

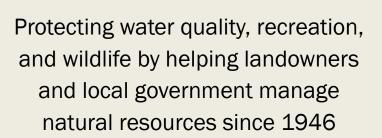
2019

At a Glance

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ATION





1318 McKay Dr. NE, Suite 300 Ham Lake, MN 55304 Ph:763-434-2030 www.AnokaSWCD.org The Anoka Conservation District (ACD) was established in 1946 through a voter led petition.

ACD's mission is to: "Conserve and enhance the natural resources of Anoka County. We do this by:

- conducting monitoring and analysis,
- informing landowners and local government in natural resource management, and
- leveraging technical and financial resources to promote natural resource stewardship practices."

As the character of Anoka County changed, so has ACD. We now offer a wide variety of programs and services in all areas of natural resource management in the county.

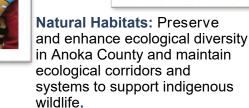
# What We Do

All Anoka Conservation District programs address one or more natural resource concerns. In order of priority they are:

Water Quality: Maintain high quality surface waters, improve impaired surface waters, and protect drinking water.









Water Quantity: Stop long-term depletion, and where possible, replenish aquifer levels, control stormwater runoff and the resultant erosion, and reduce localized flooding and related damage.

Wetlands: Achieve no net loss, and where possible, improve the quality and quantity of wetlands.

**Soils:** Maintain and enhance soil health.

ACD serves all of Anoka County's 357,000 residents spanning 284,000 acres, 72 recreational and natural environment lakes, 446 miles of streams and rivers, and a regionally critical groundwater resource.

Per MN Stat. 103C.005 Soil and Water Conservation Policy:

Maintaining and enhancing the quality of soil and water for the environmental and economic benefits they produce, preventing degradation, and restoring degraded soil and water resources of this state contribute greatly to the health, safety, economic well-being, and general welfare of this state and its citizens. Land occupiers have the responsibility to implement practices that conserve the soil and water resources of the state. Soil and water conservation measures implemented on private lands in this state provide benefits to the general public by reducing erosion, sedimentation, siltation, water pollution, and damages caused by floods. The soil and water conservation policy of the state is to encourage land occupiers to conserve soil, water, and the natural resources they support through the implementation of practices that:

- control or prevent erosion, sedimentation, siltation, and related pollution in order to preserve natural resources;
- ensure continued soil productivity;
- protect water quality;
- prevent impairment of dams and reservoirs;
- reduce damages caused by floods;
- preserve wildlife;
- protect the tax base; and
- protect public lands and waters.

Working to ensure natural resources are managed to sustain benefits for current and future generations will greatly reduce long-term infrastructure maintenance costs by reducing flooding, preventing groundwater contamination, maintaining surface water quality, and preventing sedimentation of stormwater treatment infrastructure. Improved fisheries, wildlife, aesthetics and recreational opportunities further improve the quality of life of Anoka County taxpayers. The ACD Board of Supervisors is composed of five elected officials serving four-year terms. They determine the direction of the District and oversee its operations.

#### 2019 Supervisors were:

- Chair Mary Jo Truchon term thru '20
- Vice Chair Jim Lindahl term thru '22
- Treasurer Glenda Meixell term thru '22
- Secretary Steve Laitinen term thru '20
- Member Sharon LeMay term thru '20

Daily activities are attended to by staff.

# Who We Are

## **Guiding Principles**

- Focus on long-term resource sustainability.
- Make informed and ethical decisions.
- Promote cost-effective and efficient resource management.
- Partner with both public and private sectors.
- Retain highly qualified, knowledgeable staff.
- Utilize technology to achieve efficiency and enhance work products.
- Keep natural resource issues visible in Anoka County.
- Respond to opportunity and changing needs.
- Develop diverse programs, partners, and funding sources.
- Utilize education and outreach in addition to technical and financial assistance to encourage natural resource stewardship.



