

**FINAL PROGRAMMATIC ENVIRONMENTAL ASSESSMENT
FOR VOLUNTARY PUBLIC ACCESS HABITAT INCENTIVE
PROGRAM STATE OF TEXAS**



**United States Department of Agriculture
Farm Service Agency**

October 13, 2011

FINDING OF NO SIGNIFICANT IMPACT

Voluntary Public Access and Habitat Incentive Program State of Texas October 2011

Introduction

The United States Department of Agriculture Farm Service Agency proposes to implement a new program authorized by the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) in the State of Texas. The Voluntary Public Access and Habitat Incentive Program (VPA-HIP) provides grants to State and tribal governments to encourage owners and operators of privately-held farm, ranch, and forest land to voluntarily make that land available for access by the public for wildlife-dependent recreation, including hunting, fishing, and other compatible recreation and to improve fish and wildlife habitat on their land. The VPA-HIP is administered by the State or tribal government that receives the grant funds.

The State of Texas, through Texas Parks and Wildlife Department (TPWD), proposes to use VPA-HIP grant funds to expand its existing public access programs to provide the public with more opportunities to hunt, fish, watch wildlife, enjoy other recreation, and to improve wildlife habitat on private lands. TPWD works closely with landowners who voluntarily participate in three existing private-land access programs: Walk-In Hunts (WIH), Private Lands Drawn Hunts (PLDH) and Waterway Access Easement (WAE). These programs provide private landowners with habitat improvements, financial incentives and technical assistance in exchange for public access to their lands and adjoining public waters. To date these programs have opened more than 80,000 acres of private land to the public in Texas. These successful programs also increase awareness about the importance of private lands for individuals who hunt, fish, and enjoy wildlife-related recreation and help motivate landowners to conserve wildlife species.

Preferred Alternative

The Preferred Alternative is the Proposed Action which consists of three main components: (1) expand the WIH program by 50% to over 120,000 acres; (2) double the number of current landowner agreements in the PLDH program; and (3) acquire 3 new river access points in the WAE program.

Reasons for Finding of No Significant Impact

In consideration of the analysis documented in the Programmatic Environmental Assessment (EA) and in accordance with Council on Environmental Quality regulations 1508.27, the preferred alternative would not constitute a major State or Federal action affecting the human and natural environment. Therefore, this Finding of No Significant Impact (FONSI) has been prepared and an Environmental Impact Statement will not be prepared. This determination is based on the following:

1. Long-term beneficial impacts and short-term localized impacts would occur with the preferred alternative. Neither of these impacts would be considered significant.
2. The preferred alternative would not affect public health or safety.
3. Unique characteristics of the geographic area (cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, and ecologically critical areas) would be preserved with implementation of the preferred alternative.
4. The potential impacts on the quality of the human environment are not considered highly controversial.
5. The potential impacts on the human environment as described in the Programmatic EA are not uncertain nor do they involve unique or unknown risks.
6. The preferred alternative would not establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.
7. Cumulative impacts of the preferred alternative in combination with other recent, ongoing, or foreseeable future actions are not expected to be significant.
8. The preferred alternative would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places.
9. The preferred alternative would have long-term beneficial impacts to wildlife and their habitats, including endangered and threatened species under the Endangered Species Act of 1973.
10. The preferred alternative does not threaten a violation of Federal, State, or local law imposed for the protection of the environment.

Determination

On the basis of the analysis and information contained in the Programmatic EA and FONSI, it is my determination that adoption of the preferred alternative does not constitute a major Federal action affecting the quality of the human and natural environment. Barring any new data identified during the public and agency review of the Final Programmatic EA that would dramatically change the analysis presented in the EA or identification of a significant controversial issue, the Programmatic EA and this FONSI are considered final 30 days after date of approval signature.

Signature: 

Date: October 13, 2011

Cover Sheet

Proposed Action: The United States Department of Agriculture (USDA) Farm Service Agency (FSA) and the State of Texas have agreed to implement a new Voluntary Public Access – Habitat Incentive Program (VPA-HIP). USDA is provided the statutory authority by the provisions of the Food Security Act of 2008, and the Regulations at 7 Code of Federal Regulations (CFR) 1410. VPA-HIP provides grants to State and tribal governments to encourage owners and operators of privately-held farm, ranch, and forest land to voluntarily make that land available for access by the public for wildlife-dependent recreation, including hunting, fishing, and other compatible recreation and to improve fish and wildlife habitat on their land. The VPA-HIP is administered by the State or tribal government that receives the grant funds.

Type of Document: Programmatic Environmental Assessment

Lead Agency: USDA, FSA

Sponsoring Agency: Texas Parks and Wildlife Department

Cooperating Agency: None

Comments: This Programmatic Environmental Assessment was prepared in accordance with USDA FSA National Environmental Policy Act (NEPA) implementation procedures found in 7 CFR 799, as well as the NEPA of 1969, Public Law 91190, 42 United States Code 4321-4347, 1 January 1970, as amended.

A Notice of Availability was released on September 7, 2011 announcing a 30-day comment period. Comments will be accepted until October 14, 2011.

A copy of the document can be found on the TPWD website at:

http://www.tpwd.state.tx.us/business/feedback/public_comment/proposals/20110_vpa-hip.phtml

Comments may be submitted via e-mail to:

Chuck.Kowaleski@tpwd.state.tx.us

Or via mail to the following address:

Linda Campbell VPA-HIP PEA
Texas Parks & Wildlife Department
4200 Smith School Road, Austin, TX 78744

EXECUTIVE SUMMARY

The United States Department of Agriculture Farm Service Agency proposes to implement a new program authorized by the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) in the State of Texas. The Voluntary Public Access and Habitat Incentive Program (VPA-HIP) provides grants to State and tribal governments to encourage owners and operators of privately-held farm, ranch, and forest land to voluntarily make that land available for access by the public for wildlife-dependent recreation, including hunting, fishing, and other compatible recreation and to improve fish and wildlife habitat on their land. The VPA-HIP is administered by the State or tribal government that receives the grant funds.

The State of Texas, through Texas Parks and Wildlife Department (TPWD), proposes to use VPA-HIP grant funds to expand its existing public access programs to provide the public with more opportunities to hunt, fish, watch wildlife, enjoy other recreation, and to improve wildlife habitat on private lands. TPWD works closely with landowners who voluntarily participate in four existing private-land access programs: Waterway Access Easement (WAE), Private Lands Drawn Hunts (PLDH), and Walk-In Hunts (WIH). These programs provide financial incentives and the opportunity to work with state employed biologists for private landowners to allow public access to their lands as well as improve wildlife habitat. These programs have opened more than 80,000 acres of private land to the public in Texas. Type of public access can vary depending on the specific program. These successful programs also increase awareness about the importance of private lands for individuals who hunt, fish, and enjoy wildlife-related recreation and help motivate landowners to conserve wildlife species.

Proposed Action

The Proposed Action consists of three main components: (1) expand the WIH program by 50% to over 120,000 acres; (2) double the number of current landowner agreements in the PLDH program; and (3) acquire 3 new river access points for the WAE program.

Purpose and Need

The purpose of the Proposed Action is to use VPA-HIP grant funds to increase public access and improve wildlife habitat on private farms, ranches, and forest land in the state of Texas. The need for the Proposed Action is to: increase the value realized by private landowners for wildlife populations inhabiting their property; increase the types and amounts of public access on qualified private land; and promote wildlife habitat restoration and improvement of watershed conditions on private properties.

Environmental Consequences

This Programmatic Environmental Assessment has been prepared to analyze the potential environmental consequences associated with implementing the Proposed Action (Preferred Alternative) or the No Action Alternative. Under the Proposed Action, TPWD would utilize VPA-HIP funds to expand the existing public access programs and offer leasing fees and habitat improvement as incentives for landowners to join these programs. Under the No Action

Alternative, the three public access programs would continue as they are currently administered. The WIH, PLDH and WAE programs would not be expanded and the additional opportunities afforded by the proposed habitat improvement projects would not be realized.

The potential environmental consequences of implementing the Proposed Action would be beneficial overall to the natural environment and increase wildlife-related recreational opportunities in the state. A summary of environmental consequences is provided in Table ES-1.

Table ES-1 Summary of Environmental Consequences

Resource	Proposed Action (Preferred Alternative)	No Action Alternative
Biological Resources (Vegetation, Terrestrial and Aquatic Wildlife, Protected Species, and Wetlands)	Habitat improvement projects would cause minor short-term impacts to vegetation and nearby wildlife due to the direct disturbance of the land (re-seeding, mechanical vegetation removal, prescribed burning). However, long-term beneficial impacts to biological resources would be expected as a result of more stable native vegetation and improved cover and forage habitat for game species. No direct impacts to any protected species or wetlands would occur.	Expansion of the WIH, PLDH and WAE programs would not occur and the additional funding for VPA-HIP would not be available for habitat improvement projects. The current public access programs would remain, but the long-term benefits to the environment from increased funding for habitat improvement would not be realized.
Recreation	Some habitat improvement projects may temporarily limit entry until the project is firmly established. However, long-term beneficial impacts to recreation are expected from improving wildlife habitat and increasing hunting and fishing opportunities.	Expansion of the WIH, PLDH and WAE programs would not occur and there would be no use of VPA-HIP funding to expand or improve wildlife-related recreational opportunities in Texas. Current public access programs would continue.
Socioeconomics and Environmental Justice	Beneficial impacts to the local economy from WIH expansion and increased compensation, as well as from goods and services purchased for habitat improvement projects. Utilization of the land for wildlife-related recreation especially for the WAE program would also be beneficial due to purchases (lodging, meals, and goods) from traveling sportsmen accessing the land. There would be no impacts to minority or low income populations; therefore, there are no environmental justice concerns.	Expansion of the WIH, WAE and PLDH programs would not occur and there would be no VPA-HIP grant funding. No direct negative impacts would occur to local economies. Any beneficial impacts from the spending of VPA-HIP funds locally would not be realized. No Environmental Justice impacts would occur.
Air Quality	Localized and temporary increases in particulate matter could occur during habitat improvement projects that disturbed soils or utilized prescribed fire. However, projects would adhere to all state and federal regulations to ensure that no impacts to regional air quality would occur.	Current public access programs and habitat improvement projects would continue. Prescribed burning would continue to occur as part of habitat restoration efforts in Texas. There would be no change to existing air quality conditions.
Water Resources	Short-term, localized impacts to water quality could occur from habitat improvement projects that disturb soil. However, long-term, beneficial impacts to water quality would be realized from restoring vegetation cover, establishing native riparian vegetation, and stabilizing banks and streambeds around public access points.	Expansion of the WIH, PLDH and WAE programs would not occur and there would be no increase in funding for habitat improvement projects. No direct impacts to water quality would occur. However, the increased benefit from VPA-HIP grant funding for improvements to habitats, and possible benefits to water quality would not be realized.
Soils	Short-term, localized negative impacts to soils could occur during habitat improvement projects with soil disturbance. However, use of best management practices and adherence to all state and federal regulations would minimize soil erosion and runoff. Long-term benefits to soils would occur from stabilization and returning habitats to native vegetative cover.	Expansion of WIH, PLDH and WAE programs would not occur. No direct impacts to soils would occur. However, the increased long term benefits to soils from the utilization of VPA-HIP funding for habitat improvements would not be realized.

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ACRONYMS AND ABBREVIATIONS	
CAD	Computer Aided Design
CCC	Civilian Conservation Corps
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CREP	Conservation Reserve Enhancement Program
CRS	Cultural Resource Specialist
EA	Environmental Assessment
ED	Executive Director
EO	Executive Order
EPA	Environmental Protection Agency
FSA	Farm Service Agency
FWS	U.S. Fish and Wildlife Service
GIS	Geographical Information System
LIP	Landowner Incentive Program
NAAQS	National Ambient Air Quality Standards
NACHP or ACHP	National Advisory Council on Historic Preservation
NEPA	National Environmental Policy Act
NGO	Nongovernmental Organization
PEA	Programmatic Environmental Assessment
PLDH	Private Lands Drawn Hunts
SHPO	State Historical Preservation Officer
T&E	Threatened and Endangered (Species)
TCEQ	Texas Council on Environmental Quality
TDA PBB	Texas Department of Agriculture Prescribed Burning Board
TDCJ	Texas Department of Criminal Justice
THC	Texas Historic Commission
TPO	TPWD Preservation Officer
TPWD	Texas Parks and Wildlife Department
TWDB	Texas Water Development Board
U.S.	United States
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator (map grid system)
VPA-HIP	Voluntary Public Access and Habitat Incentive Program
WAE	Waterway Access Easement
WFC	Wildlife Facilities Coordinator
WIH	Walk-In Hunting Access

CHAPTER 1.0 INTRODUCTION

The United States Department of Agriculture (USDA) Farm Service Agency (FSA) proposes to implement a new program authorized by the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) in the State of Texas. The Voluntary Public Access and Habitat Incentive Program (VPA-HIP) provides grants to State and tribal governments to encourage owners and operators of privately-held farm, ranch, and forest land to voluntarily make that land available for access by the public for wildlife-dependent recreation, including hunting, fishing, and other compatible recreation and to improve fish and wildlife habitat on their land. The VPA-HIP is administered by the State or tribal government that receives the grant funds.

The VPA-HIP is a competitive grants program that is only available for state and tribal governments. The grant funding may be used to expand existing public access programs or create new public access programs, or provide incentives to improve wildlife habitat on enrolled lands. Applicable program objectives in the State of Texas are to:

- Maximize participation by landowners;
- Ensure that land enrolled in the program has appropriate wildlife habitat;
- Supplement funding and services from other Federal, state, or tribal government or private resources; and
- Inform the public about the location of public access land.

The State of Texas, through Texas Parks and Wildlife Department (TPWD), proposes to use VPA-HIP grant funds to expand its existing public access programs to provide the public with more opportunities to hunt, fish, watch wildlife, enjoy other recreation, and to improve wildlife habitat on private lands.

1.1 BACKGROUND

TPWD works closely works closely with landowners who voluntarily participate in three existing private-land access programs: Waterway Access Easement (WAE), Private Lands Drawn Hunts (PLDH) and Walk-In Hunts (WIH). These programs provide financial incentives and the opportunity to work with state employed biologists for private landowners to allow public access to their lands as well as improve wildlife habitat and access to public waters. In the WIH and PLDH programs, TPWD provides landowners with lease payments in exchange for allowing public access for hunting, fishing, or other wildlife dependent recreation. The WAE program provides access across private land to public waters.

These programs provide financial incentives and the opportunity to work with state employed biologists for private landowners to allow public access to their lands as well as improve wildlife and riparian habitat. These programs have opened more than 80,000 acres of private land to the public in Texas. Public access can vary depending on the specific program. These successful programs increase public awareness about the importance of private lands to individuals who hunt, fish, and enjoy wildlife-related recreation and motivate landowners to conserve wildlife species.

1.1.1 Waterway Access Easement

In Texas, the public has the right to use public or navigable waterways but access to large sections of those waterways is currently blocked by private property. TPWD Wildlife and Inland Fisheries Divisions work together to target areas with limited access to public waterways with the goal of creating public access sites. Guidance documents including the TPWD Land and Water Resources Conservation and Recreation Plan, Texas Conservation Action Plan, and Natural Diversity Database are used to target areas of high recreation potential, while avoiding areas that may result in negative effects to at-risk species and their habitats. Landowners in the targeted areas are contacted to assess their interest in providing access easements in exchange for direct payments and/or cost-shared habitat improvement work. Riparian enhancement is of particular importance to TPWD and landowners who are willing to implement practices designed to reduce erosion, improve water quality, remove exotic invasive plants and restore functioning riparian systems have program priority.

Landowners enter into easement agreements that provide access to rivers and other public waterways, TPWD works with them to provide appropriate rental and cost share payments for riparian and in-stream restoration, invasive species control, and exclusion-fencing to enhance riparian areas and adjacent lands. VPA-HIP funding would be used to provide appropriately sited parking areas, resource-based informational kiosks, and trails for access to hunting leases and public waters as currently allowed under our current Section 7 and 106 agreements. A staff archeologist will provide on-site evaluations and recommendations to ensure that all practices meet current federal NEPA guidelines.

1.1.2 Private Lands Drawn Hunts

In 2001, TPWD began purchasing hunt positions from private landowners willing to offer high quality big game hunting on their land for the PLDH program. Landowner offerings are based on harvest recommendations as identified in a TPWD-approved wildlife management plan. PLDH hunters are randomly selected from applications to our drawn hunt system, which lists the properties available and the bag limit offered. Once selected, hunters are provided information on the ranch and are put in contact with the landowner. In 2010-11 we offered 193 hunt positions for white-tailed deer and one position for pronghorn on a total of 8 ranches.

1.1.3 Walk-In Hunts

The WIH began as a small game walk in program in 1994 with the leasing of 4,372 acres. We have leased on average approximately 50,000 to 60,000 acres each year since 2004. Over the years we have continually worked to improve the quality of the public hunting lands leased by providing higher per-acre lease payments for landowners who implement habitat improvement Practices, offer a diversity of game and provide more days of hunting opportunity.

For the 2010-11 hunting season, field staff negotiated 139 short term lease agreements with private landowners on 49,995 acres throughout the state, targeting areas within 100 miles of urban centers. This acreage represents 46 of the 254 counties in Texas and includes all regions of the state.

1.2 THE PROPOSED ACTION

With VPA-HIP grant funds and supplemental funds brought in by the PLDH and WIH programs, TPWD proposes to expand the WIH program by 50% and offer habitat improvement as an incentive for landowner participation in two of the three existing public access programs (WAE and WIH).

This includes:

- Hiring leasing biologists to work with landowners to expand access.
- Leasing land from interested private landowners with good wildlife habitat for hunting and recreation access.
- Providing funding to landowners agreeing to implement habitat improvement practices.
- Implementing 3 waterway access easements and leasing agreements to improve access to rivers.

1.3 PURPOSE AND NEED FOR PROPOSED ACTION

The purpose of the Proposed Action is to use VPA-HIP grant funds to increase public access and improve wildlife habitat on private lands in the State of Texas. The need for the Proposed Action is to: increase the value realized by private landowners for wildlife populations inhabiting their property; increase the types and amounts of public access on qualified private land; and promote wildlife habitat restoration and improvement of watershed conditions and access on private properties.

1.4 REGULATORY COMPLIANCE

This Programmatic Environmental Assessment (PEA) has been prepared to satisfy the requirements of the National Environmental Policy Act (NEPA) (Public Law 91-190, 42 United States Code 4321 et seq.); implementing regulations adopted by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1500-1508); and FSA implementing regulations, Environmental Quality and Related Environmental Concerns – Compliance with NEPA (7 CFR 799). The intent of NEPA is to protect, restore, and enhance the natural and human environment through well-informed Federal decisions. A variety of laws, regulations, and Executive Orders (EO) apply to actions undertaken by Federal agencies and form the basis of the analysis presented in this PEA.

1.5 ORGANIZATION OF EA

This PEA assesses the potential impacts of the Proposed Action and the No Action Alternative on potentially affected environmental and economic resources.

- Chapter 1.0 provides background information relevant to the Proposed Action, and discusses its purpose and need.
- Chapter 2.0 describes the Proposed Action and alternatives.
- Chapter 3.0 describes the baseline conditions (i.e., the conditions against which potential impacts of the Proposed Action and alternatives are measured) for each of the potentially affected resources and the potential environmental impacts to those resources.

- Chapter 4.0 describes potential cumulative impacts and irreversible and irretrievable resource commitments.
- Chapter 5.0 discusses mitigation measures utilized to reduce or eliminate impacts to protected resources.
- Chapter 6.0 contains a list of the persons and agencies contacted during the preparation of this document.
- Chapter 7.0 lists the preparers of this document.
- Chapter 8.0 contains references.
- Appendix A provides a sample TPWD Project Review worksheet.
- Appendix B provides the current Section 7 Agreement between TPWD and FWS
- Appendix C provides a current list of state and federally listed species
- Appendix D provides the current Section 106 Agreement between TPWD, FWS, THC, and NACHP

CHAPTER 2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The TPWD proposes to use VPA-HIP grant funds of \$2,453,954 and a supplemental \$1,353,454 in state license funds to expand its existing public access programs to provide the public with more opportunities to hunt, fish, watch wildlife, and enjoy other recreation on private lands. Specific objectives include:

- Augment existing department staff by hiring 4 biologists/leasing specialists, one in each wildlife region, to oversee and administer the expansion of the public access project.
- Increase large and small game lease property acreage by 50% to 120,000 acres
- Double the number of big game public draw hunt agreements from 193 to 386.
- Increase the number of public hunter user days from 12,685 to 19,028
- Expand fishing and nature related opportunities through 3 new river access points.
- Ensure all program lands contain high quality fish and wildlife habitat.
- Provide personalized technical assistance to landowners enrolled in the program to ensure long term, sustainable stewardship of wildlife resources.
- Generate publicity for the program and access locations through hunting guides, the department's website, brochures, press releases, landowner presentations, and booths at outdoor events.

These objectives can be consolidated into three main Proposed Action components: Expansion of the walk-in and private lands big game drawn hunt programs, Development of three new waterway access easements, and improvement of wildlife habitat on eligible private lands. These components are discussed in more detail in Sections 2.1.1 through 2.1.3.

