2023 Work Plan for Pelican River Watershed District Area and Pelican River sub-watershed Area

OTW 1W1P: Pelican River WD/Pelican River Watershed -Targeted Focus Areas

2023-2032 Otter Tail River 1W1P

Plan Partners: Becker County, Otter Tail County, Becker SWCD, East Otter Tail SWCD, West Otter Tail SWCD, Cormorant WD

Surface Waters

Includes all water on the surface such as lakes, streams, wetlands, and drainage systems.

Primary Issues: Untreated Stormwater; Excessive Nutrient Loading; Unstable Stream Channels; Excessive Erosion (wind/water), insufficient protection **Secondary Issues:** High E.coli; Altered Hydrology (increased rate/quantity of water flows; bank erosion, habitat impacts), destruction of habitat

Focus Restoration Goal: St. Clair Lake; Campbell Creek/Ditch 12 (reduce sediment 126 tons/year)

Focus Enhance Goal: Big & Little Detroit; Sallie **Focus Protection Goal:** Floyd (Big/North), Little Floyd

Implementation Actions: Wetland Restoration/Creation; Stormwater Management; Shoreline/Streambank Stabilization; Ag Land management (soil health, water/sediment control structures);

CRP/RIM/Forest Easements; In-lake treatments; Septic/Wastewater

Habitat Management and Protection

Includes habitat for wildlife, game, birds, and aquatic life (fish and macroinvertebrates), and sensitive species such as wild rice, cisco, and trout.

Primary Issue: Aquatic Invasive Species (All Lakes, Rivers, Wetlands within the basin)

Secondary Issues: Destruction of In-Lake & Riparian Habitat (development pressure/shoreline alterations/river sediment loads); Barriers (dams, perched culverts) to Fish Movement (Pelican & Otter Tail Rivers)

GOALS: Aquatic Connectivity Enhancement, AIS Prevention and Management

OTW Goals: modify dams with rock arch rapids; manage Flowering rush, Curly-leaf pondweed; prevent AIS introductions to waters, survey vegetation on lakes; address perched culverts to allow for fish passage; Promote & install shoreline restoration projects, acquire one conservation easement or AMA

Implementation Actions: AIS prevention, monitoring, adaptive management, rapid response, research, special studies; Land Protection (conservation easements, acquisition of forests, wetlands or other sensitive aquatic areas); riparian buffers and enhancement, shoreline management (shoreline restoration, removal of seawalls/retaining walls); incorporate fish spawning habitat into applicable projects; encourage wildlife and pollinator-friendly seed mixes and plantings in buffers or linear projects

Land Stewardship

Includes multiple benefits of managing the land for healthy soils, groundwater, surface water, and habitat quality.

Primary Issues: Fragmentation and loss of forests and grasslands by land use change impacts land resilience, habitat, and surface and groundwater quality.

Secondary Issues: Soil Quality Degradation - Organic matter depletion; Inadequate Habitat for Fish & Wildlife - Habitat Degradation & Habitat Continuity

Goals: Protection of outstanding resources • Fragmentation of forests and grasslands • Destruction of riparian habitat

Implementation Actions: Forest Management Plans, SFIA, 2c, Easements, Acquisitions

Groundwater

Includes all groundwater resources including aquifers, with a focus on drinking water

Primary Issues: Water Quality Degradation-Excess nutrients in groundwater; Groundwater contamination

Secondary Issues: Groundwater Quality, Groundwater sustainability is vulnerable to overuse and loss of recharge

Goals: Protect vulnerable Drinking Water Supply Areas and vulnerable aquifers.

Implementation Actions: managing nitrates, arsenic, well-sealing, wellhead protection, septic systems, and protection of Drinking Water Supply Management Areas.

Constructed Environmental Enhancements- Structural Practices

Stormwater Management (constructed treatments, retrofits, wet/dry basins, street cleaning, raingardens, other), 103E Drainage Systems, Wetland Restoration/Creation, Shoreline/Streambank Stabilization/Riparian buffers, Ag BMPs (sed basins, grade stabilization, filter strips), Bacteria Reduction (Ag Waste Storage or pit closures, livestock fencing & crossings) Well/Septic Systems; Technical Assistance/Engineering (site assessment; surveys, preliminary analysis/design, final design, construction supervision, installation, inspection, final sign-off.

