

Virginia Field Office

Wasena Dam Removal Project Roanoke, VA

The Wasena Dam Project was successfully completed in February 2009. The project involved the demolition of a 255-foot long dam across the Roanoke River in Roanoke, Virginia and the relocation of an internal sewer line below the bed of the river. The Wasena Dam was constructed in 1933 and consisted of a 42-inch overflow sewer line encased in concrete and backed with metal sheeting. The structure formed a 6 foot dam within the river channel of the Roanoke River with tail waters extending upstream for 2 miles. The sewer line encased by the dam was abandoned in 1989 after the construction of a new interceptor line and an inflow and infiltration study conducted in 1998 found multiple cracks and leaks within the dam.

Removal of the dam provides passage for fish and recreational boats, supports endangered species recovery and aquatic habitat restoration, and remedied a water contamination risk. Thirty miles of mainstem river channel on the Roanoke River are now available to fish and boater access, along with an additional 155 miles of tributary streams upstream of the dam. Removal of the dam helped to promote recovery of the federally listed endangered Roanoke logperch by directly restoring 3,900 linear feet of habitat inundated by the dam's tail waters and promoting genetic mixing among logperch populations upstream and downstream of the dam leading to improved genetic vigor. This area is part of the City of Roanoke greenway system. There are parks on both sides of the former

dam site and plans are underway to install a pedestrian walkway to connect the parks. Removal of the degraded sewer line had significant public safety implications by eliminating a potential source of water quality contamination.

The Fish and Wildlife Service, Natural Resources Conservation Service, FishAmerica Foundation, and Western Virginia Water Authority provided funding support.

Project Goals

- Recover endangered Roanoke logperch
- Restore passage for native fishes
- Improve water quality
- Restore recreational boating access



Wasena Dam Before Demolition



Free Flowing Roanoke River Immediately After Dam Removal

USFWS

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6669 Short Lane
Gloucester, VA 23061
1 804/693 6694
<http://www.fws.gov/northeast/virginiafield>

<http://www.contaminants.fws.gov>
<http://www.fws.gov>
1 800/344 WILD

Federal Relay Service
for the deaf and hard-of-hearing
1 800/877 8339

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