Timeline of Action Items for the SEP-HCP Citizens Advisory Committee through Phase 2 of the Work Plan.

7/27/2010

Topic	Status	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010
Plan Area	recommendation								
Covered Species	preliminary recommendation		x						
Covered Activities	recommendation	o	x						
Permit Holders	in progress		o	o	o	x			
Permit Duration	recommendation		o	x					
Incidental Take Request	undetermined				o	x			
Conservation Strategy									
a. General Approach	in progress			o	o	x			
b. Conservation Measures	in progress			o	o	x			
c. Participation Process	in progress			o	o	x			
d. Management and Monitorin	in progress			o	o	x			
e. Public Access	undetermined				o	x			
Funding Strategy	undetermined			o	o	o	x		
Preferred HCP Alternative	undetermined						o	x	
Review Resource Assessments	in progress			o	o	o			
Review Impacts Assessment	in progress			o	o	o			

o Topic introduced for discussion
x Recommendation anticipated

Timeline of Action Items for the SEP-HCP Biological Advisory Team through Phase 2 of the Work Plan.

7/27/2010

Topic	Status	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010
Plan Area	recommendation								
Covered Species	preliminary recommendation	x							
Covered Activities	recommendation	x							
Permit Holders	undetermined	x							
Permit Duration	recommendation	x							
Incidental Take Request	undetermined				o	x			
Conservation Strategy									
a. General Approach	in progress		o	x					
b. Conservation Measures	in progress		o	o	x				
c. Participation Process	undetermined			o	o	x			
d. Management and Monitorin	undetermined			o	o	x			
e. Public Access	undetermined				o	x			
Funding Strategy	undetermined								
Preferred HCP Alternative	undetermined				o	o	x		
Review Resource Assessments	in progress	o	o	o	x				
Review Impacts Assessment	in progress				o	x			

o Topic introduced for discussion
x Recommendation anticipated

Regional HCP Permit Applicant

Role and Responsibility of Permit Applicant (per USFWS HCP Handbook, pg 2-1):

The applicant is responsible for compliance with the take prohibition and exceptions under sections 9, 4(d), and 10(a) of the ESA. Once the decision to obtain a permit has been made, the applicant is also responsible for preparing the HCP and, if approved, for implementing it. Requesting technical assistance from FWS, NMFS, and other interests during preparation of the HCP is strongly recommended to ensure the HCP ultimately submitted for approval is biological sound and meets statutory requirements. The applicant:

- Should coordinate with FWS, NMFS, affected Federal and state agencies, tribal governments, and where appropriate, affected private interests and organizations in preparing an HCP that satisfies the requirements of section 10(a)(1)(B) of the ESA and Federal regulations

- Generally, develops a draft Environmental Assessment (EA) with technical assistance from the Services, and draft Federal Register notices for Service use during the permit processing phase. Normally, EISs are also prepared by the applicant, or through a contractor, or an HCP applicant, under certain circumstances and strict guidance from FWS or NMFS, can assist in developing an EIS. However, FWS or NMFS is ultimately responsible for the content of all section 10 NEPA documents.

- Submits a permit application (Form 3-200), a $25 application fee (unless applicant is fee exempt), a completed HCP, draft NEPA analysis (optional) and an IA (as needed) to the appropriate FWS Field or Regional Office or NMFS Regional or Washington, D.C. Office (see Chapter 6, Section B.3). For FWS applications, note that Federal regulation [50 CFR 13.11(b)] calls for the application to be submitted to the Arlington, Virginia office; however, these regulations are being amended to reflect delegation of the permit program to the Regional Directors. NMFS regulations [50 CFR 222.22] state that applications should be sent to the Silver Spring, Maryland Office, but applications involving west coast anadromous fish should be submitted to the Southwest or Northwest Regional Directors.

- During the permit processing phase, coordinates with the appropriate FWS or NMFS Field Office to amend or correct the HCP or associated documents, as necessary. Also should provide the Field Office with additional information necessary for the Services to respond to public comments when appropriate.

- If the permit is issued, implements all measures and programs required by the HCP permit and submits all documentation, monitoring reports, etc. as required over the life of the permit.

Examples of Permit Applicants in other Texas Regional HCPs

Plan	Permit Applicant	Comments
Comal County Regional Habitat Conservation Plan (draft March 24, 2009)	Comal County	
Hays County Regional Habitat Conservation Plan (draft September 28, 2009)	Hays County	
Williamson County Regional Habitat Conservation Plan (final August 15, 2008)	Williamson County and the Williamson County Conservation Foundation, Inc.	Williamson County Conservation Foundation (WCCF) is a non-profit corporation formed by the Williamson County Commissioners' Court and overseen by an appointed Board of Directors. The WCCF was established in December 2002 to provide for conservation of endangered species in Williamson County while helping to promote responsible development.
Lost Pines Habitat Conservation Plan (final December 1, 2007)	Bastrop County	
Balcones Canyonlands Conservation Plan (final March 1996)	Travis County and City of Austin	Permit Applicants collaborate with "Managing Partners" on preserve management and monitoring. Some Managing Partners have specific agreements with the Permit Applicants; others are informal partners.

BIOLOGICAL GOALS AND OBJECTIVES

GUIDANCE FROM USFWS 5-POINT POLICY

- Biological goals are the broad, guiding principles for the operating conservation program of the HCP. They are the rationale behind the minimization and mitigation strategies.
- Biological objectives are the different components needed to achieve the biological goal such as preserving sufficient habitat, managing the habitat to meet certain criteria, or ensuring the persistence of a specific minimum number of individuals.
- …the biological goals of an individual HCP are not necessarily equivalent to the range-wide recovery goals and conservation of the species. However, if viewed collectively, the biological goals and objectives of HCPs covering the same species should support the recovery goals and conservation of the species.
- The biological goals and objectives of an HCP are commensurate with the specific impacts and duration of the applicant's proposed action.
- …the permittee's obligation for meeting the biological goals and objectives is proper implementation of the operating conservation program of the HCP.

