

BIOLOGICAL ADVISORY TEAM OF THE SOUTHERN EDWARDS PLATEAU HABITAT CONSERVATION PLAN

MEETING 10 MINUTES

DATE: September 24, 2010
LOCATION: San Antonio Builders Association
3625 Paesanos Parkway
San Antonio, Texas 78231

1. Call to order - Richard Heilbrun, Texas Parks and Wildlife Department (TPWD)

Richard Heilbrun called the meeting to order at 9:12 AM.

2. Review and approve minutes from September 10, 2010 BAT meeting.

Richard Heilbrun stated that due to differences with how the draft minutes for the September 10 meeting were prepared, no action would be taken on approval of these minutes. BAT members discussed alternate methods for preparing meeting minutes and the amount of time spent reviewing draft minutes. Andy Winter (Bexar County) suggested that the minutes be shortened to a very brief summary and supported by transcripts from the audio recording. CAC members in attendance indicated that detailed meeting minutes were preferred.

Motion (Richard Heilbrun): Continue to have Amanda Aurora (Loomis Partners) prepare detailed draft minutes, with audio recordings and raw transcripts (from Dragon Dictation software) distributed with the minutes and posted on the website. **SECOND** (Jackie Poole).
VOTE: Voice vote carried without opposition.

3. Public comments (3 minutes per speaker)

Bebe Fenstermaker (CAC member) announced that the San Antonio Water System was planning a meeting to discuss their proposed Certificate of Convenience and Necessity for wastewater service and encouraged BAT members to attend.

4. Update from BAT Subcommittee meeting

Richard Heilbrun reported that BAT members Julie Groce, Tom Hayes, and himself met the prior week to discuss U.S. Fish and Wildlife Service issues for golden-cheeked warbler (GCW) conservation and to develop preserve size and mitigation recommendations.

Mr. Heilbrun noted that this subcommittee only had the habitat and impact estimates provided to date by the consultant team to work with, but stated that the consultant team distributed new estimates to the BAT at the start of the meeting. Amanda Aurora (Loomis Partners) walked the BAT through the revised estimates of available GCW habitat using the Model C and Model L,

including patch size metrics, at the Plan Area, county, and sector level. Clifton Ladd (Loomis Partners) reported that revisions to the land use projections based on comments received from the BAT and CAC were underway and would be available soon.

Richard Heilbrun asked Tom Hayes to report on the status of the Greater Edwards Aquifer Alliance (GEAA) proposal to estimate GCW habitat loss between 2000 and 2010 and provide an updated assessment of available habitat. Dr. Hayes reported that GEAA was ready to begin work and had begun hiring additional staff to help prepare the analysis. Clifton Ladd stated that Loomis had met with Dr. Hayes to discuss the proposal, but had not an opportunity to discuss the work with Bexar County. Mr. Heilbrun suggested that the BAT should proceed with the data already provided, but would like the BAT to review the information prepared by GEAA when it is ready. He indicated his preference that the BAT provide only preliminary recommendations to the CAC, subject to revisions until the GEAA data has been considered.

Richard Heilbrun asked for an update from the consultant team on the status of the conservation lands database. Amanda Aurora responded that tabular information was ready, but that not all of the spatial data would be released due to sensitivity associated with private lands. Clifton Ladd stated that the conservation lands report would be released on Monday, September 27, 2010. He also noted that not all properties included in the database are protected specifically for endangered species. Richard Heilbrun asked the consultant team to work with area land trusts to be able to release as much information as possible about existing conservation lands.

5. Discussion and possible action on Preserve Size and Configuration

Richard Heilbrun gave a presentation to the BAT outlining an approach for determining preserve size recommendations for the GCW and black-capped vireo (BCV). The suggested approach included determining the biological needs of the GCW and BCV based on the conservation goals set by the committees, develop scenarios for preserving different percentages of habitat in each county, and include additional acreage to accommodate buffers for protected habitat.

Mr. Heilbrun stated that the Service recommended basing the impacts analysis on a mid-range estimate of available GCW habitat. The mid-range habitat loss projections prepared by the consultant team indicated approximately 62,000 acres of GCW habitat loss over the duration of the plan. He also reported that the Service suggested that the incidental take request err on the high side to avoid the need for future major amendments and to ensure that take was commensurate with the proposed mitigation. He reported other Service recommendations, including that the amount of requested take plus the amount of proposed mitigation must be less than the amount of available habitat, consistent habitat estimates be used for determining take and mitigation, buffers should be considered, and that the locations of proposed take and mitigation should be identified (i.e., general numbers for the Plan Area as a whole are not sufficient).

