

What Resources are Available to Help with Flooding?

An Educational Event for Property Owners in Lodi & wider Seneca County

Brought to you by the Floodwater Committee of the Lodi Climate Smart Community (CSC) Team
Seneca County Cornell Cooperative Extension, Seneca County Soil & Water Conservation District,
USDA- Natural Resources Conservation Service and USDA-Farm Services Agency

AGENDA

Welcome and Introduction:

Climate Smart Task Force, Flood Survey, & Program Need

🔥 *Jaclyn Eisman, Lodi Climate Smart Community (CSC) Team & Floodwater Committee*

Flood Survey Map & Importance of Flood Mitigation Strategies

🔥 *Laurie VanVleet, Lodi Climate Smart Community (CSC) Team & Floodwater Committee*

Agenda Overview & Introductions

🔥 *Anisa Mendizabal, Lodi Climate Smart Community (CSC) Team & Floodwater Committee*

Changing Weather Patterns, Anatomy of a Flood and Floodplains

🔥 *Ryan Staychock, Seneca County Cornell Cooperative Extension*

Best Management Practices and Available Resources

🔥 *Erin Peruzzini, Seneca County Soil and Water Conservation District*

Additional Resources

🔥 *Daniel Tighe, Natural Resources Conservation Service, USDA*

🔥 *John Mietz, Farm Service Agency, USDA*

Question and Answer

🔥 *Laurie VanVleet, Lodi Climate Smart Community (CSC) Team & Floodwater Committee*

Closing

🔥 *Anisa Mendizabal, Lodi Climate Smart Community (CSC) Team & Floodwater Committee*



Seneca County Soil & Water Conservation District

Erin Peruzzini
District Manager

"The nation that destroys its soil, destroys itself" -FDR

▶ How the Dust Bowl led to the creation of the **Seneca County** Soil and Water Conservation District



Black Sunday
4/14/1935

Congress Passes
16USC590a-590q
Establishing the Soil
Conservation Service
4/27/1935



USDA Releases "A
Standard State Soil
Conservation Districts
Law"
5/13/1936



FDR's letter to all
Governors: Uniform
Soil Conservation Law
2/26/1937



Today, there are nearly **3,000** Districts
nationwide – one in almost every county.



New York State
Conservation District
Law adopted
4/23/1940



Seneca County Soil &
Water Conservation
District created on
12/27/1940
8th District in New
York State.

1935

1935

1936

1937

1938

1939

1940

1940

In the early 1930s, along with the Great Depression, came an equally unparalleled agricultural and ecological disaster known as the **Dust Bowl**.



Since its inception, the **Seneca County SWCD** has worked with landowners, agricultural producers, and municipalities to protect Seneca County's natural resources while maintaining resource productivity.

Over 80 years of Conservation in Seneca County!



► Purpose

The primary purpose of the District is to improve and protect the land, water and related resources both existing and potential; to discourage land use practices that are detrimental to the environment; and to develop and carry out preventive and creative programs aimed at conserving and enhancing the natural resource base of the County and the State. The Seneca County Soil and Water Conservation District is an action agency. It has the power to plan as well as to implement the physical work on both public and private lands.



Soil & Water is NOT regulatory.

BMPs

Best Management Practices also known as **BMPs** are designed to: Protect water quality by minimizing erosion and surface water run-off. They maintain hydrologic processes by limiting disturbances to water flow patterns.





FLOODING

Floods are unpredictable, natural and inevitable events.





Changing Weather Patterns

Higher Frequency Storm Events

More Localized Storms

Increase in Intensity of Rainfall

Floods are the most common and widespread Natural Disaster in the United States.

FLOOD CONTRIBUTORS

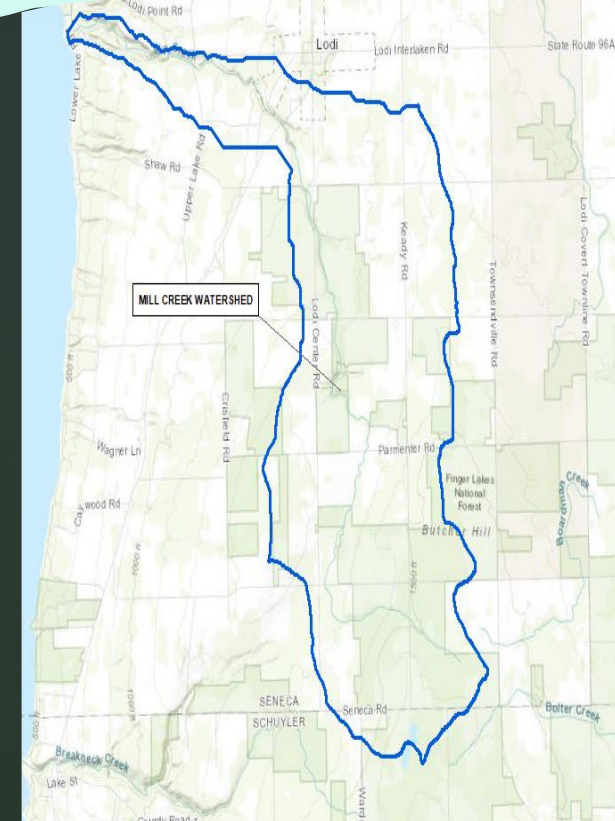
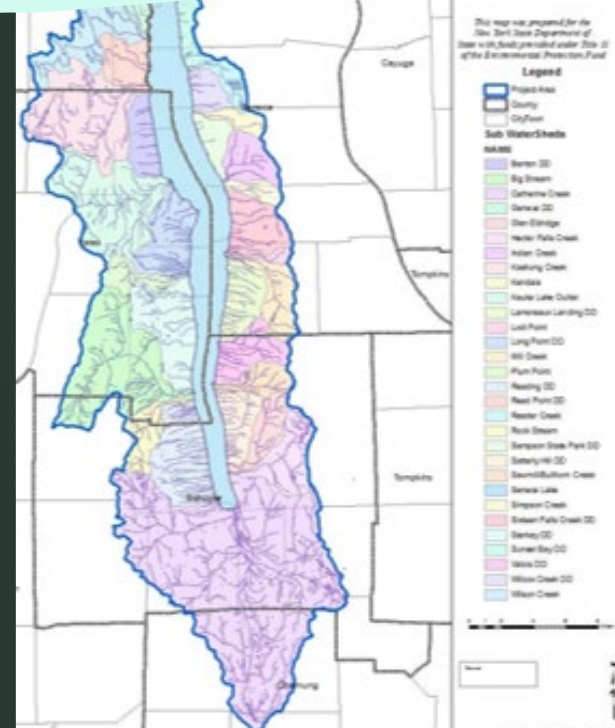
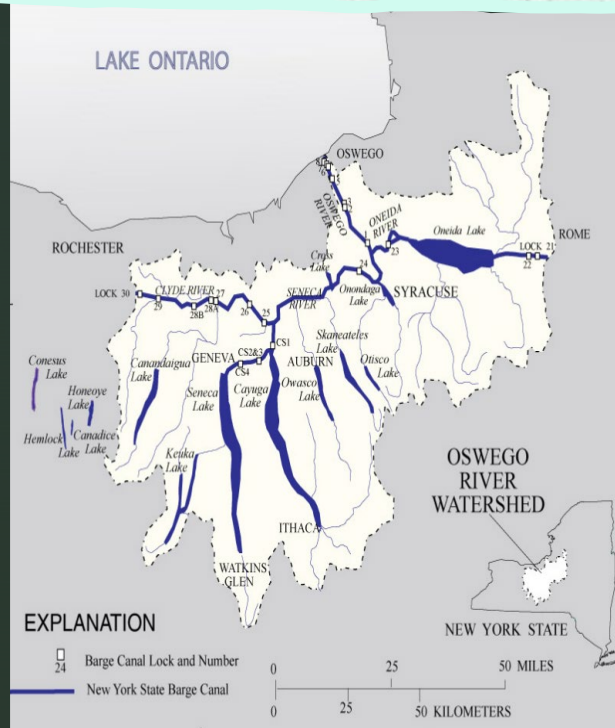
- Intensity of Rainfall
- Watershed Size & Shape
- Land Use
- Topography / Slope
- Soil Type / Geology
- More impervious surface = Reduced infiltration
- Obstructions in flow



WATERSHEDS

What is a watershed?

- Area of land that **channels water** to creeks, streams, and rivers, to a common outlet point such as lakes and oceans.



FLOODING IMPACTS

- Loss of Human Life
- Loss of Property
- Affects on roads and infrastructure
- Disruption to transportation and utility services
- Economic and financial implications
- Increased threats to water quality
- Spread of water-borne communicable diseases

Densely populated areas are at more risk. Roughly **17% of all urban land** in the United States is **located in high-risk flood zones**.

