

## MEETING NOTES

Cumberland Habitat Conservation Plan Steering Committee  
Cumberland County Art Circle Public Library  
3 East St., Crossville, TN  
September 15, 2011

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### ATTENDEES

Name		Affiliation
Robert	Baker	TN Dept. of Environment and Conservation
Everett	Bolin	Crab Orchard Utility District
Dr. Chris	Burcher	HCP Team (UT)
Kevin	Dean	City of Crossville
Mayor J.H.	Graham	City of Crossville
Dr. Jerry	Hardin	Emory River Watershed
Pam	Harris	ECE Services
Dr. Yoichiro	Kanno	HCP Team (TTU)
Katherine	Medlock	The Nature Conservancy
Teresa	Payne	HCP Team (UT)
Barbara	Rosensteel	HCP Team (TTU)
Rebecca	Schapansky	NPS Obed Wild & Scenic River
Peggy	Shute	U.S. Fish and Wildlife Service
Chuck	Sutherland	HCP Team (TTU)
Samantha	Wyatt	HCP Team (TTU)

### MEETING GOALS

- Update the Steering Committee (SC) on the progress of the take model.
- Give the SC general updates on the HCP.
- Review Covered Activities, Adaptive Management, Monitoring, and Cumulative Impacts and discuss progress of other HCP components.

### WELCOME AND INTRODUCTIONS

- Teresa Payne (HCP staff) welcomed all attendees. Mark Thurman (TWRA) and Deborah Tuck (USACE) are new SC members but were unable to attend this meeting.
- Attendees introduced themselves to the group.
- Teresa reviewed the purpose of the meeting.

Take Model Update for Aquatic & Semi-Aquatic Species

Presented by Dr. Yoichiro Kanno, CHCP Post-Doctoral Research Associate

*Media: PowerPoint*

Dr. Yoichiro Kanno (HCP Team) updated the SC on the progress of the take model. Highlights:

- A lot has been accomplished, and Chuck Sutherland (HCP Team) has done most of the GIS work.
- Meaningful data can be obtained from GIS to use in the take model. The take assessment will determine how much terrestrial and aquatic suitable habitat will be lost over the 30-yr period. Take must be calculated for each species.
- Four criteria were used to create spotfin chub habitat mapping: 1) SWAP (preferred, suitable, and marginal habitat were used); 2) known occurrences (with 5-km buffers applied upstream and downstream from each occurrence); 3) stream size; and 4) human disturbance (impervious cover was used as an indicator). The same criteria were used for purple bean habitat mapping.
- Areas that were projected to have 5% or greater impervious cover were mapped. Areas that have currently exceeded 5% impervious cover have been taken out because they are already impaired.
- More analysis is needed for the terrestrial species. SWAP habitat classifications were used to make a map for cerulean warbler, in which habitat fragmentation can be seen.
- Plans are to complete the aquatic and semi-aquatic species take models and to do the analyses for the terrestrial species by November.
- Leaving in the different layers of habitat (i.e., marginal, suitable, and preferred) in the final draft maps will make it easier for the applicants to decide where to restore habitat.

Q&A

What type of habitat do cerulean warblers need?	Yoichiro- Cerulean warblers are interior forest-dependent species, and they need un-fragmented forest tracts that are 500-1000 acres in size.
Were the projected take numbers in the absence of the conservation measures?	Yoichiro- Yes, they were projected as conditions exist now. Take numbers should be lower once the conservation measures are incorporated.
Did you have any surprises as you did these take analyses?	Yoichiro- We have a lot more GIS data than we were expecting. We do not have as many species occurrence data as we thought.
Could the 5% impervious cover threshold be increased when the conservation measures are incorporated?	Yoichiro- Yes, we are trying to figure out what the increase would be.
Did you see anything in other states or HCPs that made the same hypothesis about impervious cover?	Yoichiro- Yes, the Etowah HCP used impervious cover. Robby- The threshold of 5% impervious cover is well known and used in aquatic ecology and other HCPs. I am surprised that impervious cover increased in Fairfield Glade because they are already doing Low Impact Development, but maybe it is from new roofs and roads. Mayor Graham- It would include golf courses as well.