#### 2019 Staff were:

- District Manager Chris Lord
- Office Administrator Kathy Berkness
- Wetland Specialist Becky Wozney
- Watershed Projects Manager Jamie Schurbon
- Water Resource Specialist Jared Wagner
- Water Resource Technician Kris Larson
- Stormwater and Shoreland Specialist Mitch Haustein
- Conservation Specialist Aaron Diehl
- Restoration Ecologist Carrie Taylor
- Outreach and Engagement Coordinator Emily Johnson
- Assistant District Technician Dan Belden
- MN GreenCorps Member Jaron Cook
- Intern Catrina Linehan

- Field Crew Chris Walz
- Field Crew Haley Grunwald
- Field Crew Brittany Allen
- Field Crew Erin Bjork
- Field Crew Grace Lippink
- Field Crew Jack Beahler
- Field Crew Maggie Allardice

SWCDs are non-regulatory local governments with elected boards covering 99.3% of Minnesota that provide technical and financial assistance to willing landowners to improve natural resources.

## Serving the Community

## Working with Local Government Entities

Natural resources valued by Anoka County residents require collaborative management by entities with varying jurisdictions within and across city, county and watershed boundaries. It is important that ACD remains continually engaged with each entity to

- avoid duplication,
- maximize efficiencies,
- capitalize on common interests,
- direct limited financial and staff resources to the most cost-effective approaches, and
- apply management strategies at a scale most appropriate to meet identified goals and objectives (e.g. multi-city lakesheds vs. multicounty aquifer recharge areas).

## Working with the Public

Over 78% of Anoka County is privately owned, and over 350,000 residents call Anoka County home. Effective natural resource management requires that we actively partner with those who live, work, and play in Anoka County, whether or not they own land in the county. ACD enlists the public to assist with natural resource management by offering the following services.

- <u>Technical assistance</u> providing project design and installation management
- <u>Financial assistance</u> securing, allocating and administering grant funding to install conservation projects
- <u>Regulatory assistance</u> providing guidance to help keep landowners out of regulatory harm's way with regard to several federal and state laws, and local ordinances
- <u>Outreach and engagement</u> providing information resources and opportunities to assist with community efforts to improve our natural resources

## **Conservation News**

# & Updates

Outstanding Conservationists -Anoka SWCD 2019 outstanding conservationists were Carrie and Matt Malette. They reside along the banks of the wild and scenic Rum River in the City of Anoka. They recently worked with the Anoka SWCD to install a first-inthe-county Focal Point rain garden. This rain garden uses a proprietary design allowing it to treat runoff from half of the neighborhood in a small space, despite a high water table. That runoff was previously discharged to the river untreated. The

Malette's have also used goats as an alternative method to manage invasive buckthorn on their riverbank.

Reinvest in MN, Rum River -\$3M in state funds are now available to landowners in the Rum River watershed to purchase conservation easements. Sensitive and ecologically outstanding lands adjacent to the river are being targeted for an initial round of funding. Under the easement, the owner retains ownership and continues to pay taxes on the land, but there are restrictions on future building.



<u>New ACD Pole Building</u> - ACD constructed a 40'x56' pole building on its property. The new building will house materials for our Rain Guardian business, host our annual tree sale, and serve as storage for a variety of conservation tools and supplies.





## **Programs**

## **Monitoring and Inventory**

<u>Water Monitoring</u> - In order to manage water resources for consumption, recreation, and wildlife, ACD monitors water quality and/or quantity in Anoka County lakes, streams, wetlands, and groundwater. Data summaries and analyses are presented in an annual Water Resources Almanac. Water management organizations and lake associations often contract for these services. 2019 sites included:

- 12 manual precipitation gauges
- 19 electronic reference wetland shallow wells
- 24 deep groundwater observation wells
- 12 electronic stream elevation monitoring gauges
- 25 lake level gauges
- 5 continuous rain garden water level wells
- 11 lake water quality monitoring sites
- 18 stream water quality monitoring sites
- 4 continuous stream water quality monitoring stations
- 3 stream biomonitoring sites with area high schools

## AIS Inventory - ACD staff

completed an inventory of two aquatic invasive species on Lake George; curly-leaf pondweed and Eurasian watermilfoil to enable targeted treatments. ACD staff also monitored for new AIS in four lakes for Coon Creek Watershed District as part of their early detection program.