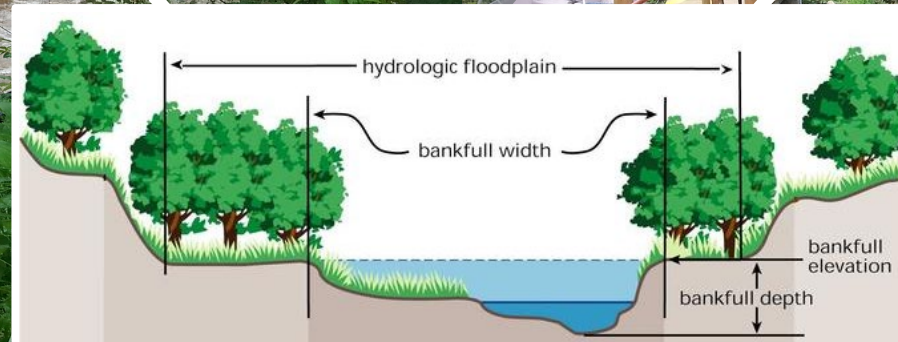
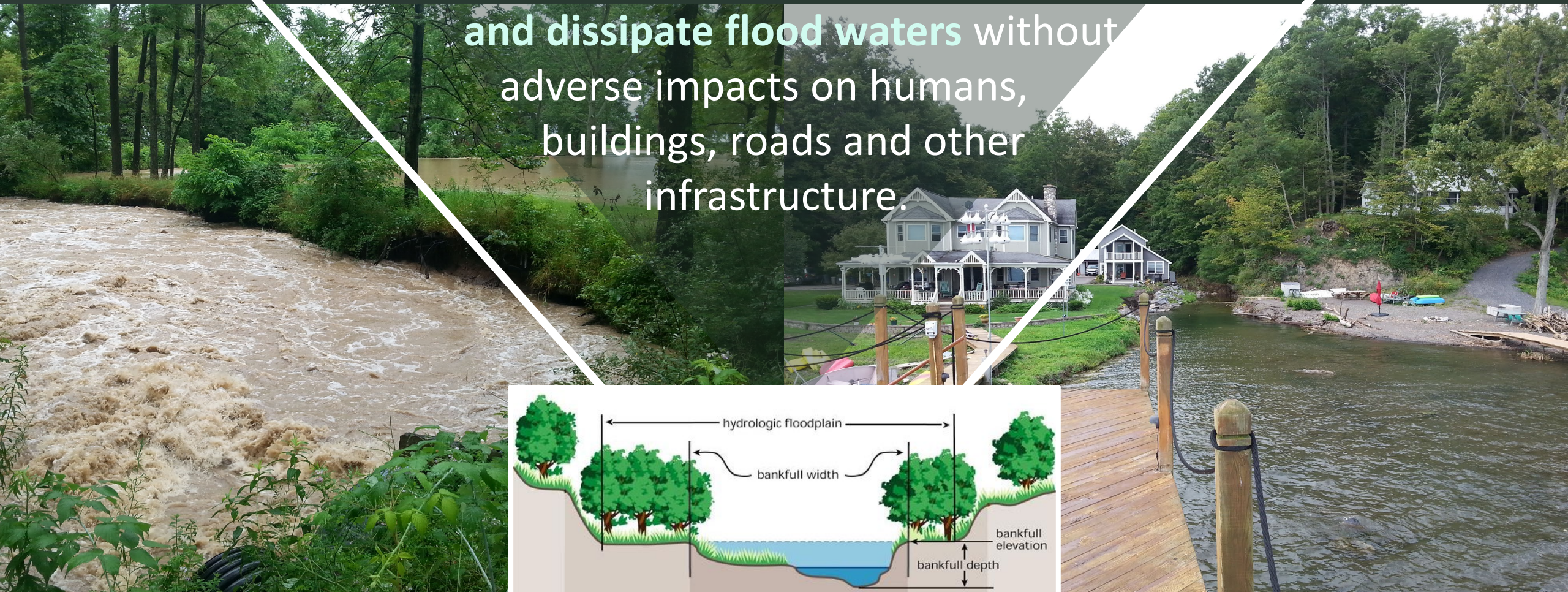


FLOODPLAINS

- What is a flood plain?
- Floodplains are **low-lying lands next to rivers and streams.**

When left in a natural state, **floodplain systems store**

and dissipate flood waters without adverse impacts on humans, buildings, roads and other infrastructure.





When homeowners take steps to protect themselves and to **reduce the impacts of flooding** through mitigation practices such as elevating or flood-proofing their homes, **moving out of harm's way**, and investing in “natural defenses” they can save themselves and taxpayer’s money because it’s less expensive to prepare for a flood than it is to keep cleaning up afterwards.

FLOOD MITIGATION PRACTICES REDUCE THE LOSS OF LIFE AND DAMAGES TO PROPERTY



RESOURCE ASSISTANCE



RESIDENTIAL



AGRICULTURE



MUNICIPAL

RESIDENTIAL

- DO NOT build in a flood plain.
- If existing home or structures are in a flood plain take measures to reduce potential damage.



Simple low-cost maintenance for flood mitigation

- Be aware of streams, floodplains & wetlands on your property and neighboring properties & observe their flooding habits & assess risk.
- Mow and maintain road ditches.
- Don't throw yard waste in road ditches, streams or wetlands.
- Routinely inspect culvert inlets and road ditches to make sure they are free of debris.
- Keep outdoor areas uncluttered and don't place items in floodplains.
- Remove fallen trees in streams that might catch flood debris and change flow paths.
- Clean and maintain roof gutters and outlets.

Standard BMPs for flood mitigation

- Install roof gutters and downspouts.
- Install a sump pump, French drain or perimeter drain around your house or structure.
- Improve grading around the home.
- Elevate utilities and service equipment.
- Reduce impermeable surfaces.
- Install a rain barrel or rain garden.

RESIDENTIAL – CAUTIONARY DON'Ts

Don't narrow the stream outlet.

Don't build homes or structures in flow paths.



RESIDENTIAL – ASSISTANCE

STREAMBANK STABILIZATION



Streambank Stabilization helps protect infrastructure and address erosion issues. It is **NOT** a flood mitigation measure.



RESIDENTIAL - FUNDING



Mill Creek – Streambank Stabilization
2007

NYS Department of Environmental Conservation (DEC)

- Water Quality Incentive Program (WQIP)
 - BMPs related to Water Quality primarily focused on erosion control.

OTHER FUNDINGS SOURCES

- Finger Lakes Lake Ontario Watershed Protection Alliance (FLOWPA)
 - BMPs related to Water Quality.

AGRICULTURE

Cultural Practices

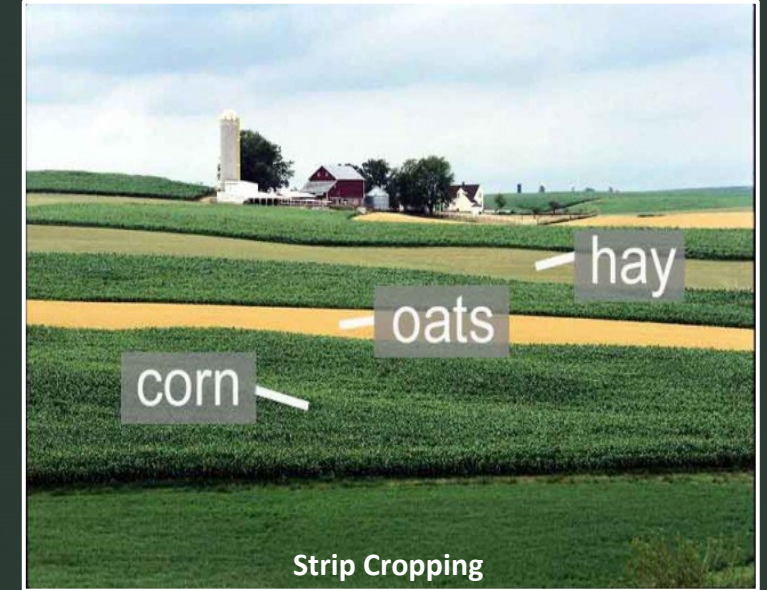
- Cover Crops
- Contour Farming
- Strip Cropping
- Residue & Tillage Management
- Reduced Tillage
- Buffers

Structural earth moving practices

- Grassed Waterways
- Diversions
- Water and Sediment Control Basins
- Stormwater Basins



AGRICULTURE – CULTURAL PRACTICES



AGRICULTURE – GRASSED WATERWAYS



A vegetated channel that conveys surface water at a nonerosive velocity using a graded broad and shallow cross section to a stable outlet.

AGRICULTURE - DIVERSIONS



before



before



after



after

A vegetated channel constructed across the slope to break slope length that intercepts surface flow, diverts it away from sensitive areas and reduces runoff and erosion.



before



after

AGRICULTURE – WATER SEDIMENT CONTROL BASINS

An earthen embankment with an underground outlet constructed across the slope of a minor drainageway that detains water and slowly releases it to a stable outlet.



AGRICULTURE – WATER SEDIMENT CONTROL BASINS



AGRICULTURE – STORMWATER BASIN

A dry earthen basin designed to temporarily detain stormwater. The basin allows sediment to settle while controlling flow.



FUNDING



NYS AG & MARKETS

- Agricultural Non-Point Source (AGNPS)
 - Larger BMPs related to Water Quality including Nutrient Management, Barnyard / Heavy Use Area Protection, Cover Crops...
- Climate Resilient Farming (CRF)
 - BMPs related to climate – 3 tracks
 - Manure Cover & Flares
 - Flooding & Erosion
 - Cover Crops
- Ecosystem Based Management (EBM)
 - Smaller BMPs for Water Management & Erosion Control

OTHER FUNDINGS SOURCES

- Finger Lakes Lake Ontario Watershed Protection Alliance (FOLLOWPA)
 - BMPs related to Water Quality.

