Natural AGENDA
2001-2005
a strategic plan for texas parks and wildlife
Natural AGENDA

A Strategic Plan for Texas Parks and Wildlife

June 1, 2000
STRATEGIC PLAN
For Fiscal Years 2001-2005
by
Texas Parks and Wildlife

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February 1, 1999 – February 1, 2005
February 1, 1999 – February 1, 2005
February 1, 1999 – February 1, 2005

Fort Worth
Houston
Midland
Fort Worth
Dallas
Houston
Dallas
Alvin
San Antonio

June 1, 2000

Signed: ________________________________
Andrew Sansom
Executive Director
Texas Parks and Wildlife

Approved: ________________________________
Lee M. Bass
Chairman
Texas Parks and Wildlife Commission
It's an exciting time at Texas Parks and Wildlife. Never before in the Department's history have there been so many simultaneous opportunities for improving the way we manage Texas' natural and cultural resources.

First, TPW has recently been through the Sunset Process. Sunset staff delivered their report, which recommends our continuation. The Department was complimented for its “spirit” and for “genuinely trying to meet the public’s needs in imaginative and innovative ways.” But, as with most operational reviews, there's room for improvement. Sunset staff pointed out where we can eliminate duplication of effort, improve public input, and strengthen conservation assistance to private landowners. We've begun to address some of these issues, and soon we'll go before the 77th Legislature who will evaluate our efforts and determine whether TPW remains the state’s leader in natural and cultural resource management.

Much has changed in Texas over the past few decades. It's been thirty years since a needs assessment was completed for the State Park System. The state's demographics have changed. Landowners, non-profit organizations and local governments are becoming engaged in conservation policy. To fully understand the impact of these changes, TPW has contracted with Texas Tech University to complete a two-part study, called Texas Parks and Wildlife for the 21st Century. Part one involves a public opinion survey that will focus on gaining a better understanding of the values and attitudes of Texans and user/non-user constraints to participating in outdoor recreation. Part two will determine the extent and characteristics of public lands and required conservation strategies, plus identify thematic needs and gaps in TPW holdings that will strengthen the concept of a unified statewide system of public/private holdings. Through this study, we will equip ourselves with better, more comprehensive information for future decisions relating to conservation and outdoor recreation.

With 97% of the state's land in private ownership, the long-term viability of Texas' natural resources is in the hands of private landowners. With this in mind, Governor Bush created the Governor's Task Force on Conservation to serve in an advisory capacity regarding important conservation issues facing Texas. Three of our Commission members were appointed to the Task Force, with Commissioner Carol E. Dinkins serving as chair. The Task Force has been charged with examining a long list of concerns and potential solutions, including the impact of land fragmentation on wildlife habitat, landowner assistance for more effective stewardship, promotion of economic activities involving natural resources like nature tourism, strategies for species recovery that respect private property rights, and enhancements needed to the State Park System. TPW looks forward to hearing the Task Force’s recommendations to the Governor in November of 2000.

Perhaps the most exciting news relates to the Conservation and Reinvestment Act (CARA), now before Congress. This piece of legislation would permanently reinvest revenue from federal Outer Continental Shelf oil and gas production into the conservation of the nation's natural resources. This could mean over $225 million per year for Texas! CARA funding could provide additional opportunities for youth, allow private landowners to become more involved in conservation management, provide greater protection for coastal resources, and better conserve our wildlife diversity. It would also increase the amount of natural habitat, forest lands, wetlands, cultural sites and recreation lands available to the public. On May 11, 2000, the U.S. House of Representatives overwhelmingly approved CARA by a 315 to 102 vote. The legislation now goes to the Senate, with markup set for June. If ultimately passed, CARA would represent the greatest financial commitment ever made to the nation’s natural resources.

Finally, we are ever mindful of the importance of strategic planning as an agent for change. Borne out of input from employees and constituents, Natural Agenda continues to be our greatest tool for keeping our conservation efforts relevant and on track. There's also no better document for expressing who we are and why we exist.

With even greater focus for the future--and new financial resources hopefully on the way--we should be able to accomplish most everything in the plan before you. That's our promise to Texans.

