

Guidelines for the Establishment, Management, and Operations of Golden-cheeked Warbler and Black-capped Vireo Mitigation Lands

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Contents

Introduction.....	4
Mitigation Land Options	5
2. Individual- or Permittee-responsible mitigation lands.....	5
3. Conservation Banks	5
4. Third party mitigation lands.....	5
5. In-lieu Fee Programs.....	5
Credits and Credit Stacking	6
Habitat Assessments	6
Management Plans	7
Real Estate Assurances	7
Amendment and Modification	8
Standard Conservation Easement Requirements	8
Prohibited activities.....	8
Allowed activities.....	10
Financial Assurances	11
Reporting.....	11
Permits and Incidental Take.....	12
Emergency Situations	13
Remedial Actions.....	13
Golden-cheeked Warbler Mitigation Lands Requirements	13
Minimum Standards	13
Habitat Evaluation.....	14
Crediting Methodology	15
Preservation Credits	16
Buffer Credits	16
Service Area	16

Surveys and Monitoring	17
Development of a Management Plan	17
Black-capped Vireo Mitigation Lands Requirements.....	19
Minimum Standards	19
Habitat Evaluation.....	20
Credit Methodology	22
Preservation Credits	22
Buffer Credits	22
Service Areas.....	23
Development of a Management Plan	23
Literature Cited	28
Appendix A: Checklist for Mitigation Land Proposals	30
Appendix B: Golden-cheeked Warbler Recovery Regions	32
.....	32
Appendix C: Black-capped Vireo Texas Recovery Units/Service Areas	33
.....	33

Introduction

The golden-cheeked warbler (*Dendroica chrysoparia*) (GCWA or warbler) breeds only in the mixed evergreen-deciduous woodlands of central Texas and winters in the highland oak woodlands of southern Mexico and northern Central America. Human activities have eliminated much GCWA habitat within the species' range in Texas and as a consequence the species was listed as endangered on December 27, 1990 (55 FR 53153). The black-capped vireo (*Vireo atricapilla*) (BCVI or vireo) breeds in shrublands and open woodlands in Oklahoma, Texas, and northern Mexico and winters in the mountains of western Mexico. The vireo was listed as endangered on October 6, 1987 (52 FR 37420), as a result of habitat loss through development, overbrowsing, vegetational succession, and brood parasitism by brown-headed cowbirds. Loss of habitat is an extensive threat to the warbler and vireo along the I-35 corridor from Dallas to San Antonio where several county-wide habitat conservation plans (HCPs) have been permitted or are in development. Due to the ongoing loss of warbler and vireo habitat and the mitigation requirements of HCPs, there is a need for guidelines to establish consistency for warbler and vireo habitat mitigation that effectively promotes the recovery of these species.

The recovery plans for these species establishes short-term and long-term criteria involving public and private lands to de-list the GCWA and down-list the BCVI. One of the long-term objectives in these recovery plans involves the preservation and protection of viable populations in these species' recovery regions. The U.S. Fish and Wildlife Service (Service) believes that an effective strategy to conserve these species involves protecting large patches of habitat, as large patches are more resilient to other threats such as wildfires and less total habitat may be required to achieve recovery in a region with large contiguous patches of habitat versus smaller fragmented patches.

This document provides guidance for those involved in the establishment, management, and operation of GCWA and BCVI mitigation lands in Texas. The Service requires that mitigation for these two species meet the minimum standards and other requirements described in this document for all mitigation options described below.

All mitigation proposals will be reviewed by the local Field Office and final review and approval will occur by the ARD-ES or designee. The Service can not commit to a standard time frame for any proposals received and therefore applicants should not expect a specific timeframe for review and possible approval. A checklist of items required for a mitigation lands proposal is included in Appendix A.

This guidance is subject to revision by the Service as new information related to these species and the ecosystems they depend on becomes available. Templates to assist prospective mitigation land owners/sponsors are available and can be found at:

www.fws.gov/southwest/es/AustinTexas/Cons_Banking.html.

Mitigation Land Options

Four types of mitigation lands are briefly described below. Proposals for any of these options must meet the minimum standards and other requirements described in this document. Mitigation lands may be located on-site (i.e., on or adjacent to the project site) or off-site, as long as they meet the minimum standards for the species for which the site is being established. Project proponents should evaluate the options below when compensatory mitigation is appropriate for their project's impacts to the species; however, some options may not be immediately available or have additional requirements for initial implementation. Project proponents should consult their Incidental Take Permit associated with their approved Habitat Conservation Plan for the correct type and number of credits to purchase, and any restrictions on the area where mitigation can occur.

1. **Individual- or Permittee-responsible mitigation lands:** These mitigation lands are established by the project proponent and must be described in detail and included in the project description. There is no transfer of liability for the success of the mitigation site and the project proponent maintains responsibility for the mitigation land in perpetuity even if the project is finite in duration.
2. **Conservation Banks:** Conservation banks are mitigation lands that are established by a party other than the project proponent referred to as the Bank Sponsor. These sites are established to mitigate multiple projects. By definition a Service approved conservation bank meets the minimum standards and other requirements described in these guidelines. Conservation banks are established through a conservation bank agreement with the Service. When a project proponent chooses to mitigate through the purchase of credits in a Service-approved conservation bank, liability for the success of the mitigation is transferred to the bank sponsor upon sale of the credits. Project proponents can visit <http://geo.usace.army.mil/ribits/index.html>, the Regulatory In-lieu Fee and Bank Information and Tracking System (RIBITS) for information on Service-approved conservation banks with available GCWA and BCVI credits.
3. **Third party mitigation lands:** These mitigation lands are usually established for a single project rather than multiple projects as are conservation banks. The mitigation land sponsor (landowner or easement holder) assumes liability for the success of the mitigation land with the approval of the Service.
4. **In-lieu Fee Programs:** These programs are usually established when conservation banks or other compensatory mitigation options are unavailable. Due to the level of uncertainty associated with the timing of in-lieu fee site establishment, only in-lieu fee programs that "front load" mitigation will be allowed. In other words, mitigation on the ground must precede or be established concurrently with implementation of the project. In-lieu fee

programs are implemented within a specified amount of time through an agreement with the Service.

Credits and Credit Stacking

For a conservation bank or other species mitigation land, a credit is defined as a unit of trade related to habitat representing the accrual or attainment of habitat functions or value at a habitat offset site (mitigation land). Depending on the target species, credits can be measured in different ways (e.g., habitat area, number of mating pairs, etc.). For the BCVI and GCWA, the units for credits are measured in area of occupied nesting habitat.

Credit stacking is a term that describes a single unit of land to provide multiple credit types and/or trade credits under multiple market-based strategies, where all credits can be sold independently. For example, a mitigation land may have both aquatic endangered species and wetland credits for sale. Nesting habitats for the BCVI and GCWA are often adjacent or overlap on the landscape. However, management requirements for these habitats are unique for each species. Properties in which both species occur would delineate habitat areas for both species as they would be managed. Thus, the habitat areas should not overlap and credits would be assigned to either one species or the other, but not both (i.e., no credit stacking).

Although GCWA and BCVI credits cannot be stacked on a single acre, there may be situations where other threatened or endangered species also co-occur on property that contains BCVI, GCWA or both. Depending on the specific circumstances, credit stacking may be appropriate for the other species that occupies area credited to either the BCVI or GCWA.