Richard Heilbrun suggested a framework for determining what “contribute to recovery” means for the GCW and BCV. He indicated that the Plan Area would likely cover part or all of 2 or 3 GCW recovery regions, depending on the outcome of the current recovery planning process, and that recovery for a region was defined as protecting a population of at least 3,000 GCW breeding pairs (i.e., meeting recovery for the Plan Area would require the protection of at least 6,000 breeding pairs). He also stated that the GCW territory size in the SEP-HCP region was approximately 7 acres and that the typical territory density was approximately 15 acres per pair. He suggested that the SEP-HCP preserve system include sufficient habitat to meet approximately 75% of the recovery goal for the region (i.e., include approximately 84,000 acres of habitat). However, Mr. Heilbrun noted that this estimate is not spatially explicit.

Mr. Heilbrun proposed a method for determining a biologically based recommendation for the amount of incidental take that the plan should seek to cover. He acknowledged several assumptions used in this suggested approach, including that recovery region boundaries have not yet been redrawn, incidental take must not exceed an area's ability to provide sufficient mitigation, mitigation must be provided close to the impact, the need to consider the ecological harm to the species associated with authorized habitat loss, and mitigation ratios of at least 2:1 for most of the Plan Area and ratios of 3:1 for Bexar County and surrounding areas with extraordinary threats to the species. He reported that the Service would not accept a plan that allowed for all remaining habitat in Bexar County to be taken and that the Service will require that mitigation for take in Bexar County be located at least partially in Bexar County, with the remaining mitigation located in closely adjacent areas.

Richard Heilbrun presented three scenarios for determining the amount of GCW incidental take to authorize and the corresponding preserve size to acquire for mitigation. Scenario 1 assumed that 100% of the projected GCW habitat loss would be covered by the plan (approximately 62,000 acres of GCW habitat loss) and would require approximately 187,000 acres of mitigation, including habitat buffers. He noted that this scenario allows more habitat loss to occur in Bexar County than is available for mitigation in that county. Scenario 2 assumed that the plan would cover approximately 70% of projected GCW habitat loss in Bexar County, 50% of the projected habitat loss in Kendall and Medina counties, 40% of the projected habitat loss in Kerr County, and 20% of the projected habitat loss in Bandera and Blanco counties. This scenario would require a preserve size of approximately 105,000 acres, including buffers. Scenario 3 assumed that the plan would cover approximately 50% of the projected habitat loss in Bexar County and 20% of the projected habitat loss in other counties. The amount of mitigation required under Scenario 3 would be approximately 67,000 acres, including buffers.

Richard Heilbrun suggested that the BAT would only be able to issue preliminary recommendations on preserve size to the CAC since the BAT was missing information to validate model information, revisions to the impacts analysis were not yet available, the BAT was missing spatial data for available habitat, and the BAT could not determine focal areas for protection.

Moving on to BCV mitigation, Richard Heilbrun noted that there was not a lot of good data available to estimate habitat loss for this species and referred to the impacts analysis by the consultant team that projected approximately 11,000 acres of BCV habitat loss over the plan duration. He also suggested that preserve size recommendations for the BCV include an additional 25% for habitat buffers or to accommodate temporary habitat loss due to management activities.

Tom Hayes suggested that areas of non-habitat in parcels acquired for preserves could be considered habitat buffers and that he would prefer to consider mitigation ratios of 4:1.

The BAT discussed the take and mitigation scenarios, and proposed revisions to the scenarios. Some BAT members expressed concern about treating whole counties the same, particularly if different rates of land development are expected. Amanda Aurora (Loomis Partners) suggested that the analysis could be revised based on the sectors used in the land use projections, such that high growth and low growth sectors could be grouped separately. Richard Heilbrun noted that take authorization would not be sought for Comal County, since that county is pursuing its own plan, but that mitigation could be situated in Comal County. Mr. Heilbrun also noted that the CAC could reduce the preserve size recommendations of the BAT.

Richard Heilbrun asked the consultant team to provide an analysis of estimated take and mitigation based on high growth and low growth sectors for consideration by the BAT during the

week of September 27th. Mr. Heilbrun offered to work with the legal team to determine if the BAT could meet electronically to review the new analysis and settle on a preliminary recommendation for the CAC.

Richard Heilbrun requested the consultant team to reconsider and more completely explain how steep slopes and floodplains are considered in the land use analysis.

Mr. Heilbrun also suggested that the BAT can use the same type of analysis for estimating take and mitigation for the BCV. Several BAT members questioned whether BCV habitat, with its required management, would be appropriate as a buffer for GCW habitat, but generally agreed that buffers should be applied to BCV preserve size estimates.

