



Helping People Help the Land

Conservation Notes

USDA - Natural Resources Conservation Service - Michigan

July/August 2020

Efforts Underway to Repair Damage from May Flooding

The heavy rains that triggered extreme flooding over a couple of days last May will impact many Mid-Michigan residents for years to come. The rains started on May 17 over a large area of Mid-Michigan, rainfall over three days ranged from 3 to 4 inches in Midland County to 7 to 8 inches in counties further north like Arenac and Iosco. As the water moved south down the Tittabawassee River destruction followed.

First the Edenville Dam, lying mostly in southern Gladwin County, failed, followed by the Sanford Dam about 10 miles downriver in Midland County. The loss of the two 1920s-era earthen dams drained Wixom and Sanford lakes, leaving only a channel of the Tittabawassee River running through the former lake bottoms. The two failed dams are the most dramatic flood damage but other damage including washed away roads, bridges, culverts, homes and other structures along with deposited flood debris can be found over a large portion of northern Mid-Michigan. NRCS is one of several federal and state agencies helping to fix the damage. The NRCS Emergency Watershed Protection (EWP)



A steam shovel used to build the Edenville Dam and left on the bottom of Wixom Lake in the 1920s is left exposed after the dam was destroyed by May flooding.

program provides financial assistance to repair imminent hazards after natural disasters. NRCS is not a first responder after a disaster, said Water Quality Specialist Ruth Shaffer who is serving as Michigan's EWP program manager. EWP addresses stabilizing drainage in the watershed rather than providing immediate disaster relief, said Shaffer.

EWP provides financial assistance through local sponsor agencies

who must request assistance from the NRCS state conservationist within 60 days of the disaster event. NRCS is working with nine local sponsors to address flood damage in Arenac, Gladwin, Iosco, Midland and Saginaw counties. The sponsors include local and state agencies as well as the Four Lakes Task Force, a non-profit formed by lakeside residents of Wixom, Sanford, Secord and Smallwood lakes. One requirement of sponsors is to provide 25 percent of project costs, either by direct funding or in-kind contributions with EWP covering the remainder. NRCS staff first started inspecting sites for potential EWP projects May 22 in Gladwin County, said

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USDA - Natural Resources Conservation Service

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State Conservationist's Message

With most of us working from home it may be easy to think that NRCS is hunkered down with a day-to-day mentality and not thinking about the future. Fortunately, this is not the case.

At the end of May, NRCS-Michigan adopted a new Soil Health strategy. This document outlines how NRCS conservationists will attain and maintain expertise in regenerative soil health, encourage producers to adopt soil health practices and quantify the benefits of improving soil health. NRCS helped to spearhead the Soil Health movement and this strategy will guide NRCS-Michigan as it continues to lead the effort.

Also looking forward to the future, NRCS-Michigan is continuing to hire new employees to reach its full compliment of approved staffing. Eleven new employees have joined our ranks over the past two months. Orienting new employees with the safety restrictions we are operating under is not ideal, but by all reports they are fitting in well. Please join me in welcoming our new colleagues to Michigan.

~

This past May Michigan made national news after heavy rains of up to 8 inches fell over a wide area of northern Mid-Michigan. The rains led to two dams failing on the Tittibiwassee River and the evacuation of 10,000 people, mostly in Midland County. The flooding left two lakes drained and two partially drained while the dams containing them are inspected.

Today, NRCS is working with local sponsors to repair flood damage that could impair drainage in the watershed and lead to additional soil erosion and damage to property after future

rain events. Local NRCS staff, along with engineering staff from throughout the Lower Peninsula, have been surveying sites in a five-county area to determine where agency funding can be utilized to repair flood damage. Work will start this fall and continue well into next year. When finally completed this will be one of the largest projects ever funded through the Emergency Watershed Protection Program in Michigan.



State Conservationist
Garry Lee

~

In August the USDA announced another round of funding for the Regional Conservation Partnership Program (RCPP). The program was created in the 2014 Farm Bill and the formal announcement took place in Michigan. Since the program was created, 11 projects, including multi-state projects including Michigan and projects within the state, have been funded through RCPP.

