



Pomme de Terre River Association

Who are we?

Founded in 1981, the Pomme de Terre River Association (PDTRA) is a watershed-based, grant-funded partnership among the 6 counties within the watershed:

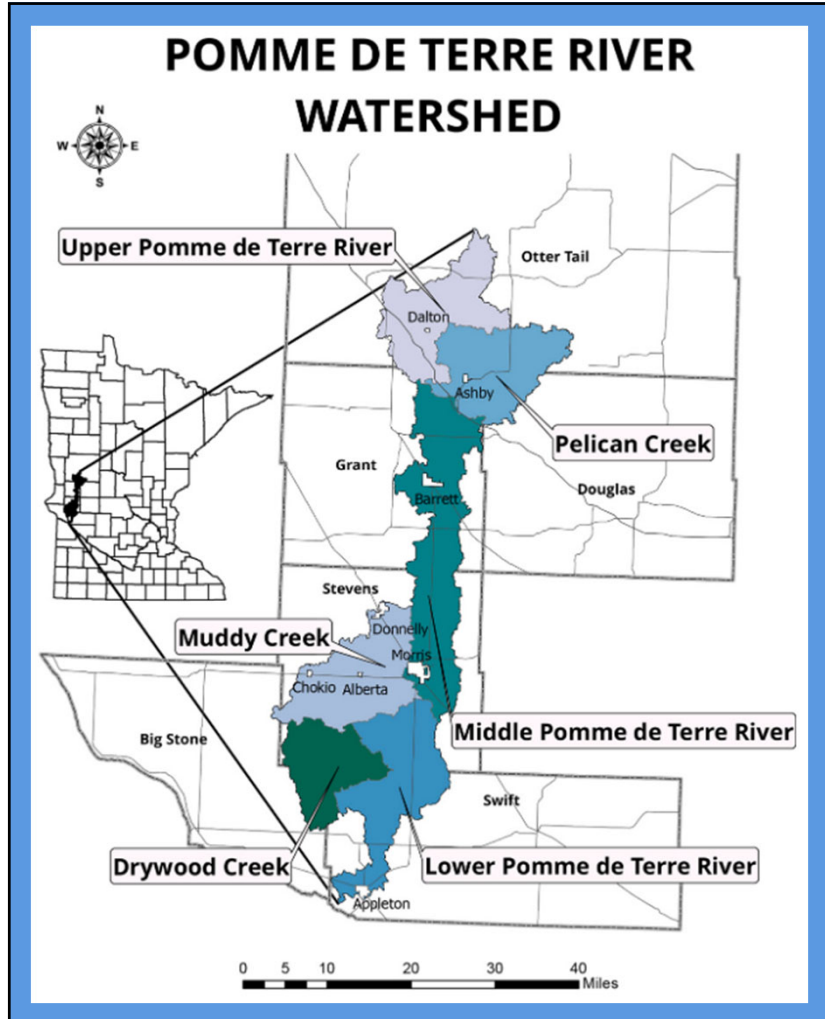
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|---------------------|--|
| ◆ Big Stone County | ◆ Big Stone Soil & Water Conservation District |
| ◆ Douglas County | ◆ Douglas Soil & Water Conservation District |
| ◆ Grant County | ◆ Grant Soil & Water Conservation District |
| ◆ Otter Tail County | ◆ West Otter Tail Soil & Water Conservation District |
| ◆ Stevens County | ◆ Stevens Soil & Water Conservation District |
| ◆ Swift County | ◆ Swift Soil & Water Conservation District |

The PDTRA is governed by a Joint Powers Board (JPB) and guided by a Technical Advisory Committee (TAC).

JPB: One SWCD supervisor and one County Commissioner from each member county.

TAC: One SWCD employee and one County employee from each member county.





