

Etowah Habitat Conservation Plan Steering Committee Meeting

February 13, 2004

Big Canoe, GA

Present: Jeffrey Boring, *UGA*; Steve Bradley, *Bartow County*; Bill Bumback, *UGA*; Melissa Casteel, *City of Canton*; Robin Dake, *UERA*; Erin Dreelin, *UGA*; Patty Durand, *Forsyth Forest Conservation Group*; Kevin Flanagan, *Lumpkin County*; Laurie Fowler, *UGA*; Bud Freeman, *UGA*; Mary Freeman, *USGS*; Beth Gavrilles, *UGA*; Curt Gervich, *HCP*; Frank Gipson, *Cobb County*; Robin Goodloe, *US FWS*; Mark Hutcheson, *City of Woodstock*; Ron James, *Cherokee County*; Dana Johnson, *City of Marietta*; Dale Jones, *CH2M Hill*; Susan Kidd, *TGC*; Charles Laughinghouse, *Forsyth County*; Emily Lewy, *Rep. Amos Amerson*; Holly Martin, *City of Kennesaw*; Louise McPherson, *USDA*; Eddie Mitchell, *City of Cartersville*; Ron Papaleoni, *LAPA*; David Paris, *City of Emerson*; Erik Petersen, *US ACOE Allatoona Project*; Norman Pope, *Pickens County*; Don Powell, *Paulding County*; Chris Quinn, *AJC*; Julia Reed, *UGA*; Candace Stoughton, *TNC*; Mike Tuller, *Cobb County*; Lynn Tully, *Dawson County*; Don Wells, *Mountain Stewards*; Seth Wenger, *UGA*.

Agenda Item 1. Adaptive Resource Management and the HCP, Mary Freeman

Adaptive Management is specifically mandated in the HCP process. Definition: “Managing in the face of uncertainty, with emphasis on reducing it (uncertainty.)” Adaptive Resource Management (ARM) began to develop in the sixties, and is the management strategy best suited for dealing with complex problems in large systems.

The case for incorporating ARM into the HCP:

- Allows for best possible decisions given the information available
- Allows for adjustments as new information becomes available
- Allows decisions that satisfy the HCP’s social objectives, but also can handle “surprises”

ARM differs from “traditional” management. Traditional management decisions are based on:

- Political/ social concerns (least complex and costly of the traditional models)
- Conventional wisdom
- Best current data
- Monitor and modify strategy (most complex and costly of the traditional models)

But none of these can incorporate multiple management objectives; they don’t define the things that can and can’t be predicted well; and they don’t deal well with surprises. All of those are factors in the HCP.

Uncertainties in the HCP

- *Structural, or ecological:* We can’t predict well how nature will respond to our management attempts. We can infer some things based on other river systems; we do know that certain human actions have certain consequences (e.g. land disturbance leads to erosion and sedimentation leads to loss of fishes) but not necessarily the rates at which this happens.
- *Environmental variation:* Future conditions are unknown, e.g. climate, drought, future societal demands, technological advances.
- *Partial controllability:* We can apply regulations but don’t know how well they’ll actually be implemented (e.g., we post speed limits, but...)

- *Partial observability*: We can only sample, and must extrapolate from there; we can never know the system completely.

ARM Process:

1. Steering Committee states objectives
 - Must be measurable
 - Must contain constraints to incorporate multiple goals
2. Steering Committee (with input from Technical and Advisory Committees) states alternative management actions
 - E.g. regulations, development locations
3. Steering Committee and Technical and Advisory Committees develop models to predict responses to each alternative
 - Goal of models is not to predict, but to structure our understanding and show the gaps in our knowledge
 - Can't be left to modelers!
 - Must be based on best available data
 - Predict the likelihood of attaining objectives using each alternative management strategy
 - Show what we need to monitor
4. Steering Committee (with input from Technical and Advisory Committees) chooses and implements optimal decision
5. Steering Committee (with input from Technical and Advisory Committees) monitors regarding objectives and predictions of the model
 - Implementation
 - Land use change
 - Status of aquatic species
 - Environmental and social variables
6. Steering Committee (with input from Technical and Advisory Committees) establishes program to, at specific intervals, evaluate monitoring data and make decisions
 - Monitoring results used to update models and revise HCP terms

Scientific review is critical. We'll need to assemble a group of conservation biologists, and other expertise with no vested interest in the HCP, to review the models, data, monitoring program, and monitoring results.

Pros and cons of ARM:

Cons:

- Big upfront workload
- Result is not a final decision
- Large investment in monitoring
- Requires institutional flexibility

Pros:

- Only process that handles uncertainty
- Without a plan to deal with uncertainties, the Incidental Take permit could be revoked if our decisions based on best current data turn out to be wrong
- ARM allows room for better technology
- ARM is scientifically defensible

- Using monitoring data reduces uncertainty

Discussion:

Monitoring. Monitoring interval needs to be frequent enough to react to crises. It doesn't take long for a habitat to be destroyed. Can we put the brakes on fast enough if need be? We'll need instantaneous feedback. The monitoring data should be available for all to see so decisions are transparent. The public is a good source of monitoring information. If problems start appearing – endangered fish populations declining – so that changes need to be made to the HCP, won't it all break down? Different regulated sectors will blame one another for the species' decline... This is why monitoring is so important, and has to be very thorough. We need to prepare, think through all the options so we know where the boundaries are.

Possible challenges to HCP. Why would environmental groups challenge the HCP? Historically, they have. We've been meeting with them to make sure we don't make the mistakes they've identified with other HCPs, namely we're basing ours on science, and on public involvement; and will have an adaptive management plan.

