OVERVIEW OF ETOWAH AQUATIC HCP POLICIES

In 2002, the counties and cities of the Etowah basin began working together to create a Habitat Conservation Plan (HCP) for the imperiled fish species that live in the Etowah's waters. Their impetus was not merely to protect wildlife—although the HCP is designed to protect the unique fish species of the Etowah, some of which are found nowhere else on Earth—but rather, to ensure that the protection of fish does not compromise the ability of the region to continue to grow and develop. Because three of the fish species are protected under the Endangered Species Act (ESA), developers faced lengthy delays to their projects in order to assure the U.S. Fish and Wildlife Service (FWS), which enforces the ESA, that impacts to fish would be minimal. In addition, they faced potential enforcement actions if fish were killed. But many projects fell through the cracks, creating an uneven regulatory field and inadequate protection for the fish.

Etowah darter

Recognizing that this situation was neither fair nor sustainable, the local governments have pursued an alternative approach: writing a Habitat Conservation Plan, or HCP. Under an HCP, local governments can pass ordinances and policies to ensure that development activities do not cause too much harm to fish species. In return, developers will have greatly reduced consultation times with FWS, saving them money. The local governments will also receive an Incidental Take Permit, which gives them and all developers who adhere to the regulations protection from prosecution if fish are accidentally killed. The bottom line is that the Etowah Aquatic HCP will result in time and money savings for developers, more uniform and fair enforcement conducted primarily by local—not federal—officials, and better protection for the imperiled fish of the Etowah. An added benefit is that policies that protect fish also protect water quality.

Development of the Etowah Aquatic HCP has been overseen by a Steering Committee, the voting members of which are representatives of the local governments within the basin. Representatives of numerous state and federal agencies and various stakeholder organizations have been involved in the plan development as well.

The Steering Committee has approved six main policies for the Etowah Aquatic HCP. These policies are considered essential to protecting the imperiled fish of the Etowah:

- Stormwater management
- Erosion and sedimentation control
- Stream buffer ordinance
- Road crossings of streams
- Utility crossings of streams
- Water supply planning protocol

In addition, the Etowah Aquatic HCP includes an optional conservation subdivision ordinance and a program for monitoring and adaptive management. Nearly all of the policies are based on existing local, regional and state policies, in order to simplify compliance. The policies of the HCP have been developed by Technical Committees, which are made up of developers, local officials, consulting engineers, and various other interested parties. Most staff for the HCP are employees of the University of Georgia, funded by grants from FWS.

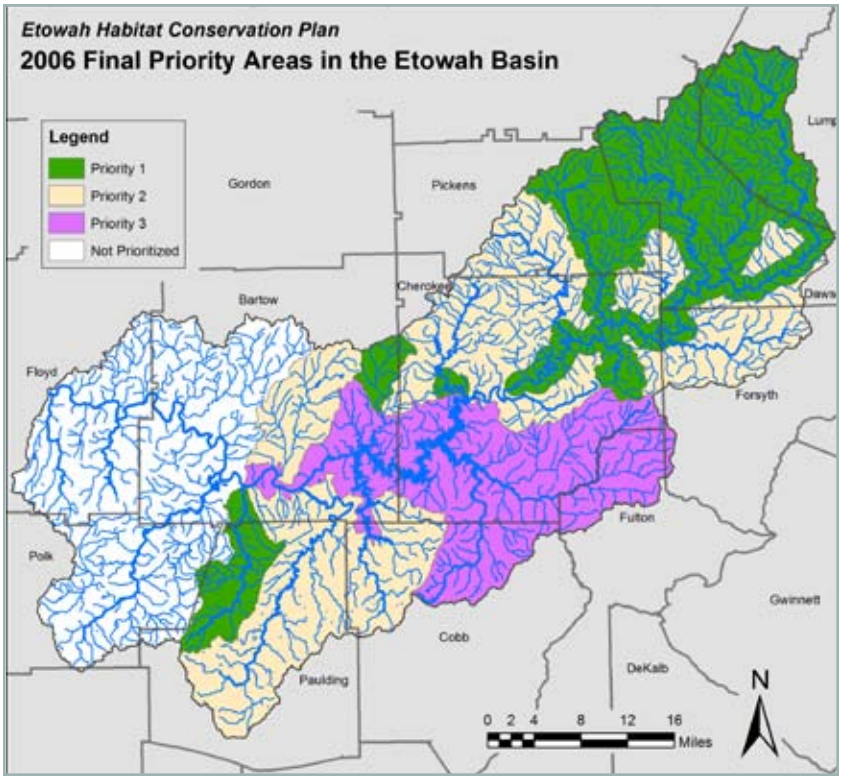
This document outlines the policies of the Etowah Aquatic HCP, as it has been proposed in August, 2006. As of this writing, the final HCP has not yet been approved by the Etowah Aquatic HCP Steering Committee. For a basic introduction to the Etowah and the Etowah Aquatic HCP, refer to the 2-page fact sheet titled, "Etowah Aquatic Habitat Conservation Plan," available at www.etowahhcp.org. The web site also has more detail on individual policies, including brief fact sheets and full-length reports with model ordinances.

