TEXAS PARKS & WILDLIFE

2015

Land and Water

RESOURCES CONSERVATION AND RECREATION PLAN

2015

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January 2015
TEXAS PARKS AND WILDLIFE DEPARTMENT

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Letter to the People of Texas

The *Land and Water Resources Conservation and Recreation Plan* (known as the Land and Water Plan, or "the Plan") serves as the strategic visionary document guiding the Texas Parks and Wildlife Department (TPWD) in achieving its mission to conserve land and water resources and to provide outdoor recreation opportunities for all Texans.

The plan, originally developed in 2002, with updates in 2005, 2010 and 2013, was developed with extensive input from our constituents and partners, state leaders and agency staff. As such, it encompasses the collective vision of conservation and outdoor recreation in Texas. It will guide the operational plans that the Texas Parks and Wildlife Department develops to ensure the long-term health of Texas' fish, wildlife, rivers, bays and estuaries, parks and open spaces.

Together, we face many challenges in the years ahead. As we write this, the landscape around us has changed and will continue to change. As more and more Texans reside in urbanized areas, many are becoming increasingly detached from any meaningful connection to nature or the outdoors. Farm, ranch and timber land held in families for generations is being subdivided and sold in smaller parcels. The proliferation of exotic and invasive species threaten to compromise our native species and habitats, particularly our precious water supplies. Working cooperatively with private landowners and other partners will be essential in addressing these challenges.

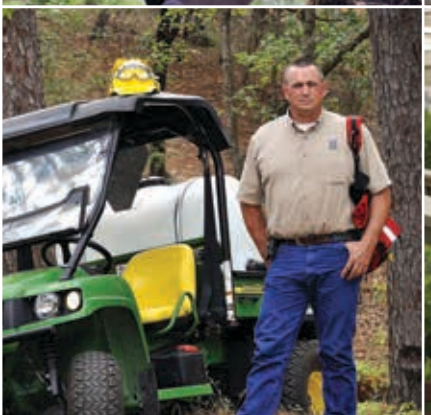
In addition, as our population grows, so will the impacts and pressures on our lands and waters. The growing number of Texans seeking outdoor experiences will call for new recreational opportunities. Our State Parks as well as local parks will play a vital role in meeting that demand. Emerging and expanding energy technologies will require us to balance new energy sources with their potential impacts on wildlife habitat. Conserving adequate water for healthy communities, economies, and our environment will be of paramount importance in the years to come. As we tackle these challenges, we will continue to utilize the best available science-based research and staff expertise and will rely on the input of state leaders and our public and private partners.

We are fortunate that so many Texans are passionate about the outdoors, whether it's through hunting, fishing, camping, boating, kayaking or just enjoying nature. Simply put, we could not do our conservation work alone. In this ecologically diverse state with so much to care for, everyone's participation and effort counts. Thank you for your interest in the Land and Water Plan and for your care and concern for Texas' wild things, and wild places.

DAN ALLEN HUGHES, JR.
CHAIRMAN

CARTER P. SMITH
EXECUTIVE DIRECTOR

The mission of the Texas Parks and Wildlife Department is to manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.



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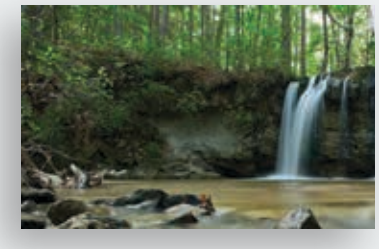

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The Rich Resources of Texas

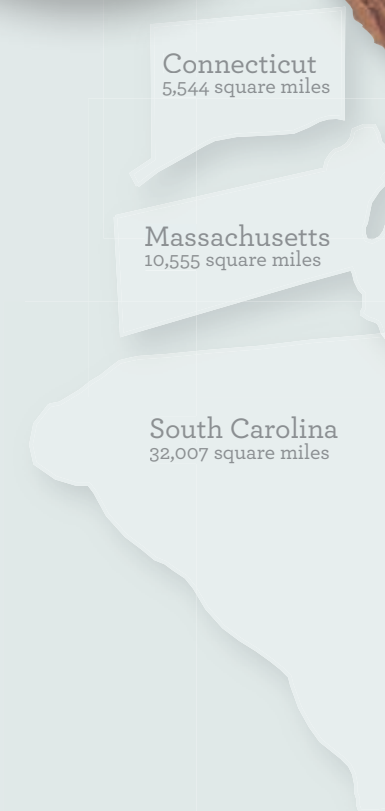
Texas holds a special place in the hearts and minds of its citizens. The sheer size of the state and its richly varied landscape and history are among the reasons that Texans feel an incredibly strong sense of place and connection to our lands, waters and wildlife. Stewardship of these resources is something Texans take great pride in achieving.

Texas is blessed with amazing biodiversity—home to nearly 800 species of fish, 425 species of butterflies, 634 species of birds, and over 4,600 species of native plants. With 12 distinct ecoregions covering approximately 268,500 square miles, Texas has an astounding array of climates, soils and habitats. High plains, wetlands, mountains, deserts, forests and coastal marshes provide habitat for the fish and wildlife resources that help define the landscape.

Today, Texas is facing unprecedented conservation challenges. Several species of birds and mammals have already vanished from Texas, and many more are imperiled. Fortunately, Texans have long recognized the need for stewardship of the state's land, water, fish and wildlife and took action generations ago to protect the state's natural heritage.

The first game and fish laws in Texas were passed in the late 19th century and the first game wardens began protecting the state's resources in 1895. Fish and wildlife biologists were soon hired to bring scientific expertise to the management of these resources. In 1923, the State Parks Board was created by the Texas Legislature, beginning the modern state parks era. The Texas Parks and Wildlife Department was formed in 1963 when the Texas Game and Fish Commission and the Texas State Parks Board were united into a single agency. For over a hundred years, this agency has worked to ensure that present and future generations continue to enjoy the great natural and cultural heritage of Texas.

Texas Parks and Wildlife Department manages over 1.4 million acres of public land including fish hatcheries, historic sites, state natural areas, state parks and wildlife management areas.



Texas Ecoregions

JUNIOR
GIRL SCOUTS

The People of Texas

Not only does Texas support some of the greatest diversity of animal and plant life in the nation, but it also supports a diversity of people and cultures. With a population of over 25 million, Texas has three cities with over 1 million people, more than any other state. These cities are increasingly diverse, and the face of Texas continues to change.

Demographers predict that by 2040, more than 53 percent of the Texas population will be Hispanic. Engaging diverse audiences will become even more important in the years to come.