- ◆ 875 square miles (560,399 acres)
- ◆ 751.3 miles of river and streams
 - ◆ Pomme de Terre River is 105 miles long
- ◆ 69% cropland
- ◆ 9% water
- ◆ 9 cities
- ◆ Population 15,232 (2010 census)
- ◆ Percent of watershed in each county:
 - ◆ Stevens: 39%
 - ◆ Otter Tail: 23%
 - ◆ Grant: 18%
 - ◆ Swift: 13%
 - ◆ Douglas: 4%
 - ◆ Big Stone: 3%



PDTRA Past Funding & Accomplishments

- 💧 Clean Water Fund Grants
 - 💧 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2019
- 💧 Federal 319 Grants
 - 💧 2014, 2016, 2019
- 💧 Pre-WRAPS & WRAPS Grants
- 💧 Clean Water Partnership Grant 2013, SWAG Grants, 1W1P

- 💧 Total grant funding since 2014: \$2,810,307



PDTRA Projects



- ◆ Rain Gardens
- ◆ Water & Sediment Control Basins
- ◆ Streambank Restorations
- ◆ Drywood Creek Dam Removal & Stream Restoration
- ◆ Wetland Restorations
- ◆ Filter Strips
- ◆ Cattle Exclusions
- ◆ And more!



Roles and Responsibilities of Involved Entities



Joint Powers Board

- Adopt, implement, amend the Plan
- Allocate funding sources
- Approve work plans, contracts, fiscal reports, budgets, BWSR required reports, grant applications
- Approve assessment of plan progress and measurable results
- Establish committees

Technical Advisory Committee

- Provide expertise and scientific data
- Develop recommendations for Plan implementation
- Assist with work plan development and implementation
- Identify and coordinate grant opportunities
- Assist with assessment of plan progress and measure results
- Provide recommendations to the PDTRA JPB

Roles and Responsibilities of Involved Entities



Pomme de Terre River Association Staff

Prepare work plan
Prepare fiscal reports and budgets
Prepare reports required by grantors
Prepare and submit grant applications
Assess plan progress & measure results
Provide general administrative and fiscal functions

County Boards and SWCDs

Approve the plan for submittal to the Board of Water & Soil Resources
Adopt plan locally
Implement the plan

