

2020-2029 Revised Management Plan Goals Summary

Water Quality

Lakes: *Adaptively manage District lakes to protect, enhance and restore lake water quality and recreational utility as appropriate to each lake.*

- Reduce excess nutrient and sediment loading to lakes through BMPs, capital improvement projects and regulatory controls.
- Reduce rate and volume of stormwater runoff entering lakes to help meet water quality loading goals.
- Reduce internal phosphorus loading (from bottom sediments) to lakes.
- Monitor and reduce chloride loading to lakes.
- Inform and educate regarding loading of pharmaceuticals and personal care products to wastewater.
- Protect the public from mercury exposure due to mercury-impaired lakes.
- Acquire data necessary to better understand water quality trends and threats in order to most effectively implement water quality improvement practices.

Wetlands: *Protect, enhance and restore wetland water quality and function.*

- Restore hydrology of altered wetlands and surrounding areas that are contributing excess nutrients to downstream waters.
- Inventory wetland water quality and function.
- Protect high quality wetlands as identified in wetland inventory to be performed.
- Help implement requirements for wetland management

Rivers, streams and other waterways: *Protect, enhance and restore rivers, tributary streams and other waterways, such as ditches.*

- Inventory water quality and function of public drainage systems in the District in accordance with Minnesota State Statute 103E.
- Restore stream water quality and stream ecosystem health.
- Protect high quality stream reaches.

Groundwater: *Protect aquifers and maintain or improve groundwater quality, so that drinking water is safe.*

- Protect groundwater quality and ensure safe drinking water.
- Increase public awareness of groundwater protection issues and of the City of Detroit Lakes Wellhead Protection Plan.

Water Quantity

Water Levels: *Promote shoreline resilience to fluctuations in water levels of lakes, streams and drainage systems.*

- Monitor lake, stream and drainage system water levels.
- Promote shoreline that is resilient under fluctuating water levels through shoreline rehabilitation (e.g., with deep-rooted plants, soft-armor plantings, etc).

Localized Flooding: *Mitigate localized flooding issues and prevent flooding-related damages to property, public safety and water resources.*

- Gather baseline floodplain data.
- Mitigate current flooding and prevent future flooding.
- Prepare for emergency flood scenarios.

Groundwater *Ensure groundwater supply is sustainable.*

- Reduce groundwater withdrawal.
- Increase groundwater recharge.

Ecological Integrity

AIS: *Prevent establishment of new invasive species and manage invasive species that already exist in the watershed.*

- Manage priority invasive species using the best available methods and technology.
- Monitor for new invasive species.
- Stay current with new management strategies and aquatic invasive species research

Wildlife Habitat: *Protect, enhance and restore wildlife habitat.*

- Search for opportunities to partner on multi-benefit projects that will enhance water quality and create new wildlife habitat.

Fish Communities: *Maintain healthy fish communities.*

- Prioritize areas for aquatic habitat protection
- Protect, enhance, and restore fish habitat, especially when projects have multiple benefits that meet District objectives.

District Operations/Administration Program

	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
District Operations	<ul style="list-style-type: none"> • Develop 2021 Annual Budgets, Levies, Assessments, Fees (Aug/Sept) • Develop Work Plan, Monitoring Plan, Education Plan (Jan-Feb) • Complete Annual Report; Financial Reporting (BWSR, MN DNR, MN State Auditor-Due June 30); Assess and evaluate progress against objectives. • Review and update HR functions- personnel policies; job descriptions/ 3-yr salary updates • Complete Contract Renewals – Office Lease, GIS software, QB’s, Microsoft • Provide project oversight- grants, reports, budgets, payroll • Maintain and upgrade office equipment; 2 monitors – Admin; Conference Room – dual screens/stand/mount • Develop and maintain and inventory of District-owned or financed stormwater management facilities- including locations, characteristics, maps 	<p><u>Program-wide</u> Guetter – 15% Mortenson – 5% Moses –35%</p>	<ul style="list-style-type: none"> • \$7,400 LMCIT and MAWD Dues 2020 – (GEN) • \$2,000 Noah & Associates – (GEN) • \$5,500 Equipment; – (GEN)
Fiscal Management	<ul style="list-style-type: none"> • Perform payroll and bookkeeping activities – payroll, liabilities, reports; monthly bills and financial statement; Annual Financial audit 		<ul style="list-style-type: none"> • \$5,800 Audit 2019 (GEN)
Internal Governance Policies	<ul style="list-style-type: none"> • Review and Update Governance Policies – Bylaws (2020) 		
Collaboration with other units of government and partners Advisory Committees	<ul style="list-style-type: none"> • Enhance local intra-agency administration effectiveness through semi-annual meetings, service delivery agreements, memoranda of understanding, administrative procedures, process methods and timelines and other collaborative opportunities; serve on inter-agency committees and panels. • Organize and facilitate a summer Project/program tour for managers, advisory committees, and public (Aug) • Facilitate recruitment of CAC for 2020 and hold one meeting. • Utilize a Technical Advisory Committee (TAC) to engage local, state and federal government agencies and stakeholders. 		