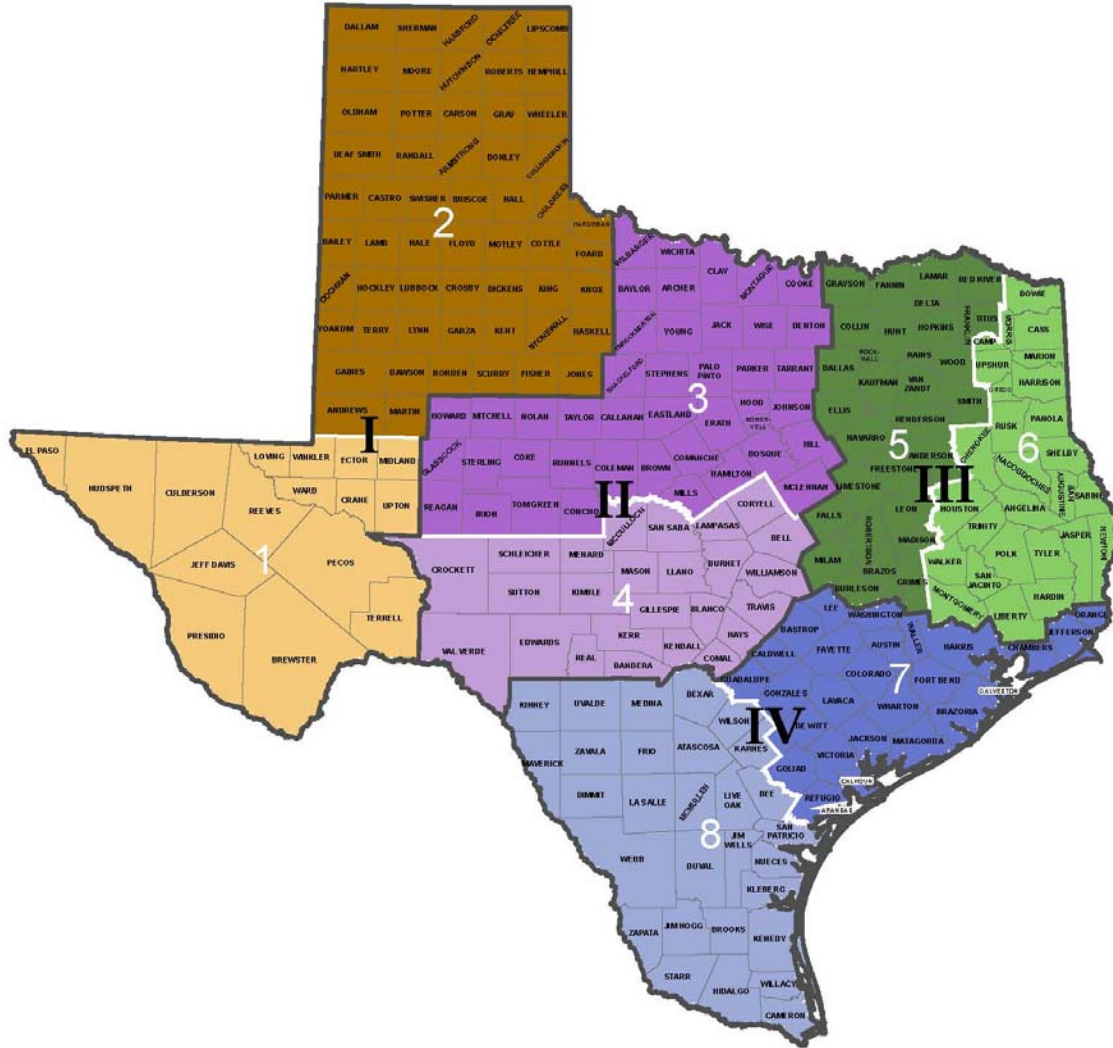
Under the Proposed Action, TPWD would focus on expanding these programs with the goal of doubling the popular big game drawings and focusing on obtaining walk-in hunting and recreational leases within 100 miles of major urban centers where 85% of Texans live. Four regional biologists/leasing agents would be hired. These leasing specialists will evaluate existing habitat and negotiate both short and long-term lease agreements with landowners as well as work with USDA, and other conservation partners to plan and implement habitat practices designed to conserve soil and water resources and enhance wildlife habitat.

2.1.1 Expansion of the Walk-in and Private Lands Drawn Hunt Programs

Administratively, Texas is divided into 4 regions (see Figure 2-1) each containing 2 districts. Currently, our public hunting leases are scattered throughout the state wherever local biologists find willing landowners in the course of their regular duties. Landowner participation in Texas's two public access programs has steadily increased in the last decade, expanding from 9 leases in 1994 to 147 leases as of December 2010. Potential properties are screened through an evaluation process that determines the types and abundance of wildlife, availability of essential components (food, cover, and water), amount of land available for access and the quality of the habitat for hunting, fishing and other recreation.

Figure 2-1 TPWD Administrative Regions

Texas Parks and Wildlife Department Wildlife Regions I-IV and Districts 1-8



2.1.2 Develop Three New Waterway Access Easements

In Texas, the public has the right to use public waterways but access to large sections of those waterways is blocked by private property. TPWD will seek three such properties with high recreational potential. Basic search criteria include: public support and landowner interest; bank and river conditions at potential access sites; ease of access; access site spacing; access site parking and other amenities; maintenance needs; seasonal stream flows and other physical conditions; natural and historical attractions; types of recreational experiences offered and required skill levels; canoe and kayak shuttle and livery services; potential public safety and law enforcement issues; and project cost. Following public meetings, landowners in the targeted areas will be contacted to assess their interest in providing easements to support the waterway access points in exchange for direct payments and/or cost-shared habitat improvement work.

Riparian improvements, similar to CREP activities in many states, are of particular importance to TPWD. Landowners who are willing to implement similar practices designed to reduce erosion, improve water quality, remove exotic invasive plants and restore functioning riparian systems will be prioritized. Sites selected will then undergo an extensive planning process to develop detailed design plans for launches, parking areas, signage, and trails between parking and launch areas, portage trails, and necessary amenities. Universal design considerations will be included, where possible, to accommodate a wide variety of users including children, the elderly, and people with severe disabilities, without substantially altering the natural setting. Habitat improvements will be integrated into the design of any paddling trails.

TPWD partners with private landowners, NGOs and local municipalities to develop watershed conservation plans that support river conservation and recreation goals. Selection, design and implementation of three new access easements will be integrated into TPWD's ongoing watershed conservation planning processes. Various environmental and ecological factors are considered including status of the water body on EPA 303d and 305 lists; presence and status of a Total Maximum Daily Load Plan for the water body; occurrence of species of concern or critical habitats; native species population integrity; non-native species populations and distribution; existing habitat conditions; and other factors relevant to the conservation of native fishes, wildlife, and their habitats. Access and habitat improvements will be conducted consistent with the current approved Statewide Programmatic Section 7 and the Statewide Programmatic Agreement regarding compliance with Section 106 of the National Historic Preservation Act developed for the TPWD Landowner Incentive Program. Depending on the scope of the specific improvements implemented under this project, additional environmental clearances may be required (e.g., US Army Corps of Engineers Nationwide Permit 27 for stream restoration or TPWD Permit to authorize alteration of state-owned streambeds), and will be coordinated by TPWD and provided to the granting agency before work begins.

2.1.3 Improve Wildlife Habitat

TPWD has a long established track record of working with private landowners to improve wildlife habitat on their property. Currently we have more than 200 field staff working with over 6,700 active landowner cooperators implementing wildlife habitat management plans on over 26 million acres across the state. While much of our technical assistance is directed toward game

species, fifteen years ago we also saw a need for additional landowner assistance directed at T&E, nongame and at-risk species. In response to that need TPWD developed the Landowner Incentive Program (LIP) www.tpwd.state.tx.us/lip in 1997 as a way to provide technical and financial assistance to landowners interested in improving habitats for rare and declining species.

This state program was used as a model for the national Landowner Incentive Program (LIP) created in 2002 by the U.S. Fish and Wildlife Service. This demonstrates TPWD's knowledge and experience in identifying and improving habitat for both game and at-risk species and implementing federally funded habitat improvement.

The 2005 Texas Wildlife Action Plan outlines species, habitats, and ecological systems at risk across the state. Certain conservation actions, such as protective easements or leases, management of natural resources through restoration, outreach to private landowners and technical assistance (e.g. prescribed fire application and workshops, streamside restoration workshops) and economic incentives for private landowners to influence responsible stewardship, are outlined in the Action Plan as ways to reduce threats and improve the status of declining species and their habitats. Cost share payments for riparian and in-stream restoration, invasive species control, exclusion-fencing to restore riparian areas and adjacent lands and resource-specific content for informational kiosks are all strategies outlined in the Action Plan. Depending on specific project habitat conditions, which vary widely across a state as diverse as Texas, actions taken with this funding will be tailored to fit site-appropriate resource protection and restoration objectives as outlined in the Plan and other agreements.

Our biologists negotiate lease payments based on the quality of the habitat, diversity of game offered and the length of lease. VPA-HIP funding will allow us to lease additional land and offer higher rental payments to enroll quality existing habitat as well as work with landowners willing to implement site-appropriate habitat restoration practices such as replanting native grasses, removing invasive species and protecting or enhancing wetlands and riparian areas. Practices such as shredding, disking and planting food plots on multi-year leases will be encouraged in exchange for expanded cost share payments.

In order to fully comply with NEPA requirements we will provide funding assistance only for those habitat enhancement practices that fall within the PEA categorical exclusions of our existing federal LIP Section 7 (T&E species) and Section 106 (Cultural Resources) programmatic agreements with the U.S. Fish and Wildlife Service (Appendices B & C respectively). Participation in public access programs is voluntary, as such, the exact habitat improvement projects and where they would occur is not known. This PEA is intended to serve as an overall programmatic analysis for individual habitat improvement projects. As part of the site-specific environmental evaluation, TPWD would consult with the appropriate resource area agency leads, such as the State Historic Preservation Officer or staff at the local Fish and Wildlife Service ecological offices to ensure impacts to protected resources would not occur.

For landowners entering into easement agreements that provide access to rivers and other public waterways, we will work with them to provide appropriate payments for riparian and in-stream restoration, invasive species control, and exclusion-fencing to enhance riparian areas and adjacent lands. VPA-HIP funding will also be used to provide appropriately sited parking areas,

resource-based informational kiosks, and trails for access to hunting leases and public waters as currently allowed under our current Section 7 and 106 agreements and other federal permits. A staff cultural resource specialist will provide on-site evaluations and recommendations to ensure that all practices meet current federal NEPA guidelines.

2.2 ALTERNATIVES

CEQ regulations (40 CFR §1502.14) require the lead agency to identify all reasonable alternatives for implementing a Proposed Action. The Federal Register notice announcing the rule for VPA-HIP (Vol. 75(130), page 39135) explicitly states the purpose of VPA-HIP is to provide grants to State and tribal governments to encourage owners and operators of privately-held farm, ranch, and forest land to voluntarily make that land available for access by the public for wildlife-dependent recreation and to improve fish and wildlife habitat on their land. Each VPA-HIP application received by USDA FSA underwent a selection screening process to identify those proposals that met the program objectives (listed in Introduction Section 1.0).

Expanding the WIH and PLDH leasing programs increase current opportunities for private landowners to enroll in public access programs. The proposed rental and habitat improvement payments act as incentives for additional landowners to enroll in the programs. The WAE program provides additional public access to public waters through private lands while protecting natural resources. Given these issues and the overall program goals, the only reasonable action alternative is the Proposed Action.

2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, the VPA-HIP would not be implemented in the State of Texas. Expansion of the WIH and PLDH programs and the creation of 3 additional waterway access points would not occur. The public access programs (PLDH, WIH and WAE) as currently administered would continue to be available. The No Action Alternative does not meet the purpose and need of the Proposed Action, but is being carried forward in accordance with CEQ regulations to serve as the baseline against which potential impacts of the Proposed Action are measured.

2.4 RESOURCES ELIMINATED FROM ANALYSIS

CEQ regulations (40 CFR §1501.7) state that the lead agency shall identify and eliminate from detailed study the issues which are not important or which have been covered by prior environmental review, narrowing the discussion of these issues in the document to a brief presentation of why they would not have a dramatic effect on the human or natural environment.

As described above, the Proposed Action consists of three main components: expanding both the WIH and PLDH programs and creating three additional waterway access points while offering habitat improvement activities. Expansion of the two current access programs by hiring 4 additional biologists/leasing agents is primarily administrative while the habitat improvement activities and creating access points would have the greatest potential for environmental impacts. The potential direct and indirect impacts to physical resources would be dependent on specific

ground disturbing activities proposed, methods, location, and time of year. Therefore, TPWD plans to utilize a version of our project review form (Appendix A) and the same Section 7 and 106 methodology approved for the Landowner Incentive Program at each individual habitat improvement and waterway access project (Appendices B - C) to minimize potential impacts on threatened or endangered species or cultural resources. Prior to any activity taking place, TPWD personnel would utilize this methodology to make an assessment of potential impacts and undertake the proper measures to minimize any impacts and/or consult with the responsible agencies or authority to prevent any undesired consequences. Depending on the scope of the specific improvements implemented under this project, additional environmental clearances may be required (e.g., US Army Corps of Engineers Nationwide Permit 27 for stream restoration or TPWD Permit to authorize alteration of state-owned streambeds), and will be coordinated by TPWD and provided to the granting agency before work begins. Thus, from a programmatic level, the Proposed Action should have little to no negative impact on the following resource areas:

Noise. The Proposed Action would not create any new permanent sources of noise to the environment. Expanding the WIH and PLDH programs may introduce gunfire noise on lands where public hunting may not be currently occurring. This noise would be intermittent and occur during daylight hours during specified hunting seasons. In addition, the requisite size of land needed for safe hunting would reduce the potential for gunfire noise to be heard outside the property. Habitat improvement activities could require the use of heavy equipment. These activities would be localized, temporary in nature, only occur during typical working daylight hours, and are not likely to exceed typical noise levels experienced on active agricultural land.

Human Health and Safety. No components of the Proposed Action would directly impact human health or safety. The goal of the Proposed Action is to increase public access to privately-held land that supports an abundance of wildlife, thereby allowing hunting, fishing, and outdoor recreation. While hunting and boating do pose a slight safety risk, these activities would take place either on private land with controlled access or public waterways. Texas hunting regulations require hunters to receive the appropriate education and meet minimum age requirements before a permit can be issued. Texas regulations require boaters to meet certain safety standards in regards to boats and equipment.

Land Use. The Proposed Action would not result in any changes to land use designations. The Proposed Action would occur on private lands on a voluntary basis and would not require the alteration of land use except for limited areas used as parking lots or other access points.

Transportation. No aspect of the Proposed Action entails any alteration of the current transportation system in the State of Texas. Increasing acreage available for enrollment in the WAE, WIH and PLDH programs could cause an increase in the number of vehicles traveling to the new lease areas and river access points. However, it is highly unlikely this would be considered an impact to the transportation system, but rather a redistribution of vehicular traffic.

Cultural Resources. The Proposed Action would not directly or indirectly impact any cultural resources, either architectural or archaeological. TPWD is highly aware of the importance of cultural resources, and no aspect of the Proposed Action would allow for purposeful destruction

of any cultural resources. As part of the TPWD Project Review Sheet (Appendix A) and the site-specific Section 106 worksheet, consultation with the State Historic Preservation Officer would occur if any cultural resources were to be impacted as outlined in TPWD's Section 106 Agreement in Appendix D. As a matter of practical policy, TPWD avoids causing impacts to "eligible" historic properties, choosing instead to redesign or modify specific features of proposed habitat restoration efforts, following survey or consultation with the State Historic Preservation Officer. Therefore, no impacts to cultural resources would be expected to occur.

Coastal Zones. The Texas Gulf Coastal Zone is a low, flat plain extending more than 624 miles northeast to southwest. Rivers drain from the north-west highlands and eastern forests to the Gulf of Mexico and provide fresh water, sediments and nutrients that are critical to native plants and wildlife living in this area. Proposed habitat improvement projects implemented during the WAE program would ultimately benefit these areas by removing invasive species, improving water quality and quantity and increasing public awareness of these natural treasures and the need for their continued protection. Potential water resources impacts are addressed in Section 3.4.

Other Formally Classified Lands. The Proposed Action can only be implemented on privately owned lands. The only formal classification applicable on private land would be Prime and Unique Farmland or Farmland of Statewide Importance. The Proposed Action would not include removing these lands from agricultural production. Therefore, there would be no impacts to any other formally classified lands.

CHAPTER 3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter provides a description of the existing environmental conditions that have the potential to be affected by implementation of the Proposed Action and the potential environmental impacts that may occur to those resources. Resource areas potentially impacted by the Proposed Action and covered in this PEA include:

- Biological Resources (Vegetation, Terrestrial and Aquatic Wildlife, Protected Species, and Wetlands)
- Recreation
- Socioeconomics and Environmental Justice
- Air Quality
- Water Resources
- Soils

As described in Chapter 2, this PEA describes the potential impacts from implementing VPA-HIP funds in the State of Texas on a programmatic level. Site-specific analysis for all proposed habitat improvement projects would be done using methodology described in the TPWD Project Review Sheet, Section 7 and Section 106 documents provided in Appendices A-C in the attached appendices. Depending on the scope of the specific improvements implemented under this project, additional environmental clearances may be required (e.g., US Army Corps of Engineers Nationwide Permit 27 for stream restoration or TPWD Permit to authorize alteration of state-owned streambeds), and will be coordinated by TPWD and provided to the granting agency before work begins. The site-specific analysis in combination with the programmatic level analysis provided in this PEA serves as the full NEPA documentation.

Environmental consequences to each resource area are described for the Proposed Action (Preferred Alternative) and the No Action Alternative:

- Proposed Action (Preferred Alternative): utilize VPA-HIP funds to expand and enhance existing public access programs and improve habitat.
- No Action Alternative: continuation of existing public access programs as they are currently administered. No expansion or additional financial incentives for enrollment would occur.

3.1 BIOLOGICAL RESOURCES

Biological resources are any characteristic or feature of the natural environment that adds to the intrinsic value of the local area. In this PEA, biological resources include vegetation, terrestrial wildlife, aquatic wildlife, protected species, and wetlands. Biological resources are included in this PEA because habitat improvement projects have the potential to temporarily disturb the natural environment during implementation but would also result in long-term positive improvements to the natural environment. Also, expanding the public access programs and increasing hunting and fishing opportunities may increase the potential for impacting game populations.

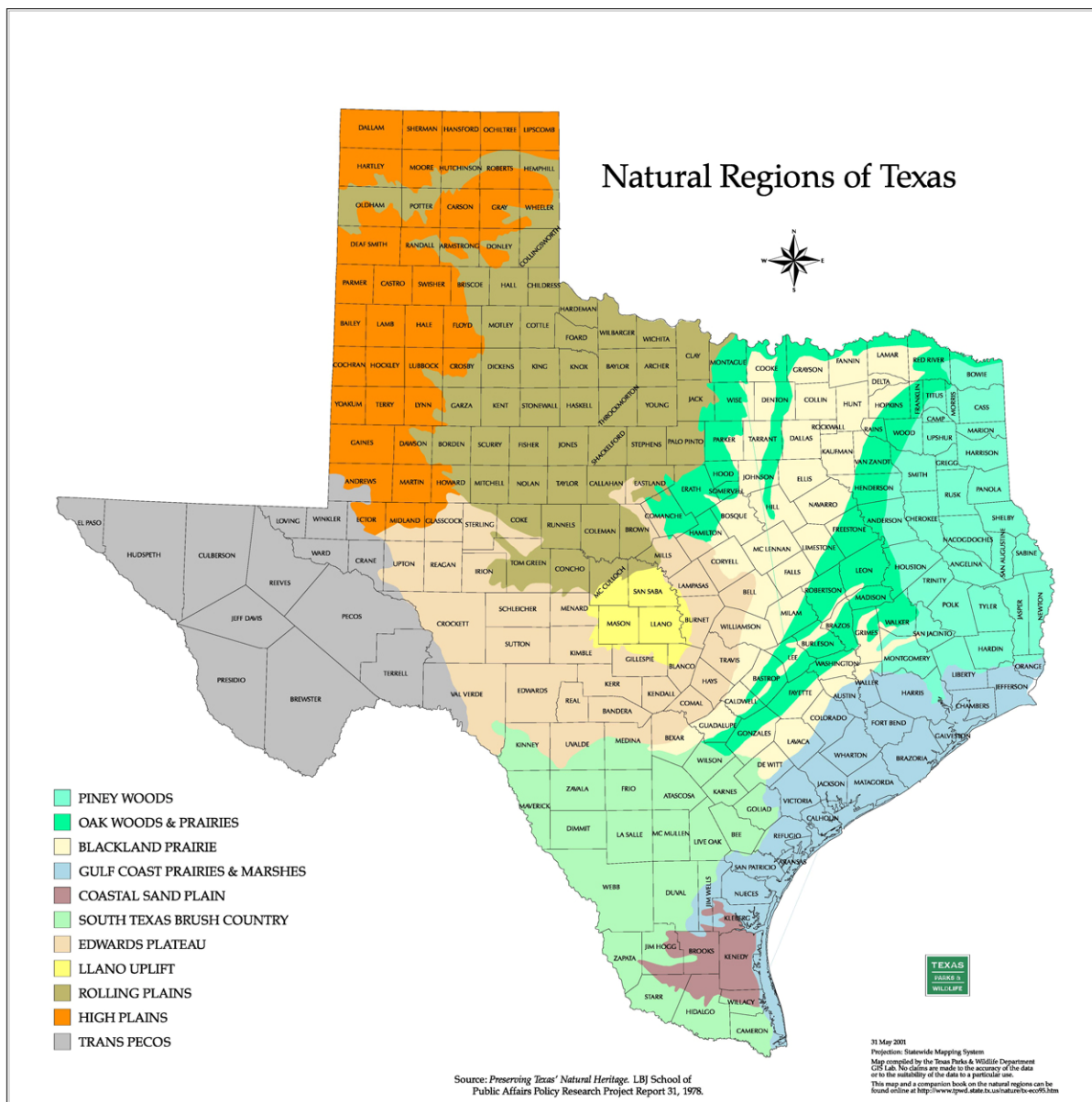
3.1.1 Affected Environment

The Proposed Action covers the entire state; however, the biological resources discussed in this PEA focus on those primary ecological areas where there is the potential to implement a habitat improvement project as discussed in Chapter 2. A very brief overview of the ecological region and the vegetation within those areas is presented in Section 3.1.1.1, terrestrial and aquatic wildlife and protected species are described in Section 3.1.1.2, and wetlands are described in Section 3.1.1.3.

3.1.1.1 Ecological Regions, Elevations, Rainfall and Vegetation

Texas habitat types can be generally characterized by the dominant tree, shrub, and plant species and are impacted by rainfall, soils, and elevation. For this PEA, vegetation is briefly described for 11 ecological regions in Texas shown in Figure 3.1.

Figure 3-1 Ecoregions of Texas



The **Pineywoods Ecoregion** covers an area of 23,500 square miles in east Texas. Elevation ranges from 200 – 500 feet above sea level and the area receives an average of 36 to 60 inches of rain uniformly spread throughout year. Soils are generally acid pale to dark gray sands or sandy loams. Longleaf pines once dominated the southeastern part of the pineywoods with mixed loblolly, shortleaf pine and oak forests north and west. Bottomland hardwoods are found in the lowlands and riparian areas.

The **Oak Woods and Prairies Ecoregion** covers an area of 19,500 square miles in 3 fingers of land jutting into the blackland prairies. Elevation ranges from 300 - 800 feet above sea level and the area receives an average of 35 – 45 inches of annual rainfall generally increasing from west to east. Rainfall peaks in May or June. Soils are generally light colored acid sandy loams or sands with light brown to dark gray bottomland soils. Vegetation in this region is comprised of oak – hickory forests mixed with tall grass prairies. This combination of forest and prairie attracted early settlers who colonized much of this region first.

The **Blackland Prairies Ecoregion** covers an area of 25,500 square miles. Elevation ranges from 300 – 800 feet above sea level and the area receives an average of 30-40 inches of rain generally decreasing in amount from west to east. Soils are fertile dark alkaline clay and once supported tall grass prairie before being replaced by highly productive croplands and ranches.

The **Gulf Coast Prairies and Marshes Ecoregion** covers an area of 21,000 square miles. Elevation ranges from 0 – 120 feet above sea level and the area receives an average of 30 – 50 inches of rainfall a year. Soils are generally acidic sands and sandy loams with clays in the river bottoms. Vegetation in this region consists of salt marsh along the coast with tall grass prairie, oak mottes and parklands and tall woodlands replacing each other as you travel inland.

The **Coastal Sand Plain Ecoregion** covers an area of 4,000 square miles. Elevation ranges from 0 – 100 feet above sea level with highly variable rainfall averaging 20 – 30 inches per year. Soils consist of deep relic sand dunes. Vegetation includes grasslands with oak mottes, mesquite on the uplands and salt marshes at sea level.