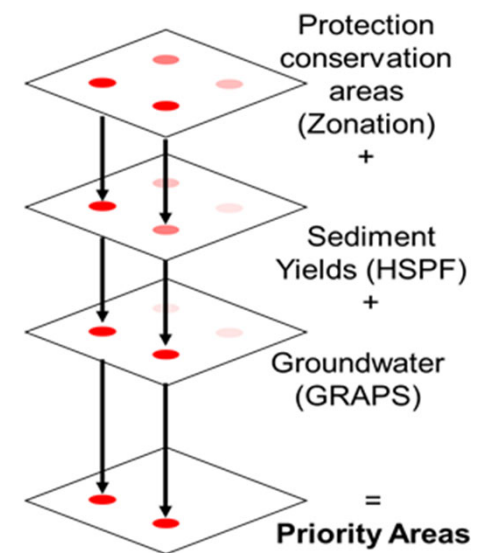
Current and Potential Partners

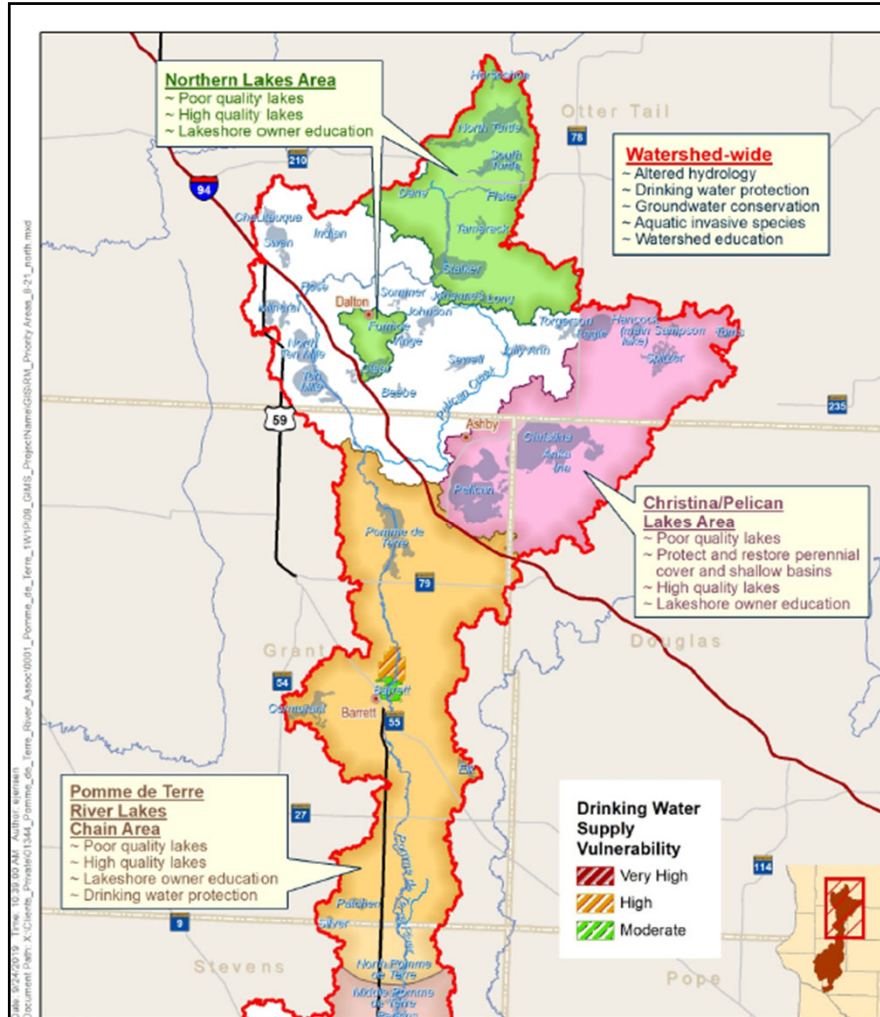


Department of Natural Resources	Local Sportsmen's Clubs
Board of Water & Soil Resources	SWCDs
Pollution Control Agency	Townships
Department of Health	Cities
Department of Agriculture	Counties
MN Pheasants Forever	Landowners
University of Minnesota	Lake Associations
NRCS	FSA

Prioritizing Areas for Implementation

- 💧 Comprehensive watershed priority model
- 💧 Combination of model outputs & zonation conservation prioritization
- 💧 Local knowledge & recent monitoring of known impairments or near impairments, drinking water sensitivity, existing BMPs & easements, high sediment or phosphorus levels
- 💧 Targeted Implementation Plan developed by Houston Engineering using PTMApp





North Region Priority Areas

Northern Lakes Area

- Poor quality lakes
- High quality lakes
- Lakeshore owner education

Watershed-wide

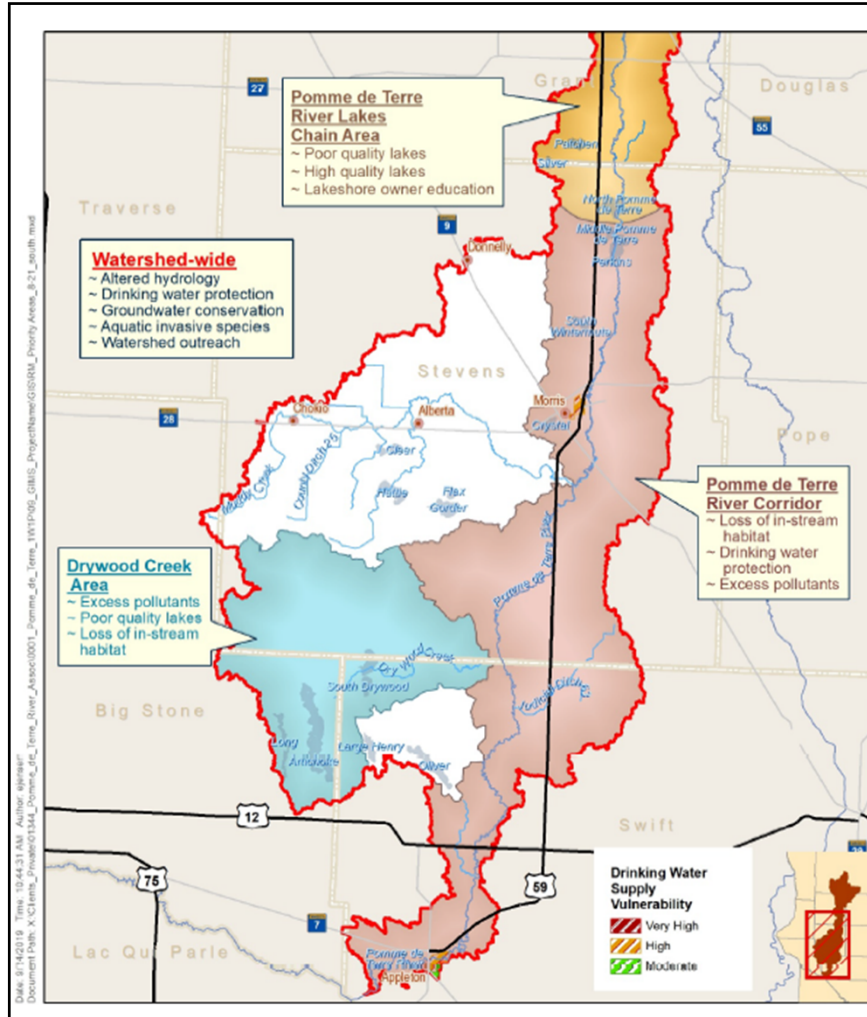
- Altered hydrology
- Drinking water protection
- Groundwater conservation
- Aquatic invasive species
- Watershed education