Capital Improvement Projects & Programs

	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
Rice Lake Nutrient Reduction Project	<ul style="list-style-type: none"> Design and complete the Rice Lake Wetland restoration project to reduce Rice Lake Wetland's release of phosphorus to the Pelican River and create new wildlife habitat. Loan Funding for Rice Lake Project completion if necessary 	Program-wide Guetter – 10% Mortenson – 8% Moses – 5%	<ul style="list-style-type: none"> \$5,000-Dunton dry dock outlet modification (UTY) \$500,000 - Rice Lake construction (UTY- Grant Match) – 25% grant match
St. Clair Lake TMDL	<ul style="list-style-type: none"> Implement activities identified in TMDL 		
Campbell Creek Watershed Restoration	<ul style="list-style-type: none"> Develop via WRAPS – Identify and target critical agricultural erosion and sediment transport areas in North and Little Floyd sub-watersheds; develop and implement a streambank stabilization plan for Campbell Creek. 		
Otter Tail WRAPS Actions	<ul style="list-style-type: none"> Develop TMDL Campbell Creek and Pelican River through WRAPS; additional monitoring. 		
Regional Urban Stormwater Management & Treatment	<ul style="list-style-type: none"> Re-apply for CWP Grant Funding for West Lake Drive & Industrial Park improvements (stormwater innovation; buffers) 		
Ditch 14 Complex Nutrient Reduction	<ul style="list-style-type: none"> TBD 		
Lake Alum Treatments including St. Clair & Floyd	<ul style="list-style-type: none"> TBD 		

Regulatory Program/Rules			
	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
Rule Permit Program and Enforcement	<ul style="list-style-type: none"> Assess permitting application procedures; then identify and implement solutions to better streamline permitting application procedures and to better coordinate with other local governments. MOU with County and City for District permitted projects. Develop software to facilitate permit application and approval process- Review County, City, other programs (Paradigm Consulting – Access database) (Sept-October) Inspect permitted projects (ensure bmp functionality) Annually review and approve permit application and review fees; update forms as necessary. Keep Rules/Permitting section of the Website current. Enforce the Minnesota Buffer Law. 	<p>Program-wide Guetter – 30% Mortenson – 25% Moses – 15%</p>	<ul style="list-style-type: none"> \$4,000 - 2 ruggedized tablets (LMP-01, GEN, Utility) \$ 1,000 - Permit materials/print and website – see Education/Outreach \$4,000 – Software upgrade (UTY)
Coordination with Other Agencies	<ul style="list-style-type: none"> Provide continuous and consistent enforcement of District and other agencies Rules/regulations. Ensure infiltration best management practices and other BMPs in accordance with the City of Detroit Lakes Wellhead Protection Plan and MPCA regulations. Through the Becker County technical advisory committee, review Conditional Use Permits, Environmental Assessment Worksheets and Environmental Impact Statement applications for large-scale projects. Assist in enforcing the new Minnesota Buffer Law as appropriate. 		
Rules	<p>Revision-2020</p> <ul style="list-style-type: none"> Ensure that rules support the Becker County Shoreland Ordinance, the City of Detroit Lakes Shoreland Ordinance, the MS4 Ordinance, and the City of Detroit Lakes Wellhead Protection Plan. Ensure that rules reflect Minnesota Buffer Law enforcement responsibilities. Refine rules to restrict new developments from increasing the volume or rate of runoff from leaving the site. Refine rules to prevent building or filling in the 100-year floodplain. Implement design standards for bridges, culverts or other water-related infrastructure to ensure integrity of road system and infrastructure while maintaining connectivity where needed. Help implement wetland requirements such as buffers, setbacks and pretreatment of stormwater prior to discharge into wetlands. Review withdrawal/aquifer alterations, such as gravel extraction in the Pearl-Loon and Long Lake LWQMA. Consider developing rules to require wetland buffers and/or structure setbacks from wetland edge. Consider developing rules to protect groundwater. Consider adopting and enforcing a standard for minimum low floor elevation of buildings. Consider a filtration requirement for wellhead protection areas. Encourage wildlife and pollinator-friendly seed mixes and plantings in buffers or linear projects Encourage incorporation of fish spawning habitat into projects. Utilize technical and citizen advisory committees including developers, landscapers, engineers and other directly affected service providers. 		<ul style="list-style-type: none"> \$5,000 – Rules (UTY)