Involving Texans in outdoor recreation is a critical component of conservation. Numerous studies have confirmed that outdoor recreation leads to caring for natural resources. Studies have also confirmed the importance of connecting children to nature. Providing nature-based experiences for the children of Texas is important to their health, education and well-being.

A century ago, most Texans lived in rural areas and were closer to nature. Today, the vast majority of the population lives in large cities and urbanized areas. As the population increases, so does the demand for more and better access to outdoor recreational opportunities. As more Texans seek outdoor experiences, it is more important than ever to ensure that lands and waters are set aside and managed for fish, wildlife and recreation. Our quality of life and sense of place depend on it. That's what the Land and Water Plan is all about.

Sharelunker Bass | Purtis Creek State Park | Henderson and Van Zandt Counties

Hunting and Fishing Heritage of Texas

Hunting and fishing have been part of the fabric of Texas for as long as humans have lived here. Thousands of years ago, native hunters and gatherers settled in Texas to take advantage of its abundant fish and game. Today, people still flock to Texas to enjoy the rich traditions of hunting and fishing in the state's bountiful forests, prairies and waters. These activities speak deeply to those who seek connection with the wild places and heritage of our state. Generations of parents have passed on to their children a passion and respect for nature, an understanding of where food and water really come from, and the lessons of patience and perseverance. Few activities teach as much about the daily rhythms of nature as effectively as hunting and fishing.

Historically hunters and fishermen were at the forefront of the conservation movement, providing the impetus for sustainable use of our natural resources and the concept of wildlife preserves and parks. Even today, 1.1 million hunters and 2.2 million anglers put their money behind their passion, purchasing over 3.2 million hunting and fishing licenses each year in Texas, more than in any other state, and spending an estimated $5.1 billion in pursuit of these traditions. Of these expenditures, tens of millions of dollars find their way back into conservation through acquisitions, research, habitat restoration, conservation law enforcement and site operations. Millions more are spent locally on other hunting- and fishing-related purchases, thereby providing a boost to rural economies and local communities around the state.

GAME WARDEN
TEXAS
GAME WARDEN

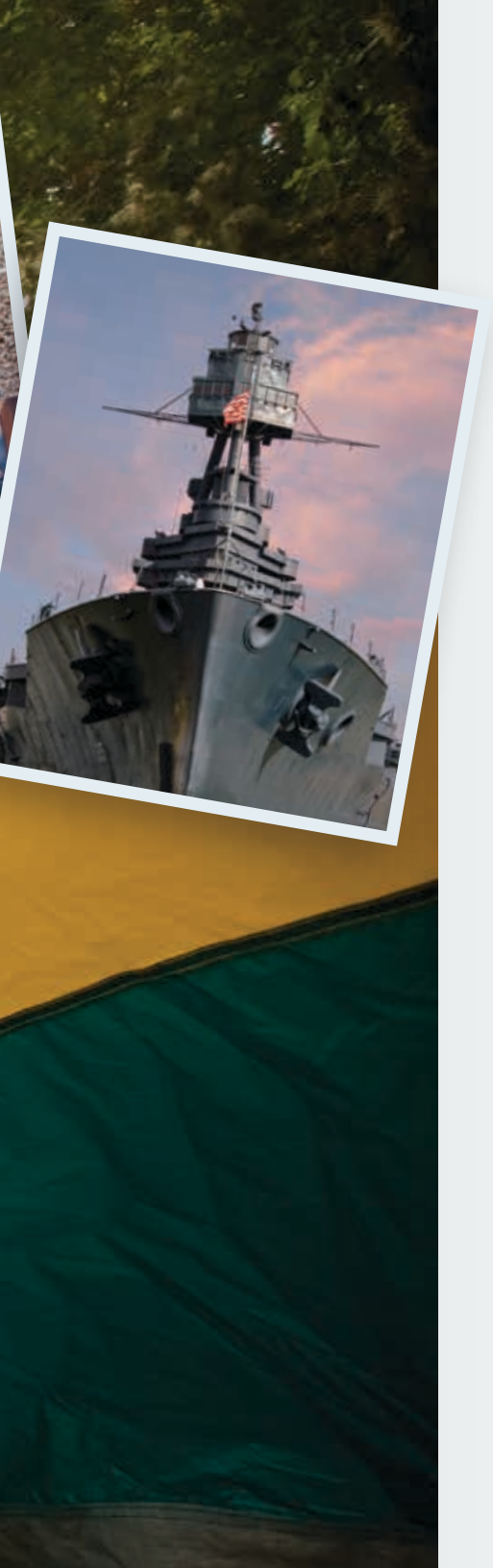
Law Enforcement

Caring deeply about the people and natural and cultural resources of Texas comes naturally to Texas game wardens and park police officers (PPO). As commissioned peace officers, game wardens provide leadership in conservation enforcement, patrolling the lands and waterways of their communities and enforcing fishing, hunting and water safety laws. Park police officers ensure our parks remain safe for visiting families and outdoor enthusiasts.

Texas game wardens also assist other law enforcement agencies with apprehending criminals; patrolling the Texas-Mexico border as part of the state's homeland security initiative; investigating environmental crimes; and conducting search-and-rescue operations in the state's bays, lakes and rivers. When disasters strike, such as hurricanes and floods, wardens are at the forefront of rendering aid. So, too, are our park police officers who have expertise in search and rescue and play an important role in emergency response in surrounding areas.

TPWD's law enforcement interacts with the public through the long-established philosophy of Community Oriented Policing. This philosophy promotes and supports organizational strategies to address the underlying causes of unlawful activity through problem-solving tactics and officer-community collaboration. This helps engender greater support for the protection of the state's fish and wildlife resources and for public safety on our Texas waterways. Both game wardens and park police officers take pride in serving on the front lines to represent the agency with our diverse citizenry.

Lost Maples State Natural Area | Bandera and Real Counties



Outdoor Conservation

Every child should have the opportunity to climb a tree, catch a fish or roast marshmallows over a campfire. Direct experience with nature is vital to physical, emotional and spiritual well-being and leads to a healthy understanding of our place in the world. Yet, as the population becomes more urbanized and once-vast expanses of open space continue to be fragmented and developed, more children today are growing up without these experiences.

TPWD currently operates 95 state parks and natural areas, 47 wildlife management areas and eight fish hatcheries, comprising 1.4 million acres that are managed in the public trust for recreation and conservation. State parks and wildlife management areas offer a remarkable variety of opportunities to experience the outdoors. From the desert mountain sky islands of Big Bend Ranch State Park to the cypress swamps of Caddo Lake Wildlife Management Area, TPWD maintains and provides outdoor experiences ranging from peaceful to exhilarating, and from suburban oases to backcountry wilderness. TPWD also conserves some of the great cultural and historic treasures of our state, including ancient Native American rock art at Seminole Canyon and Hueco Tanks. Sites that speak to our identity as Texans, such as the origin of Texas ranching at Goliad and the struggle for independence at Washington-on-the-Brazos and the San Jacinto Battleground, are managed by TPWD, as well the signpost of an expanding nation's frontier at Fort Richardson and its emergence as a world power as shown by the Battleship Texas.