CONSIDERATIONS

- Biological goals and objectives should be defined for each of the covered species, and possibly for species included in other categories.
- Consider the scope of the incidental take request.
    - SEP-HCP will be a voluntary mechanism for ESA compliance for non-federal projects located in the Plan Area.
    - The SEP-HCP must only cover the incidental take associated with projects that voluntarily enroll in the plan. However, you can choose to cover more than that, if desired.
    - The amount of take authorized under the SEP-HCP may be less (possibly even much less) than the total amount of habitat loss/species impacts projected to occur across the Plan Area over the permit duration due to participation rates.
        - BCCP estimates that only 10% of projects potentially affecting habitat have actually sought participation in the plan, despite years of reduced participation fees. (*per citation in draft Comal County RHCP dated April 2010*)
        - Williamson County assumes that approximately 20% of anticipated impacts will seek coverage through their RHCP.
        - Hays County assumes that 33% of private sector projects will participate in their plan.
        - Comal County assumes that 50% of impacts will be authorized through their plan.

POSSIBLE ALTERNATIVES FOR BIOLOGICAL GOALS

1. REGIONAL RECOVERY: Achieve the equivalent of **regional recovery** for a species within the Plan Area.
    a. Pros:
        i. Would result in the highest degree of conservation for the species.
        ii. Committing to regional recovery could allow SEP-HCP to cover all projected impacts to the species in the Plan Area, regardless of formal participation in the SEP-HCP or type of activity.
        iii. Would alleviate concerns from Camp Bullis regarding endangered species pressures on training missions.
        iv. Could support a permit duration beyond 30 years.
    b. Cons:
        i. Likely to be extremely expensive to achieve and funding needs would likely far outpace the collection of mitigation fees from project participants and require commitments of public funds from permittees and other plan partners.
        ii. May not be necessary from a regulatory perspective in order to obtain incidental take authorization for a covered species, depending on the amount of incidental take authorization sought.

2. ALL ANTICIPATED IMPACTS: Minimize and mitigate to the **maximum extent practicable** at a level sufficient to allow authorization for **all anticipated impacts** to a covered species in the Plan Area over the permit duration. (Might be similar to the recovery goal option, depending on the results of the land development projections.)
    a. Pros:
        i. Would result in a high degree of conservation for the species.
        ii. Committing to mitigate for all anticipated impacts, regardless of the type of activity or plan participation rate, could allow a high level of take authorization on par with the full set of anticipated cumulative impacts to the species across the Plan Area over the duration of the permit.
        iii. Would alleviate concerns from Camp Bullis regarding endangered species pressures on training missions.
        iv. Achieves the level of conservation required by regulations to compensate for the level of authorized impacts.
    b. Cons:
        i. Likely to be extremely expensive and funding needs would likely far outpace the collection of mitigation fees from project participants and require commitments of public funds from permittees and other plan partners.

3. PARTICIPATING PROJECTS: Minimize and mitigate to the **maximum extent practicable** at a level sufficient to allow take authorization **only for projects voluntarily participating** in the Plan over the permit duration.
    a. Pros:
        i. Achieves level of conservation required by regulations to compensate for authorized impacts and does not obligate permittees to provide more mitigation than is necessary.

ii. Does not prohibit permittees from voluntarily implementing additional conservation measures beyond those needed to achieve regulatory compliance.

iii. The conservation commitment is scalable with the actual demand for plan participation.

iv. Expected revenue from participation fees would be more in line with anticipated expenditures for the conservation program.

b. Cons:

i. Commits to achieving only the minimum level of conservation needed to allow for permit issuance.

ii. USFWS could require higher mitigation ratios for impacts since the overall conservation benefits could be lower than for other options.

iii. Could still require some commitment of public funds or resources to adequately implement the program.

EXAMPLES FROM OTHER TEXAS RHCPS

See attached pages from:

- Draft Comal County RHCP (pages 4-2 through 4-3; final draft plan dated April 2010)
- Draft Hays County RHCP (pages 61-62; final draft plan dated September 28, 2009)
- Final Williamson County RHCP (pages 5-1 through 5-3; final plan dated August 15, 2008)
- BCCP HCP/EIS (March 1996) – biological goals not explicitly stated

4.1.1 Biological Goals and Objectives of the RHCP

The HCP Handbook 2000 Addendum defines biological goals as the broad, guiding principles that clarify the purpose and direction of the conservation components of an HCP (65 FR 35241). The biological goals and objectives are designed to address the anticipated impacts of the proposed activities while taking into account the overall conservation needs of the listed species and their habitat. Conservation measures identified in an HCP, including minimization and mitigation strategies, provide the means for achieving these biological goals and objectives.

4.1.1.1 Biological Goals

The biological goals of this RHCP are to:

- Contribute to and facilitate the conservation of the federally listed endangered golden-cheeked warbler and black-capped vireo (the Covered Species).
- Help conserve the Evaluation Species. The Evaluation Species include the Cagle's map turtle, one cave-obligate decapod, two cave-obligate amphipods, a cave-obligate beetle, a cave-obligate harvestman, two cave-obligate spiders, and one snail (the nymph trumpet) (see Chapter 1, Section 1.1.1.1 for scientific names).