Habitat Assessments

Proposals for mitigation lands submitted to the Service should include a complete habitat assessment of the proposed property. Habitat assessments must include the following information:

1. A map clearly indicating the location of the property being considered for a conservation bank or mitigation lands;
2. A current aerial photo with:
 - a. the date the photo was taken, and
 - b. the property boundary;
3. Detailed descriptions identifying the vegetation types described as habitat for each species (species habitat and other types), and on-the-ground methodologies used to evaluate the habitat;

4. A map delineating habitat types identified for target species (and buffer areas) on the property;
5. Detailed descriptions of species survey methodology (see page 13, GCWA Minimum Standards, and page 19, BCVI Minimum Standards) and results (including relevant GIS data); and
6. Description of current land uses, structures, access management (fences, roads, etc.), known exotic or invasive species, any areas excluded from the mitigation parcel, and recent and ongoing management actions.

Management Plans

All mitigation lands must have an active management plan that includes goals and objectives specific to maintaining the habitat for the continued use of the target species in perpetuity. Each plan will also have performance standards, which are measurable attributes used to determine if the management plan meets the agreed upon goals and objectives. Management plans will have specific performance standards related to the species (see details for GCWA and BCVI below), but all plans should have the following addressed:

1. Description of biological resources on-site
2. Identification of biological goals and objectives
3. Identification of activities allowed and prohibited
4. Invasive species management plan
5. Grazing plan (where applicable)
6. Process for adaptive management
7. Line-item proposed costs and funding mechanisms.

Real Estate Assurances

A perpetual conservation easement that transfers usage rights creating a legally enforceable land preservation agreement between a landowner (grantor) and a qualified land protection organization (grantee), such as a land trust or a governmental agency, is required. The easement

holder (grantee) must be qualified pursuant to state laws. The Service (Regional Office - RO) shall approve the form of the conservation easement as well as the entity that will hold the easement. The Owner shall provide the Service with a copy of all easements recorded on the property, and mineral rights through a title report, along with a legal easement. The easement shall contain, among other things, a provision granting to the Service a third party right of enforcement. In the case of land trusts, the organization's board of directors should have in its corporate resolutions the adoption of the National Land Trust Alliance's *Statement of Land Trust Standards and Practices* as guiding the practices of the organization. (The Statement is available from LTA (www.lta.org) or 202-638-4725). The grantee's board of directors, officers, and staff should not have a conflict of interest concerning the mitigation lands or permits issued by the Service or state in which the mitigation land resides. The Service may require written certification that the land trust board of directors, officers and staff, as holders of conservation easements, will not receive benefit, financial or otherwise, from the issuance by the Service of the underlying permit or incidental take authorization, or approval of a conservation bank or other mitigation agreement.

Amendment and Modification

The conservation banking or in-lieu fee program agreement may be amended or modified only with the written approval of all of the parties. As part of this process all proposed amendments and modifications must be consistent with current Service banking guidance and guidance for conservation of the species in effect at the time of the amendment. All amendments and modifications shall be fully set forth in a separate document signed by all parties that shall be appended to the conservation banking agreement. Modifications resulting in the alteration of the number or type of available credits may result in the temporary suspension of credit sales for the duration of the conservation banking agreement re-evaluation process.

Banking agreements that have already been signed as of the date this guidance is made final are considered grandfathered. Other than a minor modification, for any proposal to amend or modify an existing bank agreement, the entire agreement will be re-evaluated to bring it up to current standards according to the most recent version of this guidance. Minor modifications include name changes/updates, address changes/updates, spelling corrections, and grammatical corrections.

Standard Conservation Easement Requirements

The following list contains prohibited and allowed activities on lands under conservation easements for BCVI and GCWA mitigation lands.

Prohibited activities

1. Any activity on or use of the mitigation lands that is inconsistent with the purposes of the conservation easement is prohibited.
2. Any legal or de facto division, subdivision or partitioning of the mitigation lands.
3. Construction, erecting or placement of any building, billboard or sign, or any other structure or improvement of any kind.
4. Use of off-road vehicles and use of any other motorized vehicles except on existing vehicle trails.
5. Recreational activities, including, but not limited to, horseback riding and biking; except for personal, non-commercial, recreational activities of the Grantor, so long as such activities are consistent with the purposes of this Conservation Easement and specifically provided for in the management plan.
6. Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other materials.
7. Planting, introduction or dispersal of non-native or exotic plant or animal species.
8. Unseasonable watering; use of fertilizers, pesticides, biocides, herbicides or other agricultural chemicals; weed abatement activities; incompatible fire protection activities; and any and all other activities and uses which may impair or interfere with the purposes of the Conservation Easement. Invasive plant control, including the use of herbicides, is permitted subject to the management plan for the property.
9. Agricultural activity of any kind except cattle grazing which may be approved subject to a grazing plan as specifically provided in the management plan. The grazing of goats or sheep is prohibited within BCVI habitat areas.
10. Altering the surface or general topography of the mitigation lands, including but not limited to any alterations to habitat, building roads or trails, paving or otherwise covering the mitigation lands with concrete, asphalt or any other impervious material except for those habitat management activities specified in the management plan.
11. Removing, destroying, or cutting of trees, shrubs or other vegetation, except as required by law for (i) fire breaks, (ii) maintenance of existing foot trails or roads, or (iii) prevention or treatment of disease; except for BCVI habitat management as specifically

provided in the management plan. Any activities proposed under (i), (ii), or (iii) must be coordinated with the Service prior to implementation.

12. Manipulating, impounding or altering any natural water course, body of water or water circulation on the mitigation lands, and any activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters. Without the prior written consent of Grantee, which Grantee may withhold, transferring, encumbering, selling, leasing, or otherwise separating the mineral, air (including wind), or water rights for the mitigation lands.
13. Engaging in any use or activity that may violate, or may fail to comply with, relevant federal, state, or local laws, regulations, or policies applicable to Grantor, the mitigation lands, or the use or activity in question.

Allowed activities

1. The right to undertake or continue any activity or use of the Property not prohibited by the Conservation Easement provided such use is consistent with the purposes of the Conservation Easement. Prior to making any change in use of the Property, landowner shall notify Grantee and the Service in writing to allow Grantee and the Service a reasonable opportunity to determine whether such change would violate the terms of this Conservation Easement.
2. The right to sell, give, mortgage, lease, or otherwise convey the Property subject to the terms of the Conservation Easement.
3. With the prior written approval of the Grantee and the Service, the right to restore and enhance native plant and wildlife habitat, consistent with approved wildlife management and soil conservation practices and all applicable laws and regulations governing such practices, provided such restoration does not impair the conservation values that support the GCWA or BCVI.
4. Reconstruction of existing structures within the original footprint is allowed outside of the breeding season (March- September) with no disturbance or removal of existing vegetation.
5. Hunting and fishing is allowed on the parcel provided these activities do not occur within habitat areas during the breeding season (March- September). Hunting of feral hogs may occur at any time with care being taken to reduce potential impacts to nesting GCWA or BCVI.

Financial Assurances

Mitigation lands must identify an adequate funding source to provide for interim and perpetual operation, management, monitoring, and documentation costs. Funding for the start-up and interim management program (e.g., purchase of land, property taxes, initial restoration, or legal fees) should be separate from the requisite endowment for ongoing actions. Letters of credit may be required. The Service's RO shall have final approval over endowment documents. A target date and target amount for fully funding the endowment for ongoing actions must be determined. The endowment must be fully funded before all credits are sold, preferably within the first 3-4 years of the mitigation lands operation. A master escrow account should be established concurrent with final approval of mitigation by the Service. All credit sales/trades are deposited into escrow and a portion of each credit sale deposited is used to fund the long-term and interim management account. In the event the long-term fund is not fully funded by the end of the target date, the owner shall immediately convey the remaining amount.

