

Legacy Land Trust: Wetland Mitigation and Wildlife Habitat

Summary: Expanding its conservation toolbox, Legacy Land Trust resurrected a wetland mitigation program in the Spring Creek watershed. In addition to protecting the mitigation lands, the land trust will restore and enhance habitat on all land set aside through the program.

Regional Setting: The Greater Houston area, home to four million people, encompasses four major watersheds and portions of five ecoregions. Spring Creek is one of the watersheds draining into Lake Houston, the drinking water supply for much of the region. Undeveloped forested areas dominate the Spring Creek corridor.

Land Trust Mission: To protect open space in the 13-county Houston area for its recreational, aesthetic and habitat values.

Service Area: 13 counties in the Houston, Texas area.

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Biodiversity Values

The 400 square-mile Spring Creek watershed is home to several ecosystems, including palmetto thickets, bottomland hardwood forests and cypress swamps, that host a broad diversity of native plant and animal species. Rare and endangered species include nesting bald eagles, osprey, white ibis and Swainson's warbler. The generally forested area located between Spring Creek and the San Jacinto River provides important habitat for neotropical migratory birds, as well as more local but wide-ranging mammals, reptiles, amphibians and other aquatic species. Spring Creek feeds into Lake Houston, which provides drinking water to Houston residents. Spring Creek also has an extensive archaeological history with several known sites of the Akokisa Indians.



Conservation Strategy

Legacy Land Trust has worked with the U.S. Army Corps of Engineers, local developers and county governments for eight years to acquire and monitor 15 conservation easements (4,000 acres) on functioning wetlands. These areas are approved compensatory mitigation projects under federal regulatory programs for permitted development projects.

Despite these achievements, there were concerns that traditional mitigation transactions slowed the pace of wetland conservation and perpetuated habitat fragmentation, and that "created" wetlands (an option often used by developers) did not function naturally. Legacy Land Trust and Harris and Montgomery counties approached the Army Corps with an "in-lieu-fee" mitigation program. Under the in-lieu-fee program, Legacy Land Trust will market compensatory mitigation credits to permit applicants in Harris and Montgomery counties through the acquisition, preservation and/or enhancement of aquatic resources along Spring Creek. The goal of the program is to protect as many wetlands, and subsequently as much floodway and floodplain, as possible within the 33-mile long, 15,000-acre Spring Creek area between two major highways. In addition, Legacy Land Trust is adding an important habitat restoration and enhancement component to its programs.

Partnerships and Funding

Preservation of this watershed serves millions of downstream residents as Spring Creek feeds into Lake Houston, the main water source for Houston. A significant threat to the landscape and the watershed is the rapid silting-in of the lake, caused by multiple upstream sources including sand and gravel operations, rapid commercial and residential development, and illegal motorized activity within the creek and along its sugar-sand banks.

Conservation goals for the Spring Creek program are to:

- Use conservation easements to preserve connected wetland and riparian habitat acreage along Spring Creek;
- Assist counties by planting native vegetation on degraded mitigation parcels;
- Provide labor and technical assistance for removal of invasive non-native plant species, particularly Chinese tallow (*Triadica sebifera*), deep-rooted sedge (*Cyperus entri-ri-anus*) and non-native privet (*Ligustrum spp.*); and
- Protect the riparian corridor and restore habitat damaged by all-terrain vehicles, sand and gravel mining, timbering and other effects of inappropriate development.

Legacy Land Trust and its partners follow these steps for lands in the in-lieu-fee mitigation program:

1. Counties acquire lands along Spring Creek;
2. Permitted developers deposit appropriate funds in a restricted mitigation account held by Legacy Land Trust;
3. Legacy Land Trust puts a conservation easement on county-owned land or other willing-seller land and pays the landowner for the development rights;
4. Legacy Land Trust undertakes restoration and enhancement, such as fencing to prevent cattle intrusion, removal of non-native invasive species with volunteer Master Naturalists' assistance, loosening compacted soils and planting with native species; and
5. After a five-year mitigation oversight period, Legacy Land Trust continues more typical conservation easement monitoring and



enforcement tasks. If the land is publicly owned, the counties assume management responsibility for natural resources.

Looking Ahead

In late 2006, Legacy Land Trust will acquire its first conservation easement under the in-lieu-fee program. Extension Master Naturalists will assist the counties and landowners with habitat restoration and enhancement. Legacy Land Trust works closely with dozens of certified Master Naturalists and biologists who inventory parcels, develop management plans and implement projects on the ground.

Tips for Mitigation Projects

1. **Know your partners.** Legacy Land Trust has eight years of traditional mitigation experience, is known to most wetland regulators, and has worked extensively with the counties.
2. **Ensure that landowners understand the process.** Conservation easements are technical and involved; mitigation requirements add complexity.
3. **Use a transparent process.** Legacy Land Trust offers regulators open access to its mitigation records.
4. **Build trust with the community.** Legacy Land Trust and the counties have gained respect and trust over years of working together.
5. **Stewardship matters.** Restoration and enhancement of mitigation lands benefit ecosystems, the watershed and the underlying fee owner while showcasing land trust efforts.

For More Information

- **U.S. Army Corps of Engineers, Galveston District:**
www.swg.usace.army.mil
- **Texas Master Naturalist Program:**
<http://masternaturalist.tamu.edu>
- **Spring Creek Greenway Program:**
www.springcreekgreenway.org



Photos: All photos are by Jennifer Lorenz.