4.1.1.2 Biological Objectives and Conservation Measures

In general, the biological goals will be accomplished 1) by minimizing disturbance to Covered Species and their habitat in Comal County, and 2) by mitigating the impacts of take contemplated by this RHCP by preserving and managing certain known endangered and rare species habitat areas. In addition to these general objectives, the biological goals of the Comal County RHCP will be met by accomplishing the following objectives and conservation measures:

- Minimize disturbance during the nesting season through temporal and spatial restrictions on clearing activities.
- For the golden-cheeked warbler, establish a system of permanent preserves within the County that will serve as mitigation for impacts covered by the RHCP or purchase sufficient mitigation credits from Service-approved conservation banks, the service area of which includes Comal County. The amount of preserve land or mitigation credits needed to mitigate for the requested take is estimated to total 6,548 acres (2,650 hectares) by the end of the 30-year Permit period (see Section 4.3.1.3 for an explanation of the mitigation acreage). The actual preserve acreage will be a function of several unknown factors, including the amount of take eventually authorized through the RHCP (it may be less than the amount requested, depending on participation), the mitigation ratios to be determined on a project-by-project basis, and future opportunities for land acquisition.
- For the black-capped vireo, the County will provide mitigation for any impacts it authorizes in one of the following ways:
- Acquisition of credits from a Service-approved conservation bank for the black-capped vireo, the service area of which includes Comal County, or, in the event the service area

does not include Comal County, if the Service has specifically approved the sale of credits to Comal County.

- Acquisition (in fee title or conservation easement) and operation, management, and monitoring in perpetuity of habitat for the black-capped vireo, including as a component of a preserve also providing habitat for the golden-cheeked warbler.
- Acknowledgment of black-capped vireo conservation bank credits owned by a potential participant, used for the purposes of providing mitigation in exchange for participation in the RHCP, and managed in perpetuity for the benefit of the black-capped vireo.
- In all events, no impacts to the black-capped vireo will be authorized through the RHCP unless and until sufficient black-capped vireo conservation credits have been obtained in one or more of the foregoing manners.
- Manage and monitor in perpetuity all preserved habitat areas in an effort to maintain or enhance habitat quality.
- Provide annual funding of at least $10,000[18] beginning in Year 3, totaling $429,309 over the life of the RHCP, for a program of prioritized research on listed and rare species in the County.
- Provide annual funding of at least $5,000[19] beginning in Year 3,[20] totaling $214,655 over the life of the RHCP, for a public education/outreach conservation program. This program will be designed to increase public understanding and appreciation of the need to protect the Covered and Evaluation Species and minimize impacts to their habitat.
- Develop and maintain a database on the Covered and Evaluation Species locations and general population numbers within the County and preserve habitat quality indices collected during monitoring efforts. To the fullest extent allowed by State law, the County will attempt to maintain the confidentiality of the database, but allow access as approved by the Service.
- Periodically evaluate the degree to which the RHCP, as it is being implemented, is providing conservation benefits to the Evaluation Species, and, if data indicate that a species is in need of increased management or its status indicates a potentially threatened or endangered existence, identify what additional measures, if any, the County could implement through the RHCP to provide conservation benefits for the species.

4.2 RHCP PROGRAM ADMINISTRATION

Many elements of the RHCP will require consistent administrative procedures and assurances that the program will be sufficiently funded and staffed to implement all aspects of the commitments detailed in this document. Program implementation includes not just a 30-year

[18] Research and public awareness expenditures are calculated to increase annually at a rate of 3.0 percent.

[19] See preceding footnote.

[20] The funding plan provides funding for public education/outreach conservation program beginning in Year 3, after the RHCP is expected to generate income sufficient for that purpose.

6.0 CONSERVATION PROGRAM

The RHCP conservation program is designed to meet the specific regulatory requirements of the ESA with regard to the species covered for incidental take by the Permit (i.e., the golden-cheeked warbler and black-capped vireo). The ESA requires that the conservation program of a habitat conservation plan include measures to minimize and mitigate impacts to the covered species to the maximum extent practicable. The amount of incidental take sought by the Permit would allow impacts to a maximum of 9,000 acres of potential warbler habitat and 1,300 acres of potential vireo habitat in Hays County.

The conservation program described below includes a number of actions that Hays County commits to implement that minimize and mitigate the anticipated impacts of the incidental take that will be permitted through the RHCP to the maximum extent practicable. The stated commitment to implement these conservation actions is not intended to and does not restrict the County's ability to engage in additional conservation actions at its discretion, should additional resources become available.

6.1 Goals and Objectives

6.1.1 Community Goals and Objectives

The RHCP may contribute to a number of local community goals, such as: 1) provide a locally-developed method for ESA compliance; 2) maintain open space and quality of life in Hays County; and 3) encourage partnerships with private landowners and local organizations as conservation partners.

The RHCP may simplify compliance with the ESA. It may streamline ESA compliance and reduce uncertainty, time, and costs for the County and other RHCP participants.

The RHCP may compliment the County's initiatives to protect open space and aquifer recharge areas. The RHCP may also compliment County efforts to establish parks and provide water access for county residents.

6.1.2 Biological Goals and Objectives

The biological goals and objectives of the RHCP are to:

1. Create a preserve system within Hays County that effectively mitigates for incidental take of the golden-cheeked warbler and black-capped vireo and coordinates and consolidates mitigation requirements from projects scattered across the county into larger, more biologically significant preserve blocks.

Objectives to accomplish this goal include the establishment of a preserve system that includes between 10,000 and 15,000 acres (which is expected to be sufficient to generate enough mitigation credits to balance the anticipated level of participation in the RHCP).

2. Design the preserve system to provide perpetual conservation value to the golden-cheeked warbler and black-capped vireo.

To help meet this goal, preserve blocks (which may be composed of multiple adjacent parcels) will meet certain design criteria. Preserve blocks will typically contain a minimum of 500 contiguous acres.

3. Encourage compliance with the ESA by providing an efficient means of authorization.

By implementing the RHCP and providing an efficient and reliable mechanism for ESA compliance, the County is hopeful that there will be an increase in ESA compliance across Hays County. Increased compliance with the ESA has long-term benefits for the covered species.

4. Provide for perpetual management and monitoring of preserve lands to maintain, enhance, or create quality habitat for the golden-cheeked warbler and black-capped vireo.

Management of the preserves will include documenting habitat conditions, establishing sound preserve boundaries, limiting (and possibly prohibiting) access to protected habitats, and reducing threats. Required monitoring activities will measure key habitat and population parameters and the results will be used to inform adaptive management decisions.