Eligibility requires...

- Participation in the **NYS Ag & Markets – Agricultural Environmental Management (AEM) Program**
- Cost share (typically 75% -25%)

MUNICIPAL

- Assess road ditches for **proper flow**. Only clean when necessary, **NEVER in winter**.
- Stabilize** eroded areas with **rock armor or check dams**.
- Routinely assess and maintain **culverts**.
- Replace undersized or aging culverts** with properly engineered structures.
- Conduct **drainage assessments and routine maintenance schedules** of flood prone areas.
- Implement **Green Infrastructure** practices to alleviate flooding.
- Functional and educated **Planning Boards** that help make informed decisions.



MUNICIPAL - HYDROSEEDING



Hydroseed is a slurry of seed and mulch material used as an erosion control technique.
SWCD will hydroseed for FREE.

MUNICIPAL – ROADBANK STABILIZATION



Rock Rip-Rap is used to stabilize road ditches, slow water flow and reduce erosion.



SWCD can assist with sizing, design and obtaining grant funds to pay for materials.

Check dams are utilized on steeper slopes to reduce water velocity.



MUNICIPAL - CULVERTS



SWCD can assist with Hydrologic studies, culvert sizing & design, grant applications and funding for materials.



MUNICIPAL – TRASH GUARDS



Trash Guards capture flood debris, allow for continued flow of storm water while protecting infrastructure.

MUNICIPAL – GREEN INFRASTRUCTURE

STREETSCAPE ALIVE!

These Geneva streets are ALIVE with interesting elements that encourage you to PLAY and LEARN!

What is below the surface?

Did you know?

The integration of public art and green infrastructure practices throughout the streetscape helps to create a playful environment and often highlight the ecological systems occurring in that place. **Functional public art** has been a guiding principle in the City of Geneva. An artist designed the back panel for this bike shelter AND its tiled roof design allows rainwater to be harvested in the planter below! Can you find this **bike shelter** along Exchange Street?

Public art in a streetscape may look very different than what you might see in an art museum. It may be a large wall mural, brightly colored tables and chairs, different pavement materials, and may even be displayed as improvements on street walls. It could even be a bike rack shaped like a cyclist!

I spy with my little eye...

1. BIKE SHELTER
2. BIKE/BIKE RACKS
3. EDUCATION PANELS
4. BENCHES
5. GAME TABLES

Unique Public Spaces

Bioretention Planting with Seating

Proposed Rendering

GENEVA Environmental Facilities Corporation

What is Green Infrastructure?

- Technique used to capture and treat stormwater runoff, and prevent pollutants from entering rivers & lakes.
- Improves water quality by reducing and treating stormwater at its source through infiltration and evapotranspiration. - NYS Environmental Facilities Corporation
- Provides multiple environmental, economic, and social benefits, which include: filtering pollutants, recharging aquifers, rivers and streams, alleviating flooding, preserving wildlife, restoring habitat, cooling the surrounding environment, reducing air pollution, and decreasing energy usage. - NYS Environmental Facilities Corporation
- Incorporates green, sustainable design elements to assist in beautifying the area, increasing property values, and promoting economic viability of the City.

Permeable Concrete Pavers
Designed to infiltrate rainfall through the pavement surface, thereby reducing stormwater runoff quantities. Proposed permeable concrete pavers are located at the intersections and crosswalks, and within the tree trench areas along the sidewalks.

Stormwater Tree Plantings
New trees are proposed throughout the streetscape to increase biodiversity, intercept precipitation, reduce urban heat island effect, and absorb carbon, nitrogen, and particulate matter.

Permeable Flexi-pave
Flexi-pave allows water to soak into the ground instead of running directly into drainages and underground connections to the Lake, some is made from recycled tires and stone and is easily identifiable by its brick red color.

Structural Cornell University (CU) Soil
Stone storage below porous clay brick pavers. CU structural soil provides ample rooting area for the street trees and allows for stormwater capture and harvest until it can infiltrate into the ground.

Bioretention Planting
Plantings that are tall, tolerant and hardy species are placed within the bioretention area to provide benefits including effective breakdown and removal/immobilization of pollutants found in runoff and increased wildlife habitat and biodiversity.

Green Infrastructure Practices
Green infrastructure practices such as rain water harvesting and its reuse filter and manage stormwater runoff by providing effective breakdown and capture of pollutants. These practices increase infiltration time, increase wildlife habitat and biodiversity, and decrease reliance on existing stormwater infrastructure and treatment facilities.

GENEVA Environmental Facilities Corporation

Green Infrastructure is an approach to water management that mimics natural permeable surfaces that allows for better infiltration and stormwater management.



MUNICIPAL – FUNDING



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-Water Quality Incentive Program (WQIP)

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OTHER FUNDINGS SOURCES

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–BMPs related to Water Quality.

FUNDING - REVIEW

RESIDENTIAL & MUNICIPAL:

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BMPs related to Water Quality.

AGRICULTURAL:

NYS Agriculture & Markets

-Agricultural Non-Point Source (AGNPS)

Larger BMPs related to Water Quality including Nutrient Management, Barnyard / Heavy Use Area Protection, Cover Crops...

-Climate Resilient Farming (CRF)

BMPs related to climate – 3 tracks

- Manure Cover & Flares

-Flooding & Erosion

-Cover Crops

-Ecosystem Based Management (EBM)

Smaller BMPs for Water Management & Erosion Control.

OTHER FUNDINGS SOURCES

-Finger Lakes Lake Ontario Watershed Protection Alliance (FOLLOWPA)

BMPs related to Water Quality.

FUNDING - CONSIDERATIONS

1. It takes Time –

- Planning Phase & Preliminary Engineering: 1-3 years
- Grant Application: 1-3 months
- Grant Review & Ranking: 4-12 months
- Grant Award & Contract: 3-6 months
- Contract & Implementation length: 3 years
- Closeout & Reporting: 3-6 months

2. Cost Share – landowner or other funding source match requirement of at least 25% of total project cost.

3. Grant Funding is Competitive = NO GUARANTEES





United States Department of Agriculture



Opportunities Available Through NRCS

January 17, 2024– Dan Tighe, Resource Conservationist

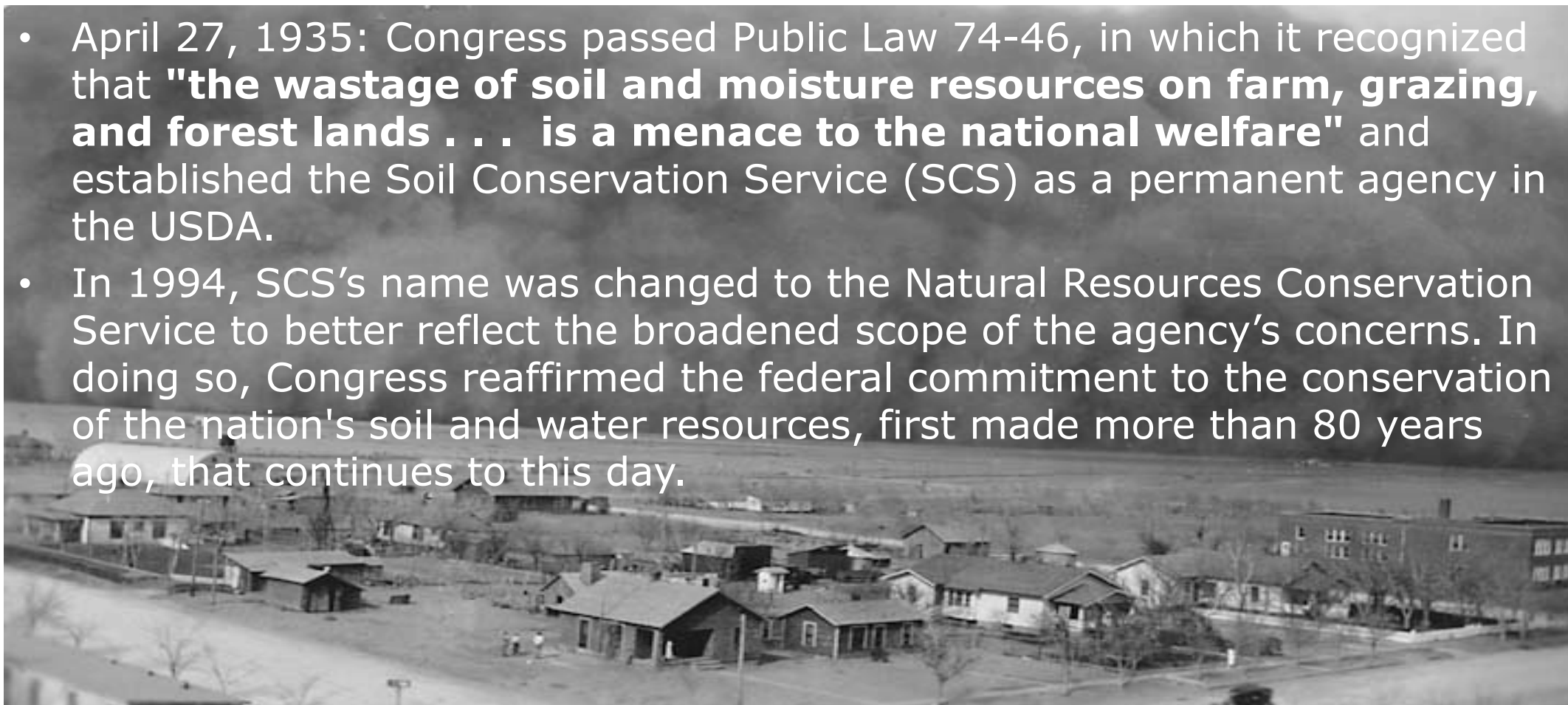
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A Brief History of NRCS



- April 27, 1935: Congress passed Public Law 74-46, in which it recognized that "**the wastage of soil and moisture resources on farm, grazing, and forest lands . . . is a menace to the national welfare**" and established the Soil Conservation Service (SCS) as a permanent agency in the USDA.
- In 1994, SCS's name was changed to the Natural Resources Conservation Service to better reflect the broadened scope of the agency's concerns. In doing so, Congress reaffirmed the federal commitment to the conservation of the nation's soil and water resources, first made more than 80 years ago, that continues to this day.