6. Karst Minimum Preserve Standards by FWS: Charlotte Kucera and Allison Arnold

Charlotte Kucera (U.S. Fish and Wildlife Service) presented the Service's recommendations pertaining to the covered karst species, including how to assess take, determining mitigation, pressure points, recent findings, and acquisition strategies.

Ms. Kucera described that direct take should be defined as impacts to the cave footprint (which includes both the surface and subsurface drainage basins), and that indirect take occurs later in time than the direct impact. She also stated that the Service required mitigation ratios to be commensurate with the impacts, that take and mitigation be considered for focal areas (as determined by the BAT), mitigation ratios should vary with the severity of the habitat loss and with the availability of mitigation. Ms. Kucera stated that the Service recognizes the following issues associated with karst take and mitigation: rapid habitat loss, the suitability of the remaining habitat, restricted ranges, and what may be counted towards recovery vs. towards mitigation for the plan. She also stated that the Service believes that structuring the take and mitigation strategy based on focal areas (as determined by the BAT) would be a good idea, with higher mitigation ratios for some focal areas.

Ms. Kucera stated that the Service recognizes that conservation banking is one possible approach to karst conservation with conservation measures based on the draft karst recovery plan. Conservation measures recommended in the draft recovery plan include protecting at least 3 Karst Faunal Areas (KFAs) in each Karst Faunal Region (KFR) with at least one of the KFAs being of high quality. She explained that under a conservation banking scenario, KFAs contributing to recovery must be occupied by the species, are required to be managed to maintain the conservation value of the habitat, are required to have legal protection, and may not have public access except on a case-by-case basis where the conservation value is maintained or exceeded. She noted that other acquisition strategies for karst mitigation, such as fee simple or fee-in-lieu, were also possible. She also stated that mitigation must be in place before take can occur and that the plan should seek to leverage partnerships with other entities engaging in karst conservation.

Ms. Kucera stated that the Service needs the following information to evaluate the plan: what caves are known to support the covered species, how many of these caves are protected, maps of the surface and subsurface drainage basins for known caves, and what opportunities may be available in the Plan Area for the creation of high quality KFAs. She also noted that the Service will require the use of current data (including aerial imagery) for determining habitat loss for karst and that caves must be managed to maintain their conservation value.

Jean Krejca (Zara Environmental) stated that the recovery standards for the covered karst species could require the protection of 39 caves, unless some species co-occur in the same cave.

7. Presentation and discussion on karst habitat information and terminology – Jean Krejca and Rachel Barlow (Zara); about 45 minutes

Rachel Barlow (Zara Environmental) presented information on basic karst conservation terminology. She explained the different types of features that constitute karst habitat, including caves, sink holes, and fractures. Ms. Barlow described the features of a cave profile and surface and subsurface drainage basins. She noted that surface and subsurface water may flow in different directions and that aquifer recharge features commonly occurs in creek beds.

Ms. Barlow explained the definitions of karst zones, with Zones 1 and 2 being known or highly likely to harbor listed species and Zone 3 being unlikely to have occupied caves. She noted that Zone 4 included areas that were not sufficiently studied and that Zone 5 was not known to provide habitat for listed karst species.

Ms. Barlow explained the definition of Karst Faunal Regions as areas though to be biologically and hydrologically separate. She stated that 6 KFRs have been delineated in Bexar County. She also reported that the Service has identified 22 Critical Habitat Units for karst invertebrates in Bexar County that include 1,063 acres and 31 caves with listed species.

8. Presentation and discussion on karst Conservation Measures (concepts, examples, and ideas for SEP-HCP) – Jean Krejca (Zara); about 30 minutes

Jean Krejca (Zara Environmental) noted that the BAT had decided to seek to achieve recovery of the 3 covered karst invertebrates, which could be possible given the number of currently known localities for these species, and walked the BAT through the draft recovery criteria. Dr. Krejca explained that the 3 covered karst species were known to occur in 4 or 5 KFRs, which corresponded to a recovery standard of 12 to 15 protected KFAs for each species. She explained that 3 KFAs must be protected in each KFR where the species is known to occur, and that at least 1 KFA in each KFR should be of high quality. Dr. Krejca also noted that the recovery plan did not precisely define the criteria for a high quality KFA, but noted that management might be needed to compensate for insufficient protected area around the cave.

Dr. Krejca briefly summarized the distribution of the known localities for each of the listed karst species in Bexar County. She noted that many of the currently known localities for the 2 covered beetle species occur within Government Canyon State Natural Area and may already have some degree of protection. She reported that many of the other known localities for the listed karst species occur on Camp Bullis, which has been intensively studied for karst invertebrates. However, she stated that working with private landowners to protect karst habitat and caves would be essential to recovering the covered karst species, given currently available information.

