance, and EQIP offers financial assistance through a contractual agreement.

If you decide to work with NRCS, you will receive a one-on-one consultation from a local NRCS conservation planner to evaluate your current management system and conduct an assessment of natural resources on your land. You will then work with the NRCS conservation planner to develop a free conservation plan that addresses the identified resource concerns.

Once you choose the conservation practices or activities that best fit your needs, and if your application is selected for funding, EQIP offers payments for implementing these practices on your land with the expectation that you will operate while maintaining the practices for the expected lifespan.

How Long is a EQIP Contract?

The length of an EQIP contract can vary depending on your goals and timeline, but cannot exceed 10 years.

EQIP Eligibility

Land Eligibility

Q. What lands are eligible for EQIP?

A. For eligibility purposes in Farm Bill programs, NRCS considers any land on which agricultural commodities, livestock or forest-related products are produced as eligible land.

That land can include cropland, rangeland, pastureland, non-industrial private forestland and other farm or ranch lands.

EQIP has no minimum acreage requirement; however, EQIP is a competitive program that awards points based on resource concerns to be addressed and other factors.

Producer Eligibility

Q. Who is eligible to apply for EQIP?

A. Applicants may include individuals, legal entities, joint operations or Indian Tribes that have control of the land and currently manage it for agricultural, forest and livestock production.

Special EQIP Initiatives

EQIP has a broad delivery system to put targeted conservation on the ground at the local level, across the entire country.

EQIP targets conservation through the following initiatives to address priority natural resource concerns on the most vulnerable lands and high priority watersheds:

- High Tunnel Initiative
- Organic Initiative
- Air Quality Initiative
- On Farm Energy Initiative

EQIP Payments

Q. What types of payments are offered through EQIP?

A. EQIP offers payments for practices and activities which may be categorized as vegetative, structural, and management practices.

Producers may also apply for Conservation Activity Plans through a Technical Service Provider.

Historically Underserved (HU) Participants:

Historically underserved participants are eligible for increased payment rates and advanced payments to help offset the costs of purchasing goods or services. HU participants include socially disadvantaged, beginning, veteran and limited resource farmers and ranchers.

- **Dedicated funds** – at least 10 percent of EQIP funds are dedicated to socially disadvantaged and beginning farmers and ranchers.
- **Higher payment rates** – up to 25 percent higher than the standard practice payment rates.
- **Veteran Preference** – eligible veterans who compete in the beginning or socially disadvantaged farmers and ranchers funding pools, receive preference points.

Q. When are payments made?

A. Under the general EQIP payment process, a producer is reimbursed after a conservation practice is certified as meeting NRCS standards and specifications. This process often means that producers must pay up front costs with their own funds, unless the participant opts for the advance payment option.

Q. Do I have to pay income taxes on my payments?

A. Yes. All payments made to you by NRCS are reported to the Internal Revenue Service and should be reported as income on your tax return for the applicable tax year. You will receive a Form 1099 to report EQIP payments on your tax return.

EQIP Application and Evaluation

Q. How do I apply for EQIP?

A. Contact your local USDA Service Center and let them know you are interested in EQIP. A conservation planner will work with you to determine your eligibility.

NRCS accepts EQIP applications year-round and funding is provided through a competitive process.

State-specific application cutoff dates are set to evaluate applications for funding. Cutoff dates can be found at nrcs.usda.gov/statecutoffdates. If you apply after the application cut-off date, your application will automatically be deferred to the next funding cycle.

If you are new to working with USDA, you will need to establish your Farm Record with the Farm Service Agency (FSA). Establishing a Farm Record requires several forms and documents, so make an appointment with your FSA office as soon as possible.

Q. How are EQIP applications evaluated?

A. Once NRCS completes an assessment of your operation and you choose the conservation practices or activities that you want to implement, NRCS will rank your application to determine how well your current and future management system will address national, state, and local natural resource priorities.

NRCS will rank your application against other similar eligible applications in the same ranking pool, with the highest scoring applications receiving contract offers first.

Programs

- Farm Bill
- Landscape Initiatives
- Financial Assistance
- Technical Assistance
- Easements
- Landscape Planning
- Alphabetical Listing & Archive

Highlights

- National Conservation Practice Standards

Related Links

- Small & Limited and Beginning Farmers & Ranchers
- Tribal Assistance
- Technical Service Providers
- Disaster Recovery Assistance

A Guide to USDA Resources for Historically Underserved Farmers and

Programs

NRCS Conservation Programs

NRCS's natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters.

Funding Opportunities Available From NRCS Programs

NRCS provides funding opportunities for agricultural producers and other landowners through these programs.

NRCS Conservation Program Data

NRCS provides program-specific reports in our RCA Interactive Data Viewer.

Alphabetical Listing of NRCS Programs

An alphabetical list of all current NRCS programs is available.

Conservation Technical Assistance Program and Activities

- Conservation of Private Grazing Land
- Conservation Reserve Program (administered by USDA Farm Service Agency)
- Conservation Technical Assistance
- Grazing Lands Conservation Initiative
- State Technical Committees

Environmental Improvement Programs

- Agricultural Management Assistance
- Environmental Quality Incentives Program
  - 2022 Conservation Activity Plans
  - 2020 Conservation Activity Plans
  - 2019 Conservation Activity Plans
  - 2018 Conservation Activity Plans
  - 2017 Conservation Activity Plans
  - 2016 Conservation Activity Plans | 2015 Conservation Activity Plans
  - 2014 Conservation Activity Plans | 2013 Conservation Activity Plans
  - Agricultural Water Enhancement Program (AWEP)(not reauthorized under 2014 Farm Bill)
  - EQIP Initiatives Overview
    - EQIP Air Quality Initiative
    - EQIP On-Farm Energy Initiative
    - EQIP Organic Program Initiative
    - EQIP High Tunnel System Initiative
  - Joint Chiefs' Landscape Restoration Partnership
  - National Water Quality Initiative (NWQI)
  - Colorado River Basin Salinity Control
  - Conservation Innovation Grants

Conservation Compliance Home

EQIP Disaster Recovery Assistance

EWP Disaster Recovery Assistance

Read summaries of NRCS Interim and Final Rules

- Great Lakes Restoration Initiative
- Mississippi River Basin Healthy Watersheds Initiative
- Mississippi River Basin Healthy Watersheds Initiative fact sheet (PDF; 392KB)
- Water Bank Program (WBP)
- Working Lands for Wildlife

Stewardship Programs

- Conservation Stewardship Program

National Watershed Programs

- Emergency Watershed Protection Program
- Watershed and Flood Prevention Operations Program
- Watershed Surveys and Planning
- Watershed Rehabilitation Program

Easement Programs

- Agricultural Conservation Easement Program
- Emergency Watershed Protection Program (Floodplain Easements)
- Healthy Forests Reserve Program

Community Assistance Programs and Activities

- Farmland Protection Policy Act
- Small, Limited, and Beginning Farmer Assistance
- Tribal Government Assistance

Technical Processes, Tools, and Other Technical Resources

- Conservation Planning
- Limited Resource Farmer/Rancher Self-Determination Tool
- National Environmental Policy Act (NEPA) Documents
- Rapid Watershed Assessment

Conservation Issues and Strategies

- Animal Feeding Operations
- Nutrient and Pest Management
- USDA-DOE Irrigation Modernization Programs and Case Studies (PDF)

Resource Inventory and Assessment

- Conservation Effects Assessment Program
- National Resources Inventory
- Resource Conservation Act
- Snow Survey and Water Supply Forecasting
- Soil Survey Program

Appendix J
Organic Farming Information

United States Department of Agriculture

Resources for Conservation Planning on Organic and Transitioning-to-Organic Operations

Purpose

The purpose of this document is to discuss existing tools and resources that support successful conservation planning on organic and transitioning-to-organic operations. It also includes information about organic certification and the National Organic Program (NOP).

Organic Standards and Conservation Practices

NOP regulations define organic production as systems that respond "to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity." (7 CFR Part 205.2). Operations "must maintain or improve the natural resources of the operation, including soil and water quality." (NOP Regulation 205.200). To meet these standards, producers are subject to regulations that cover a range of topics related to conservation such as soil fertility, crop rotations, pest management, and biodiversity. NOP standards are broader than conservation-related practices and include aspects of production that are outside of the scope of NRCS. For example, NOP regulations cover the handling, labeling, and marketing of organic products.

While the NOP regulations cover a broad range of topics, they do not include prescriptions detailing how the standards should be met. For example, regulations state that a "producer must manage crop nutrients and soil fertility through rotations, cover crops, and the application of plant and animal materials" (NOP Regulations 205.203(b)). The regulations do not go on to stipulate specific crop rotations or cover crops. In contrast, the NRCS conservation planning process employs land-use specific tools and their interpretations to evaluate resource conditions and develop alternative practices for the landowner's consideration. NOP regulations fit into the NRCS conservation planning process as landowner objectives and should be considered in the alternatives developed for a producer.

It is important to have an awareness of NOP land requirements especially when working with producers transitioning to organic production. Any field or farm parcel from which harvested crops will be sold as organic must have "had no prohibited substances applied to it for a period of 3 years immediately preceding harvest of the crop." (NOP Regulations 205.202). Therefore, transitioning producers must

adhere to all regulations governing allowable substances. During this period, these producers are shifting from conventional to an integrated management approach of their soil fertility and pests. With this change in management, transitional producers are often faced with a steep learning curve and can benefit from NRCS technical expertise.

Despite different strategies and management activities in conventional and organic production systems, the operations face similar resource concerns. When working with organic and transitioning producers, the NRCS planning process is the same. In light of the USDA's goal to increase the number of organic operations, the department is investigating opportunities to streamline conservation planning and organic certification.

Resources

While not exhaustive, the following documents and online resources provide many tools to support conservation planning on organic and transitioning-to-organic operations.

Conservation Planning with Transitioning to Organic Producers

National Organic Farming Handbook
This NRCS Handbook describes organic systems and identifies key resources to guide conservation planning and implementation on organic farms. The document covers topics such as nutrient management, crop rotations, livestock grazing and pest management.

Frequently Asked Questions (FAQ): Conservation Planning with Transitioning to Organic Producers
The FAQ provides guidance for conservation planners and includes:

- definitions of key NOP terms including "certified organic," "exempt producer," and "organic system plan";
- answers to key questions about the EQIP Organic Initiative including relationship to NOP, eligibility requirements, and related NRCS conservation practices;
- information on technical assistance available to transitioning producers including NRCS practices that can be implemented on organic or transitioning operations; and
- discussion of the relationship between an NRCS conservation plan and an OSP.