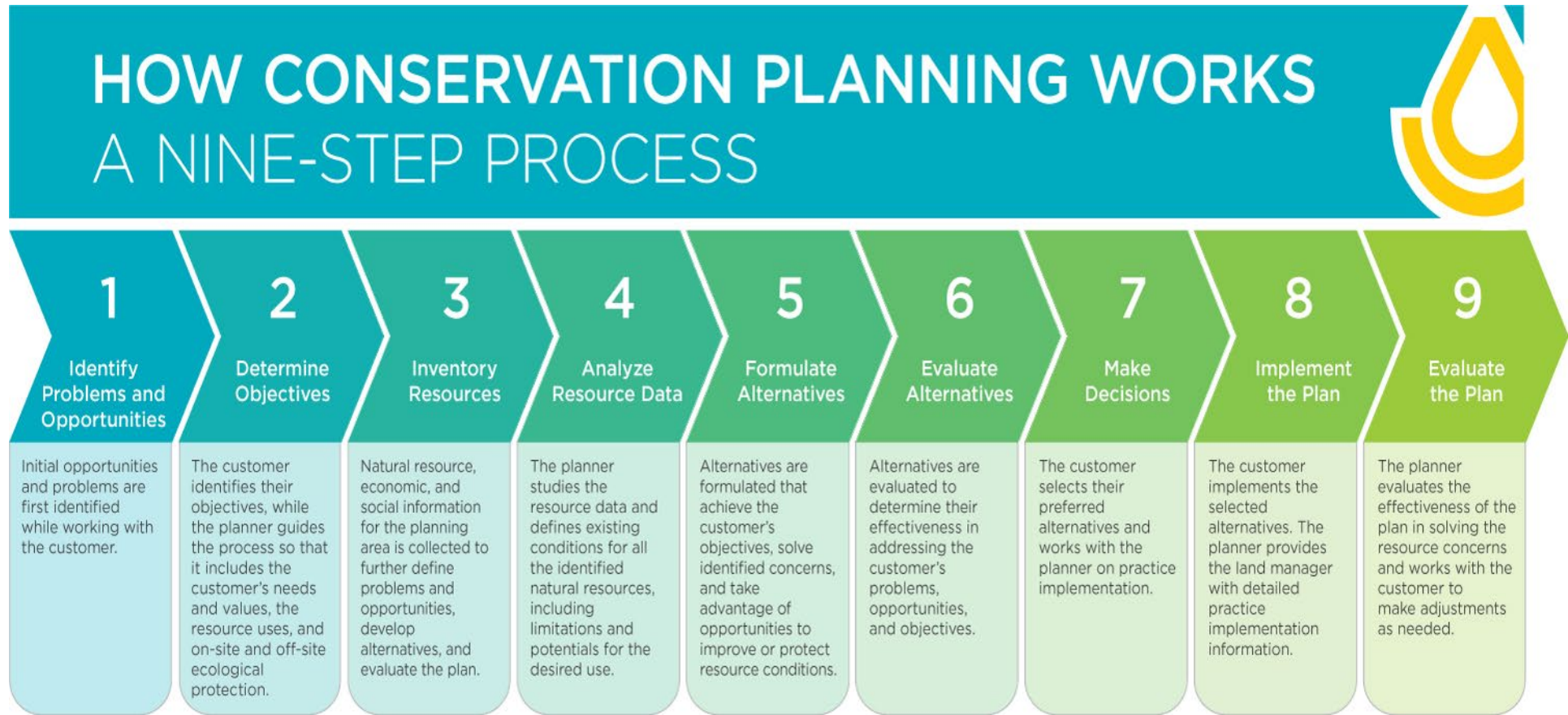
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Nine Step Planning Process

The Natural Resources Conservation Service uses a nine-step planning process whenever it begins a project. The purpose of the steps is to develop and implement plans that protect, conserve, and enhance natural resources within a social and economic perspective.



Resource Concerns



Category - Soil

- 1. Sheet and rill erosion
- 2. Wind erosion
- 3. Ephemeral gully erosion
- 4. Classic gully erosion
- 5. Bank erosion from streams, shorelines, or water conveyance channels
- 6. Subsidence
- 7. Compaction
- 8. Organic matter depletion
- 9. Concentration of salts or other chemicals
- 10. Soil organism habitat loss or degradation
- 11. Aggregate instability

Category - Water

- 12. Ponding and flooding
- 13. Seasonal high-water table
- 14. Seeps
- 15. Drifted snow
- 16. Surface water depletion
- 17. Groundwater depletion
- 18. Naturally available moisture use
- 19. Inefficient irrigation water use
- 20. Nutrients transported to surface water
- 21. Nutrients transported to groundwater
- 22. Pesticides transported to surface water
- 23. Pesticides transported to groundwater
- 24. Pathogens and chemicals from manure, biosolids, or compost applications transported to surface water

- 25. Pathogens and chemicals from manure, biosolids, or compost applications transported to groundwater
- 26. Salts transported to surface water
- 27. Salts transported to groundwater
- 28. Petroleum, heavy metals, and other pollutants transported to surface water
- 29. Petroleum, heavy metals, and other pollutants transported to groundwater
- 30. Sediment transported to surface water
- 31. Elevated water temperature

Category - Air

- 32. Emissions of particulate matter (PM) and PM precursors
- 33. Emissions of greenhouse gasses (GHGs)
- 34. Emissions of ozone precursors
- 35. Objectionable odors
- 36. Emissions of airborne reactive nitrogen

Category - Plants

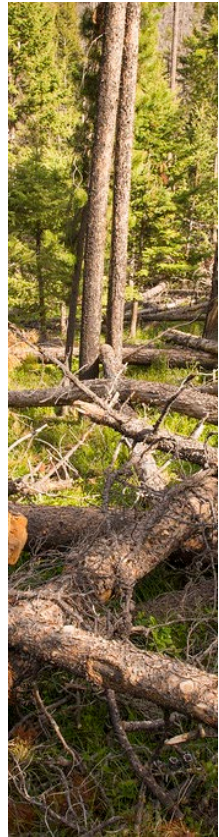
- 37. Plant productivity and health
- 38. Plant structure and composition
- 39. Plant pest pressure
- 40. Wildfire hazard from biomass accumulation

Category - Animals

- 41. Terrestrial habitat for wildlife and invertebrates
- 42. Aquatic habitat for fish and other organisms
- 43. Feed and forage imbalance
- 44. Inadequate livestock shelter
- 45. Inadequate livestock water quantity, quality and distribution

Category - Energy

- 46. Energy efficiency of equipment and facilities
- 47. Energy efficiency of farming/ranching practices and field operations



Natural Resources Conservation Service



Conservation Plans

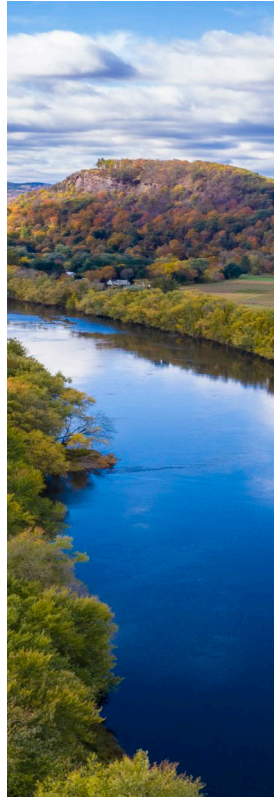


What is a conservation plan?

- It is voluntary, site specific, comprehensive, and action-oriented...
- It is based on natural resource information and is a record of decisions made by the client...
- Which describes a system of practices and activities needed to solve identified natural resource problems and take advantage of opportunities.

A conservation plan includes:

- Producer/landowner determined objectives and goals;
- An aerial photo and diagram of your farm;
- A soil map and soil descriptions of your property;
- Resource inventory data, forage crop potentials, livestock carry capacity, etc.;
- A list of treatment decisions;
- A location and schedule for applying conservation practices you want to install on your land; and
- A plan of operation and maintenance of your conservation system.



