

Iowa City Wastewater Treatment Plant Relocation Project

Flooding in the Summer of '08 rendered Iowa City's North Wastewater Treatment Facility (WWTF) nearly inoperable. Biological treatment and chemical disinfection was disabled for over 30 days.

Due to this flood event, wastewater that had undergone only a brief detention was released into the Iowa River.

Only the efforts of staff and volunteers prevented the total loss of the facility during the flood.

Relocating operations of the North Wastewater Treatment Plant, expanding flood capacity, and re-development of the existing site is vital to flood resilience and recovery.



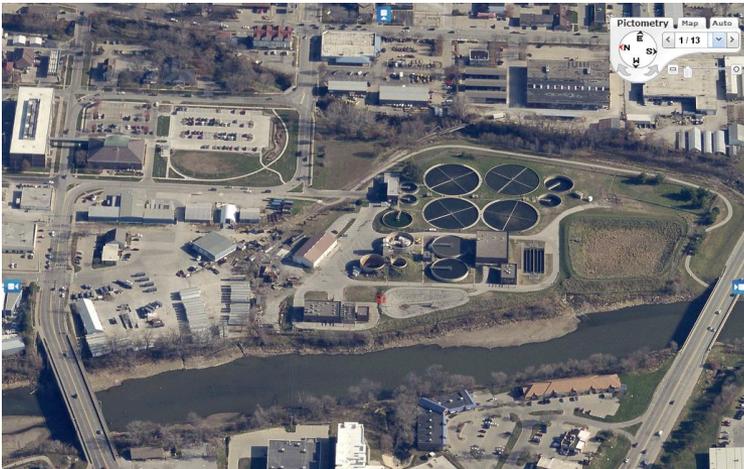
2008 Flood Overview – North Wastewater Treatment Facility

Identification of the Problem

- North WWTF located in Floodway and Special Flood Hazard Area
 - Significant flood events such as 2008 damage the plant
 - Facility cannot properly operate during high water events
- Untreated Wastewater is released
 - Wastewater collects in flood discharge as well as travels downstream
 - Environmentally and Ecologically damaging
- Considerable local, state and federal financial support as well as staff & volunteer labor required to sustain and rehabilitate the North WWTF during and after flood events.
- Surrounding homes, businesses, and public infrastructure inundated with water

Proposed Solution

- Relocate wastewater operations
 - Newer South Facility outside SFHA
 - Expected completion mid-2014
- Demolish North WWTF
 - Removal of all buildings / improvements
- Convert former North WWTF site to riverfront park and wetland
 - Create 5 acre wetland - expanded Flood Capacity
 - Stream bank restoration of confluence of Ralston Creek and Iowa River



Current view of the North Plant



Rendering showing the riverfront park.

Rationale for Choosing Project

- Permanent Mitigation
 - Removing North WWTF removes risk of commercial and residential exposure to untreated effluent during floods
- Removes a critical facility from the floodway / floodplain
 - Costs to repair repetitive flood damage to facility & buildings eliminated
- Flood impacts upstream and downstream reduced by addition of wetlands



Rendering of the proposed reconstructed wetland.

- Critical piece of Iowa City's total mitigation plan which includes property buyouts, infrastructure enhancements, and various other projects.

Economic Benefits

- Provides reliable wastewater services to businesses and the University of Iowa
- Project spurs development in the Riverfront Crossings Area (immediately south of downtown Iowa City and adjacent to the University of Iowa campus)
 - Creates a regional park – catalyst for redevelopment of surrounding area outside of SFHA
 - Economic opportunities created adjacent to park
 - 1.3 million square feet of property available to interested developers
- Continues partnership towards economic recovery from local, state, and federal agencies
 - Economic Development Administration
 - EPA Smart Growth Program
 - Partnership for Sustainable Communities



Rendering of residential courtyard looking toward the riverfront park.

Support

- Iowa City Chamber of Commerce
- University of Iowa
- Citizens of Iowa City (LOST funds for 4 years)
- Iowa City Flood Plains Manager
- Friends of the Iowa River
- ACT
- Proctor & Gamble
- ALPLA
- Senator Joe Bolkcom
- Mercy Hospital

Project Timeline

- Phase 1 – Relocation of wastewater treatment
 - Design completed in early 2012
 - Construction underway now, complete mid-2014
- Phase 2* – Demolish North WWTF
 - Design to start in spring 2014
 - Demolition to begin in late 2014 to early 2015
- Phase 3* – Wetland Development / Ralston Creek Improvements
 - To begin immediately following North WWTF Demolition (late 2015)
 - Complete approximately 1 year after inception

* These phases are dependent on project funding from the Iowa Flood Mitigation Program

Maintenance Plan

- Wetland
 - Weekly monitoring first 3 months
 - Inspected after all heavy storms
 - Monthly monitoring month 4 to month 24
 - Month 24 and beyond – twice per year
- Ralston Creek bank stabilization
 - Regular inspections and maintenance
 - City organizes volunteer clean-up efforts for watersheds, waterways, and wetlands (last year storm water volunteers logged 3300 hours)
- Park will become element of City Parks & Rec. regular maintenance program



Estimated Project Costs

- Phase 1 - \$54.945M
 - Moving operations to South facility
- Phase 2 - \$4.39M
 - Demolish North Wastewater Treatment Facility
- Phase 3 – \$1.38M
 - Creation of Wetland and Bank Stabilization
- Financing Costs - \$2.72M
- Total Costs \$63.4M

Funding – Sales Tax Increment

- \$8,497,249 in sales tax increment revenues requested
 - Necessary for 2nd and 3rd phases of project
 - Beginning in fiscal year 2015, ending in 2022
- Other secured funding
 - Economic Development Administration (Fed.) \$22M
 - CDBG Supplemental Disaster (Fed.) \$13M
 - I-Jobs (local) \$6.3M
 - Local Option Sales Tax \$8.6M
 - Wastewater Operations (local) \$4.9M