Andrew Sansom
Executive Director
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Together, we can make Texas a beacon state:

- a state where our children receive an excellent education so they have the knowledge and skills for the 21st century;

- a state where people feel safe in their communities, have access to equal justice, and all people know the consequences of committing a crime are swift and sure;

- a state where our institutions encourage jobs and economic opportunity;

- a state where each resident accepts responsibility for his or her behavior; and

- a state where our people – our greatest resource – are free to achieve their highest potential.

As I have said before, I envision a state where it continues to be true that what Texans can dream, Texans can do.

– George W. Bush
Governor

The mission of Texas state government is to support and promote individual and community efforts to achieve and sustain social and economic prosperity for its citizens.
**Limited and Efficient Government** - Government cannot solve every problem or meet every need. State government should do a few things and do them well.

**Local Control** - The best form of government is one that is closest to the people. State government should respect the right and ability of local communities to resolve issues that affect them. The state must avoid imposing unfunded mandates.

**Personal Responsibility** - It is up to each individual, not government, to make responsible decisions about his or her life. Personal responsibility is the key to a more decent and just society. State employees, too, must be accountable for their actions.

**Support for Strong Families** - The family is the backbone of society and, accordingly, state government must pursue policies that nurture and strengthen Texas families.

To conserve and protect the state’s natural resources through prudent stewardship.

The statewide benchmarks directly applicable to Texas Parks and Wildlife from Vision Texas are:

- Percent of state parks that are adequately maintained
- Percent of Texas land conserved as public or private natural and wildlife areas
- Number of acres of wetlands, including acres mitigated and created.
To manage and conserve the natural and cultural resources of Texas for the use and enjoyment of present and future generations.

We seek to balance outdoor recreation with conservation as we achieve greater self-sufficiency. On one hand, we must manage and protect our natural and cultural resources. At the same time, we must generate increased revenue by adding value through more and better public services. We affirm that a culturally diverse well-trained staff will best achieve this balance. And we must never forget, not in the haste of business, nor in the pride of science, that the outdoors should above all be a source of joy! Providing outdoor experiences, whereby young minds form values, will be our greatest contribution to the future.
Primary Functions
The Department’s primary functions are management and conservation of the state’s natural and cultural resources, provision of outdoor recreational opportunities, conservation education and outreach, and cultural/historical interpretation. To this end, TPW operates and maintains a system of public lands, including state parks, historic sites, fish hatcheries and wildlife management areas; monitors, conserves, and enhances the quality of public and private lands, rivers, streams, lakes, coastal marshes, bays, beaches, and Gulf waters; manages and regulates fishing, hunting and boating activities; assists public and private entities in providing outdoor recreational opportunities; conducts education and outreach events and programs; and cooperates with other governmental entities in these areas.

Vision Texas
Many of Texas Parks and Wildlife’s functions relate to the overall social and economic prosperity of the state. Governor Bush developed Vision Texas to strategically focus Texas as a whole. The Department directly contributes to Texas’ mission and a number of goals laid out for the state through his leadership. Our most significant contribution to Vision Texas is reflected in our support of the state’s Natural Resources goal. Conserving Texas’ plentiful and magnificent resources through prudent stewardship is our commitment to the citizens of the state. The relationships between TPW strategies and statewide benchmarks are demonstrated above.

<table>
<thead>
<tr>
<th>TPW Strategy</th>
<th>Supports Statewide Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>010201</td>
<td>Percent of State Parks that are Adequately Maintained</td>
</tr>
<tr>
<td>010202</td>
<td>Percent of Texas Land Conserved as Public or Private Natural and Wildlife Areas</td>
</tr>
<tr>
<td>030201</td>
<td>Number of Acres of Wetlands, Including Acres Mitigated and Created</td>
</tr>
</tbody>
</table>

Important contributions are also made to the state’s goals for economic development, public safety and criminal justice, and health and education.

Economic impacts include provision of jobs in rural areas across the state, for example at state parks. Dollars spent by visitors at state parks and surrounding businesses boost local economies by creating jobs and capital growth. Finally, real estate property values increase when located near Department sites.

In the areas of public safety and criminal justice, TPW provides a variety of recreational and educational opportunities to Texas youth. Creating positive experiences for utilization of non-school time is an important part of what we do. Programs like the Texas Buffalo Soldiers, Blazing New Trails, and Exploring Texas Roots are for everyone to enjoy, but are frequently targeted to
"at risk" youth. In addition, TPW partners with the Texas Youth Commission to serve youth under their authority with programs whenever possible.