The **South Texas Brush Country Ecoregion** covers an area of 24,000 square miles. Elevations range from 100 – 650 feet above sea level. The area receives an average of 20 – 32 inches of rain each year. Soils consist of alkaline to slightly acid clays and clay loams. The vegetation in this area was at one time open grasslands but this area is now covered with thick thorny brush including mesquite, acacia and prickly pear.

The **Edwards Plateau Ecoregion** covers 31,000 square miles. Elevations range from 100 to 3,000 feet above sea level. Rainfall ranges from 15 to 33 inches with amounts generally increasing from west to east. The soils are shallow and overlie thick beds of limestone. Vegetation consists of a scrub forest made up of ash, juniper and stunted oaks. Savannah lands were once widespread but have disappeared with the removal of fire from the ecosystem.

The **Llano Uplift Ecoregion** covers 5,000 square miles. Elevation averages 1,000 feet above sea level. The area generally receives an average of 15 – 34 inches of rain fall, highest in May, June or September and amounts generally increasing from west to east. This area consists of a granite outcrop approximately 70 miles long. Oak, juniper, mesquite and hickory grasslands exist in shallow pockets of soil and lowlands throughout the region.

The **Rolling Plains Ecoregion** covers 44,000 square miles. Elevations range from 1,000 – 2,000 feet above sea level. The area receives an average of 20 -24 inches of rainfall each year. Soils consist of soft prairie sands and clays with underlying impermeable caliche layers. Vegetation consists of mixed grass prairies and juniper woodlands.

The **High Plains Ecoregion** covers 30,000 square miles. Elevation ranges from 1,000 to 4,000 feet above sea level. This receives an average of 15 – 20 inches of rainfall each year with amounts increasing from west to east. Soils consist of coarse sand to tight clays and shale with an underlying caliche layer. Originally the vegetation was short to mid grass prairie, now most of the area is either farmed or ranched.

The **Trans-Pecos Ecoregion** covers 38,000 square miles. Elevation ranges from 1,800 to 8,700 feet above sea level. The region receives an average of 10 – 18 inches of rainfall a year usually August through October. Soils are generally alkaline though acidic and volcanic soils are found here as well. Vegetation consist of cactus, desert scrub and desert grasslands at the lower elevations, pinyon oak juniper woodlands above 4,500 feet with some stands of ponderosa pine, aspen and Douglas fir at the highest elevations.

The general trend in Texas is for conditions to get drier as you travel west or south from the Texas/Louisiana border. Local vegetation and associated wildlife are dependent on moisture levels, which in turn are influenced by rainfall, soil type and depth and elevation (which influences temperature and evaporation). At a local level, orientation also impacts vegetation, with west and south facing slopes generally hotter and drier than north or east facing ones. In-depth vegetation maps and plant association descriptions for Texas ecoregions can be found at: http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_bn_w7000_0120.pdf

3.1.1.2 Terrestrial Wildlife, Aquatic Wildlife, and Protected Species

Texas has a very diverse and extensive assemblage of wildlife species including many endemic species. Texas prioritizes native species according to their level of conservation need. The species with the highest conservation need include Federally Threatened and Endangered, Federal Candidate, and Conservation Agreement species (i.e., Protected Species). Next are the species on the Texas Threatened and Endangered Species list. A list of federal and state threatened, endangered and candidate species can be found in Appendix C. Finally are those that are of particular conservation concern because they are linked to an at-risk habitat, have had a significant decrease in population size, or those for which available information is limited, especially information regarding the species' life history, population status, and threats. These species are covered in the 2005 Texas Wildlife Action Plan (currently being updated) which can be found at: http://www.tpwd.state.tx.us/publications/pwdpubs/pwd_pl_w7000_1187a/ .

Project managers will follow the TPWD Project Review guidelines found in Appendix A and the 2003 TPWD/FWS Section 7 Agreement (Appendix B) covering all actions with potential take implications for federally listed threatened and endangered species.

3.1.1.3 Wetlands

Wetlands are broadly considered “waters of the U.S.” and are defined by the U.S. Army Corps of Engineers (USACE) as areas that are inundated and saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a

prevalence of vegetation typically adapted for life in saturated soil conditions (USACE 1987). Wetlands provide valuable habitat for a variety of wildlife.

Low elevation marsh and wetland areas are typically associated with coastal estuaries, rivers, streams and lakes, but can also occur in depressional areas such as playas. The most common vegetation species include cord grass, cattail, bulrush, and sedge. In Texas, wet meadows could also typically be considered wetlands as well as the fringe areas along rivers, ponds, and streams.

3.1.2 Environmental Consequences

Impacts to biological resources would be considered significant if activities resulted in reducing the wildlife or fisheries populations to a level of concern, removing land with unique vegetation characteristics, incidental take of a protected species or its habitat, or filling of wetland areas without appropriate permits and mitigation measures.

3.1.2.1 Proposed Action (Preferred Alternative)

Under the Proposed Action, additional habitat improvement projects similar to those currently done by TPWD would occur on privately-held farms, ranches, and forest land throughout Texas under the VPA-HIP. These projects would be consistent with overall strategies to conserve habitat and wildlife important to the state of Texas as described in the 2005 Texas Wildlife Action Plan. In general, the activities associated with installing these projects would result in minor, short-term impacts, which include disturbance to local vegetation, wildlife, and wetlands. However, the goal of these projects is long-term habitat improvement and sustainability of wildlife. The specific impacts of each individual project, with respect to biological resources, would be addressed by the regional biologist through TPWD's Project Review worksheet (see Appendix A for a sample worksheet) and TPWD's current Section 7 (Appendix B) and Section 106 (Appendix D) agreements with FWS and the State Historic Preservation Officer (SHPO). This process would ensure minimal impacts to wildlife and their habitat, and no impact to a protected species or wetlands. Programmatic level impacts to vegetation, terrestrial and aquatic wildlife, protected species, and wetlands are described below.

Vegetation and Terrestrial Wildlife

Under the Proposed Action, it is expected that implementation of the habitat improvement projects would increase habitat value by controlling less favorable vegetation species in preference for native species that provide greater habitat value. Many habitat improvement projects are focused on the conservation of important terrestrial wildlife species such as bobwhite quail and whitetail deer. In general, habitat improvement would remove invasive or nuisance species to allow for preferred native species to dominate the habitat. Removal of nuisance species can be done by hand, mechanically, or with prescribed burning depending on the habitat type, size of project area, and local conditions. Prescribed burning is preferred for grassland areas if deemed appropriate by TPWD biologists. In some cases, preferred vegetation species may be seeded or planted to increase the habitat value, while in other cases the habitat would be allowed to naturally regenerate after removal of invasive species. Installation of the restoration activity could result in short-term, minor impacts to vegetation and disturbance to

TPWD goes to great lengths to ensure hunting a game species does not negatively affect the status of the species. All game species are managed for the long-term viability of the populations. Each year TPWD determines the population health, population size, and the conservation objective for each game species. TPWD then determines the appropriate bag limit for each species in each area of the state based on the carrying capacity of that area. Expanding participation in the current programs and increasing hunting opportunities would not result in adverse impacts to game species' populations given the existing TPWD monitoring process.

Aquatic Wildlife

Under the Proposed Action, it is expected that implementation of the habitat improvement projects would improve riparian habitats and result in long-term decreases in erosion and exotic species. Improvements to riparian habitat may include herbaceous seeding, exotic species removal, and limiting grazing; all of which would improve the quality of the surface water associated with the riparian area. Improving the water quality would have subsequent beneficial impacts to aquatic wildlife. The habitat improvement and access construction activities could cause a minor, localized, short-term impact by increasing sediment loads in runoff; however, the long-term benefit of the habitat improvement more than offsets the short-term impact. In addition, approved erosion and sediment control measures would be utilized during installation of the habitat improvement and access projects.

To ensure an aquatic resource is not over fished, TPWD routinely samples fish populations to assess the population size and health of the target species in each area and sets appropriate size and bag limits for game species. Expanding participation in the current programs and increasing fishing opportunities would not result in adverse impacts to fish populations.

Under the Proposed Action, it is expected that implementation of the habitat improvement projects would increase habitat value by controlling less favorable species in preference for native species that provide greater habitat value. As described above, many habitat improvements would result in long-term positive impacts to the habitat and associated wildlife. The TPWD Project Review worksheet process and associated Section 7 and 106 protocols (Appendices A-C respectively) would identify the potential presence of a protected species or its habitat and ensure no impact would occur during installation of a project. Informal consultation with U.S. Fish and Wildlife Service would occur as necessary for individual projects. Depending on the scope of the specific improvements implemented under this project, additional environmental clearances may be required (e.g., USACE Nationwide Permit 27 for stream restoration or TPWD Permit to authorize alteration of state-owned streambeds), and will be coordinated by TPWD and provided to the granting agency before work begins.

Wetlands

The Proposed Action would not directly impact wetland areas; however, it is expected that implementation of the habitat improvement projects in adjacent habitats would increase wetland

habitat value. Improvements to adjacent riparian habitat may include herbaceous seeding, shrub planting, and limiting grazing. These measures would stabilize the banks and streambeds. Installation of the habitat improvement measure could cause minor, short-term impact by increasing sediment loads in runoff; however, long-term benefit of the habitat improvements more than offsets the short-term impact. In addition, erosion and sediment control measures would be utilized during project implementation. The TPWD Project Review worksheet process (Appendix A) would identify the presence of a wetland area and ensure its protection. Consultation with USACE and necessary permits would be obtained for individual projects as required.

3.1.2.2 No Action Alternative

Under the No Action Alternative, the WIH and PLDH programs would not be expanded and no habitat improvement projects would be undertaken on private lands utilizing the VPA-HIP funding. The current public access programs would continue to be available. While habitat improvement projects and restoration activities would still occur, the benefit from additional improvement projects throughout Texas utilizing the VPA-HIP funding would not be realized.

3.2 RECREATION

Recreation includes those outdoor activities that take place away from the residence of the participant. The State of Texas offers a wide variety of recreational opportunities to its residents. Recreational activities that are common in Texas include hunting, fishing, wildlife viewing, camping, golfing, boating, skiing, hiking, biking, and using off-road vehicles. For this PEA, recreation focuses on hunting, fishing and other wildlife-related recreational activities available to the public in the State of Texas.

3.2.1 Affected Environment

Hunting in the State of Texas is regulated by TPWD and a valid hunting license is required to hunt within the state. These licenses are valid from September 1 to August 31 of the following year. When combined with the appropriate additional stamps these licenses can be used to hunt large and small game, including most waterfowl and upland game. Licenses and stamps can be obtained online, through a TPWD office, or at local retail stores. Separate permits are required for the WIH and PLDH programs.

Like hunting, fishing is also regulated by TPWD. To legally fish in Texas, anyone who is 17 years of age or older is required to purchase a fishing license. These licenses last for one day, or one year and can be obtained online, through a TPWD office, or at local retail stores. The most common types of fish that can be fished for in Texas are sunfish, catfish, crappie and bass in freshwater and sea trout, drum, snappers and croakers in salt water.

Other wildlife-related recreational activities in the State of Texas include wildlife viewing and photography and Texas paddling trails. A recent increase in public interest in these activities led to the creation of the Life's Better Outside and Texas Wildlife Trails Programs. <http://www.tpwd.state.tx.us/exptexas/>.

3.2.2 Environmental Consequences

Impacts to recreation would be considered significant if they drastically reduced, increased, or removed available public lands designated for recreation or significantly degraded the quality of the recreation. Impacts to environmental conditions such as air, water, or biological resources within or near public recreational land in such a way to affect its use would also be considered significant.

3.2.2.1 Proposed Action (Preferred Alternative)

The Proposed Action has the potential to provide long-term, beneficial impacts to recreational resources in the State of Texas. Expansion of the WIH and PLDH programs would allow more opportunities and venues for hunting, fishing, and wildlife viewing on private property. During habitat improvement projects there could be short-term, negative impacts to recreational resources because the land may not be accessible and improvement activities could disturb wildlife and game species. However, the increased funding for habitat improvement would also lead to long-term, higher quality hunting, fishing, and wildlife viewing opportunities. Therefore, the Proposed Action would have long-term, beneficial impacts to recreational resources in Texas.

3.2.2.2 No Action Alternative

Under the No Action Alternative, the WIH and PLDH programs would not be expanded and no habitat improvement projects would be undertaken on private lands utilizing the VPA-HIP funding. There would be no use of VPA-HIP funds for expansion of recreational opportunities in Texas; therefore, under the No Action Alternative there would be no impacts to recreational resources. The current public access programs would continue as they are currently administered.

3.3 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

Socioeconomics for this PEA includes an investigation of population and demographic statistics as well as a discussion on the potential income from selling additional public hunting permits and draw hunts.

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires a Federal agency to “make achieving environmental justice part of its mission by identifying and addressing as appropriate, disproportionately high human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” A minority population can be defined by race, by ethnicity, or by a combination of the two classifications.

According to CEQ, a minority is defined as being one of the following groups: American Indian or Alaska Native, Asian or Pacific Islander, Black, not of Hispanic origin, or Hispanic. A minority population is defined as one of these groups exceeding 50 percent of the population in an area or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population (CEQ 1997).

Each year the USCB defines the national poverty thresholds, which are measured in terms of household income and are dependent upon the number of persons within the household. Individuals falling below the poverty threshold are considered low-income individuals. USCB census tracts where at least 20 percent of the residents are considered poor are known as poverty areas (USCB 1995). When the percentage of residents considered poor is greater than 40 percent, the census tract is considered an extreme poverty area.

3.3.1 Affected Environment

3.3.1.1 Population and Demographics

The State of Texas had an estimated population of 25 million as of July 2009. According to the USCB, Texas had a population growth rate of 20.6% from 2000 to 2009, as compared to a growth rate of 9% for the U.S. as a whole. Long-term projections for the population of the state show a population of 33.3 million by the year 2030. Texas's population is mostly white, with 46.7% of the 2009 Census respondents claiming this ethnicity. Hispanic/Latino origin ranked second at 36.9%. Black or African American ranked third in the state at 12% percent, followed by Asian (3.6%), American Indian or Alaskan Native (0.8 percent) and Native Hawaiian or Pacific Islander (0.1 percent). Persons reporting two or more races accounted for 1.4% of respondents in the 2009 Census. Hispanics were the fastest growing population in Texas and increased 42% from 2000 to 2009. In 2009, Texas had a poverty rate of 15.8% compared to the national average of 13.2%. Of the current population in Texas, 75.7% have attained a high school degree with 23.2% of persons over 25 having attained a bachelor's degree <http://quickfacts.census.gov/qfd/states/48000.html> .

3.3.1.2 Private Landowner Income from Hunting Permits

The Proposed Action has the potential to directly impact a small percentage of Texas's privately-held farms, ranches, and forest land. In 2008 there were 247,500 farms in Texas, comprising 130,432,500 acres within the state, with an average farm size of 527 acres. The average value per farm of all assets including land and buildings was \$816,646 (Texas 2010 Almanac).

Landowners that are eligible for inclusion into one of TPWD's public access programs receive annual compensation payments. TPWD currently leases over 80,523 acres of private land for small game and some big game "walk-in" public hunting at a cost of \$335,418 in payments to landowners have voluntarily joined the program and have adhered to program regulations. Currently, landowners can enroll land for varying contract periods. Payments are determined based on location, contract length, acreage and the quality of the hunting opportunity.

3.3.2 Environmental Consequences

Significance of an impact to socioeconomics varies depending on the setting of the Proposed Action, but 40 CFR 1508.8 states that effects may include those that induce changes in the pattern of land use, population density, or growth rate.

Environmental justice is achieved when everyone, regardless of race, culture, or income, enjoys the same degree of protection from environmental and health hazards and has equal access to the decision-making process. Significant environmental justice impacts would result if access to decision-making documents was denied or if any adverse environmental effects occurred that would disproportionately affect minority or low-income populations.

3.3.2.1 Proposed Action (Preferred Alternative)

Under the Proposed Action, a total of \$3,321,959 VPA-HIP funds (includes a \$2,453,954 grant from USDA FSA and \$1,353,454 of supplemental funding from TPWD) would be used to negotiate both short-term (1-3 years) and long-term (5-15 years) leases with farmers and ranchers, timber management companies, corporations, and other private landowners willing to provide public access for hunting, fishing and other wildlife-related recreation. VPA-HIP funding will be used to acquire 3 new river access points across private land to public waterways for fishing, paddling, birding, and wildlife viewing in exchange for easement/rental payments and/or habitat restoration payments. The VPA-HIP funds would also be used to hire four full time biologists to assist landowners in each of the four wildlife regions with enrollment and for any habitat improvement projects.

Ultimately, some of the increased money paid out to private landowners and the hiring of four full-time personnel would have a slight beneficial impact on local economies. Any habitat improvement projects undertaken may require purchase of goods (seeds, seedlings, shrubs) and services (rental of heavy equipment) depending on the nature of the improvement project. This would also have a slight beneficial impact to local economies. Increasing hunting opportunities or allowing access to previously inaccessible hunting lands and rivers could also bring indirect economic benefits through traveling hunters, anglers and other recreational users needing lodging, meals, and other goods. Additionally, if more quality wildlife habitat became available, there would be some chance that the number of public draw permits could increase, thereby increasing the total revenue TPWD could use for program administration.

Under the Proposed Action, there would be no disproportionate negative impact to minorities or low income populations in Texas. All of the public access programs are voluntary and would only target landowners with eligible lands. TPWD's current public access programs actually offer additional outdoor recreational opportunities to lower income hunters by providing low cost public access to favorable habitat provided by private landowners without the need to purchase expensive trespass rights in the form of hunting leases.

3.3.2.2 No Action Alternative

Under the No Action Alternative, TPWD would not receive funding under the VPA-HIP. TPWD would not be able to hire personnel to support this program or perform additional habitat improvement projects. The No Action Alternative would not allow for any of the positive economic impacts from the introduction of the VPA-HIP funding into the economy, nor would it allow for the expansion of low cost hunting and other recreational opportunities on private lands in Texas which also bring economic benefit via lodging and purchase of goods and supplies.

3.4 AIR QUALITY

Air quality in the U.S. is governed by the Clean Air Act. National Ambient Air Quality Standards (NAAQS) have been established for criteria air pollutants regulated by the U.S. Environmental Protection Agency (EPA): ozone, carbon monoxide, sulfur dioxide, nitrous oxide, lead, and particulate matter. The NAAQS are used as thresholds to determine if local air quality is within acceptable thresholds (in “attainment”) or exceeds the thresholds (“non-attainment”). Air quality in this PEA is limited to an analysis of particulate matter since the proposed habitat improvement projects could include prescribed burning or result in soil disturbance, both of which have the potential to increase particulate matter in the local area.

3.4.1 Affected Environment

Texas’s arid climate, diverse economy, and rapidly growing population in high density urban areas create air quality challenges for the state. The Texas Commission on Environmental Quality (TCEQ) outlines the procedures for planning and acquiring approval for any burning within the states air quality management areas. TPWD works closely with many other agencies including TCEQ, Texas Forest Service and the Texas Department of Agriculture Prescribed Burning Board (TDA PBB) as well as local prescribed burning associations to ensure successful and safe prescribed burns are conducted.

3.4.2 Environmental Consequences

Impacts to air quality would be considered significant if the action resulted in a violation of air quality regulations, resulted in a permanent increase of criteria pollutants, or affected the attainment status of the local area.

3.4.2.1 Proposed Action (Preferred Alternative)

The Proposed Action would have little potential for impacts to regional air quality. Increasing the land available for enrollment into the WIH, PLDH and WAE programs will require minimal activities that would impact air quality. Only those habitat improvement projects that involved prescribed burning or soil disturbance (tillage or digging) could temporarily increase particulate matter in the local area. The amount of particulate matter that could be released into the local area and how far it may disperse would be dependent on the specific activity taking place, soil type and condition, topography, climate, and wind speed and direction. The site-specific impacts to air quality would be fully analyzed in the TPWD project review process. Programmatic-level air quality impacts with respect to prescribed burning and soil disturbance are described below.

Prescribed burning is a very cost effective and valuable tool that wildlife and habitat managers utilize to return an area to a more natural fire regime. The disturbance caused by prescribed burning releases nutrients, opens understory, thins out dead plant material, and may be necessary for seed germination of fire-dependent species. Prescribed burning, when used appropriately, can greatly benefit many of the targeted habitat types within the public access programs. Additionally, the use of prescribed burning reduces fuel availability to wildfires thereby making wildfires less intense and somewhat easier to control.

If it was determined by TPWD that prescribed burning was an appropriate course of action for habitat improvement and the private landowner was in agreement, a prescribed burning plan would be drafted in accordance with the guidelines set forth by TDA PBB.

Close correspondence and comprehensive planning would ensure that impacts to air quality would remain negligible from any activities undertaken for the Proposed Action. TPWD is cognizant of air quality regulations and would plan burning activities accordingly. Adherence to all applicable state regulations and smoke management guidelines would ensure safe and effective prescribed burning practices while minimizing risks to the greatest extent practicable.

In most cases, the proposed projects would occur on current farmland that is already subject to soil disturbance to some degree. The potential air quality impacts from soil disturbance during habitat improvement projects would be minor, temporary, and localized. During those habitat improvement projects that would disturb soil, best management practices would be utilized to reduce the possible amount of particulate matter released into the local area or lost to erosion (such as watering exposed soils, promptly restoring vegetative cover, or installing silt fencing around the project site).

It is anticipated that potential impacts to air quality would be minor and they would not affect the current attainment status of the area. Utilization of best management practices as well as adherence to all state air quality regulations, guidelines, and permits would reduce impacts to air quality to negligible levels.

3.4.2.2 No Action Alternative

Under the No Action Alternative, the WIH, PLDH and WAE programs would not be expanded and no habitat improvement projects would be undertaken on private lands utilizing the VPA-HIP funding. TPWD would continue with the current public access programs. As such, no impacts to air quality from the No Action Alternative would occur.

3.5 WATER RESOURCES

For this analysis, water resources include surface water quality. The Clean Water Act, the Safe Drinking Water Act, and the Water Quality Act are the primary Federal laws that protect the nation's waters including lakes, rivers, aquifers, and wetlands. Texas Council on Environmental Quality (TCEQ) is the main state regulatory agency responsible for the protection of Texas water quality. Wetlands are addressed in Biological Resources, Section 3.1.

3.5.1 Affected Environment

Surface water in Texas includes approximately 191,000 miles of perennial rivers and streams found in 23 surface water basins which include 15 major river basins and 8 coastal river basins that lie between two river estuaries on the Gulf of Mexico. Texas also has 196 large lakes and reservoirs, all but one of them man-made. Surface waters play an important role in development in Texas because of its low rainfall and high population growth. Surface waters are needed in the

state for drinking water, recreational opportunities, wildlife, and agricultural production. The quality of these surface waters impacts how they can be utilized by the populace.