5. Where possible, maximize the value of the preserve system for multiple rare species in Hays County.

Hays County will consider the conservation benefits to the evaluation and additional species when evaluating potential preserve acquisitions. The County will evaluate acquired preserve lands for the presence of evaluation or additional species to create an inventory of conserved resources within the RHCP preserve system, when resources allow. The County may implement appropriate management practices within the preserve system when these practices are compatible with the management of habitat for the warbler and vireo, and when it is practicable to do so. The RHCP identifies research priorities for evaluation species, and the County will support research projects (as applicable and practicable) to fill knowledge gaps that could assist with the creation or implementation of more focused conservation measures for one or more of these species.

6.2 Avoidance and Minimization Measures

Hays County encourages public and private entities whose activities may impact the covered species in Hays County to avoid and minimize impacts to the species included in the RHCP, including the evaluation and additional species. As described in the sections below, the

CHAPTER 5 – AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

The following sections describe the steps that will be taken to avoid, minimize, and mitigate impacts of the Williamson County RHCP to the four covered species (two invertebrates and two songbirds). These steps may also benefit the additional species.

5.1 GOALS AND OBJECTIVES OF THE WILLIAMSON COUNTY RHCP

The RHCP and proposed section 10(a)(1)(B) permit are designed to achieve the following general goals:

- *Reduced burden on individual permit applicants*: The RHCP will reduce time, costs, and logistical burden for individual permit applicants.
- *Responsible economic activities*: The RHCP will facilitate the coordinated and beneficial use of land within Williamson County to promote the local economy of the region.
- *Maintenance of open space and quality of life in Williamson County*: The RHCP will help to ensure that some of the natural character of the County is maintained despite extensive anticipated development.
- *Conservation of natural resources*: The RHCP will promote the long-term conservation and recovery of the covered species.
- *Efficient and effective administration of the Endangered Species Act*: The RHCP will reduce the administrative and logistical burden on the Service of processing individual Endangered Species Act permits and monitoring post-issuance performance of multiple individual permit projects within the County.

The RHCP is designed to meet these goals through a variety of mechanisms and programs, the core features of which include:

- Meeting the biological goals and objectives described below and applying the associated conservation measures.
- Prescribing the conditions necessary for Williamson County to secure Service authorization for take of covered species during land use and development projects.
- Establishing the standards and procedures for extending the RHCP permit take authorization to land use projects undertaken within the County by other non-Federal entities.

5.1.1 Biological Goals and Objectives of the RHCP

The HCP Handbook 2000 Addendum defines biological goals as the broad, guiding principles that clarify the purpose and direction of the conservation components of an HCP (65 FR 35241). The biological goals and objectives are designed to address the anticipated impacts of the proposed activities while taking into account the overall conservation needs of the listed species

and their habitat. Conservation measures identified in an HCP, including minimization and mitigation strategies, provide the means for achieving these biological goals and objectives.

5.1.1.1 Biological Goals

The biological goals of this RHCP are to:

- Support recovery efforts for the endangered Bone Cave harvestman, Coffin Cave mold beetle, golden-cheeked warbler, and black-capped vireo.
- Help conserve the 20 additional karst species[53] and four additional salamander species listed in Chapter 1, Section 1.1.1, thereby assisting the Service in precluding the need to list those that are not currently listed (all but the Tooth Cave ground beetle).

5.1.1.2 Biological Objectives

In general, the biological goals will be accomplished 1) by minimizing disturbance to endangered and rare species and their habitat occurring in Williamson County, and 2) by mitigating the impacts of take contemplated by this RHCP by preserving and managing certain known endangered and rare species habitat areas. For the covered bird species, due to the paucity of high quality habitat within Williamson County, the RHCP will need to focus mitigation efforts outside of the County, although mitigation opportunities will be actively pursue within the County as well (see Sections 5.4 and 5.5, below). In addition to these general objectives, the biological goals of the Williamson County RHCP will be met by accomplishing the following measurable objectives:

- Ensure Recovery Plan conservation goals for the Bone Cave harvestman and Coffin Cave mold beetle in Williamson County are reached as quickly as possible. The published recovery (downlisting) criteria (USFWS 1994) include the following:
    - Three KFAs within each KFR[54] in each species' range should be protected in perpetuity.
    - If fewer than three KFAs exist for a species, that species would still be considered for downlisting if it occurred in two KFAs and those were adequately protected.
- Provide long-term management (*in perpetuity*) of the KFAs required for covered species recovery.
- For additional karst invertebrate species, acquire and manage KFAs that are rich in invertebrate species diversity.
- For golden-cheeked warbler, contribute to the amount of high quality habitat (at least 1,000 acres [405 hectares] within the first four years of the plan) preserved in perpetuity in Recovery Region 5.

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[53] One of the 20 additional karst invertebrate species, the Tooth Cave ground beetle, is already listed.

[54] With the exception of Cedar Park KFR, which contains the Bone Cave harvestman but is already largely developed and has little potential for additional take and little or no potential for establishment of additional protected KFAs.

- For black-capped vireo, restore and enhance protected vireo habitat either within or outside Williamson County commensurate with vireo habitat taken under the plan.
- For the Georgetown salamander (a candidate species not covered by the proposed Permit), increase knowledge of the species' status, distribution, and conservation needs through research in Years 2–6 of the plan.
- Increase the knowledge and understanding of covered and additional species via research and monitoring throughout the 30 years of the plan.
- Increase public understanding and appreciation of the need to protect the covered and additional species via public education throughout the 30 years of the plan.

5.1.1.3 Conservation Measures for Attaining Biological Objectives

The strategy for attaining the above biological objectives consists of the following conservation measures. Each of these measures is described in detail later in this chapter.