	On-going and 2023 Targeted Activities	Financial Resources
Detroit Lake/Sallie Rice Lake Nutrient Reduction Project (Phase 2 Construction) Nutrient Reduction (Phosphorus) Wetland Restoration	• Capital Improvement Project/Wetland Restoration. (2023 – 24) Design and complete Phase 2 of the Rice Lake Wetland restoration project to reduce Rice Lake Wetland's release of phosphorus to the Pelican River and create new wildlife habitat; complete BWSR Grant Phase 2 workplan, project bidding, project construction, close-out Phase 1 and 2 grants.	• \$400,000 - Rice Lake construction (UTY- Grant Match) – 25% grant match (BWSR grant)
St. Clair Lake TMDL Regional Urban Stormwater Management & Treatment	 Project Development/Technical Assistance. OTW Implementation funding (23/24) for Regional Stormwater Treatment Enhancement Study (Fairgrounds treatment area) Capital Improvement Project. Apply for BWSR Clean Water Grant (Competitive) for Washington Mall Parking Lot Stormwater management/treatment improvements; explore augmenting with OT Funding for Construction. Develop and implement a phosphorus load tracking and credit system for Lake St. Clair with MPCA 	Funding: OT - \$50,000; City of DL \$50,000 Match
Floyd/Little Floyd Campbell Creek/Ditch 12 Streambank and Ditch Stabilization	 Campbell Creek Watershed Restoration Program MPCA 319 small watershed grant (\$250 K, \$100 K match for 2022-2025) Develop and implement a streambank stabilization plan for Campbell Creek; Explore OT Implementation and MN DNR for additional match) 	• \$100,000- Match (UTY- Grant Match 40%); 319 Federal Grant (\$250K)
District Lakes/Streams Stormwater Management	Northern area of City – TBD in future	
Sallie Ditch 14 Complex Nutrient Reduction	Continue to monitor phosphorus loadings between St. Clair Lake and Pelican River/Detroit outlet	
St. Clair & North Floyd Internal Loading Management -Nutrient Reduction (Phosphorus)	• Continue to monitor in lake phosphorus concentrations; continue to implement upstream WQ measures; Alum treatment if	
Pelican River (Hwy 10 – Detroit E.Coli	Continue monitoring to pinpoint source	
District-wide Localized Flooding	• FEMA grant for hydraulic modeling study to identify flood prone areas, potential damages, and critical infrastructure that may need updating. Update Floodplain insurance maps.; \$50,000 match (UTIL), Grant \$150,000	\$50,000 (UTY) Match

	Planned Landscape Management — Non-Structural Practices Ordinances/Rules, Soil Health (cover crops, reduced tillage, perennial crops, crop rotation, pasture management), Forest Stewardship Plans, Irrigation Mgmt.	
	On-going and 2023 Targeted Activities	Financial Resources
Floyd/Little Floyd Campbell Creek/Ditch 12 Ag Land Management WASCB Soil Health	 Campbell Creek Watershed Restoration Program MPCA 319 small watershed grant (\$250 K, \$100 K match for 2022-2025) Identify and target critical agricultural erosion and sediment transport areas in North and Little Floyd subwatersheds. Collaborate with Becker SWCD to identify and target critical erosion areas and to promote the use the erosion control measures, such as perennial cover, conservation tillage, residue management, buffers, structural practices, and land protection easements. 	 \$100,000- Match (UTY-Grant Match 40%); 319 Federal Grant (\$250K) OTW Funding via Becker SWCD for Land Management Practices
<u>District-Wide</u> Maintain 103E Public Drainage Systems Ditch 11/12 (Campbell Creek); Ditch 13 (Pelican River from Little Floyd to Detroit); Ditch 14 (Hwy 10 – St. Clair – Pelican River)	 Ensure proper ditch management (in accordance with MN 103E) and PRWD Drainage Management Policy (updated 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 Review maintenance funds (11/12; 14 last assessed in 2017; Ditch 13 Assessed \$20k - 2023); Advocate use of Drainage Work Group to address legislative or policy changes. 	 \$ 4,800 Ditch Buffer Enforcement (DBE) \$ 4,500 Beaver and blockage Removal (D 11-12,13,14) \$750 Drainage system meetings/trainings (DBE & Ditch 11/12, 13, 14)
District-Wide Rule Permit Program and Enforcement	 Provide continuous and consistent enforcement of District Rules & MN Buffer Law 103E Ensure that rules support the MPCA Stormwater Regulations and Manual, Becker County Shoreland Ordinance, the City of Detroit Lakes MS4 & Shoreland Ordinances, and Wellhead Protection Plan Update forms, program information, and project review fees as needed Website Information – pictures, BMP's, templates 	\$ 1,000 - Permit materials/print and website – see Education/Outreach
District Planning Area Forest Stewardship Plans	 Provide assistance with developing and implementing Forest Stewardship Plan within the District area. Attend technical meetings (Kemper) 	

