

PROJECT OVERVIEW:

lowa City's history as the former state capital and home to the University of lowa is richly intertwined with the lowa River. Even with the Coralville Reservoir controlling much of the watershed upstream, lowa City has experienced several large floods and has realized extensive damage to many city and university properties. As lowa City continues to grow, much of that growth is focused on moving critical infrastructure out of the floodplain and providing effective management and safe access to the lowa River corridor. One such project is the decommissioning and demolition of the North Wastewater Treatment Plant, located at the confluence of the lowa River and Ralston Creek north of Highway 6. The demolition of the plant will allow for the restoration of a 5-acre site back to a natural stream/wetland complex. The proposed concept includes adding meanders to the straightened Ralston Creek to improve flow conditions and stream habitat. Cross vanes, root wads, and soil lifts will be incorporated to maintain stability of the revised stream pattern. The new stream geometry will result in a wider floodplain on the east side of Ralston Creek. The west side of Ralston Creek will be lowered to create a wetland area to improve water quality, provide additional flood mitigation, and establish a diverse ecosystem. The wetland connect to groundwater sources to maintain hydrology but will accept storm flows from Ralston Creek to maximize water quality treatment. The wetland will be hydraulically connected to Ralston Creek and the lowa River but physically separated by high terraces, consistent with natural streams typically found throughout lowa.

NORTH WASTEWATER TREATMENT PLANT RESTORATION 2014 GREEN INFRASTRUCTURE TECHNICAL ASSISTANCE PROGRAM - IOWA CITY, IA