General HCP Update

Presented by Teresa Payne, CHCP Outreach Coordinator

Teresa Payne (HCP Team) updated the SC on work that has been accomplished over the summer. Highlights:

- The HCP team has been very busy creating conservation measures with assistance from the Permitting Partnership Coordination Committee (PPCC). A few members of the PPCC are here today: Peggy, Rebecca, and Robert. They have been meeting since April and have worked diligently to assist in completing the draft document. The Technical Team has also reviewed the conservation measures. HCP staff are now in work sessions presenting the conservation measures to the applicants (City and County staff). They will then be taken to the Outreach Committee, and then to the SC for approval.
- The Funding Committee, including City and County staff, was formed. They have discussed mechanisms for funding and some HCP costs. They will have another meeting at the end of September or in October.
- HCP staff, USFWS, City Staff, and Robert Baker (TDEC) updated City Council in August. Outreach Team members were there to show their support. The Council got a good update, and they seemed pleased.
- HCP staff has begun working on adaptive management and monitoring.

#### Q&A

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<p>Do you feel confident that all components of the HCP are coming along at the same speed?</p>	<p>Teresa- We are working on all the components concurrently. There might be a portion of funding that will have to wait until we have more information.</p> <p>Kevin- Once we finish the conservation measures, we will be able to move along.</p> <p>Katherine- It's my job to make sure the project moves along as it should. Outreach is progressing as necessary. I agree with Teresa that there are some items that hinge on others to be complete first. I feel comfortable and confident that we are progressing toward finishing this during the requested timeline.</p> <p>Peggy- I think things are progressing well, too. The HCP staff has come a long way in four months, and I am pleased.</p>
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Covered Activities, Adaptive Management, Monitoring, and Cumulative Impacts

Presented by Dr. Chris Burcher, CHCP Science Coordinator

*Media: PowerPoint*

Dr. Chris Burcher (HCP Team) reviewed the meaning and progress of the CHCP components. Highlights:

- The HCP team is making every effort to think about anything that could come up in the HCP. A lot of things were revisited that had been done prior to the new HCP team members coming on board.
- In many ways, having access to public sewers is a trigger for development. Conservation measures have already been conducted for the Holiday Hills STP. They have expanded the plant to be able to process wastewater to accommodate for growth. This would have been a conservation measure they would have been asked to do under the HCP if it hadn't already been done. Take has already potentially been accounted for. There are some regulatory issues with determining whether or not the wastewater effluent is causing degradation. Through the HCP, monitoring and adaptive management plans can be developed to determine whether or not it's causing degradation or not. Since the dam was put in the stream, there was no flow. The flow that is being put in now is from the STP, so it can be argued that the species are dependent on the STP to provide high quality volume. That's what makes it a conservation measure.
- Adaptive management is a new way of looking at management by assessing whether or not the management approach is doing what it is supposed to. Management is changed when new information is gained. Jerry- Adaptive management is like an option cornerback.
- Compliance monitoring tells us if we are doing what we said we would do. Effects/effectiveness monitoring tells us if our conservation measures are doing what they are supposed to. Peggy- If the applicant is thinking about the effects of their activities on species and their habitats, and if they are following the conservation measures, if they see that everything is doing a good job through effectiveness monitoring, then, they can probably do less effects/effectiveness monitoring later.
- Cumulative impacts are the sum of impacts over the landscape. Changed/unforeseen circumstances are things that are not currently happening but could happen over the life of the HCP.

Q&A

<p>Will the new Tansi Sewer Utility District be evaluated as well?</p>	<p>Teresa- No, just the Holiday Hills STP.  Chris- It has to be under the jurisdiction of the HCP applicant in order to be covered under the HCP.  Katherine- It is dependent upon the applicants to tell us what they want to be covered activities.</p>
<p>How does this approach for wastewater treatment fit in with anti-degradation of the stream?</p>	<p>Katherine- The stream is listed as impaired because of low flow.  Chris- Even if volume increases, concentration will remain the same.  Robert- TDEC's assessment of their rules might be a separate from the HCP, but the HCP will help them make decisions. It argues for better treatment of the flow that comes from the STP.  Chris- They have already made the upgrades for this.</p>

	<p>Katherine- If we are wrong, there will be a trigger in place to do something about it.</p> <p>Robert- They will have to lower the concentration to increase the volume in order to comply with TDEC's anti-degradation regulations.</p> <p>Katherine- Clark Annis (Holiday Hills STP) is willing to add monitoring stations for this.</p> <p>Robert- They would not want to monitor to make sure they are not adding more pollutants because the rules state that they cannot add more pollutants. They can use monitoring to justify the addition of flow. TTU will have the Oasis Model, which is a hydrologic model that can consider different variables. It would be available to the City.</p>
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**ADJOURN**

**ACTION ITEMS**

<b>Responsible Party</b>	<b>Item</b>	<b>Deadline</b>
HCP Staff	Include marginal, suitable, and preferred habitat on the final draft maps.	When Complete

*The next SC meeting is scheduled for November 10<sup>th</sup> from 1-4 PM Central at the same facility (Cumberland County Art Circle Public Library on East St., Crossville).*