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Programs Offered in New York

- **Agricultural Conservation Easement Program (ACEP)**
 - Consolidates
 - ALE – Agricultural Land Easements
 - WRP – Wetland Reserve Program
- **Conservation Stewardship Program (CSP)**
 - Compensates agricultural/forest producers who agree to increase their level of conservation by adopting additional conservation activities and maintaining their baseline level of conservation.
- **Environmental Quality Incentives Program (EQIP)**
 - Technical and financial assistance to producers to address natural resource concerns such as: water and air quality, depleted ground and surface water, soil erosion and sedimentation, insufficient wildlife habitat, and livestock health.
- **Agricultural Management Assistance (AMA)**
 - 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
 - Urban Agriculture Initiative
- **Emergency Watershed Protection Program (EWP)**
 - The Emergency Watershed Protection (EWP) Program, a federal emergency recovery program, helps local communities recover after a natural disaster strikes.



How Financial Assistance Programs Work

- **Eligibility**

- **Land** (farmstead, cropland, pastureland, non-industrial private forestland)
 - Must have an identified, eligible resource concern
 - Documented control-of-land (deed or lease)
- **Producer**
 - Engaged in agricultural production or forestry management
 - Adjusted Gross Income (AGI) annual limitations (less than \$900,000)
 - In compliance with the Food Security Act: Highly Erodible Land (HEL) and Wetland Conservation (WC) compliance



Program Eligibility



B. Producer.—Eligible applicants must be—

- (1) A person, legal entity, Indian Tribe, Alaska Native corporation, or joint operation with signature authority.
- (2) Engaged in agricultural production or forestry management or have an interest in the agricultural or forestry operation associated with the land offered for enrollment. Interest in the agricultural operation means one of the following:
 - (i) Owner or renter of the land in the agricultural operation;
 - (ii) Have an interest in the agricultural products, commodities, or livestock produced by the agricultural operation; or
 - (iii) Be a member of a legal entity or joint operation that either owns or rents land in the agricultural operation or has an interest in the agricultural products, commodities, or livestock produced by the agricultural operation.

- Conservation (CFC) Certification, is filed, verified, and eligible
- B. Farm Tract Eligibility – FTE. Determine if participant is “In Compliance” and FTE eligibility = “Y”:

 - (i) Highly Erodible Land Conservation (HELC)
 - (ii) Planted Converted Wetland- PCW (If applicable)
 - (iii) Converted Wetland – CW (If applicable)

E. Ineligible Applicants

- (1) A producer is ineligible for USDA program benefits if engaged in controlled substance activities, including growing marijuana on any part of their agricultural operation in violation of Federal law, even if the requested assistance does not relate to the part of

(440-530-M, 2nd Ed., Nov 2022)

530-C.2

Farm Bill	AGI Requirement for Covered Conservation Programs
2002 Farm Bill	A person or legal entity that is determined to have an average AGI, as defined, that is less than 75 percent from farming, ranching, or forestry operations and that exceeds \$2.5 million is ineligible for any covered conservation payment or benefit during the applicable year.
2008 Farm Bill	A person or legal entity with an average adjusted gross nonfarm income exceeding \$1 million is ineligible for any covered conservation program payment or benefit, unless at least 66.66 percent of total AGI was farm income.
2014 Farm Bill	A person or legal entity with average AGI greater than \$900,000 is ineligible for any covered program payment or benefit.
2018 Farm Bill	A person or legal entity with average AGI greater than \$900,000 is ineligible for any covered program payment or benefit.

Title 440 – Conservation Programs Manual

the agricultural operation used for the production of the controlled substance. See section 530.21D, in this subpart, for guidance on hemp production.

- (2) Federal, State, county, and local governments, and political subdivisions of State government (e.g., school districts, conservation districts, etc.) and entities with members of units of government or subdivisions, are not eligible. See subpart R, section 530.402, “EQIP Eligibility,” of this manual for exceptions to this policy.



Types of Practices EQIP Funds

Farmstead:

- Comprehensive Nutrient Management Plans (CNMPs)
- Covered Barnyards
- Waste Storage Facilities
- Silage Leachate Collection Systems
- Milking Center Waste Collection Systems
- Agrichemical Handling Facility



Projects Completed with NRCS Assistance



Existing barnyard before NRCS assistance



Completed Covered Barnyard



Projects Completed with NRCS Assistance



Installed total collection system for silage leachate

Completed waste storage facility



Types of Practices EQIP Funds

Cropland:

- Cover Crops
- Diversion ditches
- Grassed Waterways
- Strip Cropping



Strip cropping



Grassed Waterway



Projects Completed with NRCS Assistance



Cover crops



Types of Practices EQIP Funds

- **Grazing**
- Prescribed Grazing Plan
- Based on the practices identified in your Prescribed Grazing Plan applicants can apply for:
 - Fence
 - Waterline
 - Watering Facilities
 - Stream Crossing
 - Wells, spring developments, ponds
 - Access road
 - Animal Trails and Walkways



Types of Practices EQIP Funds

High Tunnels- extends the growing season and makes it possible to grow crops that traditionally wouldn't grow locally

- Must already be growing crops in the area where you are interested in applying to install a high tunnel.
 - *Can not be installed in a wetland or hydric soil (wet soil) areas*



- *Must already be growing crops in the area where you are interested in installing a high tunnel.*
- *Must have water already available on site for irrigation.*



Types of Practices EQIP Funds

Pollinator Habitat

- Can apply to have a Pollinator Habitat Plan funded.
- If you have been actively farming land and not using pesticides you can potentially apply for pollinator habitat funding without having a completed Pollinator Habitat Plan.



Types of Practices EQIP Funds

Grassland and Shrubland Habitat

- Grassland Habitat- Goal is to provide habitat to grassland nesting birds by providing open fields for them to nest in.
 - The main activity we promote is mowing outside of the nesting season (after August 1)
- Shrubland Habitat- Goal is to conserve populations of shrubland birds and other early successional wildlife through promoting shrubland areas.



Shrubland habitat



Grassland habitat



Types of Practices EQIP Funds

Forestry

- A Forest Stewardship Plan is required before applying for additional forestry funding. Can apply for funding to hire a private forester to write the plan through NRCS, or can contact your DEC Forester and ask them to complete a free Forest Stewardship Plan for you.
- Types of Practices eligible through forestry funding:
 - Forest Health Thinning
 - Tree planting
 - Invasive Species removal and treatment
 - Forest Trails and Landings, water bars
 - Wildlife habitat (bat boxes, brush piles)



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Financial Assistance Programs

- **CSP: Conservation Stewardship Program**
 - For landowners who are actively engaged in applying conservation activities on their land.
 - Helps participants to maintain and improve their existing conservation systems and to adopt additional conservation activities.
 - **Payments for:**
 - Improving, maintaining, and managing existing conservation activities.
 - Undertaking additional conservation activities



Conservation Stewardship Program

- **Types of Land typically enrolled in CSP**
 - Cropland
 - Examples of enhancements:
 - Cover crop to suppress excessive weed pressures and break pest cycles,
 - Pasture
 - Examples of enhancements:
 - following a more intensive rotation, creating wildlife buffers
 - Forestland
 - Examples of enhancements:
 - Brush management for improved structure and composition
 - Snags, den trees, and coarse woody debris for wildlife habitat
- **Participants interested in CSP need to be prepared to manage their own contract and supply the NRCS field office with records every fall documenting the completion of the enhancement. Documentation includes things such as pictures of completed enhancements, documentation of planting dates, detailed rotational grazing notes, and anything else required by NRCS to document implementation and completion of the enhancement.**