Habitat Protection and Management

AIS prevention, monitoring, adaptive management, rapid response, research, special studies; Land Protection (conservation easements, acquisition of forests, wetlands or other sensitive aquatic areas); riparian buffers and enhancement, shoreline management (shoreline restoration, removal of seawalls/retaining walls); incorporate fish spawning habitat into applicable projects; encourage wildlife and pollinator-friendly seed mixes and plantings in buffers or linear projects

	On-going and 2023 Targeted Activities	Financial Resources
Project 1B (Sallie/Melissa) Project 1C (Detroit, Curfman) Muskrat AIS Adaptive Management	 Conduct delineations and implement the flowering rush management plan to achieve less than 2% occurrence Detroit, Curfman, Muskrat, Sallie, Melissa Lakes; Conduct/continue curly-leaf pondweed delineations and treatments to reduce frequency of occurrence by 90% on Detroit, Curfman, Muskrat (MN DNR Grant Awarded), Sallie, Melissa. Provide readiness response treatments if necessary. Apply for cost-share grant funding for treatments (Becker County & Mn DNR, City of DL MN DNR 2022 (unspent funds) and 2023 Grants for 2023 Treatments: Muskrat (2022 unspent-\$1,500 CLP); Melissa 2023 - \$1,650; applied for grant funding, but no other lakes funded- DNR grant criteria changed Becker County AIS grants (MN State funds): apply for \$4,000 on Detroit public access areas/marinas (CLP) 	 \$26,700 for AIS plant management (1B) \$32,100 for AIS plant management (1C) \$2,000 Muskrat (LMP-01) \$30,000 Rapid Response, Research (LMP-01) \$6,000 - POI and Delineations for Detroit, Curfman, Sallie, Melissa, Muskrat (LMP-01)
Habitat -District-Wide AIS Prevention, Monitoring, Research, Special Studies	 Annually review and update Readiness Response Plan for priority invasive species (Eurasian Water Milfoil, Starry Stonewort, Hydrilla). Conduct research to identify alternative treatment practices for flowering rush (if opportunity arises): ACOE has funds for FR research in 2023; explore options for treatment in flowing water conditions. 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 (2025); Continue to partner with MN DNR zooplankton study on Detroit Lake). Classroom AIS Education _ see education section 	 \$2,000 Education (LMP-01) \$10,000 Research (LMP-01) \$30,000 Rapid Response, Research (LMP-01)
Habitat -Little Floyd-Ditch 13, Bucks Mill (Pelican River) Fish Passage Projects	 Implement Little Floyd Lake fish passage improvements. Apply for CWL grant with MN DNR for Buck's Mill Dam modification Project when ready 	
Habitat District-wide Buffer and Shoreline Management	 Aquatic Vegetation Monitoring. Conduct Point Intercept Surveys for submerged aquatic vegetation – Long, Pearl, Munson Shoreline management (shoreline restoration, removal of seawalls/retaining walls); encourage wildlife and pollinator-friendly seed mixes and plantings in buffers 	• \$5,000 – Cost Share
<u>Habitat – District-wide</u> Land Protection	Assist Project Partners with promotion of targeted area conservation easements	

