

## **RESTORATION PLANNING ACTIVITIES FOR THE LOWER PASSAIC RIVER RESTORATION PROJECT**

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The Lower Passaic River Restoration Project is being conducted through a joint, integrated plan between USACE, EPA and NJDOT in partnership with NJDEP, USFWS, and NOAA. The USACE is preparing a Comprehensive Restoration Plan (CRP) for River Miles 0 through 17 and the associated tributaries. Prior to the release of the CRP, USACE is preparing a restoration companion to EPA's potential early action Focused Feasibility Study. This Focused Ecosystem Restoration Plan (FERP) will concentrate on river miles 0 through 8.2.

In support of restoration planning efforts for both the CRP and the FERP, the USACE has prepared several restoration visioning products. These products include examples of before and after representations of restoration opportunities within the study area and a segment of Simulation Video Presentation showing desired future conditions for the Lower Passaic River. The USACE also conducted vegetation studies in fall 2007 and spring 2008 which will provide critical information for restoration planning throughout the differing salinity gradients of the river. In addition, detailed biological sampling in the future for the Remedial Investigation/Feasibility Study will be collected by the EPA in order to complete the CRP.

Baseline vegetation data for proposed restoration sites along the brackish, transitional and freshwater sections of the tidal Lower Passaic River (and its tributaries) from Newark Bay to the Dundee Dam were collected. Vegetation sampling plots were surveyed at 23 sites in the riparian zone of the 17-mile long Lower Passaic River and at four sites on tributaries - Saddle River, Third River, and Toney's Brook (a tributary of the Second River). Vegetation plots were also sampled at three reference sites; a brackish wetland in Harrison, the tidal freshwater Rancocas Creek, and the non-tidal forested Upper Passaic River in the Scherman Hoffman Wildlife Sanctuary. Parameters measured at each sampling plot included tree basal area, percent cover of shrubs, vines, and herbaceous vegetation, tree and shrub stem density, species identification and wetland indicators. A total of 143 distinct plant species were observed along the Lower Passaic River and its tributaries, 45 of them being invasive or exotic species. The reference sites consisted almost entirely of native species, many of which were also found along the Lower Passaic River and its tributaries.

Based on this information and other sources, a Restoration Planting Resource Document was completed and provides recommendations for vegetation to be planted or seeded during restoration of the diverse habitats of the Lower Passaic River. To fulfill the vision of the River, activities discussed above, in conjunction with the upcoming field sampling scheduled in 2009, will provide the basis for a comprehensive restoration plan of the Passaic River watershed.