Protecting, enhancing and increasing recreational opportunities throughout the state is an important component of the agency's mission. TPWD will continue working to ensure that all Texans have access to the outdoors for education, recreation and rejuvenation.

"In Texas, there is no more important natural resource than water. The conservation of our water resources and the preservation of flowing rivers are critical for both the people and the environment of our state."

– Ken Kramer, Lone Star Chapter of the Sierra Club

Beef Creek | Jasper County

Sustaining Healthy Water and Ecosystems

From spring-fed rivers flowing past towering cypress trees to coastal bays and wetlands teeming with plants, fish and wildlife, Texas waters are a source of beauty and wonder, and an essential life-supporting resource for animals, plants and humans alike. With over 191,000 miles of rivers and streams, seven major estuaries and approximately 200 major springs, Texas is blessed with a bounty of aquatic resources. The abundance and high quality of fishing opportunities within these waters is a major reason why Texas ranks second in the nation in the amount of money and number of days spent fishing.

Healthy ecosystems depend on careful and effective water management. The population of Texas is expanding rapidly, bringing incredible pressure to bear on all of the state's natural resources, especially water.

Integrated watershed-based planning and conservation are key to the future health of Texas' aquatic ecosystems. Although the agency has limited regulatory authority over the use of state waters, TPWD is committed to working with stakeholders to develop environmental flow and water-quality management strategies, increase knowledge about spring habitats, help recover threatened and endangered species, control the spread of invasive species, and address other challenges confronting the future of Texas' aquatic habitats. TPWD has a long track record of communicating with the public about water-related issues. An informed and involved citizenry is vital to the conservation of abundant water and healthy aquatic habitats.

THE PLAN

The Land and Water Plan is a guiding document which describes how the Texas Parks and Wildlife Department (TPWD) will accomplish its mission in the years ahead. It is a living document that will be updated periodically as conditions change. It is a vision of how TPWD will strive to conserve the natural and cultural resources of Texas for future generations. Consistent with direction from the Texas Legislature and Sunset Commission, TPWD will base its decisions regarding the state's conservation and recreation needs on the criteria developed in this plan.

The plan is arranged into four goals. The goals and objectives are intended to promote stewardship on public and private lands and waters; protect our unique natural and cultural resources; encourage partnerships with all stakeholders; utilize science as the backbone of decision-making; promote participation in the outdoors; instill appreciation of nature in our citizens, young and old; and promote business approaches that leverage industry standards and best practices to support our mission.

The agency will develop measures to gauge the success of the Land and Water Plan. These measures will be made available to the public annually.

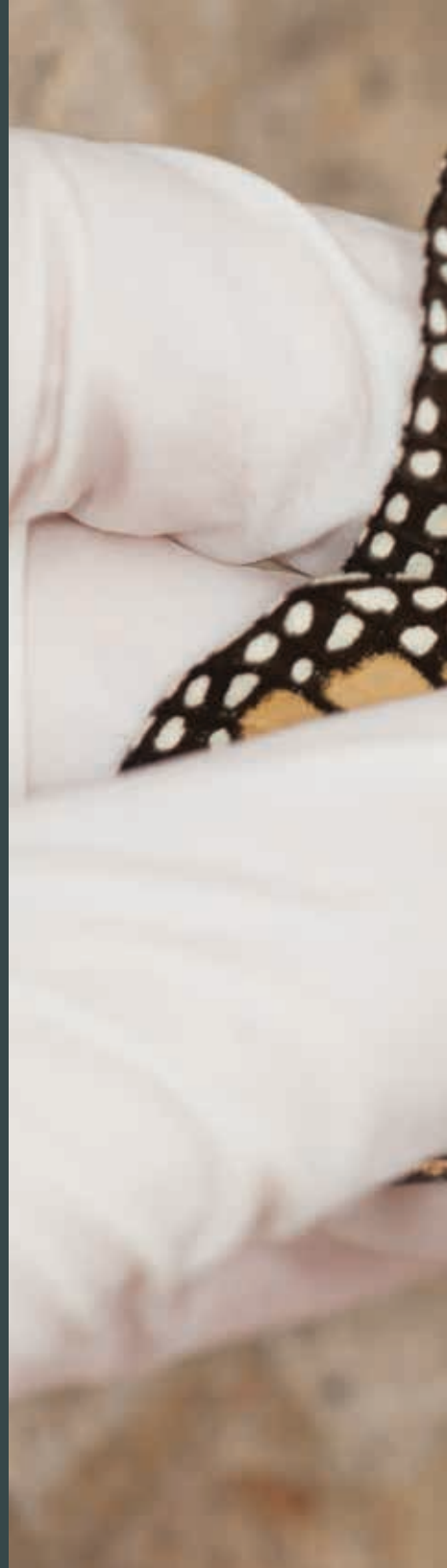
"A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise."

– Aldo Leopold, ecologist and "father" of wildlife management

Richards Ranch | 2005 Lone Star Land Steward Winner | Jack County

1 PRACTICE, ENCOURAGE AND ENABLE SCIENCE-BASED STEWARDSHIP OF NATURAL AND CULTURAL RESOURCES

Texans should strive to conserve, manage and restore terrestrial and aquatic ecosystems, and to protect the rich natural and cultural legacy of Texas. Science and experience foster understanding of natural systems and help TPWD anticipate changes and address emerging issues that impact plants, fish and wildlife resources. Relevant science informs the TPW Commission and focuses the actions of staff, constituents and partners.



Monarch Butterfly Research | Medina, Texas

Pronghorn antelope populations in the Trans-Pecos have been declining in recent years. Trapping and relocating pronghorns from the Panhandle to the Trans-Pecos holds promise in restoring this iconic grassland species.