Texas has three state agencies with jurisdiction over water issues. The Texas Water Development Board (TWDB) is responsible for planning and funding projects that enhance water availability. The Texas Commission on Environmental Quality (TCEQ) is responsible for protecting the state's water quality and allocating the use of surface water; groundwater is neither allocated nor managed by a state agency, with a few exceptions (see the Availability section). And the Texas Parks and Wildlife Department ensures that the state's wildlife, including the vital fish, shrimp and oyster industries, have sustainable supplies of fresh water

TCEQ's Texas Surface Water Quality Standards establish explicit goals for the quality of streams, rivers, lakes, and bays throughout the state. The Standards are developed to maintain the quality of surface waters in Texas so that it supports public health and enjoyment and protects aquatic life, consistent with the sustainable economic development of the state. Water quality standards identify appropriate uses for the state's surface waters, including aquatic life, recreation, and sources of public water supply (or drinking water). The criteria for evaluating support of those uses include dissolved oxygen, temperature, pH, dissolved minerals, toxic substances, and bacteria.

The Texas Surface Water Quality Standards are codified in [Title 30, Chapter 307 of the Texas Administrative Code](#). The Standards are written by the TCEQ under the authority of the [Clean Water Act](#) and the [Texas Water Code](#) (Scroll down to Chapter 26 and select Section 26.023.) The Texas Surface Water Quality Standards are effective for Clean Water Act purposes when they are approved by EPA. The Antidegradation Policy ([307.5](#)) establishes additional protection for water bodies that are defined in the standards as being of intermediate, high, or exceptional quality. Specific numerical criteria ([307.6](#)) for 42 toxic pollutants (expressed as maximum instream concentrations) protect aquatic life. Human consumption of fish and drinking water is protected by numerical criteria for 100 toxic pollutants. Section 307.6 also addresses biomonitoring, which involves exposing selected aquatic organisms to samples of a discharge effluent. Any significant toxicity observed during biomonitoring must then be evaluated and resolved.

The water quality segments listed in 307.10 are divisions of major river basins, bays, and estuaries. All water bodies in the state have been divided into segments based on regional hydrologic and geologic diversity, which are referred to as classified or designated segments. Segments are listed and defined in Appendices A and C of the Texas Surface Water Quality Standards and depicted graphically in the [Atlas of Texas Surface Waters](#), which is a collection of maps showing all the state's classified surface waters.

3.5.2 Environmental Consequences

Impacts to water resources would be considered significant if implementation of the Proposed Action resulted in violating laws or regulations established to protect water resources, or actions resulted in major deterioration of water quality.

3.5.2.1 Proposed Action (Preferred Alternative)

Under the Proposed Action, it is expected that implementation of the habitat improvement projects would increase water quality by controlling less favorable species in preference for species that provide greater vegetation and wildlife value, as well as long term decreases in erosion. Improvements to riparian habitat may include herbaceous seeding, shrub planting, and limiting grazing during certain times of the year. Surface water quality would be improved by stabilizing the banks, plantings, and limiting grazing during certain times of the year. Construction of river access points and habitat improvement measures could cause a minor short term impact by increasing sediment loads in runoff; however, the long term benefit of the habitat improvements more than offset the short term impact. In addition, sound erosion and sediment control measures would be utilized during the habitat improvement. The TPWD project review worksheet (Appendix A) would identify all nearby surface water sources and establish the appropriate management practices to protect those resources from increased sedimentation, such as installing silt fencing around the project site and establishing vegetative cover on exposed soils. The potential impact to aquatic wildlife species is addressed in Section 3.1.

3.5.2.2 No Action Alternative

Under the No Action Alternative, the WIH, PLDH and WAE programs would not be expanded and VPA-HIP funding would not be available for habitat improvement projects on private lands. The current public access programs would continue to be available. While habitat improvement projects and restoration activities would still occur, the benefit from additional improvement projects on water quality throughout Texas utilizing the VPA-HIP funding would not be realized.

3.6 SOILS

Soils are included in this PEA because of the increased erosion potential resulting from the proposed habitat improvement projects.

3.6.1 Affected Environment

A variety of soils occur throughout the State of Texas. Differences in geology, topography, and climatic conditions have led to the development of many different soils with unique characteristics and distributions. There are also large areas in the state that are covered in outcropped rock, drifting sand dunes, and playa lakebeds.

Seven soil orders are found in the state. Mollisols, Alfisols, and Aridisols are the dominant soils of the state, with Ultisols and Vertisols being found to a lesser extent. Inceptisols and Entisols are the least common, and only occur in small tracts where the parent material in the area has influenced their formation. Generally, soils in the mountainous regions of Texas are derived from a combination of volcanic intrusions and limestone reefs and upthrusts. Soils in much of the western two-thirds of Texas are generally alkaline and overlay limestone rock although archaic dune lines of sand are found in various parts of the state. East Texas soils tend to be acidic and sandy.

3.6.2 Environmental Consequences

Impacts to soils would be considered significant if activities resulted in increased erosion and sedimentation to a level that could not be avoided or minimized with appropriate management practices or mitigation measures.

3.6.2.1 Proposed Action (Preferred Alternative)

The Proposed Action has the potential to negatively impact soils resources during habitat improvement projects associated with the Texas VPA-HIP. Specific impacts would depend on the types of soil in the project area and the erosion potential of each individual soil, and the size and depth of the proposed disturbance. These site-specific impacts would be fully addressed during the TPWD project review process. Programmatic level impacts would include temporary disturbance during habitat improvement from activities such as grading or the removal of invasive vegetation. The use of approved proper best management practices, such as silt fencing, during soil disturbing activities would reduce the amount of soil erosion and sedimentation in project areas. Completion of habitat improvement projects would have long-term benefits on area soils because an increase in vegetation cover would help reduce future soil erosion in improved areas. Under the Proposed Action, there would be short-term, negative impacts to soil resources during habitat improvement projects; however, once the projects are completed there would be long-term, beneficial impacts to soil resources in the State of Texas.

3.6.2.2 No Action Alternative

Under the No Action Alternative, the WIH, PLDH and WAE programs would not be expanded and no habitat improvement projects would be undertaken on private lands utilizing the VPA-HIP funding. TPWD would continue with the current public access programs. Therefore, the long-term, positive impacts associated with the implementation of the Proposed Action would not be realized. There would be only minor impacts to soils under the No Action Alternative.

CHAPTER 4.0 CUMULATIVE IMPACTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

4.1 CUMULATIVE IMPACTS

CEQ regulations stipulate that the cumulative impacts analysis within an EA should consider the potential environmental impacts resulting from “the incremental impacts of the action when added to past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions” (40 CFR 1508.7). Recent CEQ guidance in considering cumulative impacts involves defining the scope of the other actions and their interrelationship with the Proposed Action. The scope must consider geographical and temporal overlaps among the Proposed Action and other actions. It must also evaluate the nature of interactions among these actions.

Cumulative impacts are most likely to arise when a relationship or synergism exists between the Proposed Action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in proximity to the Proposed Action would be expected to have more potential for cumulative impacts than those more geographically separated.

In this PEA, the affected environment for cumulative impacts includes all of the State of Texas since the public access programs are available statewide; therefore, the proposed habitat improvement projects could occur anywhere in the state on private land enrolled in one of the three public access programs. In addition to VPA-HIP, several other Federal and state programs in Texas focus on conservation. Federal programs include the Partners for Wildlife Program, Conservation Reserve Program, Wildlife Habitat Incentives Program, Environmental Quality Incentives Program, Grassland Reserve Program, and the Wetlands Reserve Program.

The potential long-term impacts from habitat improvement projects under the VPA-HIP in combination with other wildlife habitat conservation strategies would have overall long-term, beneficial impacts to the wildlife populations and habitat in the state of Texas. Increasing public awareness of the presence of important wildlife and game species and activities they can do to improve habitat on their land would create an environment to support a sustained wildlife population. Therefore, cumulative impacts are expected to be beneficial to the natural environment.

4.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretreivable commitments are related to the use of nonrenewable resources and the effect that the use of these resources has on future generations. Irreversible effects primarily result from the use or destruction of a specific resource that cannot be replaced within a reasonable time frame. Irretreivable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action. Under the Proposed Action, long-term beneficial impacts are expected for fish and wildlife populations and their habitats. There would be no irreversible or irretreivable commitment of resources.

CHAPTER 5.0 MITIGATION MEASURES

The purpose of mitigation is to avoid, minimize, or eliminate significant negative impacts on affected resources. CEQ regulations (40 CFR 1508.20) state that mitigation includes:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

CEQ regulations state that all relevant reasonable mitigation measures that could avoid or minimize significant impacts should be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies. This serves to alert agencies or officials who can implement these extra measures, and will encourage them to do so. The lead agency for this Proposed Action is FSA. The state partner agency is TPWD.

There are no expected long-term, significant negative impacts associated with implementation of the VPA-HIP in Texas. State employed biologists or representatives must complete site specific environmental evaluations (TPWD Project Review Sheet, Appendix A) prior to all habitat improvement projects which would reveal any protected resources on the property. In those site specific instances where a wetland, threatened or endangered species, or a cultural resource may be present, consultation with the appropriate lead agency would identify specific mitigation measures required to eliminate or reduce the negative impacts to an acceptable level.

CHAPTER 6.0 PERSONS AND AGENCIES CONTACTED

Contact information for a list of Agencies informed of the Texas VPA-HIP PEA:

Mr. Micky Woodard
Chief Conservation Officer
Texas Farm Service Agency
P.O. Box 2900
College Station, TX 77841
micky.woodard@tx.usda.gov

Ms. Susan Baggett
State Resource Conservationist
USDA-NRCS
101 South Main Street
Temple, TX 76501
Susan.Baggett@tx.usda.gov

Mr. Gene Richardson
Wildlife Coordinator
Texas Farm Bureau
P.O. Box 2689
Waco, TX 76702
grichardson@txfb.org

Mr. Clyde Gottschalk
Texas Association of Soil and Conservation
Districts
P.O. Box 658
Temple, TX 76503
cgottschalk@tsswcb.state.tx.us

Mr. Jason Skaggs
Texas and Southwestern Cattle Raisers
Association
1005 Congress Ave. Ste 825
Austin, TX 78701
jskaggs@tscra.org

Mr. Don Wilhelm
Partners for Wildlife Program Manager
U.S. Fish and Wildlife Service
711 Stadium Drive, Suite 252
Arlington, TX 76011
Don_Wilhelm@fws.gov

Mr. Neal Carlton
Federal Liaison
Texas Department of Agriculture
P.O. Box 12847
Austin, TX 78711
Neal.Carlton@TexasAgriculture.gov

Mr. Matthew T. Ponish, CKM
United States Department of Agriculture
Farm Service Agency
1400 Independence Ave., SW
Mail Stop 0513
Washington, DC 20250-0513
Matthew.Ponish@wdc.usda.gov

Ms. Amy Braun
Natural Resource Specialist
U.S. Department of Agriculture
Farm Service Agency
Mail Stop 0513
1400 Independence Ave., SW
Washington, DC 20250
Amy.Braun@wdc.usda.gov

CHAPTER 7.0 REFERENCES

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Texas VPA-HIP Application Narrative. Feb 2011.

CHAPTER 8.0 LIST OF PREPARERS

Texas Parks & Wildlife Department

Chuck Kowaleski, Farm Bill Coordinator

Linda Campbell, Private Lands and Public Hunting Program Coordinator

Kelly Edmiston, Public Hunting

Timothy Birdsong, Inland Fisheries

APPENDIX A – SAMPLE TPWD PROJECT REVIEW SHEET



TPWD Project Review Request Form

For All PROJECTS that could impact natural, archeological, or historical resources

Project Location: _____

Project – Lower Task – Lower Task Org Number (assigned by Infrastructure Division): _____

Project: _____ Project Initiator: _____

TO WHOM AND WHEN IS THIS FORM SUBMITTED? The Project Initiator/administrator is responsible for submitting this form **electronically** to all appropriate and necessary TPWD reviewers (see below). The time allotted for project review will ensure sufficient time for scoping, planning, design and construction review, and review by other state or federal agencies, when necessary.

Send Copies of This Form to the Reviewer(s) below (complete all that apply).
NOTE: You will receive separate responses from each reviewer.
Wildlife Projects: Submit to the Wildlife Division Cultural Resource Specialist
All other Divisions: Submit to the Cultural Resources Program Director

1. ALL State Parks Division projects must receive approval from the Regional Director prior to submitting to the reviewers below.
 Regional Director Approval Date: _____

Project Type	Lead Time*	Reviewer (insert name)	Date Submitted
2. Archeological Resources Projects that disturb the ground or otherwise disturb cultural resources—on any park/historic site (see flow chart for exemptions)*	60 or 30 days	Cultural Resource Specialist _____	_____
3. Natural Resources Projects that may affect habitat, vegetation, wildlife, water resources or other physical resources—on any park/historic site	60 or 30 days	Natural Resource Coordinator _____	_____
4. Historic Sites, Buildings, Structures, Features, & CCC parks Any project on a designated Historic Site or a CCC park <i>and/or</i> any project affecting a building, structure, or feature 45 years old or older—on any park/historic site	60 days	State Parks Historic Preservation Specialist _____	_____
5. Facility Planning/Development Any visible <i>addition or alteration</i> e.g. building, road, utility, trail, parking, playground, fence, traffic circulation, monument, memorial, exhibit—on any park/historic site	60 days	State Parks Planner _____	_____
6. Exhibit Installation Any exhibit, wayside, kiosk or other interpretive display—on any park/historic site	60 days	Cultural Resource Specialist _____ Natural Resource Coordinator _____	_____ _____

* See the **Procedures for the Consideration of Archeology in Project Planning** flow chart for exemptions and for the appropriate lead-time for cultural resources reviews.

Upon documented completion of all requirements made in the reviewers' responses, the project may proceed.

WHEN IS THIS FORM REQUIRED? (For archeological exemptions see the flow chart). This Review Request Form must be used for all projects on federally funded projects that may disturb the ground, disturb above-ground cultural resources (e.g., rock art or surface sites), impact a building or structure 45 years old or older, effect the aesthetic of a park, and/or impact natural resources—including state or federally listed species or habitats/communities of special concern. This form is to be completed by the Project Initiator/administrator, who is responsible for fully describing a proposed project or undertaking so that appropriate action may be taken to ensure compliance with TPWD Policy and state and federal laws relating to cultural and natural resources on federally funded projects. Consultation with reviewers during the development of project plans is appropriate and *highly recommended*. Consultation should take place well in advance of submittal of the Review Request Form. *Lack of consultation during the planning stage may cause postponement or cancellation of the project.*

WHEN MAY MY PROJECT PROCEED? On receipt of required Review Responses, the Project Initiator/administrator is responsible for ensuring that all requirements are implemented. Upon documented completion of all requirements made in the reviewers' responses, the project may proceed.

TPWD Project Review Request Form

Project Location: _____ Project: _____
Project Initiator/administrator: _____ County: _____
Phone: _____ Email: _____ Fax: _____
Region # _____ Superintendent/Manager: _____
Funding Source: _____
Brief Project Description: _____

Attach a detailed project description on an Interoffice Memo (PWD0036).

Does TPWD own the property? Yes No If not, who is landowner? _____

Does a lease or easement exist? Yes No If yes, with whom? _____

Is this project on federal property or does it use federal funds or federal permits? Yes No

Is this project new construction and/or a new addition? Yes No

Is this project maintenance and/or repair? Yes No If yes, what is the age of the building/facility? _____

Who will be conducting the work? _____

e.g., park staff, contractor, TDCJ, volunteers, Friends Group, Force Account, etc.

Will borrow/fill material be used? Yes No If yes, source: _____

Will fill materials/refuse soils be produced? Yes No If yes, disposal site: _____

Describe any other work associated with the project: _____

e.g., clearing, equipment turnarounds and parking, berms, culverts, etc.

Total size of area that will be disturbed (length and width): _____

Give measurement in acres or in feet. Include all other work associated with the project.

Maximum Depth of Disturbance: _____

Planning and Design Completion Date: _____ Proposed Construction Start Date: _____

Traditional use in the project area – *state parks, give pre-park use:* _____

Previous ground disturbance in the project area: _____

Can a building, structure, or human-made feature over 45 years old be seen from the project area? Yes No

Does the project directly involve a building or structure over 45 years old? Yes No

Will this project cross or come near a known archeological site(s)? Unknown Yes No

ALL Project Review Request Forms MUST include the following attachments:

- Project area map
- Location of project area on USGS 7.5' quad – scan a paper map or download from www.terraserver.com
- Written detailed project description and/or plans – use Interoffice Memo PWD0036
- Schematic plans, if available – do not send CAD file, place plans on O Drive and provide network file location
Schematic plan network file location: _____

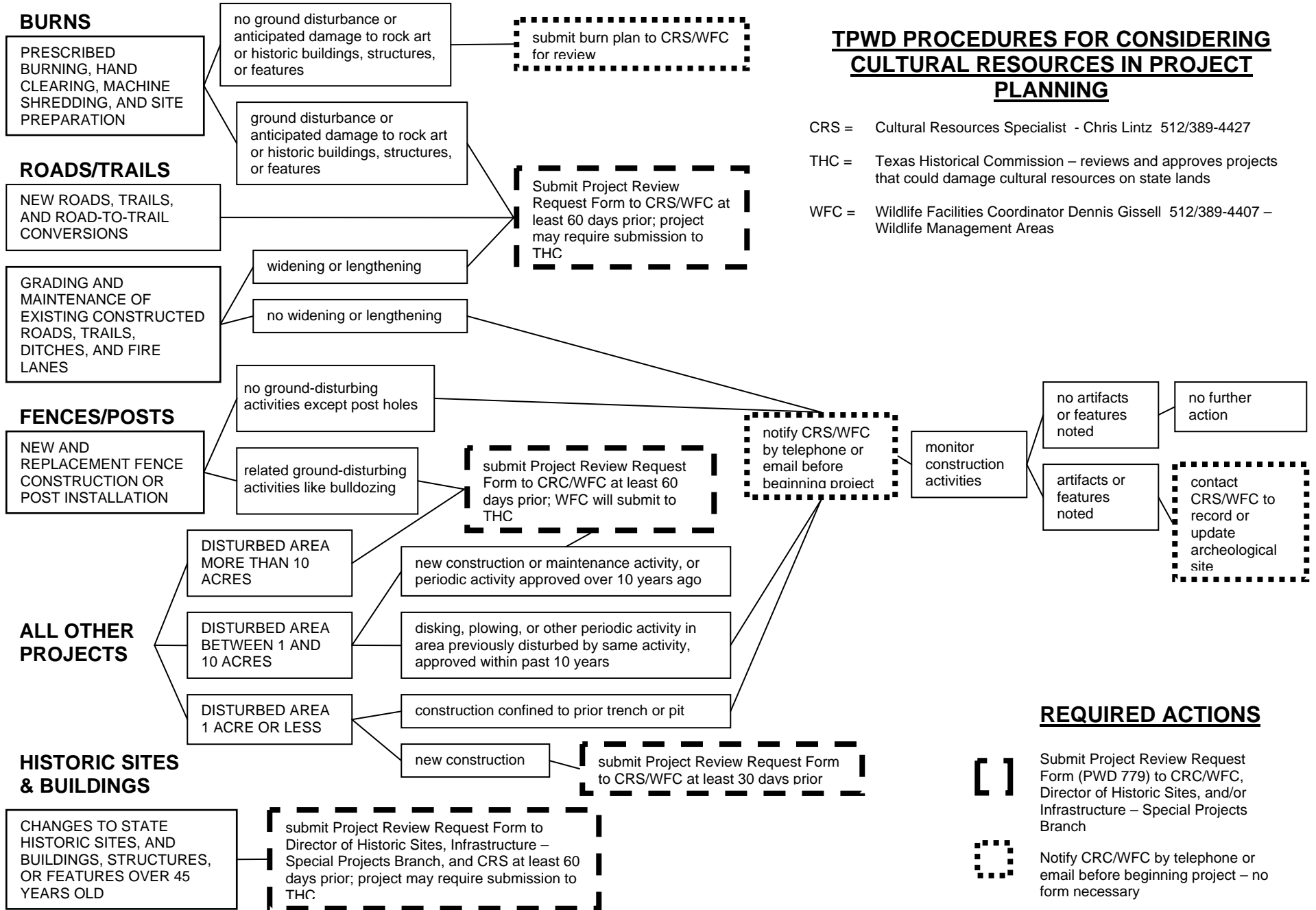
In addition to the attachments required above, you may also include these optional attachments:

- GIS shapefile or UTM's of project location
- Stackhouse map
- Photographs

Total # attached pages: _____

Signature of Project Initiator-Administrator: _____ Date: _____

CULTURAL RESOURCES FLOWCHART



APPENDIX B

SECTION 7 PROGRAMMATIC AGREEMENT FOR THE INTRA-SERVICE CONSULTATION/CONFERENCE ON THE LANDOWNER INCENTIVE PROGRAM IMPLEMENTED BY THE TEXAS PARKS AND WILDLIFE DEPARTMENT

August 26, 2003

I. INTRODUCTION

In 1997, the Texas Parks and Wildlife Department (TPWD) initiated their Landowner Incentive Program (LIP) as a pilot project using funds from the U.S. Fish and Wildlife Service (Service) under Section 6 of the Endangered Species Act (Act). In subsequent years, this program was supplemented with money appropriated by the Texas legislature. The Texas LIP was developed to encourage private landowners to improve habitat on their property for rare species (including Federally listed, candidate, and State listed species) by providing financial incentives. In 2002, the Service initiated the federal version of LIP as a competitive grant program for States, territories, and Tribes to develop and implement a qualifying program to provide financial and technical assistance to private landowners for projects which would protect and manage habitat for species-at-risk. Under the Service's LIP, TPWD is expected to receive \$ 1.4 million in grants in FY03 for expanding their current program. Proposed actions funded under LIP must have a minimum 25% non-federal contribution.

II. PURPOSE

This Agreement provides the intra-Service consultation requirements under section 7(a)(2) of the Act regarding the informal consultation process (50 CFR 402.13) on the Service's LIP. In addition, this Agreement documents the intra-Service informal conference on LIP. Through the informal consultation/conference process, the Service may provide technical assistance to an agency to evaluate the potential effects of a proposed action on federally listed threatened and endangered species, proposed listed species, candidate species, and critical habitat, and suggest possible modifications to the action which could avoid potentially adverse effects. During the consultation process, it may be determined that the anticipated effects of the action are not likely to adversely affect listed species or critical habitat. The Service's written concurrence is required for this determination, which concludes the consultation. Recommendations provided to a federal agency through conference are advisory only.

The Service's LIP is designed to benefit species-at-risk and their habitats, and work concurrently with the Act and other federal and state programs for the recovery of listed species, as well as the prevention of the future listing of species. Proposed actions under LIP would most likely be designed for long-term management of habitat using established management principles and techniques. For these reasons, it is anticipated that the majority of project-level actions receiving funding through LIP would be completely beneficial to listed species and critical habitat. However, some proposed actions may be anticipated to have a wide array of effects before any subsequent beneficial effects are realized. Those actions in which all potential effects would be anticipated to be completely beneficial, insignificant, or discountable would qualify a "not likely to adversely affect" determination. The purpose of this Agreement is to provide the conditions of LIP activities for which actions may be considered to "not likely to adversely affect" federally listed species and critical habitats in Texas, as well as provide guidelines for avoiding

adverse effects to proposed and candidate species. For those actions that would be funded through LIP and involve activities that do not meet the conditions of the Agreement for listed species, or for activities not included in the Agreement, a separate consultation would be conducted. Therefore, the concurrence provided herein meets the requirements under section 7(a)(2) and concludes the informal consultation on the Service's LIP.