Incentive Programs

	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
<p>District Cost-Share Program</p>	<ul style="list-style-type: none"> • Maintain a cost-share program to implement voluntary stormwater BMPs • Maintain cost-share program for installation of stormwater management BMPs, including BMPs that encourage infiltration. • Maintain a cost-share program for lakeshore landowners to convert shoreline turf grass into "lake-friendly" buffer, which tolerates fluctuating lake levels. • Maintain cost-share program for lakeshore landowners to convert shoreline turf grass to "lake-friendly" buffer that tolerates fluctuating lake levels. • Maintain cost-share program for installation of stormwater management BMPs such as rain gardens, which provide pollinator habitat • Encourage wildlife and pollinator-friendly seed mixes and plantings in buffers or linear projects. • Explore Cost Share Program to remove sea walls and install shoreline practices that promote aquatic habitat. 	<p>Program-wide Guetter – 2% Mortenson – 2% Moses – 5%</p>	<ul style="list-style-type: none"> • \$10,000-Cost share for shoreland, rain gardens, other special projects within District – (UTY)
<p>Collaborative Grant/Cost-share projects</p>	<ul style="list-style-type: none"> • Continue to assist with City shoreline projects – Overlook, parks, public access • Encourage wildlife and pollinator-friendly seed mixes and plantings in buffers or linear projects. • Incorporate fish spawning habitat into projects. • Provide technical and cost share assistance to Becker County Parks and MN DNR with Dunton dry dock outlet modification project • Act as an information source to identify potential financial assistance such as grants, loans, and cost-share programs for well and septic system work, including sealing unused wells, repairing failing septic systems, and filling abandoned septic systems • Assist City of Detroit Lakes and Partners with BWSR "BEE Friendly" neighborhood demonstration grant application. • Assist the MN DNR in replacing Bucks Mill Dam with rock rapids including development of carp deterrent measures. 		<p>Included in cost-share above</p>

Aquatic Invasive Species Management

	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
<p>AIS Management</p>	<ul style="list-style-type: none"> • Implement the flowering rush management plan to achieve less than 2% occurrence – Detroit, Curfman, Muskrat, Sallie, Melissa Lakes. • Conduct/continue curly-leaf pondweed treatment to reduce frequency of occurrence by 90% on Detroit, Curfman, Muskrat, Sallie, Melissa. • Continue the aquatic plant roadside pickup program (Projects 1B & 1C – Sallie, Melissa, Detroit, Curfman). • Provide readiness response treatments if necessary. • Manage Zebra Mussels and Chinese mystery snails on infested waters using methods devised by the University of Minnesota or other research facilities. • Apply for cost-share grant funding for treatments 	<p><u>Program-wide</u> Guetter – 10% Mortenson – 15% Moses – 5%</p>	<ul style="list-style-type: none"> • \$40,000 for AIS plant management (1B) • \$74,000 for AIS plant management (1C) • \$30,000 Rapid Response (LMP-01)
<p>Research, Special Studies</p>	<ul style="list-style-type: none"> • Finalize readiness response plans for priority invasive species (Eurasian Water Milfoil, Starry Stonewort, Hydrilla). • Conduct research to identify alternative treatment practices for flowering rush. • Continue communications and develop a research partnership with University of Minnesota’s Aquatic Invasive Species Center and other institutions (Assist Becker COLA with Regional Meeting MAISRC Research update; Continue to partner with zooplankton study on Detroit Lake). • Apply for cost-share grant funding for research 		<ul style="list-style-type: none"> • \$2,000 Education (LMP-01) • \$10,000 Research (LMP-01) • \$ 7,500 Phyto/Zoo plankton monitoring (LMP-01)