Pronghorn Antelope Relocation | Dallam County

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

A. TPWD will be an exemplary steward of the public's lands and waters by using the best available science for ecosystem-based management

1. Protect native plants, fish and wildlife and their habitats
2. Conduct strategic research on species, habitats and ecosystems
3. Manage landscapes and watersheds holistically, in cooperation with public and private landowners, to foster biodiversity of plants, fish and wildlife
4. Manage lands and waters for sustainable use and enjoyment compatible with ecosystem goals
5. Establish protocols to address invasive species, wildlife diseases and other threats to plants, fish and wildlife
6. Optimize visitation and visitor experience while protecting natural and cultural resources
7. Maintain a level of compliance that meets or exceeds federal, state, county and local environmental regulations

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

B. TPWD will provide leadership for the promotion and protection of healthy aquatic ecosystems

1. Provide technical expertise and data to federal, state and local agencies to help ensure sufficient water quality and quantity for plants, fish and wildlife
2. Work with public and private entities to integrate planning and management of groundwater, spring, stream, wetland, estuarine and marine ecosystems
3. Refine scientific tools to further the understanding of groundwater and surface water interactions
4. Protect, maintain or restore appropriate watershed and hydrologic conditions to support healthy aquatic ecosystems
5. Establish and maintain cooperative strategies to incorporate long-term plant, fish and wildlife needs in all statewide, regional and local watershed planning, management, and permitting processes
6. Develop and implement strategies to prevent the introduction and spread of nuisance aquatic species
7. Work with stakeholders to ensure that the Texas Surface Water Quality Standards increasingly incorporate biological data to protect the health and productivity of Texas waters
8. Encourage the voluntary transfer of water rights to the Texas Water Trust or appropriate nonprofit water trusts
9. Work with stakeholders and scientists to identify instream flow and freshwater inflow regimes adequate to support fish and wildlife resources

TPWD hatcheries have stocked over 3.9 billion fry, fingerlings and adult fish into Texas waters.

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

C. TPWD will maintain, restore and protect healthy ecosystems on public lands

1. Concentrate on-the-ground conservation efforts on landscapes of high biological value, such as watersheds, recharge zones, wildlife corridors and migratory bird flyways
2. Publish, disseminate and promote guidelines and protocols for habitat restoration and management
3. Inventory conservation, recreation and historic properties to identify gaps in representation and protection
4. Pursue funding for acquisition of land, conservation easements, and the purchase of development rights from willing sellers
5. Acquire additional wildlife management areas in underrepresented ecological regions for habitat conservation, demonstration and public hunting
6. Manage exotic and feral species populations on TPWD lands to minimize impacts

"With three times more privately owned land than any other state, Texas leads the nation in private property ownership."
– Greg Abbott, Texas Attorney General

Anderson Ranch | 2010 Lone Star Land Steward Winner | Hemphill County

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

D. TPWD will foster conservation of healthy ecosystems on private lands

1. Promote voluntary incentive-based management options
2. Increase the number of wildlife cooperatives, with a focus on habitat restoration
3. Incorporate watershed management goals into all Wildlife Management Plans (WMPs)
4. Educate landowners, wildlife cooperatives and nongovernmental organizations about management options, funding opportunities and TPWD programs to help achieve habitat management goals
5. Encourage landowners to cooperatively establish conservation agreements to preserve contiguous habitat
6. Provide technical guidance on wildlife and habitat management, watershed management, and control of invasive and feral species

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

E. TPWD will maintain the highest level of scientific validity and credibility

1. Collaborate with other science-based conservation organizations to expand research efforts and improve scientific methodologies
2. Encourage TPWD scientists to pursue rigorous scientific studies and to disseminate findings in peer-reviewed publications and journals
3. Conduct periodic reviews to ensure internal use of the best science methodologies
4. Develop position papers explaining the scientific basis for the agency's positions and perspectives

"Saving the water and the soil must start where the first raindrop falls."
– Lyndon B. Johnson, 1947

F. TPWD will protect and assist in the recovery of threatened, endangered and high-priority species

1. Use the *Texas Wildlife Action Plan* as the guiding document for prioritizing agency actions to address species of greatest conservation need
2. Review current knowledge, identify gaps and update the status of high-priority species
3. Manage biotic communities to protect, recover and prevent species from becoming threatened or endangered
4. Provide technical advice and coordination for activities of universities, conservation organizations and landowners regarding declining species populations and their habitats
5. Include conservation actions for high-priority and rare species in appropriate division operating plans
6. Cultivate relationships with private landowners and the general public to better assess the status of and to protect, conserve and manage sensitive species and habitats
7. Partner with the U.S. Fish and Wildlife Service and other stakeholders to assemble large-scale protected areas that support grassland birds such as bobwhite quail and the lesser prairie-chicken

Lesser Prairie-Chickens | Yoakum County

© MARK LOCKWOOD

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

G. TPWD will cultivate partnerships that result in tangible conservation benefits

1. Work with international, federal, state, local and private organizations and the public to generate creative ways to achieve landscape-scale habitat management
2. Use joint ventures as a model to identify large-scale habitat recovery goals and the tools needed to accomplish those goals
3. Provide site managers with the skills and tools to work with neighboring landowners
4. Foster regional and statewide dialogue about conservation priorities
5. Provide web links to other conservation and recreation organizations
6. Utilize agency forums to analyze the state's existing and future land and water conservation and recreation needs; identify threatened land and water resources; and establish the relative importance of identified needs

Temple Ranch | 2011 Lone Star Land Steward Winner | Duval County

GAME WARDEN

OPERATION GAME THIEF
"WALL OF SHAME"