Conservation Plan Supporting Organic Transition (CAP 138)
The CAP 138 is an NRCS Conservation Activity Plan that helps farmers who are interested in transitioning from conventional farming practices to organic production by addressing the natural resource concerns on their operation.

Practice Specific Resources

Oregon Tilth, the National Center for Appropriate Technology, and the Xerces Society partnered with NRCS to develop four guides that provide conservation planners with detailed information on NOP regulations, organic management practices, and technical guidance for NRCS practice design in an organic context. They include information about the different purposes for the practice's use, design considerations, and how installation might differ on organic operations:

- Nutrient Management Plan (590) for Organic Systems Implementation Guide
- Cover Crop (340) in Organic Systems Implementation Guide
- Conservation Buffers in Organic Systems Implementation Guide
- Common NRCS Practices Related to Pest Management on Organic Farms

A separate resource published by the Natural Resource, Agriculture and Engineering Service (NRAES; now Plant and Life Sciences Publishing) provides an in-depth review of purposes for crop rotation including improving soil quality and health, and managing pests, diseases, and weeds. The book includes instructions for making rotation plans, on-farm examples of specialty crop rotations, and discusses the transition to organic farming.

- Crop Rotation on Organic Farms: A Planning Manual

Biodiversity Resources

NOP regulations broadly require that producers "conserve biodiversity." (§ 205.2). While the NOP is in the process of developing specific guidance, other resources are available:

- Biodiversity Conservation: An Organic Farmer's Guide is a Wild Farm Alliance publication which provides a range of farm management practices that maintain and enhance biodiversity.
- Pollinator Habitat Assessment Form and Guide for Organic Farms is a Xerces Society guide that assesses pollinator habitat in orchards and field crop settings.

USDA Resources

USDA National Organic Program (NOP)
Main site has links and information including organic standards, organic certification, news, lists of certified operations, certifying agents, and more.

USDA NOP Organic Literacy Initiative
Many USDA resources: 'Is Organic an Option for me?' brochure, videos, organic certification guidebooks for producers, and AgLearn courses for USDA and the public (including Organic 101 and 201).

NRCS EQIP Organic Initiative
The Environmental Quality Incentives Program (EQIP) Organic Initiative provides technical and financial assistance to eligible organic, transitioning, and certain 'exempt' from certification operations to treat identified natural resource concerns in an organic production setting.

NRCS Science and Technology Training Library: Webinar Portal for Conservation of Natural Resources
Features upcoming and archived conservation webinars including an annual organic series.

Other Resources

eOrganic
A collection of land-grant university publications and webinars on different aspects of organic agriculture.

National Sustainable Agriculture Information Service (ATTRA)
ATTRA is a premier source of information about sustainable agriculture for farmers and agriculturalists.

Oregon Tilth
Oregon Tilth is an international nonprofit organic certifier. The Organic Education Program works to advance and promote organic agriculture through training, information, research, technical assistance, and advocacy.

Organic Materials Review Institute (OMRI)
OMRI provides a list and independent review of products allowed in certified organic production, handling, and processing.

Rodale Institute
A nonprofit organization focused on organic farming research and outreach. Rodale hosts the longest running side-by-side U.S. study comparing conventional agriculture and organic production systems. The institute has a free 15-hour Organic Transition Course.

Acknowledgments

Authors Sarah Brown, Ben Bowell and Carrie Sendak (Oregon Tilth)
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Design and layout Tim Kirkpatrick, Wonder Parade, LLC

Funded by a grant from Western Sustainable Agriculture Research and Education (WSARE).

WESTERN SARE Sustainable Agriculture Research & Education

Highlights

- Organic Cover Crops
- Organic Crop Rotations

Organic webinars

click to Join! our next event

USDA ORGANIC

Organic & Sustainable Agriculture Webinars

Organic

Sign up for E-mail updates on Organic Agriculture

Organic farming is an ecologically-based system that relies on preventative practices for weed, insect and disease problems, uses nontoxic methods to manage problems if they arise, and improves the natural resources of the land, including soil and water quality.

NRCS can help organic producers develop a conservation plan that meets their goals, and can often help with financial assistance to implement elements of the plan.

LEARN MORE

- Booklet, Fact Sheets and Handouts
- Training & Webinars
- Organic Success Stories
- Organic Theater

GET STARTED

- Technical and Financial Assistance
- Handbook and Planning Resources

Learn more about NRCS assistance with:

National NRCS Organic Contacts

- Lindsay Haines, National Organic and Pest Management Specialist, National Headquarters
- Donna Hopwood, EQIP Organic Program Specialist, National Headquarters

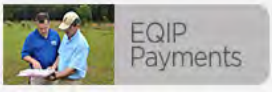
Programs

- Farm Bill
- Landscape Initiatives
- Financial Assistance
  - Agricultural Management Assistance
  - Conservation Innovation Grants
  - Conservation Stewardship Program
  - Environmental Quality Incentives Program
  - Regional Conservation Partnership Program
- Technical Assistance
- Easements
- Landscape Planning
- Alphabetical Listing & Archive

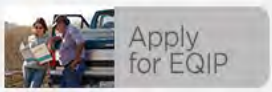
Additional Information

- 2015 EQIP Organic Initiative Attachment B
- NRCS Organic Farming Technical Assistance
- Find A Technical Service Provider
- National Organic Program (AMS website)
- National Sustainable Agriculture Information Service EQIP Organic Initiative Page

EQIP Nationwide



EQIP Payments



Apply for EQIP

EQIP Organic Initiative

The National Organic Initiative, funded through the Environmental Quality Incentives Program (EQIP), is a voluntary conservation program that provides technical and financial assistance for organic farmers and ranchers, or those interested in transitioning to organic. NRCS can help organic producers improve their operations or help producers transition to organic using a conservation plan tailored to their needs.

Eligibility:

Certified Organic - producers with a USDA National Organic Program (NOP) Organic Certificate or proof of good standing from a USDA accredited certifying agent. The certification must be maintained for the life of the EQIP contract.

Exempt from Certification of the NOP - producers who are selling less than $5,000 a year in organic agricultural products and are exempt from NOP's certification. Exempt organic producers are eligible for the EQIP Organic Initiative if they self-certify that they agree to develop and work toward implementing an Organic Systems Plan (OSP), as required by the NOP.

Transitioning to Organic - producers who are in the process of transitioning to organic. Transitioning producers self-certify that they agree to develop and work toward implementing an OSP, as required by the NOP.

Assistance begins with the development of a conservation plan based on a needs assessment and each farmer's unique goals. The plan includes conservation practices, systems or activities, and the resource concerns identified in the assessment.

Common conservation practices, systems or activities planned include:

Improving irrigation efficiency;
Developing a Conservation Activity Plan for Transition that can be part of the OSP;
Establishing buffer zones;
Creating pollinator habitat;
Improving soil health and controlling erosion;
Developing a grazing plan and supportive livestock practices;
Enhancing cropping rotations;
Nutrient and pest management activities;
Managing cover crops; and
Installing a high tunnel system.

Additional information about the Organic Initiative:

- Financial assistance is limited to no more than $140,000 total over the 2018 Farm Bill years, 2019 through 2023.
- Producers must meet all other eligibility requirements associated with EQIP
- Participants who are not certified or exempt from certification, agree to develop and work towards implementing an Organic System Plan to meet National Organic Program organic certification through USDA

Although EQIP supports a wide variety of conservation practices, your local NRCS field office staff will work with you to develop an organic plan that includes practices that fits your resource needs as part of the Organic Initiative.

Organic and transitioning farmers and ranchers may also apply for assistance through general EQIP or other conservatoin initiatives.

For more information about NRCS resources for organic farmers, see the Organic Farming web page.

Ready to improve your organic operation or transition to organic? Check out Apply for EQIP.

Appendix K
Climate Resilient Farming Information

CORNELL UNIVERSITY COLLEGE OF AGRICULTURE AND LIFE SCIENCES

CLIMATE CHANGE FACTS

CORNELL COOPERATIVE EXTENSION

FARMING SUCCESS IN AN UNCERTAIN CLIMATE

Climate preparedness makes good business sense. The Earth's climate is always in flux, but today's pace of change is far beyond what previous generations of farmers have had to face. Climate change is already posing new challenges, such as increased risk of flooding, summer heat stress, and more intense pest and weed pressures.

Some farmers are beginning to plan to minimize the risks and capitalize on opportunities. In New York, there will be plenty of both. Making business decisions on future scenarios is always a hair-raising endeavor, even more so with the complication of trying to discern between normal weather variability and long-term climate shifts. Many of the commodities that currently dominate the New York agricultural sector, like dairy products, apples, cabbage, and potatoes, are not well suited for the warming trends predicted for this century. However, there will be profitable opportunities to experiment with new crops or new crop varieties as temperatures rise and the growing season lengthens.

FLOODING

More precipitation is occurring in heavy rainfall events (more than 2 in / 48 hrs), and this trend is expected to continue.

Flooding Challenges:

- Springtime flooding can delay planting
- Root damage and reduced yield due to flooding
- Soil compaction from use of heavy machinery on wet soils
- Soil loss from erosion during heavy rain events
- Contamination of waterways from agricultural run-off

Flooding Solutions:

- Increase soil organic matter for better drainage with practices such as reduced tillage, cover cropping, and use of composts or other organic amendments
- Invest in tile or other drainage systems for problem fields
- Shift to more flood tolerant crops
- Buy or lease new acreage with better drainage
- Shift planting dates to avoid wet conditions

DROUGHT

New York does not face the severe water shortages predicted for some other regions, but the risk of short-term summer drought is expected to increase over this century. Warmer temperatures and longer growing seasons will increase crop water demand, while summer rainfall will remain about the same or possibly decline.

Drought Challenges:

- Declining and more variable yields of rain-fed crops
- Decline in quality of high-value fruit and vegetable crops

Drought Solutions:

- Increase irrigation capacity, particularly for high-value crops
- Shift to drought-tolerant crop varieties
- Shift plant dates to avoid dry periods

HEAT STRESS

The growing season across the state has already increased on average by 8 days. The number of summer heat stress days (e.g., exceeding 90°F) is expected to increase substantially, while winters grow milder. These changes will create both opportunities and challenges for farmers.

New Crops for a New Climate

The increase in average temperatures and longer growing season will allow experimentation with new crops, varieties, and markets. Peaches, melons, tomatoes, and European red wine grapes are a few examples of longer growing season crops that will be favored by a warming climate.

