

Creek Buffer Restoration: North Star Greenbelt



Introduction: A small tributary of Walnut Creek with fairly perennial baseflow runs through this neighborhood park. It has been routinely mowed down to the water's edge in some locations, but many of these areas along the creek are in a natural state, with willows and other riparian species. Through a joint effort between Parks and Recreation (PARC) and Watershed Protection (WPD), the North Star greenbelt has been selected as one of several creeks for a riparian restoration initiative that will eliminate mowing from this buffer. While appropriate in some areas for public access and recreation, repeated mowing along the stream bank is not conducive to a healthy riparian zone.

What is the long-term goal?

To establish a healthy riparian buffer on each side of the creek, with a woody canopy, understory, and diverse and dense ground cover with open view corridors.

Why is a streamside buffer important?

Establishing this buffer, with its mix of grasses, forbs/wildflowers, shrubs and trees, will allow for a variety of benefits to the park's ecosystem, including:

- Filtering pollutants out of storm runoff before it reaches the creek
- Limiting erosion, protecting creek banks and keeping sediment out of the creek
- Providing a "sponge" that will slow run-off and enhance baseflow
- Providing shade and maintaining moderate water temperatures
- Providing habitat and food for a diverse group of animals, both on land and in the water

City of Austin Riparian Restoration



Current mowed status

Improved condition (transitional)

Management Approach:

- Establish a no-mow area along the stream channel with a goal of a 50 foot riparian buffer (25 ft on each side of the creek). This is a flexible buffer, depending on trails, park infrastructure, access areas and/or view corridors.
- Allow for passive plant growth in entire buffer area, with additional active plantings where necessary, (native grass, wildflowers, and woody species) following site assessments. Planting activities will be coordinated by WPD, but will rely on stakeholder interest and involvement.
- Periodic trash clean-up, triggered by an agreed upon trash threshold, measured using the WPD Trash index score sheet and implemented by WPD (Field Operations-Easter Seals).
- Periodic “weed/invasive management” to address nuisance problems that may arise, based on stakeholder input and WPD site assessment, implemented by WPD (American Youth Works).
- Educational and demarcation signage where appropriate and/or requested (Collaboration between WPD, PARD and stakeholders).

Enhancement Options:

- Establish bioswale/rain garden areas at stormflow outfalls, including revegetation where appropriate.
- Develop a design and costs and seek grant to improve the erosional “head cut” area at the lower end of the park.

What should park users expect?

- As the plant community recovers from the mowing disturbance, some areas may have taller, much less manicured vegetation. It can take between 5 and 10 years to develop a diverse vegetation community, so patience is important!
- Continued maintenance/mowing along trails, around infrastructure and access areas.
- Signs will be posted explaining the effort.

When will this start?

- We would like to initiate this process at the beginning of the 2012 growing season.

Who will track progress and/or Success?

- WPD will evaluate changes over the next 3-5 years, as the vegetation transitions into more mature communities and implement a range of adaptive riparian restoration practices as needed.
- Volunteers monitoring is encouraged, particularly changes in bird or plant communities, and any other ecological measures of interest.

Questions: Please contact Mateo Scoggins, WPD, 974-2215, mateo.scoggins@austintexas.gov

Website: <http://www.cityofaustin.org/watershed/creekside.htm>