Some mitigation will also have short-term costs, usually associated with restoration or enhancement of the site, fencing, equipment purchases, or other such start-up costs. An interim management account (i.e., a dedicated, interest bearing account in an amount adequate to cover short-term costs and contingencies) should be established. Other potential assurances may include performance bonds or letters of credit; however, an interim management account is usually preferable. For example, establishment of an interim management account can serve as a contingency fund to manage the property that may not be expended except as agreed to by the Parties and that must be replenished if expended. Once an agreed upon target amount is reached, this account may be terminated and all funds (except interest retained by the banker) will be transferred to the endowment fund.

The strategy for long-term funding is normally to establish a non-wasting management endowment (i.e., a fund that generates enough interest each year to cover the costs of the yearly management). This endowment could be established by including the cost of management into the price per credit. As credits are sold, an agreed upon portion of the proceeds can be deposited into a non-wasting endowment fund or escrow. The size of the required endowment will depend on certain factors, including land management activities, rate of inflation, and interest rate, but should always be estimated out for 30 years. The cost of each credit will ultimately be determined by the owner of the mitigation land, and is not the concern of the Service, if the non-wasting endowment has been fully funded.

Reporting

In order to evaluate compliance with the terms of the agreements and associated management plan, the owner/manager of the mitigation lands will prepare an annual report to the Service by December 31st of that year containing the following information:

1. A statement of funds received and expended in the management of the mitigation lands during the previous year.
2. A general description of the status of the biological resources on the mitigation lands.
3. The results of any biological monitoring or studies conducted on the mitigation lands.
4. A description of all management actions taken on the mitigation lands, including any prescribed grazing that may take place to manage vegetation, and any management actions not taken with an explanation of why such action was not taken.
5. A description of any problems encountered in managing the bank/mitigation land.
6. A description of management actions that the Owner may undertake, according to the management plan, in the coming year and the related annual budget (the "Annual Budget").
7. A summary of the bank/mitigation land and habitats included in the bank/mitigation land, including total acres of habitat protected and managed for the GCWA and BCVI.
8. An inventory of any known threats or impacts to the target species or its habitat, the status of the threat or impact (i.e., cured, ongoing, or uncured), and a summary of actions taken to reduce such threats or impacts, as applicable.
9. Recommended modifications to the management plan as determined by the adaptive management process.
10. The annual monitoring report prepared by the easement holder, as available.

Permits and Incidental Take

Under section 9 of the ESA, it is unlawful for any person to “take” any federally-listed threatened or endangered fish or wildlife species, without special exemption. Consequently, it is a violation of Federal law to take threatened or endangered fish or wildlife species or their habitat without appropriate permits, even if the take is accidental. Take of federally-listed species incidental to a lawful activity may be authorized through section 7 or 10 of the ESA.

It is possible for a mitigation manager to establish and operate mitigation lands without any ESA section 7 or 10 authorization (incidental take permit) or state permits, provided that they do not take listed species. However, we do suggest property owners/managers hold their own permits

to cover management activities. We recommend consulting with the state permitting authority and the appropriate Service Field Office to determine necessary permitting requirements.

Emergency Situations

The mitigation land owner/manager will not be held responsible for offsetting acts of nature that are unforeseen, or foreseeable but unpredictable, such as fire, floods, and hurricanes. The mitigation land owner/manager will notify the Service within 24 hours of occurrence of a catastrophic event, event of force majeure, or unlawful act, and as promptly as reasonably possible shall meet with the Service to discuss the course of action in response to such occurrence. In the meantime, mitigation lands will continue to be managed and maintained according to the existing management plan.

Remedial Actions

Mitigation lands must include provisions for a dispute resolution process applicable if the owners of the property fail to meet their obligations under the conservation bank or mitigation agreement. The Service, in consultation with the mitigation land sponsor, will decide on the need for remediation.

Golden-cheeked Warbler Mitigation Lands Requirements

Minimum Standards

1. Recent surveys, within the last two breeding seasons, have indicated that the property is occupied by male GCWA at a density indicative of high quality habitat for the area. High quality habitat for the area is evaluated in comparison with densities of managed populations within the vicinity of the proposed mitigation land. Surveys should be designed to estimate the abundance of birds present and show distribution of birds across entire property being considered as a mitigation land. Appropriate survey methods include point counts (Bibby et al. 2000, Knutson et al. 2008), territory mapping (Verner 1985, Bibby et al. 2000), and distance sampling (Buckland et al. 2001, Peak 2011). The methodology used should be described in detail.
2. Site contains a minimum of 500 acres of contiguous, occupied GCWA breeding habitat. For more information, see "Habitat Types Where Warblers Are Expected to Occur" in the habitat descriptions provided by the Texas Parks and Wildlife Department in *Management Guidelines for the Golden-cheeked Warbler in Rural Landscapes* (Campbell 2003). The configuration of the habitat patch should have low forest edge

(boundary between forest and any other land-cover type) to area ratio, which is known to increase nest success (Peak 2007) and for ease of management actions. The minimum size standard is based on research that indicates the probability of occupancy of a particular patch by GCWA increases with increasing patch size, reaching a probability of 100% between approximately 400 and 500 acres (160 and 200 hectares) (Collier et al. 2008).

3. Existing or proposed land management activities, and conditions resulting from these activities, are compatible with the long term conservation of GCWA.
4. The site is sustainable for the purposes of the mitigation as outlined in the original conservation bank or mitigation agreement (e.g., minimal oak wilt infestation, oak recruitment is monitored and managed, low fire hazard, adaptable to a changing climate, potential or existing urbanization adjacent to the parcel is low, etc.).
5. Supports recovery of the species (as per current recovery plan, recovery outline, recent 5-year review, or other Service-approved document).

Habitat Evaluation

The GCWA inhabits dense forests and woodlands containing Ashe juniper and a variety of other, mostly deciduous species of trees during the breeding season. The species prefers large patches of habitat, and studies have shown that the probability of occupancy by warblers increases as the size of a habitat patch increases (Collier et al. 2008). In evaluating a property, an assessment of all habitat types should be conducted, with an emphasis placed on identifying large, contiguous blocks of closed-canopy Ashe juniper/deciduous woodlands. A survey of the property to determine abundance and distribution of GCWAs should be conducted in all areas believed to provide nesting habitat for the species. The level of effort for surveys should be appropriate to cover all possible GCWA habitat areas and estimate the abundance and distribution of breeding males present.

Habitat evaluations should follow Campbell (2003):

- It is possible that not all sites within the habitat types described below will be used by GCWA. Only patches of habitat occupied by GCWA will be considered for preservation credits (see Preservation Credits section below).
- Typical nesting habitat is found in tall (> 15 feet in height), dense (50-100% canopy closure), mature (> 5 inch dbh) stands of Ashe juniper (blueberry cedar) mixed with trees such as Texas (Spanish) oak, Lacey oak, shin (scalybark) oak, live oak, post oak, Texas ash, cedar elm, hackberry, bigtooth maple, sycamore, Arizona walnut, escarpment cherry,

and pecan. This type of woodland generally grows in relatively moist areas such as steep-sided canyons, slopes, and adjacent uplands. A mix of juniper and deciduous trees on the slopes, along drainage bottoms, and in creeks and draws provide an ideal mix of vegetation for these birds. Warblers can also be found in drier, upland juniper-oak (i.e., Texas oak, live oak, post oak, blackjack oak) woodlands over flat topography.