Dr. Krejca described how the Balcones Canyonlands Conservation Plan (BCCP) and the Williamson County Regional Habitat Conservation Plan dealt with karst conservation. She explained that these plans assessed impacts based on either the amount of karst zone affected and/or on the basis of impact zones delineated around cave features. She noted that the BCCP committed to protecting 62 identified caves and that the Williamson County plan committed to protected 9 to 15 caves.

Dr. Krejca asked the BAT to consider recommendations on how to measure impacts and what mitigation measures might be appropriate. She also suggested that committing to a level of conservation that is short of recovery for the karst species could make it difficult to demonstrate that the mitigation provided is commensurate with the impacts (i.e., define appropriate mitigation ratios), since it could be difficult to show a direct link between surface disturbances and take of individual karst invertebrates in a cave.

BAT members discussed whether impact assessments should be based on a map-based approach with simplified impact zones or detailed field information (such as delineations of surface and subsurface drainage basins). Andy Gluesenkamp suggested that detailed field information would be the most certain option for assessing impacts, but that this information (particularly the extent of subsurface drainage basins) is often difficult to determine and that a simplified approach could encourage more participation in the plan. BAT members discussed alternatives for impact zone distances and suggested distances between 2,000 and 50 feet.

Jean Krejca noted that not much of Bexar County has been carefully surveyed for karst features, and that extrapolating data from Camp Bullis suggests that there could be between 300 and 600 caves with listed karst species in the county.

BAT members indicated that seeking additional protections for listed karst species in caves on Government Canyon (and possibly Camp Bullis) would be important for the plan. Dr. Krejca reported that the consultant team met with the Service to discuss ideas for the karst conservation program and proposed that at least 3 caves be protected for a particular species in a KFR before take would be allowed for that species in that KFR. Valerie Collins suggested that there should be an option to participate in the plan based on field survey data, if it is available, not just on a map-based approach.

Richard Heilbrun noted that the Service has stated it will require case-by-case review of karst participation and that some amount of mitigation would be needed prior to any take being authorized. BAT members discussed how to identify and acquire karst preserves prior to the plan being approved. Jean Krejca suggested that identifying preserves before the plan was approved may not be necessary to achieve the Service's requirements. Instead, the plan could simply commit to achieving a certain level of conservation before take would be allowed, without prescribing how it would be accomplished.

BAT members discussed working towards a karst conservation deal and reaffirmed the committee's desire to work towards recovery for these species. The BAT also discussed the importance of forming partnerships with private landowners to accomplish karst conservation.

BAT members discussed which karst zones should be subject to mitigation fees and generally agreed that Zones 1 and 2 were likely to include listed species. Some members also suggested that Zone 3 should be included, particularly where Zone 3 is adjacent to Zone 2. Valerie Collins noted that Zone 3 is not currently considered as likely karst habitat and should not be automatically included in a mitigation fee zone; although, all known occupied karst features should require mitigation regardless of karst zone. BAT members discussed how to encourage participants to collect detailed karst field data to assess impacts.

Tom Hayes suggested that wide impact buffers should be proposed, including surface drainage basins, and that other geological information might be available to help refine a map-based approach to participation. Valerie Collins noted that the BAT should review the Texas

Commission on Environmental Quality optional enhanced measures for karst conservation. Jean Krejca suggested that finding additional species localities would be key to achieving conservation of these species.

Andy Gluesenkamp volunteered to work on a subcommittee to consider karst impacts and conservation measures.

9. Presentation and discussion on karst impacts analysis – Jean Krejca (Zara); about 30 minutes

Detailed presentation and discussion of the draft karst impacts analysis was postponed.

10. Future agenda items and next meeting - Richard Heilbrun, TPWD

Richard Heilbrun noted that the next BAT meeting was scheduled for October 8, but that he would confer with the legal team to explore options for electronically meeting to consider GCW and BCV take and preserve size recommendations.

11. Adjourn

MOTION (Justin Dreibelbis): Adjourn the meeting at 1pm. SECOND (Jackie Poole). VOTE: Voice vote carried without opposition.

Attachments

- Presentation slides from Richard Heilbrun (“Warbler and Vireo Preserve Size”)
- Presentation slides from U.S. Fish and Wildlife Service (“Southern Edwards Plateau Habitat Conservation Plan – karst impacts and mitigation”)
- Presentation slides from Rachel Barlow (Zara Environmental, “Karst Terminology”)