



# Tompkins County

## Soil and Water

2020 Budget Presentation

# Recommended Budget

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	2019 Modified	2020 Recommended	\$ Change	% Change
<b>Expenditures</b>	<b>\$246,974</b>	<b>\$251,913</b>	<b>\$4,939</b>	<b>2.00%</b>
<b>Net Local</b>	<b>\$246,974</b>	<b>\$251,913</b>	<b>\$4,939</b>	<b>2.00%</b>



# Over-Target Requests NOT Supported by the Recommended Budget 2

Page #	OTR #	Priority	Req. OTR	Req. Source	Rec. OTR	Rec. Source	Purpose
5-26	25	1	\$130,000	Target	\$0	Target	Water Resource Engineer
5-26	54	2	\$35,000	Target	\$0	Target	Agricultural Conservation Technician/Outreach Coordinator

# Job Approval Authority

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- \*NYS Education Law dictates how engineering projects are approved by licensed Professional Engineers in NYS.
- \*The Natural Resources Conservation Service (NRCS) provides conservation practice standards for most of the Soil and Water District work.

“Non-NRCS employees who are not federal employees and are not licensed to practice engineering in the state will be limited to job approval authority for Inventory and Evaluation (I&E) and construction inspection, for those practices defined as ‘engineering practices’ by New York State”





# NRCS Job Approval Authority – Non Engineers

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- ❑ Animal Trails and Walkways (limited)
- ❑ Stream Crossings (limited)
- ❑ Heavy Use Area Protection (concrete pads)
- ❑ In-Field Diversions and waterways (Grassed Swales/ditches) (limited)
- ❑ Roof Runoff Structures (Gutters and downspouts)
- ❑ Fencing
- ❑ Clearing and Snagging (tree limb removal)
- ❑ Irrigation and sprinkler systems
- ❑ Land clearing
- ❑ Subsurface tiling
- ❑ Tree/Shrub/grass planting





# Projects implemented with non-engineer staff resources 5





# NRCS Job Approval Authority - Engineers

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- ❑ Agrichemical Handling Facilities
- ❑ Waste Storage Facilities
- ❑ Animal Mortality Facilities
- ❑ Composting Facilities
- ❑ Critical Area Plantings for steep slope erosion
- ❑ Dams/Diversions
- ❑ Sediment Basins
- ❑ Water Well Decommissioning
- ❑ Dikes
- ❑ Waste Facility Closures
- ❑ Anaerobic digesters
- ❑ Roofs and Covers
- ❑ Farmstead Energy Improvement
- ❑ Ponds
- ❑ Aquatic Organism Passage Structures (Culverts)
- ❑ Grade Stabilization Structures
- ❑ Irrigation Pipelines
- ❑ Dry Hydrants
- ❑ Irrigation Reservoirs
- ❑ Lined Waterways
- ❑ Livestock Pipeline
- ❑ Pond Sealing/Lining
- ❑ Pumping plants
- ❑ Access Roads
- ❑ Stormwater Runoff Controls



# NRCS Job Approval Authority - Engineers

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- ❑ Large Animal Trails and walkways
- ❑ Large Stream Crossings
- ❑ Streambank and Shoreline Protection
- ❑ Open Channels
- ❑ Channel Bed Stabilization
- ❑ Structures for Water Control
- ❑ Saturated Buffers
- ❑ Denitrifying Bioreactors
- ❑ Subsurface Drains designed to protect engineered systems
- ❑ Waste Treatment
- ❑ Vertical Drain
- ❑ Waste Separation Facilities
- ❑ Waste Recycling
- ❑ Waste Transfer Systems
- ❑ Vegetated Treatment Areas
- ❑ Water Wells
- ❑ Building Envelope improvement
- ❑ Phosphorus removal systems



# Typical Projects Requiring Engineer Certification

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# Current Project List Requiring Engineering

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- ▶ 3 CAFO Waste Storage Grants
  - ▶ Private Engineering costs = \$73,500
- ▶ 2 Ag Non-Point Source Pollution Abatement Grants
  - ▶ Private engineering costs = \$22,500
- ▶ 2 FLOWPA contracts
  - ▶ \$2,000-\$10,000 private engineering costs annually (or per contract)
- ▶ Cayuga Inlet sediment analysis and implementation project
  - ▶ \$50,000 carved out of grant for existing part-time engineer costs projected into 2021
- ▶ Stormwater Coalition SWPPP reviews for municipalities
  - ▶ \$5,000 private engineering costs annually for PE reviews