- The following habitat may also be occupied by the GCWA and may be particularly important to GCWA nesting in the western and northern portions of the species' breeding range or in areas where typical habitat no longer exists:
 1. Stands of mature Ashe juniper (trees with shredding bark), over 15 feet in height and dbh of about 5 inches, with scattered live oaks make up at least 10% of the total canopy cover, where the total canopy cover of trees exceeds 35% and overall woodland canopy height is at least 20 feet.
 2. Bottomlands along creeks and drainages which support at least a 35% canopy of deciduous trees (average canopy height of 20 feet), with mature Ashe juniper (at least 15 feet in height with 5 inches dbh) growing either in the bottom or on nearby slopes.
 3. Mixed stands of post oak and/or blackjack oak (making up 10-30% canopy cover), with scattered mature Ashe juniper (at least 15 feet in height with 5 inches dbh), where the total canopy cover of trees exceeds 35% and overall woodland canopy height is 20 feet.
 4. Mixed stands of shin (scalybark) oak (making up 10-30% canopy cover) with scattered mature Ashe juniper (at least 15 feet in height with 5 inches dbh), where the total canopy cover of trees exceeds 35% and overall woodland canopy height is 20 feet.

Crediting Methodology

The process for establishing mitigation lands for the GCWA will require the evaluation and determination of the number of available credits for each parcel of land submitted for review. If the size of your proposed mitigation land is close to the minimum size standard (500 acres), early coordination with Service biologists should be conducted to ensure that identification of buffer habitats, incompatible land use, or other issues do not prevent the parcel from meeting that standard. Following the approval of all documentation required under the conservation bank or mitigation agreement, credits will be released as determined by the credit release schedule and all applicable performance standards. The proponent of the mitigation land will be required to provide a habitat assessment (including maps) and baseline surveys that identify: 1) the extent of suitable habitat including estimates of canopy cover and tree species composition, 2) an estimate

of “buffer” habitat (see description below), 3) the distribution and abundance of GCWA on the parcel, 4) a description of the methodologies used for determining the presence/absence and densities of GCWA, and 5) an estimate of the parcel’s GCWA population. Based on the habitat assessment and baseline surveys, the Service will make a determination on the amount of GCWA credits (preservation and buffer) that will be available to the proponent.

Preservation Credits

Areas within the mitigation lands that are determined to consist of high quality breeding habitat for the GCWA through an appropriate habitat assessment will also be surveyed to determine the distribution and abundance of the species across all the habitat areas. Surveys should be evenly distributed across the parcel to accurately represent the extent of GCWA occupancy.

Preservation credits will be valued at one credit per one acre of suitable habitat provided the habitat consists of contiguous patches occupied by the species and all applicable standards identified in the management plan have been met.

Buffer Credits

Mitigation lands will need to be of sufficient size for ecosystem management in perpetuity. Most properties will likely have areas that do not meet the definition of suitable habitat and are not included in the calculation of preservation credits (for any species). These “non-habitat” areas that are included in the easement and are necessary to maintain ecosystem function specific to the target species are considered buffer areas. Additionally, the outer boundaries of the property that ‘buffer’ against effects from adjacent land use will be considered buffer areas. According to the Service’s 2003 *Guidance for the Establishment, Use, and Operation of Conservation Banks*, “...limited credits may be given for the inclusion of these buffer areas only to the degree that such features increase the overall ecological functioning of the bank.” Therefore, we have determined that in the case of the GCWA buffer areas may qualify for limited credit based on the need to maintain the ecological integrity of mitigation lands in perpetuity. All buffer areas will be evaluated on a case-by-case basis and if appropriate, will be credited at 0.5 credits per one acre. Avian predation of GCWA nests is likely greatest within 300 feet of forest edge (Arnold et al. 1996). For this reason, the Service has determined that buffer areas will typically consist of any habitat within 300 feet of the parcel boundary and/or within 300 feet of the outside edge of suitable habitat within the parcel.

Service Area

The Service Area of a mitigation land defines the area in which the credits may be used to offset project impacts. If projects fall within a mitigation land’s Service Area, the project proponent may offset their impacts by purchasing the appropriate amount of conservation credits from that property. The designation of Service Areas for GCWA mitigation lands is based primarily on the conservation needs of the species. All existing conservation banks will be “grandfathered” in

under these guidelines and will be provided the opportunity to keep their existing Service Area or amend their conservation bank agreement to replace their service areas with the new Service Areas defined below.

We have determined that Service Areas for GCWA mitigation lands will be based on the recovery regions identified in the GCWA Recovery Plan (USFWS 1992) in existence at the time a proposal is submitted to the Service by a proponent (Appendix B). The GCWA Recovery Plan may be updated periodically, and changes to the recovery regions are possible. The conservation banking program for this species will support the recovery criterion of permanently protecting sufficient breeding habitat to ensure the continued existence of at least one viable, self-sustaining population in each recovery region. In order to best accomplish this objective, it is imperative that the loss of GCWA habitat in a particular recovery region is mitigated by the purchase of credits (habitat protection) within the same recovery region until the recovery goal of habitat protection has been achieved in that region. This will assist the Service in ensuring that no particular recovery region loses more GCWA habitat than is protected through the conservation banking program.

Surveys and Monitoring

The primary purpose of conducting GCWA surveys within proposed mitigation lands is to identify those areas that are occupied by the GCWA and their approximate abundance. These surveys should be designed to estimate abundance and density of breeding birds and show the distribution across habitat areas. Surveys must be evenly distributed across the parcel in order to accurately identify the distribution of GCWAs. Subsequent GCWA surveys will be required every three years to monitor population trends and allow for adaptive management. At the time the conservation easement is signed, GCWA surveys within the easement must be current (i.e., conducted within one of the last two breeding seasons).

Development of a Management Plan

1. A proposal for mitigation lands should include a long-term management and monitoring plan identifying the type, condition and function of the resources to be perpetually conserved with provisions for adaptive management. Management actions for buffer areas should also be included. In addition to detailed resource management needs of the property, the plan should describe control of public access, monitoring of resources, maintenance of facilities, personal recreational activities and any special management requirements necessary to meet the goals and objectives of the property. Management goals and objectives should be clearly stated.
2. Grazing and browsing pressure from livestock, exotic ungulates, and white-tailed deer should be managed to prevent over-browsing of broad-leaved shrubs and trees. Over-browsing by white-tailed deer, goats, and various exotic ungulates is specifically

mentioned in the GCWA Recovery Plan as a reason for listing and has recently been cited as a current threat to the species (USFWS 1992, Groce et al. 2010). Management and monitoring of white-tailed deer should be conducted to allow for successful recruitment of hardwood species and optimal foliage cover. A deer/exotic ungulate management plan should be developed that includes spotlight and/or mobile survey system on an annual basis to quantify deer and exotic ungulate populations. Surveys should follow Texas Parks and Wildlife guidelines. Deer densities should be 15 acres or more per deer. The goal for exotic ungulate management will be complete eradication from mitigation lands and must be achieved within two years of establishing the mitigation lands. It is recognized that complete eradication may not be possible on some mitigation lands due to immigration, but in these situations populations must not exceed one exotic ungulate for every 100 acres as identified during annual spotlight surveys. Additional hunting pressure outside of the breeding season (March – September) must be implemented if surveys determine that this ratio has been exceeded. Goats and sheep are not permitted on mitigation lands. In limited circumstances, cattle may be allowed provided it does not compromise the conservation values of the mitigation lands. If cattle grazing is proposed for the mitigation land, a grazing plan with a “light” rotational grazing regime must be reviewed and approved by the Service. The techniques used for surveying white-tailed deer and exotic ungulates and monitoring browsing pressure must be detailed in the management plan.