In terms of health and education goals, research affirms that outdoor recreation and physical activity improve people's health and reduce the risk of many illnesses. The young and old alike benefit from regular physical activity. To that end, TPW provides hiking and biking trails and swimming pools at many of its facilities. The Department also educates citizens about Texas' rich natural and cultural heritage. We offer many outstanding educational programs and consider our state parks, historic sites, wildlife management areas and fish hatcheries educational "assets." Environmental education, for instance via Project/Aquatic Wild and our website, is considered one of the best tools for improving interest in school and in courses like math, science and reading.

While the primary focus of TPW's efforts will always be conservation and management of the state's natural and cultural resources, we are pleased to support other state goals.

---

"It costs approximately $30,000 to incarcerate a juvenile offender for one year.

If that money were available to the Park Department, we could:
- Take him swimming twice a week for 24 weeks, and
- Give him four tours of the Zoo, plus lunch, and
- Enroll him in 50 community Center programs, and
- Visit Oxley Nature Center twice, and
- Let him play league softball for a season, and
- Tour the gardens at Woodward Park twice, and
- Give him two weeks of tennis lessons, and
- Enroll him in two weeks of day camp, and
- Let him play three rounds of golf, and
- Act in one play, and
- Participate in one fishing clinic, and
- Take a four-week pottery class, and
- Play basketball eight hours a week for 40 weeks

After which we could return to you:
- $29,125 and one much happier kid.”

—Bob Jennings
Naturalist III, Oxley Nature Center
Hugh McKnight, Director
Tulsa Parks and Recreation Department
For the FY 2000-2001 biennium Texas Parks and Wildlife has an authorized workforce of 2,954 full-time equivalent employees. This authorization is utilized through approximately 2,650 regular full and part-time budgeted positions, supplemented by a seasonal temporary workforce that peaks at around 700 employees during the May through September time period. Due to the nature of our work, large percentages of Department employees serve in scientific, technical, regulatory, conservation and law enforcement capacities.

We are a field organization with greater than 75% of our employees at more than 225 locations throughout the state. This dispersion of facilities and employees creates strengths and weaknesses:

**Strengths**
- creates agency presence and positive economic impact in many Texas communities
- places resource managers in close contact with the state’s natural and cultural resources

**Weaknesses**
- creates complicated communication network
- makes coordination of programs difficult
- requires extensive travel by staff
- requires expensive andlogistically complex statewide information network
The Department has made progress in increasing overall numbers of minorities and women in its workforce, but efforts to enhance the number of minorities (particularly Blacks) and women in non-traditional career fields must continue. Texas Parks and Wildlife’s workplace diversity program works to achieve representation of these groups, as well as persons with disabilities, throughout the organization. An example of recent success in this area is the 47th class of the Game Warden Academy, of which 17% are minority (14% Black) and 14% are female.

**Women in the Workforce**

Source: TPW Human Resources Division

<table>
<thead>
<tr>
<th></th>
<th>1988</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>75.4%</td>
<td>68.4%</td>
</tr>
<tr>
<td>Female</td>
<td>24.6%</td>
<td>31.6%</td>
</tr>
</tbody>
</table>

Leadership Initiative

A recent statewide human resource management and technical training needs assessment showed that TPW employees want more training to prepare them for their jobs and especially their management roles. Texas Parks and Wildlife has responded with the development of a leadership program. The program represents a commitment to our employees to increase their growth potential, create a more unified culture and establish a broad-based understanding of our mission. A combination of training, experiential opportunities and project work will span a portion of an employee’s time over the course of a year. TPW is looking forward to an exciting first year of this program and expansion in the years to come.

**The Natural Classroom Intern Program**

The Natural Classroom is an effort by Texas Parks and Wildlife to introduce interested prospective professionals to our agency and to stimulate teachers at all grade levels to inspire joy and respect for the magnificence of Texas’ natural and cultural resources. The three key components of this initiative are the: Conservation Student Intern Program, Teacher Intern Program, and Natural Classroom Symposium.

Since the inception of the Department’s Student Intern Program in 1992, we have had 401 students participate in the program. Of those, 31 students have been hired in regular full-time positions. This summer intern program provides opportunities for college students to work alongside Texas Parks and Wildlife professionals and share first-hand the experiences which support the Department’s mission.