III. LEGAL AUTHORITY

The Endangered Species Act of 1973, as amended, 16 U.S.C. § 1531 et seq., is intended to protect threatened and endangered species and the ecosystems upon which they depend. Under section 7 of the Act, federal agencies are required to ensure that any action they authorize, fund, or carry out does not jeopardize the continued existence of listed species or adversely modify designated critical habitat. Procedural regulations for conducting interagency consultation under section 7 are provided in 50 CFR 402.

The Service's policy on intra-Service conference requires the evaluation of candidate species as though they were proposed for listing under the Act. Under section 7(a)(4) of the Act, a conference is required for federal actions that may jeopardize the continued existence of a proposed species; however, action agencies may confer informally to assess the extent of potential impacts to proposed species.

IV. DEFINITIONS

The following terms are used throughout the Agreement and its appendices. They are defined here for the purpose of providing consistency in the consultation and conference.

Action area - All areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR § 402.02).

Discountable effects - Effects of an action that would be extremely unlikely to occur.

Insignificant effects - Effects of an action relating to size and could not be meaningfully measured, detected or evaluated.

Project area - The immediate area involved in the action. The project area would be directly affected by the project activities.

Species-at-risk - Any federally listed, proposed, or candidate animal or plant species or other species of concern as determined and documented by a State.

V. CONSULTATION AND CONFERENCE PROCEDURES

This Agreement provides an outline by which project-level actions may be determined to be included in the consultation and, therefore, would not require contact with the Service. The concurrence provided in the informal consultation memorandum implementing this Agreement is based on the conditions for which covered actions are defined. TPWD, acting as the designated non-federal representative of the Service, will evaluate proposed actions to identify coverage under this Agreement. The LIP activities under consultation were provided by TPWD and are listed in Section A. These activities are management tools available to private landowners for proposed actions. Conditions for the activities available for proposed actions are listed in Section B. The conditions were developed for each listed, proposed, and candidate species based upon 1) known management techniques and principles, 2) the anticipated effects that would be reasonably certain to occur based on the biology of the species, and 3) the presence/absence of

the species and/or its habitat. Certain actions may be excluded from the consultation for those species in which management needs are unknown, or the potential effects of covered activities cannot be evaluated sufficiently. Potential effects resulting from proposed actions that consist of covered activities meeting the conditions of this Agreement would be expected to be insignificant, discountable, and/or completely beneficial. Conditions are also provided for LIP activities that, if implemented at the project level, would not be anticipated to result in any adverse impacts to proposed and candidate species.

A. DETERMINATION OF COVERED ACTIVITIES

Project applications submitted to TPWD for LIP funding should have a complete description of all proposed activities involved with the implementation of the action, including management techniques that would occur for the duration of the grant agreement. Each proposal will be reviewed by the TPWD project biologist to evaluate the proposed activities. All activities described in the proposal will be compared to the list of activities covered in this Agreement in Section A. **A project proposal that contains any activity that is not listed in Section A is not covered by this Agreement.**

B. DETERMINATION OF COVERED ACTIONS

Actions covered under this Agreement will be determined by the TPWD project biologist through evaluation of proposed actions which include only covered activities under the conditions of the Agreement. Proposed actions that contain any non-covered activities are not covered by this Agreement. For proposed actions which include only covered activities, the TPWD project biologist will review the list of species for the county or counties in which the proposed action occurs using the list provided at the following website: <http://gis.tpwd.state.tx.us/TpwEndangeredSpecies/DesktopDefault.aspx>. For each species listed in the county or counties in which the proposed action would be located, the TPWD project biologist will review the conditions listed by species in Section B. The conditions for each species provides detailed information specific to each covered activity that should be followed to ensure all potential effects of the action on listed species would be insignificant, discountable, or completely beneficial. **Covered actions include only those proposed actions that consist of covered activities that meet the conditions for the listed species occurring in the county in which the action would be located.**

C. NON-COVERED ACTIONS

Proposed actions that include any activity that is not included in the list in Appendix A are non-covered actions. Proposed actions that contain only covered activities, but do not meet the conditions for each listed species occurring in the project county or counties as listed at the website:

<http://gis.tpwd.state.tx.us/TpwEndangeredSpecies/DesktopDefault.aspx>,

are also not covered. **All non-covered actions are not considered in this consultation and will be consulted on individually through the appropriate Service Field Office.**

D. PROPOSED AND CANDIDATE SPECIES

Proposed and candidate species will be reviewed by the project biologist as in Items A

through C of this section. If a proposed action does not meet the conditions for each proposed and candidate species occurring in the project county or counties as listed at the website: <http://gis.tpwd.state.tx.us/tpwEndangeredSpecies/DesktopDefault.aspx> a separate conference will be conducted with the appropriate Service Field Office to determine the need for formal conference.

VI. MONITORING AND REPORTING

In order for the Service's LIP to achieve the maximum benefit to species-at-risk, it is important that accurate monitoring and reporting of actions be accomplished. Monitoring projects that benefit listed species is essential for evaluating the species' status and recovery goals. For covered actions under this Agreement, TPWD assumes the responsibility of monitoring projects receiving funding through LIP to ensure the project is completed and achieves the anticipated benefits to the species-at-risk included in the proposal. Monitoring information may be provided to TPWD by the applicant. TPWD will have discretion on the level of monitoring of projects to ensure the eventual benefit to species-at-risk; however, a minimum reporting requirement is necessary to assist the Service in evaluating species' status. For each covered action, the following minimum information will be reported to the Service under this Agreement:

- . • Project County or Counties
- . • Species anticipated to benefit
- . • Number of acres involved in project
- . • Dates Project was implemented and completed
- . • Amount of funding awarded to project
- . • Summary of project activities
- . • Status and results (if available) of project

Project reports should include all projects initiated during each fiscal year and should be sent to the U.S. Fish and Wildlife Service, Ecological Services, 711 Stadium Drive, Suite 252, Arlington, Texas 76011, by the end of December.

VII. TERMINATION AND REINITIATION OF CONSULTATION

This Agreement shall be in effect from the date of final signature. This Agreement may be terminated at any time by the Service or TPWD with 30 days written notice. During the term of this Agreement, circumstances may change which may require consultation to be reinitiated. Such changed circumstances may include, but are not limited to, species status, new species or critical habitat listing, species management needs, and modifications in project design. Upon the determination by TPWD or the Service that circumstances have changed that may warrant additional review, consultation will be reinitiated.

Robert L. Cook, Executive Director Date
Texas Parks and Wildlife Department

Thomas J. Cloud, Jr., Field Supervisor Date
U.S. Fish and Wildlife Service, Arlington, Texas

SECTION A.

The following is a list of activities for potential projects that would be funded under the Landowner Incentive Program. To the extent possible, conservation practices should be implemented in accordance with the Natural Resources Conservation Service's Standards and Specifications.

- A. Prescribed Fire - Firebreak construction & burn operation. Applicant will abide by all local, state, and federal laws, regulations, and restrictions governing the use of prescribed fire and shall obtain all the essential and required permits and licenses for implementing all operational aspects of prescribed fire according to a written Prescribed Burn Plan.
- B. Brush Control Mechanical Shearing, Hand cutting (medium and heavy). Individual Plant treatment 50-150 plants. Individual Plant treatment > 150 plants. Roller chopping. Tree dozing - light & heavy.
- C. Fencing - Four and five wire standard with ten inch spacing between top two wires.
- D. Seedling Operation -Broadcast, broadcast & rollerpack, seed drill, hand placement and cover. To the extent possible, TPW will utilize locally adapted, native plant material based on soil type in the action area.
- E. Seedbed Prep - Disking and harrowing (disk or spring tooth).
- F. Tree/shrub Planting - Hand plant.
- G. Noxious Plant Control - Mechanical (disking, harrowing, mowing and shredding) and chemical (ground application only).
- H. Pond Construction - Use of existing livestock tanks, shallow dry dirt removal via scraping, digging. Construction of berms/dams to hold natural drainage.
- I. Wildlife Watering Facility - Drip watering, "guzzler" condensation and rainfall catch device. Facilities would be self-contained and encompass 0.1 acres or less.
- J. Brown-headed Cowbird Trapping - Installation, operation, and maintenance of cowbird traps.
- K. Grazing Deferment - Temporary and/or periodic removal of livestock from pasture.
- L. Rotational Grazing - Cross-fencing pastures and implementation of rotational grazing schedule.
- M. Aerial application of herbicides.

SECTION B.

A list of conditions for implementing activities under the Landowner Incentive Program without adverse effects to threatened, endangered, and candidate species and critical habitat in Texas.

Activities are listed by letter from the covered activities in Appendix A. Species are listed in alphabetical order by common name, with the exception of the groups Karst Invertebrates, Edwards Aquifer Species, Plants, Sea Turtles, and West Texas Fishes, which include conditions for the entire group.

Key - E = Endangered, T = Threatened, C = Candidate, P = Proposed for listing, CH = with designated Critical Habitat.

Arkansas River shiner *Notropis girardi* - T w/CH

1. Proposed actions that only involve activities C, D, F, I, J, and/or K, would not be anticipated to result in any adverse effects to the Arkansas River shiner or its critical habitat.
2. Proposed actions that would include activities A, B, E, G, H, L and/or M, and would be located a minimum distance of 200 meters from the Canadian River would not be anticipated to result in adverse effects to the Arkansas River shiner or its critical habitat.

Attwater's greater prairie-chicken *Tympanuchus cupido attwateri* - E

1. Proposed actions that only involve activity J would not be anticipated to adversely affect Attwater's greater prairie chicken.
2. Proposed actions that include activities A, B, C, D, E, F, G, H, I, K, L and/or M may occur without adverse effects provided the action area does not contain occupied chicken habitat.

Austin blind salamander *Eurycea waterlooensis* - C

The Austin blind salamander is found in three of the four Barton Springs outlets in the City of Austin's Zilker Park: Parthenia (Main) Spring, Eliza Spring, and Sunken Garden (Old Mill). The Main Spring forms the Barton Springs swimming pool.

1. Proposed actions that only involve activities A, C, D, E, F, H, I, J, K, and L would not be anticipated to result in any adverse effects to the Austin blind salamander.
2. Proposed actions that would include activities B, G, and/or M may occur without adverse effects provided vegetation removal and chemical applications are done at a reasonable distance as to avoid sedimentation or chemical pollution of Parthenia Spring, Eliza Spring, and Sunken Garden.

Bald eagle *Haliaeetus leucocephalus* - T

1. Proposed actions that only involve activity K would not be anticipated to result in any adverse effects to the bald eagle.
2. Proposed actions that would include activities A, B, C, D, E, F, G, H, I, J, L and/or M may occur without adverse effects to the eagle under the following conditions:
 - a. No bald eagles are known to nest within the action area, as determined by records kept by Texas Parks and Wildlife's bald eagle coordinator.

- b. In project areas where a bald eagle nest has been active in any of the preceding three years when activities are located a minimum 1,500 feet from the nest tree OR proposed work is scheduled between June 1 to October 1.

Barton Springs salamander *Eurycea sosorum* - E

1. Proposed actions that only involve activities C, D, F, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Barton Springs salamander.
2. Proposed actions that would include activities A, B, E, and/or H may occur without adverse effects to the salamander provided an adequate buffer zone is present around Barton Springs, tributaries of the springs, and recharge features within the Barton Springs segment of the Edwards Aquifer. The Service's Austin Field Office should be contacted for information on buffer zones.
3. Proposed actions that involve activities G and/or M may occur without adverse effects provided chemical application does not occur within the recharge zone of the Barton Springs segment or in the immediate vicinity of Barton Springs, and is minimized to the greatest extent possible in the contributing zone of the Barton Springs segment.

Big Bend gambusia *Gambusia gaigei* - E

The only known population of the Big Bend gambusia is located in Big Bend National Park, well isolated from private land. Therefore, proposed actions that would include any of the activities listed in Appendix A are not anticipated to adversely affect this species.

Black-capped vireo *Vireo atricapillus* -E

1. Proposed actions that only involve activities I, J, K, and/or L would not be anticipated to result in any adverse effects to the black-capped vireo.
2. Proposed actions that would include activities B, E, G, H, and/or M may occur in areas suitable for the black-capped vireo without adverse effects, as long as clearing of vegetation which may provide habitat for the vireo is accomplished using the "Management Guidelines for Black-capped Vireo" in TPWD's publication *Endangered and Threatened Animals of Texas*.
3. Proposed actions that involve activity A may occur without adverse effects to the vireo under the following conditions:
 - a. In project areas with unoccupied vireo habitat and located at least 300 feet from occupied habitat.
 - b. In project areas with occupied vireo habitat, provided activities do not render habitat unsuitable for vireos AND are conducted between September 1 and March 15. Burns should be scheduled at a minimum four year interval.
4. Proposed actions that involve activities C, D, and/or F, may occur without adverse effects to the vireo under the following conditions:
 - a. In project areas unsuitable for black-capped vireo and located at least 300 feet from suitable vireo habitat.
 - b. In project areas of suitable habitat for vireos when activities are scheduled between September 1 and March 15.
5. Suitable habitat for the black-capped vireo will be determined using the description in *Endangered and Threatened Animals of Texas*.

Black-tailed prairie dog *Cynomys ludovicianus* - C

Proposed actions that would include any of the covered activities listed in Appendix A would not be anticipated to result in any adverse effects to the black-tailed prairie dog.

Brown pelican *Pelecanus occidentalis* - E

The brown pelican occurs along the Gulf coast of Texas. They are rarely seen inland or far out at sea. Brown pelicans feed almost entirely on fishes captured by plunge diving in coastal waters and nest in colonies on small, coastal islands. Proposed actions that would include any of the covered activities listed in Appendix A would not be anticipated to result in any adverse effects to the brown pelican.

Cagle's map turtle *Graptemys caglei* - C

1. Proposed actions that only involve activities A, C, D, E, F, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to Cagle's map turtle.
2. Proposed actions that would include activities B, G, and/or M may occur without adverse effects provided an adequate buffer zone exists that prevents sediment and chemical pollution from affecting the Guadalupe River system, including the San Marcos River.

Clear Creek gambusia *Gambusia heterochir* - E

The only known habitat for the Clear Creek gambusia is located on private land in the headwaters upstream of Dam 1 of Clear Creek, a tributary of the San Saba River. This creek is fed by Wilkenson Springs, part of the Edwards Trinity aquifer system.

1. Proposed actions that only involve activities C, D, F, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Clear Creek gambusia.
2. Proposed actions that would include A, B, E, G, and/or M may occur without adverse effects, provided an adequate buffer zone from the proposed action area and the known habitat exists that prevents sediment resulting from ground disturbing activities and chemical pollution from directly entering Clear Creek and its associated springs.
3. Proposed actions that would include activity H may occur without adverse effects to the gambusia under the following conditions:
 - a. The species is not transplanted to ponds constructed on private lands.
 - b. Proposed actions do not occur within the Clear Creek watershed.

Concho water snake *Nerodia paucimaculata* (= *harteri* p.) - T w/CH

1. Proposed actions that only involve activities C, F, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Concho water snake or its critical habitat.
2. Proposed actions that involve activities A, B, D, E, G, H, and/or M may occur without adverse effects under the following conditions:
 - a. The action area is located outside the 100-year floodplain of the Colorado and Concho Rivers.
 - b. The action area is located a minimum of 20 meters from the conservation pool of Spence Reservoir, Ivie Reservoir, and Ballinger Municipal Lake.
3. Critical Habitat for the Concho water snake occurs at 3 locations: along the Concho River from Mullin's Crossing (locate 5 miles northeast of Veribest) downstream to the confluence of the Concho and Colorado Rivers; the Colorado River from the FM 3115 bridge (near

Maverick) downstream to its confluence with Salt Creek (northeast of Doole); and O.H. Ivie Reservoir basin up to a water level of 1551.5 foot elevation and reservoir banks up to 15 vertical feet above the 1551.5 foot elevation. Activities that affect (1) the hydrology of the Concho and Colorado rivers (such as the construction of new dams and ponds) and (2) riparian vegetation in critical habitat, even temporarily, require individual review by the Service's Austin office.

Devils River minnow *Dionda diaboli* - T

1. Proposed actions that only involve activities A, C, D, E, F, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Devils River minnow.
2. Proposed actions that would include activities B, G, and/or M may occur without adverse effects, provided an adequate buffer zone from the proposed action area and the known habitat exists that prevents sediment resulting from ground disturbing activities and chemical pollution from directly entering the Devils River, San Felipe Creek, or any other of their associated tributaries.
3. Proposed actions that would include activity H may occur without adverse effects to the minnow under the following conditions:
 - a. The species is not transplanted to ponds constructed on private lands.
 - b. A buffer zone is present as in Item 2.

Edwards Aquifer Species:

Comal Springs dryopid beetle *Stygoparnus comalensis* - E

Comal Springs riffle beetle *Heterelmis comalensis* - E

Fountain darter *Etheostoma fonticola* - E w/CH

Peck's cave amphipod *Stygobromus* (= *Stygonectes*) *pecki* - E

San Marcos gambusia *Gambusia georgei* - E w/CH

San Marcos salamander *Eurycea nana* - T w/CH

Texas blind salamander *Typhlomolge rathbuni* - E

Texas wild-rice *Zizania texana* - E w/CH

1. Proposed actions that only involve activities C, D, F, I, J, K, and/or L would not be anticipated to result in any adverse effects to Edwards aquifer species.
2. Proposed actions that would include activities B, E, and/or H may occur without adverse effects provided an adequate buffer zone exists between the action area and sensitive aquifer recharge features and streams. Please contact the Service's Austin Field Office for information on buffer zones.
3. Proposed actions that include activities G and/or M may occur without adverse effects provided chemical application is avoided within the recharge zone and minimized to the greatest extent possible in the contributing zone. Chemical application should also be avoided in the artesian zone in areas adjacent to or with drainage to the upper San Marcos River in Hays County or Comal River in Comal County.

Georgetown salamander *Eurycea naufragia* - C

The Georgetown salamander is known from springs on 5 tributaries (Berry Creek; South,

Middle, and North forks; and Cowan Creek) of the San Gabriel River and one cave in Georgetown, Texas.

1. Proposed actions that only involve activities A, C, D, E, F, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Georgetown salamander.
2. Proposed actions that would include activities B, G, and/or M may occur without adverse effects provided an adequate buffer zone exists that prevents sediment and chemical pollution from affecting the 5 tributaries listed above.

Golden-cheeked warbler *Dendroica chrysoparia* - E

1. Proposed actions that only involve activities I, J, K, and/or L would not be anticipated to result in any adverse effects to the golden-cheeked warbler.
2. Proposed actions that would include activities B, E, G, H, and/or M may occur in areas suitable for the golden-cheeked warbler without adverse effects, as long as clearing of vegetation which may provide habitat for the warbler is avoided, and activities are scheduled outside of the breeding season (March 1 - September 1).
3. Proposed actions that would include activity C may occur without adverse effects to the warbler under the following conditions:
 - a. In project areas that do not contain suitable habitat for the warbler.
 - b. In project areas that contain suitable warbler habitat and the clearing of right-of-way for the fence and its construction do not exceed 16 feet in width.
4. Proposed actions that would include activity A may occur without adverse effects to the warbler if the project area does not contain suitable habitat and is located at least 300 feet from suitable habitat.
5. Proposed actions that involve activities D and/or F, may occur without adverse effects to the warbler under the following conditions:
 - a. In project areas unsuitable for the golden-cheeked warbler and located at least 300 feet from suitable warbler habitat.
 - b. In project areas of suitable habitat for warblers when activities are scheduled between September 1 and March 1.

Suitable habitat for the golden-cheeked warbler will be determined using the description in TPWD's publication *Endangered and Threatened Animals of Texas*.

Gulf Coast Jaguarundi *Herpailurus yagouaroundi cacomitli* - E

1. Proposed actions that only involve activities C, D, E, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the jaguarundi.
2. Proposed actions that include activity G may occur without adverse effects under the following conditions:
 - a. The project area does not contain suitable habitat for the ocelot.
 - b. In areas of suitable habitat when actions do not clear brush.
3. Proposed actions that would include activities A, B, and/or M may occur without adverse effects when located in areas determined to be unsuitable for the jaguarundi. Areas with little or no woody vegetation are deemed unsuitable jaguarundi habitat. Generally, areas with less than 75% horizontal vegetative cover would not be suitable jaguarundi habitat.

If uncertain, suitable habitat for the jaguarundi will be determined through coordination with USFWS ocelot biologist.

4. Proposed actions that include activity F may occur without adverse effects provided native thornscrub plant species are used exclusively in project areas that contain suitable habitat.

Houston toad *Bufo houstonensis* - E w/CH

1. Proposed actions that only involve activities B, C, D, E, F, G, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Houston toad or its critical habitat.
2. Proposed actions that would include activities A, H, and/or M must be reviewed individually by the Service's Austin office in all occupied counties and critical habitat.

Interior least tern *Sterna antillarum* - E

1. Proposed actions that only involve activities B, C, D, F, I, J, K, L, and/or M, would not be anticipated to result in any adverse effects to the interior least tern.
2. Proposed actions that include activities A, E, G, and/or H, may occur without adverse effects to the tern provided the project area does not contain suitable tern nesting habitat.
3. Suitable habitat for the interior least tern, including natural and artificial habitat, will be determined using the descriptions in TPWD's publication *Endangered and Threatened Animals of Texas*.

Karst Invertebrates:

Bee Creek Cave harvestmen *Texella reddelli* - E

Bone Cave harvestmen *Texella reyesi* - E

Braken Bat Cave meshweaver *Cicurina venii* - E w/CH

Coffin Cave mold beetle *Batrisodes texanus* - E

Cokendolpher cave harvestmen *Texella cokendolpheri* - E w/CH

Government Canyon Bat Cave meshweaver *Cicurina vespera* - E w/CH

Government Canyon Bat Cave spider *Neoleptoneta microps* - E w/CH

Ground beetle (no common name) *Rhadine exilis* - E w/CH

Ground beetle (no common name) *Rhadine infernalis* - E w/CH

Helotes mold beetle *Batrisodes venyivi* - E w/CH

Kretschmarr Cave mold beetle *Texamaurops reddelli* - E

Madla cave meshweaver *Cicurina madla* - E w/CH

Robber Baron Cave meshweaver *Cicurina baronia* - E w/CH

Tooth Cave ground beetle *Rhadine persephone* - E

Tooth Cave pseudoscorpion *Tartarocreagris texana* - E

Tooth Cave spider *Neoleptoneta (=Leptoneta) myopica* - E

Note: The portions of Travis, Williamson, and Bexar Counties which overlie karst terrain have been divided into zones based on the probability of finding caves and karst features that contain listed species (Veni 1992; 1994; 2002). Travis and Williamson counties are divided into zones 1 through 4, and Bexar County is divided into zones 1 through 5. All projects in these counties should be assessed for their location within these zones. The following

recommendations apply to zones 1, 2, and 3 in Travis/Williamson counties and zones 1 through 4 in Bexar County. Zone 4 in Travis/Williamson counties and zone 5 in Bexar County are not expected to support the listed karst species, thus these recommendations do not apply. Critical habitat for the species' in Bexar County was designated April 8, 2003 (68 FR 17155). If a project is within a critical habitat unit, it should be reviewed individually by the Service's Austin office for potential impacts. Currently, no critical habitat has been designated for listed species in Travis or Williamson counties.