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

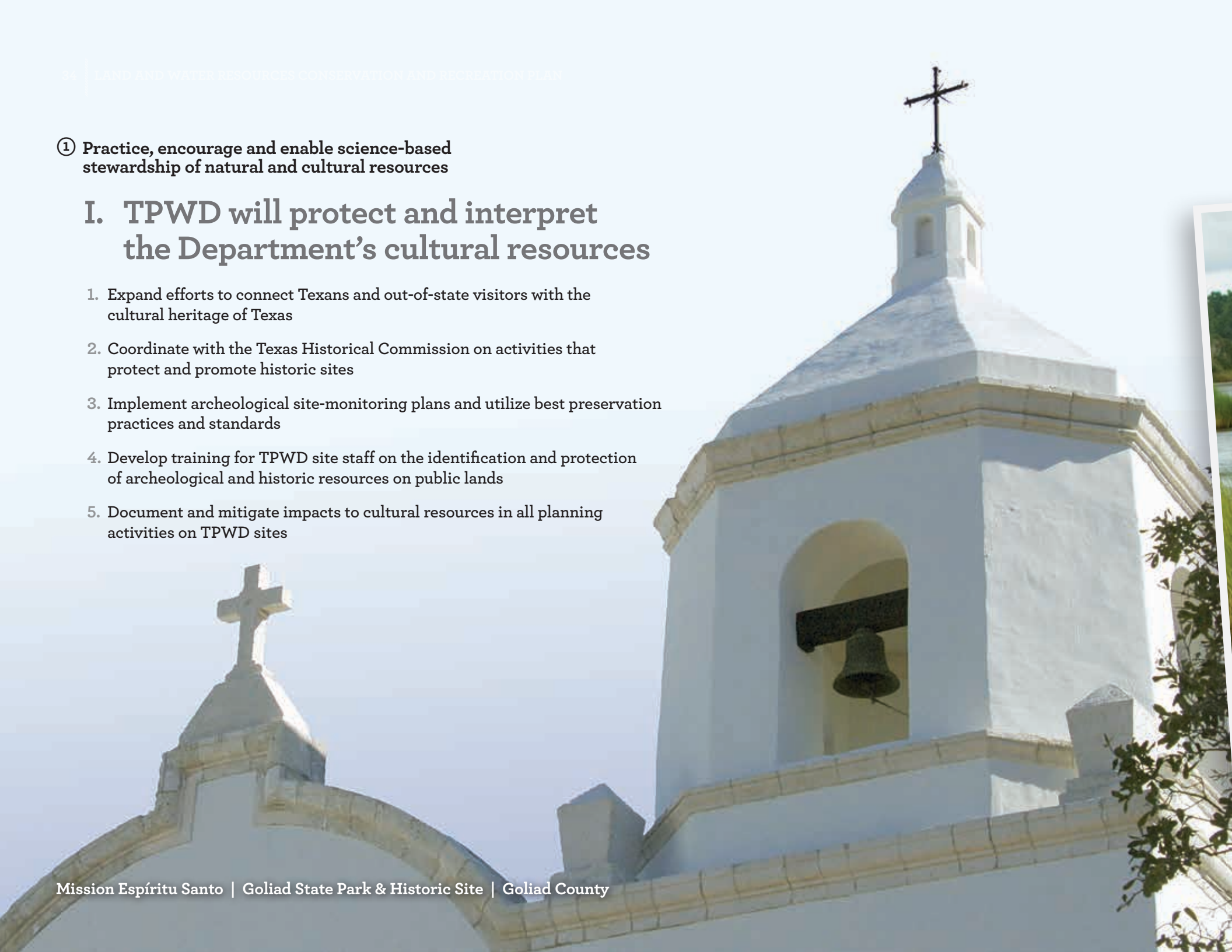
H. TPWD will establish and enforce regulatory actions to protect native habitats

1. Provide a comprehensive law enforcement program that increases the public's understanding and support of TPWD's mission
2. Utilize the best available science and human dimensions data to provide recommendations to policymakers to encourage legal, sustainable and ethical use of natural resources
3. Coordinate with federal, state and local agencies to combat environmental crimes
4. Educate and work collaboratively with businesses and industries regarding compliance with natural resource regulations
5. Promote Operation Game Thief to curb illegal exploitation of fish and wildlife resources
6. Raise the level of voluntary compliance by increasing the number of contacts with hunters, anglers and other stakeholders
7. Implement, strengthen and enforce regulations that prevent the introduction of, and control the proliferation of, harmful exotic or invasive species

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

I. TPWD will protect and interpret the Department's cultural resources

1. Expand efforts to connect Texans and out-of-state visitors with the cultural heritage of Texas
2. Coordinate with the Texas Historical Commission on activities that protect and promote historic sites
3. Implement archeological site-monitoring plans and utilize best preservation practices and standards
4. Develop training for TPWD site staff on the identification and protection of archeological and historic resources on public lands
5. Document and mitigate impacts to cultural resources in all planning activities on TPWD sites



Mission Espíritu Santo | Goliad State Park & Historic Site | Goliad County

① **Practice, encourage and enable science-based stewardship of natural and cultural resources**

J. TPWD will anticipate and plan for emerging conservation issues

1. Participate in international, national, state and regional scientific forums to identify and address emerging issues
2. Support conservation actions that mitigate anticipated climate change or other impacts to plants, fish and wildlife
3. Evaluate the environmental advantages and disadvantages of emerging energy, utility and fuel technologies
4. Encourage the development of renewable energy projects which do not adversely affect plant, fish and wildlife communities

> "Like the resource it seeks to protect, wildlife conservation must be dynamic, changing as conditions change, seeking always to become more effective."
>
> – Rachel Carson, biologist, ecologist and writer

2

INCREASE ACCESS TO AND PARTICIPATION IN THE OUTDOORS

Access to a variety of outdoor experiences is critical for human health and quality of life. Since the vast majority of Texans reside in urban areas, there is a great need to ensure the availability of affordable and accessible outdoor recreational and educational opportunities. Charged with this task, TPWD must engage citizens from all places and all walks of life while maximizing the use of limited public lands and incentivizing public access to private lands.

② **Increase access to and participation in the outdoors**

A. TPWD will provide a variety of high-quality, nature-friendly outdoor recreational opportunities on TPWD sites

1. Increase public fishing and hunting opportunities
2. Provide diverse outdoor recreational opportunities, from urban programs to paddling trails to wilderness backcountry camping
3. Make the development of outdoor programs for Texas youth a priority
4. Expand and enhance agency sites by acquiring inholdings and adjacent tracts from willing donors and sellers
5. Construct facilities and amenities to broaden access to the outdoors, protect natural resources, and enhance the quality of experience for people of all ages, abilities and interests
6. Increase public awareness of recreational opportunities at agency sites
7. Increase compatible recreational opportunities and programs at wildlife management areas
8. Seek opportunities to create new state parks of high biological and recreational value near metropolitan centers
9. Post information at each site regarding its acquisition, mission, purpose, rules and recreational opportunities

B. TPWD will increase and facilitate access to public and private lands and waters for recreation

1. Partner with federal, state and local agencies to provide increased access to public lands and waters
2. Encourage private landowners to provide additional public recreation access to lands and waters
3. Encourage collaboration among adjacent landowners to link recreational venues
4. Encourage wildlife cooperatives to organize recreational activities and events
5. Collaborate with private landowners to increase public hunting opportunities
6. Promote paddling trails, recreational fishing and other forms of aquatic-based recreation in and around urban areas
7. Improve the quality and distribution of boat ramps statewide
8. Work with the Texas Department of Transportation (TxDOT) to evaluate the feasibility of public access to public waters at TxDOT bridges
9. Provide proactive law enforcement to protect the public waterways and the people of Texas

Lake Arlington Paddling Trail | Tarrant County

② **Increase access to and participation in the outdoors**

C. TPWD will encourage people of all ages, backgrounds and abilities to experience the outdoors

1. Promote the enjoyable, responsible and ethical use of natural, cultural and recreational resources
2. Conduct outreach activities and events targeted specifically for underrepresented communities
3. Expand the Texas Outdoor Family program on public and private lands
4. Explore new ways to involve youth and urban residents in outdoor activities
5. Engage underserved populations through multilingual programs
6. Offer recreational workshops that physically engage participants in outdoor activities
7. Continue to provide certification programs such as Aquatic, Hunter and Boater Education