The Teacher Intern Program provides public school teachers with hands on experience as they serve a six-week internship working with Department staff. These teachers then translate their experiences into lesson plans or other school activities that encourage future generations to become good stewards of state resources.

At the end of the summer internships, the Natural Classroom Symposium provides students and TPW staff a forum to share what they have learned. During this time they also have the opportunity to discuss the status and future of educational and awareness programs, as well as strategies to better accomplish our mission.
Three columns of text, separated by a table:

**Value of Agency Assets**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$198,422,182</td>
</tr>
<tr>
<td>Facilities</td>
<td></td>
</tr>
<tr>
<td>Buildings</td>
<td>96,142,535</td>
</tr>
<tr>
<td>Improvements</td>
<td>162,576,089</td>
</tr>
<tr>
<td>Furniture &amp; Equipment</td>
<td>57,188,655</td>
</tr>
<tr>
<td>Construction in Progress</td>
<td>30,820,411</td>
</tr>
<tr>
<td>Vehicles, Boats &amp; Aircraft</td>
<td>45,842,884</td>
</tr>
<tr>
<td>Other Fixed Assets</td>
<td>345,792</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$591,338,548</strong></td>
</tr>
</tbody>
</table>

* Book Value as of 08/31/99

**Assets**

Texas Parks and Wildlife owns the headquarters complex and most of its facilities throughout the state. Building and land improvements, campsites, historic sites, boats and vehicles are examples of assets the Department owns and operates. In addition, over 175,000 square feet of office, warehouse and storage space are leased. Total managed assets exceed $591 million.

**TPW Lands**

FY99 Acreage*

<table>
<thead>
<tr>
<th>Category</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Parks &amp; Historic Sites</td>
<td>625,634</td>
</tr>
<tr>
<td>Fish Hatcheries</td>
<td>1,646</td>
</tr>
<tr>
<td>Wildlife Areas</td>
<td>445,403</td>
</tr>
</tbody>
</table>

* Includes leased lands

Source: TPW Land Ledger
Finances
Texas Parks and Wildlife's appropriations as approved by the 76th Legislature are $219.5 million for FY00 and $194.5 million for FY01. These amounts do not include various riders which allow appropriation of revenues.

The 76th Legislature approved new general revenue funding for state parks, purchase of badly needed equipment and the hiring of new employees. Legislators appropriated $5 million annually to increase the

amount available for local park grants, Community Outdoor Outreach Program grants, indoor recreation grants and for local entities to provide recreation opportunities. Legislators also approved spending $5 million on conservation education projects and provided debt service funding for Texas Parks and Wildlife to issue $16.3 million in state park development bonds. In addition, employees received raises as part of the appropriations bill.

Who Pays the Bills?
FY 2000 Revenue Projections

FY 2000 Revenue Projections by Fund

Source: TPW Administrative Resources Division
Capital funding for investment in automation must continue to be a priority to keep the Department technologically current. Although there is a perception that technological advancements save money, in reality many projects cost more than existing systems, but provide significant information enhancements, increase the Department's credibility with the public, and improve customer service. Often the improved information can result in additional revenue if managed for that purpose.

Previously, a backlog of capital projects was identified as one of the most critical issues facing Texas Parks and Wildlife. As a result of the Infrastructure Task Force Report and other studies, Texas Parks and Wildlife has worked closely with state leadership to address this serious issue. In order to begin major facility repairs, the 75th Legislature provided $60 million in revenue bonds to be repaid from general revenue. These repairs fall within the categories of health and safety, regulatory and resource damage, Americans with Disabilities Act requirements, water/wastewater projects and hatchery renovations.

Additionally, state leadership responded favorably to the Department’s request for additional appropriations for small repair and maintenance needs at Texas Parks and Wildlife facilities. The Infrastructure Task Force Report identified ongoing maintenance and small repairs as a critical need, that if left unaddressed would mean an even larger backlog in the future. It is important that scheduled and routine maintenance continue to ensure that facilities do not deteriorate. During the 76th Legislative Session an additional $3 million in appropriations for small repair and maintenance was approved.
HUB Program
Texas Parks and Wildlife is committed to supporting and promoting the State of Texas Historically Underutilized Business (HUB) Program. We are determined to ensure that contracting opportunities for minority and female-owned businesses exist throughout all divisions of the Department.

