

City of Rosemount Request for Funding of Engineering Costs Associated with Effluent Reuse

Where: The City of Rosemount is a southeastern suburb in the Metropolitan Area. The City is bordered by the Mississippi River to the northeast and the Empire Treatment Plan effluent outfall pipe outlets into the Mississippi River adjacent to Rosemount. The outfall pipe traverses Rosemount from the Treatment plant, south of Rosemount to the River.

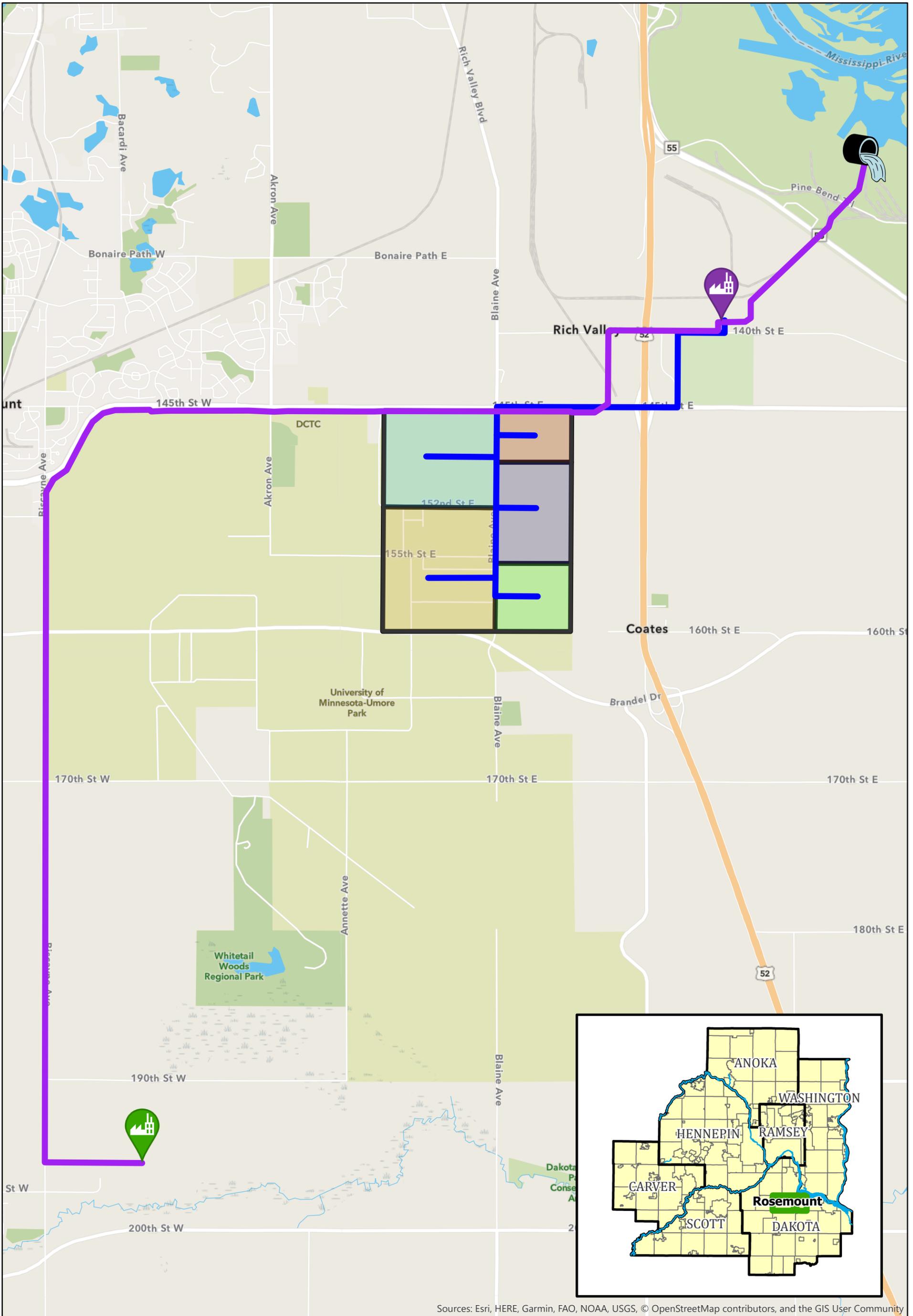
Why: The City of Rosemount is approximately 1/3 developed. Approximately 900 acres within the UMore site, a 5000-acre landholding owned by the University of MN, is currently being marketed for development for Light Industrial or Business Park Development. The outfall pipe runs immediately adjacent to the property for development and land owned by the Metropolitan Council to permit additional treatment of the effluent for industrial purposes.

Benefits: The City of Rosemount uses approximately 2.47 MGD or 871,000,000 gallons of water annually, with the largest private water user being Flint Hills Refinery which is estimated to use 1.4 billion gallons annually. Wastewater effluent reuse would provide another source for industrial cooling, processing and potentially irrigation, thereby preserving groundwater for local users outside of the effluent service area. Presently millions of gallons of effluent is discharged annually into the Mississippi River. A portion of that can be recaptured reducing reliance on groundwater aquifers.

Effluent reuse in Rosemount would function as a demonstration project for other similar opportunities in the Metropolitan Area and within the State. The overall project will capture effluent and treat it to appropriate PCA standards to permit release to private companies for individual use. It is anticipated that some of the businesses can reuse the recycled water several times through their process, increasing the environmental benefits. We are aware of one high water user that is actively pursuing the service area and is interested in effluent reuse. The City has also reached out to several local users who have expressed interest in the effluent reuse project. Effluent reuse would provide business attraction benefits especially as compared to other states in the United States that have water capacity issues. A reasonable and economical way to treat effluent for industrial reuse would provide a competitive advantage in business attraction to Minnesota.

Who: The City has been working with the Metropolitan Council Environmental Services to explore effluent reuse. Preliminary work has been completed. The University of MN is partnering with the City to attract businesses to the UMore site and is supportive of water reuse opportunities that could lead to business investment.

Ask: \$700,000 in State funds for Engineering design for effluent reuse system and the subsequently required chloride study by Metropolitan Council



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



-  WWTP Site
-  Empire WWTP
-  Outfall
-  Outfall Pipe
-  Water Reuse Pipe