<u>Shoreland Condition</u> <u>Inventory</u> - Photo inventories were conducted of several shorelines using a camera that takes 360 degree photos. The photos are then uploaded to the internet and can be viewed by the public using Google Streetview. Coon Lake, Linwood Lake, and Typo Lake were completed in 2019.

The public expects safe and plentiful drinking water, clean lakes and streams, good fishing and hunting, and plenty of opportunities to enjoy nature. Soil and Water Conservation Districts (SWCDs) are the only statewide government entity that works with private landowners to implement projects to meet these expectations. 78% of natural resources are on private lands, so this approach is critical.



Federal EPA 319 Grant - An approximately \$250K grant was secured by soil and water conservation districts in the Rum River watershed. The grants through the MN Pollution Control Agency will provide multiple years of continuing funds. Work beginning in 2020 will focus on Green Lake in Isanti County. Impaired Green Lake drains to the Rum River, so improvements to it will benefit Anoka County residents downstream.

## Analyses & Plans

Highland Sullivan SRA - ACD completed a stormwater retrofit analysis for the Mississippi Watershed Management Organization that identified water quality improvement projects throughout the drainage areas to Highland and Sullivan Lakes. 123 projects were identified throughout the 715-acre target study area and generally consisted of rain gardens, underground sediment collection chambers, and stormwater pond installations or modifications. Potential projects were ranked in order of cost-effectiveness. The report provides a tool for natural resource managers considering the implementation of projects to improve water quality in Highland and Sullivan Lakes.

## Linwood Lake Carp Management

- An analysis was completed on Linwood Lake to determine the feasibility of improving water quality by managing rough fish. The process involves analyzing population numbers and age classes, tracking carp movements and congregation patterns. We found carp populations are 10% above management targets and primed to increase with many young carp. A \$148,000 Clean Water Fund grant was secured to manage carp throughout the Sunrise River Chain of Lakes.

<u>Inventory Rum River Erosion</u> - In 2019, ACD conducted a bank erosion inventory on the Rum River throughout Anoka County. We identified 80 eroding reaches totaling more than 7 miles in length. We estimated pollutant loading from each stretch, assigned a "best fit" stabilization technique to each, and ranked the projects by anticipated cost/benefit for pollutant removal to the River. We used that ranked inventory to apply for state grants to do stabilization projects. All of this has led to more than \$1 Million in state grant funding to stabilize Rum River banks over the next three years with additional local match by Anoka County and the Upper and Lower Rum WMOs. We plan for additional grant applications to do even more stabilization work in the future.

<u>Campus Groundwater Conservation Planning</u> - In partnership with SWCDs throughout the 11-county metro, ACD led a process to develop and implement protocols to analyze large campuses for opportunities to reduce groundwater use. Identified opportunities included fixture and equipment maintenance and upgrades as well as irrigation management recommendations. Options for infiltration practices that increase groundwater recharge were also highlighted. The program will be completed by the end of 2020 and will result in the analysis of 21 campuses.



<u>Land Protection Strategies</u> - Two conservation easements were secured in partnership with the MN Land Trust and LSOHC funding. These two conservation easements on private land buffer Carlos Avery WMA and expand the habitat core.

<u>Sunrise River WMO Plan Update</u> - ACD was awarded a contract by the SRWMO to complete updates to their watershed management plan. The process was completed and State-approved in 2019.

<u>Rum River Watershed 1W1P</u> - Partners throughout the 11county Rum River watershed from Lake Mille Lacs to the City of Anoka were jointly awarded \$267K to complete a One Watershed, One Plan. The plan will be completed in 2020.

<u>St. Croix Watershed 1W1P</u> - ACD has been collaborating with 17 other governmental entities since 2018 to complete a One Watershed, One Plan. This plan contains regional priorities for non-competitive state grants. The plan is on public notice in early 2020.

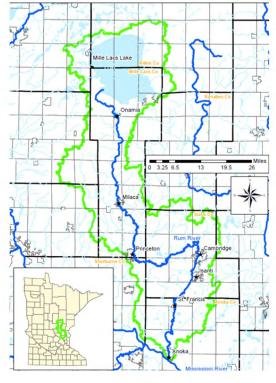
## **Regulatory Assistance**

Although not regulatory, ACD provides guidance to help keep landowners out of regulatory harm's way.