3. If cattle grazing is allowed, or in the event adjacent landowners are grazing livestock, cowbird trapping must be conducted from March 1 through May 31 following Texas Parks and Wildlife Department guidelines (http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_w7000_1148.pdf). If cattle occur on the parcel, cowbird trapping must begin immediately after the mitigation lands are established. A minimum of one trap for every 250 acres of grazed land should be evenly deployed across the property. A goal of 10% or less nest parasitism rate or fewer than 50 cowbirds trapped in a single trap in a single season should be established. If monitoring determines such rate has been exceeded, additional traps will need to be deployed.
4. Methods should be identified and implemented for monitoring and controlling fire ant populations.
5. GCWA population monitoring should be conducted every three years. An appropriate monitoring/survey methodology to estimate population and density should be developed and approved by the Service. On large parcels, subplots may be surveyed and the results extrapolated to the entire habitat area with Service approval.

6. Vegetation monitoring should include measures of species composition (including invasive species) and canopy cover.
7. Monitoring of threats should be conducted annually and include surveys to determine oak wilt and fire ant infestations. Surveys to monitor browse pressure should be conducted at least every five years in occupied habitat.
8. Unauthorized access to mitigation lands must be controlled. At a minimum, all property boundaries must be securely fenced (minimum 5 strand barbwire fence in good condition), patrolled on a regularly occurring basis (once per month), and damage immediately repaired. Issues related to the management and control of access to mitigation lands should be clearly identified in the Habitat Assessment documents submitted for initial review, and reported in the annual report.
9. Feral hogs must be controlled year-round using traps and hunting with a goal of complete eradication from the mitigation lands. It is recognized that such goal is likely not achievable, but this goal stresses the importance of removing as many feral hogs as possible. Regular monitoring by driving all property roads and viewing all watering locations looking for evidence of feral hog damage (e.g., rooting, wallowing, etc.) must be conducted. If evidence is identified, trapping and/or hunting must be initiated immediately. Corral type traps that allow for multiple feral hogs to enter the trap should be the preferred method of control.
10. The management plan should include an adaptive management section to identify areas of uncertainty, develop alternative strategies, integrate a monitoring program to evaluate effectiveness, and incorporate feedback loops that link implementation and monitoring to the decision-making process.

Black-capped Vireo Mitigation Lands Requirements

Minimum Standards

1. Recent surveys within the last two breeding seasons indicate the habitat is occupied by male vireos at a density indicative of high quality habitat for the geographic area. Generally, the density of black-capped vireos in occupied habitat is variable across the range, but comparisons with managed populations within the vicinity should be evaluated. For example, black-capped vireos at Fort Hood, Texas, generally occur at a density of > 0.3 males/hectare. Surveys should be designed to estimate the abundance of birds present and show distribution of birds across entire property being considered for a mitigation land. Appropriate survey methods include point counts (Bibby et al. 2000),

territory mapping (Bibby et al. 2000), and distance sampling (Buckland et al. 2001). When estimating abundance, count duration should be adjusted as recommended in Cimprich (2009). The methodology used should be described in detail. Habitat should meet the definition of nesting habitat as described in Campbell (2003).

2. The minimum area of suitable nesting habitat for inclusion in mitigation lands will need to consider: a) patch size, connectivity, and density of birds present for management in perpetuity, b) habitat prescriptions (burn, mechanical) feasible for maintaining at least 75% occupation each breeding season, c) extent of threats such as brown-headed cowbird parasitism, white-tailed deer and non-native species, and how size and location of parcel may influence managing threats. In general, the Service is aware of 10 large populations (> 100 males) within the U.S. portion of the breeding range. There are approximately 21 known populations consisting of 30 to 90 pairs, followed by various small populations or single observations of singing males. Many of the mid-range populations (30 to 90 pairs) occur on state or other managed lands and have occurred for numerous years. Based on a review of density estimates for moderate to large sized, managed populations, a baseline of 30 pairs at a density of 0.3 males/hectare, would take 100 hectares (~250 acres) of nesting habitat to maintain. Therefore, a minimum patch size of 100 hectares of contiguous black-capped vireo habitat is required for mitigation lands until further research or information indicates otherwise. It should be noted that nesting habitat is often patchy and may include areas of adjacent golden-cheeked warbler habitat or non-habitat for either bird. However, patches of vireo nesting habitat should be close enough to allow dispersal.
3. Existing or proposed land management activities, and conditions resulting from these activities, are compatible with the long-term conservation of the black-capped vireo.
4. The site is sustainable (e.g., minimal juniper present, oak recruitment is monitored and managed, low fire hazard, adaptable to a changing climate, potential or existing urbanization is low, etc.) and will be managed to maintain nesting habitat for the species.
5. Supports recovery of the species (as per current recovery plan, recovery outline, recent 5-year review, or other Service-approved document).

Habitat Evaluation

The black-capped vireo is a habitat specialist. Breeding habitat is quite variable across its range, but is generally shrublands with a distinctive patchy structure. In evaluating a property, an assessment of all habitat types should be conducted, with emphasis on nesting habitat for the

BCVI. A survey of the property to determine the level of occupancy should be conducted in areas determined to provide nesting habitat for the species. The level of effort for occupancy surveys should be appropriate to cover all BCVI habitat areas and estimate the density of breeding males present.

Habitat evaluations should follow Campbell (2003):

- In Texas, vireo habitat is found on rocky limestone soils of the Edwards Plateau, Cross Timbers and Prairies, eastern Trans-Pecos and, to a limited extent, on igneous soils in the Chisos Mountains. Although Black-capped Vireo habitat throughout Texas is highly variable with regard to plant species, soils, temperature, and rainfall, all habitat types are similar in vegetation structure; i.e. the “overall look” is somewhat similar although the plant species vary. Vireos require broadleaf shrub vegetation reaching to ground level for nesting cover. They typically nest in shrublands and open woodlands with a distinctive patchy structure. Typical habitat is characterized by shrub vegetation extending from the ground to about 6 feet or more and covering about 30 to 60 percent or greater of the total area. In the eastern portion of the vireo’s range, the shrub layer is often combined with an open, sparse to moderate tree canopy. Patches of open grass or bare rock separate the clumps of shrubs and trees. In central Texas, this habitat is often regrowth from disturbances such as clearing, fire, and browsing.
- In the Edwards Plateau and Cross Timbers Regions, vireo habitat occurs where soils, topography, and land use produce scattered hardwoods with abundant low cover. Common broad-leaved plants in vireo habitat in these regions include: Texas (Spanish) oak, Lacey oak, shin oak, Durand (scaleybark) oak, live oak, mountain laurel, evergreen sumac, skunkbush sumac, flameleaf sumac, redbud, Texas persimmon, Mexican buckeye, elbowbush and agarita. Although Ashe juniper is often part of the plant composition in vireo habitat, preferred areas usually have a low density and cover of juniper.
- In the western Edwards Plateau and Trans-Pecos Regions, on the western edge of the vireo’s range, the birds are often found in canyon bottoms and slopes where sufficient moisture is available to support diverse shrub vegetation. Dominant woody plants in this habitat type include sandpaper oak, Vasey oak, Texas kidneywood, Mexican walnut, Texas persimmon, lotebush, brasil, wafer ash, mountain laurel, cenizo, whitebrush, and guajillo.
- For all habitat types, the plant composition appears to be less important than the presence of adequate broad-leaved shrubs, foliage to ground level, and mixture of open grassland and woody cover. Deciduous and broad-leaved shrubs and trees throughout the vireo’s range are also important in providing habitat for insects on which the vireo feeds.