Pomme de Terre River Lakes Chain Area

- Poor quality lakes
- High quality lakes
- Lakeshore owner education
- Drinking water protection

Christina/Pelican Lakes Area

- Poor quality lakes
- High quality lakes
- Protect & restore perennial cover & shallow basins
- Lakeshore owner education



South Region Priority Areas

Watershed-wide

- Altered hydrology
- Drinking water protection
- Groundwater conservation
- Aquatic invasive species
- Watershed education

Pomme de Terre River Lakes Chain Area

- Poor quality lakes
- High quality lakes
- Lakeshore owner education

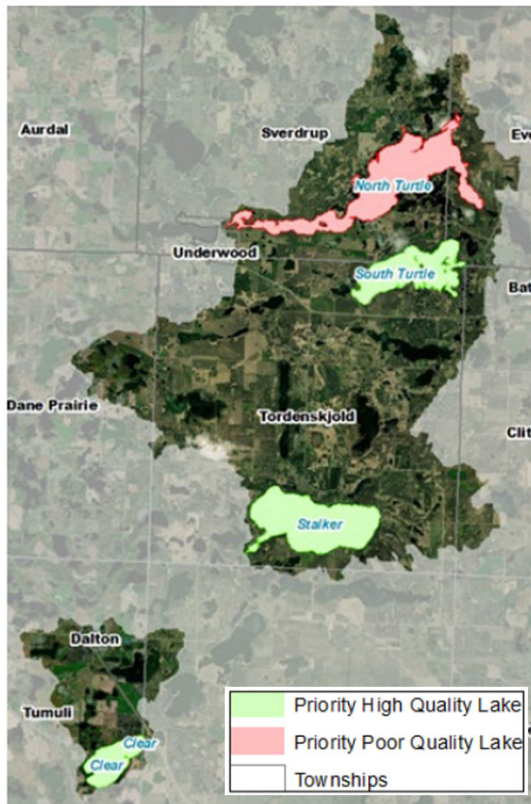
Drywood Creek Area

- Excess pollutants
- Poor quality lakes
- Loss of in-stream habitat

Pomme de Terre River Corridor

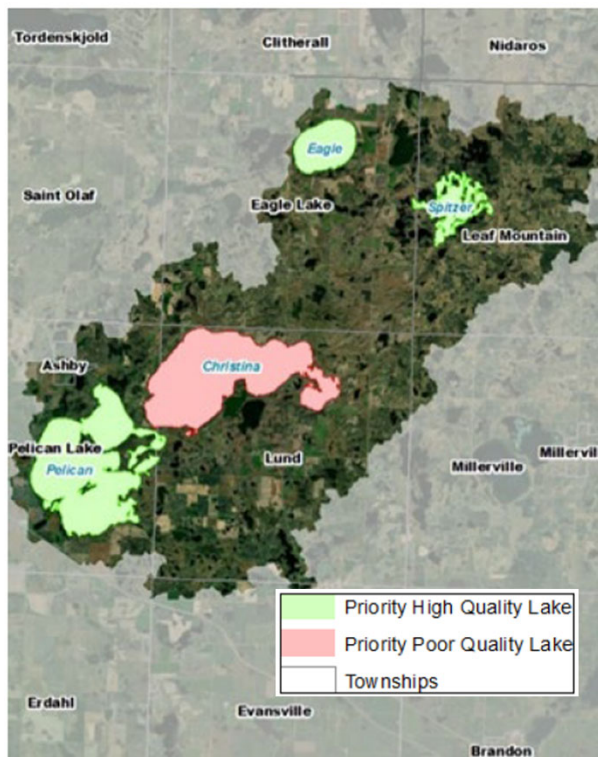
- Loss of in-stream habitat
- Drinking water protection
- Excess pollutants