Since 1965, Recreation Grants have awarded Texas communities more than $650 million in state and federal funds for over 3,600 park, boating, trail, OHV and outreach projects.

d State Park

Resaca de la Palma State Park

Luling Zedler Mill Paddling Trail

② **Increase access to and participation in the outdoors**

D. TPWD will encourage nature and heritage tourism

1. Work with international, federal, state, local and private parties to identify creative ways of promoting nature and heritage tourism
2. Assist local communities and private landowners in developing economically viable recreational venues for activities such as wildlife-watching, stargazing, photo safaris, camping and other nature-based recreation
3. Partner with public and private organizations to establish and promote natural and cultural areas and trails
4. Partner with the Texas Nature Tourism Council and others to increase visitation at nature and heritage tourism sites
5. Market agency sites as nature and heritage tourism destinations

The Buffalo Soldiers program shares the compelling story of the heroism and stalwart service of African-American cavalry and infantry regiments formed after the Civil War.

3

EDUCATE, INFORM & ENGAGE TEXAS CITIZENS IN SUPPORT OF CONSERVATION & RECREATION

Texas has a vast diversity of ecosystems and natural resources, many of which are unique to Texas. These landscapes transcend political and ownership boundaries. As a result, wide-ranging awareness and cooperation are critical for effective stewardship of natural and cultural resources. It is essential to develop an array of public and private strategies that build broad-based support for successful and adaptive management, restoration and conservation.

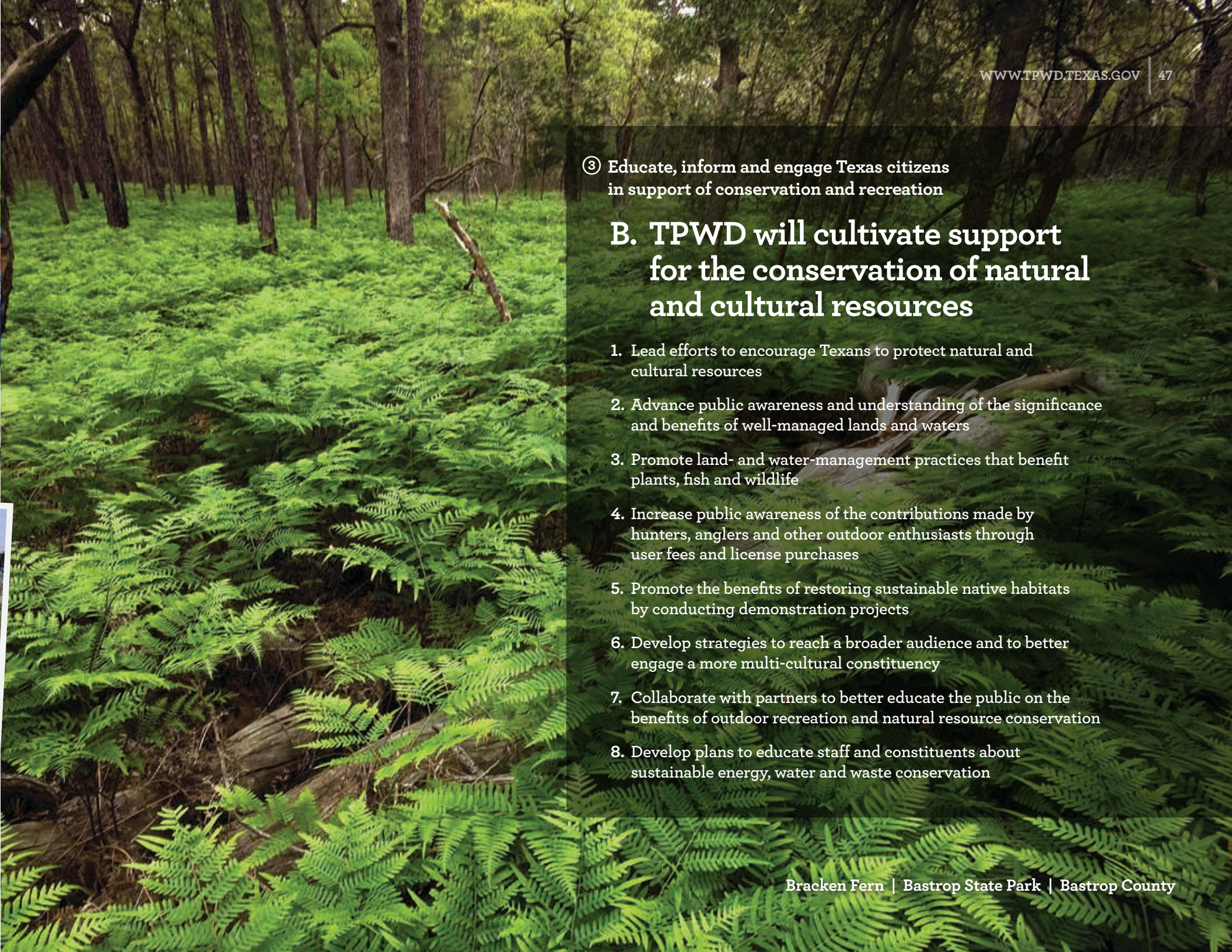
Nature Interpreter | Palo Duro Canyon State Park | Armstrong and Randall Counties

③ **Educate, inform and engage Texas citizens in support of conservation and recreation**

A. TPWD will promote and provide outdoor education

1. Team with classroom educators, and health and physical education instructors, to advocate for a lifelong interest in outdoor recreational activities
2. Expand the availability of training and curriculum tools to educators and conservation partners
3. Develop and implement programs that encourage children's involvement in nature
4. Educate Texans on how land use, water use and water quality affect the lives and health of people, plants, fish and wildlife
5. Educate citizens on the importance of riparian zones, habitat connectivity, mountain sky islands, wildlife corridors and other sensitive habitats
6. Expand interpretation by volunteers at agency sites
7. Educate outdoor users on how to minimize their impacts on nature
8. Promote water safety on public waters

The Texas Brigades is an intensive, multi-partner leadership development program that empowers youth through knowledge of fisheries, wildlife, land stewardship, team-building and communication.