1. Proposed actions that involve activities C, D, F, I, J, K and/or L would not be anticipated to result in any adverse effects to karst species.
2. Proposed actions that involve activities A, B, E, and/or H may occur without adverse effects under the following conditions:
 - a. Action areas are located outside of a suitable buffer zone around caves and karst features containing listed species or suitable habitat for listed species. Please contact the Service's Austin Field Office for information on buffer zones.
 - b. Construction of berms/dams should not alter the surface or subsurface drainage basins associated with caves or karst features known to be occupied by listed species.

Proposed actions that involve activities G and/or M may occur without adverse effects under the following conditions:

- a. The use of chemical herbicides or pesticides does not occur within 164 ft (50 m) of the entrance of any cave containing listed species or any karst feature containing cave crickets.
- b. Control of red imported fire ants within 164 ft of an occupied cave or karst feature is conducted using boiling water. Please contact the Service's Austin Field Office for recommendations on boiling water treatment to control non-native fire ants.

Lesser prairie-chicken *Tympanuchus pallidicinctus* - C

1. Proposed actions that only involve activities C, D, E, F, H, I, J, and/or K would not be anticipated to result in any adverse effects to the lesser prairie-chicken.
2. Proposed actions that would include activities A, B, G, L, and/or M may occur without adverse effects in areas determined to be unsuitable nesting habitat for the lesser prairie chicken.
3. Proposed actions that would include activities A, B, G, L, and/or M may occur in suitable nesting habitat without adverse effects to the chicken under the following conditions:
 - a. Activity A: if performed prior to or after the primary nesting period (15 April - 15 June).
 - b. Activities B and/or M: if shrub canopy coverage remains \geq 20% of the total vegetative community after treatment.
 - c. Activities G and/or M: if forb canopy coverage remains \geq 15% of the total vegetative community after treatment.
 - d. Activity L: if forage utilization does not exceed 25% harvest efficiency (see Texas Cooperative Extension circular B-5036 for details).

Suitable habitat for the lesser prairie chicken will be determined using the most current literature available, such as the Natural Resources Conservation Service Wildlife Habitat Management Institute's *Fish and Wildlife Habitat Management Leaflet Number 6*, which can be accessed at the website: <http://www.ms.nrcs.usda.gov/whmi/technotes.htm>

Louisiana black bear *Ursus americanus luteolus* - T

Proposed actions that would include any of the covered activities listed in Appendix A would not be anticipated to result in any adverse effects to the Louisiana black bear.

Louisiana pine snake *Pituophis melanoleucus ruthveni* - C

1. Proposed actions that only involve activities A, C, D, I, J, K and/or L would not be anticipated to result in any adverse effects to the Louisiana pine snake.
2. Proposed actions that would include activities B, E, F, G, H, and/or M may occur without adverse effects to the snake under the following conditions:
 - a. Suitable habitat for the snake does not occur within the action area. Suitable habitat is described as low, broad ridges of sandy, well-drained soils, open pine forest (particularly longleaf-pine savannah), moderate to sparse midstory, and a significant herbaceous and grassy understory. Pocket gophers may be an essential part of pine snake habitat, both as food and to build burrow systems used by pine snakes for refuge.
 - b. In action areas that contain suitable habitat, provided a qualified biologist has determined the action would have no adverse effects on the species.

Mexican spotted owl *Strix occidentalis lucida* - T

1. Proposed actions that only involve activities A, C, D, E, F, G, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Mexican spotted owl.
2. Proposed actions that would include activities B and/or M may occur without adverse effects provided the removal of suitable owl habitat, which includes native coniferous forest trees, such as fir and pine, is avoided.

Mexican long-nosed bat *Leptonycteris nivalis* - E

The current distribution of this species ranges from Guadalupe Canyon in extreme southwestern New Mexico south to central Mexico. The only known roost site for this species in the United States is Emory Cave in Big Bend National Park. Proposed actions that would include any of the activities in Appendix A would not be expected to adversely affect this species under the following conditions:

1. Any newly discovered roost sites are not disturbed.
2. Agave plants are not destroyed or harmed. Although roost sites may not occur on private land, bats have been known to travel long distances to feed and forage on this important food source.

Mountain plover *Charadrius montanus* - P/T

Mountain plovers are known to occur in Texas during migration and as residents. At least two breeding reports have been documented from the panhandle and Trans-Pecos region. The panhandle is the southern limit of their typical breeding range.

1. Proposed actions that involve any of the activities in Appendix A and do not occur within the known counties of occurrence in the panhandle and west Texas (Armstrong, Brewster, Dallam, Deaf Smith, Hartley, Jeff Davis, Lamb, Lynn, Oldham, Potter, Randall, and Swisher) would not be anticipated to result in any adverse effects to the mountain plover.
2. Proposed actions that only involve activities C, D, F, I, J, K, and/or L would not be anticipated to result in any adverse effects to the mountain plover in any of the counties of occurrence in Texas.

3. Proposed actions that would include activities A, B, E, G, H, and/or M and would be located in the panhandle and west Texas counties (Armstrong, Brewster, Dallam, Deaf Smith, Hartley, Jeff Davis, Lamb, Lynn, Oldham, Potter, Randall, and Swisher) may occur without adverse effects to the plover under the following conditions:
 - a. Suitable nesting habitat for the mountain plover does not occur within the action area.
 - b. Suitable nesting habitat occurs within the action area and the activities are scheduled outside of the breeding season, which generally runs from mid-March to early August.
 - c. Suitable nesting habitat occurs within the action area, but a qualified biologist has determined breeding/nesting birds are not using the area.

Northern Aplomado falcon *Falco femoralis septentrionalis* - E

1. Proposed actions that only involve activities C, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Aplomado falcon.
2. Actions that involve D, E, F, and/or G may occur without adverse effects provided these activities do not involve any clearing or replacement of native prairie vegetation with non-native species.
3. Proposed actions that would include activities A, B, and/or M may occur without adverse effects provided these activities occur outside of the falcon's breeding and nesting season in areas with known nests. The nesting season for Aplomado falcons is generally from mid-March until mid-June. Although most clearing of woody vegetation should not result in adverse impacts to Aplomado falcons, this species will nest in mesquite trees or yucca that are growing in more isolated situations within the prairie. To avoid these types of impacts to nesting falcons, project proponents should contact the Service's Corpus Christi Office regarding locations of nesting falcons.

Ocelot *Leopardus pardalis* - E

1. Proposed actions that only involve activities C, D, E, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the ocelot.
2. Proposed actions that include activity G may occur without adverse effects under the following conditions:
 - a. The project area does not contain suitable habitat for the ocelot.
 - b. In areas of suitable habitat when actions do not clear brush.
3. Proposed actions that would include activities A, B, and/or M may occur without adverse effects when located in areas that are determined to be unsuitable habitat for the ocelot. Areas with little or no woody vegetation are deemed unsuitable ocelot habitat. Generally, areas with less than 75% horizontal vegetative cover would not be suitable ocelot habitat. However, the ocelot is sometimes forced into using marginal habitat along water courses, or even across agricultural and range lands, for traveling between suitable patches of habitat, therefore caution regarding treatment of areas between suitable habitat patches is recommended. If uncertain, suitable habitat for the ocelot will be determined through coordination with USFWS ocelot biologist.
4. Proposed actions that include activity F may occur without adverse effects provided that native thornscrub plant species are used exclusively in areas with suitable habitat.

Piping plover *Charadrius melodus* - Tw/CH

Proposed actions that would include any of the covered activities listed in Appendix A would not be anticipated to result in any adverse effects to the piping plover or its critical habitat.

Plants:

Ashy dogweed *Thymophylla* (= *Dyssodia*) *tephroleuca* - E Black lace cactus *Echinocereus reichenbachii* var. *albertii* (*E. melanocentrus*) - E Bunched cory cactus *Coryphantha ramillosa* - T Bushy whitlow-wort *Paronychia congesta* - C Chisos Mountain hedgehog cactus *Echinocereus chisoensis* (= *reichenbachii*) var. *chisoensis* - T Davis' green pitaya *Echinocereus viridiflorus* var. *davisii* (= *E. davisii*) - E
Guadalupe fescue *Festuca ligulata* - C Gypsum wild-buckwheat *Eriogonum gypsophilum* - T Hinckley oak *Quercus hinckleyi* - T Johnston's frankenia *Frankenia johnstonii* - E Large-fruited sand-verbena *Abronia macrocarpa* - E Little Aguja pondweed *Potamogeton clystocarpus* - E Lloyd's Mariposa cactus *Sclerocactus* (= *Echinomastus* = *Echinocactus*) *mariposensis* - T Navasota ladies'-tresses *Spiranthes parksii* - E Neches River rose-mallow *Hibiscus dasycalyx* - C Nellie cory cactus *Coryphantha* (= *Escobaria* = *Mammillaria*) *minima* - E Pecos (= puzzle) sunflower *Helianthus paradoxus* - T Slender rush-pea *Hoffmannseggia tenella* - E Sneed pincushion cactus *Coryphantha sneedii* (= *Escobaria* = *Mammillaria*) var. *sneedii* - E South Texas ambrosia *Ambrosia cheiranthifolia* - E Star cactus *Astrophytum* (= *Echinocactus*) *asterias* - E Terlingua Creek cats-eye *Cryptantha crassipes* - E Texas ayenia *Ayenia limitaris* - E Texas golden gladecress *Leavenworthia texana* - C Texas poppy-mallow *Callirhoe scabriuscula* - E Texas prairie dawn-flower *Hymenoxys texana* - E Texas snowbells *Styrax texana* - E Texas trailing phlox *Phlox nivalis* ssp. *texensis* - E Tobusch fishhook cactus *Ancistrocactus* (= *Echinocactus* = *Mammillaria*) *tobuschii* - E Walker's manioc *Manihot walkerae* - E White bladderpod *Lesquerella pallida* - E Zapata bladderpod *Lesquerella thamnophila* - E w/CH

1. The only known population of the Guadalupe fescue is located in Big Bend National Park, well isolated from private land. Gypsum wild-buckwheat is not currently known to occur in Texas, but is listed due to the close proximity of the closest known population in Eddy County, New Mexico. Proposed actions that would include any of the activities listed in Appendix A are not anticipated to adversely affect the Guadalupe fescue and gypsum wild-buckwheat.
2. Proposed actions that only involve activity K would not be anticipated to result in any adverse effects to the listed and candidate plants, or designated critical habitat (for the Zapata bladderpod).
3. Proposed actions that would include activities A, B, C, D, E, F, G, H, I, J, L and/or M may occur without adverse effects to the listed and candidate plant species under the following conditions:
 - a. Suitable habitat for listed and candidate plants does not occur within the action area. The most current information on habitat use by the listed and candidate plants should be used to determine habitat suitability.
 - b. In action areas with suitable habitat, provided a qualified botanist has determined the action would have no adverse effects on the species or critical habitat.

Red-cockaded woodpecker *Picoides borealis* - E

1. Proposed actions that only involve activities K and/or L would not be anticipated to result in any adverse effects to the red-cockaded woodpecker.
2. Proposed actions that would include activities A, B, C, D, E, F, G, H, I, J, and/or M may occur without adverse effects to the woodpecker under the following conditions:
 - a. In action areas unsuitable for the red-cockaded woodpecker and located a minimum of 200-ft from suitable habitat.
 - b. In action areas of suitable habitat that have been determined by a qualified biologist to be unoccupied by the woodpecker.

Suitable habitat for the red-cockaded woodpecker will be determined using the description in TPWD's publication *Endangered and Threatened Animals of Texas*.

Salado salamander *Eurycea chisholmensis* - C

The Salado salamander was known historically from two spring sites near Salado, Texas: Big Boiling Springs (also known as Main, Salado, or Siren Springs) and Robertson Springs. These springs bubble up through faults in the northern segment of Edwards Aquifer and associated limestone layers along Salado Creek. It is possible that this species may occur in four other spring sites all within one mile of Big Boiling and Robertson Springs.

1. Proposed actions that only involve activities A, C, D, E, F, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the Salado salamander.
2. Proposed actions that would include activities B, G, and M may occur without adverse effects provided vegetation removal and chemical applications are done at a reasonable distance as to avoid sedimentation or chemical pollution of Big Boiling and Robertson Springs, and the four springs within a mile of these two springs.

Sand dune lizard *Sceloporus arenicolus* - C

1. Proposed actions that only involve activities C, D, E, F, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the sand dune lizard.
2. Proposed actions that would include activities B, G, and/or M may occur without adverse effects to the lizard under the following conditions:
 - a. The action area does not contain suitable habitat.
 - b. Removal of suitable habitat (shinnery oak and sandsage associated with active sand dunes) is avoided.

Proposed actions that would include activity A may occur under the following condition:

- a. The action area does not contain suitable habitat.
- b. In project areas with suitable habitat, provided burns are timed to correspond with cool, humid conditions to minimize impacts to the lizard's preferred shinnery oak habitat.

Sea Turtles:

Green sea turtle *Chelonia mydas* - T

Hawksbill sea turtle *Eretmochelys imbricata* -E

Kemp's Ridley sea turtle *Lepidochelys kempii* -E

Leatherback sea turtle *Dermochelys coriacea* -E

Loggerhead sea turtle *Caretta caretta* - T

Proposed actions that would include any of the covered activities listed in Appendix A would not

be anticipated to result in any adverse effects to the listed sea turtles.

Sharpnose shiner *Notropis oxyrhynchus* - C

1. Proposed actions that only involve activities C, D, F, I, J, and/or K would not be anticipated to result in any adverse effects to the sharpnose shiner.
2. Proposed actions that include activities A, B, E, G, H, L, and/or M and would be located a minimum distance 100 meters away from the Brazos River, as well as the Salt, Double Mountain, and North Fork Double Mountain Forks of the Brazos River, would not be anticipated to result in adverse effects to the sharpnose shiner.

Smalleye shiner *Notropis buccula* - C

1. Proposed actions that only involve activities C, D, F, I, J, and K would not be anticipated to result in any adverse effects to the smalleye shiner.
2. Proposed actions that include activities A, B, E, G, H, L, and M and would be located a minimum distance 100 meters away from the Brazos River, as well as the Salt, Double Mountain, and North Fork Double Mountain Forks of the Brazos River, would not be anticipated to result in adverse effects to the smalleye shiner.

Southwestern willow flycatcher *Empidonax traillii extimus* - E

1. Proposed actions that only involve activities A, C, D, E, F, G, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the southwestern willow flycatcher.
2. Proposed actions that would include activities B and/or M may occur without adverse effects provided the removal of suitable habitat for the flycatcher, which includes riparian trees such as willow, cottonwood, and buttonbush, is avoided.

Texas hornshell *Popenaias popei* - C

Proposed actions that would include any of the covered activities listed in Appendix A would not be anticipated to result in any adverse effects to the Texas hornshell.

West Indian manatee (= Florida) *Trichechus manatus* - E

Proposed actions that would include any of the covered activities listed in Appendix A would not be anticipated to result in any adverse effects to the West Indian manatee.

West Texas Fishes and Invertebrates:

Comanche Springs pupfish *Cyprinodon elegans* - E

Diamond Y Springs snail *Tryonia adamantina* - C

Gonzales springsnail *Tryonia stocktonensis* - C

Leon Springs pupfish *Cyprinodon bovinus* - E w/CH

Pecos assiminea snail *Assiminea pecos* - P/E w/CH

Pecos gambusia *Gambusia nobilis* - E

Phantom Lake cave snail *Cochliopa texana* - C

Phantom Springs snail (= Cheatum's snail) *Tryonia cheatumi* - C

1. Proposed actions that only involve activities A, B, C, D, E, F, G, I, J, K, L, and/or M would

not be anticipated to result in any adverse effects to these species. The known distribution of each of these species is solely on land owned by the state or managed by the Nature Conservancy.

2. Proposed actions that would include activity H may occur without adverse effects provided they do not include the transplanting of any of the West Texas Fishes and Invertebrates to ponds constructed on private lands.

Whooping crane *Grus americana* - E w/CH

1. Proposed actions that only involve activities A, D, E, F, G, H, I, J and/or K, would not be anticipated to result in any adverse effects to the whooping crane or its critical habitat.
2. Proposed actions that would include activities B and/or M may occur without adverse effects provided live oak brush less than five feet tall that is adjacent to known whooping crane wintering areas is avoided.
3. Proposed actions that would include activity C may occur without adverse effects provided the project area is not located in areas known to be used by sandhill or whooping cranes.

Yellow-billed cuckoo *Coccyzus americanus* - C

1. Proposed action that only involve activities A, C, D, E, F, G, H, I, J, K, and/or L would not be anticipated to result in any adverse effects to the yellow-billed cuckoo.
2. Proposed actions that would include activities B and/or M may occur without adverse effects provided the removal of suitable habitat for the cuckoo, which includes riparian trees such as willow, cottonwood, and buttonbush, is avoided.

SECTION C.

County by County listing of Federally Threatened, Endangered or Candidate Species

The county by county listing of federally listed threatened, endangered, and candidate species found in the original agreement has been updated. The current county listing for threatened, endangered and candidate species in this agreement is being maintained at the following website: <http://gis.tpwd.state.tx.us/TpwEndangeredSpecies/DesktopDefault.aspx> and can also be found in Appendix C of this document.

**APPENDIX C
TEXAS STATE AND FEDERALLY LISTED SPECIES**

Scientific Name	Common Name	State Listing Status	Federal Listing Status
Amphibians			
<i>Eurycea latitans complex</i>	Cascade Caverns Salamander	T	
<i>Eurycea nana</i>	San Marcos Salamander	T	LT
<i>Eurycea tridentifera</i>	Comal Blind Salamander	T	
<i>Eurycea sosorum</i>	Barton Springs Salamander	E	LE
<i>Eurycea tonkawae</i>	Jollyville Plateau Salamander		C
<i>Eurycea chisholmensis</i>	Salado Springs Salamander		C
<i>Eurycea naufragia</i>	Georgetown Salamander		C
<i>Eurycea rathbuni</i>	Texas Blind Salamander	E	LE
<i>Eurycea robusta</i>	Blanco Blind Salamander	T	
<i>Eurycea waterlooensis</i>	Austin Blind Salamander		C
<i>Notophthalmus meridionalis</i>	Black-spotted Newt	T	
<i>Siren sp. 1</i>	South Texas Siren (Large Form)	T	
<i>Anaxyrus houstonensis</i>	Houston Toad	E	LE
<i>Smilisca baudinii</i>	Mexican Treefrog	T	
<i>Leptodactylus fragilis</i>	White-lipped Frog	T	
<i>Hypopachus variolosus</i>	Sheep Frog	T	
<i>Rhinophrynus dorsalis</i>	Mexican Burrowing Toad	T	
Birds			
<i>Pelecanus occidentalis</i>	Brown Pelican	E	
<i>Egretta rufescens</i>	Reddish Egret	T	
<i>Plegadis chihi</i>	White-faced Ibis	T	
<i>Mycteria americana</i>	Wood Stork	T	
<i>Elanoides forficatus</i>	Swallow-tailed Kite	T	
<i>Haliaeetus leucocephalus</i>	Bald Eagle	T	
<i>Buteogallus anthracinus</i>	Common Black-hawk	T	
<i>Asturina nitidus</i>	Gray Hawk	T	
<i>Buteo albicaudatus</i>	White-tailed Hawk	T	
<i>Buteo albonotatus</i>	Zone-tailed Hawk	T	
<i>Falco femoralis</i>	Aplomado Falcon	E	
<i>Falco femoralis septentrionalis</i>	Northern Aplomado Falcon	E	LE
<i>Falco peregrinus</i>	Peregrine Falcon	T	
<i>Falco peregrinus anatum</i>	American Peregrine Falcon	T	
<i>Tympanuchus cupido attwateri</i>	Attwater's Greater Prairie-chicken	E	LE
<i>Tympanuchus pallidicinctus</i>	Lesser Prairie-chicken		C
<i>Grus americana</i>	Whooping Crane	E	LE
<i>Charadrius melodus</i>	Piping Plover	T	LT
<i>Charadrius montanus</i>	Mountain Plover		PT
<i>Numenius borealis</i>	Eskimo Curlew	E	LE

<i>Sterna antillarum athalassos</i>	Interior Least Tern	E	LE
<i>Sterna fuscata</i>	Sooty Tern	T	
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo		C1;NL
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo		C
<i>Glaucidium brasilianum cactorum</i>	Cactus Ferruginous Pygmy-owl	T	
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl	T	LT
<i>Picoides borealis</i>	Red-cockaded Woodpecker	E	LE
<i>Campephilus principalis</i>	Ivory-billed Woodpecker		LE
<i>Camptostoma imberbe</i>	Northern Beardless-tyrannulet	T	
<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	E	LE
<i>Pachyrhamphus aglaiae</i>	Rose-throated Becard	T	
<i>Anthus spragueii</i>	Sprague's Pipit		C
<i>Vireo atricapilla</i>	Black-capped Vireo	E	LE
<i>Parula pitiayumi</i>	Tropical Parula	T	
<i>Dendroica chrysoparia</i>	Golden-cheeked Warbler	E	LE
<i>Aimophila aestivalis</i>	Bachman's Sparrow	T	
<i>Aimophila botterii</i>	Botteri's Sparrow	T	
<i>Aimophila botterii texana</i>	Texas Botteri's Sparrow	T	
<i>Aimophila botterii arizonae</i>	Arizona Botteri's Sparrow	T	
Fish			
<i>Scaphirhynchus platyrhynchus</i>	Shovelnose Sturgeon	T	
<i>Polyodon spathula</i>	Paddlefish	T	
<i>Campostoma ornatum</i>	Mexican Stoneroller	T	
<i>Dionda diaboli</i>	Devils River Minnow	T	LT
<i>Gila pandora</i>	Rio Grande Chub	T	
<i>Hybognathus amarus</i>	Rio Grande Silvery Minnow	E	LE
<i>Notropis buccula</i>	Smalleye Shiner		C
<i>Notropis chihuahua</i>	Chihuahua Shiner	T	
<i>Notropis girardi</i>	Arkansas River Shiner	T	LT
<i>Notropis oxyrhynchus</i>	Sharpnose Shiner		C
<i>Notropis simus</i>	Bluntnose Shiner	T	
<i>Cyprinella proserpina</i>	Proserpine Shiner	T	
<i>Pteronotropis hubbsi</i>	Bluehead Shiner	T	
<i>Cycleptus elongatus</i>	Blue Sucker	T	
<i>Erimyzon oblongus</i>	Creek Chubsucker	T	
<i>Satan eurystomus</i>	Widemouth Blindcat	T	
<i>Trogloglanis pattersoni</i>	Toothless Blindcat	T	
<i>Cyprinodon bovinus</i>	Leon Springs Pupfish	E	LE
<i>Cyprinodon elegans</i>	Comanche Springs pupfish	E	LE
<i>Cyprinodon eximius</i>	Conchos Pupfish	T	
<i>Cyprinodon pecosensis</i>	Pecos Pupfish	T	
<i>Gambusia gaigei</i>	Big Bend Gambusia	E	LE
<i>Gambusia georgei</i>	San Marcos Gambusia	E	LE
<i>Gambusia heterochir</i>	Clear Creek Gambusia	E	LE
<i>Gambusia nobilis</i>	Pecos Gambusia	E	LE