Northern Lakes Area (Otter Tail County)



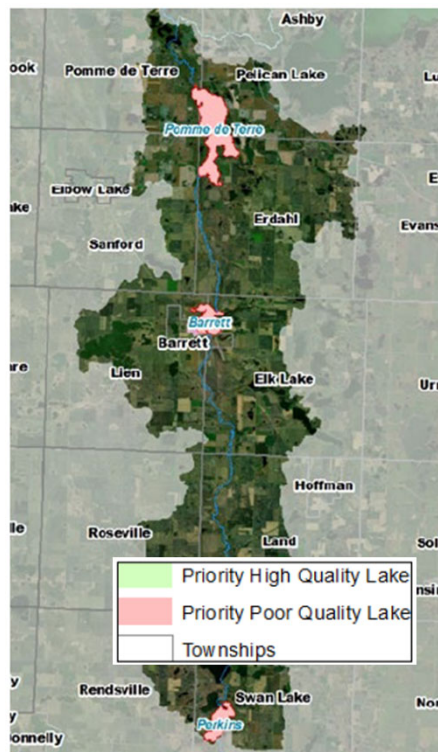
Priority - Goal	Implementation Activities
Poor Quality Lakes - Reduce phosphorus runoff by 57 lb/yr to North Turtle Lake	Meetings to identify in-lake management and engage landowners Inspect subsurface sewage treatment systems Update noncompliant septic systems Conduct shoreline condition inventories Implement shoreline restoration projects for erosion control Implement structural & nonstructural BMPs
High Quality Lakes - Reduce phosphorus runoff by 25 lb/yr to South Turtle Lake, 135 lb/yr to Stalker Lake, and 126 lb/yr to Clear Lake	
Lakeshore Owner Education - Increase understanding of shoreland regulations and how to be better shoreline stewards	Provide shoreland owners with annual lakeshore management education and outreach Distribute education materials via mailings & at time of property transfers

Christina-Pelican Lakes Area (Otter Tail, Grant, & Douglas Counties)



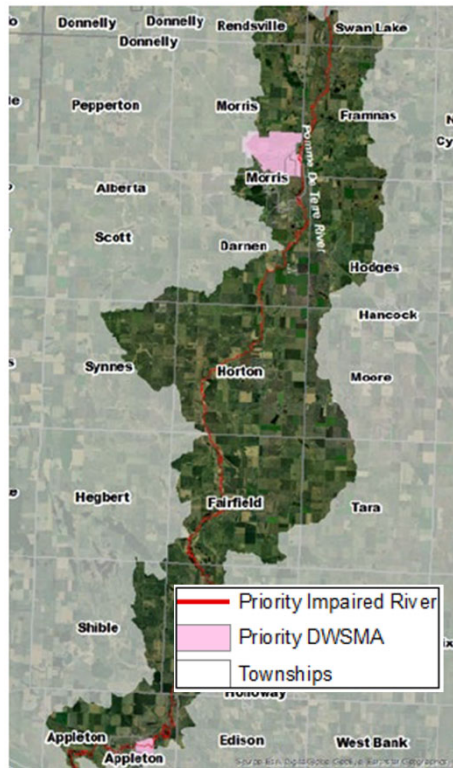
Priority - Goal	Implementation Activities
Poor Quality Lakes - Reduce phosphorus runoff by 59 lb/yr to Christina Lake	Meetings to identify lake management and engage landowners Inspect subsurface sewage treatment systems
High Quality Lakes - Reduce phosphorus runoff by 14 lb/yr to Eagle Lake, 95 lb/yr to Spitzer Lake, and 29 lb/yr to Pelican Lake	Update noncompliant septic systems Conduct shoreline condition inventories Implement restoration projects for erosion control Implement structural & nonstructural BMPs
Lakeshore Owner Education - Increase understanding of shoreland regulations and how to be better shoreline stewards	Provide shoreland owners with annual lakeshore management education and outreach Distribute education materials via mailings & at time of property transfers
Protect & Restore Perennial Cover and Shallow Basins - Implement perennial vegetation and protect wetlands	Protect water quality by maintaining wetland and grassland currently enrolled in conservation programs; increase amount of perennial vegetation and wetland storage in the watershed

Pomme de Terre River Lakes Chain (Grant & Stevens Counties)