Heat Stress Challenges:

- Warmer summer temperatures have been shown to lower yields for certain varieties of grain crops (field corn, wheat, and oats) by speeding the development cycle and shortening the period during which grain heads mature
- Hot daytime or nighttime temperatures during critical phases of plant development can reduce yield and quality of even those crops considered heat-adapted
- Potatoes, cabbage, snap beans, apples, and other heat-sensitive plants will be more challenging to grow
- Warmer and more variable winters can ironically increase the chance of frost and freeze damage for perennial fruit crops by inducing premature leaf-out and interfering with cold-mediated winter hardening

Heat Stress Solutions:

- Shift planting dates to avoid heat stress during critical periods of plant development
- Explore new varieties of heat-resistant crops, and be prepared to diversify production to reduce reliance on heat-sensitive crops
- Capitalize on the opportunity to grow longer season crops. For example, some field corn growers are already experimenting with new longer growing-season varieties

INSECT INVASIONS AND SUPER WEEDS

Interactions between climate, crops, insects, and disease are complex, but evidence suggests that climate change will require New York farmers to invest in earlier and more intensive pest and weed management. Anticipating the challenge of increased weed and pest pressure will allow for better control and more cost-effective management.

Insect Challenges:

- Spring populations of insect pests will expand, as survivorship rates of marginally over-wintering insect species increase, and migratory insects arrive earlier
- A longer growing season means more insect generations per season, requiring increased intensity of management

Case-Study: Brown Marmorated Stink Bug

If not for its diminutive size, the brown marmorated stink bug (BMSB) could be the subject of a 1950's horror movie. Described as "the bug from hell" after BMSB ate $37 million of the 2010 MD apple crop, the hungry bugs will munch on anything from orchard crops, to corn and soybeans. First introduced in PA during the '90s, BMSB are teeming northward, taking advantage of recent warm winters and long summers. BMSB was first sighted in NY in 2008, increasing yearly since then. Some pesticides have proven effective against BMSB, but control has been limited.

Weed Challenges:

- Warmer weather and increasing concentrations of carbon dioxide in the atmosphere favor weed growth over crop plants in many cases
- Weeds will have to be controlled for longer and weed seed production will be greater
- Certain weed species currently restricted to the warmer south are migrating northward, such as kudzu, while some familiar weed species, e.g. lambsquarters, are projected to become stronger competitors
- Pressure to use chemical control methods will increase as pest and weed infestation intensifies, but studies have shown the climate change may reduce the efficacy of certain commonly used pesticides (pyrethroids, spinosad) and herbicides (e.g. Glyphosphate)

Insect and Weed Management Solutions:

- Improved rapid response plans and regional monitoring efforts will allow for targeted control of new weeds and pests before they become established
- Enhanced monitoring and implementation of integrated pest management (IPM) will help farmers balance pest and weed control while avoiding the economic, environmental and health-related costs of increased chemical application

CHANGE IN THE DAIRY AND LIVESTOCK INDUSTRIES

Heat stress can have devastating consequences for livestock. Keeping cool in the heat of the next century will be critical for maintaining the milk production levels that have made dairy the dominant industry in New York's agricultural sector.

Livestock Challenges:

- Heat stress associated with hotter summers will create dangerous and unhealthy conditions for livestock, reducing productivity and reproductive capacity
- Availability and cost of animal feed will fluctuate as climate affects crops like corn grain and silage
- New costs will be incurred from investments to improve cooling capacity of livestock facilities

Heat Stress and Dairy

- Even moderately warm temperatures, e.g. above 75°F, when combined with moderate humidity, can lead to milk production decline
- In 2005, unusually warm temperatures reduced milk production 5 to 15 lbs per cow per day for many dairies (leading to losses of 8 to 20%)
- The frequency of heat-stress events is expected to increase with climate change

Livestock Solutions–Low Cost:

- Reduce over-crowding and improve barn ventilation
- Minimize heat exposure, e.g. feed during the cool part of the day and maximize shade
- Increase water availability and adjust diet (more fat, less protein)

Livestock Solutions–Moderate to High Cost:

- Improve cooling capacity with additional fans, sprinkler or mister systems, and ventilation renovations
- Insulate under barn roofs to buffer extreme heat and save on cooling costs
- Build new barns with adequate cooling capacity for future heat loads

When is it Time to Make a Change?

This will be the critical question for farmers. Climate scientists can provide useful information to help determine when a poor season or two is due to just "normal" bad weather, and when it is due to a shift in the climate that will likely be here to stay. At Cornell, we are working on new decision tools that will allow farmers to examine different future climate scenarios for their region, impacts these might have on crops and livestock, and evaluate various options for timing adaptation investments to minimize negative effects or take advantage of opportunities brought about by climate change.

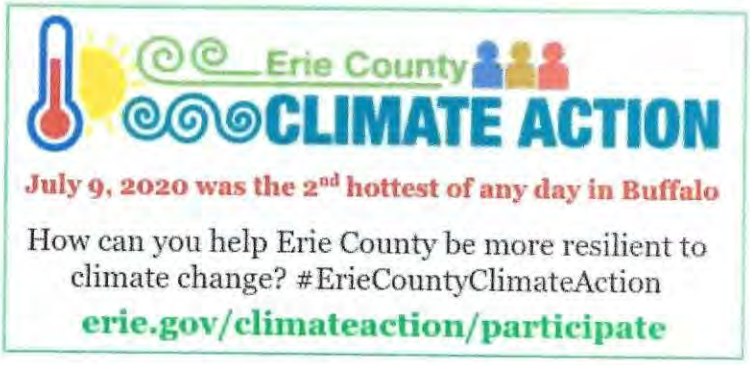
Prepared by: David Wolfe, Jeff Beem-Miller, Lauren Chambliss, Allison Chatrchyan, and Holly Menninger. Designed by DragonFishStudio.com

CONTACT: Dr. David Wolfe, Dept. of Horticulture, dww5@cornell.edu, www.climatechange.cornell.edu

Climate Change and Agriculture

John Whitney, Agriculture Educator, CCE Erie County

If you have been following the issues of climate change and associated extreme events, regardless of your position on the cause or magnitude of changes in weather and climate variations from historical trends and norms, you know that agriculture is considered both to have a role in accelerating climate change and potentially to be a major part of the solution.



It is generally accepted that modern agriculture, food processing, and distribution are all contributors to the greenhouse gases that are understood to be contributing to accelerating climate change. The World Future Council, one of many organizations working to address the issue, suggests that agriculture is directly responsible for 14% of total greenhouse gas emissions. Importantly, rural land use decisions and changes "have an even larger impact." Globally, deforestation both for harvest and often for clearing for agriculture and development accounts for an additional 18% of carbon emissions. www.worldfuturecouncil.org/how-does-agriculture-contribute-to-climate-change/

State and Federal environmental and regulatory agencies are working to balance agricultural production and food supply goals with environmental protection and real threats to agricultural production, forest resources and rural economies with regional, state and national and global greenhouse gas reduction goals. These are overlapping goals since the risks of climate change include:

- More frequent and severe storms
- Rising average temperatures
- Extremes and shifts in precipitation patterns
- More floods and forest fires.

Cornell Cooperative Extension has responded to the need for better information and subject matter guidance both by supporting research on the topic and, with respect to agriculture, by organizing the "Cornell Climate Smart Farming" program. This voluntary initiative is intended to help farmers in New York and the Northeastern U.S. to:

- Increase agricultural productivity and farming incomes sustainably
- Reduce greenhouse gas emissions from agricultural production through adoption of best management practices, and increased energy efficiency and use of renewable energy
- Increased farm resiliency to extreme weather and climate variability through adoption of best management practices for climate change adaptation.

The program's web page is: www.climatesmartfarming.org. The Extension team includes Elizabeth Buck, Vegetable Specialist with the Cornell Vegetable Program. While this is a regional team, Elizabeth is based out of the CCE Erie office. General questions to the team can be addressed to: climatesmartsolutions@gmail.com or directly to Elizabeth at: emb273@cornell.edu.

Locally, Erie County's Department of Environment and Planning is leading the "Erie County Community Climate Change Task Force" as Erie County's green initiative to develop an equity-centered Community Climate Action Plan to identify and promote actions to reduce greenhouse gas emissions and to help communities

adapt to the changing climate. See: https://www.erie.gov/climateaction/. In addition to developing the Climate Action Plan, the Task Force is developing resources to help build awareness and participation with the goal of achieving "equitable climate action for a healthy and resilient Erie County."

The plan will directly address agriculture by identifying local contributions and impacts and in looking to the agricultural sector and associated land uses as part of practical solutions. CCE-Erie is participating in the Task Force and planning activities, both to help ensure that agriculture issues are considered and incorporated and to help promote the public outreach efforts.

Over the coming months and years, farms will be hearing much more about this topic including the likelihood of financial incentives and payments associated with climate smart farming practices both to reduce emissions and for soil conservation efforts to continue erosion reduction and carbon sequestration efforts. ■

References:

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United States Department of Agriculture, Climate Solutions: www.usda.gov/topics/climate-solutions
New York State Department of Environmental Conservation, Climate Change: www.dec.ny.gov/energy/44992.html
Cornell Climate Smart Farming: www.climatesmartfarming.org
Erie County Climate Action: www.erie.gov/climateaction
World Future Council, Agriculture and Climate Change: www.worldfuturecouncil.org/how-does-agriculture-contribute-to-climate-change/

CONTENTS

Available at: www.sare.org/cover-cropping-for-pollinators or order free hard copies at (301) 779-1007.

SARE
Sustainable Agriculture Research & Education

Cover Cropping for Pollinators and Beneficial Insects

Doug Crabtree uses many tools to make his Montana farm bee friendly. – *Photo by Jennifer Hopwood;* **Phacelia is an attractive pollinator cover crop.** – *Photo by John Hayden;* **Clover fixes nitrogen and provides bee forage.** – *Photo by Judson Reid*

DOUG AND ANNA CRABTREE'S VILICUS FARM RESTS on more than 2,000 acres in northern Montana, and it is a model of how cover crops can be a foundation of pollinator and beneficial insect management. Like many farmers, their approach to cover cropping began with an interest in soil health and quickly grew to encompass much broader goals as they recognized the additional benefits cover crops could provide.

"We want to implement pollinator conservation at the field-level scale," Doug says. "Anyone can create a small wildflower strip, but as we scale up, we need conservation areas distributed across the entire operation."

While the Crabtrees have established permanent native wildflower strips around many of their fields to provide a skeleton of habitat throughout the farm, extensive cover crop rotations provide the muscle that makes their operation a rich landscape for bees and other beneficial insects.

This commitment to cover cropping is having clear and positive impacts. Flax, sunflower and safflower are just a few of the Crabtrees' regular crops that either require or strongly benefit from insect pollination. And, because of their commitment to integrating habitat for wild pollinators throughout their holdings, the Crabtrees have never needed to bring honey bee hives onto the farm for pollination. Instead, a walk through their fields quickly reveals an abundance of wild bumble bees, longhorn bees, sweat bees and more—all supported by the farm's habitat. A farm's ability to support its own pollinator community provides security, especially if managed honey bee hives become scarce or expensive.