③ Educate, inform and engage Texas citizens in support of conservation and recreation

B. TPWD will cultivate support for the conservation of natural and cultural resources

1. Lead efforts to encourage Texans to protect natural and cultural resources
2. Advance public awareness and understanding of the significance and benefits of well-managed lands and waters
3. Promote land- and water-management practices that benefit plants, fish and wildlife
4. Increase public awareness of the contributions made by hunters, anglers and other outdoor enthusiasts through user fees and license purchases
5. Promote the benefits of restoring sustainable native habitats by conducting demonstration projects
6. Develop strategies to reach a broader audience and to better engage a more multi-cultural constituency
7. Collaborate with partners to better educate the public on the benefits of outdoor recreation and natural resource conservation
8. Develop plans to educate staff and constituents about sustainable energy, water and waste conservation

Bracken Fern | Bastrop State Park | Bastrop County

Llano Springs Ranch | 2008 Lone Star Land Steward Winner | Edwards County

③ **Educate, inform and engage Texas citizens in support of conservation and recreation**

C. TPWD will increase conservation awareness on private lands

1. Utilize wildlife management areas as research and demonstration sites to help expose landowners to the best conservation management practices
2. Educate private landowners on the economic benefits of conservation
3. Promote watershed and range management practices that improve ground and surface water quality and quantity
4. Provide technical guidance, including incentive-based strategies, for protecting and managing habitats for rare and priority species
5. Share information with landowners on the value of historical and cultural resources

"We believe if fate or fortune places you in a stewardship position for any natural resources, it is your duty to humankind to be the very best steward you can be."

– David Langford, Vice-President Emeritus, Texas Wildlife Association

③ **Educate, inform and engage Texas citizens in support of conservation and recreation**

D. TPWD will promote citizen participation in hands-on conservation

1. Encourage participation in the Texas Master Naturalist program
2. Expand and support Texas Nature Trackers programs
3. Encourage volunteerism in support of conservation and outdoor recreation
4. Collaborate with other agencies, organizations and schools to engage youth in conservation programs
5. Demonstrate the benefits of rainwater harvesting, renewable energy and other green technologies

③ **Educate, inform and engage Texas citizens in support of conservation and recreation**

E. TPWD will increase awareness of the value of urban and suburban ecosystems

1. Provide technical guidance to municipalities, developers and local citizens regarding urban conservation issues
2. Provide recommendations and assistance to local governments regarding the importance of green space, watersheds, aquifer recharge zones and park lands
3. Contribute to national and state urban wildlife discussions
4. Support staff professional development to address conservation and recreation issues specific to urban audiences
5. Provide technical guidance and materials on coexisting with wildlife

4 EMPLOY EFFICIENT, SUSTAINABLE AND SOUND BUSINESS PRACTICES

Efficient and effective management of people, finances and assets is critical for the success of any organization. Responsiveness, transparency and accountability are cornerstones of TPWD's commitment to the public. In addition, the agency will strive to leverage its resources by employing a cross-divisional, multidisciplinary and skilled workforce.

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PARKS & WILDLIFE
STATE GAME WARDEN

④ **Employ efficient, sustainable and sound business practices**

A. TPWD will continuously improve business management systems, business practices and technologies

1. Maintain financial and information technology procedures and safeguards that meet or exceed industry standards and best practices, as well as government requirements
2. Improve agencywide coordination of information technology services
3. Improve the accuracy and timeliness of business processes and financial data
4. Increase staff's and stakeholders' understanding of agency business practices and budgets
5. Conduct audits to ensure public funds are spent in a responsible manner
6. Enhance internal business systems to improve, integrate and protect agency information
7. Develop a tool to prioritize opportunistic land acquisitions that are biologically, recreationally and/or culturally significant
8. Develop branding strategies for products and services
9. Improve historically underutilized vendors' opportunities to competitively participate in procurement processes

B. TPWD will provide excellent customer service with integrity and professionalism

1. Use established and emerging technologies to remain current with the changing marketplace and to better serve customers
2. Maximize accessibility of all programs, facilities and services
3. Involve Texans through expanded social media tools, public meetings, public forums, one-on-one conversations and customer surveys
4. Expand Internet-based opportunities to provide fast, secure, one-stop services
5. Ensure that the public can easily identify and contact appropriate program areas and responsible parties
6. Make it easier to obtain TPWD licenses and permits
7. Improve permitting processes by clarifying regulations for customers and enhancing automated systems and processes

C. TPWD will seek and leverage financial resources

1. Seek sustainable state funding for TPWD operations
2. Identify and leverage new and existing revenue streams to maximize recreation and conservation efforts
3. Pursue dedicated state revenue funding for land and water acquisitions, conservation easements and purchase of development rights from willing sellers
4. Maximize federal aid reimbursement through appropriate allocation of funds to approved projects
5. Seek additional grant opportunities

TPWD parks generate an estimated $774 million in retail sales, have a $202 million impact on residents' incomes and sustain 5,871 jobs each year.

④ **Employ efficient, sustainable and sound business practices**

D. TPWD will ensure regulations and publications are balanced, effective and easy to understand

1. Evaluate regulations periodically to determine their usefulness and effectiveness
2. Simplify regulations
3. Ensure that key publications, such as the *Texas Parks and Wildlife Outdoor Annual* and *Texas State Park Guide*, are readable, accessible, easy to use and available online
4. Implement regulations that protect fish and wildlife resources and are consistent with statutory requirements
5. Ensure that regulations are structured so that compliance is achievable, measurable and enforceable

E. TPWD will develop effective communication processes and tools

1. Advance the internal and external exchange of information through existing venues and expanded social networking tools
2. Review all agency communication strategies in order to maximize efficiencies and minimize duplicative efforts
3. Ensure that staff has electronic access to resources, applications, services and each other
4. Implement relevant recommendations from the Survey of Organizational Excellence
5. Improve dialogue with regulatory and oversight agencies and the public

F. TPWD will efficiently manage its lands and facilities for sustainable public use

1. Balance sustainable customer use with resulting ecosystem impacts when planning site acquisitions, developments or operations
2. Implement plans for environmentally-friendly replacement and maintenance of agency equipment and preservation of agency facilities
3. Take advantage of regulatory tools such as compensatory mitigation and Natural Resource Damage Assessment to expand acreage in conservation
4. Transfer or close agency sites that do not contribute to the TPWD mission
5. Assess the cost and benefits of appropriate re-use of existing and historic buildings versus new construction
6. Implement practices that promote green construction, maintenance, water conservation and transportation
7. Adopt best practices to increase recycling and reduce use of utilities, fuel, water and consumables

Sheldon Lake State Park & Environmental Learning Center | Harris County

④ **Employ efficient, sustainable and sound business practices**

G. TPWD will promote an organizational culture which is informed, adaptive and innovative

1. Encourage and reward creativity and outside-the-box thinking
2. Keep agency policies, procedures, plans and programs relevant through periodic review
3. Regularly gauge the success of the *Land and Water Resources Conservation and Recreation Plan* and make results available
4. Advance employees' understanding of their individual contributions to the agency mission
5. Encourage employees to participate in outdoor recreation and conservation activities
6. Promote a work culture that fosters a team approach to problem-solving