Priority - Goal	Implementation Activities
Drinking Water Protection - Protect public drinking water supplies with moderate and high vulnerability	Convert cropland to perennial vegetation
	Review wellhead protection plans & serve on those teams
	Contact landowners about completing BMPs
Poor Quality Lakes - Reduce phosphorus runoff by 275 lb/yr to Perkins Lake, 98 lb/yr to Barrett Lake, 142 lb/yr to Pomme de Terre Lake	Meetings to identify in-lake management and engage landowners
	Inspect subsurface sewage treatment systems
	Update noncompliant septic systems
	Conduct shoreline condition inventories
	Implement restoration projects for erosion control
High Quality Lakes - Reduce phosphorus runoff by 4 lb/yr to Elk Lake	Implement structural & nonstructural BMPs
	Provide shoreland owners with annual lakeshore management education and outreach
	Distribute education materials via mailings & at time of property transfers
Lakeshore Owner Education - Increase understanding of shoreland regulations and how to be better shoreline stewards	

Pomme de Terre River Corridor (Stevens & Swift Counties)



Priority - Goal	Implementation Activities
Drinking Water Protection - Protect public drinking water supplies with moderate and high vulnerability	Convert cropland to perennial vegetation Review wellhead protection plans, serve on those teams Contact landowners about completing BMPs
Excess Pollutants - Reduce phosphorus runoff by 382 lb/yr, reduce sediment by 2501 tons/yr - Reduce stormwater runoff impacts	Implement structural and nonstructural BMPs Restore drained shallow basins Implement nutrient management plans Work with cities to develop stormwater management plans in urban areas
Loss of In-Stream Habitat - Improve habitat by reducing sedimentation due to bank erosion - Improve habitat by establishing and maintaining perennial buffers and floodplain connections	Implement BMPs to reduce erosion due to livestock Implement pasture management & grazing plans Complete streambank stabilization projects Implement side water inlets where appropriate Implement buffers on "other waters" coming into the main stem of the Pomme de Terre River

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Drywood Creek Area (Stevens, Swift, & Big Stone Counties)



	Priority - Goal	Implementation Activities
	Poor Quality Lakes - Reduce phosphorus in direct drainage runoff by 99 lb/yr to Artichoke Lake	Identify lake management & engage landowners
	Excess Pollutants - Reduce direct runoff of phosphorus by 209 lb/yr and reduce sediment by 1029 tons/yr	Inspect subsurface sewage treatment systems; update noncompliant systems
		Conduct shoreline condition inventories & restorations
	Loss of In-Stream Habitat - Reduce sedimentation due to bank erosion	Implement structural & nonstructural BMPs
		Restore drained shallow basins
	Loss of In-Stream Habitat - Establish & maintain perennial buffers and floodplain connections	Implement nutrient management plans
		Work with cities to develop stormwater management plans
		Implement BMPs to reduce erosion caused by livestock
		Implement pasture management & rotational grazing plans
		Complete streambank stabilization projects
		Implement side water inlets and buffers where appropriate
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Watershed Wide Priorities



Priority - Goal	Implementation Activities
Drinking Water Protection - Provide resources to well owners about water testing options for nitrate & arsenic - Reduce conduits to groundwater system & protect groundwater quality by sealing abandoned wells	Host annual well water nitrate/arsenic testing clinics and make testing kits available to the public
	Provide cost-share assistance to well owners for sealing abandoned & unused wells
Groundwater Conservation - Promote water conservation measures that improve water use efficiencies	Promote adoption of irrigation BMPs
	Request County Geologic Atlas
	Identify recharge areas from Atlas
	Continue observation well monitoring
Altered Hydrology - Reduce annual runoff by 0.08 inch (or 3,527 acre-feet) at the outlet of the river - No increase in runoff from public water basins during peak runoff periods	Increase perennial vegetation & restore wetlands
	Implement structural & nonstructural BMPs
	Identify non-contributing areas
	Pursue management plans for existing and future controlled outlets on public water basins

