The Comprehensive Utilities Strategic Master Plan (CUSMP) is tied to the City of Fort Lauderdale’s strategic planning efforts conceived to schedule improvements necessary to ensure reliable service for the next twenty years. As part of the CUSMP, Reiss evaluated the normal functions of water supply, water treatment, water high service pumping and distribution, wastewater collection, lift station pumping and wastewater treatment, and disposal. The CUSMP contained evaluations and recommendations of policies, procedures, and process improvements to increase energy conservation, monitoring and analysis, water conservation, and evaluations necessary to prepare for climate change and overall recommendations to increase the resiliency of the City’s utility infrastructure.

Components included:
- Wastewater collection/transmission master plan
- Water system master plan
- 20-year capital improvement plan (CIP)
- Water, wastewater Collection/Transmission Hydraulic Models

The project also included recommendations to increase energy efficiency and sustainability, as well as analyses regarding climate change and water conservation. In particular, Reiss recommended measures the City can take to address impacts to the wastewater system, including flows in the collection system, due to potential climate change and sea level rise. Recommendations included the prioritization of rehabilitation projects in order to increase reliability of the conveyance systems and reduce I&I and flows to the WWTP. This was accomplished through development of new hydraulic models and flow projections to aid in capital project planning improvements to reduce Infiltration and Inflow (I&I) flows based on pump station and rainfall data, and development of an implementation plan to monitor I&I at key locations.

Data Points
- **Scope:** Master planning, hydraulic modeling
- **Duration:** 18 months

Project Components
- Master planning
- Evaluation
- Hydraulic modeling
- Capital improvement plan

Key Benefits
- Improved reliability and service
- Proposed recommendations to increase energy conservation, water conservation, energy efficiency, and sustainability