

Stream Mitigation: Benefits to Private Landowners

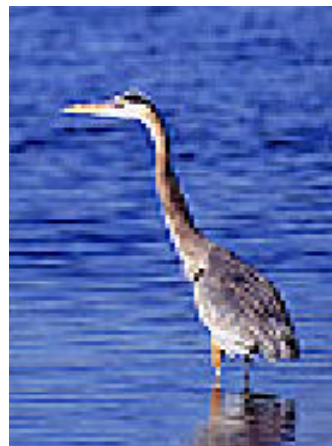
Stream mitigation is the preservation or restoration of stream habitat, including riparian buffers, or implementation of measures to improve water quality, when these activities are conducted to compensate for loss of stream habitat that is authorized under Section 404 of the Clean Water Act

The Etowah River Basin

The Etowah River originates in the Chattahoochee National Forest in Lumpkin County and flows west 165 miles until it meets the Oostanaula River in Rome to form the Coosa River. The Etowah River and its tributaries (which together comprise the Etowah River basin) drain parts of Fulton, Cobb, Cherokee, Dawson, Forsyth, Pickens, Bartow, Paulding, Polk and Floyd Counties.



Once a very rural setting, the Etowah River basin is undergoing rapid change. Because of its proximity to Atlanta, urban and suburban development has increased, resulting in conversion of agricultural and forest lands into subdivisions, industrial parks, roads, and other land uses. In many cases, optimal development of a site requires streams to be filled, rerouted, or piped, and riparian vegetation that stabilizes stream banks and improves water quality to be cleared. Growth often requires greater water supply, and reservoirs that flood stream habitat are constructed to meet demand. Parking lots, roads, and other paved areas associated with urban development can increase stream erosion by diverting stormwater runoff rapidly into streams after a rain. Urban runoff also may carry pesticides, herbicides, and other contaminants that reduce water quality.



The Etowah River Basin's Resources

The Etowah River basin provides habitat for a variety of wildlife species, including deer, squirrels, and turkey; fur-bearers, such as bobcats and raccoons; wading birds and song birds; and numerous reptiles and amphibians.

However, it is the Etowah River's fish species that are remarkable. The basin support one of the most diverse groups of fish in the US -- 76 native fish species, including some that are found nowhere else in the world. This fish diversity is threatened by loss of stream habitat and declining water quality. Currently, the Etowah River has more imperiled fish than any other river system of similar length in the southeastern US, including 3 species that are federally endangered or threatened.



Why Mitigate for Stream Losses?

Section 404 of the CWA authorizes the Secretary of the Army to issue permits for the discharge of dredged or fill material into streams, wetlands, and other waters. In Georgia, Section 404 permits are issued by the Savannah District, Corps of Engineers. Activities that generally require Section 404 authorization include

- culverting or piping a stream;
- damming a stream to create a pond or impoundment (other than a farm pond);
- straightening a stream's natural curves;
- stabilizing stream banks with riprap;
- and installing pipelines or other utility lines, if excavating the stream is required.

A permit generally is not required for normal farming, silviculture and ranching activities.



Applicants for Section 404 permits generally must mitigate for unavoidable impacts to streams and wetlands associated with their development. Stream mitigation may include such on-the-ground activities as

- preservation or restoration of vegetated riparian buffers;
- fencing of livestock from riparian buffers;
- stream bank stabilization activities;
- installation of instream habitat structures;
- and reshaping of streams to make them more stable and less likely to erode.

Developers also may mitigate for stream losses by purchasing mitigation credits at an existing stream mitigation bank or paying in lieu stream mitigation fees to a trust fund designated by the Savannah District.

Stream Mitigation Benefits to Private Landowners

Private landowners willing to allow stream mitigation work on their lands can benefit both financially and environmentally:

- Generally, a developer pays a private landowner to use the land for mitigation activities. The amount paid varies from property to property and is determined by the developer and landowner, not the Corps of Engineers.
- Mitigation activities can stabilize eroding stream banks that are affecting property values or resulting in loss of land.
- Mitigation activities can improve fish and wildlife habitat, both within the stream channel and in riparian buffers.



The Corps requires that a mitigation site be protected in perpetuity with at least a restrictive covenant. Under a restrictive covenant, the mitigation site remains the property of the private landowner. Timber harvest or other land clearing, mowing, grazing, earthmoving, construction, mining, or other activities that would alter vegetation, hydrology, or topography are prohibited on mitigation lands protected by a restrictive covenant. However, the private landowner can use mitigation land for many other activities, including hunting and fishing. Stronger protection of the mitigation site can be provided with a conservation easement if the landowner is willing.

The Savannah District's stream mitigation guidelines and a draft standard restrictive covenant are posted on their web page at: <http://144.3.144.48/permit.htm>.

Please contact Robin Goodloe, Fish and Wildlife Service, for information on how stream mitigation can benefit listed and rare aquatic species
706-613-9493 X21
robin_goodloe@fws.gov