In addition to supporting the pollinator community, cover crops have many traditional uses on a farm. These range from preventing erosion and improving soil health to managing weeds and serving as an additional source of income when part of a double-crop system. With cover

crops planted on more than 10 million acres annually, many farmers already appreciate the role diverse agroecosystems play in improving crop productivity. In the 2012 and 2013 growing seasons, corn yields increased 9 percent and 3.1 percent, respectively, when following a cover crop, and soybean yields increased 10 percent and 4.3 percent, according to a two-year survey of farmers conducted by North Central Region SARE and the Conservation Technology Information Center (CTIC). While the CTIC-SARE survey revealed that 38 percent of cover crop users already choose plants in order to support pollinators [1], cover crops reap many additional benefits.

Flowering cover crops can fulfill their original purpose as a conservation practice while at the same time providing valuable forage for wild bees and beneficial insects. This added benefit can be significantly enhanced with some fine-tuning of management practices and thoughtful plant selection.

This bulletin will help you use cover crops to encourage populations of pollinators and beneficial insects on your farm while you address your other resource concerns. It begins with a broad overview of pollinator and beneficial insect ecology, then describes cover crop selection and management, how to make cover crops work on your farm, and helpful and proven crop rotations. It will also touch on the limitations of cover crops and pesticide harm reduction, among other topics.

Cover crop mixes can offer multiple benefits. This mix of sunn hemp and radishes in South Dakota provides livestock grazing, pollinator forage and brooding cover for pheasants.
– Photo by Ben Lardy, USDA NRCS in cooperation with Pheasants Forever Inc.

Basic Pollinator Ecology

IN ADDITION TO THE DOMESTICATED EUROPEAN HONEY bee, roughly 4,000 species of wild bees can be found in the United States. Among these, honey bees and bumble bees are social animals, living in complex family units with a single queen, female workers (the daughters of the queen) and a few male bees called drones. In contrast, most wild bees (except for bumble bees) are solitary animals, with each female locating and provisioning her own nest.

Honey bees and wild bees alike are considered important agricultural pollinators, and both groups of bees share many of the same habitat requirements necessary to thrive. Both require reliable and abundant pollen and nectar resources throughout the growing season. In the case of honey bees, nectar demands can be significant, requiring large-scale flowering habitats to produce surplus honey.

In addition to the availability of food, honey bees and wild bees require protection from pesticides. While large doses of pesticides may be directly lethal to bees, smaller doses can result in sublethal impacts, such as reduced reproduction or foraging. Interestingly, research suggests that diverse pollen and nectar resources may help improve the overall health of bees and increase their chances of detoxifying low doses of some pesticides.

Along with food availability and pesticide protection, wild bees have a third habitat requirement: undisturbed areas for nesting. In the case of many wild bee species, the preferred nesting areas are undisturbed soils. These soil-nesting wild bees excavate underground tunnels and provision them with pollen clumps, onto which they lay their eggs. Other wild bee species nest in the hollow stems of plants, including the stems of some trees, shrubs, large grasses and even large wildflowers. A few species, including bumble bees, typically nest in the abandoned underground burrows of small rodents, or in other similar cavities.

With appropriate plant selection and proper management, flowering cover crops can support the habitat requirements of bees through pollen and nectar resources to maximize their health and reproductive potential, an abundance of nectar to produce surplus honey, a refuge from insecticides, and sometimes enhanced nesting opportunities for wild bee species.

Other Beneficial Insects

THE NATURAL ENEMIES OF CROP PESTS THAT SOMETIMES inhabit farms include a diverse range of predatory beetles, aphid-eating flower flies, lacewings, small solitary parasitic wasps and many others.

In addition to preying upon crop pests, most of these predatory and parasitoid insects either need or benefit from alternative food sources during at least one stage of their life. In some cases that alternative food source is nectar or

pollen. Consequently, like pollinators, many of these natural pest enemies also benefit from flowering cover crops.

A SARE-funded group of University of California researchers demonstrated that mixed species of flowering cover crops in vineyards increased beneficial insect populations [2]. The increase in beneficial insects, brought about by a mix of annual buckwheat, lacy phacelia, sweet alyssum, bishops weed and wild carrot, resulted in fewer pests, such as the vine mealy bug.

In other cases, cover crops can support beneficial insect populations even when they do not flower. Some predators and parasitoids do not feed on nectar and pollen, but rather need a continuous supply of prey insects to maintain their local populations at an effective level. So when cash crops are absent, non-flowering cover crops can support pests to the extent that they become a stable food source for beneficial insects. For example, ground beetles, which are generalist predators of slugs, caterpillars and grasshopper eggs, can be sustained by leaving some areas unmowed or by creating a "beetle bank" of perennial grasses outside crop fields. Beetles can overwinter in this augmented habitat and their prey can breed in it. Thus, these grassy refuges can keep the beetle population high by providing both habitat and a food source outside the cropping period.

Similarly, even if prey insects found in cover crops are not pests of your cash crops, they can still be an important food resource for predator and parasitoid insects that will switch their prey preference once cash crop pests become available.

Finally, like pollinators, predatory beneficial insects need protection from insecticide applications and vegetative structures for egg-laying or overwintering. Well-managed cover crop systems can help meet these habitat requirements.

PERENNIAL COVER FOR ORCHARDS AND VINEYARDS

FAST-GROWING ANNUAL COVER CROP SPECIES SUCH AS RYE AND CRIMSON CLOVER ARE the most common choice for rotation with annual field crops. However, in perennial farm systems such as orchards and vineyards, longer-term ground cover may be desired. In these settings, the ground cover may have multiple demands placed upon it, including erosion control, nutrient management, and pest and disease suppression. As long as these perennial ground covers are combined with a thoughtful and careful approach to pesticide use, pollinator conservation can be very compatible with other goals.

For example, perennial turf grass in orchards can be enhanced for pollinators simply by tolerating non-invasive weeds such as violets or dandelions. To go a step further and actively increase pollen and nectar resources, such perennial turf grass systems can be over-seeded with various low-growing perennial clovers. Where these approaches are used, it is critical that insecticides not be over-sprayed and allowed to drift down onto flowering plants in the ground cover. Some farmers with these types of ground covers simply mow them to remove flowers before spraying. Although a mowed ground cover without flowers may significantly reduce the landscape value for pollinators, it is preferable to killing bees that might otherwise move on to areas where no spraying is taking place.

In perennial crop systems where no insecticides are used, ground cover options may be even more diverse and expansive. In such cases it may be possible to establish an entirely native grassland, meadow or diverse prairie as an understory. These systems typically provide maximum benefits to pollinators and other beneficial insects, and they are well adapted to the local climate and do not require routine mowing or irrigation.

Cover Crops On Your Farm

BEYOND SUPPORTING BEE AND BENEFICIAL INSECT populations, cover crops can reduce your costs for herbicide, insecticide and fertilizer, and improve overall soil health [3]. Many cover crops can be included in a double-crop system or used as animal forage. Cover crops can be integrated into most crop or crop-livestock systems, including no-till, conventional till, rotational no-till and livestock grazing or haying systems. In the CTIC-SARE survey, farmers who plant cover crops identified these top five reasons for doing so (in order): increase soil organic matter, reduce soil erosion, reduce soil compaction, manage weeds and provide a nitrogen source [1].

The economic benefits associated with cover crops can be both significant and realized in year one. On a Georgia cotton farm, a grower reduced costs by $200 per acre by implementing conservation tillage and cover cropping. His cover crop cocktail combined crimson clover, an excellent nectar plant and nitrogen source; and rye, a soil-builder and nitrogen scavenger. Between the savings on fertilizer from the clover's nitrogen enrichment and

Strips of flowering cover crops such as lacy phacelia and sweet alyssum (pictured) can manage vineyard pests such as the vine mealy bug by supporting beneficial insects.
– Photo by Miguel Altieri

Cotton growing in a system using cover crops and conservation tillage. A cover crop mix of rye and crimson clover can improve the profitability of cotton because the clover adds nitrogen to the soil and the rye attracts beneficial insects.
– Photo by Stephen Kirkpatrick, USDA NRCS

reduced insecticide costs thanks to beneficial insect activity, this farmer observed that many pests were no longer a problem in his fields [3]. Similarly, a Pennsylvania vegetable farmer cut pesticide costs by 40 percent (saving $125 per acre) by using a combination of cover crops [4], and a North Dakota farmer saw net profits on his barley harvest increase by $109 per acre on cover cropped fields. He was also able to harvest his cover crops as forage for his cattle [5].

There are many tools available to farmers as they weigh the economics of adding cover crops to their system. The USDA Natural Resources Conservation Service's (NRCS) *Cover Crop Economics Decision Support Tool* (see Resources) provides a number of cropping system scenarios that explore the costs and benefits of cover crops over time. While some systems, like a soybean/corn rotation in the absence of cost share, only became profitable in the long run, other systems realized a net profit in the first year, such as a cotton/corn rotation that led to a net profit increase of $38.50 per acre [6]. All of the default scenarios were immediately profitable with a modest cost share. A webinar explaining how to use this tool is available through the www.conservationwebinars.net portal.

While a 2005 survey in the Corn Belt found that more than half of all farmers said they would use cover crops if they received cost-share funds [7], the more recent CTIC-SARE survey found that farmers are increasingly likely to try cover crops without any sort of financial assistance. This survey found that 63 percent of farmers said they had never received cost-share funds, and only 8 percent restricted their cover cropping to times when they received funding [1]. Although cost-share programs improve the profitability of cover crops, many farmers who use them—perhaps the majority—look beyond the balance sheet when assessing their value. It seems that financial assistance can open the door to cover cropping, but many farmers with experience cover cropping do not require it [1]. The less easily quantified conservation benefits of cover crops, such as their role in soil health and pollinator promotion, are the important consideration for many.

Opportunities to Use Cover Crops

ONE OF THE FIRST STEPS WHEN INCORPORATING COVER crops in your system is identifying available niches. You may already have periods in your cropping systems which are open to cover crops. Common niches for cover crops include during the winter fallow, during a summer fallow between cash crops, during a small-grain rotation or during a full year of improved fallow [3]. Cover crops are often used in a corn/soybean rotation, with specialty crops or following small grains [1].

Cover crops sown after the cash crop in the winter fallow niche serve multiple purposes. They both prevent soil erosion and—if they are nitrogen scavengers—can prevent nutrient leaching [3]. Available cover crop niches will vary with the local climate and the cash crops in your rotation. For example, in Minnesota, many growers plant cover crops after corn harvest in September for winter cover [8]. Meanwhile, in North and South Carolina, cover crops are often used to absorb excess nutrients after manure applications [9].