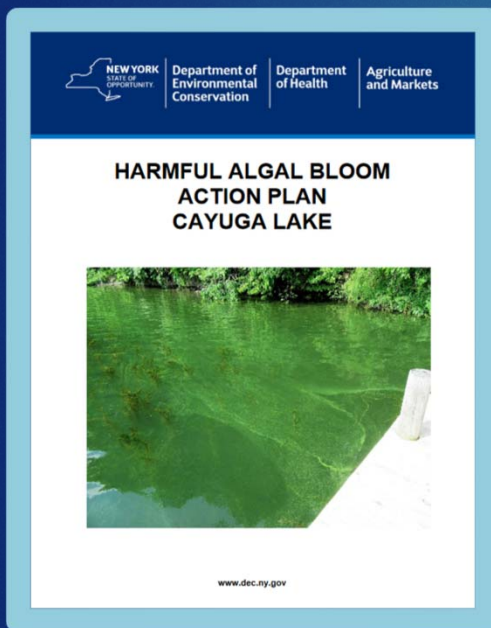


# Statewide Priorities

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- ▶ Harmful Algae Blooms (HABs)

- ▶ Priority 1 projects from NYSDEC Cayuga Lake HAB Action Plan  
*"Implement runoff reduction BMPs on agricultural and non-agricultural lands to reduce nutrient runoff and soil erosion in the watershed. These BMPs would be implemented by local SWCDs and other partners, and include:"*



- ▶ Implement Cover Crops
- ▶ Field Erosion Control Systems (Grassed waterways, shaping and grading, Water and Sediment Control basins)
- ▶ Stabilize drainage swales
- ▶ Streambank Stabilization
- ▶ Farmstead runoff management (roof runoff management, barnyards, laneways, bunk silos)
- ▶ Manure Storage and Transfer Lines
- ▶ Drain Tile BMPs
- ▶ Riparian Buffers
- ▶ Properly Size Culverts
- ▶ Check Dam installations in roadside ditches



# Statewide Priorities

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- ▶ HABs Continued
  - ▶ Priority 1 Projects – Mid-term (3-5 years)
    - ▶ “Increase SWCD staffing through appropriations to focus capacity to plan and implement projects (e.g., planners, engineers, technical staff) to mitigate soil erosion and reduce nutrient pollution in subwatersheds through all counties that drain to Cayuga Lake.”
    - ▶ “Implement Agricultural Environmental Management (AEM) Tier 3A Resource Management Plans to reduce sediment and nutrient runoff on crop farms and AEM Tier 3A Nutrient Management Plans (NMPs) on non-Concentrated Animal Feeding Operation (CAFO) beef/dairy operations.”



# Where's that \$65 million dollars of HAB funding from the Governor?

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- ▶ Much of the funding has gone into existing programs through the Environmental Protection Fund



# Statewide Priorities

## Environmental Protection Fund (2019-2020)

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### ▶ Agriculture

- ▶ AEM (Agricultural Environmental Management Program) - \$65,000/year directly to District for Staff expenses related to program
- ▶ Agricultural Non-Point Source Pollution Abatement Program (Competitive implementation funding only available to SWCDs - \$18,000,000 statewide)
- ▶ Ag Waste Management (competitive implementation funding 1,500,000 statewide)

### ▶ State Aid to Districts

- ▶ \$60,000 Part A – Supports salaries, maintenance, vehicles, etc.
- ▶ \$6,000 Part B – Specific water quality related project
- ▶ \$90,000 Part C – Variable contribution based on performance measures to implement projects