For the covered species:

- For karst species, to discourage impact on species-occupied caves within 50 feet of the cave footprint and to provide sufficient funds to contribute to the purchase of KFAs, levy a high participation fee ($400,000/cave) for impacts within 50 feet of the cave footprint.
- To mitigate for incidental take of the Bone Cave harvestman and Coffin Cave mold beetle, purchase or acquire management control[55] of approximately 700 acres (283 hectares) of KFAs, establishing three KFAs for each species in the KFRs where the two species occur: North Williamson County KFR, Georgetown KFR, and McNeil/Round Rock KFR for the Bone Cave harvestman, and North Williamson County KFR and Georgetown KFR for the Coffin Cave mold beetle.[56]
- Develop and carry out long-term management/monitoring plans for 10 of the 22 existing karst conservation areas (see Table 3-1 and Figure 3-2), the 700 acres in new KFAs, and up to 240 acres of protected karst habitat as identified above.
- For the golden-cheeked warbler and the black-capped vireo, preserve habitat by helping plan participants avoid and minimize impacts to habitat.
- For the golden-cheeked warbler and the black-capped vireo, minimize disturbance during the nesting season through temporal and spatial restrictions on clearing activities.

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[55] A service-approved KFA may be established for an existing conservation area that meets all KFA criteria except adequate management, if the Foundation provides the needed management, beginning with the preparation of a karst management and monitoring plan.

[56] No take or mitigation is planned for the fourth KFR in the County, Cedar Park, because that KFR is already built out to the extent that insufficient undeveloped land with occupied caves is available for a KFA. No KFAs are planned for the Tooth Cave ground beetle because, in Williamson County, this species is known only from the Cedar Park KFR, which cannot support a new KFA. Little additional development on undisturbed land will occur in Cedar Park, so no additional take of the Tooth Cave ground beetle in the County is expected in any case.

DRAFT PROPOSAL
BIOLOGICAL GOALS AND OBJECTIVES FOR THE SEP-HCP

Biological goals are the broad, guiding principles for the operating conservation program of the SEP-HCP. They are the biological rationale behind the mitigation strategies described in the Plan.

Biological objectives are the different components needed to achieve the biological goals, such as preserving sufficient habitat, managing the habitat to meet certain criteria, or ensuring the persistence of a specific minimum number of individuals.

Biological Goals:

1. Minimize and mitigate impacts to the covered species to the maximum extent practicable at a level that:
    a. contributes substantially to the recovery of and avoid jeopardy to the covered species; and
    b. is sufficient to obtain incidental take authorization for the covered species for those projects voluntarily participating in the Plan.
2. Contribute to the conservation of the other species addressed in the Plan to help prevent or minimize possible future declines in the status of these species.

Biological Objectives:

1. Golden-cheeked Warbler
    a. Mitigate for the impacts of participating projects at an average ratio of 2 acres of permanently protected GCW habitat for each acre of habitat directly impacted, with exceptions to this ratio based on the intensity of the impacts. Mitigation for indirect impacts of participating projects at a rate that is 50% of the mitigation ratios for direct impacts.
    b. Over the duration of the permit, permanently protect and manage approximately xxx acres of GCW habitat within the Plan Area as mitigation for the impacts of participating projects in parcels or clusters of adjacent parcels that are no smaller than 600 acres (250 ha). Clusters of less than 600 acres may not receive immediate credit.
    c. Prioritize the creation of a preserve system with multiple “focal” conservation areas for the GCW that each contain several thousand acres of contiguous or nearly contiguous GCW habitat and are distributed across the Plan Area.
    d. Create a new focal area of permanently protected GCW habitat near Camp Bullis and the rapidly urbanizing portions of the Plan Area, with an emphasis on creating new habitat or restoring degraded or low quality habitat, to contribute to recovery of the species beyond the mitigation required to compensate for authorized incidental take.
    e. Prioritize the acquisition of those preserve parcels that expand upon or help connect existing conserved lands and parks within the Plan Area.
    f. Manage GCW habitat within preserves to minimize threats and to maintain, restore, or enhance high quality habitat for the GCW.
    g. Regularly monitor GCW populations and habitats to track the status of the species within the preserve system and to inform the adaptive management process.
    h. Contribute to the body of scientific knowledge to benefit the recovery of the golden-cheeked warbler.

2. Black-capped Vireo
    a. Mitigate for the impacts of participating projects at an average ratio of 2 acres of permanently protected BCV habitat for each acre of habitat directly impacted,

with exceptions to this ratio based on the intensity of the impacts. Mitigation for indirect impacts of participating projects at a rate that is 50% of the mitigation ratios for direct impacts.

b. Over the duration of the permit, permanently protect and manage approximately xxx acres of BCV habitat in the Plan Area as mitigation for the impacts of participating projects with individual patches of habitat that are no smaller than x acres.
c. Manage BCV habitat within preserves to minimize threats and to maintain, restore, or enhance high quality habitat for the BCV.
d. Regularly monitor BCV populations and habitats to track the status of the species within the preserve system and to inform the adaptive management process.
e. Contribute to the body of scientific knowledge to benefit the recovery of the BCV.

3. Category 1 Karst Invertebrates
    a. Recover species as described by draft Recovery Plan, through phased conservation measures. (Ensure protection for at least (12, 15, 12) high or medium quality karst faunal areas (KFAs) that are occupied by a Category 1 karst invertebrate.
    b. Regularly monitor populations and habitats to track the status of the species within the preserve system and to inform the adaptive management process.
    c. Contribute to the body of scientific knowledge to benefit recovery..

4. Category 2 Karst Invertebrates
    a. Recover species as described by draft Recovery Plan, through phased conservation measures. (Treat as C1 when recovery threshold is exceeded.)
    b. Regularly monitor populations and habitats to track the status of the species within the preserve system and to inform the adaptive management process.
    c. Contribute to the body of scientific knowledge to benefit recovery.