John and Nancy Hayden grow 30 varieties of tree fruit and berries at The Farm Between in Jeffersonville, Vt., and maintain a pollinator sanctuary of perennials, trees and brush piles on their property. Even with such an abundance of flowering plants and habitat, they identified a need for summer cover crops. “We notice in July and August here in the Northeast there's a dearth of floral resources,” John says. “So for us, it was seeing if we can fill a gap that we can't with our perennials using annual cover crops.”

The next step in getting the most out of your cover crop is to identify your conservation needs. You may need to break up a plow pan (daikon radish), prevent nutrient leaching (non-legumes, cereals), boost soil fertility with a green manure (legumes), out-compete weeds with a fast-growing plant (buckwheat), provide forage for livestock (crimson clover, canola, cereals), manage nematodes (brassicas), or prevent erosion (cowpea, clovers). Increasingly, farmers are turning to cover crops in “prevented planting” situations—that is, when the soil is too wet to plant in the spring [1].

The Haydens used a 2013 SARE grant to evaluate three cover crop options—phacelia, buckwheat and a commercial bee forage mix—for their ability to support bumble bees and suppress weeds in vegetable beds where weed pressure had built up [10]. The phacelia and buckwheat established well,

suppressed weeds and attracted pollinators, but the commercial mix was outcompeted by weeds and did not establish well. "The phacelia we liked a lot," John says. "We were able to see that bumble bees had a statistically significant preference for phacelia over buckwheat."

Ideally, your cover crop will be dual-purpose. It should both serve as a conservation practice and also boost beneficial insect populations. Your cover crop mixture must include flowering legumes or forbs to accomplish this objective. See Plant Selection for an in-depth discussion of choosing plants for multiple objectives.

As a cover crop, fast-growing buckwheat is commonly used to suppress weeds. When allowed to flower, it can provide excellent forage for wild pollinators.
– Photo by John Hayden

Planting and Managing Your Cover Crops

COVER CROPS CAN EITHER BE SOWN AFTER HARVEST OF a cash crop, or they can be sown into a standing crop (over-seeding). Typically, drilling uses fewer seeds than broadcast seeding and promotes more uniform stand establishment. It can be done post-harvest or into a standing crop, and is the technique most commonly used by farmers in the CTIC-SARE survey [1]. Other farmers aerially over-seed cover crops into a standing crop. Over-seeding is most commonly used to give cover crops a head start before the winter in regions with a short growing season. The CTIC-SARE survey found that the median seed cost in the Midwest was $25 per acre in 2013 [1].

As you decide when to terminate your cover crop, the goal is to do so sufficiently in advance of your cash crop for cover crops to decompose, release nutrients and recharge soil moisture [11, 12]. You need to weigh these demands against the need to minimize the amount of time your fields are bare. Appropriate termination time for cover crops varies by region.

At the time of this writing, federal crop insurance programs have developed region-specific requirements for cover crop termination. These rules are intended to reduce yield losses of cash crops due to water use by previously planted cover crops. They require the termination of cover crops in advance of cash crop planting, from at least 35 days before planting to up to five days after planting, depending on the region. For more information, see Balancing Insect Conservation with USDA Crop Insurance Rules on page 9.

Cover crops can be terminated by mowing, tillage, herbicides, harvesting, rolling or winter kill. An herbicide burn down is the most common termination strategy, followed by tillage and winter kill [1]. You may also opt to graze or hay your cover crop for winter forage. The best option will vary depending on plant selection and growth stage. Deep tillage should be avoided, as it tends to counteract many of the benefits provided by cover crops. These range from improved soil tilth to increased populations of over-wintering beneficial insects.

If pollinators are to benefit from your cover crop planting, you must give it time to flower. This is not a problem for management of legumes or brassicas. Their conservation benefits are maximized after they bloom. Management of some other plantings can be a little trickier, as is the case for buckwheat. Buckwheat must flower for a minimum of 20 days to build up beneficial insect populations [3]. At the same time, buckwheat should be mowed seven to 10 days after flowering to prevent it from reseeding [3]. Because buckwheat is one of the best cover crops for bees and beneficial insects, and because it kills so easily with mowing, it may be advisable to put off cover crop termination until beneficial insects are established, with the expectation of having to mow a field twice to achieve cover crop termination. Note, however, that this practice could result in unwanted buckwheat (weeds) in subsequent crops. Alternatively, a farmer could stagger planting and mowing row by row to lengthen the bloom period while still preventing buckwheat from reseeding.

When the Haydens used buckwheat as a summer cover crop, they allowed it to flower extensively and go to seed, and did not follow it with a fall crop. With unfavorable conditions for germinating through the fall and winter, volunteer buckwheat was not a problem come spring. "From our experience, reseeding would only be a problem if you were planting another crop the same season," John Hayden says. "Neither phacelia nor buckwheat presented any problems with volunteers the year after planting."

Another cover crop practice that may require some additional tweaking to benefit bees and beneficial insects is planting for green manure. Green manure is tilled into the soil to increase soil organic matter in the vegetative stage or at flowering. This practice can be made more insect-friendly by allowing the green manure crop to flower for a few days before tilling, but still tilling before seed set.

Plant Selection

THE PLANTS THAT BEST FIT YOUR NEEDS WILL VARY BY location and purpose. Different cover crops have different strengths. Flowering broadleaf species are a must when selecting cover crops for pollinators. Grass cover crops do not provide nectar and their pollen typically has lower protein content than the pollen of broadleaf plants, thus making them only marginally attractive to bees. A flowering plant/grass blend may be an ideal solution in situations where a grass crop is needed to achieve other management priorities, such as preventing nutrient leaching.

You have more flexibility when selecting plants in support of predator and parasitoid insects for pest management, with certain grass cover crops supporting alternate prey (such as aphids) to help sustain the beneficial insects when cash crops are absent.

Cover Crop Services and Examples of Suitable Pollinator-Friendly Plants [1, 13]

Conservation Service	Pollinator-Friendly Cover Crops
Nitrogen source	alfalfa, white clover, red clover, cowpea, lupin, partridge pea, sunn hemp, vetch
Nitrogen scavenger	phacelia, canola, sunflower
Erosion control	canola, cowpea, crimson clover, white clover
Forage value	crimson clover, canola, white clover, forage radish
Weed management	buckwheat, canola, cowpea, sunn hemp, sunflower
Nematode management	canola, other brassicas and mustards
Reducing compaction	canola, radish, lupines, brassicas and mustards

Avoid cover crops that serve as alternate host plants for crop diseases and those that support large numbers of crop pests. An alternate host is another species, different from the cash crop, which serves as a reservoir for the pest or is necessary for the pest to complete its life cycle. For example, if you are growing a brassica vegetable crop, do not cover crop with another brassica, as it would support similar pests.

However, cover crops that support low levels of crop pests may be valuable in some cases, as they can provide a consistent food source for beneficial predators. This is well documented in the case of pecan orchards with a clover understory [14]. The legumes attract aphids, which are followed by beneficial insects. When the clover dies back and the aphid population drops, the beneficial insects are driven up into the trees. These insects, in search of other foods, manage pests on the developing pecans [14].

Be sure the cover crop you choose is adapted to local conditions. A good first step is to look around you and see what works for other farmers. Red clover and crimson clover are popular cover crops for nitrogen fixation east of the Mississippi River [3]. Red clover is a low-bloat legume that is excellent forage for grazing animals. Clover is also a high-value honey plant. Rapeseed and other brassicas are used for pest and nematode management in fields (biofumigation). Cowpeas, another legume, are exceptionally heat and drought tolerant. They also have extra-floral nectaries—or nectar-producing glands at leaf stems—which attract beneficial insects. These plants are used for erosion control across the Southeast and coastal California [3]. They are also used for weed suppression in the Deep South. Buckwheat is useful as a rapid-growing smother crop in much of the United States [3], and it is the premier cover crop for attracting beneficial insects.

Of course, buckwheat is not ideal for every situation. Hoping to use buckwheat as a nectar source for predators of the glassy-winged leafhopper, a vineyard pest [15], SARE-funded University of California-Riverside Extension specialists found that the plant struggled to grow during the hot, dry southern California summer. Sustaining the cover crop with irrigation turned out to be an expensive proposition, and actually increased populations of the blue-green sharpshooter, another local vineyard pest. Ultimately the buckwheat did in fact increase predator numbers to help manage glassy-winged leafhoppers, but that benefit became more difficult to justify when balanced against unexpected challenges.

Finally, when considering plants, a strong case can be made for the role of diversity. Using a SARE grant, a graduate student researcher in Florida [16] found significant differences in wild bee abundance and diversity based upon the number of crops present on a farm. At one end of the spectrum, the farm with the fewest number of bees (five species) grew only two crops and mowed directly up to the field edges. The farm with the greatest abundance of bees (14 species) grew nine crop species and maintained open, unmowed buffer areas around the farm. Interestingly, both farms were relatively similar in size. While not explicitly demonstrated in the study, it seems likely that multi-species cover crop mixes are a relatively simple way to expand plant diversity on a farm, with probable benefits to bee abundance and diversity.

Cover Crop Cocktails

MIXTURES OF COVER CROPS, OR COCKTAILS, HAVE synergy—they generally work better than each single species could alone. In fact, a planting of legumes and grasses can result in an overall increase in available nitrogen [17]. Legumes build up soil nitrogen quickly, but their residue also decomposes quickly, releasing nutrients. A small grain does not add soil nitrogen, but it is an excellent nutrient scavenger. Additionally, its residue decays over a longer period of time, providing a slow-release mechanism for soil nutrients. Small grains are also useful for controlling erosion, preventing nutrient leaching and suppressing winter weeds. Mixing the fertilizing effects of the flowering legume with the soil-building small grain can be a winning combination for winter cover [1, 18].

A pollinator-oriented cocktail may include a mix of plants that have different strengths and which flower at different times. Buckwheat, rapeseed, lupines, phacelia, sunn hemp, cowpeas, partridge pea, sunflowers and many clovers are all cover crops that are also beloved by bees and beneficial insects. Stacking these pollinator plants in one field can lengthen the bloom period. For example, if rapeseed blooms in early spring and is harvested in May or June, then it can be followed by the late-summer blooming sunflower, which can then be over-seeded with a winter legume/small grain mix. The rapeseed serves to manage nematodes, the sunflowers mine nutrients and bring them to the surface, while the legume/grain mix adds nitrogen and prevents winter erosion. This is just one path using an all-pollinator rotation for season-long flowers. All of these plants except the small grain have flowers highly preferred by pollinators and other beneficial insects.

