WATERSHED RESTORATION, RECONSTRUCTION, AND RESILIENCY

Several of the priority issues facing the District are caused by changes both inside and outside of the District including land use conversion and climate change. The District's Watershed Restoration, Reconstruction, and Resiliency program provides implementation funds to address problems that these changes cause including altered hydrographs or increase in peak flows as water runs off of the watershed more quickly, stabilization of natural drainage systems to withstand anticipated discharges, protection and restoration of rare and native communities, increasing resiliency of natural and man-made systems against climate changes, reducing habitat fragmentation by creating or maintaining linear corridors, managing invasive species, and protecting groundwater resources.

All implementation under this program will be guided by existing or future guidance documents. Existing guidance documents include the District's Greenway Corridor Plan, Resource Management Plans, and County Groundwater Plan. Future documents will focus on climate adaptation and resiliency, Agriculture BMP Pilot Program, and natural resources. Funding for implementation under this program is provided for through collection of Stormwater Utility Fees and Levy funds.

SWWD's 1997 Watershed Management Plan and 2000 Greenway Corridor Plan identified the need for a greenway corridor encompassing the major North/South drainage route through the center of the District. As originally conceived the greenway would link Lake Elmo Regional Park with Cottage Grove Ravine Regional Park and the Mississippi River and provide a link to the proposed park on Grey Cloud Island to the West. A major purpose of that plan was to identify missing links in the corridors. To date, SWWD efforts have focused on securing those missing links. That effort has resulted in a nearly complete corridor covering the North/ South Drainage. That corridor will be permanently protected with development of Cottage Grove's East Ravine watershed. Future planning efforts will expand the greenway plan to include additional linkages in the District's East Mississippi and Lower St. Croix management areas. The goal of the original plan remains: to create a multipurpose system of open space that provides a physical link to existing natural areas while providing for conveyance of stormwater runoff. The linear system provided by a greenway provides cost effective overland routes for stormwater, maintains natural stream systems, and provides important community amenities including active and passive recreation, fish and wildlife habitat, rare species habitat, groundwater recharge, water quality protection, environmental education, and erosion control.

District resource management plans are developed to identify the source of a resource problem and identify cost-effective practices to address it. Typical scenarios may include excess nutrient loading to a lake caused by development in the watershed or destabilized stream channels caused by drain tiling or other changes in farming practices. Typically, most cost effective solutions are focused on source control and heavily rely on various infiltration practices to keep water and nutrients on the land and help recreate a more natural hydrograph.

Performance Measures:

- Establishment and protection of identified greenway
- corridors (Greenway Plan);
- Establishment and protection of vegetated buffers along streams, ravines, bluffs and around lakes and wetlands (Buffers, Part II);
- Stabilization of identified ravines to prevent downstream transport of sediment and nutrients (Bluff erosion, Part II);

- Implementation of yet to be identified practices to increase resiliency of natural and man-made systems against land use and climate change (Climate Change, Part II);
- Implementation of regionally identified strategies to address aquatic and terrestrial invasive species.
- Identify willing landowners and begin operation of pilot agriculture BMP research program within 6 years;
- Provide adequate funding for local implementation actions identified in the Washington County Groundwater Plan.