Project Development, Outreach, Education- Activities that support Workplan Goals and Outcomes

Education/Outreach: Environmental Education, Events, Publications, Local Media, Mailings, Public Engagement/Outreach, Meetings, School Outreach, Communications **Project Development:** Peer-To-Peer, preliminary information gathering, landowner site visits & technical assistance, demonstration plots, workshops, targeted outreach, conservation marketing

GOAL: track by number of events, projects, people reached, adopted practices

	On-going and 2023 Targeted Activities	Financial Resources
EDUC/OUTREACH Local Media, Mailings	 Watershed information - Publish annual summaries, lake info sheets, data reports, Project "snapshots", press releases Continually update Facebook page, and other social media outlets, Website, local ads Monthly Hodge Podge radio Contribute Information to Lake Association Newsletters, Otter Tail Snapshot (monthly release), County Tax mailings, and other organizations; Develop an OT Watershed Outreach plan to promote consistent messaging and strategies with plan partners. 	
EDUC/OUTREACH Events, Workshops, Public Engagement, Meetings	 Present at LGU board meetings, lake associations, COLA's, Service groups, Contractors, etc. Maintain Otter Tail Citizen Advisory Committee Publish information (monitoring data, studies, events, etc) on Websites and social media Becker County Fair; BMP Workshops, landowner forums Assist with other partners events (Breakfast on Farm, Raingarden workshops, Salt Applicators) OTW 1W1P- assist with public surveys when needed Conduct public surveys as needed 	 \$ 2,500 - Community Education (promotional items, advertise, print materials) (GEN) 2,500 Events, Workshops
EDUC/OUTREACH Local Schools	 Continue to assist with environment education (classroom, field trips, events) such as 4-H, FFA, Tamarac Fall Festival, Envirothon. Promote education cost-share opportunities Aquatic Invasive Species (AIS) Classroom Education (Middle School) Maintain PRWD Education Grant Programs: Detroit Lakes Water Festival (\$250) Sucker Creek Education Day (\$600) Environmental Field Trips (\$ 6,000) Mini-Grant Science Education Classroom Supplies (\$2,500) Environmental Service Projects (\$2,500) 	• \$ 15,000 – Environmental Education Grant Program (UTY)
PROJECT DEVELOPMENT Peer to Peer	 Discuss project implementation and make local connections (Campbell Creek); Forest Stewardship plans; continued communication and cooperation between agencies; participate in group meetings Encourage use of pollinator-friendly vegetation and trees on city property and linear road projects. 	
PROJECT DEVELOPMENT Site visits & Technical Assistance	 Site visits for permits; shoreline repair/restoration, stormwater management Participation in Drinking Water Protection Plan Development and Implementation Meeting; Forest Stewardship plans and options. Ag BMPs - Campbell Creek Area; Use PTM or other tools 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. Continue to assist with City shoreline projects - HWY 10 Overlook, South Shore Park, North Shore public access Hold workshops with technical information and cost share for implementation 	 OTW - \$8,000- Consult/cost share (UTY). Collaborative Cost Share Program - \$10,000 (UTY)
PROJECT DEVELOPMENT Demonstration Plots, Workshops, Targeted Outreach	Develop demonstration plots, hold workshops, present technical information, cost share for implementation, compliance letters, signage at project sites, targeted mailings	