Ground-breaking nature of this HCP. This is a ground-breaking HCP and is already being used as a model for others.

Uncertainty. We'll be asking local governments to implement new strategies; it will be hard enough to build up political will to do it once, but really tough to make changes if we then come back to them a little while later and say "Sorry, we were wrong – you need to do something else instead."

But it won't be a top-down mandate; any changes will be decided on together. Also, there is not total uncertainty – we have a good idea of the parameters of potential changes.

Outreach. Politicians will only do this if their constituents support it; and that will only happen if they know what's happening. Information has to be publicly available.

Agenda Item 2. Water Supply Planning, Jeffrey Boring

Framework: oversight by a Technical Advisory Committee, which would include the Upper Etowah River Basin Group (which is already working on this issue) as well as representatives from the Lower Etowah counties.

Suggestions to take to TAC:

1. Adopt a standardized protocol to project water supply demand across the region. The protocol should incorporate end users (not all models do.) The Advisory Committee would research models and protocols.
2. Adopt water conservation measures. The Etowah local governments, UGA, TGC would work together to find cost-effective strategies.
3. If modeling shows that more supply is needed than can be achieved through conservation alone, analyze alternatives.

- a. Stream intakes (reservoirs sited off stream.) Would need to know how much water can safely be withdrawn, and from where.
- b. Use FWS/DNR biodiversity standards (reservoirs shouldn't impact highly biodiverse streams.) Requires mapping and analysis.
- c. In a drought, these measures may not be enough; where can we site reservoirs that have the least impact?

Some places would just not be acceptable in order to meet HCP goals; those could be made off-limits.

How this framework benefits local governments:

- Helps meet HCP goals
- Provides greater certainty to HCP participants re. water supply; acceptable projects pre-identified
- Expedites permitting process. Inter-agency agreement between DNR, EPD, and ACOE outlining responsibilities and guidelines for each agency.

Agenda Item 3. Stormwater/ Better Site Design Technical Advisory Committee, Erin Dreelin, UGA

The committee is composed of planners, engineers, and developers representing almost every HCP county and municipality (still need members from Bartow and Paulding Counties.)

Meeting information will be posted on the HCP Web site. The first meeting will take place March 3 in Canton. The committee will be working on a model ordinance which they expect to have drafted by May.

Agenda Item 4. Visualization Tool for Data and Growth Scenarios, Bill Bumback, UGA, and Susan Kidd, TGC

Community Viz is a software tool that can be used to show what policy changes will look like on the ground. It can focus on a site, watershed, county, or regional scale. It can be used to look at environmental and economic impacts of different development scenarios. Information such as economic data, topography, land cover, impervious surfaces, streams, parcel lines, county lines, watershed boundaries, aerial photography, zoning, and anything for which a rate can be determined (*e.g.* car trips per household or water use per household) can be incorporated. Unlike traditional overlay analysis, Community Viz is based on a geographic information system (GIS,) so it can be used to re-run models with different sets of assumptions quickly, and to output the results in both map and 3-D formats. Many Steering Committee members responded that the visualization capability alone made the software a useful tool. The software costs about \$5000 and is an extension to ARC-View. UGA owns a copy, purchased specifically for use on the HCP for Etowah counties.

The Advisory Committee asked for some specific Etowah projects that could benefit from Community Viz, and will start working on modeling several of those as a pilot project.

Agenda Item 5. Enforcement Issues, Laurie Fowler

Lots of legal research into HCP enforcement has been done over the last few months. We are waiting to get feedback from the Attorney General. We'd like to include a thorough discussion of this issue at the next Steering Committee meeting, including enforcement funding.

Agenda Item 6. Outreach Report, Curt Gervich

Curt outlined his goals and objectives for the following areas: media; development of marketing materials; stakeholder outreach; development community involvement; environmental group involvement; civic group involvement; general public involvement; and networking with community groups on local projects. Curt has been meeting with people from all these groups, informing them about the HCP, and listening to their concerns.

Discussion focused on how to incorporate stakeholder input into the decision-making structure. So far the Advisory Committee has been presenting information to the Steering Committee for decisions. Now the Technical Committees are forming and will be starting to work on their recommendations, some of which should be completed by May. At what point should stakeholder input be solicited on the Technical Committees' recommendations – before the Steering Committee sees the recommendations, or after?

It was suggested that although one size doesn't fit all, the political leaders should be approached first, then the most impacted stakeholders, then the general public. Elected officials need to buy in; then groups like the Chambers of Commerce and environmental organizations; then community leaders; then the general public. At the same time, however, the most impacted stakeholders need to be in on it from the beginning or they will never agree to the conditions of the HCP.

Curt suggested that he provide his notes from meetings with stakeholder groups to the Technical Committees; his notes are also available to the Steering and Advisory Committees. The Technical Committees (so far) include representatives of stakeholder groups as well as professional staff of local governments, so stakeholder input is being used to come up with recommendations.

Curt also reported on broader outreach efforts. Bruce Goldstein at Virginia Tech has agreed to help us look into setting up the peer review panel for the HCP. Curt will be presenting a paper on the HCP at a conference in Colorado, and the Advisory Committee will be organizing a symposium on the HCP at next year's Ecological Society of America meeting. Also, results of scientific studies were presented at the North American Benthological Society (NABS) and American Fisheries Society (AFS) annual meetings last year. Finally, there is an opportunity for a documentary film to be made about the HCP; it would require finding funding. There was general agreement that Curt should learn more and explore the options available.

Next Meeting

Friday, May 7, 10 am – 1 pm

Mike Tuller of Cobb County Water Department offered to host the meeting; exact location and directions TBA.