5. Category 3 Voluntarily Conserved Species
    a. Prioritize the acquisition of preserves that are occupied by or contain habitat for one or more of the Category 3 species.
    b. Identify and monitor populations of Category 3 species within the Plan Area and manage these populations to eliminate or minimize threats, to the extent practicable given higher priority management needs for the covered species and available resources.
    c. Assist the USFWS with the development of appropriate conservation strategies for non-listed Category 3 species, to the extent practicable given available resources.
    d. Contribute to the overall body of knowledge for Category 3 species by assisting the USFWS with identifying data gaps and other research needs or by conducting targeted research or monitoring studies for one or more of these species, to the extent practicable given available resources.

6. Category 4 Incidentally Conserved Species
    a. Identify and monitor populations of Category 4 species within the Plan Area and manage these populations to eliminate or minimize threats, to the extent practicable given higher priority management needs for the covered species and available resources.

GENERAL CONSERVATION / MITIGATION STRATEGY GUIDANCE

OVERVIEW

Purpose of the SEP-HCP is two-fold: 1) facilitate compliance with the Endangered Species Act; *and* 2) conserve the Covered Species.

Conservation Strategy – composed of several parts:
Note: some or all of the components of the conservation strategy may be different for different species

1. Biological Goals – what does the plan aspire to accomplish? What is the expected outcome?
2. Specific Biological Objectives –what are the measurable targets designed to achieve goals
    a. Total acres of habitat to be protected
    b. Types of habitat to be protected
    c. General distribution of preserves (*caution: avoid "green-lining"!!!*)
    d. Management targets / desired conditions
    e. Others…
3. Implementation Measures – specific conservation commitments / actionable plan to meet objectives
    a. Preserve acquisitions
        i. Available conservation tools: fee simple ownership, conservation easements, regulations (?)
        ii. General approach for acquisitions (up-front preservation, phased acquisitions, "pay as you go", rolling/term acquisitions, mitigation banking; mitigation funds, etc…)
    b. Management plan
        i. General species and habitat management
        ii. Dealing with threats
        iii. Managing other uses of preserve land: agriculture, public uses, infrastructure corridors, hunting, etc…
    c. Monitoring and reporting program – track progress towards meeting commitments and achieving goals and objectives; monitor status of covered species in preserves
4. Participation Process – how to determine mitigation needs for RHCP participants
    a. Application process
    b. Habitat determinations
    c. Mitigation assessments
    d. Fees and other forms of acceptable mitigation

GENERAL REGULATORY GUIDANCE and POLICY on MITIGATION

Endangered Species Act Section 10(a)(2)(B):

If the Secretary finds, after opportunity for public comment, with respect to a permit application and the related conservation plan that –

i. the taking will be incidental;
ii. the applicant will, ***to the maximum extent practicable, minimize and mitigate the impacts of such taking***;
iii. the applicant will ensure that adequate funding for the plan will be provided;

iv. ***the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild***; and
v. the measures, if any required under subparagraph (a)(iv) will be met;

and he has received such other assurances as he may require that the plan will be implemented, the Secretary shall issue the permit. [*emphasis added*]

USFWS HCP Handbook (Chapter 3, Section B-3 – starting on page 3-19)

- Mitigation programs should be based on sound biological rationale; they should also be practicable and commensurate with the impacts they address. (pg. 3-19, 3rd paragraph)
- Mitigation actions under HCPs usually take one of the following forms:
  - Avoiding the impact (to the extent practicable);
  - Minimizing the impact;
  - Rectifying the impact;
  - Reducing or eliminating the impact over time; or
  - Compensating for the impact. (pg 3-19, 4th paragraph)
- Issuance of a Section 10 permit must not "appreciably reduce" the likelihood of the survival and recovery of the species in the wild. Note that this does not explicitly require an HCP to recover listed species, or contribute to their recovery objectives outlined in a recovery plan. This reflects the fact that HCPs were designed by Congress to authorize incidental take, not to be mandatory recovery tools (pg 3-20, 2nd paragraph). However, recovery is nevertheless an important consideration in any HCP effort… Thus, contribution to recovery is often an integral product of an HCP, but it is not an explicit statutory requirement (pg. 3-20, 3rd paragraph). [*original emphasis*]
- Re: Habitat Banks/Mitigation Credit Systems –
  - … considerable promise as a mitigation strategy because:
    i. It allows owners of endangered species habitat to derive economic value from their land as habitat;
    ii. It allows parties with mitigation obligations to meet their obligations rapidly (mitigation lands are simply purchased as credits); and
    iii. The mitigation lands are provided prior to the impact (eliminating uncertainty about whether a permit might fail to fulfill the HCP's obligations after the impact has occurred). (pg. 3-21, 3rd paragraph) [*original emphasis*]
- The type of mitigation habitat and its proximity to the area of impact will need to be considered. Generally the location of replacement habitats should be as close as possible to the area of impact, it must also include similar habitat types and support the same species affected by the HCP. However, there may be good reason to accept mitigation lands that are distant from the impact area -- e.g., if a large habitat block as opposed to fragmented blocks can be protected or if the mitigation lands are obtained through a mitigation fund. (pg 3-21, paragraph 4)
- Potential types of habitat mitigation include, but are not limited to
  i. Acquisition of existing habitat;
  ii. Protection of existing habitat through conservation easements or other legal instruments;
  iii. Enhancement or restoration of disturbed or former habitats;
  iv. Prescriptive management of habitats to achieve specific biological characteristics; and
  v. Creation of new habitats. (pg 3-21, 5th paragraph)

- When habitat losses permitted under an HCP are permanent, protection of mitigation lands normally should also be permanent. (pg. 3-22, 4th paragraph)

DRAFT PROPOSAL
GENERAL CONSERVATION STRATEGY FOR THE SEP-HCP

The general conservation strategy establishes the goals and objectives of the conservation program, including both biological and community considerations. The BAT has made preliminary recommendations for species-specific biological goals and objectives for CAC consideration. However, the CAC is charged with considering a broader set of issues, including the social, political, and financial implications of the plan.