# Statewide Priorities

## EPF 2019-2020

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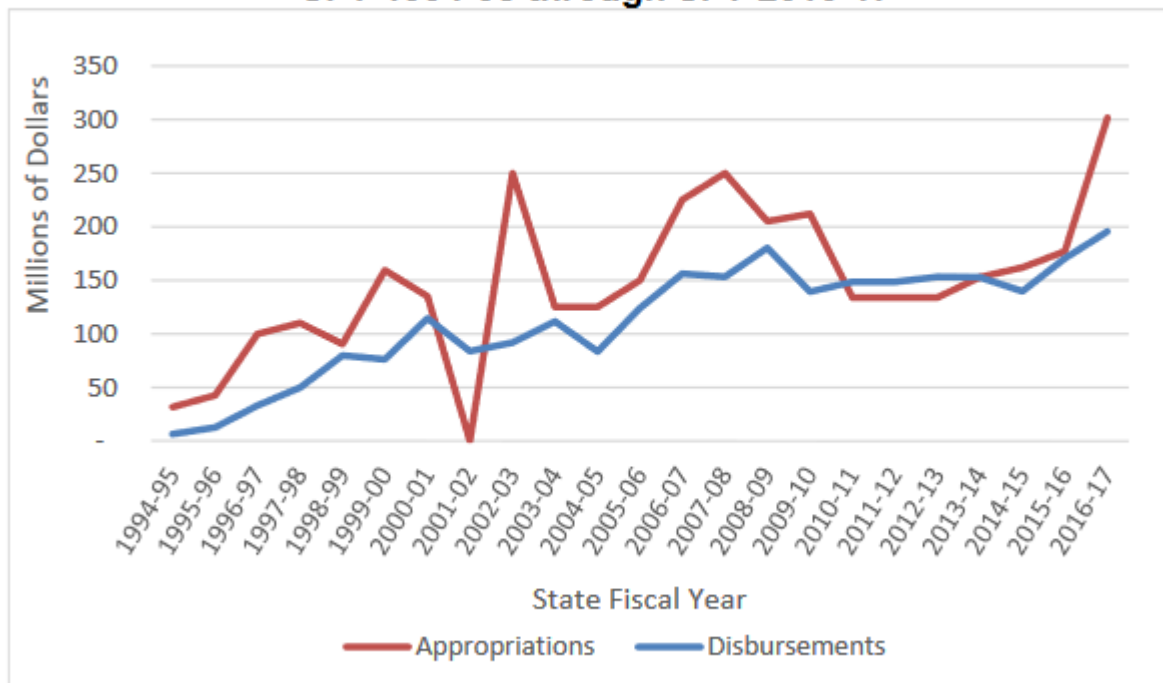
- ▶ NYSDEC Water Quality Improvement Program (competitive implementation funding - \$17,750,000 statewide)
  - ▶ a competitive, statewide reimbursement grant program open to local governments and not-for-profit corporations to implement projects that directly address documented water quality impairments or protect a drinking water source. This funding is for construction/implementation projects, not projects that are exclusively for planning.
- ▶ Finger Lakes/Lake Ontario Watershed Protection Alliance
  - ▶ \$89,250 available to Tompkins County for implementation of projects



# EPF Volatility

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**History of EPF Appropriations and Disbursements  
SFY 1994-95 through SFY 2016-17**



Source: Office of the State Comptroller



# County/Watershed Priorities 16

- ▶ 2017 Cayuga Lake Watershed Restoration and Protection Plan recommended actions
  - ▶ Agriculture:
    - ▶ Support higher state and federal funding for agricultural agencies including Cornell Cooperative Extension and Soil and Water Conservation Districts.
    - ▶ Establish and fund water quality monitoring programs at creek outlets around the lake, in cooperation with Soil and Water Conservation District offices
  - ▶ Stormwater:
    - ▶ Update/assess the roadside Ditch Inventory (2000 Characterization), delineate severe roadside ditch problem areas in Seneca, Cayuga and Tompkins counties, and develop a several-municipality project to test roadside ditches best management practices.
  - ▶ Streams and Wetlands:
    - ▶ Preserve existing wetlands and restore degraded wetlands
    - ▶ Preserve and restore existing riparian vegetation zones
    - ▶ Restore degraded streams to a natural condition for the purposes of reducing streambank erosion and restoring aquatic habitat



# County/Watershed Priorities 17

## ▶ 2016 Owasco Lake Watershed Management Plan

### ▶ Agriculture:

- ▶ Implement agricultural BMPs in a strategic manner to reduce the loss of soil, nutrients, fertilizers, animal wastes, crop residues, and pesticides from the landscape

### ▶ Streambanks:

- ▶ Design and implement stream restoration to restore natural hydrologic and biological processes, taking climate change into account.

### ▶ Stormwater:

- ▶ Provide training on stormwater management BMPs
- ▶ Investigate and implement innovative approaches to stormwater management
- ▶ Encourage municipalities to participate in programs on environmental impacts of road maintenance practices



# County/Watershed Priorities 18

- ▶ Upper Susquehanna Coalition – Phase 3  
Chesapeake Bay Watershed Implementation Plan

## Goals:

- ▶ “SWCD technicians, private planners, and engineers are needed to facilitate planning and design of projects on behalf of producers. New York supports SWCD staff trained to provide technical assistance through the AEM Base Program, though this capacity needs to be expanded... In addition, engineering services are required for design of structural BMP’s, such as waste management structures and barnyard runoff control, and can be cost-prohibitive for small farms....Shared services should be explored and supported using federal or state funding”



# Current Staff

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- ▶ District Manager
- ▶ Senior Account Clerk
- ▶ Natural Resource Program Specialist (Ag Environmental Management Program)
- ▶ Resource Conservation Specialist (Municipal Stormwater Programs, Streambank Stabilization, Hydrilla)
- ▶ Conservation Assistant (Dual Ag and Streambank stabilization project responsibilities)
- ▶ Water Resource Engineer (Part-time, <20 hours/week – Streambank stabilization)



# Outreach needs

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- ▶ Soil and Water Newsletter
- ▶ Timely Facebook feed updates to public about environmental topics of interest
- ▶ Funding availability outreach to municipalities and landowners concerning eligible environmental protection funds
- ▶ Timely outreach to legislators and other elected leaders on topics of importance
- ▶ Outreach to public about various programs and services available to them from Soil and Water



# Questions?

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