Projects selected for RCPP address regional conservation concerns from proposals submitted by partnerships of private, non-profit and government entities. In Michigan, RCPP projects have addressed a wide variety of environmental concerns in

Michigan, from water quality in the Western Lake Erie Basin, to forest habitat in Northern Michigan and the Upper Peninsula, to farmland protection and aquatic habitat improvement in Northwest Michigan. The deadline for submitting proposals for the next round of RCPP projects is Nov. 4, 2020.



Area 2 Engineer Todd Zielinski surveys a portion of the former lake bottom of Sanford Lake.

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Efforts Underway to Repair Damage from May Flooding

NRCS Design Engineer Dan Vasher. Engineering staff from the state office, all three Lower Peninsula area engineering staffs and local field office staff have helped conduct disaster survey reports, said Shaffer.

The first EWP project funded is the removal of flood debris deposited at the flood gates of the Sanford Dam. Boats, including a pontoon boat, along with residential propane tanks can be spotted in the debris along with tree branches and other random items. Vasher hopes a lot of EWP projects will be completed before winter. Most of the projects will involve bank stabilization and debris removal.

It's important that as much work is completed as possible to avoid additional damage, he said.

"We're grateful to NRCS, stabilizing the lake is incredibly important," said Stacy Trapani, spokesperson for the Four Lakes Task Force. Not only were Wixom and Sanford lakes drained after the two dam failures, but Secord and Smallwood lakes were lowered to about half their usual depth so that the dams forming those two lakes can be inspected, said Trapani.

Joe Mitz bought his home on Sanford Lake just two years ago. He enjoyed going out on his pontoon along with his wife and 8-month-old daughter. They enjoyed waving at neighbors and stopping at the lakeside bar and grill, or the beach and park across the lake. In addition to losing his lakefront, Mitz also lost his dock and boat lift to the flood waters. "It's a horrible time."

The Four Lakes Task Force has told residents it may take four to six years before the lake is restored. Mitz expects it to be closer to six. In the meantime, he has seeded the lake bottom adjacent to his property to reduce erosion, as recommended by Four Lakes, and will he hope for the best.

(top right) NRCS staff inspect a portion of the former bottom of Wixom Lake. The Four Lakes Task Force encouraged lakeside property owners to plant grass and install drain hoses to reduce erosion. (middle right) Wixom Lake homeowner Joe Mitz stands on the breakwater wall of his property. Floodwaters reached the edge of his home before the Sanford dam breached and the lake emptied. (right) The first EWP project is expected to be the removal of debris deposited at the flood gates of the Sanford Dam.



Dormant Post Cuttings Used to Establish Trees on WRP Easement

Re-establishing native plant communities, especially on areas overtaken by aggressive invasive species, can be a challenging, time consuming and expensive proposition. A field trial conducted on a wetland easement in Jackson County shows promise for at least one planting scenario.

Establishing native plants in wet soils overgrown with invasive reed canarygrass (*Phalaris arundinacea*) has been a challenge, said NRCS State Forester Andy Henriksen. The plant is common, especially in the southern half of the state. Reed canarygrass grows in thick mats and quickly shades out competing plants. Henriksen and now-retired Area 4 Biologist Jim Marshall were discussing the topic and came up with a possible solution, dormant post plantings, a [practice](#) more typically used for streambank restoration.

Henriksen and Marshall along with fellow members of the Michigan Plant Materials Committee decided to install the dormant posts on the wetland site during the second week of March. They obtained permission from the landowner to cut down a number of cottonwood (*Populus deltoides*) and black willow (*Salix nigra*) trees not far from the trial site. The trees were cut into lengths of approximately 8 feet with diameters of about 4 inches. The posts were moved to the trial site and planted in post holes dug to about 3 feet to ensure the ends would remain below the shallow water table. About 36 cottonwoods and an equal number of black willows were planted.

Marshall visited the site in late June and estimated that about 90 percent of the dormant post willows had new growth along with about 75 percent of the cottonwoods. A variety of dormant stakes were also planted the same day as the dormant posts and about 50 percent of those appeared to be growing, Marshall reported. The dormant stakes included two releases developed by the Rose Lake Plant Materials Center, 'Indigo' silky dogwood (*Cornus amomum*), and Riverbend Germplasm silky willow (*Salix sericea*). The stakes were cut to approximately 4-foot lengths and planted about two feet into the ground.