Common and Suggested Rotations

THERE ARE A NUMBER OF ROTATIONS THAT WORK WELL with common crops, and there is likely to be a proven cover crop rotation that works with your system. The NRCS *Cover Crop Economics Decision Support Tool*, released in 2014, comes pre-loaded with example scenarios to help farmers think about the economics of including cover crops in their system. For example, in a three-year corn/soybean/corn rotation with fall cover crops every year, including a winter cover crop of cereal rye following corn and a cocktail of cereal rye/crimson clover/brassica following soybeans had long-term benefits in terms of fertilizer and pesticide savings, with no reduced yield [6]. In another scenario,



Photos, from left to right: **Teff grain, phacelia and a fava bean flower**

COVER CROP COCKTAIL EXAMPLES

The following examples represent cover crop cocktails for various regions and seasons. They include pollen and nectar-rich plant species that support a diversity of bees and other beneficial insects, as well as vegetative structure that insects may use for egg laying or hibernation. Flowering will vary depending on season, planting date and region; these mixes can provide multiple benefits even when terminated before all species have flowered.

Sample Cool Season Cocktail (formulated for one acre at 10-15 seeds per sq. ft.)

Species	Percent of Mix	Quantity (pounds per acre)
Phacelia	8	0.2
Crimson clover	8	0.3
Radish (daikon)	8	0.6
Hairy vetch	8	2.2
Field pea	8	17
Turnip	8	0.2
Fava bean	2	29
Rye	25	6
Oat	25	7
Totals	**100 percent**	**62 pounds per acre**

Sample Warm Season Cocktail (formulated for one acre at 15-20 seeds per sq. ft.)

Species	Percent of Mix	Quantity (pounds per acre)
Buckwheat	16	7
Soybean	16	34
Sunflower	16	3.5
Cowpea	16	28
Sudangrass	12	2.5
Millet	12	1.5
Teff	12	0.1
Totals	**100 percent**	**77 pounds per acre**

Sample Tropical Cocktail (formulated for one acre at 15-20 seeds per sq. ft.)

Species	Percent of Mix	Quantity (pounds per acre)
Buckwheat	12	7
Sunn hemp	12	7
Sunflower	12	3.5
Cowpea	12	26
Yellow sweet clover	12	0.5
Teff	12	0.1
Sudangrass	14	3.5
Millet	14	2.5
Totals	**100 percent**	**50 pounds per acre**

NATIVE AND NEARLY NATIVE COVER CROP MIXES

EXTENSIVE RESEARCH DEMONSTRATES THAT NATIVE PLANTS FOSTER MORE abundant and diverse pollinator populations than non-native plant species. Similarly, other benefits of native plants, such as their adaptation to local climate conditions, are well understood. However, the vast majority of cover crop options consist of non-native plants. There are some exceptions, described below.

Phacelia (*Phacelia tanacetifolia*), a vigorous-growing annual native to California, and common sunflower (*Helianthus annuus*), a native of western prairie and desert states, are two species that continue to be more common in cover crop applications. Both are also extremely attractive to honey bees and a variety of native bees. While phacelia (first used as a cover crop in Europe) is sometimes planted as a single-species cover crop, both it and sunflower are increasingly used as part of diverse cover crop cocktails. While those cocktails still do not resemble true native plant communities, the inclusion of these plants within their native range may provide special benefits to local pollinator species.

More work is needed to identify and increase the availability of promising native plant species. Across eastern, southern and Midwestern states, for example, partridge pea (*Chameacrista fasciculata*), a native annual prairie legume, shows particular promise. In addition to its ability to fix nitrogen, partridge pea attracts large numbers of pollinators and beneficial insects with both flowers and extra-floral nectaries (nectar-producing glands located at leaf stems). The abundant biomass production, trailing vetch-like growth habit and low-cost commercial availability also make partridge pea an attractive cover crop choice for warm-season applications.

While additional research is needed, farmers looking to experiment with local native plants as cover crops might seek out readily available, low-cost wildflower species and begin including them in cocktail seed mixes at a low rate. Annual species such as California poppy (*Eschscholzia californica*), Douglas meadowfoam (*Limnanthes douglasii*) and plains coreopsis (*Coreopsis tinctoria*) may soon take their place alongside crimson clover and buckwheat in creating diverse cover crop seed mixes that blur the lines between agriculture and ecology.

SPECIAL CONCERNS: TERMINATION AND RESIDUE MANAGEMENT FOR GOOD BUGS

WHILE NECESSARY TO PREPARE FOR CASH CROP planting, the process of terminating a cover crop can be very detrimental to pollinators and beneficial insects, especially when the cover crop is actively flowering when terminated. The risks to insects from cover crop termination include direct mortality, such as being crushed by cultivation or roller-crimping equipment; and indirect harm, such as the rapid loss of available food sources. Even when adult insects are not present and active in cover crops, nest sites, eggs and hibernating adults may all be present in the crop canopy or upper soil surfaces.

Adopting cover crops for pollinators takes careful planning and consideration. To reduce some of the impact of cover crop termination, we recommend the following:

- Where possible, wait until most of the cover crop is past peak bloom before termination.
- If waiting until peak bloom is not possible, consider leaving strips of the cover crop standing to prevent the crash of beneficial insect populations. With buckwheat, for example, stagger planting and mowing row by row (or groups of rows) to lengthen the bloom period while still preventing buckwheat from reseeding.
- Terminate with as little physical disturbance as possible. For example, roller-crimping may be less disruptive to pollinator nests in the soil than cultivation.
- Maintain permanent conservation areas on the farm to sustain beneficial insects in the absence of the cover crop.
- Leave as much cover crop residue as possible to protect beneficial insect eggs and any hibernating adults.
- Minimize insecticide use in the cash crops that follow cover crops to avoid harm to beneficial insects that may still be nesting in crop residue. At a minimum you should follow a comprehensive integrated pest management (IPM) plan that includes specific risk mitigation strategies that protect pollinators and beneficial insects.

Including native flowering species in a cover crop mix can help attract pollinators and beneficial insects, as in this South Dakota field.
– Photo by Mieko Alley, USDA NRCS

a two-year cotton/corn rotation that included winter cover crops of crimson clover following cotton and a cereal rye/crimson clover/brassica cocktail following corn provided immediate financial and environmental savings [6]. Brassicas, such as mustards, oilseed radishes, tillage radishes, canola and others, are often part of vegetable rotations because of their role in managing soil pests.

There are other examples of successful rotations. In Ohio, a typical corn/soybean rotation might include the cover crops cereal rye, wheat, cowpea and sunn hemp [19]. Brassicas are also an option for a winter cover crop. In Missouri, it is possible to double-crop buckwheat or sunflowers after harvesting a winter crop of canola or wheat in early summer [20]. After winter wheat, Michigan State University Extension recommends the soil-improving cocktail of annual ryegrass/red clover/hairy vetch/oilseed radish to add nitrogen, reduce compaction and improve tilth [21]. Alternatively, the cocktail of crimson clover/annual ryegrass provides many of these same benefits, minus the soil aeration, and is also excellent pasture [21].

A new, cost-efficient rotation is meadowfoam (*Limnanthes alba*), a winter annual, following seed grasses. Grown in northern California and Oregon, meadowfoam over-winters as a rosette. Its dense flowers attract pollinators and beneficial insects in the spring. This emerging species is useful as both a cover crop and an oilseed. The oil produced is highly shelf stable, and is quite valuable to the cosmetics industry. However, seeds can be hard to find.

Balancing Insect Conservation with USDA Crop Insurance Rules

THE USDA'S NRCS, RISK MANAGEMENT AGENCY (RMA) and Farm Service Agency (FSA) came together in 2014 to develop standardized termination recommendations for non-irrigated cover crops in four different regions or zones in the United States [12]. They sought recommendations that would achieve optimal balance between conservation benefits and soil water conservation for cash crops, and would provide consistent guidance for cover crop policy across the three agencies. For the purpose of crop insurance, cover crops must be terminated according to these recommendations in order for the following crop to receive insurance coverage. California and the Intermountain West (zone 1) require the longest gap between cover crops and a cash crop, with a recommended cover crop termination date at least 35 days before planting. For much of the country's bread basket, the Central Plains (zone 2), farmers should terminate the cover crop at least 15 days before planting. In the eastern prairie states and south Florida (zone 3), cover crops can be terminated at planting. Finally, in the eastern states (zone 4), growers can terminate cover crops up to five days after planting, but before cash crop emergence.

A major challenge of these rules is the loss of pollen and nectar resources when cover crops are terminated before they have fully bloomed. Even when partial bloom occurs, rapid termination of that bloom results in boom and bust conditions for insects. To mitigate some of the impact of early termination, consider supplementing cover crops with other pollen and nectar resources such as hedgerows, permanent wildflower meadows, or other high-quality natural areas. Similarly, consider leaving small sections of the field (even a single outer row) in the cover crop, rather than terminating it entirely. Even such small sections can help sustain pollinators in the absence of other forage sources.

For current guidance on cover cropping and federal crop insurance, consult your local NRCS office or crop insurance program agent, or see "NRCS Cover Crop Termination Guidelines" [12] in the References section.