Wetland Conservation Act - ACD employs one full time Wetland Specialist whose responsibilities include serving on Technical Evaluation Panels, processing cease and desist orders, providing quality control reviews of wetland replacement plans and other projects that impact wetlands, and assisting project applicants by providing technical and regulatory interpretations to facilitate project review and permitting at the local level.

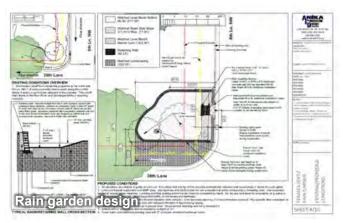
Buffer Law Compliance Inventory - Of the 112 parcels that a 2016 inventory suggested were non-compliant with the buffer requirements, ACD assisted landowners to achieve compliance on 106 parcels by the end of 2019. ACD staff have been working with landowners and renters on the remaining six parcels to install the buffers in early 2020.

Rum River Watershed



## **Technical Assistance**

<u>Site Planning and Design</u> - ACD staff provide landowners with consultation and design assistance for projects that attract wildlife, reduce erosion, conserve water, and improve water quality. In 2019, ACD completed site surveys and/or designs for 2 septic system repairs, 4 curbcut rain gardens, 5 riverbank stabilization projects, 24 habitat enhancements, and 1 lakeshore restoration.



<u>Wetland Restoration</u> - ACD staff used GIS data including aerial photos, topography, and national wetlands inventory data—to identity about 100 opportunities to restore drained and highly altered wetland areas. ACD followed up this effort with outreach to the properties with the highest potential for successful wetland restoration.

## **Financial Assistance**

<u>Natural Resources Block Grant</u> - ACD supports the Subsurface Sewage Treatment System program, Local Water Plan implementation, Wetland Conservation Act implementation, and Shoreland rules implementation by passing NRBG funds through to local government units (LGUs). In 2019, \$50,246 in grant funds were used to reimburse twenty LGUs for their efforts.

Septic System Repair or Replacement - ACD received \$40K in State funds to assist low income homeowners with repair or replacement of noncompliant septic systems. In 2019 septic systems adjacent to Coon Lake and Rice Creek were replaced.

## We are very fortunate to have you as a project partner, advocate, and colleague. Thank you so very much! Private sector consultant to ACD

Engineering Assistance - Through a state funded program, ACD has access to funds provide ACD staff or to contract with consulting engineers to design non-point source pollution projects such as riverbank and lakeshore restoration, gully stabilization, and sediment basins. <u>Cost Share</u> - ACD helps landowners pay for conservation projects with community level benefits. Some incentive programs include the State Cost Share Program, USDA Environmental Quality Incentive Program, DNR Conservation Partners Legacy Grants, MN Clean Water, Land and Legacy Fund, County Ag. Preserves Grants, and Watershed District and Watershed Management Organization cost share programs.

The most common cost share projects include:

- Lakeshore stabilization and buffer restoration
- Streambank stabilization and buffer restoration
- Rain garden installation
- Wildlife habitat enhancement and invasive species control \_\_\_\_\_\_

## **Products**

<u>Annual Tree Program</u> - In 2019, ACD sold approximately 21,500 tree and shrub seedlings to control erosion and enhance wildlife habitat. We also distribute prairie seed and are available to help landowners develop site-specific plans.

Rain Guardian<sup>™</sup> - ACD patented pretreatment chambers to address many of the challenges associated with rain garden maintenance in 2013. Distributorships covering 31 states, tradeshows, and the RainGuardian.biz website all promote the use of this product in bio-retention practices. In 2019, sales were just over \$500K. Proceeds from sales fund conservation initiatives in Anoka County. There are currently three product lines; Bunker, Turret, and Foxhole, with others under development to address a variety of field conditions.



