## Delaware River Basin Comprehensive Study – Interim Feasibility Study for New Jersey Flood Risk Management Measures

## **Fact Sheet**

**Ecosystem Restoration Measures** 

## **Option:** Improve Water Quality

- Description: Implementation of restoration measures aimed at improving water quality, with focus on non-point source pollution, including nitrogen, phosphorous, sediment, pesticides and bacteriological pollutants. Measures can include streambank stabilization, biofiltration, vegetative buffer strips, interruption of sheet flow, etc.
- Example(s): The town of Centreville, Maryland has recently implemented a stormwater management program which includes design and construction of three separate ecosystem restoration projects aimed at providing habitat improvements while improving water quality. The projects include a wooded wetland/stormwater basin, a vegetated bioswale, and a coastal plains outfall wetland/stormwater basin. All projects incorporate native plants along with stormwater management.
  - Benefits: Reduction in stormwater runoff; increased groundwater recharge; improved base flow in streams; improvement in runoff quality through sediment retention; reduction in bank erosion and sedimentation in streams yielding improved water quality and aquatic habitat; vegetated areas can provide wildlife habitat; reduction of sediment load to reservoirs and other dammed waterbodies, thereby, reducing maintenance costs.
- Challenges: Can increase costs of development projects; can limit land available for development; streambank stabilization and constructing new wetland/stormwater basins can be expensive due to design and construction costs.





For more information, please visit: http://www.nap.usace.army.mil/Projects/delbasin