STORMWATER MANAGEMENT

Most rain that falls onto roads, parking lots, roofs and other impervious surfaces runs off and is channeled quickly to streams in storm sewers. This stormwater runoff carries debris, chemicals, metals, and other pollutants to streams, and the high flows during storms can scour stream banks and lead to sedimentation. Many scientists believe that stormwater runoff is the greatest threat to urban and suburban streams.

To manage stormwater runoff, the Etowah Aquatic HCP includes a proposed stormwater ordinance for post-construction runoff. This ordinance applies to new development and some types of redevelopment. It is adapted from the Metropolitan North Georgia Water Planning District ("Metro District") ordinance and is identical in many important respects, so that jurisdictions within the Metro District can meet both requirements in a single set of regulations. The ordinance includes performance standards for water quality protection, stream channel protection, and flood protection. In addition, the Etowah Aquatic HCP stormwater ordinance includes a performance standard that limits the volume of runoff in watersheds most critical to the survival of the fish species of the Etowah Aquatic HCP. This "runoff limit" standard is what makes the HCP such an effective tool for protecting imperiled species in the Etowah.

The watersheds where the runoff limits apply are known as Priority Areas 1 and 2. Priority Area 1 is home to the most sensitive species protected by the HCP, and so has the most restrictive standard; Priority Area 2 supports species that are slightly less sensitive, and has a slightly less restrictive standard. Parts of the Upper Etowah that do not currently provide significant habitat to any imperiled fish are classified as Priority Area 3, and are not subject to the runoff limits (see map).



In Priority Area 1, the volume of runoff from small storms must be the same as if the site were in a forested condition—in other words, the site must "act like a forest," as far as runoff is concerned. In Priority Area 2, development projects are allowed to generate an additional volume of runoff; however, it can not exceed the amount that would occur if the site were 95% forested and 5% impervious. In both Priority Areas 1 and 2, local governments can designate some locations as "development nodes," where restrictions are significantly relaxed.

To meet the runoff limits, developers can use "Better Site Design" techniques to reduce the amount of impervious cover—which also saves money—and they can use various stormwater infiltration best management practices to return runoff to the soil. Use of these practices will be supported by an engineering manual and by a training program. A general approach to Better Site Design is to protect greenspace and cluster homes in a conservation subdivision. A model conservation subdivision ordinance is included as part of the Etowah Aquatic HCP, but local governments have the flexibility to modify this or not to use such an ordinance at all.

EROSION AND SEDIMENTATION (E&S) CONTROL

Sedimentation is one of the most serious threats to aquatic species in the Etowah basin. An excess of fine sediment in waterways can blanket the bottom of a stream degrading physical habitat, impeding spawning and reducing

populations of aquatic insects on which fish feed. Suspended sediment in the water may also impair the ability of fish to breathe and forage for food.

The HCP addresses sedimentation from construction sites in two ways. First, it establishes six standard operating procedures for enforcement of existing E&S regulations. Participating local governments developed these by exchanging information and identifying the best practices in use around the basin. The procedures include such things as preconstruction erosion control planning meetings, biweekly self-reporting and a minimum average frequency of inspections. Second, the HCP includes a grading ordinance that limits the disturbed area of a site to no more than 17 acres at any one time, and requires that at least 30% of slopes of 25% or more remain undisturbed. This ordinance was crafted with extensive input from the development community.

STREAM BUFFERS

Stream buffers, also known as riparian buffers, are the areas of land alongside streams and rivers. When left undisturbed, these areas help maintain clean water and healthy aquatic wildlife. Scientists believe that stream buffers are essential to protect the imperiled fish species of the Etowah basin.