The draft proposal outlined below identifies some of the community-based goals and objectives that the CAC may want to consider as part of the general conservation strategy for the SEP-HCP, in addition to the species-specific biological goals and objectives.

1. REGIONAL CONSERVATION: Design and implement a regional conservation program with a focus on habitat protection for the covered species and that supports the conservation of other regionally important natural resources.
    a. Protect and manage sensitive native habitats for the golden-cheeked warbler, black-capped vireo, and other native species that depend on these habitats.
    b. Protect and manage karst habitat, surface and subsurface drainage basins, and surface vegetative communities for sensitive karst organisms.
    c. Contribute to the recovery of federally listed species and the stabilization or improvement of the status of other rare species in the region, to the extent practicable.
    d. Contribute to the protection of other important ecosystem functions, such as water quality and quantity in the Edward's Aquifer system, through large-scale conservation actions for the covered species.

2. SUPPORT CAMP BULLIS: Support the military training mission at Camp Bullis by helping to alleviate local and regional endangered species issues.
    a. Assist ESA compliance on private lands in the vicinity of Camp Bullis by facilitating the incidental take permit process.
    b. Contribute significantly to endangered species recovery beyond the minimum required for ESA compliance.
    c. Seek conservation partners and prioritize opportunities to protect and manage endangered species habitat in the vicinity of Camp Bullis.

3. STAKEHOLDER INVOLVEMENT: Seek input and buy-in from a wide spectrum of stakeholders during development and ongoing implementation of the SEP-HCP, including private landowners, business interests, scientists, environmental groups, government entities or agencies, and others.
    a. Include a broad spectrum of stakeholder interests on SEP-HCP advisory committees and teams.
    b. Continue to convene advisory groups after permit issuance to provide feedback on plan implementation.
    c. Enable and encourage formal, but flexible, partnerships with other jurisdictions in the Plan Area to cooperate on plan administration and implementation in regionally appropriate ways.
    d. Share research results, monitoring data, and other planning information with the public to the extent practicable without compromising sensitive biological, personal, or property information.

4. STREAMLINE PERMITTING: Facilitate Endangered Species Act compliance for non-federal entities in the SEP-HCP Plan Area by streamlining the process for obtaining an incidental take permit.
    a. Establish a voluntary and regionally (or locally) administered option for obtaining incidental take authorization for projects in the Plan Area that is clear, certain, timely, and cost-effective.
    b. Ensure that mitigation ratios and participation fees are based on sound biological rationale, consistent with the level of impact to the species.
    c. Provide guidance to potential plan participants on avoiding or minimizing impacts to the species addressed in the plan to reduce mitigation obligations where practicable and appropriate.

5. LOCALLY APPROPRIATE AND COST-EFFECTIVE IMPLEMENTATION: Achieve regional conservation of endangered species using locally appropriate and cost-effective tools and approaches.
    a. Understand local community and landowner concerns regarding endangered species habitat protection, and prioritize the use of compatible land protection tools to build the SEP-HCP preserve system.
    b. Seek voluntary, willing conservation partners for endangered species habitat protection and management.
    c. Phase the implementation of the Plan to provide opportunities to review progress and adapt the conservation program to changing needs and circumstances over time.
    d. Minimize administrative costs associated with Plan implementation through the use of efficient and effective practices, to the maximum extent practicable.

6. LEVERAGE RESOURCES: Coordinate conservation planning for endangered species on a regional scale to take best advantage of available conservation opportunities.
    a. Pool available conservation resources from Plan partners, participants, and other sources as available to achieve biologically significant, regional conservation of endangered species.
    b. Leverage available conservation resources with other programs active in the Plan Area to maximize the regional benefits of past, present, and future conservation efforts or opportunities.
    c. Compliment other conservation efforts in the region (such as aquifer protection initiatives, scenic and cultural preservation, and parkland acquisition programs) and seek to avoid competition with complementary programs for conservation resources.

In addition to this general conservation strategy, the biological goals and objectives will further define the specifics of the operating conservation program with respect to the species addressed in the plan, such as the size and configuration of the preserve system.

GENERAL CONSERVATION TOOLS AND APPROACHES

Types of Conservation Actions

- **Avoidance** –avoiding take of a listed species negates the need for ESA compliance for that species or, if complete avoidance of take is not possible, reduces the amount of mitigation needed to compensate for adverse impacts
- **Minimization** – actions that reduce the amount of take associated with a project or that reduce the magnitude of adverse impact to the species; minimization actions reduce the amount of mitigation needed to compensate for adverse impacts
- **Mitigation** – actions that compensate for the adverse impacts of take; mitigation actions for an HCP typically involve the protection, enhancement, restoration, or creation of habitat for the affected species

Definition of "take" – To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. (*per Section 3 of the ESA*)

Definition of "harass" – An intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt the normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. (*per 50 CFR 17.3*)

Definition of "harm" – An act which actually kills or injures wildlife. Such act may include significant habitat modification of degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. (*per 50 CFR 17.3*)

Work with BAT to identify appropriate avoidance and minimization measures for each of the covered species.

(The Lost Pines Habitat Conservation Plan in Bastrop County relies almost entirely on avoidance and minimization measures for its conservation program.)

Habitat Preserve Acquisition Tools

There are many tools available to conserve open space. See attached publication by the National Park Service that describes several conservation tools for protecting open space in Texas (the publication is also available through the Texas Land Trust Council at www.texaslandtrustcouncil.org). Conservation tools that may be most applicable to the SEP-HCP are summarized below.