Credit Methodology

Establishing mitigation lands for the BCVI will require the evaluation and determination of the number of available credits. Following approval of all documentation required under the conservation bank or mitigation agreement, credits will be released as determined by the credit release schedule and all applicable performance standards. The mitigation land proponent will be required to provide a habitat assessment (including maps) and baseline surveys that identify: 1) the extent of suitable breeding/nesting habitat for the BCVI, 2) an estimate of buffer areas (see description below), 3) the distribution and density of BCVIs occurring on the property, and 4) a description of the methodologies used for determining population density and distribution. Based on the habitat assessment and baseline surveys, the Service will make a determination on the amount of BCVI credits that will be available to the proponent. In general, credit determinations may consist of preservation and buffer.

Preservation Credits

Areas within the mitigation lands that are determined to consist of suitable breeding/nesting habitat for the BCVI through an appropriate habitat assessment should be surveyed for the extent of occupancy by the species. Surveys should be appropriately designed to determine species density across all areas delineated as nesting habitat. Preservation credits will be valued at 1 credit per 1 habitat acre provided 1) the habitat acre contains suitable breeding/nesting habitat, 2) is occupied by the species and 3) all applicable performance standards are met. Occupied habitat for mitigation lands should be determined through a current and appropriate survey protocol that shows the presence of vireo territories at a density indicative of high quality habitat as compared to geographically-similar managed populations. Areas that are not currently occupied by the species but are proposed to be credited in the future through enhancement/restoration of habitat will only be credited when the habitat meets criteria 1-3 above.

Buffer Credits

Mitigation lands will need to be of sufficient size for ecosystem management in perpetuity. Most properties will likely have areas not included as “habitat areas” occupied by the species and are not included as preservation credits (for any species). Those non-habitat areas that are included in the easement and are necessary to maintain habitat function specific to the target species are “buffer” areas. Buffer areas may also be areas along property boundaries that are appropriate to buffer against effects from adjacent non-compatible land use. Buffer areas will generally extend 300 feet from the edge of delineated habitat areas and may include small gaps between habitat patches that may be more than 300 feet from a delineated edge but are not practical to exclude. Buffer areas qualify for 0.5 credits per 1 acre.

Service Areas

The 1991 Recovery Plan (USFWS 1991) for the BCVI defined six locations requiring at least one viable breeding population exist as one criterion for downlisting the species. The locations were Oklahoma, Mexico, and four of the six Texas regions delineated in the plan. In 1995, the Service held a BCVI Population and Habitat Viability Assessment workshop, which was attended by 36 biologists representing 26 agencies, organizations, consulting firms, and universities (USFWS 1996). One of the recommendations resulting from the publication produced by the workshop was a proposed reorganization of the recovery regions from the 1991 plan into four units.

Since then, there has been a fair amount of confusion on the “official” recovery regions; some entities using the 1991 six Texas regions, others using the four Texas units from the 1995 workshop. The Service has attempted to clarify that the 1991 recovery plan, while in need of revision, is still the current document with regard to recovery planning. However, much new information with regard to species distribution and status has become available since the original development of the Texas recovery regions. Recently, the Service has used this information to reorganize the Texas recovery regions into four units. This was accomplished using status and distribution information, major vireo populations centers, and geologic and vegetation features. The resulting four units were then made to conform to county lines, for ease of use (Appendix C). The recovery criterion of “*at least one viable breeding population exist in each of the following six locations...*” from the 1991 recovery plan still applies, but now there are only four units in Texas, allowing for the viable population requirement to occur in each of these four (and still one in Oklahoma and one in Mexico).

The proposed recovery units are evenly distributed across the range and logically delineated based on available habitat and distribution information. Therefore, these units would adequately represent Service Areas as described in the Service’s “Guidance for the Establishment, Use, and Operation of Conservation Banks.” In general, mitigation lands would only be able to sell credits to projects that are located within the recovery unit in which it occurs. This is meant to ensure recovery units are not precluded from recovery through cross-unit mitigation. However, in limited situations, it may be prudent to allow a modified service area to provide for enhanced conservation of the species. Examples of such situations include: 1) location of a property that crosses or is in close proximity to service area boundaries, 2) inadequate mitigation options in service areas, and 3) projects located in recovery units that have met population recovery criteria. In any case, a proposal to modify a service area from the standard four in Texas would be considered on a case-by-case basis and must be justified based on the conservation needs of the species.

Development of a Management Plan

1. A proposal for mitigation lands should include a long-term management and monitoring plan identifying the type, condition and function of the resources to be perpetually conserved with provisions for adaptive management. Management actions for buffer areas should also be included. In addition to detailed resource management needs of the property, the plan should describe control of public access, monitoring of resources, maintenance of facilities, public uses and any special management requirements necessary to meet the goals and objectives of the property. Management goals and objectives should be clearly stated. For example:

Goal: Perpetually protect and manage land as shrubland/grassland habitat to contribute to the recovery of the endangered black-capped vireo.

Objectives: 1) Define the desired conditions of habitat areas to set targets for planning, implementing, monitoring and evaluating management practices. 2) Minimize the direct and indirect impacts to the black-capped vireo and habitat areas. 3) Monitor the status of the black-capped vireo and habitat areas to evaluate effectiveness of management practices and management targets. 4) Apply adaptive management as appropriate to maintain or improve habitat conditions for black-capped vireo.

2. Maintenance of BCVI habitat will be needed through prescribed fire and/or mechanical manipulation in most portions of its breeding range. Depending on the existing situation and many site-specific variables, habitat treated with fire may become suitable for the species in 2-5 years and remain suitable for 10 to 20 years. Therefore, a portion of the parcel may be treated with fire approximately every 3 years in a rotational manner to ensure a majority of the property remains suitable for breeding vireos, while newly burned areas recover. At least 75% of the original area delineated as BCVI habitat should be maintained in nesting condition and occupied by the species. A maximum of 25% may be temporarily unsuitable due to maintenance actions (i.e., prescribed fire or mulching). Exceptions to the minimum/maximums may be made based on site specific information (e.g., existing burn plans, presence of natural or manmade firebreaks, etc.). Objectives of habitat management should follow Campbell (2003). Maintenance of habitat should not occur during the breeding season (March 15 to September 1).
3. Mechanical or hand removal of trees/shrubs for maintenance of habitat may be used outside of the breeding season. Slash should be mulched in place or removed from habitat areas and burned prior to the next breeding season.
4. Goats and sheep are not permitted on mitigation lands. Other non-native ungulates (e.g., exotic game species) will not be introduced and any existing species should be removed. The goal for exotic ungulate management will be complete eradication from mitigation

lands and must be achieved within two years of establishing the mitigation lands. It is recognized that complete eradication may not be possible on some mitigation lands due to immigration, but in these situations populations must not exceed one exotic ungulate for every 100 acres as identified during annual spotlight surveys. Additional hunting pressure outside of the breeding season (March 15 to September 1) must be implemented if surveys determine that this ratio has been exceeded. Feral hogs must be controlled year-round using traps and hunting with a goal of complete eradication from the mitigation lands. It is recognized that such goal is likely not achievable, but this goal stresses the importance of removing as many feral hogs as possible. Regular monitoring by driving all property roads and viewing all watering locations looking for evidence of feral hog damage (e.g., rooting, wallowing, etc.) must be conducted. If evidence is identified, trapping and/or hunting must be initiated immediately. Corral type traps that allow for multiple feral hogs to enter the trap should be the preferred method of control.