## **Public Outreach and Information Access**

<u>AnokaSWCD.org</u> - Website design and maintenance is all completed inhouse by ACD staff. A project map interface features ongoing and completed projects, inventories, and analyses. The site also includes current events, policies, board actions, financials, and information on technical and financial assistance 94% of Anoka County Residents Supply Their Household Water Needs with Groundwater

technical and financial assistance programs and services.

<u>Videos for the Web</u> - ACD staff have developed videos on a variety of topics, all of which can be found on AnokaSWCD.org and YouTube. In 2019, ACD collaborated with several partners to co-produce an animated video to educate the public about groundwater entitled, "Our Groundwater Connection."

<u>Blog and eNewsletter</u> - In 2019, ACD launched our weblog and quarterly electronic newsletter as new outreach tools to engage with the public. Past blog articles and issues of our eNewsletter can be found on our website.



<u>Brochures and Table Top Displays</u> - ACD developed a series of brochures and table top displays covering many natural resources topics that are all available for use by our partners. In 2019, we created a new Groundwater display and brochure as well as a new Native Plants

display to accompany the existing Native Plants brochure.

Торіс	Brochure	Display
Lakeshore Restoration: Enhancing water quality and habitat on your shore	Х	Х
Riverbank Stabilization: Understanding water flow and managing erosion	Х	Х
Backyard Habitat: Attracting wildlife to your property	Х	Х
Water-Smart: Conserving water at home	Х	Х
Rain Gardens: Treating runoff at the source	Х	Х
Wetlands: Benefitting wildlife and people.	Х	Х
Stormwater Management: Improving water quality and reducing runoff	Х	Х
Groundwater: Protecting drinking water for generations to come	Х	Х
Native Plants: Restoring habitat for local wildlife	Х	Х
Threats to our Natural Resource		Х
Land Protection: Establishing a legacy		Х
Soil Health (US Dept. of Ag. NRCS design)		Х
Invasive Species: Combating a threat to native ecosystems		Х



<u>Anoka County Water Resource Outreach Collaborative</u> - ACD serves as the host site for the Anoka County Water Resource Outreach Collaborative (WROC) Coordinator. WROC is a partnership formed in 2018 to implement a comprehensive water outreach and engagement program for watershed and city partners. The goal is to augment and

enhance the outreach programming of its partners, inform communities about issues affecting local waterbodies and groundwater resources, and engage people in activities and behavior changes that will help protect and improve the health of these water resources. In 2019, a total of 6,927 people were engaged across all WROC outreach efforts including through booths, presentations, workshops, and trainings about various natural resource topics.

# **Projects**

## 2019 Project Technical Assistance Summary

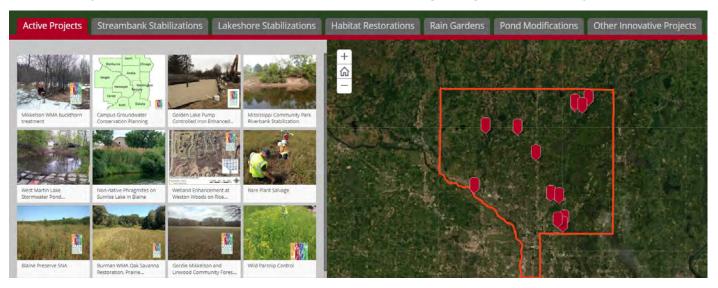
Project Type	Consult	Design	Install	Maintain
Lakeshore	6	1	0	1
Streambank	20	5	5	9
Rain Garden	30	4	0	24
Habitat Enhancement	50	24	29	3
Other*	6	2	4	0
Total	112	36	38	37

"Just a note to say thank you for your time and information given so pleasantly and generously. People like you make life a little less stressful."

> Tallulah Owens, Anoka County resident to ACD staff member

\*IESF, carp barrier, stormwater treatment structure, and swale

## All ACD projects are featured online at www.AnokaSWCD.org using our virtual project tour.



## Golden Lake Stormwater Pond Pump Controlled IESF

With \$467,968 secured by ACD from the Clean Water Fund of the Clean Water, Land and Legacy Amendment, \$70,000 from the City of Circle Pines, \$50,000 from the Rice Creek Watershed District, and \$12,000 from ACD, construction of an Iron-Enhanced Sand Filter (IESF) was completed in 2019. The project

is designed to reduce phosphorus discharging to Golden Lake by 40-60 lbs./yr. The project uses a pump instead of natural water level fluctuations to get water into the IESF, which will allow the City of Circle Pines to proactively manage it for optimum benefits to the lake for the next 25 years.