Henriksen was pleased with what he saw from Marshall's visit. Establishing trees previously in areas with reed canary grass has been difficult with plantings of 3-foot seedlings failing after being shaded out, he said. Starting out at five feet above

the dormant reed canary grass appears to have given the trees the advantage they needed. Cutting posts from existing trees was also much cheaper than buying trees large enough to create a canopy above the reed canary grass.

More observation will be needed to find out how successful the dormant post field trial ultimately is. Assuming the trees continue to establish themselves, they will not be the final phase of the restoration. "They are a stepping stone to restoration, they won't be the end of the process," said Henriksen. After the trees form a canopy the shade should discourage the reed canary grass allowing more native plant species to be established, either naturally, or by further planting efforts.



(above top) Photo from June 29 of black willow and cottonwood trees grown from dormant post plantings. (above) Dormant posts planted on the WRP site in Jackson County on March 11, dormant stakes in background.

NRCS-Michigan Welcomes New Employees

Dedra "De" Burnom, Administrative Coord., Flint

Last Position & location: Quality Information Specialist at McLaren Medical Group

Home Town: Flint

Education: Strayer University

Family: daughter Tiffany

Hobbies & Interests: Reading/Movies (suspense/thrillers), Cooking, and riding my motorcycle. Interested in starting a garden next season.



Kelly Schmiermund - District Conservationist, Hastings

Last Position: Soil Conservationist in Scarborough, Maine for the last 6 years but was a soil con in Centreville, MI for 2 years before that.

Home Town: Brighton

Education: Forestry Degree - Michigan State University

Family: Moved back with boyfriend who is also originally from the Midwest

Hobbies & Interests: Camping, hiking, soccer, volleyball, and cooking



Ashli Holloway - Soil Conservationist, Ann Arbor

Home Town: Stockbridge, Georgia

Last Position: NRCS Student Trainee, Ann Arbor

Education: Bachelor of Agricultural Science - Alcorn State University,

Family:

Hobbies & Interests: Reading, Baking, Movies and Hiking



Sam Wallace - Soil Conservation Technician, Gladstone

Last Position: Peace Corps Volunteer (Aquaculture/Agriculture); Luapula Province, Zambia

Home Town: Potomac, Md.

Education: B.A. - Denison University

Hobbies & Interests: Biking, baking, cooking, reading, hiking, camping, snowboarding, watching and playing soccer and hockey

Nathan McNett - Soil Conservationist, Adrian

Last Position: Soil Conservation Technician, Adrian

Home Town: Sand Creek

Education: Bachelor's in Fisheries and Wildlife Management - Lake Superior State University

Family: wife Samantha, children, Avery 15, Natalie 12, and Cameron 11, two bird dogs and a house cat

Hobbies & Interests: hunting, fishing, bird watching and making music



Katlin Beaven - Soil Conservationist, Ann Arbor

Rebekah Faivor - Soil Conservationist, St. Johns

Justin Jacobs - Soil Conservationist, Allegan

Laura Muntzinger - Soil Conservationist, Jonesville

Jeff Smith - Soil Conservation Technician, Sandusky

Emily Vincent - Soil Conservationist, Owosso

In-State Transfer

Eric Gano - Resource Soil Scientist, East Lansing
(formerly Flint MLRA office)

Van Buren CD Partners to Expand Recycling

- Van Buren Conservation District

The Van Buren Conservation District, Broken Arrow Recycling, and Pratt Industries, Inc. have partnered to expand cardboard and paper recycling in Van Buren County. RRS has designed, coordinated and implemented this pilot project on behalf of Pratt Industries. The new service is free to both businesses and residents and the quantity that can be recycled is unlimited.

Pratt utilizes the paper products collected in the production of its 100% recycled content paper and

packaging solutions. Resource Recycling Systems, based in Michigan, is the largest consulting firm in the country that is specifically focused on material management across the entire supply chain, including recycling and composting.

This three-month pilot program (September through November) may be extended based upon participation levels. To make this pilot project a success, please bring items including cardboard, paperboard and mixed paper to Environ, 67901 Red Arrow Hwy, Hartford, from Sept. 1 through Nov. 30.