Relative Value of Cover Crop Species to Bees and Other Beneficial Insects

Cover Crop	Life Cycle	Seeding Rate (pounds/acre single species)	Seeding Depth (inches)	Honey Bee Value	Wild Bee Value	Beneficial Insect Value (predators and parasitoids)	Alternative Host of Crop Pests	Notes
GRASSES								
Annual ryegrass	Annual	10-20	½	None	None	Low	Unknown	Probably only useful to beneficial insects when included as part of a diverse seed mix
Barley	Annual	60-125	1½	None	None	Low	Oat and Russian wheat aphids, various small grain diseases	Best adapted to dry, cool (but not cold) climates
Millet (foxtail, proso and pearl)	Annual	5-25	½	None	None	Low	Unknown	Seeding rates for foxtail millet can be reduced to the lower end of the described range
Oats	Annual	60-120	1½	None	None	Low	Oat and Russian wheat aphids, various small grain diseases	Cool-season plant; limited cold tolerance with most varieties subject to winter kill in cold climates
Rye, cereal	Annual	60-120	1	None	None	Low	Russian wheat aphids, various small grain diseases	Potentially allelopathic to other crops
Sorghum/ sudangrass	Annual	10-40	1	None	None	Moderate	Corn aphids	Attractiveness to grass-specific aphids may make this a useful insectary plant for attracting aphid predators (in non-grass crop systems); lower end of seeding rates are appropriate for sorghum and sorghum-sudangrass hybrids; potentially allelopathic to other crops
Teff	Annual	5-10	¼	None	None	Low	Unknown	Seed may have limited availability
Triticale	Annual	60-120	1	None	None	Low	Russian wheat aphids, various small grain diseases	Potentially allelopathic to other crops
LEGUMES								
Alfalfa	Perennial	10-25	¼	High	High	Moderate	Pea aphids	Top honey plant, also attractive to large numbers of diverse wild bees
Birdsfoot trefoil	Perennial	5-10	¼	Moderate	Moderate	Moderate	Spittlebugs, alfalfa plant bugs, potato leafhoppers and others	Can be weedy and invasive
Clover, berseem	Annual	8-20	¼	High	High	Moderate	Likely a host for various leafhoppers, true bugs and generalist aphids	Best adapted to Mediterranean climates
Clover, crimson	Annual	15-25	¼	High	High	Moderate	Pea aphids, tarnished plant bugs	Grows very well in combination with cereal rye and other cool season grasses
Clover, kura	Perennial	5-15	¼	High	High	Moderate	Various leafhoppers, true bugs and generalist aphids	Poor seedling vigor and slow to establish; considered a top honey plant

Clover, red	Perennial	5-20	¼	Moderate	High	Low	Various leafhoppers, true bugs and generalist aphids	Typically short-lived; high value for bumble bees
Clover, rose	Annual	10-25	¼	Moderate	High	Moderate	Various leafhoppers, true bugs and generalist aphids	Excellent bumble bee plant
Clover, strawberry	Perennial	5-15	¼	High	High	Moderate	Unknown	Can be weedy and invasive
Clover, subterranean	Annual	10-20	¼	None	None	Low	Pea aphids, tarnished plant bugs	Flowers are inconspicuous and do not attract pollinators
Clover, white	Perennial	5-15	¼	High	High	Moderate	Various leafhoppers, true bugs and generalist aphids	Considered a top honey plant
Chickpea	Annual	80-120	1½	Low	Low	Low	Pea borers, wireworms	Beneficial insects are attracted to extrafloral nectaries
Cowpea	Annual	30-90	1	High	High	High	Various stink bugs, leaf-footed bugs, aphids	Extensive extra-floral nectaries attract large numbers of beneficial parasitoid wasps as well as other beneficial insects
Fava bean	Annual	80-160	3	Low	Moderate	Moderate	Unknown	
Lablab	Annual	30-40	1-4	Moderate	Moderate	Moderate	Unknown	Vining growth habitat; more common in subtropical climates
Lupin	Annual	40-120	1-2	Low	Moderate	Moderate	Unknown	
Medic	Annual (a few species are perennial)	10-20	½	Low	Low	Low	Alfalfa weevils, pea aphids, tarnished plant bugs	Small, nondescript flowers attract few beneficial insects
Partridge pea	Annual	10-20	¼-¾	Moderate	High	High	Various leafhoppers	Extensive extra-floral nectaries attract large numbers of beneficial parasitoid wasps
Pea, field	Annual	50-100	2	Low	Low	Low	Tarnished plant bugs	
Sainfoin	Perennial	40-80	½	High	High	Moderate	Unknown	Considered a top honey plant
Soybean	Annual	35-120	1	Moderate	Moderate	Moderate	Wireworms, bean leaf beetles, potato leafhoppers and various others	
Sunn hemp	Annual	20-40	¾	Moderate	High	Moderate	Unknown	Attracts wild carpenter and leafcutter bees in tropical farm systems; supports parasitoids of corn earworm in the Pacific Islands region
Sweet clover	Biennial	6-20	½	High	High	High	Unknown	Considered a top honey plant; may be weedy or invasive in some areas
Vetch	Annual; perennial	15-30	½-2½	Moderate	High	High	Pea aphids, tarnished plant bugs, two-spotted spider mites	Standard options include common vetch, hairy vetch and purple vetch; may be weedy or invasive in some areas

Relative Value of Cover Crop Species to Bees and Other Beneficial Insects cont.

Cover Crop	Life Cycle	Seeding Rate (pounds/acre single species)	Seeding Depth (inches)	Honey Bee Value	Wild Bee Value	Beneficial Insect Value (predators and parasitoids)	Alternative Host of Crop Pests	Notes
FORBS/BROADLEAVES								
Beet	Biennial	6-10	1	Low	Low	Low	Unknown	Wind-pollinated flowers are only marginally attractive to bees
Buckwheat	Annual	30-80	1	High	High	High	Tarnished plant bugs	Top honey plant with nectar flow typically occurring in the morning; shallow flowers attract parasitoid wasps
Canola	Annual	3-10	½	High	High	High	Flea beetles	Excellent honey plant
Chicory	Perennial	3-5	½	Low	Low	Low	Unknown	Flowers are considered self-fertile and attract few insects
Flax	Annual	25-50	¾-1½	Moderate	Moderate	Moderate	Unknown	Reports of bee attractiveness vary; probably most valuable to pollinators as part of a diverse mix
Kale	Biennial	3-10	½	High	High	High	Cabbage loopers, flea beetles, cabbage aphids	Aphid-susceptible varieties likely support the more predatory insects such as lady beetles and lacewings; rapid-blooming varieties most beneficial to bees
Mustard, tame	Annual	5-20	½	High	High	High	Flea beetles	Can be weedy and invasive in California
Phacelia	Annual	5-15	Surface	High	High	High	Tarnished plant bugs	Major honey bee nectar plant; produces volunteer seedlings in moderate climates
Radish	Biennial	8-20	¼	High	High	High	Club root of brassicas, flea beetles, cabbage aphids, root maggots	Deep-rooted varieties are promoted for reducing compaction and adding soil organic matter; not tolerant of prolonged freezing
Safflower	Annual	25-35	1	Moderate	Moderate	Moderate	Sunflower head moths, tarnished plant bugs, wireworms	Relatively drought tolerant with surprisingly deep tap roots (in some cases exceeding 8 feet)
Sunflower	Annual	4-6	½	High	High	High	Sunflower head moths, various beetles, tarnished plant bugs	Both flowers and extra-floral nectaries attract huge numbers of pollinators and beneficial insects, in most cases outweighing any risk of attracting pests
Turnip	Biennial	2-12	½	High	High	High	Club root of brassicas, flea beetles, cabbage aphids, wireworms, cabbage loopers	Turnips tend to be more cold tolerant than radishes, allowing them to flower in the spring unless terminated

Limitations of Cover Crops

YOU MAY BE ASKING YOURSELF, "IF COVER CROPS ARE so great, why doesn't everyone use them?" While some farmers may not know where to start, perhaps the greater barrier to adoption is that the financial and environmental benefits of cover cropping oftentimes accrue gradually [22, 23, 24], while the startup costs in time and money are immediate. State and federal agricultural incentive programs which offset this initial investment can be very successful in encouraging the use of cover crops [22].

Of course, not all systems are equally suited to cover cropping. In some cases, existing long-season cash crop rotations may not be compatible with cover crops. In other regions, a cover crop's water usage may hurt cash crop yields [23]. This impact can be mitigated to some extent by terminating a cover crop well prior to establishing a cash crop, allowing soil water to recharge. Additionally, over the long term, cover crops increase soil organic matter, soil water infiltration and soil water capacity. Initial declines in available water are often offset by later, long-term increases [23].

Other limitations of cover crops include expenditures for new equipment, more complicated management practices and time spent seeding and terminating cover crops rather than managing cash crops [23]. It is important to run the figures for your own operation to decide if cover crops are right for you. Should you decide that the benefits outweigh the drawbacks, plan to ease into cover cropping, starting with a small area and gradually expanding your cover cropped land as you get the hang of it.

John Hayden tested a summer cover crop of buckwheat for its ability to suppress weeds and attract bumble bees, an important pollinator on his Vermont fruit farm. It worked well, and after going to seed did not return in the spring as a weed. *– Photo by Nancy Hayden*

Beyond Cover Crops

ALTHOUGH COVER CROPS CAN PROVIDE SIGNIFICANT pollen and nectar resources for bees, they do have constraints. For example, because most cover crop species have a short bloom period, single species cover crops typically offer a feast-or-famine situation for bees. A shortage of food is followed by abundance, followed by another shortage. Under such circumstances wild pollinators may have trouble sustaining their populations. (Honey bees may be more resilient under such conditions due to their ability to store food reserves.)

Moreover, because most cover crop plants are non-native species, their attractiveness to wild native bees may be highly variable. The cover crops highlighted in this bulletin will attract mostly generalist species of wild bees that are relatively common in most landscapes. Less common species of native bees often require more permanent plant communities comprised primarily of native plant species. In general, to maximize the diversity and abundance of beneficial wild insects, flowering cover crops should be combined with the restoration and maintenance of permanent, high-quality, pesticide-free native plant habitat in other areas of the farm. Adding pollinator hedgerows, establishing pollinator plantings on marginal lands and borders, and other practices to boost habitat can all fit into other USDA conservation practices.

Regarding pollinator borders specifically, two SARE-funded research projects in Michigan demonstrated the value of permanent native wildflower strips adjacent to crops. In one of these studies [25], researchers found that corn borer egg parasitism was measurably higher in fields adjacent to perennial native wildflower strips. In the other study [26], researchers found that blueberries planted adjacent to perennial wildflower strips had berries that were 22-40 percent heavier, due to enhanced pollination by wild bees.

Insecticides and Insect Conservation

You can reduce risk to pollinators and beneficial insects by implementing IPM on your farm and only applying insecticides when the threshold for economic damage has been crossed.

INSECTICIDES SHOULD NOT BE APPLIED TO COVER CROPS where pollinator and beneficial insect conservation is a priority. In most cases it is unnecessary, regardless of your cover crop objectives. Both organic and conventional pesticides can harm pollinators and other beneficial insects. Cover crops are themselves often used to break pest cycles and manage nematodes, and can help reduce your overall use of insecticides.

However, where cover crops are planted in rotation with insecticide-treated cash crops, the residual impact of cash crop insecticides may still be a concern. You can reduce risk to pollinators and beneficial insects by implementing IPM on your farm and only applying insecticides when the threshold for economic damage has been crossed. You can also start your course of treatment with the least harmful insecticide that will accomplish your management need. You can reduce harm to good bugs from insecticides by following label instructions, avoiding the application of insecticides to flowering plants, spraying at dawn or dusk and by using chemicals that have low residuals and do not accumulate in the soil or plant.

Unfortunately for beneficial insect conservation, there are a number of widely used systemic insecticides with persistent chemical residues in soil and plant matter. Systemic insecticides are those which are absorbed into the plant tissue and move through the vascular system of the plant, making most parts of it toxic to insect pests. In some cases the insecticide may even be present in flower nectar, resulting in the lethal or sublethal poisoning of bees and other pollinating insects.