Two different stream buffer ordinances have been proposed for jurisdictions in the Etowah. For the more mountainous counties of Lumpkin, Dawson, and Pickens (as well as the cities of Dawsonville and Jasper), the ordinance requires protection of 50ft buffers. Since state law already requires 50ft buffers on trout streams, there will be no change in buffer width on most streams in these counties. For downstream jurisdictions, the ordinances require an additional 25ft setback for impervious surfaces, for a total 75ft setback. This requirement is identical to that required by the Metro District of which the downstream jurisdictions of the Etowah basin are members. Therefore, the HCP does not require additional buffers beyond the current regulations. Some jurisdictions in the Etowah already exceed these minimums, protecting buffers as wide as 75 or 100 feet.

UTILITY STREAM CROSSING POLICY

Utility stream crossings occur when utility service providers such as gas, cable television and telephone companies install service lines across a stream. This is sometimes done via wet open trench construction, in which a ditch is dug across the stream, resulting in significant sedimentation. An alternative, already widely employed, is directional boring, which allows lines to cross streams with minimal disturbance. The Etowah Aquatic HCP includes a Utility Stream Crossing Policy that requires that directional boring be used in preference to other methods when possible. During fish spawning periods, only directional boring is permitted.

ROAD STREAM CROSSING POLICY

Road stream crossings—especially where pipe culverts are used—can limit fish movement up and down stream, fragmenting populations. This can greatly increase the likelihood of local extinctions. Studies by researchers in the Etowah basin show that as many as one-third of stream crossings in the basin that drain areas from 1km^2 to 50km^2 are likely to imped fish passage. These problems can be eliminated by using bridges or by sizing culverts sufficiently large. The Etowah Aquatic HCP Road Stream Crossing Policy requires that for new stream crossings:

- Bridges are required for streams that drain areas of 20mi^2 or greater;
- Box and pipe culverts may be used on smaller streams, but these must be embedded or bottomless, and sized at 1.2 times the stream width, plus two feet. Multi-barrel pipe culverts are prohibited, although multi-barrel box culverts are allowed.

These requirements apply to both privately constructed road crossings and those built by city and county governments and their contractors. Only new road crossings are affected, not replacement of existing crossings, except in the case where a bridge is to be replaced by a culvert.

WATER SUPPLY PLANNING

Water supply reservoirs, if located in the wrong place, can permanently fragment habitat and prevent fish movement on large scales. On the other hand,

water supply is critical to the future development of the region. Therefore, the Etowah Aquatic HCP includes a protocol to assist local governments in identifying reservoir locations with the least impact on protected fishes. The protocol is a procedure for evaluating the impacts of potential reservoir locations by examining:

- the number of habitat patches disturbed;
- the habitat quality in patches disturbed;
- the connectivity among patches disturbed; and
- the diversity of patch types disturbed.

Implementing the protocol has the potential to both minimize the impacts of reservoirs on fish and to greatly streamline the review process by federal agencies, saving considerable time and expense for local governments and water utilities.

MONITORING AND ADAPTIVE MANAGEMENT

Once implemented, the HCP will require monitoring to evaluate the plan's effectiveness. The monitoring program will include biological monitoring, to monitor the plan's effect on fish populations and habitat, and compliance monitoring to monitor the effectiveness of local governments in implementing the plan. Information collected through the monitoring program will be used in the plan's adaptive management program. This program allows the plan to be modified if components are found to be ineffective or inefficient.

WHAT DOES IT COST?

The Etowah Aquatic HCP adds an additional cost of $85/disturbed acre to new development activity in the basin. This implementation fee is collected by participating local governments and will support an HCP implementation staff hired by the Etowah Aquatic HCP Board, which consists of one representative from each of the participating local governments. This staff will assist local governments in implementing the policies of the HCP and oversee monitoring, adaptive management and training activities.

WHAT ABOUT PROPERTY RIGHTS?

From the beginning, the local governments, developers, and other stakeholders involved in creating the Etowah Aquatic HCP recognized that the plan would only work if it fully respected property rights and made minimal restrictions on landowners' ability to use their property. For example, the Etowah Aquatic HCP does NOT restrict land use or affect zoning. It also does not mandate wide stream buffers. Instead, the Etowah Aquatic HCP relies primarily on enforcement of existing regulations and on performance standards that provide maximum flexibility to developers and landowners.

WHAT'S THE ALTERNATIVE?

Participation in the Etowah Aquatic HCP is optional, and participating governments may opt out at any time. However, FWS has signaled that it will continue to require individual development projects to meet requirements similar to those of the Etowah Aquatic HCP, and may even require projects to create their *own* HCPs if they are not covered by the Etowah Aquatic HCP. Thus, developers in jurisdictions that choose not to participate will have to meet similar requirements, while facing the traditional slow consultation process. This will make the cost of development significantly lower within jurisdictions that participate in the Etowah Aquatic HCP.

For more information, please contact:
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