Release the Piping Plovers



by Maureen Stine, Earth Team Volunteer

Earth Team volunteer Maureen Stine participated in the release of some piping plover chicks. The chicks were raised from eggs harvested on North Manitou Island.

The eggs were harvested from a location threatened with storm flooding. The eggs were sent to the Detroit Zoo for incubation and hatching and

then sent to the University of Michigan Biological Station in Pellston for final rearing.

The birds were 28 days old when they were released. If they survive, they will head to the Carolinas, Florida or Louisiana for the winter and return to a northern Michigan beach next April or May. Plovers live about 5-6 years. They are federally endangered.

Michigan NRCS Adopts Soil Health Strategic Plan

State Conservationist Garry Lee signed a Michigan NRCS Soil Health Strategy plan at the end of May which outlines how the agency will promote regenerative soil health management efforts in the state.

The plan, available on the [Michigan SharePoint Site](#), has four key elements including; 1) Technical Excellence for Michigan NRCS employees and other conservation professionals, 2) Regenerative Agricultural Management Systems implementation, 3) Education and Outreach, and 4) Quantifying Soil Health benefits.

Michigan NRCS leadership created the long-term strategy that will form the basis for current and future soil health efforts with partners and farmers.

Included in the plan is prioritizing soil health training for new and existing NRCS employees and incentivizing producers to implement regenerative soil health practices in their operations.



Under the plan, NRCS conservation planners are required to complete advanced soil health training on an ongoing basis. Area soil health teams will coordinate with the state soil scientist and agronomist to ensure that the latest soil health guidance is provided to the field staff and producers.

NRCS will promote the adoption of soil health practices through increased ranking points for financial assistance programs and by identifying other policies that could increase adoption.

Upcoming Events - Upcoming Events - Upcoming Events - Upcoming Events
September September ctd.

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| <p>9 Corn Virtual Field Day, 9 a.m. to 11 a.m., for more information and to register go to www.canr.msu.edu/events</p> <p>9 Wild about Backyard Conservation Webinar Series, 11 a.m. to noon, for more information and to register go to www.canr.msu.edu/events</p> <p>10 Field Crops Virtual Breakfast (this Virtual Breakfast focuses on industrial hemp), 7 a.m. to 7:30 a.m., for more information and to register go to www.canr.msu.edu/events</p> <p>10 Evenings in the Garden - Native Grasslands of Michigan: Acting in the Interest of Prairies and Savannas, 6:30 p.m. to 8:30 p.m., for more information and to register go to www.canr.msu.edu/events</p> <p>12 Forestry Field Day - "Forests for the Future - Utilizing Tools for Success," 9 a.m. to 2 p.m., Jan Malik property -in Grant Twp., Grand Traverse County, contact Kama Ross, District Forester, 231/256-9783 or kama.ross@macd.org for more information</p> <p>13 Sunday Dinner with L'Oreal Hawkes-Williams of NEW LEAF Detroit, 6:30 p.m. to 8 p.m., for more information and to register go to www.eventbrite.com</p> <p>16 Vegetable and Root Crop Virtual Field Day, 6 p.m. to 8 p.m., for more information and to register go to www.canr.msu.edu/events</p> | <p>16-18 Michigan Inland Lakes Convention: Conserving Lakes in a Changing Environment, for more information and to register go to www.canr.msu.edu/events</p> <p>17 Michigan SWCS Water Quality Science Webinar, 11 a.m., for more information and to register go to www.miglswcs.org</p> <p>23 Wild about Backyard Conservation Webinar Series, 11 a.m. to noon, for more information and to register go to www.canr.msu.edu/events</p> <p>24 Race, Food, & Land Series, 6:30 p.m. to 8:30 p.m., for more information and to register go to www.canr.msu.edu/events</p> |
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October

- 14 Wild about Backyard Conservation Webinar Series, 11 a.m. to noon, for more information and to register go to www.canr.msu.edu/events
- 24 Michigan History Museum - Michigan Archaeology Day, save the date, for updates go to: www.miplace.org/historic-preservation/archaeology



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