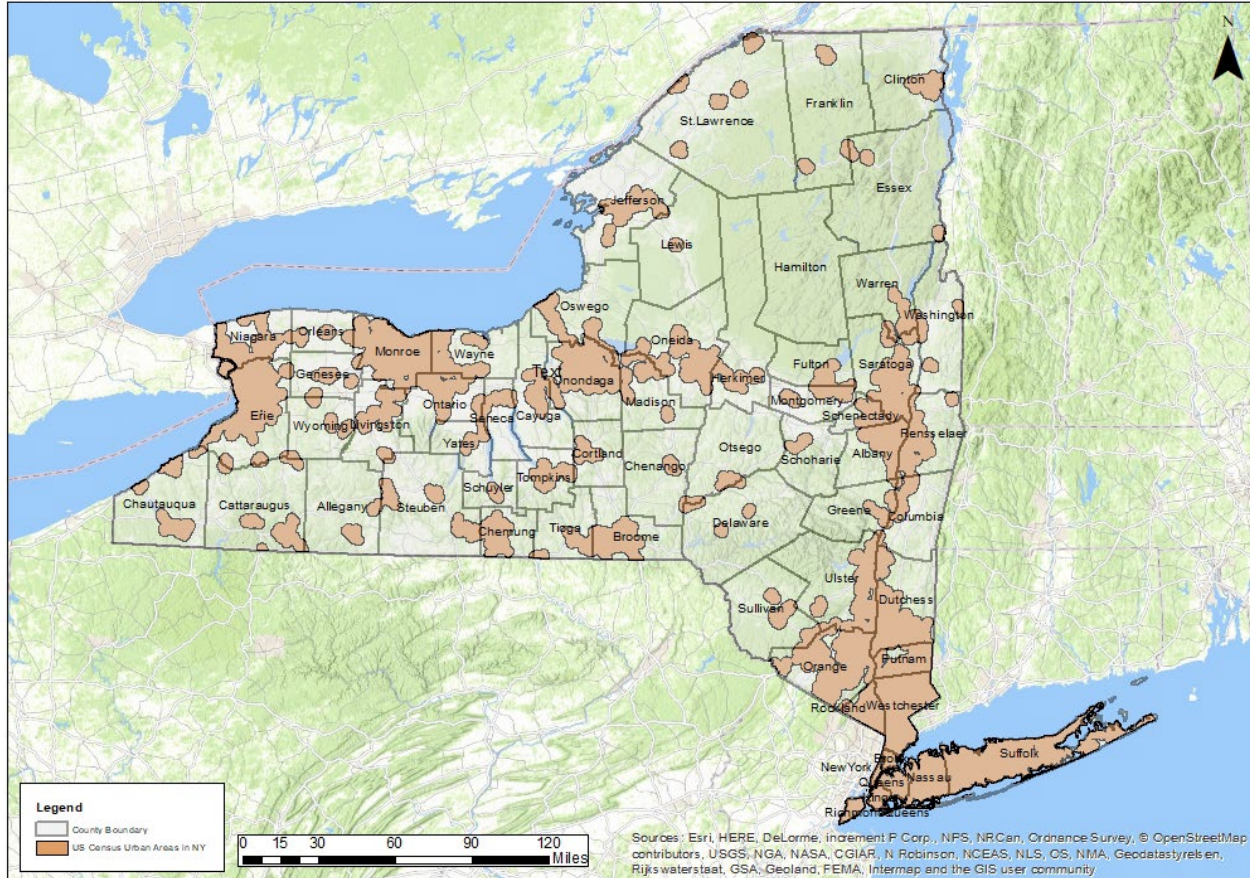


Agricultural Management Assistance



AMA 2022 NY Urban Agriculture Areas

A Product of USDA-NRCS
Created: March 23, 2022



Sources: Esri, HERE, DeLorme, InCREMENT P Corp., NPS, NRCAN, Ordnance Survey, © OpenStreetMap contributors, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystrelen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Available Practices

- Access Road (560)
- Combustion System Improvement (372)
- Composting Facility (317)
- Conservation Cover (327)
- Conservation Crop Rotation (328)
- Cover Crop (340)
- Critical Area Planting (342)
- Fence (382)
- Field Border (386)
- Forage and Biomass Planting (512)
- Heavy Use Area (561)
- Hedgerow Planting (422)
- Herbaceous Weed Treatment (315)
- High Tunnel System (325)
- Irrigation Pipeline (430)
- Irrigation Reservoir (436)
- Irrigation System, Microirrigation (441)
- Irrigation Water Management (449)
- Livestock Pipeline (516)
- Mulching (484)
- Nutrient Management (590)
- Obstruction Removal (500)
- Pest Management Conservation System (595)
- Prescribed Grazing (528)
- Pumping Plant (533)
- Roof Runoff Structure (558)
- Sprinkler System (442)
- Stormwater Runoff Control (570)
- Trails and Walkways (575)
- Underground Outlet (620)
- Upland Wildlife Habitat Management (645)
- Watering Facility (614)
- Wildlife Habitat Planting (420)
- Windbreak/Shelterbelt Establishment (380)
- Windbreak/Shelterbelt Renovation (650)



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NRCS Emergency Watershed Protection Program (EWP)

The **EWP Program** offers technical and financial assistance to help local communities relieve imminent threats to life and property caused by floods, fires, windstorms and other natural disasters that impair a watershed.

- EWP does not require a federal disaster declaration by federal for program assistance to begin.
- The NRCS State Conservationist can declare a local watershed emergency and initiate EWP program assistance in cooperation with an eligible sponsor.

NRCS offers financial and technical assistance for various activities under the EWP Program, including:

- Remove debris from stream channels, road culverts and bridges;
- Reshape and protect eroded streambanks;
- Establish vegetative cover on critically eroding lands;
- Repair certain conservation practices, and
- Purchase of EWP Buyouts.



Introduction to the EWP Program



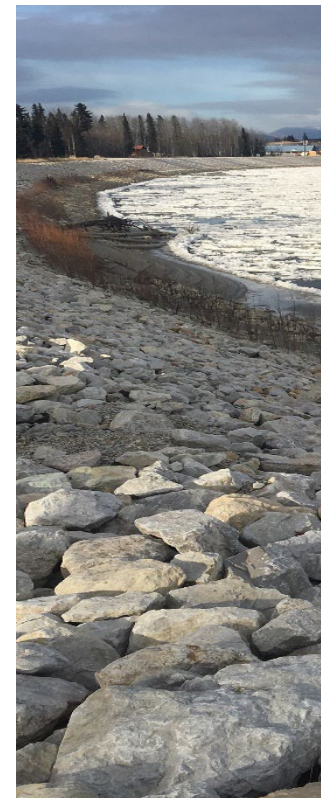
EWP Program



*Flooding and
Erosion Protection*

Natural Occurrences

- Floods
- Fires
- Windstorms
- Ice storms
- Hurricanes/ Typhoons
- Tornadoes
- Earthquakes
- Volcanic actions
- Slides
- Drought

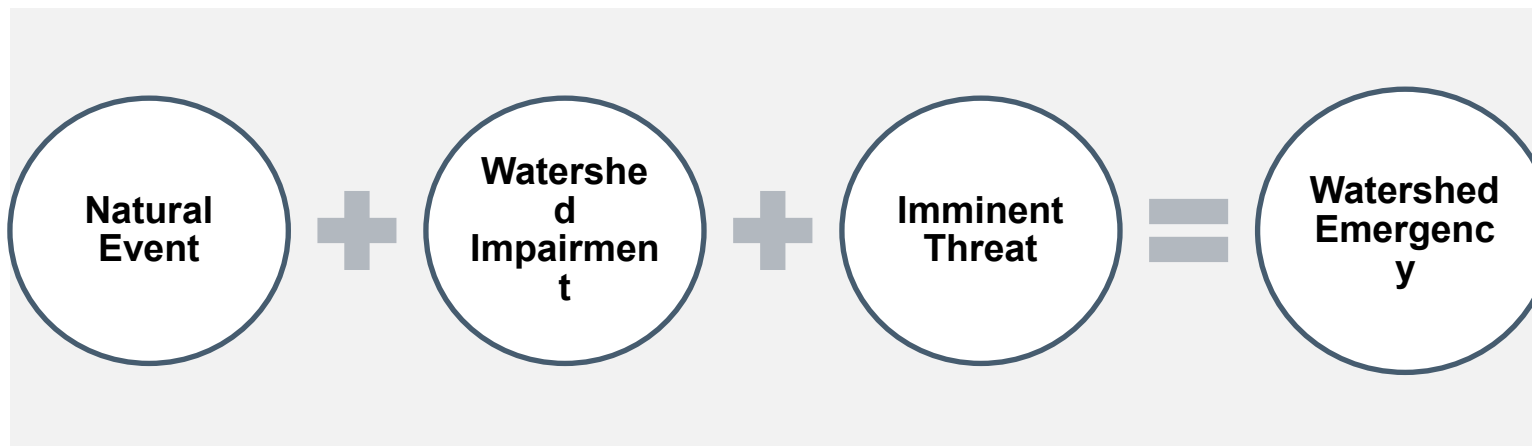


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Program Eligibility



Property EWP Program Can Be Used to <u>Protect</u> :	<ul style="list-style-type: none">• Permanent structures• Houses & Buildings• Roads & Utilities• USDA NRCS PL 566 Dams and Flood Control Structures
EWP Program Cannot Be Used to Protect Only:	<ul style="list-style-type: none">• Standing Timber• Orchards• Agronomic crops (other USDA programs are available for Ag Land)



Natural Resources Conservation Service



EWP Sponsors

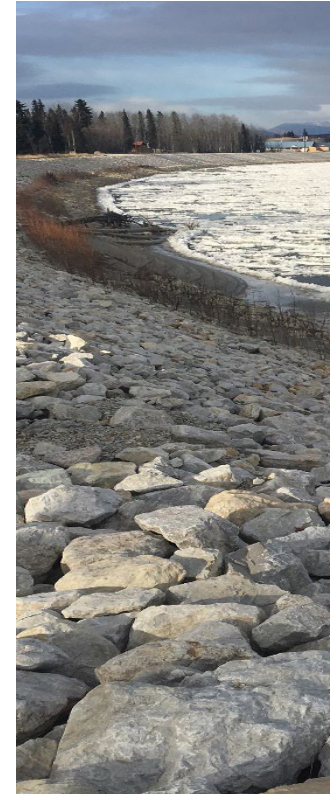


Eligible Sponsors

- State
- Political Subdivision of State
- Qualified Indian Tribe or Tribal Organization
- Unit of local government
- *All sponsors must have a legal interest in or responsibility for the areas threatened*

Sponsor Responsibilities

- Share of project costs as determined by NRCS as cash or in-kind services
- Real property rights, water rights, and regulatory permits
- Provide for required O&M as determined necessary by NRCS
- Document they have insufficient resources to provide adequate relief