Data Collection			
	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
Lake Monitoring & Data Collection	<ul style="list-style-type: none"> Evaluate and update lake monitoring plans; incorporate collection of additional data for special projects or studies as needed. Include Chloride baseline sampling for Big and Little Detroit. Amend standard monitoring protocol to include monthly inspections of boat access points and additional areas for starry stonewort or other new invasive species. Recruit additional monitoring volunteers and coordinate data collection with lake association and agencies (focus on Pearl, Brandy, Abbey, Meadow, Johnson/Reeves – MPCA Secchi). Identify active volunteers/lakes. 	Program-wide Guetter – 13% Mortenson – 30% Moses – 5%	<ul style="list-style-type: none"> \$5,000 for ZM phytoplankton and zooplankton assessment (LMP-01) \$4,000 Special Project Study (LMP-01) \$3,000 Vegetation surveys (LMP-01)
Aquatic Vegetation Monitoring	<ul style="list-style-type: none"> Survey submerged aquatic vegetation, including aquatic invasive species, on Lakes Floyd (Big and North) and Little Floyd. Survey public/private access areas and other higher water equipment use areas for new AIS on a monthly basis (June – Sept) on District monitored lakes. Coordinate efforts with Becker SWCD AIS. 		
Land Use Change Data Collection	<ul style="list-style-type: none"> Conduct shoreline surveys on lakes with potential for increased development (sand blanket, rip rap, retaining walls, natural shoreline, number of boats, docks, lifts) – Meadow, Muskrat, Fox, Johnson-Reeves, Sands 		
Stream Monitoring	<ul style="list-style-type: none"> Update the annual stream monitoring plan for Campbell Creek and Public Drainage Systems 11 & 12; the Pelican River and Public Drainage System 13; Public Drainage System 14; and smaller waterways (ongoing; Assess chemical water quality parameters and flow; bank erosion and runoff when possible). Maintain water level gages at lake outlets and key stream locations; record water levels on a weekly basis during ice off season. Develop and implement a Sucker Creek monitoring plan (2020); Include Special Project monitoring/assessment- Rice Lake Wetland Identify unstable reaches that degrade water quality using Campbell Creek, Pelican River and Sucker Creek data. Evaluate and update the stream monitoring plan for special projects. 		\$1,000 – Industrial Park sampling (UTY)
Special Projects	<ul style="list-style-type: none"> Monitor existing agricultural BMPs in the Floyd and Pearl-Loon LWQMAs to evaluate phosphorus removal efficiency. Use PTM tool to identify areas for potential phosphorous reduction (address soil erosion, wetland enhancement/protection) in Campbell Creek, Ditch 13 area and Pearl lake Sub-watershed – Review Red River Basin Data, Becker SWCD, and WRAPS. Through Otter Tail Wraps assess streams for index of biological integrity (2020) Zebra Mussel Impacts - Phytoplankton and Zooplankton assessment; population inhibitors? PRWD Special Project; MN DNR/MAISRC project Pelican River –E. coli impairment; DO, fisheries/biological stressors Special Project for interns – survey residents for interest in removing sea walls on Little Floyd. 		\$3,000 pre and post Rice Lake monitoring (UTY)
Lake Management Plans	<ul style="list-style-type: none"> Write and/or update lake management plans for Long. Work with the MPCA to conduct a Wine Lake TMDL study and implement activities recommended by the TMDL implementation plan Develop and implement a phosphorus load tracking and credit system for Lake St. Clair. Acquire Otter Tail WRAPS study data and use the study to update lake management plans as necessary 		
Resources/ Equipment	<ul style="list-style-type: none"> Upgrade Monitoring Equipment and Software; Integrate monitoring with GIS Employ 2-3 summer interns to assist with Data Collection/Monitoring. 		\$3,000 equipment and repairs (LMP-01) \$2,200 equipment purchases (SADAF) \$200 ESRI GIS software grant (LMP-01, UTY)

**Drainage Systems Management
(Becker County 11,12,13, &14)**

	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
Drainage Systems	<ul style="list-style-type: none"> • Ensure proper ditch management in accordance with MN 103E) and PRWD Drainage Management Policy (November 2017); • Conduct annual Inspections; remove beaver and blockages • Submit annual buffer compliance report to BWSR • Enforce MN Buffer Compliance Rule • Attend drainage system meetings/trainings 	<p>Program-wide Guetter - 5% Mortenson - 5%</p>	<ul style="list-style-type: none"> • \$ 4,800 Buffer Enforcement (DBE) • \$ 4,000 Beaver and blockage Removal (D 11-12,13,14) \$750 Drainage system meetings/trainings (DBE & Ditch 11/12, 13, 14)

