

# SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

## FY2021 Cooperative Funding Initiative Application Form

**Project Name** City of North Port Utilities Direct Potable Reuse Feasibility Study  
**Project Number**  
**Cooperator** City of North Port  
**Department** Public Utilities  
**Contact Person** Nicole Brown  
**Address** 6644 W. Price Blvd.  
**City State Zip** North Port, FL 342914106  
**Phone #** 941-240-8025  
**Email** [nbrown@cityofnorthport.com](mailto:nbrown@cityofnorthport.com)

**Project Type:**

Water Supply  Water Quality  Flood Protection  Natural Systems

**Strategic Initiatives:**

Water Quality Maintenance and Improvement  Water Quality Monitoring  
 Alternative Water Supply  Conservation  
 Reclaimed Water  Regional Water Supply Planning  
 Emergency Flood Response  Floodplain Management  
 Minimum Flows and Level Establishment and Monitoring  Minimum Flows and Levels Recovery  
 Natural Systems Conservation and Restoration  Natural Systems Identification and Monitoring

**Indicate All Counties to Benefit From Project:**

Charlotte  Citrus  Desoto  Hardee  Hernando  Highlands  Hillsborough  Lake  
 Levy  Manatee  Marion  Pasco  Pinellas  Sarasota  Sumter  Polk

**Project Description/Benefit/Cost**

**Description:**

The City of North Port currently operates a water treatment plant consisting of a surface water component and groundwater component. The groundwater component is treated via reverse osmosis membrane treatment. The City also operates a wastewater treatment plant that produces high quality public access reclaimed water. The reclaimed water is distributed to customers for irrigation purposes via a distribution system that is approximately 23 miles in length. Despite the maximization of the use of reclaimed water for irrigation purposes, in excess of one million gallons per day, on average, of reclaimed water is disposed of via deep well injection. Despite the high quality of this water it is 'lost' deep underground below the underground sources of drinking water. The use of reclaimed water as a source water for potable uses is being investigated and put into practice around the United States with significant work having been done in Florida. The Potable Reuse Commission has proposed a framework for the regulation of direct and indirect potable reuse projects. This framework will likely establish the beginning of the regulatory approach to these projects. The Commission is currently actively working in this area. The City's wastewater plant effluent generally meets all the primary and secondary drinking water standards with the exception of the total dissolved solids. This project would investigate the feasibility of using reclaimed water as a source water within the City of North Port as well as the treatment technologies that might be required to make this water potable.

**Benefit:**

The use of reclaimed water as a source water for potable purposes would offset current groundwater withdrawals and going forward as growth occurs additional reclaimed water would be available as a source water.

**Cost:**

The cost for the feasibility study is anticipated at \$250,000.

**Describe your complementary efforts in developing, implementing and enforcing water conservation, water quality and flood protection ordinances.**

The City of North Port has one of the lowest per-capita water use rates in the region. This can be attributed to an extensive conservation program which includes a tiered rate structure, reclaimed water program, irrigation enforcement, floodplain management both locally and regionally; and, a comprehensive public education and outreach program that promotes water conservation, protection of City and regional resources, and encourages public participation in flood control efforts. The City's outreach program is a year-round effort to involve, inform and inspire all ages to conserve and protect water in their daily activities. The program offers education for all ages through participation at school and community events locally and regionally as well as hosting its own workshops, contests – including a “rain barrel” contest, and annual environmental fair. These efforts are complimented by print and web-based literature including the City's award-winning web site and its annual Consumer Confidence Report, which provide practical, useful information on water conservation and protection. The City's public education and outreach efforts earned the City the internationally recognized 2014 “WateReuse Public Education Program of the Year” award from the WateReuse organization out of Alexandria, Virginia. In 2019, The City of North Port participated in the Wyland National Mayor's Challenge for Water Conservation. The City finished in 3<sup>rd</sup> place in our population category. Our City made 6,843 pledges resulting in a water savings of 28.3 million gallons of water! Additionally, North Port pledges resulted in the reduction of 1,616 pounds of hazardous waste from entering watersheds, 790,864 fewer pounds of landfill material, and a carbon dioxide reduction of 124.9 million pounds. The City continues acquisition of land as a protective conservation buffer for the Class I waters of the Myakkahatchee Creek, a potable water and recreational resource. This initiative also helps reduce damage from flooding events. The City's water conservation efforts and other sustainable development activities earned North Port the Florida Green Building Coalition's "Silver" level local government certification in 2016. In accordance with the City's 2008 Reuse Master Plan, the City continues planned expansion of the system to offset potable water use. The study and eventual implementation of the direct or indirect potable reuse project is a natural extension of the City's current efforts. The use of this water, especially that portion that is 'lost' via deep well injection, provides for a more sustainable and drought-resistant future water supply. In addition, the City's Unified Land Development Code (ULDC) includes the following requirement for new developments: “A reuse water system shall be provided in all new subdivisions, and connection shall be required with the City's reuse water system where the City system is within 1/4 mile from a point on the perimeter of the subdivision closest to the source of service and measured along an accessible right-of-way or easement. The order of supply sources of water for irrigation purposes shall be reuse water, storm water then well water.” Owing to the City's extensive efforts in stormwater system management, maintenance, information dissemination and outreach efforts, the May 2011 Community Rating System (CRS) audit resulted in North Port receiving an improved CRS rating from 7 to 6. The City is an active participant in the Federal Emergency Agency (FEMA) and SWFWMD's Flood Insurance Rate Map (FIRM) revision activity. The City has adopted new FIRMs which are effective November 4, 2016. The City requires that all applicable Federal and State permits be approved prior to the start of construction.

Check here if requesting a reduction in matching funds requirement pursuant to s.288.06561, F.S.

**Timelines**

<b>Milestone</b>	<b>Projected Date</b>
Request for Proposals	4/1/2020
Select Consultant	11/30/2020
Begin Study	01/01/2021
Complete Study	09/30/2021

**Data Collection Assessment:**

Mapping/GIS data