

# PROTECTING WATER QUALITY — RECENTLY COMPLETED PROJECTS IN THE OWASCO LAKE WATERSHED

Doug Kierst, CPESC, CPSWQ Cayuga SWCD Executive Director

### WHO IS THE CAYUGA COUNTY SWCD?

- Contractual County Agency, Established on August 08, 1944
- Dedicated and Hardworking Staff of 14 individuals
- Important link between state and regional natural resource programs and local landowners and farmers
- Work with Municipal and Private Landowners
- Technical Assistance for Planning and Engineering of Conservation Practices
- Best Management Practice (BMP) Implementation Oversight
- Seek Grant Opportunities (Ag & Mkts, DEC, USDA-NRCS, etc) to get conservation on the ground

#### ON GOING CONSERVATION ASSISTANCE

- Agricultural Environmental Management Program (AEM)
- Erosion & Sediment Control 4
   Hour Contractor Training Course
- Soil Group Worksheets for Ag Assessments
- Site Visits Erosion, Drainage, Flooding, Etc.

- Site Information Soils,
   Wetlands, Flood Zone Maps, Etc.
- Septic System Inspection & Design
- Spring Tree and Shrub Program
- Fish Pond Stocking Program (Spring, Summer & Fall)

### CURRENT STORMWATER AND STREAM GRANTS

FUNDING SOURCE - NYS WQIP

<ul> <li>Critical Area Stabilization – Clo</li> </ul>				
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- Owasco Watershed Road Ditch 2015
- Owasco Watershed Shoreline and Streambank 2017
- Owasco Inlet Streambank 2017
- Cayuga County Flood Resiliency 2017
- Cayuga County Streambank 2018

\$125,075.00

\$302,500.00

\$584,712.50

\$350,000.00

\$375,000.00

\$475,000.00

TOTAL:

\$2,087,212.50

# CREAM HOLLOW RD BANK STABILIZATION (NILES) TOTAL COST \$13,040.54

#### BEFORE



#### **AFTER**



### **HYDROSEEDING**



2018: 24 Loads or ~6-8 miles

2019: 79 Loads or ~20-26 miles



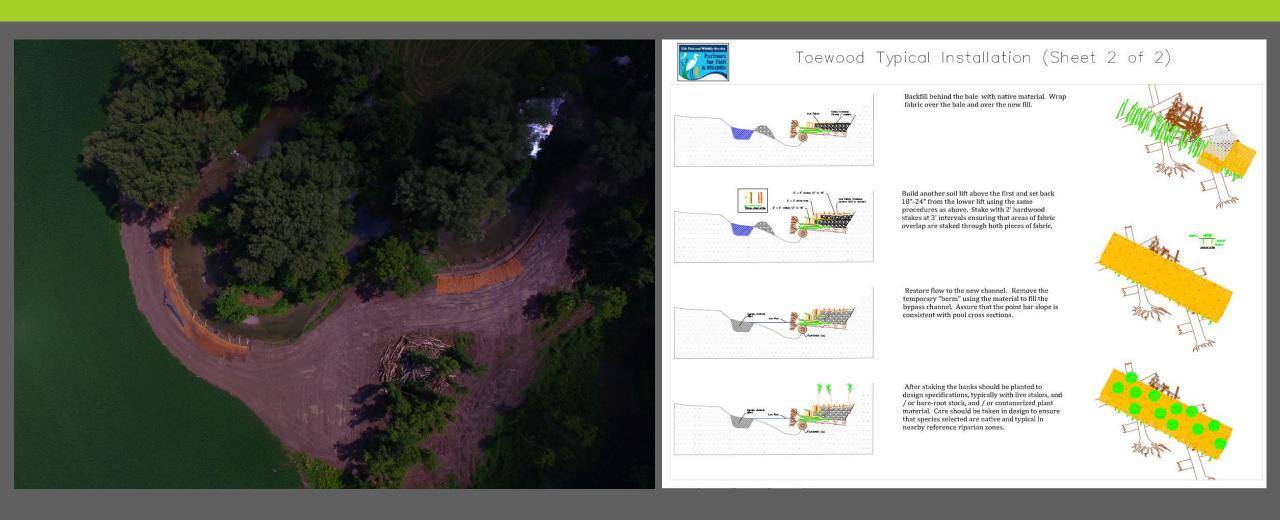
# STREAM/ROAD BANK STABILIZATION (NILES) TOTAL COST \$13,623.74

#### BEFORE AFTER





### TOEWOOD PROTECTION- DUTCH HOLLOW SITE



# TOEWOOD PROTECTION ON DUTCH HOLLOW BR. TOTAL COST \$36,365.09

#### BEFORE



#### AFTER



# OWASCO INLET BANK STABILIZATION (LOCKE) TOTAL COST \$60,000.00





# FIRELANE 20 DITCH STABILIZATION (NILES) TOTAL COST \$9,932.93

#### BEFORE



#### **AFTER**



# WHAT'S COMING NEXT? NON-AGRICULTURE

- Church Road Ditch Stabilization
- Wycoff Road Ditch Stabilization
- Hicks Road Ditch Stabilization
- Stone School Road Ditch Stabilization
- Harris Hill Road Ditch
   Stabilization