<i>Gambusia senilis</i>	Blotched Gambusia	T	
<i>Gambusia clarkhubbsi</i>	San Felipe Gambusia	T	
<i>Microphis brachyurus</i>	Opossum Pipefish	T	
<i>Etheostoma fonticola</i>	Fountain Darter	E	LE
<i>Etheostoma grahami</i>	Rio Grande Darter	T	
<i>Percina maculata</i>	Blackside Darter	T	
<i>Awaous banana</i>	River Goby	T	
<i>Ctenogobius claytonii</i>	Mexican Goby	T	
<i>Pristis pectinata</i>	Smalltooth Sawfish	E	LE
Mammals			
<i>Leptonycteris nivalis</i>	Mexican Long-nosed Bat	E	LE
<i>Lasiurus ega</i>	Southern Yellow Bat	T	
<i>Euderma maculatum</i>	Spotted Bat	T	
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	T	
<i>Dipodomys elator</i>	Texas Kangaroo Rat	T	
<i>Oryzomys couesi</i>	Coues' Rice Rat	T	
<i>Oryzomys couesi aquaticus</i>	Coues' Rice Rat	T	
<i>Peromyscus truei comanche</i>	Palo Duro Mouse	T	
<i>Mesoplodon europaeus</i>	Gervais' Beaked Whale	T	
<i>Ziphius cavirostris</i>	Goose-beaked Whale	T	
<i>Kogia breviceps</i>	Pygmy Sperm Whale	T	
<i>Kogia simus</i>	Dwarf Sperm Whale	T	
<i>Physeter macrocephalus</i>	Sperm Whale		LE
<i>Stenella frontalis</i>	Atlantic Spotted Dolphin	T	
<i>Steno bredanensis</i>	Rough-toothed Dolphin	T	
<i>Orcinus orca</i>	Killer Whale	T	
<i>Pseudorca crassidens</i>	False Killer Whale	T	
<i>Globicephala macrorhynchus</i>	Short-finned Pilot Whale	T	
<i>Feresa attenuata</i>	Pygmy Killer Whale	T	
<i>Balaenoptera physalus</i>	Finback Whale	E	LE
<i>Balaenoptera musculus</i>	Blue Whale		LE
<i>Megaptera novaeangliae</i>	Humpback Whale	E	LE
<i>Eubalaena glacialis</i>	Black Right Whale		LE
<i>Canis rufus</i>	Red Wolf	E	LE
<i>Canis lupus</i>	Gray Wolf	E	LE
<i>Canis lupus baileyi</i>	Mexican Wolf		LE, XN
<i>Ursus americanus</i>	Black Bear	T	SAT
<i>Ursus americanus luteolus</i>	Louisiana Black Bear	T	LT
<i>Ursus arctos</i>	Grizzly Bear		LT
<i>Nasua narica</i>	White-nosed Coati	T	
<i>Mustela nigripes</i>	Black-footed Ferret		LE
<i>Panthera onca</i>	Jaguar	E	LE
<i>Leopardus pardalis</i>	Ocelot	E	LE
<i>Leopardus wiedii</i>	Margay	T	
<i>Leopardus wiedii cooperi</i>	Texas Margay	T	

<i>Herpailurus yaguarondi</i>	Jaguarundi	E	LE
<i>Herpailurus yaguarondi cacomitli</i>	Gulf Coast Jaguarundi	E	LE
<i>Trichechus manatus</i>	West Indian Manatee	E	LE
Reptiles			
<i>Caretta caretta</i>	Loggerhead Sea Turtle	T	LT
<i>Chelonia mydas</i>	Green Sea Turtle	T	LT
<i>Eretmochelys imbricata</i>	Atlantic Hawksbill Sea Turtle	E	LE
<i>Lepidochelys kempii</i>	Kemp's Ridley Sea Turtle	E	LE
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	T	
<i>Dermochelys coriacea</i>	Leatherback Sea Turtle	E	LE
<i>Graptemys caglei</i>	Cagle's Map Turtle	T	
<i>Kinosternon hirtipes murrayi</i>	Chihuahuan Mud Turtle	T	
<i>Gopherus berlandieri</i>	Texas Tortoise	T	
<i>Coleonyx reticulatus</i>	Reticulated Gecko	T	
<i>Crotaphytus reticulatus</i>	Reticulate Collared Lizard	T	
<i>Phrynosoma cornutum</i>	Texas Horned Lizard	T	
<i>Phrynosoma hernandesi</i>	Mountain Short-horned Lizard	T	
<i>Sceloporus arenicolus</i>	dunes sagebrush lizard		PE
<i>Cemophora coccinea</i>	Scarlet Snake	T	
<i>Cemophora coccinea copei</i>	Northern Scarlet Snake	T	
<i>Cemophora coccinea lineri</i>	Texas Scarlet Snake	T	
<i>Coniophanes imperialis</i>	Black-striped Snake	T	
<i>Drymarchon melanurus erebennus</i>	Texas Indigo Snake	T	
<i>Drymobius margaritiferus</i>	Speckled Racer	T	
<i>Leptodeira septentrionalis</i>	Cat-eyed Snake	T	
<i>Leptodeira septentrionalis septentrionalis</i>	Northern Cat-eyed Snake	T	
<i>Nerodia harteri</i>	Brazos Water Snake	T	
<i>Nerodia paucimaculata</i>	Concho Water Snake		LT, PDL
<i>Pituophis ruthveni</i>	Louisiana Pine Snake	T	C
<i>Tantilla cucullata</i>	Trans-Pecos Black-headed Snake	T	
<i>Trimorphodon vilkinsonii</i>	Chihuahuan Desert Lyre Snake	T	
<i>Liochlorophis vernalis</i>	Smooth Green Snake	T	
<i>Crotalus horridus</i>	Timber (Canebrake) Rattlesnake	T	
Invertebrates			
<i>Stygobromus pecki</i>	Peck's cave amphipod	E	LE
<i>Gammarus hyalelloides</i>	Diminutive Amphipod		C
<i>Nicrophorus americanus</i>	American Burying Beetle		LE
<i>Heterelmis comalensis</i>	Comal Springs Riffle Beetle		LE
<i>Rhadine persephone</i>	Tooth Cave Ground Beetle		LE
<i>Rhadine exilis</i>	A Ground Beetle		LE
<i>Rhadine infernalis</i>	A Ground Beetle		LE
<i>Texamaurops reddelli</i>	Kretschmarr Cave Mold Beetle		LE
<i>Batrisodes texanus</i>	Coffin Cave Mold Beetle		LE
<i>Batrisodes venyivi</i>	Helotes Mold Beetle		LE

<i>Stygoparnus comalensis</i>	Comal Springs Dryopid Beetle		LE
<i>Neoleptoneta myopica</i>	Tooth Cave Spider		LE
<i>Neoleptoneta microps</i>	Government Canyon Bat Cave spider		LE
<i>Texella reddelli</i>	Reddell harvestman		LE
<i>Texella reyesi</i>	Bone Cave harvestman		LE
<i>Texella cokendolpheri</i>	Cokendolpher Cave Harvestman		LE
<i>Tartarocreagris texana</i>	Tooth Cave Pseudoscorpion		LE
<i>Cicurina madla</i>	Madla Cave Meshweaver		LE
<i>Cicurina baronia</i>	Robber Baron Cave Meshweaver		LE
<i>Cicurina venii</i>	Braken Bat Cave Meshweaver		LE
<i>Cicurina vespera</i>	Government Canyon Bat Cave Meshweaver		LE
<i>Cicurina wartoni</i>	Warton cave Meshweaver		C
Mollusks			
<i>Arkansia wheeleri</i>	Ouachita rock pocketbook		LE
<i>Fusconaia askewi</i>	Texas Pigtoe	T	
<i>Fusconaia lananensis</i>	Triangle Pigtoe	T	
<i>Lampsilis bracteata</i>	Texas Fatmucket	T	
<i>Lampsilis satura</i>	Sandbank Pocketbook	T	
<i>Obovaria jacksoniana</i>	Southern Hickorynut	T	
<i>Pleurobema riddellii</i>	Louisiana Pigtoe	T	
<i>Popenaias popeii</i>	Texas Hornshell	T	C
<i>Potamilus amphichaenus</i>	Texas Heelsplitter	T	
<i>Quadrula aurea</i>	Golden Orb	T	
<i>Quadrula houstonensis</i>	Smooth Pimpleback	T	
<i>Quadrula petrina</i>	Texas Pimpleback	T	
<i>Quadrula mitchelli</i>	False Spike Mussel	T	
<i>Truncilla cognata</i>	Mexican Fawnsfoot Mussel	T	
<i>Truncilla macrodon</i>	Texas Fawnsfoot	T	
<i>Potamilus metnecktayi</i>	Salina Mucket	T	
<i>Cochliopa texana</i>	Phantom Cave Snail		C
<i>Tryonia cheatumi</i>	Phantom Cave Spring Tryonia		C
<i>Pseudotryonia adamantina</i>	Diamond y Spring Snail		C
<i>Tryonia circumstriata</i>	Gonzales Spring Snail		C
<i>Assiminea pecos</i>	Pecos assiminea snail	E	LE
Plants			
<i>Ambrosia cheiranthifolia</i>	South Texas ambrosia	E	LE
<i>Helianthus paradoxus</i>	Pecos sunflower	T	LT
<i>Hymenoxys texana</i>	Texas prairie dawn	E	LE
<i>Thymophylla tephroleuca</i>	ashy dogweed	E	LE
<i>Cryptantha crassipes</i>	Terlingua Creek cat's-eye	E	LE
<i>Leavenworthia texana</i>	Texas golden gladecress		C
<i>Physaria thamnophila</i>	Zapata bladderpod	E	LE
<i>Physaria pallida</i>	white bladderpod	E	LE

<i>Coryphantha ramillosa</i>	bunched cory cactus	T	LT
<i>Coryphantha ramillosa</i> ssp. <i>ramillosa</i>	bunched cory cactus	T	LT
<i>Coryphantha scheeri</i> var. <i>robustispina</i>	Pima Pineapple Cactus		LE
<i>Echinocereus reichenbachii</i> var. <i>albertii</i>	black lace cactus	E	LE
<i>Echinocereus davisii</i>	Davis' green pitaya	E	LE
<i>Echinocereus chisoensis</i> var. <i>chisoensis</i>	Chisos Mountains hedgehog cactus	T	LT
<i>Sclerocactus mariposensis</i>	Lloyd's mariposa cactus	T	LT
<i>Sclerocactus brevihamatus</i> ssp. <i>tobuschii</i>	Tobusch fishhook cactus	E	LE
<i>Escobaria minima</i>	Nellie's cory cactus	E	LE
<i>Escobaria sneedii</i> var. <i>sneedii</i>	Sneed's pincushion cactus	E	LE
<i>Astrophytum asterias</i>	star cactus	E	LE
<i>Geocarpon minimum</i>	earth fruit	T	LT
<i>Manihot walkerae</i>	Walker's manioc	E	LE
<i>Hoffmannseggia tenella</i>	slender rushpea	E	LE
<i>Quercus hinckleyi</i>	Hinckley's oak	T	LT
<i>Frankenia johnstonii</i>	Johnston's frankenia	E	LE, PDL
<i>Callirhoe scabriuscula</i>	Texas poppy-mallow	E	LE
<i>Hibiscus dasycalyx</i>	Neches River rose-mallow		C
<i>Abronia macrocarpa</i>	large-fruited sand verbena	E	LE
<i>Phlox nivalis</i> ssp. <i>texensis</i>	Texas trailing phlox	E	LE
<i>Schwalbea americana</i>	chaffseed		LE
<i>Ayenia limitaris</i>	Texas ayenia	E	LE
<i>Styrax platanifolius</i> ssp. <i>texanus</i>	Texas snowbells	E	LE
<i>Spiranthes parksii</i>	Navasota ladies'-tresses	E	LE
<i>Festuca ligulata</i>	Guadalupe Mountains fescue		C
<i>Zizania texana</i>	Texas wild-rice	E	LE
<i>Potamogeton clystocarpus</i>	Little Aguja pondweed	E	LE

C = State Candidate

C1 = Federal Candidate – Category 1 – information supports listing

T = State Threatened

LT = Federally Listed Threatened

E = State Endangered

LE = Federally Listed Endangered

NL = Not federally listed

PDL = Proposed for Federal Delisting

PT = Federally Proposed for Threatened

XN = Nonessential experimental population

SAT = Threatened by similarity of appearance

APPENDIX D

PROGRAMMATIC AGREEMENT

**REGARDING COMPLIANCE WITH SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT FOR
THE LANDOWNER INCENTIVE PROGRAM IN TEXAS**

AMONG THE FISH AND WILDLIFE SERVICE, REGION 2, U.S. DEPARTMENT OF THE INTERIOR;

THE TEXAS STATE HISTORIC PRESERVATION OFFICE;

THE ADVISORY COUNCIL ON HISTORIC PRESERVATION;

AND

THE TEXAS PARKS AND WILDLIFE DEPARTMENT

WHEREAS, the United States Fish and Wildlife Service, Region 2 (FWS) provides funding and other assistance to the Texas Parks and Wildlife Department (TPWD) to administer the TPWD Landowner Incentive Program, which provides funds and assistance for the restoration, enhancement, and creation of wildlife habitats to benefit rare species and habitat on private lands within the state of Texas; and

WHEREAS, the FWS is the lead agency with the authority and responsibility to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. 470f) as amended and the regulations of the Advisory Council on Historic Preservation (ACHP), 36 CFR Part 800, for FWS's assistance to the Landowner Incentive Program; and

WHEREAS, the NHPA directs the FWS to identify, evaluate, protect, and preserve properties included in or eligible for inclusion in the National Register of Historic Places (historic properties) (16 U.S.C. 470-270t, 110); and

WHEREAS, the FWS, in consultation with ACHP, the Texas State Historic Preservation Officer (SHPO), and TPWD, has determined that certain of its projects in the Landowner Incentive Program may affect historic properties; and

WHEREAS, the parties to this Agreement recognize that a streamlined process for compliance with Section 106 of NHPA is appropriate and desirable, and FWS has consulted with the ACHP, SHPO, and TPWD pursuant to 36 CFR 800.14 of the regulations implementing Section 106 of the NHPA; and

NOW, THEREFORE, the FWS, the TPWD, the ACHP, and the SHPO agree that the TPWD Landowner Incentive Program shall be administered and implemented in accordance with the following stipulations in order to satisfy FWS's NHPA Section 106 responsibilities.

STIPULATIONS

The FWS shall ensure that the following measures are carried out:

I. RESPONSIBILITIES OF TPWD

The TPWD shall:

- A. Protect historic properties from damage by project activities through site identification and evaluation, project design, protection, and avoidance measures.
- B. Ensure that its actions and authorizations are considered in terms of their effects on historic properties regardless of the land status and consistent with the intent of the National Historic Preservation Act.
- C. Enter into any necessary agreements with appropriate state agencies to provide for the exchange of information regarding the location of previously identified historic property locations and previously surveyed ground.

II. CULTURAL RESOURCE PROGRAM

A. PERSONNEL

- 1. For the purposes of this Agreement and compliance with the NHPA, the FWS Regional Director is the responsible Agency Official.
- 2. The FWS Regional Director may delegate responsibility for the consultation process to the TPWD Executive Director (ED), but the legal requirement to comply with the NHPA remains the responsibility of the FWS.
- 3. The TPWD Executive Director (ED) is the signatory agent that will be accountable for TPWD's compliance with this Agreement in Texas
- 4. The ED may delegate responsibility for the consultation process and for carrying out activities agreed to herein to other TPWD personnel consistent with the provisions of this Agreement.

B. TRAINING

The TPWD Preservation Officer (TPO), a person who meets the professional qualification standards for archeology as described in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*, shall provide training to TPWD Landowner Incentive Program project leaders, managers, and field personnel sufficient to enable them to properly carry out the specified terms of this Agreement. Training shall include how to define TPWD Landowner Incentive Program project Areas of Potential Effects consistent with 36 CFR Section 800.3 and 800.16(d), how to identify historic and prehistoric artifacts and features, how to identify landforms likely to contain intact archeological deposits, how to apply Lists 1 and 2 (Appendix A of this Agreement), and how to complete required forms and documentation specified in this Agreement. This training shall include field tours of project areas and archaeological sites geographically similar to areas where those particular TPWD personnel will work.

III. TRIBAL CONSULTATION AND PUBLIC PARTICIPATION

A. TRIBAL CONSULTATION

During the development of this Programmatic Agreement (PA), FWS solicited the views of federally recognized Indian tribes, pursuant to 36 CFR 800.2 (c) (2) and 800.14. For individual TPWD Landowner Incentive Program projects, tribal consultation will be carried out as outlined in Stipulations IV.G. and H. and Stipulation V., below.

B. PUBLIC PARTICIPATION

Pursuant to 36 CFR 800.2 (d), TPWD shall consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, the likely interest of the public in the effects on historic properties, and confidentiality concerns of private individuals and businesses.

IV. TPWD LIP PROGRAM PROJECT PROCEDURE FOR CULTURAL RESOURCES

Note that the following procedure is a sequential and step-wise review process outlined in steps A through H below. The vast majority of LIP projects will need to be reviewed in accordance with the first few steps of this process only. Terms in **bold** are defined in Appendix B of this Agreement. Post-review discovery provisions are set forth in Stipulation V. of this Agreement.

- A. Landowner applying for LIP grant and TPWD project leader meet and draft conservation plan and agreement. Landowner signs project agreement/management plan, which includes permission to conduct **Cultural Resources Preliminary Assessment**. If all project activities are on List 2 (Appendix A) of this agreement, no further actions are required unless cultural resources are discovered during LIP project implementation (see Stipulation V. of this Agreement).
- B. On projects that require ground-disturbing activities, one or more activities enumerated in List 1 (Appendix A of this Agreement), or one or more activities not on the List 2 (Appendix A of this Agreement), the TPWD project leader shall provide a description of the project (draft conservation plan), mark the LIP project **Area of Potential Effect** on USGS 7.5 minute topographic map, describe how the Area of Potential Effect was determined, and submit a copy to the professional archeologist contracted by TPWD Wildlife Division. In defining the **Area of Potential Effect**, the TPWD will apply the pertinent sections of 36 CFR Sections 800.2-800.4 and 36 CFR Section 800.14(d). The professional archeologist will send a letter report to TPWD noting whether the LIP project area contains recorded cultural resources and/or locations where unrecorded cultural resources are likely to be found, and recommended actions regarding the identification of cultural resources.
- C. TPWD project leader will work with Landowner to plan LIP project. Whenever possible, TPWD project leader will limit activities to List 2 (Appendix A of this Agreement), which do not require excavation below previous ground disturbance or damage structures greater than 50 years old. Using the archaeologist's information in step B., above, and all other information available, the TPWD project leader will attempt to avoid recorded cultural resources and locations where unrecorded cultural resources are likely to be found. If all project activities are on List 2 (Appendix A of this Agreement) and all recorded cultural resources and areas likely to contain cultural resources are avoided, no further actions are required unless cultural resources are discovered during LIP project implementation (see Stipulation V. of this Agreement).

D. Conduct of a Cultural Resources Preliminary Assessment:

1. A TPWD project leader must conduct **Cultural Resources Preliminary Assessment** when a LIP project may:
 - involve one or more activities on List 1 (Appendix A of this Agreement); or
 - cause new ground disturbance below previous ground disturbance, or any other activity not included on List 2 (Appendix A of this Agreement); or
 - affect possible unrecorded or recorded archeological sites; and/or
 - damage structures greater than 50 years old.
2. TPWD project leader must complete TPWD LIP program cultural resources training before conducting a **Cultural Resources Preliminary Assessment**. Also, in conducting the **Cultural Resources Preliminary Assessment**, the TPWD project leader must make use of the cultural resources information and recommendations provided by the professional archaeologist in step B., above. Any artifacts found remain the property of Landowner. TPWD project leader documents the field investigation on the **Cultural Resources Preliminary Assessment Report** form and submits it to the TPWD Wildlife Facilities Coordinator (WFC) for potential inclusion in LIP Program annual report described in stipulation VIII, below.

E. If the TPWD project leader completing the **Cultural Resources Preliminary Assessment** finds no archeological sites or historic structures greater than 50 years old in LIP project **Area of Potential Effect**, and all project activities of the LIP project are on List 2 (Appendix A of this Agreement), no further actions are required beyond sending the Assessment Report to the WFC unless cultural resources are discovered during LIP project implementation (see Stipulation V. of this Agreement).

F. If the TPWD project leader completing the **Cultural Resources Preliminary Assessment** finds possible archeological remains or sites or structures greater than 50 years old in LIP project **Area of Potential Effect**, TPWD project leader should alter the project to avoid them. If a revised **Area of Potential Effect** extends into areas not considered originally, the TPWD project leader will follow the review steps outlined in Step B, above. When redesigned project avoids all recorded and unrecorded cultural resources and all project activities are on List 2 (Appendix A of this Agreement), no further actions are required beyond sending the Assessment Report and notification that all cultural resources were avoided to the WFC unless cultural resources are discovered during LIP project implementation (see Stipulation V. of this Agreement).

G. LIP projects requiring **SHPO** consultation regarding further actions to identify and evaluate cultural resources, such as the conduct of a Cultural Resource Survey:

1. LIP projects require consultation with the **SHPO**, likely a cultural resources survey by a professional archeologist, and possibly other steps as outlined in this Agreement when they may:
 - affect recorded archeological sites or structures greater than 50 years old; or
 - affect unrecorded archeological sites, features, or structures greater than 50 years old discovered during the **Cultural Resources Preliminary Assessment**; or
 - involve one or more activities on List 1 (Appendix A of this Agreement); and/or
 - cause new ground disturbance below previous ground disturbance, or any other activity not included on List 2 (Appendix A of this Agreement).