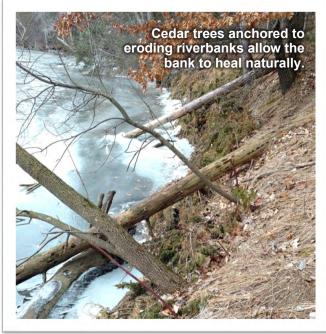


## **Project Inspection & Maintenance Guidance**

ACD guides project installations and provides long-term maintenance oversight. In 2019, ACD staff inspected 48 projects and provided guidance on maintenance needs. Each project installed with public financial assistance must be maintained by the landowner for varying durations depending on the project type and contract terms. Routine inspections are important to ensure contract terms are complied with. Assisting landowners with project maintenance beyond the duration required by grant agreements is a cost-effective way to achieve added benefits.

## Streambank Stabilization and Restoration

With grant funds from the Outdoor Heritage Fund and **Conservation Partners** Legacy Grant Program and granted crew days from the Conservation Corp of Minnesota (CCM), ACD staff led crews to install cedar tree revetments at three private properties and one Anoka County park site to stabilize 525 linear feet of the Rum River. Cedar tree revetments provide cost-effective stabilization approach for moderately eroding riverbanks.



## **Mississippi River Stabilization**

Two severely eroding riverbanks on private property along the Mississippi River in Coon Rapids, totaling 310 linear feet, were

stabilized. The sites were identified as high priorities in an erosion inventory completed by ACD, and stabilization of the two sites improves water quality by preventing 386,593 pounds of sediment and 193 pounds of phosphorus from entering the river each year. Funding for the projects was provided by a Clean Water Fund grant, and landowners provided the required match funds.





"We couldn't be more pleased. Thanks again for shepherding this whole thing through."

Marlys & Don Rainbow, Landowner & riverbank stabilization partner

## **Carp Management**

ACD continued a multi-year effort to remove common carp from Martin and Typo Lakes for the purpose of water quality and habitat improvement. From 2017 to 2019, 11,000 carp have been removed by box netting. Water quality in both lakes now has an improving trend. The work has been partially funded by a Conservation Partners Legacy grant from the MN DNR. Similar work will continue in 2020-2022 throughout the Sunrise River Chain of Lakes (includes Linwood and Island Lakes) with a new \$148,000 Clean Water Legacy grant from the MN Board of Water and Soil Resources. The Martin Lakers Association and Linwood Township have been key partners.



## Wildlife Habitat Enhancement

Some projects ACD helps landowners install are done primarily to enhance habitat for wildlife and pollinators.

Outdoor Heritage Fund (OHF) and Conservation Partners Legacy (CPL) Grant Program Habitat <u>Enhancement Projects</u> – ACD worked on the following three projects with OHF and CPL grants from the Clean Water, Land, and Legacy Amendment.

*Beach Conservation Easement* – completed buckthorn treatment on the 65-acre property in St. Francis near the Bethel Wildlife Management Area.

*Gordie Mikkelson WMA* - completed buckthorn treatment on 50 forested and 30 wetland acres within the 840-acre WMA for Phase 1 treatment. Prairie enhancement activities began on 9.3 acres of old-field, the last area in need of restoration in the WMA. Initial herbicide treatment was conducted in fall of 2019.

*Robert and Marilyn Burman WMA* – Buckthorn treatment occurred on 21 acres of woodland and oak savanna. Herbicide spot treatment occurred on 4 acres of prairie and wetland depression.



<u>Kings Island</u> - ACD staff and Mississippi Park Connection crew worked together to clear buckthorn at Kings Island in the Mississippi National River and Recreation Area.