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Watershed Wide Priorities

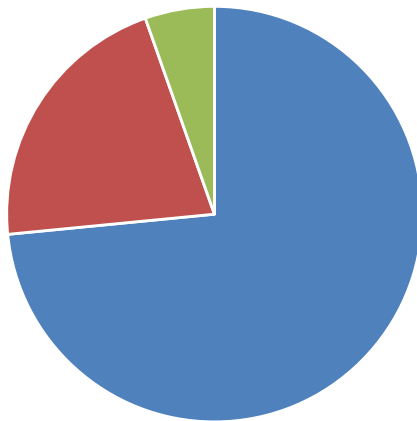


Priority - Goal	Implementation Activities
Aquatic Invasive Species - Work towards preventing spread of AIS by improving coordination of county programs across the planning area	Annual workshops to coordinate County AIS plans and implementation
	Attend DNR district-led meetings
	Continue implementing education programs
	Work with local law enforcement agencies on inspections
Watershed Outreach - Facilitate networking and participation of targeted groups to assess, build, and leverage community capacity - Increase adoption of BMPs via communication with landowners & producers - Provide information about how land-use decisions impact the watershed and resources to locally elected decision-makers - Encourage soil and water stewardship and awareness across all generations	Establish and facilitate advisory groups and soil health teams
	Conduct regional tours of priority areas in watershed to promote partnerships & discussion
	Host and facilitate BMP-focused demonstrations and soil health field days
	Identify target audience for BMP adoption
	Create and host consistent orientation to newly elected local officials
	Coordinate with UMN Extension to host Aqua Chautauqua in watershed
	Conduct annual kayak tour on Pomme de Terre River and educate about stream ecology
	Continue K-12 curriculum about watershed management
	Create a list serve to regularly share information about the watershed 18

Budget Overview

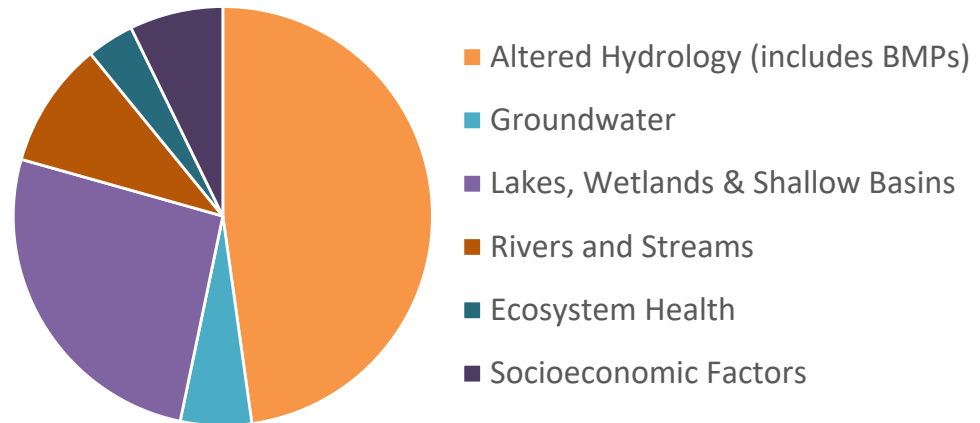


Funding Sources



■ Federal ■ State ■ Local

PDTRA CWMP Budget Summary



Public Hearings



South Region Hearing

March 4, 2020, 5:00 pm at Old No. 1, Morris MN

- 8 public attendees + PDTRA members
- Few questions, minor discussion, no written comments submitted

North Region Hearing

March 10 , 2020, 5:00 pm at Dalton Community Center, Dalton MN

- 14 public attendees + PDTRA members
- Many questions, substantial discussion, no written comments submitted

Implementation Structure

This plan will be implemented by the 12 entities within the Pomme de Terre River Association:

- ◆ Big Stone County
- ◆ Douglas County
- ◆ Grant County
- ◆ Otter Tail County
- ◆ Stevens County
- ◆ Swift County
- ◆ Big Stone Soil & Water Conservation District
- ◆ Douglas Soil & Water Conservation District
- ◆ Grant Soil & Water Conservation District
- ◆ West Otter Tail Soil & Water Conservation District
- ◆ Stevens Soil & Water Conservation District
- ◆ Swift Soil & Water Conservation District

The PDTRA will cooperate the same way it has for many years.

To implement this plan, our focus will be on projects and landowners within the plan's priority areas.



Questions?



For more information:

Pomme de Terre River Association 320-589-4886 x 109

Big Stone SWCD 320-839-6149

Douglas SWCD 320-763-5395

Grant SWCD 218-685-5395

Stevens SWCD 320-589-4886

Swift SWCD 320-842-7201 x 3

West Otter Tail SWCD 218-998-5300

pdtriver.org/projects/one-watershed-one-plan

bwsr.state.mn.us/one-watershed-one-plan



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