2. When a LIP project requires consultation with the **SHPO**, TPWD will offer the Landowner two options:
 - If Landowner has not accepted any federal funding, they may request that TPWD withdraw assistance and that no cultural resources are reported to **SHPO**; or
 - When Landowner accepts federal funding or assistance, they must allow TPWD to consult with **SHPO** to determine whether LIP project will damage cultural resources and take the further steps outlined in this review process. The Landowner may require that TPWD keep his/her identity anonymous, or may choose to participate in consultation.
3. When the Landowner accepts LIP funding for a project that requires consultation with the **SHPO**, **WFC** will inform the **SHPO** about LIP project by letter, including project description, map showing **Area of Potential Effect**, explanation of how that area was determined, the TPWD project leader's **Cultural Resources Preliminary Assessment**, and archaeologist's letter report (see step B., above), and other information that may be useful.
4. When the TPO and SHPO concur that further actions to identify cultural resources are necessary, TPWD will ensure that a professional archeologist who meets federal qualifications conducts a **Cultural Resource Survey** (e.g., pedestrian inventory and assessment of cultural resources in the LIP project **Area of Potential Effect**, or other identification effort). The archeologist must provide a report of findings to **SHPO** and **TPO**. **SHPO** and **TPO** will then consult to determine whether cultural resources are eligible for listing in the **National Register of Historic Places** in accordance with 36 CFR Section 800.4. The Landowner may participate in this consultation. When human remains, graves, and/or associated funerary objects that may be of concern to Indian tribes are or may be within the LIP project Area of Potential Effect, the TPO and FWS will consult with federally recognized Indian tribes that may attach religious and cultural significance to them in accord with *National Park Service Bulletin* 38 and 36 CFR Part 800. Differences of opinion on the eligibility of cultural resources for listing in the National Register shall be resolved by FWS requesting determinations of eligibility from the Keeper of the National Register of Historic Places whose determination shall be final.
5. When the **SHPO** and **TPO** concur that all cultural resources in LIP project **Area of Potential Effect** are not eligible for listing in **National Register of Historic Places**, no further actions are required. When the **SHPO** and **TPO** concur that any cultural resources in LIP project **Area of Potential Effect** are eligible for **National Register** listing and the LIP project is redesigned to avoid or protect those resources, no further actions are required.

H. LIP projects that may adversely affect or otherwise damage historic properties:

When the **SHPO** and the **TPO** concur that a LIP project may adversely affect or otherwise damage historic properties (e.g., cultural resources that are included in or eligible for **National Register** listing) from step G above, the **TPO** and **FWS** will consult with the **SHPO**, Landowner, and recognized Indian tribes that may attach religious and cultural significance to the historic properties in order determine measures to be taken to avoid, minimize, or mitigate the adverse effects of the LIP project on such historic properties. The portion of the project near the historic property cannot proceed until an agreed-upon treatment or mitigation plan has been implemented. In developing a mitigation or treatment plan, if agreement among the consulting parties is not reached, the **FWS**, as the lead agency, shall consult with the **ACHP** in accordance with 36 CFR Section 800.6 (b) (1) (v). The private Landowner shall be invited to participate in this process,

and may participate at his option. The development and implementation of mitigation or treatment plans must meet the standards outlined in stipulation VI below.

V. POST-REVIEW DISCOVERY SITUATIONS

- A.** If cultural resources are discovered during conduct of a LIP project, work in that part of the project will cease immediately and the project leader will contact the WFC and TPO as soon as possible. The TPO will inform the SHPO and FWS about cultural resources discovery by both telephone and letter within 24 working hours of discovery, including providing a project description, map showing Area of Potential Effect, explanation of how that area was determined, and details about the discovery. The SHPO and TPO will consult to determine whether there is sufficient information to determine whether discovered cultural resources are eligible for listing in National Register of Historic Places. When human remains, graves, or associated funerary objects that may be of religious and cultural significance to recognized Indian tribes are discovered during conduct of a LIP project, the TPO and FWS will consult with federally recognized Indian tribes that may attach religious and cultural significance to them. Landowner may participate in this consultation. If the information on cultural resources is not sufficient to determine National Register eligibility, a professional archeologist who meets federal qualifications must conduct an inventory and assessment, and provide a report of findings to SHPO and TPO.
- B.** When SHPO and TPO concur that newly discovered cultural resources are not eligible for listing in National Register of Historic Places, no further actions are required. When SHPO and TPO concur that newly discovered cultural resources are eligible for National Register listing, and the LIP project is redesigned to avoid or protect those resources, no further actions are required. When the SHPO and TPO concur that LIP project will damage or adversely affect newly discovered cultural resources that are eligible for National Register listing, TPO and FWS will consult with the SHPO, ACHP, the Landowner, and federally-recognized Indian tribes that may attach religious and cultural significance to the discovery to determine the extent of measures to be taken to avoid, minimize, or mitigate the adverse effects to the discovery caused by the LIP project. These measures may involve investigations conducted by a professional archeologist who meets federal qualifications. The SHPO, FWS, and ACHP shall expedite the review of discoveries and shall respond to requests within 5 working days from the date of receipt of the request. At any point in these consultations, the Landowner may require that TPWD keep his/her identity anonymous and shall have the option of participating in any or all consultations regarding the discovery. The portion of the project near newly discovered historic property cannot proceed until the agreed-upon treatment plan is implemented.

VI. PROFESSIONAL STANDARDS AND QUALIFICATIONS

All actions related to historic properties, including efforts to identify and evaluate historic properties, conditions to ensure that historic properties will not be adversely affected, measures to minimize or mitigate adverse effects, and mitigation or treatment plans shall be developed and implemented by appropriate professionals meeting the *Secretary of the Interior's Professional Qualifications Standards*. Such conditions, measures, and treatment plans shall be developed and implemented in accordance with the standards and guidelines contained in the *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44717-44742), the ACHP's *Treatment of Archeological Properties: A Handbook* (1980 and future other versions), *National Park Service Bulletin 38*, and guidelines and standards of the SHPO.

VII. ADDITIONAL CONSIDERATIONS IN THE CONDUCT OF THE TPWD LIP PROGRAM REGARDING IDENTIFICATION OF CULTURAL RESOURCES.

- A.** If large wetland restoration projects located in floodplains are determined to require cultural resources survey, this survey should:
 - 1. focus on areas with the potential to contain cultural resources;
 - 2. focus on areas to be impacted by ground disturbing activities such as; dam construction/borrow area, dam tie in areas, floodplain rises within the impoundment area, previously recorded sites within the impoundment area, and the terrace edge if impoundment will be to the level of this edge and may cause wave action erosion;
 - 3. disregard hydric floodplain soils with the low potential to contain intact deposits.
- B.** Negative Cultural Resource Surveys by professional archeologists. When a survey report described in stipulation IV.G.4. indicates that no cultural resources are located within the APE, the undertaking may proceed without further consultation with the SHPO. The TPO shall be responsible for the review of all surveys and completion of reports as agreed upon in consultation with the SHPO. Reports of negative findings shall be included in the annual report pursuant to stipulation VIII.A. of this Agreement.
- C.** Positive Cultural Resources Preliminary Assessments, Positive Cultural Resource Surveys, and Post-Review Discoveries: If an undertaking on private land results in the identification of cultural resources, TPWD will notify the Landowner that the following options exist at that time:
 - 1. The landowner may request that TPWD withdraw assistance to the project, provided that they haven't accepted any federal funding, or
 - 2. The landowner must allow TPWD to report the cultural resource and carry out the terms of this Agreement. The landowner may require that TPWD keep his/her identity anonymous but may also choose the option of participating in the consultation process.
- D.** TPWD shall provide final survey reports to the SHPO prior to construction in all cases of positive survey results where the landowner did not opt out under IV. G. 2. or VII. C. above.
- E.** TPWD shall provide a summary of all cultural resource survey reports in the annual report called for in Stipulation VIII. of this Agreement.

VIII. DOCUMENTATION AND REPORTING REQUIREMENTS

- A.** By December 1 of each year following the execution of this Agreement, the TPWD shall provide an annual report to the FWS, the SHPO, the ACHP, and to federally recognized Indian tribes on request. The annual report will contain the following information:
 - 1. A county list and description of all undertakings under the Landowner Incentive Program covered by this Agreement carried out during the previous fiscal year (September 1 through August 31);
 - 2. For each undertaking, notation of whether consultation was required with SHPO under the terms of this Agreement and the status of any required consultation (completed, ongoing, etc.);
 - 3. For each undertaking, a summary of the results of efforts to identify and evaluate historic properties;

4. For each undertaking, a description of cultural resources identified and their eligibility for National Register listing;
 5. For each undertaking, a description of the determination of project effects on historic properties.
 6. For each undertaking that involved identified cultural resources, include a description of the consultation process and a summary of the resolution.
 7. A description of any undertakings resulting in discoveries of cultural resources during project implementation and how these were resolved.
 8. A description of the LIP training program, including curriculum, number of training sessions conducted, and the number of TPWD personal trained during the previous year.
 9. A description of benefits and problems encountered in the implementation of this Agreement and suggestions on how to remedy such problems.
- B.** This annual report will be compiled by the WFC and reviewed by the TPO, and submitted to the SHPO, FWS, and ACHP, and to federally recognized Indian tribes on request. Documentation prepared under the terms of this Agreement shall be retained by TPWD for two years.
- C.** Information specifying the location of cultural resources shall not be released to the public. The TPO may at his/her discretion release limited portions of location data to field offices to ensure proper consideration of currently recorded sites during the planning phase.

IX. ACHP PARTICIPATION

- A.** The FWS, TPWD, the SHPO, and Indian Tribes or other consulting parties may request the ACHP to consult on any undertaking.
- B.** The TPWD and FWS shall afford the ACHP an opportunity to comment under the following conditions:
1. When SHPO and TPWD do not agree or there is a question as to whether an undertaking requires consultation with the SHPO or meets List 1 or List 2 (Appendix to this Agreement).
 2. When SHPO and TPWD do not agree or there is a question as to the need for or adequacy of efforts to identify and evaluate historic properties.
 3. When SHPO and TPWD do not agree as to the nature of an effect of an undertaking on a historic property.
 4. When the TPWD determines that data recovery at affected properties is not feasible or that stabilization or rehabilitation of a historic structure cannot be carried out in compliance with the *Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*.
 5. When the SHPO and TPWD do not agree regarding the adequacy or scope of measures to avoid, minimize, or mitigate adverse effects on historic properties or regarding measures to ensure that historic properties will not be adversely affected.

X. DISPUTE RESOLUTION

- A.** Should the SHPO, FWS, ACHP, Indian Tribes, Landowners, or other consulting parties object to the adequacy of carrying out any specifications or actions pursuant to this Agreement, the TPWD will inform the FWS. The FWS and TPWD will consult with the objecting party to resolve the objection. If, within 30 days following receipt of the objection, the TPWD and/or FWS determines that the objection cannot be resolved, the TPWD shall forward to the FWS and the ACHP all documentation relevant to the dispute. The ACHP shall either:

1. Provide the FWS and TPWD with recommendations which the FWS and TPWD shall take into account in reaching a final decision regarding the dispute; or
 2. Notify the FWS and TPWD that it will comment pursuant to 36 CFR 800.7. In response to such ACHP comment, the FWS and TPWD will take into account the comments of the ACHP and respond pursuant to 36 CFR 800.7.
- B.** If a Landowner, member of the public or other interested party objects to the manner of implementation of any aspect of this Agreement, the TPWD shall notify the FWS, SHPO and ACHP, consult with the objecting party, and as needed with the FWS, SHPO, or the ACHP.

XI. MONITORING, AMENDMENTS AND TERMINATION

- A.** The ACHP or the SHPO may monitor activities carried out pursuant to this Agreement to determine the accuracy of the field inspections in identifying cultural resources and the success with which identified cultural materials are avoided during implementation of the practice. TPWD shall cooperate with the ACHP and the SHPO in carrying out their monitoring and reviewing responsibilities.
- B.** Any party to this Agreement may request that it be amended, whereupon the parties shall consult in accordance with 36 CFR 800.14 to consider such an amendment.
- C.** Agreement Duration: This Agreement shall be in effect from the date of final signature for a period of 10 years.
- D.** Termination: This Agreement may be terminated at any time by any signatory party, provided that at least 45 days notice of intent to terminate is given to all other signatories, and the reasons for considering termination are given to all concerned parties. The parties shall consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Should TPWD or FWS not carry out the terms of this Agreement or should the Agreement be terminated, FWS and TPWD shall comply with Section 106 in accordance with 36 CFR Part 800 for all individual undertakings covered by this Agreement.

XII. LIMITATIONS

- A.** Nothing in this Agreement shall be construed as limiting or affecting the authority or legal responsibility of the TPWD or SHPO, to perform beyond the respective authority of each.
- B.** Each provision of this Agreement is subject to the laws and regulations of the respective states of Texas and of the United States of America.
- C.** Execution and implementation of this Agreement evidences that the FWS has satisfied its Section 106 requirement for all TPWD undertakings that fall under the terms of the Agreement. This Agreement becomes effective on the date of the last signature below.

**PROGRAMMATIC AGREEMENT
FWS/LIP PROGRAM**

REGIONAL DIRECTOR, UNITED STATES FISH AND WILDLIFE SERVICE, REGION 2

Dale Hall, Regional Director

Date

EXECUTIVE DIRECTOR, TEXAS PARKS AND WILDLIFE DEPARTMENT

Robert L. Cook, Executive Director

Date

ADVISORY COUNCIL ON HISTORIC PRESERVATION

John M. Fowler, Executive Director

Date

TEXAS STATE HISTORIC PRESERVATION OFFICER

F. Lawrence Oaks, Texas State Historic Preservation Officer

Date

Section 107 APPENDIX A

List 1: Examples of general categories of agency actions that are subject to consultation with the SHPO to determine if efforts to identify historic properties are necessary.

Note that these are examples of general categories; this is not an all-inclusive list.

- A. Road construction
- B. Changes to fence lines and boundaries which involve blading or heavy equipment-assisted brush clearing in areas that have not been bladed or cleared in the past, or which lead to concentrations of livestock in a confined area (corrals).
- C. Revegetation and plantings that penetrates below the depth of previous ground/soil preparation or otherwise causes new ground disturbance.
- D. Impoundments, dams, and levees
- E. Wetland construction
- F. Moist soil management
- G. Vegetation removal and root plowing/raking that penetrates below the depth of previous ground/soil preparation or otherwise causes new ground disturbance.
- H. Borrow sites for fill materials
- I. Sediment excavation
- J. Erosion control, including stream bank stabilization, restoring degraded bank areas, head or side channel
- K. Cuts and sloping, watershed terraces, and riprap
- L. Pipelines, canals, and ditches
- M. Well drilling, tanks, and windmills
- N. Shoreline protection, construction, and rehabilitation
- O. Deposited silt and sand removal from floodplains
- P. Any work conducted within a USACE designated navigable waterway

List 2: Activities that do not require consultation with the SHPO so long as they are completed as described.

Note that activities not meeting the prescribed conditions below will require consultation with the SHPO to determine if an identification effort is necessary in accordance with the Programmatic Agreement (PA).

- A. Revegetation or planting in areas which have been previously leveled, disked, tilled, or constructed, so long as plantings, revegetation, and ground/soil preparation do not penetrate below the depth of previous ground/soil preparation or otherwise cause new ground disturbance.
- B. Farming of existing fields with planting and soil/ground preparation within the same depth of previous soil/ground preparation.
- C. Continued routine maintenance of existing wetlands and existing farm fields within flood zones or plow zones, so long as such activities are within already disturbed ground and no new ground or deeper ground will be disturbed.
- D. Fencing which does not involve blading or heavy equipment-assisted brush clearing, or which restricts blading or heavy equipment-assisted brush clearing to areas that have been bladed or cleared in the past. Such fencing must not lead to concentrations of livestock in a confined area (corrals).
- E. Installation of signposts and monuments that are not within known historic properties.
- F. Installation of signs, markers, guardrails, gates, posts, and cattle guards within or alongside existing roadways or trails.
- G. Replacing, maintaining, or enhancing small water control structures (including but not limited to fish screens or barriers, culverts, pumps, power poles, weirs) in existing facilities (including, but not limited to road surfaces, dikes, or ditches), so long as no additional ground disturbance is required and where the facility itself is less than 50 years of age or has been determined to be “not eligible” for the National Register of Historic Places in consultation with the SHPO.
- H. Activities within the active stream channel, including removing blockages of bush, trees, and sediment, emplacement of in-stream structures (e.g., Gabion dams, boulders, stumps, logs, plantings), or construction of fish-cover devices or spawning gravels. However, related construction work on terraces or cutbanks or areas otherwise outside the active stream channel, including but not limited to staging areas, borrow, or work to facilitate access, does require consultation with the SHPO. Moreover, any work done in a navigable waterway does require consultation with the SHPO to determine if any historic shipwrecks may be present (see List 1).
- I. Use of borrow sources where no lateral expansion of the source site will occur.
- J. Use of dredged and fill materials from existing facilities and spreading of the fill material on another surface so long as the dredging, fill removal, and spreading of fill has been reviewed in accordance with PA.
- K. Maintaining, repairing, removing, or modifying existing facilities or infrastructure that are less than 50 years of age or that have been previously determined to be “not eligible” for the National Register of Historic Places in consultation with the SHPO and where no ground disturbance is required.
- L. Removing, refurbishing, relining, or replacing small water impoundments or conveyance structures such as dikes, levees, weirs, or dams where no ground disturbance beyond the impoundment or

conveyance structure is required and the facility itself is less than 50 years of age or has been determined to be “not eligible” for the National Register of Historic Places in consultation with the SHPO.

- M. Prescribed burns where no firebreaks are created or where firebreaks are limited to mowing, blacklines, wetlines or scraping/disking to a depth not to exceed 3 inches.
- N. Drilling of wells and placement of windmills, pump structures, above-ground conveyance pipe, water guzzlers, and storage tanks where no modifications of the ground disturbance are necessary and such facilities will not cause cattle to congregate nearby.
- O. Removing vegetation by use of hand implements or herbicides, or by mechanical shearing or chopping at ground level in any setting.
- P. Mechanical removal of brush and shallow roots by grubbing or dozing or wetland restoration projects involving excavations provided soil disturbance does not exceed 3 feet within the floodplains of the following major rivers: Sulphur, Sabine, Trinity, Brazos, Colorado, Guadalupe, San Antonio, Nueces, and Rio Grande. This includes floodplains along the lower reaches of major tributaries of these rivers, when it is apparent that recent Holocene alluvium is likely to exceed 3 feet in depth.
- Q. Wetland restoration projects confined to current or abandoned rice fields.
- R. TPWD personnel who have successfully completed the cultural resources training specified in stipulation II. B. may conduct identification efforts for water lines that are up to 2 inches in diameter, and buried to a depth of up to 6 inches (base of plow zone), in lieu of hiring a professional.

Section 107 APPENDIX B

TPWD Landowner Incentive Program Programmatic Agreement - Definitions

ACHP – Advisory Council on Historic Preservation or a Council member or employee designated to act for the Council.

Area of Potential Effect – geographic area within which an undertaking may directly or indirectly alter the character or use of historic properties, if any such properties exist, consistent with 36 CFR Section 800.3 and 800.16(d). The Area of Potential Effect is influenced by the scale and nature of an undertaking and may include areas where different kinds of effects will be caused by the undertaking.

Cultural resources – historic resources and traditional cultural properties that may or may not meet the criteria for listing in the National Register of Historic Places. Cultural resources include historic districts, archeological sites, buildings, structures, objects, historic and cultural landscapes, vistas, and American Indian traditional use areas.

Cultural Resource Survey – pedestrian inventory and assessment of cultural resources in the Area of Potential Effect of an undertaking, conducted by a professional archeologist who meets the professional qualification standards for archeology in the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*. Cultural Resource Surveys will be conducted in accord with those Guidelines and the *Archeological Survey Standards for Texas* (November 2002).

Cultural Resource Survey Report – report of a Cultural Resource Survey prepared by a professional archaeologist or other historic preservation professional who meets the *Secretary of the Interior's Professional Qualifications*.

Cultural Resources Preliminary Assessment – examination of the Area of Potential Effect of an undertaking to locate and document the presence or absence of cultural resources, conducted by TPWD project leaders who have completed cultural resources classroom and field training on:

- defining Areas of Potential Effect;
- applying Lists 1 and 2 in Appendix A of this Agreement;
- identifying landforms in the project region that are likely to contain intact archeological deposits;
- identifying historic and prehistoric artifacts and features typical of the project region; and
- completing the required forms and documentation specified in this Agreement.

Cultural Resources Preliminary Assessment Report – required documentation for Cultural Resources Preliminary Assessments conducted under TPWD LIP Programmatic Agreement. Cultural Resources Preliminary Assessment Reports are included in TPWD annual report on the LIP program submitted to the SHPO, unless the Landowner requests that TPWD withdraw federal assistance. These reports include:

- section of USGS 7.5 minute topographic map showing project location and Area of Potential Effect;
- project summary including extent and depth of ground disturbance and how Area of Potential Effect was determined. Detailed information on location and depth of areas of new ground disturbance, and locations of structures greater than 50 years old;
- identification of TPWD project leader who conducted field investigation, date(s) of investigation, and field conditions that limited the ability to identify cultural resources;
- methods of field investigation, including time spent, areas examined, and percentage of ground surface visible; and
- results of field investigation, including written descriptions of cultural resources observed. Drawings

and digital photographs are recommended for distinctive artifacts, features, and structures greater than 50 years old or of uncertain age.

FWS – designated representative of U. S. Fish and Wildlife Service, Region 2. FWS is the lead agency with the authority and responsibility to comply with federal laws and regulations related to assistance to the Landowner Incentive Program.

Historic property – any prehistoric or historic district, site, building, structure, object, cultural landscape, or traditional cultural place that is listed in or determined to be eligible for listing in the National Register of Historic Places.

National Register of Historic Places – federal list of districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that have been determined through consultation between federal agencies and SHPO to meet the following criteria for significance in American history, architecture, archeology, engineering and/or culture:

- a. association with events that have made a significant contribution to the broad patterns of American or traditional history;
- b. association with the lives of persons significant in the past;
- c. characteristic of a type, period, or method of construction; representative of the work of a master; possessing high artistic value; and/or representative of a significant and distinguishable entity whose components may lack individual distinction; and/or
- d. having yielded or being likely to yield information important in historic or prehistory.

Some cultural resources are not usually considered to be eligible for listing in the National Register: cemeteries, graves of historical figures, moved structures, properties belonging to or used by religious institutions, reconstructions, and/or properties that have attained historical significance in the last 50 years.

State Historic Preservation Officer (SHPO) – official designated under the National Historic Preservation Act to administer a state historic preservation program. In Texas, the State Historic Preservation Officer is the Executive Director of the Texas Historical Commission.

TPWD Preservation Officer (TPO) – person who meets the professional qualifications for archeology in the U.S. Secretary of the Interior Standards and Guidelines for Archeology and Historic Preservation. Under the TPWD LIP Programmatic Agreement, the TPO provides training to project leaders, managers, and field personnel to enable them to carry out the terms of the Agreement, including identification of historic and prehistoric artifacts, and landforms likely to contain intact archeological deposits. The TPO reviews annual LIP program reports to SHPO and consults with SHPO.

Undertaking –project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of Federal agencies like the U.S. Fish and Wildlife Service. Undertakings include any project, activity or program that:

- is carried out by or on behalf of a Federal agency;
- is financed in whole or part with federal financial assistance or technical assistance (like the Landowner Incentive Program);
- requires a federal permit, license, or approval, including a Federal agency’s authority to disapprove or veto the project, activity, or program; and/or
- is subject to state or local regulation administered pursuant to a delegation of authority or approval by a Federal agency.

Undertakings include new and continuing projects, technical assistance related to provision of federal assistance (like the Landowner Incentive Program), or activities, programs, renewals, or re-approvals of such assistance, approvals or programs.

Wildlife Facilities Coordinator (WFC) – official TPWD Wildlife Division contact with SHPO, designated under TPWD Memorandum of Understanding with the Texas Historical Commission.