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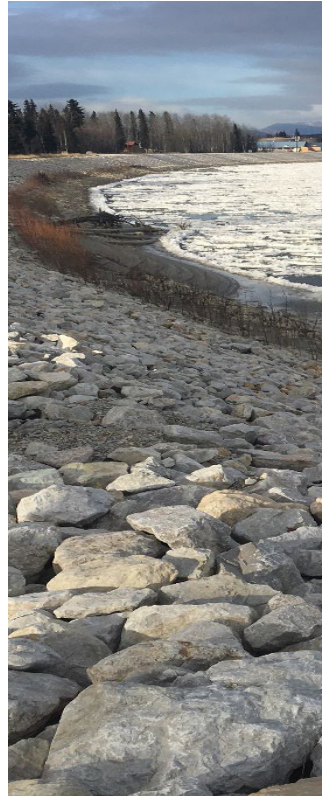


Limits on EWP Assistance



Situations where EWPP cannot provide assistance:

- ✘ The same structural practice 3 times within 10 years
- ✘ Existing operation and maintenance
- ✘ Repair or rebuild, or maintain any transportation facilities, utilities, or similar facilities
- ✘ If funded by NRCS, on Federal lands if such assistance augments the appropriations of other Federal agency
- ✘ Repair of nonstructural management practices, such as conservation tillage
- ✘ Repair coastal erosion to beaches, dunes, and shorelines, including those along the Great Lakes
- ✘ The recovery measures are instead eligible for the Emergency Conservation Program (FSA)



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Eligible EWP Practices

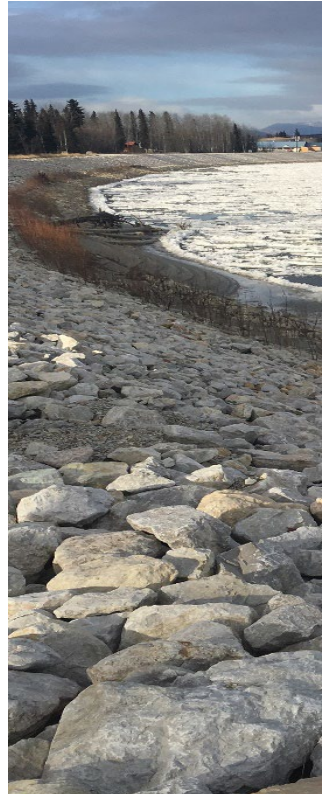


'every time, all the time' EWP Conditions

- Provide protection from flooding or soil erosion
- Reduce threats to life or property from watershed impairment
- Restore the hydraulic capacity to the natural environment to the maximum extent practical
- Be economically/environmentally defensible & technically sound

The Fine Print

- NRCS may determine that a measure is not eligible for assistance for any reason.
- NRCS will not provide funding for activities undertaken by a sponsor prior to the signing of an agreement.



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EWP Alternatives



USDA NRCS EWP Program Buyout Alternative

In communities impacted by constant flooding or severe erosion due to a natural disaster, a property **buyout** might be the best solution or alternative.

<https://www.nrcs.usda.gov/programs-initiatives/emergency-watershed-protection-ewp-program-buyouts>

EWP buyouts are used where structural alternatives to reduce threats from flooding and erosion are not cost-effective and/or beneficial. Once NRCS determines that buying a flood-prone property (for example) would provide the pivotal solution and sustainable course of action for a community, EWP has the authority to provide local sponsors with financial assistance to purchase and restore the property.

NRCS may provide project sponsors up to 75 percent of:

- the fair market value based on an appraisal for the property,
- relocation costs, and
- the site restoration costs.



EWP Examples



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EWP Examples Cont.



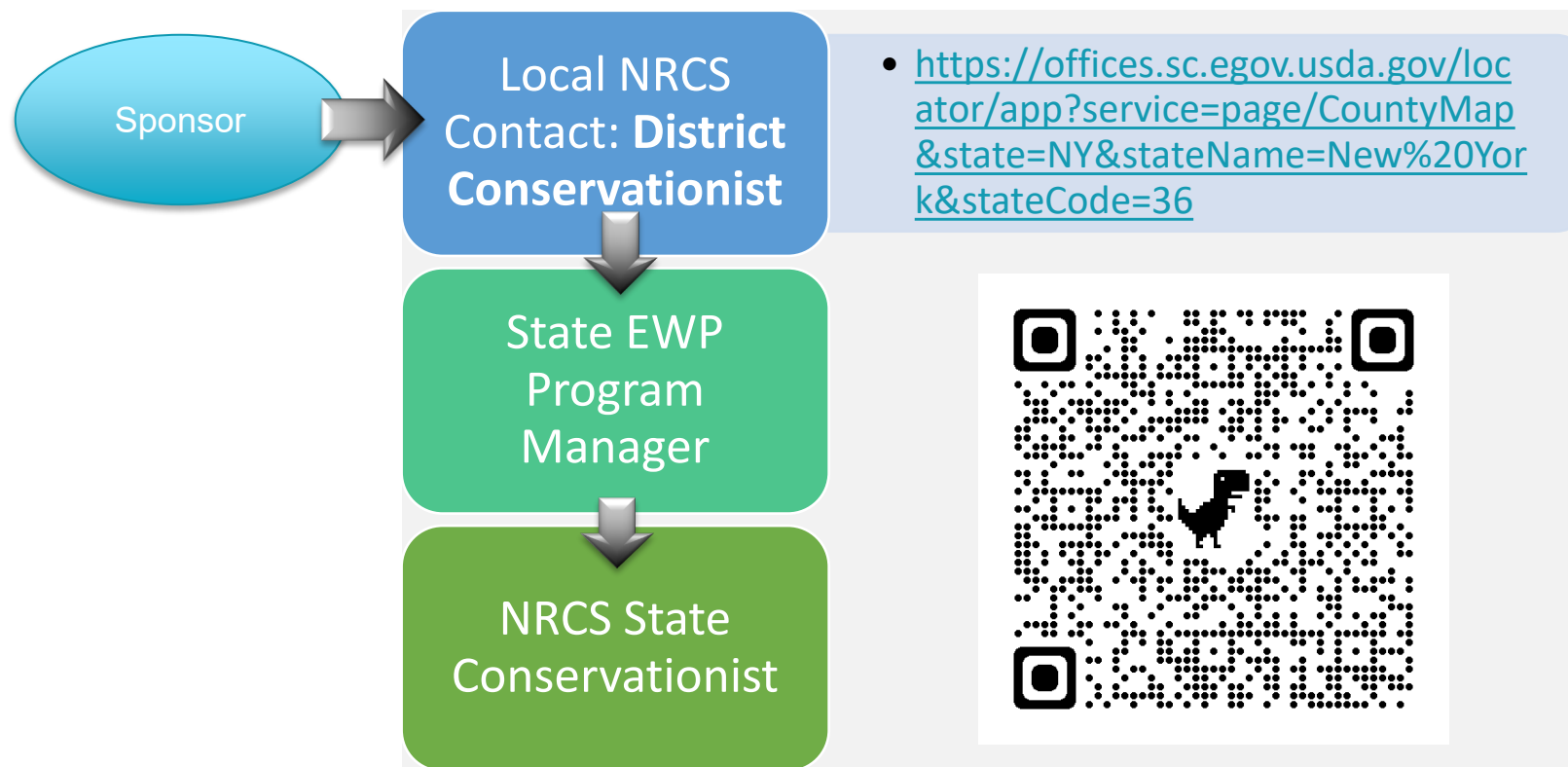
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How to Contact US



FIRST Contact is your Local County's
USDA Natural Resources Conservation Service District Conservationist



Agricultural Conservation Easement Program

Protects the agricultural viability and related **conservation values** of eligible land by limiting nonagricultural uses which negatively affect agricultural uses and conservation values, protect grazing uses and related conservation values by restoring or conserving eligible grazing land, and protecting and restoring and enhancing wetlands on eligible land.

ACEP has two components:

Agricultural Land Easements (ALE) 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.

Wetland Reserve Easements (WRE) help private and tribal landowners protect, restore and enhance wetlands which have been previously degraded due to agricultural uses.



ACEP – Agricultural Lands Easement



protects the long-term viability of the nation's food supply by preventing conversion of productive working lands to non-agricultural uses

Eligible land: agricultural land, cropland, rangeland, grassland, pastureland and nonindustrial private forest 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.

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.



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ACEP – Wetland Reserve Easement

provides habitat for migratory waterfowl and other wetland dependent wildlife, including threatened and endangered species; improves water quality by filtering sediments and chemicals; reduces flooding; recharges groundwater; protects biological diversity; provides resilience to climate change; and provides opportunities for educational, scientific and limited recreational activities.

Eligible Land: privately held farmed or converted wetlands that were previously degraded due to agricultural uses and can be successfully and cost-effectively restored



WRE Continued



Wetland Reserve enrollment options include:

- **Permanent Easements** – Permanent easements are conservation easements in perpetuity. NRCS pays 100 percent of the easement value for the purchase of the easement. Additionally, NRCS pays between 75 to 100 percent of the restoration costs.
- **30-year Easements** – 30-year easements expire after 30 years. Under 30-year easements, NRCS pays 50 to 75 percent of the easement value for the purchase of the easement. Additionally, NRCS pays between 50 to 75 percent of the restoration costs.
- **Term Easements** - Term easements are easements that are for the maximum duration allowed under applicable State laws. NRCS pays 50 to 75 percent of the easement value for the purchase of the term easement. Additionally, NRCS pays between 50 to 75 percent of the restoration costs.
- **30-year Contracts** – 30-year contracts are only available to enroll acreage owned by Indian tribes and program payment rates are commensurate with 30-year easements.

