

**Environment and Natural Resources Trust Fund
2019 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 099-B

State Park Waste Water Systems Condition Assessments

Category: B. Water Resources

Sub-Category:

Total Project Budget: \$ 1,173,776

Proposed Project Time Period for the Funding Requested: June 30, 2021 (2 yrs)

Summary:

The project will result in an inventory and functional assessment of septic and waste water systems located in state parks and a 10-year Construction Improvement Plan (CIP) which will be used to guide future capital investment decisions.

Name: David Johnson

Sponsoring Organization: MN DNR

Title: Design & Construction Manager

Department: _____

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St. Paul MN 55347

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Web Address http://www.dnr.state.mn.us

Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Map of State Park and Recreational Facilities

<input type="checkbox"/>	Funding Priorities	<input type="checkbox"/>	Multiple Benefits	<input type="checkbox"/>	Outcomes	<input type="checkbox"/>	Knowledge Base	
<input type="checkbox"/>	Extent of Impact	<input type="checkbox"/>	Innovation	<input type="checkbox"/>	Scientific/Tech Basis	<input type="checkbox"/>	Urgency	
<input type="checkbox"/>	Capacity Readiness	<input type="checkbox"/>	Leverage	<input type="checkbox"/>		TOTAL	<input type="checkbox"/>	%
<input type="checkbox"/> If under \$200,000, waive presentation?								



PROJECT TITLE: State Park Waste Water Systems Condition Assessments

I. PROJECT STATEMENT

The project will result in an inventory and functional assessment of septic and waste water systems located in state parks and a 10-year Construction Improvement Plan (CIP) which will be used to guide future capital investment decisions. Many of these systems are located in close proximity to sensitive groundwater/drinking water and surface water systems across the state. Minnesota state parks have over 10 million visitors annually and they expect that the septic and wastewater systems will be in good working order and compliance with state and local requirements. The Department of Natural Resources (DNR) has seven permitted systems and the Minnesota Pollution Control Agency (MPCA) has determined that six of the seven systems would qualify as “fundable” under MPCA rules. DNR will be working with MPCA as a project partner in this inventory and assessment.

II. PROJECT ACTIVITIES AND OUTCOMES

The project activities are as follows:

1. Develop a complete and accurate inventory of septic and waste water systems at MN DNR State Parks.
2. Complete a functional assessment of identified systems using the MPCA Municipal Scoring system for waste water and septic systems.
3. Attribute the inventory data into a Cartegraph OMS ArcGIS, cloud based, asset management system and the Minnesota Department of Administrations’ Archibus Data Base. Cartegraph will allow us to develop a GIS based, real-time, cloud based asset management system to better plan for system upgrades and repairs.
4. Develop a 10 year CIP that will address failing or inadequate waste water and septic systems, protect ground water and drinking water resources as well as protecting sensitive and Outstanding Resource Value Waters in our state parks. The CIP will include an evaluation of the use of solar and other renewable energy systems to power wells, lift stations and pumps in our water and waste water systems statewide. The study will also include the opportunity to expand connections to municipal systems.

ENRTF BUDGET: \$1,173,776

Outcome	Completion Date
<i>1. Project Kickoff, RFP, Consultant Hired</i>	<i>August, 2019</i>
<i>2. Visits to 67 State Parks, Assessments of existing systems</i>	<i>August 2020</i>
<i>3. Uploading of Data into Cartegraph OMS</i>	<i>November 2020</i>
<i>4. Draft Report and System CIP Recommendations including Renewable Energy</i>	<i>March 2021</i>
<i>5. Final Report and System CIP Recommendations including Renewable Energy</i>	<i>June 2021</i>



III. PROJECT PARTNERS:

A. Partners receiving ENRTF funding

Name	Title	Affiliation	Role
Minnesota Pollution Control Agency	NA	Partner Agency	QA/QC; System Scoring, System Recommendations

B. Partners NOT receiving ENRTF funding

Name	Title	Affiliation	Role
NA			

IV. LONG-TERM- IMPLEMENTATION AND FUNDING: Upon completion of the project, the DNR will use the asset management system provided by Cartegraph to inform biennial updates to our 10-year CIP and our biennial bonding requests for Natural Resource Asset Preservation (NRAP) funds (MN Statutes 84.946). The DNR will continue to work with the MPCA on an annual basis to ensure that our systems are functioning as required by MN water quality rules and statutes.

V. TIME LINE REQUIREMENTS: This project will take two years to complete.

2019 Proposal Budget Spreadsheet

Project Title: The Greening of State Park Waste Water Systems

IV. TOTAL ENRTF REQUEST BUDGET [2] years

BUDGET ITEM (See "Guidance on Allowable Expenses")	AMOUNT
Personnel: DNR and 1 MPCA (\$37,184); \$260,064 for DNR Project Manager, GIS specialist, Management Analyst and Civil Engineer per MNDNR internal services billing rates. The overall budget includes \$37,184 for a Senior MPCA Waste Water Engineer to QC the scoring of waste water systems and consultant deliverables. This is approximately 1.85 FTE of state employee staff time over two years.	\$ 297,248
Professional/Technical/Service Contracts: Competitive RFP process for 1 AE to conduct field verification and data collection: Anticipate 1 competitive RFP project to hire a consulting firm to visit all 67 state parks and conduct an inventory and assessment of our waste water systems per MPCA/SRF and PFA requirements.	\$ 560,433
Equipment/Tools/Supplies: N/A	\$ -
Acquisition (Fee Title or Permanent Easements): N/A	\$ -
Travel: This line item covers state employee travel and fleet expenses per state/union contracts and agency policy.	\$ 5,936
Additional Budget Items: Cartegraph OMS hosting and data migration DNR's direct and necessary costs (~\$10,159 total) pay for activities that are directly related to and necessary for accomplishing appropriated programs/projects. Direct and necessary costs cover Financial Support (~\$7,849), Communication Support (~\$1,251), and Planning Support (~\$1,059) that are necessary to accomplishing funded programs/projects.	\$ 310,159
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 1,173,776

V. OTHER FUNDS (This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period: N/A	\$ -	
Other State \$ To Be Applied To Project During Project Period: N/A	\$ -	
In-kind Services To Be Applied To Project During Project Period: N/A	\$ -	
Past and Current ENRTF Appropriation: N/A	\$ -	
Other Funding History: N/A	\$ -	

Minnesota State Parks and Recreation Areas

Click on a name for more information



● State Park or Rec. Area
▲ State Wayside



F. Project Manager Qualifications and Organization Description

**Minnesota Department of Natural Resources:
State Park Waste Water Systems Condition Assessments**

Project Manager: David C. Johnson

Qualifications: Mr. Johnson has over 27 years of experience in managing complex water, waste water and water resources projects in both the public and private sectors.

Education: Civil Engineering, University of MN, 1989-1990

MS Environmental Biology, University of MN 1989

BA Biology and Chemistry, Gustavus Adolphus College, 1987

Professional Experience

Design and Construction Manager, MN DNR December 2016-Present

Senior Hydrologist, MN BWSR December 2015-December 2016

Senior Project Manager, HDR Engineering, INC., July 1999-December 2015

Senior Hydrologist, MN DNR April 1997-July 1999

Board Conservationist, MN BWSR November 1995-April 1997

Hydrologist MN DNR June 1991-November 1995

Project Responsibilities: The project manager will be responsible for: providing overall project management and technical direction for the project; directing project staff; contracting for professional services in support of the project; coordinating with project partners; directing the development of atlas reports; and preparing and submitting project work plans, updates and final reports.

Organization Description: The Minnesota Department of Natural Resources (DNR)'s mission is to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life.