- Richardson Hill Road Culvert Project
- Hemlock Creek Bank Stabilization
- Fire Lane 24 E Stream Stabilization
- Oak Hill Rd/Moravia Flooding
- Fire Lane 3 W Road Ditch
   Stabilization

### SOIL CONSERVATION SYSTEM- COVER CROPS

16 farms participated covering 7,205 total acres. Total Investment - \$385,755.70





### INTER-SEEDING COVER CROPS - METHODS

#### Tractor mounted unit



#### Converted air flow distribution



### INTER-SEEDING COVER CROPS - RESULTS

#### Tillage radish planted into soybeans



#### Radish and ryegrass planted into corn



### REDUCED TILLAGE MANAGEMENT

6,200 ac of reduced tillage management implemented



Less passes= less erosion & more organic matter, over time. \$134,416.00



# OWASCO LAKE ENHANCED WATERSHED ACTION PLAN TOTAL COST \$117,261.90

#### **Exclusion Fence**

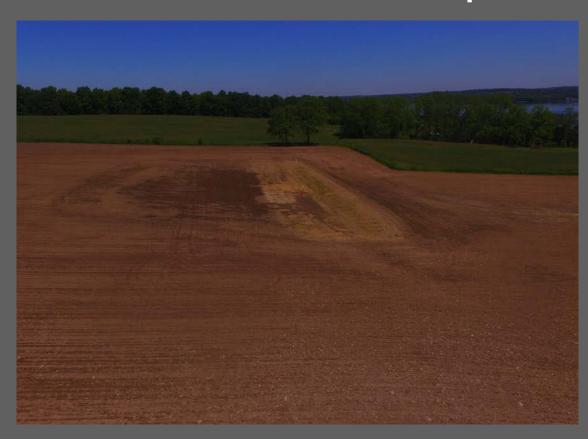


#### **Watering System**



# WATER AND SEDIMENT CONTROL BASIN (WASCOB) TOTAL COST \$12,000.00

#### **Constructed Berm with Drop Inlet**

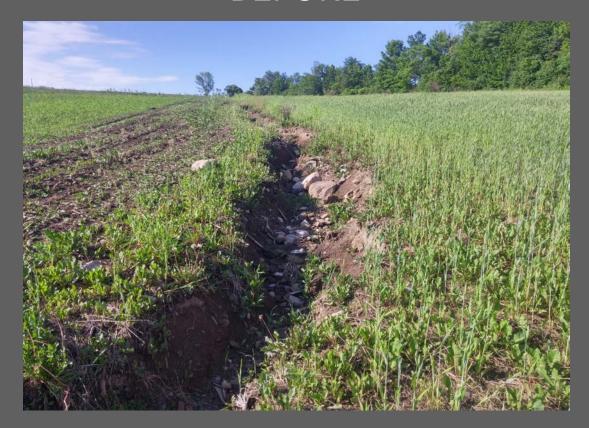


#### **Vegetative Berm with Drop Inlet**

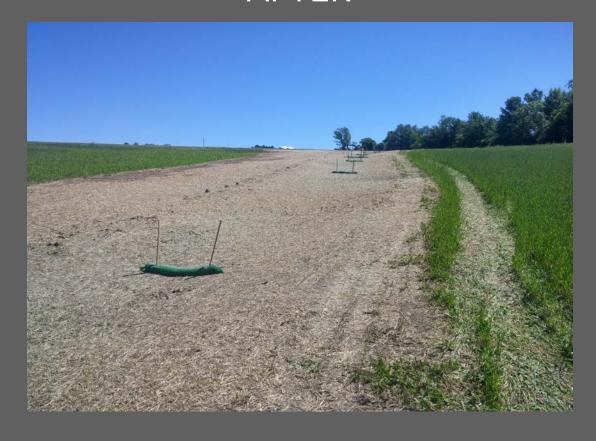


# GRASSED WATERWAY TOTAL COST \$7,192.50

#### BEFORE



#### AFTER



# WHAT'S COMING NEXT? AGRICULTURE

- Continued AEM Program Promotion and Expansion
- Conservation Planning
- Cover Crops
- Grass Waterways
- WASCOBs
- Conservation Tours
- Prescribed Grazing Management
- Retention Basins

## WE WORK WITH THE COMMUNITY IN MANY DIFFERENT WAYS, BUT ALWAYS WITH THE SAME GOAL:

## TO PROTECT, IMPROVE AND CONSERVETHE NATURAL RESOURCES THAT ARE VITAL TO EACH AND EVERY ONE OF US!

#### ~THANKYOU~



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