For all Wetland Reserve Easements options, NRCS pays all costs associated with recording the easement in the local land records office, including recording fees, charges for abstracts, survey and appraisal fees and title insurance.



Thank You!



“The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).”





Farm Service Agency
U.S. DEPARTMENT OF AGRICULTURE



What Resources are Available to Help with Flooding? – Farm Service Agency

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

Farm Service Agency (FSA)

- Administer programs authorized by the Farm Bill, including disaster assistance programs
- Ad-hoc disaster assistance programs passed by Congress
- Programs mainly for agricultural producers, but assistance may also be available for landowners
- County Committee – elected farmer advisory board that make informed decisions and act on applications submitted at the County Office

Disaster Assistance Programs – Flood-Related

Program	Purpose
<u>Emergency Conservation Program (ECP)</u>	Emergency funding & technical assistance to farmers to rehabilitate farmland and conservation structures damaged by natural disasters
<u>Emergency Assistance for Livestock, Honeybees & Farm-raised Fish Program (ELAP)</u>	Provides financial assistance to eligible livestock, honeybee, or farm-raised fish producers for losses due to certain adverse weather events or loss conditions
<u>Livestock Indemnity Program (LIP)</u>	Provides benefits to eligible livestock owners for livestock deaths caused by eligible loss conditions
<u>Emergency Forest Restoration Program (EFRP)</u>	Provides payments to eligible owners of nonindustrial private forest land to carry out emergency measures to restore land damaged by a natural disaster
<u>Tree Assistance Program (TAP)</u>	Provides financial assistance to eligible producers to replant or rehabilitate eligible trees, bushes, and vines lost by natural disasters.

Disaster Assistance Programs – Flood Related

Program	Purpose
<u>Non-insured Crop Disaster Assistance Program (NAP)</u>	Provides financial assistance to producers of non-insurable crops to protect against natural disasters that result in lower yields or crop losses, or prevents crop planting. <i>*NAP Insurance must be purchased by applicable crop deadline.</i>
<u>Emergency Loans</u>	Loans to help producers recover from production and physical losses due to natural disasters. <i>*Must have disaster designation to be available for producers.</i>

Emergency Conservation Program (ECP)

- Eligible Producer
 - Owner, landlord, or tenant of a farm and the farm is used to annually produce commercial crops or livestock. The producer must contribute part of the practice cost to be eligible for ECP benefits.
- Cost-share Payments
 - 75% of the cost to implement approved restoration practices
 - 90% for producers that certify as limited resource, socially-disadvantaged or beginning farmers with FSA
 - Available as advance payment of up to 25% of expected cost-share
 - Limited to \$500,000 per person per disaster

Emergency Conservation Program (ECP)

- Practices eligible for flood events:
 - EC1 – Removing debris from farmland and restoring the land to agricultural use
 - EC2 – Grading, shaping or leveling land and returning the land to agricultural use
 - EC3 – Restoring fences for agricultural purposes
 - EC4 – Restoring conservation structures, such as drainage systems, wells, pipelines, spring developments, sod waterways, etc.

Emergency Conservation Program (ECP)

- ECP Process:
 - Disaster event occurs
 - FSA County Office is notified of disaster event and conducts damage assessment to determine extent of damage
 - Damage must be so costly that Federal assistance (taxpayer dollars) is or will be required to return the land to productive agricultural use – minimum \$1,000 damage per participant
 - FSA County Committee submits ECP implementation request and damage assessment to FSA State Office
 - FSA State Office concurs with ECP implementation
 - County Committee announces ECP signup period – 30-60 calendar days as determined by the Committee

Emergency Conservation Program (ECP)

- Producer submits ECP application
 - *Producer cannot begin any work that involves ground disturbance (digging/excavation, etc.) practices until environmental evaluation is completed by FSA – minimum of 30 days for SHPO/THPO consultations*
- County Office performs site evaluation – photographs, GPS, etc.
- ECP application is approved by County Committee and producer can proceed with practice implementation with assistance from NRCS
- Producer completes practices and submits invoices to County Office
- Producer signs ECP application for payment and County Office approves payment

Emergency Conservation Program (ECP)

- Additional Information:
 - Payments are based on payment scenarios (flat-rates) from NRCS
 - *Payments are not based on invoice costs submitted by the producer*
 - Multiple practices cannot be applied to the same ground
 - EC1 & EC3 practice payments may not exceed 50% of the ag market value of the affected land as set by the County Committee.

Emergency Forest Restoration Program (EFRP)

- Similar signup process to ECP
- Land must have existing tree cover (or had tree cover immediately before the natural disaster occurred and is suitable for planting trees) and be owned by any nonindustrial private individual, group, association, corporation or other private legal entity.
 - Greater than two acres in size to qualify for assistance
- Cost share payments are up to 75% of costs submitted by applicant and limited to \$500,000 per person per disaster
 - Payment rates are established by FSA State Committee

Emergency Forest Restoration Program (EFRP)

- Remove debris then implement practice
 - EF1 – Hardwood Forest Restoration
 - EF2 – Softwood Forest Restoration
 - EF3 – Mixed Forest Restoration
- NYS DEC Foresters are often used to write the reforestation plans

Emergency Assistance for Livestock, Honeybee, and Farm-raised Fish Program (ELAP)

- Assistance for honeybee colony, hive, and feed losses due to floods, and livestock feed losses due to floods

Livestock Indemnity Program (LIP)

- Assistance for livestock losses due to floods

Tree Assistance Program (TAP)

- Assistance for tree, bush, or vine losses due to floods

Other FSA Programs - available to landowners

- Conservation Reserve Program (CRP) & Conservation Reserve Enhancement Program (CREP)
 - FSA provides participants with annual rental payments and cost-share assistance.
 - Participants implement conservation practices for 10-to-15-year contracts
 - CREP – focus on water quality – buffers, grass waterways, etc. – additional incentives
- SAFE CRP available in Seneca County – focus on grassland bird habitat



Contact Information

- Farm Service Agency
 - 2041 U.S. Route 20, Ste. 1, Seneca Falls, NY 13148
 - 315-568-6346, ext. 2

 - CED John Mietz
 - John.mietz@usda.gov

 - FLM Laura Scondras
 - Laura.Scondras@usda.gov

- FSA County Committee Representative
 - LAA #1 (Ovid, Lodi & Covert) – Lisa Compton of Compton Farms

FLOOD MITIGATION RESOURCE CONTACTS

Natural Resources Conservation Service, USDA within Seneca County

2041 US Route 20, Seneca Falls, NY 13148

Assistance available: Technical & Financial assistance for Best Management Practice implementation on private agricultural and forest land.

Phone: 315-568-6346, ext. 3

Email: daniel.tighe@usda.gov or jessica.burry@usda.gov

Website: <https://www.nrcs.usda.gov/>

Farm Service Agency, USDA within Seneca County

2041 US Route 20, Seneca Falls, NY 13148

Contact Person: John Mietz

Phone: 315-568-6346, ext. 2

Email: john.mietz@usda.gov

Websites: <https://www.fsa.usda.gov/>

Other Applicable Websites:

Emergency Conservation Program (ECP)

<https://www.fsa.usda.gov/programs-and-services/conservation-programs/emergency-conservation/index>

Livestock Indemnity Program (LIP)

<https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/livestock-indemnity/index>

Emergency Assistance for Livestock, Honeybees, and Farm-raised Fish Program (ELAP)

<https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/emergency-assist-for-livestock-honey-bees-fish/index>

Emergency Forest Restoration Program (EFRP)

<https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/emergency-forest-restoration/index>

Emergency Loans

<https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/emergency-farm-loans/index>

US Army Corps of Engineers – Auburn Field Office

7413 County House Road, Auburn, NY 13021

Assistance available: Stream and Lake permitting.

Phone: 315-255-8090

Website: <https://www.usace.army.mil/>

Seneca County Cornell Cooperative Extension

Assistance available: climate smart communities, education events

Phone: 315-539-9251

Email: seneca@cornell.edu

Website: www.senecacountycce.org

Other Applicable Websites:

Climate Smart Farming <https://climatesmartfarming.org/>

Northeast Regional Climate Center <https://www.nrcc.cornell.edu/>

Seneca County Soil and Water Conservation District

2041 US Route 20, Seneca Falls, NY 13148

Assistance available: Technical assistance & recommendations for residents, landowners, farmers and municipalities regarding drainage issues, flooding, erosion, Best Management Practice implementation with potential grant funding.

Phone: 315-568-4366

Email: senecacountyswcd@gmail.com

Website: www.senecacountyswcd.org

NYS Department of Environmental Conservation (Region 8)

6247 East Avon Lima Road, Avon, NY 14414

Assistance available: Stream and Lake permitting.

Phone: 585-226-2466

Website: <https://dec.ny.gov/>

Other Local Contacts:

Lodi Town Office – 607-582-6238

Lodi Town Highway – 607-582-6888

County Highway Department – 315-549-8454

County Emergency Management – 315-539-1756

County Real Property Tax Services – 315-539-1720