Surface Water Monitoring & Data Collection - District Program		
	On-going and 2023 Targeted Activities	Financial Resources
Lake & Stream Water Quality Monitoring	 Update the Annual Monitoring Plan; incorporate additional data for special projects, studies, project effectiveness as needed (E.coli, Chlorides, Erosion) Complete Annual Monitoring Report (lake, stream, veg surveys, shoreline surveys, AIS, special projects); assess water quality, flow, and annual nutrient loading (phosphorus, sediment, e. Coli) Flow measurements: Maintain HOBO's and water level gages at lake outlets and key stream locations; record water levels on a weekly basis during ice off season; replace gages or HOBO's as needed; collect flow rate data Conduct Lake/Stream water sampling program (TP, OP, TSS, Chl-A, Chlorides, e. Coli) Update Lake Management Plan data as needed on website Conduct shoreline surveys on lakes with potential for increased development (sand blanket, rip rap, retaining walls, natural shoreline, number of boats, docks, lifts) – Detroit (Big, Little) & Curfman. Investigate using drone flyover. Conduct vegetation surveys (Long, Pearl, Munson) and delineations (Detroit, Curfman, Muskrat, Sallie, Melissa) 	 \$3,000 Special Project Study (DCM-01) \$1,000 Industrial Park (UTY) Veg surveys - \$6,000 (LMP-01)
Resources/ Equipment	 Replace aging monitoring boat/motor/trailer Investigate monitoring using GIS technology: Field tablets, software licensing Employ 2-3 summer interns to assist with Data Collection/Monitoring 	 \$ 35,000 Capital Outlay (LMP-01) \$ 5,000 equipment purchases & repairs (DCM-01) \$ 500 ESRI GIS software grant (LMP-01, UTY)

Operations/Administration Program

у	On-going and 2023 Targeted Activities	Financial Resources
District Operations	 Develop 2024 Annual Budgets, Levies, Assessments, Fees (Aug/Sept) Develop 2023 Work Plan (OTWP PRWD), Monitoring Plan (PRWD), Education Plan (Jan-Feb) Complete 2022 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, wage studies as needed Complete Contract Renewals as needed -GIS software, QB's, Microsoft, Office Lease (Feb 2023- 26) Provide project oversight- grants, reports, budgets, payroll Maintain and upgrade office equipment; investigate software for Outreach documents. Update Website information (Operations, Data, Projects, Permits, Programs, etc.) & Social media outlets Internet/Email Upgrade Renew insurance through LMCIT (Property, Workers Comp, Board/Staff bonding) 	 \$15,000 LMCIT and MAWD Dues 2023, RRWMB Lobby (up to \$ 8,000) – (GEN) \$4,500 software support; – (GEN) \$8,000 EQT \$ 3,500 website (GEN) \$ 2,000 – Community Education (promotional items, adverting, print materials) (GEN)
Fiscal Management	 Perform payroll and bookkeeping activities – payroll, liabilities, reports; monthly bills and financial statement; Annual Financial audit Update audit contract (every 3 yrs. – current contract FY 22-24) Update QB program (every 3 yrs. – 2022 updated) Staff time for OTW Implementation grant coordination, admin, reporting 	\$ 6,800 Audit 2022 (GEN)\$800 QB Enhanced Payroll (GEN)
Internal Governance Policies	Review and Update Governance Policies/Procedures – Ongoing	
District Manager and Staff Education	 Continuing education for managers and staff – Minnesota Watersheds (MW) Annual Conference, MW's Summer Tour, PRWD Summer Project Tour. Attend training/seminars/conferences/courses, regional meetings, and legislative events related to Water Management Activities. Continue to attend and present at workshops and conferences. 	\$ 500- Project Summer Tour (GEN)\$6,000 Manager MAWD (GEN)
OTW 1W1P Advisory Committees	 OTW MOA Partnership: each LGU approve OTWP Annual Work Plan/Budgets/Implementation Plan Policy Committee (Kral, Alt): One board member from each MOA entity; Meets 2X/yr or as needed; review, approve TAC recommendations/annual work plan; provide direction to TAC. Technical Advisory Committee (Guetter): One staff member from each MOA entity. Meets monthly or additionally as needed; reviews the status of available implementation funds from plan participants, identifies collaborative funding opportunities, provides input for the annual work plan submitted to BWSR, biennial review and confirmation of priority issues, evaluates and recommends response to emerging issues, prepares plan for policy committee approval. Include federal and state agencies as needed. Forest land stewardship plans (Kemper). Stakeholder Advisory Committee: Hold one OTW meeting annually; Targeted - Campbell Creek Stakeholders. 	

District 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.
- 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 aguifers 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.