The most common class of systemic insecticides currently in use is neonicotinoids. These include the active ingredients imidacloprid, thiamethoxam, clothianidin, acetamiprid, thiacloprid and dinotefuran. These insecticides may be applied in crop fields as foliar sprays, root drenches and as seed treatments (the latter commonly used for corn and soybeans). They can persist in the soil and crop residue for multiple years, and can be reabsorbed by later crops that were not treated. Due to a growing body of research demonstrating the potential risk posed to pollinators and beneficial insects from neonicotinoid insecticides [27, 28, 29, 30, 31], and our knowledge of neonicotinoid crop residues, farmers should avoid planting cover crops in rotation with neonicotinoid-treated cash crops where possible, especially when bee and beneficial insect conservation is a goal. Instead, producers should focus their conservation efforts on other areas of the farm which are untreated.

Following the precautionary principle means that we should not put beneficial insect habitat on lands contaminated by systemics—that is to say, in the absence of scientific proof that residue from previous use of systemic insecticides does not harm pollinators, it is safer to assume that it does. Growers of conventional corn and soybeans could instead focus their insect conservation efforts on hedgerows, roadsides and other areas not sprayed with systemic insecticides. They could also make their preference for untreated seed known to their supplier. In 2014 the Environmental Protection Agency (EPA) confirmed that there is little to no benefit from pre-treating soybeans; if enough growers request untreated seeds, then it is likely more will become available.

Similarly, cover crops should not be directly treated with any class of insecticide. An exception would be in the case of a cover crop being used for another primary purpose, such as livestock forage, where it must be protected from catastrophic pest damage. However, treatment of cover crops with insecticides is rare. Furthermore, it is critical to protect cover crops from adjacent insecticide drift. Any use of insecticides should fully adhere to label recommendations.

Avoiding Pest Increases

WHILE ADDITIONAL RESEARCH IS NEEDED, THERE IS strong evidence that diverse cover crop cocktails will routinely reduce pests, by increasing populations of beneficial predatory and parasitoid insects. In contrast, single-species cover crops may increase populations of undesirable crop pests, by providing a more limited range of resources than plantings which can support a diverse population of predators.

To further reduce the possibility of increasing crop pests, use caution when considering cover crops that are closely related to cash crop species. For example, if brassicas such as broccoli or cabbage are primary cash crops, minimize the use of cover crops such as turnip, radish or mustard, all of which may host the same pests and diseases as the cash crops.

During their SARE-funded project, the Haydens observed that the pure stand of phacelia provided habitat for the tarnished plant bug, a pest of tree fruits and berries. “From what we have learned, we will continue to plant multi-functional cover crops timed to bloom in July and August,” Nancy Hayden says. “Our seeding mix will include buckwheat and phacelia, as well as mustard and annual white sweet clover."

RESEARCH CASE STUDY: USING COVER CROPS TO INFLUENCE NATURAL PREDATION OF COTTON PESTS

AMONG LARGE-SCALE FIELD CROPS, COTTON IS high on the list for susceptibility to multiple major pests. Cotton bollworm, tobacco budworm, cotton aphid, tarnished plant bug and various stink bugs are some of the biggest offenders for cotton growers in the Southeast. Any management strategy that can make a dent in the populations of these pests without relying on insecticides is good news.

One such successful strategy came about through a SARE-funded research project in Georgia [32] that investigated the use of cover crops to increase the number of insect predators that prey upon some of those pests. This research was based on the fact that many beneficial insects need alternate food sources, such as nectar, to sustain themselves when prey are absent. These beneficial insects also typically need vegetation on which to lay eggs or hibernate over the winter. In this study, researchers hypothesized that various cover crops might provide those habitat requirements.

Starting with standard cotton fields where cover crops were not used, the researchers compared pest and beneficial insect populations to those in cotton fields where cover crops of crimson clover, cereal rye and a legume mix were used in rotation and as intercropping cover. For a few beneficial insects like the predatory minute pirate bug, there was not a significant population difference between traditional cotton fields and those with cover crops. However, most pest and beneficial insect population responses strongly indicated that cover crops had a measureable and positive impact on pest management. For example, predatory big-eyed bug numbers were demonstrably higher in cotton fields following a crimson clover cover crop. Aphid-eating lady beetles also seemed to move directly from cover crops into cotton.

In the case of pests, researchers also found that cotton bollworm and tobacco budworm were the only two pests that exceeded economic thresholds in both the cover cropped fields and the regular cotton fields. Interestingly however, the pests exceeded those damage thresholds more often in regular cotton fields than those where crimson clover and rye cover crops were used.

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Resources

SARE's Cover Crops Topic Room
This online collection of educational materials was developed out of decades of SARE-funded cover crop research. www.sare.org/cover-crops.

Attracting Native Pollinators
Illustrated with hundreds of color photographs and dozens of specially created illustrations, this book provides rich detail on creating and managing pollinator habitat. www.xerces.org/store/#books.

The USDA-NRCS Cover Crop Economics Decision Support Tool
This user-friendly economic assessment tool helps determine the costs and benefits of incorporating cover crops into a crop rotation. www.nrcs.usda.gov/wps/portal/nrcs/detailfull/il/soils/health.

Manage Insects on Your Farm: A Guide to Ecological Strategies.
A guide on how to apply ecological pest management principles to your farming system. www.sare.org/manage-insects.

Managing Cover Crops Profitably, 3rd Edition
This definitive book explores how and why cover crops work and provides all the information needed to build cover crops into any farming operation. www.sare.org/mccp.

Bees and Cover Crops
This four-page Penn State bulletin describes the use of flowering cover crops for native pollinator conservation. www.sare.org/native-bees-and-flowering-cover-crops.

Habitat Management in Vineyards
This University of California manual provides practical steps for managing pests by improving biodiversity at the field and landscape levels. www.sare.org/habitat-management-in-vineyards.

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The Twelve Design Principles Of Permaculture

By Steve Thomas-Patel · September 7, 2021

Share:

Permaculture is a system of design that follows twelve principles.

The three tenets of permaculture are:

- Care for the planet

- Care for people
- Fair share

The idea is to look at the entire ecosystem and our place in it, and realize the effects of everything we do. We strive to achieve the three tenets. In working toward those three tenets, we follow 12 basic design principles. These are those principles:

1. Observe and Interact

2. Catch and Store Energy

3. Obtain a Yield

4. Apply Self-Regulation and Feedback

5. Use and Value Renewables

6. Produce no waste

7. Design from Patterns to Details

8. Integrate don't segregate

9. Use small, slow solutions

10. Use and value diversity

11. Use edges and value the marginal

1. Observe and Interact

Designing for permaculture means starting with observation. No matter where you are working, there is something there to begin with. At the very least, there is sun, air and land.

The land has some sort of shape. The soil has some qualities, whether it is available nutrients or a lack of available nutrients. Another major concern is water. How you use and manage water is always an important consideration in a permaculture landscape.

Permaculture is about limiting inputs such as your own work energy. Good observation lets us understand what the space already provides in order to get the most out of it. Our goal is to work with nature, not against it.

2. Catch and Store Energy

Energy is provided in many forms. The most abundant is sunlight. There is also wind and water. A permaculture system may include advanced power systems like solar or hydro. But for many of us, this might just mean harvesting gravity to deliver water from tanks. Or optimizing the placement of our plants. Plants are the original solar cells, turning light energy into edible sugars.

3. Obtain a Yield

Yield is a flexible term. It means getting something out of your space. The most obvious yield is food. Food is tangible and measurable and offers obvious benefit. Other yields can be happiness, serenity, mental health. Gardening provides great psychological benefits.

I would also argue the yield doesn't have to go to people. The earth has suffered great loss in recent years due to habitat destruction. I put as much value on providing habitat to the animals as I do on people.

4. Apply Self-Regulation and Feedback

Changes in permaculture should be made as slowly as possible. A small change can have a dramatic effect on surrounding systems. Ideally, one or two changes are made at a time and the effects are observed before another change is made. We want to understand whether and how our goals are fulfilled by our changes.

5. Use and Value Renewables

Our ease of access to utilities can make it feel like water and power are infinite. But there are costs to using them beyond the monthly bill. Water should be captured when it can be, such as with rain barrels or buckets in the shower. Use trees where shade is needed, deciduous trees can provide shade to a house in summer and allow heat through in winter, saving on electric bills.

6. Produce no waste

It seems like everything we do creates waste. Every ecommerce purchase comes wrapped in cardboard or plastic or both. 20% of waste that ends up in landfills are food that could be composted and added to our gardens. At the very least, compost your own household waste, perhaps even take in your neighbors. Recycle anything that can be recycled. Cardboard boxes can be composted, fed to worms or used in lasagna mulching.

7. Design from Patterns to Details

Use your observations of the existing features to be lazy. If water tends to pool in certain places, use that. Perhaps plant marsh loving plants there. Or dig channels and add rocks to spread the water around.

8. Integrate don't segregate

Traditional agriculture taught even us home gardeners to plant in monocultures, planting like with like. This seems to make things easier on us and human beings. It simplifies our problems. It also makes things easier on pests and diseases that tend to specialize on a small number of plants, or at least family of plants.

Biological systems do best when there is diversity. If your tomato plants are spread out, disease may take over one, but not reach over the okra and cucumbers to reach

the next tomato plant down the way.

9. Use small, slow solutions

Taking on too much at once is a recipe for failure. It's better to start a small garden and grow it out over time than to plant many gardens and become overwhelmed.

10. Use and value diversity

Use diversity to control pest populations and attract different birds and other predators. An enjoyable garden is much more interesting when it has many different types of plants instead of the same one planted over and over again.

11. Use edges and value the marginal

This is perhaps one of the most impactful observations recognized in permaculture. Things happen on the edges. Treetops are not packed full of leaves from core to stemtip. Most leaves are at the edges of the canopy. If you observe birds in a tree, they hang out near the edges.

Edges are where fertility is. A tree may protect the space within it's canopy, and other plants will thrive around the edges of it. Plants, whether wanted or not, thrive in a circle around the birdbath. Dips in the ground create opportunities for life due to the sheltering or the way water collects there.

12. Creatively use and respond to change

When we plan we often get a picture in our mind of some ideal of how we want our land to look. Even if we could achieve that perfectly in our implementation, it would only be temporary.

Any look of the land is only a snapshot, since everything is in constant change. The sun is always moving, winds are shifting, bugs are moving seeds, attacking plants. Plants are defending, water is flowing. Plants are growing, dying, or coming in or out of dormancy.

Our neighbors may unexpectedly prune a tree we relied on for shade. You can gripe over the change and make yourself miserable over things you can't control, or you can be embrace it or even be excited about it.

Native Plants

Permaculture

Demonstration Gardens

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