5. Methods should be identified and implemented for monitoring and controlling fire ant populations.
6. Monitoring of BCVI nests should be conducted in the first year to establish baseline of brown-headed cowbird parasitism rate. Depending on the existing BCVI population size, a subset of nests may be monitored to determine parasitism rate (see # 7 below). Cowbird trapping should be conducted across the parcel with the objective of keeping the parasitism rate below a 10% average over 6-year periods. Cowbird trapping should be conducted from March through May following Texas Parks and Wildlife Department guidelines (http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bk_w7000_1148.pdf). If cattle occur on the parcel, cowbird trapping should begin immediately after the mitigation land is established.
7. BCVI population monitoring, in conjunction with nest monitoring, should be conducted every other year. A management goal of a minimum density of males should be set based on known densities in nearby, equivalent healthy populations. Generally, populations in the eastern portion of the range have higher densities in suitable habitat versus the western portion of the range. In the absence of comparable regional data, a density of ≥ 0.3 males/hectare may be appropriate (based on known managed populations). An appropriate monitoring/survey methodology (e.g., point counts, spot mapping, distance sampling) to estimate population and density should be developed and approved by the Service. On large parcels, subplots may be surveyed and the results extrapolated to the entire habitat area. In general, the number and size of subplots should be 100 acres per 500 acres of habitat area (or 20% of the habitat area for parcels between

500 and 1000 acres). The configuration of subplots should be rotated in different survey seasons and should avoid areas under prescribed habitat management.

8. Vegetation monitoring should include vegetation composition, shrub canopy, and nesting cover (shrub foliage 2 to 4 feet from the ground) conducted at least every five years in occupied habitat. Habitat under maintenance prescription should be monitored annually until occupied by the species. Monitoring should be of sufficient intensity to base maintenance prescriptions as in #2 above. Juniper composition should be evaluated with the objective of maintaining less than 10% overall composition. Exceptions of greater than 10% juniper may be considered if it is determined that it provides important shrub cover due to a lack of adequate deciduous cover.
9. It is generally preferred that any livestock be excluded from mitigation lands. However, in limited circumstances, cattle may be allowed provided it does not compromise the conservation values of the mitigation lands. If cattle grazing is proposed for the property, a grazing plan with a “light” rotational grazing regime should be reviewed and approved by the FWS.
10. Management and monitoring of white-tailed deer should be conducted to allow for successful recruitment of hardwood species and optimal foliage cover. A deer/exotic ungulate management plan should be developed that includes spotlight and/or mobile survey system on an annual basis to quantify deer and exotic ungulate populations (goals for exotic ungulates provided under #4). Surveys should follow Texas Parks and Wildlife guidelines. Deer densities should be 15 acres or more per deer.
11. Within areas proposed as black-capped vireo mitigation lands where Tobusch fishhook cactus (*Ancistrocactus tobuschii*) is found on the Service's county list (http://www.fws.gov/southwest/es/EndangeredSpecies/EndangeredSpecies_Main.cfm), surveys for Tobusch fishhook cactus should be conducted by a qualified surveyor for the species across all areas within the proposed mitigation lands that contain Eckrant, Ector, and Tarrant soil series. These surveys should be completed as part of the initial assessment of the parcels. The surveys should be conducted during the flowering season for Tobusch fishhook cactus which is late January-March (rarely early April)(Poole et al. 2007). The surveyor should confirm flowering at the nearest accessible population prior to commencing the surveys. Any areas found to have Tobusch fishhook cactus will be delineated in the mitigation land management plan. Management within these areas would be modified to hand cutting only during the non-flowering season and brush piles would be removed from the area. If prescribed fire is the preferred management tool the burn should be conducted in the non-flowering season. Hand trimming of vegetation

in/around cactus populations may be needed to avoid a high temperature burn within Tobusch fishhook cactus areas.

12. The management plan should include an adaptive management section to identify areas of uncertainty, develop alternative strategies, integrate a monitoring program to evaluate effectiveness, and incorporate feedback loops that link implantation and monitoring to the decision-making process.

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Appendix A: Checklist for Mitigation Land Proposals

Note: the requirements listed below are for a Proposal. Additional requirements must be met in the conservation bank agreement or the Section 7 or Section 10 documents.

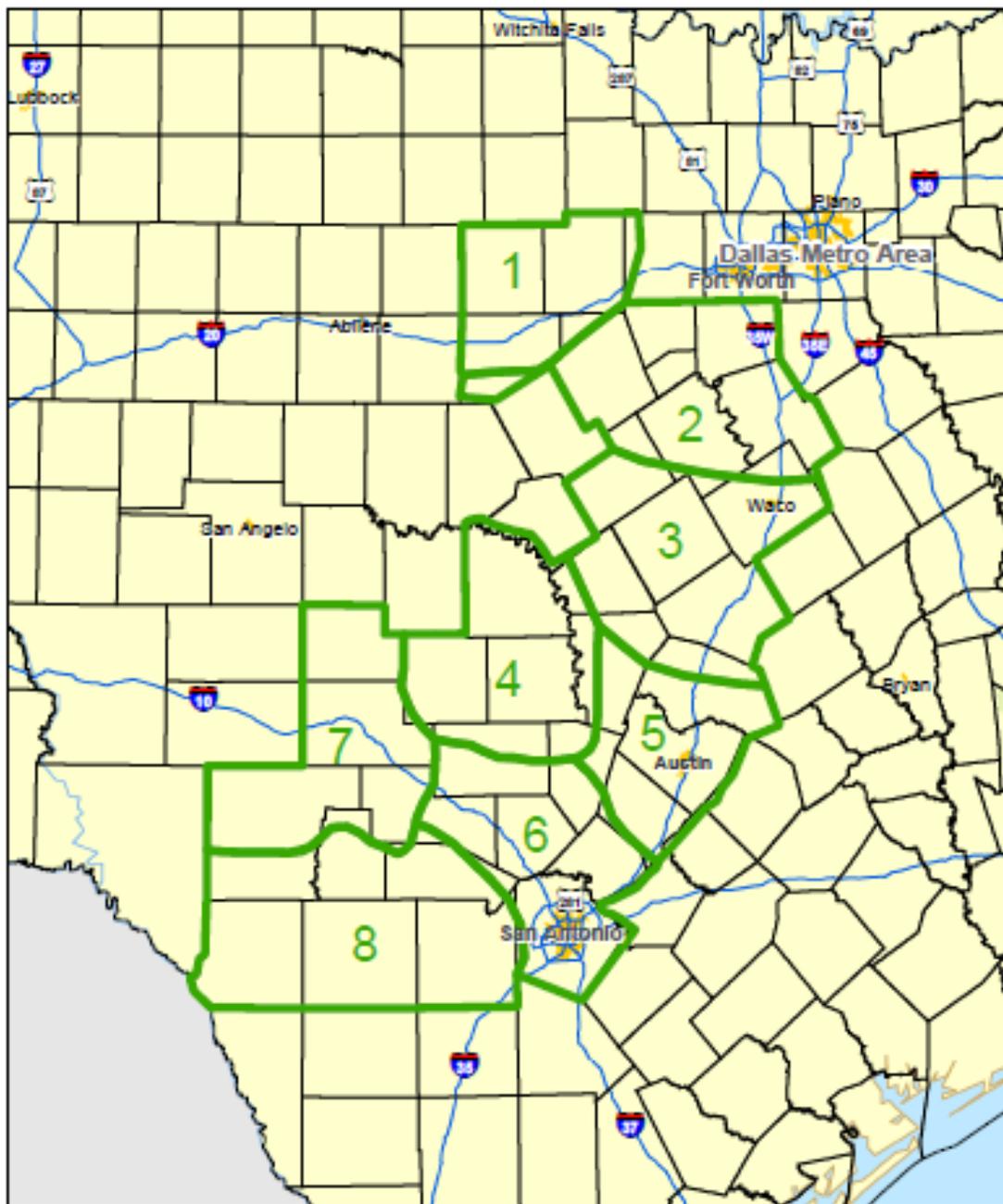
Please provide the following information and checklist with the submittal of a Final Proposal:

- Proposed Bank/Mitigation Lands Name – Use a short name based on a geographic feature if possible and include “Conservation Bank” in the name for Conservation Banks; note: name changes may be requested by an agency if the name has been used for another bank or mitigation lands (including Wetland/Stream Mitigation Banks);
- Bank Contacts – include the name, address, phone, fax, email, and role in project for: Bank Sponsor, Land Owner, Consultants, Prospective Land Manager, Real Estate Assurance, and Endowment Holder etc (if known);
- The qualifications of the Bank Sponsor/Mitigation sponsor to successfully complete the type(s) of mitigation project(s) proposed, including information describing any past such activities by the Bank Sponsor/Mitigation sponsor;
- General location map and address of the proposed Bank or Mitigation Lands; if no street address is available, then please include a written description of the location;
- Accurate current map of the proposed Bank or Mitigation Lands boundaries using a 7.5 minute USGS topographic quadrangle map as a base; if the map will be cropped, include the name of the quadrangle;
- Aerial photo(s) of the proposed Bank or Mitigation Lands and surrounding properties;
- The objectives of the proposed Conservation Bank/Mitigation Lands;
- How the Conservation Bank/Mitigation Lands will be established and operated;
- The general need for and technical feasibility of the proposed Conservation Bank/Mitigation Lands;
- The proposed ownership arrangements and long-term management strategy for the Conservation Bank/Mitigation Lands;
- Site conditions description. This must describe the ecological suitability of the site to achieve the objectives of the proposed Conservation Bank/Mitigation Lands, including the physical, chemical, and biological characteristics of the site and how that site will support the target endangered species and their habitats, and should include: site

conditions and habitats, photos of the site, description of wetlands and waters present (if applicable), what is proposed for creation, enhancement, etc., site history including past land uses, surrounding land uses and zoning along with the anticipated future development in the area;

- Assurance of sufficient water rights to support the long-term sustainability of the Conservation Bank/Mitigation Lands (if applicable);
- Proposed number and kinds of Credits (and acres) on the property;
- Biological resource survey report (an inventory of all biological resources onsite);
- If needed, Corps-verified map of on-site jurisdictional wetlands and waters, if a Corps permit will be required because of impacts to wetlands or waters of the U. S.(if verification is scheduled but not completed, please note);
- Preliminary Title Report indicating any easements or other encumbrances. Note, any liens and easements on the property that may affect a site's viability will need to be resolved before a site can be approved. Provide a written assessment of all easements and encumbrances describing the easement and how it may affect bank/mitigation site operation or habitat values;
- Any other restrictions on the property;
- An affirmative statement that a Conservation Easement covering the property, or fee title transfer of the property, will occur as part of Bank/Mitigation Lands Establishment. Include number of acres of Bank/Mitigation Lands area based on exclusion of any easement areas that allow uses incompatible with conservation.

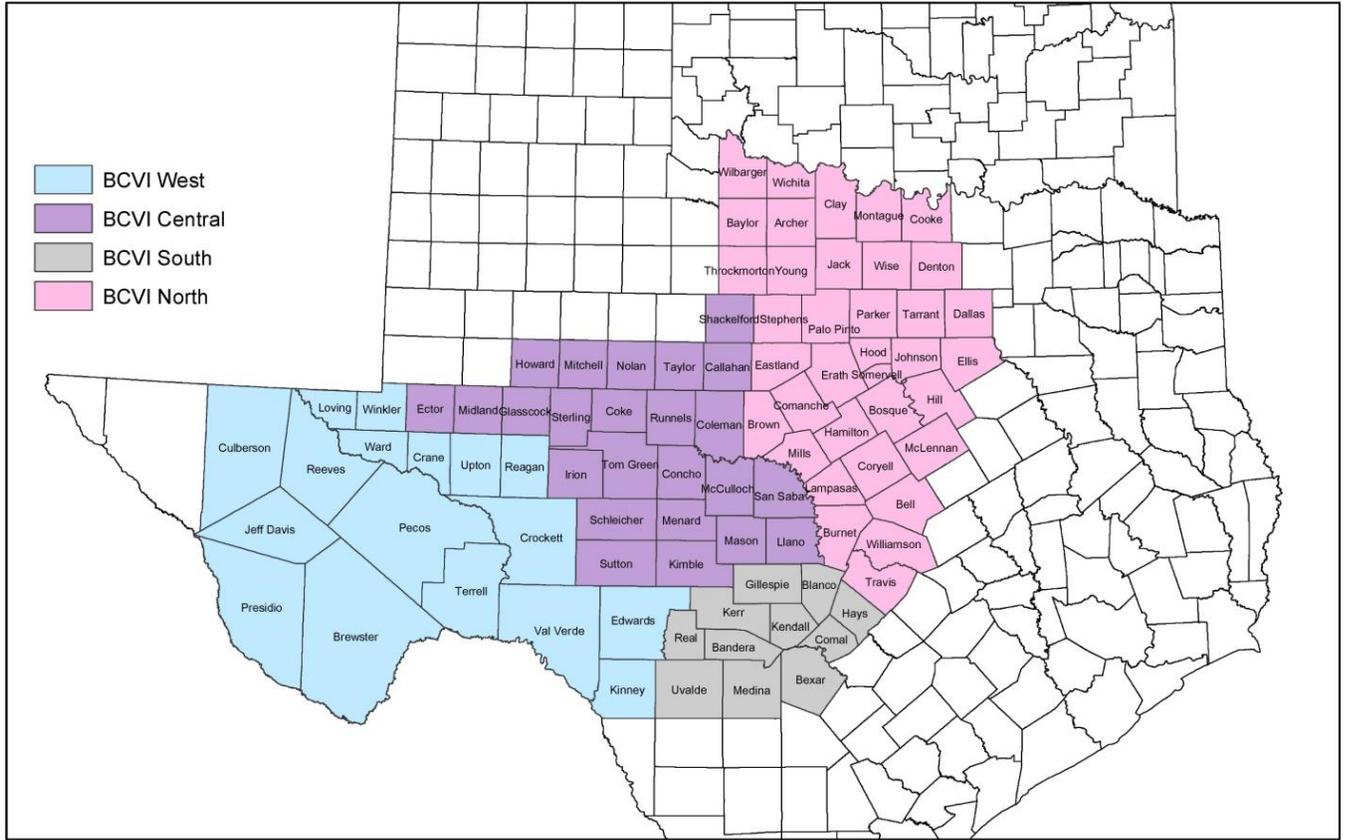
Appendix B: Golden-cheeked Warbler Recovery Regions



-  Hand digitized recovery regions based on the Golden-cheeked Warbler Recovery Plan (USFWS 1992)
-  Texas Counties



Appendix C: Black-capped Vireo Texas Recovery Units/Service Areas



U.S. Fish & Wildlife Service
Arlington, Texas, Ecological Services Field Office
 Projection: UTM Zone 14N, NAD 1983, GRS 1980
 Production Date: 6/16/2012