Education and Outreach

	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
District Manager and Staff Education	<ul style="list-style-type: none"> • Attend training/seminars/conferences/courses, regional meetings related to District Water Management Activities. • Continue to attend and present at aquatic invasive species workshops and conferences. • Continuing education for managers and staff – MAWD Annual Conference, MAWD Summer Tour, PRWD Summer Project Tour, NALMS conference, Red River Basin Conference. 	<p>Program-wide Guetter – 15% Mortenson – 10% Moses – 25%</p>	<ul style="list-style-type: none"> • \$ 500- Project Summer Tour (GEN) • \$15,000 NALMS (LMP-01) • \$6,000 Manager MAWD (GEN)
Website, Social Media, Seminars/Workshops	<ul style="list-style-type: none"> • Sponsor regular events such as workshops, seminars, and brown bags for LGU staff, developers, and other interested parties to provide practical information and opportunities for sharing experiences – hold 1 event at the library “brown bag”. • Continually update the District’s website, Facebook page, and other social media outlets • Continue an education program that promotes the basic understanding of watershed principals and consists of 12 social media posts per year; 12 radio interviews/yr; 6 educational talks to groups per year; one mailing to DL residents per year; 1 mailing to BC residents in a 10 year period. • Presentations, news articles/monthly Hodge Podge radio – 1 service club; 2 lake associations. • Develop data reports and publish on website and in social media • Publish annual summaries, lake info sheets – website, presentations • Update Website with stormwater and monitoring information. • Post educational signs at the Rice Lake Wetland restoration project. 		<ul style="list-style-type: none"> • \$ 2,500 – School Education programs (GEN) • \$ 2,000 – Community Education (promotional items, advertng, print materials) (GEN) • 0 – Permit guides (UTY) • \$ 1,000 – Storm Drain literature and materials (GEN)

Education and Outreach

	On-going and 2020 Targeted Activities	Staff/Time	Financial Resources
<p>Collaboration with other units of government and partners</p>	<p>Becker COLA</p> <ul style="list-style-type: none"> Continue to partner with Becker COLA and Lake Associations – collaborate with potential MAISRC Regional Meeting; workshop for volunteer monitoring with Becker COLA – May 21st; present “PRWD Readiness Response Plan” to Region AIS. Promote or assist in promoting proper maintenance of septic systems through flyers, booklets and social media. Distribute MDH and MPCA materials about safe consumption of fish through at least two social media posts and/or flyers per year. <p>Becker County/Becker & Otter Tail SWCD’s</p> <ul style="list-style-type: none"> As projects develop (e.g., gravel mining, subdivisions), continue to provide technical input in order to protect surface water and groundwater. Practice oversight on County and City activities relating to water quality; advocate for City, County and State water quality and ecological enhancement Assist Becker County and local SWCDs, at least once per year, in promoting proper management of private wells through flyers, booklets, newsletters, social media, and local television. Educate Public about proper use and disposal of household hazardous waste, pharmaceutical products, and other personal care products – two social media posts or flyers per year. Educate, at least once per year, about proper septic system tank management and the effects of failing septic systems on drinking water through flyers, booklets, newsletters, social media, and local television. Assist with contacting landowners and making flyers to advertise irrigation workshops and other groundwater-related workshops sponsored by the MDA, Becker County SWCD and Otter Tail County SWCD. Support Becker County Septic Inspection Program; Promote alternative approaches to ISTS such as cluster systems (Sallie/Melissa) where appropriate. <p>City of Detroit Lakes</p> <ul style="list-style-type: none"> Protect Sucker Creek by continuing to serve on the Sucker Creek Preserve technical advisory committee (quarterly meetings), supporting protection and enhancement of Sucker Creek, and education about the Sucker Creek ecosystem. Assist the City of Detroit Lakes, at least once per year, in educating residents about wellhead protection and BMPs through utility bill inserts, newsletters, the District website, and social media. <p>MN DNR/Health/MPCA</p> <ul style="list-style-type: none"> Prevent habitat degradation and fragmentation through conversations with MDNR staff about their activities and how the District can help. Distribute materials about safe consumption of fish (mercury) via 2 social media posts per year. Offer assistance to MDH and Becker/Otter Tail SWCD to promote groundwater testing for arsenic. 		<ul style="list-style-type: none"> \$ 1,000 – MAISRC Meeting (LMP-01) and promote Readiness Response Plan. \$ 1,000- Pollinator Program (LMP-01)