<u>Rare Plant Rescue Program Pilot Project</u> – ACD, University of Minnesota Landscape Arboretum, and Critical Connections Ecological Services staff collaborated with the MN Department of Natural Resources to develop a permit program that allows rare plant salvage and propagation from permitted development sites. Staff and volunteers salvaged 5,000 rare plants from two development sites and planted them into the protected Blaine Wetland Sanctuary. ACD is seeking funding to develop a Rare Plant Rescue Program.

<u>Cooperative Weed Management Area Partnership</u> – Using a state grant, ACD facilitates the Anoka Cooperative Weed Management Area Partnership invasive species efforts including outreach, training, volunteer engagement, mapping, and priority invasive species treatments in Anoka County. The CWMA also provides technical and cost share funds to residents; invasive species treatment and habitat enhancement projects were completed on five properties. Treatment of wild parsnip and golden creeper was implemented with additional funds from the MN Department of Agriculture.

<u>Non-native Phragmites Treatment</u> – Populations of non-native Phragmites were treated at 14 sites with funds from Anoka County Aquatic Invasive Species Prevention Aid Program, MN Department of Agriculture Noxious Weed and Invasive Plant Grant, and Coon Creek Watershed District. Invasive Phragmites, or common reed, is a highly invasive, non-native, wetland grass. Due to a relatively timely effort to identify the extent of the invasive in the state, and the relatively small size of infestations, Minnesota is in a position to eliminate invasive Phragmites.

# **Financials**

## Where the Money Goes

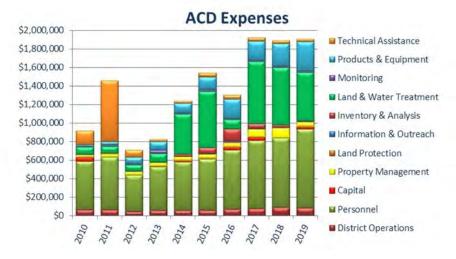
ACD finances historically experience dramatic variability from year to year due to activities being driven by competitive grants, several of which have been in excess of \$400,000. Many state grants are from sales tax revenue dedicated to natural resource activities. ACD is committed to accessing these funds so Anoka County taxpayers will benefit from them in proportion to sales tax paid in the county. Also of note is how consistent ACD's operational and personnel costs have been. ACD staff and supervisors strive to keep overhead costs down, while expanding services.

## Making Sense of the Dollars

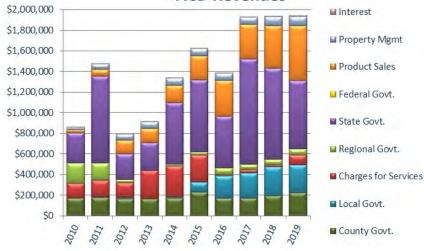
Although governed by an elected board, conservation districts do not yet have taxing authority and must secure funds from many sources to maintain programs and services. State grants are the primary funding source for project installation, while the county provides seven times what the state does to support general district operations. County funds are critical because many grants do not cover overhead expenses. Unfortunately, many grants also require matching funds, so county funds must serve as match and cover all costs ineligible under complex grant rules.

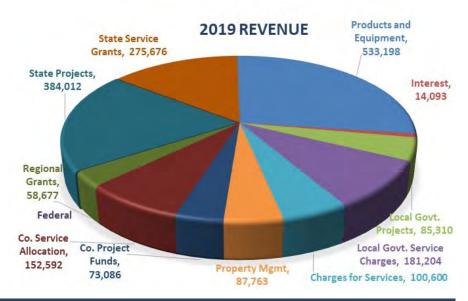
## Making Dollars of the Cents

To provide comprehensive natural resource management, ACD collaborates with cities, watershed management entities, state agencies, county departments, non-profits, and landowners on projects of mutual interest. The 2019 revenue chart begins to convey this but does not show the 68 projects and programs supported by 26 distinct funding sources, many of which supported multiple projects and programs. For example, County Project Funds alone is comprised of 12 projects, and State Grants were used in part to fund 35 different initiatives.



**ACD Revenues** 





Lackluster financial support for conservation by counties statewide has led to conservation districts seeking levy authority as their top legislative agenda item for several years.