- **Fee Simple Ownership** – the property is owned by the plan partners; land can either be purchased or accepted as a donation or in lieu of other forms of mitigation (i.e., land accepted in lieu of mitigation fees)
    - Fee simple ownership gives the greatest degree of control over the use and management of the property.
    - Fee simple land purchases may be more expensive than other types of acquisitions.
    - Publically owned preserve lands may be subject to strong pressures for public access; trespassing can be a substantial management issue.
- **Conservation Easements** - A conservation easement is a voluntary legal agreement between a landowner and conservation organization that places restrictions on specified future land uses; the easement is either voluntarily donated or sold by the landowner; the land remains in private hands
    - See the attached Texas Land Trust Council booklet on conservation easements (also available at www.texaslandtrustcouncil.org)
    - Easement purchases may be less expensive than fee simple purchases

    - Management responsibilities may be shared between the easement holder and the property owner
    - Ongoing coordination with the property owner is essential to maintain the integrity of the easement
- **Conservation Banks** – Conservation banks are lands protected for the purpose of creating "conservation credits" that can be used by or sold to other parties to compensate for adverse impacts on other properties. Conservation bankers voluntarily enter into binding agreements with the USFWS to protect and manage habitat in perpetuity. In return, the conservation value of the protected lands are translated into conservation credits that can be used to compensate for impacts to similar habitats in other areas.
    - See the attached USFWS guidance on conservation banking (also available at www.fws.gov/endangered/pdfs/MemosLetters/conservation-banking.pdf)
    - SEP-HCP could purchase conservation credits from independent conservation banks within the Plan Area (if consistent with the Service Area of the bank) or establish its own conservation bank and sell credits to plan participants
    - If purchasing credits from an independent conservation bank, the SEP-HCP would not be responsible for ongoing management or monitoring costs for lands within the independent bank. These responsibilities are taken care of by the conservation banker.

Once preserve land is acquired, adaptive management is needed to achieve conservation objectives and can include actions intended to:

- maintain the existing condition of protected habitats;
- enhance or restore the conservation value of lower quality or degraded habitats; or
- create new habitats on protected lands.

The management plan for preserves will also consider how to address other types of preserve uses (such as recreational use or grazing), infrastructure corridors, and addressing various threats to species and habitats.

General Approaches to Preserve Acquisitions

The conceptual strategy for preserve acquisitions may include considerations of preserve design and acquisition schedule. See attached table comparing these conceptual alternatives. SEP-HCP could include elements of both approaches.

- **Upfront Pre-determined Preserve System –** Plan would define a "target area" for preserve acquisitions within which the applicant would agree to acquire or otherwise protect a certain amount of habitat with certain characteristics for the species covered by the plan and set it aside permanently as preserve land. Plan would authorize incidental take (up to a certain limit) for projects outside of the target acquisition area.
    - Examples: Balcones Canyonlands Conservation Plan in Travis County; San Diego Multispecies Conservation Plans in California
- **Phased Conservation Bank** – Plan would be structured as a conservation bank through which the plan would preserve, via a series of transactions over time, parcels containing habitat for the covered species. The protected habitats would create conservation credits for the covered species that could be "banked" for future sale to voluntary plan participants (or used by the applicants themselves). The applicants would coordinate with the USFWS to determine the appropriate method for establishing the number of credits that would be associated with each parcel protected through the bank. With every potential plan participant, the applicants would have to ensure that sufficient credits were available in the bank before they could allow a particular project to mitigate for impacts through the plan.
    - Examples: Williamson County, Comal County, and Hays County regional HCPs

DRAFT July 22, 2010

COMPARISON OF POSSIBLE PRESERVE ACQUISITION APPROACHES FOR THE SEP-HCP

Approach	Schedule	Costs/Financing	Conservation Benefits	Potential Drawbacks	Opportunities for Creative Transactions
Upfront Pre-determined Preserve System	If preserves are identified upfront in the plan, the preserve system must be acquired within four years after the permit is issued or within six years after initial application for the permit is made, whichever is later. (Required by Texas Parks and Wildlife Code, Chapter 83.)	Due to state law, this approach can represent a very large, early financial commitment. However, potential inflation of land prices is reduced due to the short timeframe required for acquisitions. The plan must demonstrate that there are adequate sources of funding to acquire the land for preserves within four years, or that the voters have authorized bonds or other financing in an amount equal to the estimated cost of acquiring the land needed for habitat preserves within four years.	The preserve system is designed as part of the initial plan, so it would be based on a comprehensive scientific assessment of the most important habitat areas, given projected growth patterns. Subject to funding and landowner cooperation, the likelihood of aquiring key preserve parcels is higher (i.e., they might be less likely to be lost to future land development).	Less flexibility over time to react to new data. Would require large, early financial commitment. Identifying specific parcels for acquisition in the plan could raise the selling price of needed lands. Landowners could object to their lands being targeted for acquisition in the preserve system. No guarantee that they would be willing partners.	While this approach certainly allows use of creative transactions, the pool of potential landowner partners is limited by the initial preserve design, and the effectiveness of the preserve system can be limited if key landowners in the preserve acquisition area are not willing sellers or seek unreasonable economic terms.
Phased Conservation Bank	Schedule of bank transactions can be very flexible and matched with the demand for participation over time. Under a phased approach, potential preserve tracts must be acquired within four years after the tract is identified for preservation. However, identification of possible preserve parcels could occur as needed throughout the life of the permit. State law deadlines for acquisitions would not be tied to permit application or issuance.	This approach generally allows costs to be scaled to the actual demand for credits. There is no upfront commitment to financing acquisitions beyond a given transaction. As credits are sold, a portion of the proceeds would be placed back into the conservation banking fund to pay for future acquisitions, thereby creating a long-term funding for habitat protection. State law provides that offers to purchase individual tracts for preserve must be made four years after the tract is identified as habitat preserve.	Many of the same conservation benefits as a pre-determined preserve system. But allows more flexibility to adjust preserve design based on new data over time.	Higher likelihood that important parcels may become unavailable (i.e., developed) prior to preservation. Preserve acquisitions at any given time would be limited by the available opportunties (i.e., willing landowner partners).	This approach maximizes opportunities for creative, cost-effective transactions, because efforts will be directed towards those habitat owners most eager to work with the applicants.