H. TPWD will promote a human capital strategy to ensure a professional and diverse workforce

1. Provide professional development and training to improve employees' knowledge, skills, abilities and multi-cultural understanding
2. Implement a recruitment strategy that positions the agency to find and retain the best and brightest employees
3. Support division efforts to develop and sustain effective internship programs
4. Strengthen recruitment and retention practices aimed at increasing staff diversity
5. Create an inclusive environment that values freedom of expression and encourages diversity of thought
6. Facilitate equal advancement opportunities through mentoring, coaching and education

I. TPWD will provide a healthy and safe work environment for its employees and customers

1. Enhance safety protocols at all TPWD facilities
2. Develop effective communication strategies to promote workplace safety for employees and the public
3. Promote a health and safety culture through compliance assistance, cooperative programs and strong leadership
4. Provide ongoing training in the latest safety practices and emerging trouble-shooting techniques

CALL TO ACTION

Texas is blessed with a rich natural and cultural heritage. Conserving this rich heritage will require concerted effort in the face of immense challenges. As the state's population increases, so do land fragmentation, loss of open space, genetic isolation, habitat degradation, and the impacts to our lands and waters. Invasive species are disrupting ecosystems and reducing biodiversity. Drought has become a persistent problem. We face daunting conservation issues that compel us to adapt and innovate to conserve the natural and cultural resources that define our state's proud heritage.

Yet, conservation success stories such as the recovery of endangered brown pelicans and the reintroduction of peregrine falcons and bighorn sheep provide reason for hope. Polls and surveys consistently show that Texas citizens strongly support land, water and wildlife conservation and outdoor recreation, and they are willing to pay for these services.

Resources to address these conservation challenges are limited, so we must work collaboratively and creatively to ensure that our state's fish, wildlife, habitat, parks and recreational areas are protected into the future. No single organization or government entity alone can do what is needed. Individual action is important, but when we work together, the results can be powerful, widespread and lasting. We know you will be an important part of shaping our future. Please do so by helping to implement the Land and Water Plan, understanding the pressing issues in your community and in Texas as a whole, and then taking action. Volunteer at a state park, plant a native garden, join the Texas Stream Team, or become a Master Naturalist. Join us! Get informed, get involved and conserve the best of Texas.

Thanks for caring about our wild things and wild places. They need you now more than ever.

Davis Mountains | Jeff Davis County

Glossary of Terms

Compensatory mitigation
creation, restoration, enhancement, or in certain circumstances, preservation of natural resources or ecosystem functions for the purpose of offsetting those lost or degraded

Ecosystem
the active, changing and interrelated mosaic of plant and animal communities and their associated habitats, environment and processes. Examples: saltwater marsh, oak savanna, tall grass prairie

Environmental flows
flowing waters in a stream that provide aquatic and riparian habitat, water quality protection and freshwater inflows to bays and estuaries

Exotic
plants and animals which did not historically or naturally occur in a location, and which now occur as a result of human action; i.e., imported red fire ant, aoudad sheep, Chinese tallow tree

Feral
domesticated animals that have escaped or are descended from escaped animals, and are living in a wild state; i.e., wild hogs

Freshwater inflows
flowing fresh water that reaches coastal estuaries and mixes with saltwater from the sea; important to sediment and nutrient transport and estuarine species and habitats

Instream flows
the amount of flowing water in a river, usually measured by the volume moving down the channel in a specified amount of time and required to maintain a healthy river

Invasive
a plant or animal that typically does not naturally occur in a specific area, but becomes dominant as a result of a competitive advantage over other species

Landscape scale
a holistic approach to land management that considers biological, physical, environmental, cultural and social parameters, occurring over a large area defined by geographic features as opposed to biological or political boundaries

Natural Resource Damage Assessment
a process established by federal and state law for evaluating and recovering compensation for injuries to natural resources on behalf of the public

Species of concern
a species that might be in need of conservation action but for which there is little data or research available to support listing as threatened or endangered

Stakeholder
person or organization that may have an interest in or be affected by the implementation or completion of a project

Survey of Organizational Excellence
a survey of staff that solicits feedback to inform management of key issues that impact organizational success

Technical guidance
specific recommendations regarding the management of land and water for the benefit of fish and wildlife

Texas Master Naturalist Program
a program which certifies volunteer naturalists following an intensive program of training in a range of natural resource management topics; continuing education is required to maintain this certification

Texas Nature Trackers
a citizen science monitoring program designed to involve volunteers of all ages and interests in gathering scientific data on species of concern

Texas Outdoor Family
a program that introduces families to camping and outdoor experiences through direct participation with outdoor enthusiasts

Texas Surface Water Quality Standards
state-adopted, U.S. Environmental Protection Agency-approved standards that establish explicit goals for protecting the water quality of streams, lakes and bays throughout the state

Texas Water Trust
a program administered by the Texas Water Development Board that enables surface-water right holders to dedicate their water rights to the protection of environmental flows

Texas Wildlife Action Plan
a comprehensive statewide plan that identifies specific actions that promote conservation of wildlife and habitat. Taken as a whole, states' wildlife action plans reflect a national initiative for preventing wildlife from becoming threatened or endangered

Threatened (species)
animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range

Wildlife cooperative
a local organization formed by a group of landowners with common goals for enhancement and/or protection of wildlife habitat and associated wildlife populations

Wildlife Management Areas (WMA)
sites managed by TPWD to perform wildlife and habitat research, conduct resource management education, and provide public hunting, hiking, camping, bird-watching and other outdoor recreation opportunities

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TPWD receives federal assistance from the U.S. Fish and Wildlife Service and other federal agencies. TPWD is therefore subject to Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, in addition to state anti-discrimination laws. TPWD will comply with state and federal laws prohibiting discrimination based on race, color, national origin, age, sex or disability. If you require an accommodation or informational materials in an alternative form, please call (512) 389-4804 (telephone). Individuals with hearing or speech impairments may contact the agency on a Text Telephone (TDD) at (512) 389-8915.

If you believe that you have been discriminated against in any TPWD program, activity or event, you may contact the Human Resources Director, Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas, 78744, (512) 389-4808 (telephone). Alternatively, you may contact the Office of Diversity and Inclusive Workforce Management, U.S. Fish and Wildlife Service, 5275 Leesburg Pike, Falls Church VA 22041.

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"If there is anything left here of a golden age, varmints and nonvarmints and trees and shrubs and grasses and waters and soils and rocks have everything to do with it. They make the place work, sometimes for me but mainly for its own sake and the world's. They were here before me and will be here when I'm gone."

– John Graves, Texas author and naturalist