For the period encompassing the first six months of FY 2000, TPW spent $1,127,831 with adjusted HUBs. This number represents 4.69% of our total expenditures and a slight increase over statistics reported for FY 1999. Not reflected in these statistics is an additional $1,355,756 spent with overutilized HUBs which is subtracted from the overall amount spent with certified HUBs to determine the adjusted amount and percentage.

While TPW recognizes that our percentage of purchases from HUB vendors has been below target, we are aggressively working to reverse this trend. We are focusing our efforts in the following key areas: vendor outreach, education and recruitment; staff education and training; improved methods of communication and distribution of HUB-related information; and improved tracking and reporting of procurement card and subcontracting expenditures. In addition, TPW continues to participate in economic opportunity forums sponsored by the General Services Commission, the Texas Legislature and other entities across the state.

In our efforts to build a strong HUB program, TPW strives to incorporate the provisions of SB 178, thus ensuring a good faith effort to utilize HUBs. We are confident that planned initiatives implemented over the course of the next biennium will ensure improvement in HUB participation.

HUB GOALS
The six procurement categories and their accompanying goals are:

<table>
<thead>
<tr>
<th>Category</th>
<th>Goal FY99</th>
<th>Goal FY00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Construction</td>
<td>11.9%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Building Construction</td>
<td>26.1%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Special Trade Construction</td>
<td>57.2%</td>
<td>55.0%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>20.0%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Other Services</td>
<td>33.0%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Commodities</td>
<td>12.6%</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

The goals as outlined are “unadjusted.” Many of these numbers were adjusted down to reflect the “overutilization” of certain groups within a given procurement category identified in the Disparity Study.
Because Texas Parks and Wildlife is heavily dependent upon its customers, demographics must be an integral component of our future planning. Evaluation of our operating philosophies along with the types of services and programs provided must be ongoing to ensure the future needs of all Texans are satisfied.

**Population Growth**

Texas' population has increased rapidly. A 1970 population of 11.2 million grew to 19.7 million by 1998. Texas population is projected to increase by a rate of 1.8 percent per year over the next six years, resulting in a projected population of 22.3 million people for 2005. If this rate continues, the population will double in the next 35 to 40 years. Most of this growth has occurred, and will continue to occur, in metropolitan and adjoining counties. Counties in Texas accounting for 80% of the population change from 1990 - 1996 include Harris, Dallas, Tarrant, and Bexar counties.

This population increase will affect the labor force, income patterns, markets for goods and services, and demands on government services and costs. With the increased population and urbanization trends, Texas Parks and Wildlife is faced with meeting new demands placed on our programs and services. Survey data collected from our sites indicates that many people list "getting away" as the major reason for visiting a Texas Parks and Wildlife site. Customers are seeking wide open spaces, but indicate that participation in many outdoor activities is not considered if they are "too far away." Similarly, according to the Travel Industry Association of America, 52 percent of all travel by Americans in 1996 was weekend trips. The Department must work to provide recreation opportunities close to urban areas.

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**Major Demographic Trends Affecting Texas’ Future:**

- continuing population growth
- aging of the population
- increase in the minority population
- change in household composition

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**Population by Year for Texas 1996-2005**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>18,991,000</td>
</tr>
<tr>
<td>1997</td>
<td>19,342,300</td>
</tr>
<tr>
<td>1998</td>
<td>19,712,100</td>
</tr>
<tr>
<td>1999*</td>
<td>20,083,300</td>
</tr>
<tr>
<td>2000*</td>
<td>20,452,800</td>
</tr>
<tr>
<td>2001*</td>
<td>20,818,100</td>
</tr>
<tr>
<td>2002*</td>
<td>21,188,800</td>
</tr>
<tr>
<td>2003*</td>
<td>21,567,500</td>
</tr>
<tr>
<td>2004*</td>
<td>21,951,300</td>
</tr>
<tr>
<td>2005*</td>
<td>22,343,800</td>
</tr>
</tbody>
</table>

Source: Texas Comptroller of Public Accounts

*Projected
Aging Population
The Texas population is aging as baby boomers (persons born from 1946 through 1964) begin to enter middle age. According to Texas Comptroller’s Office estimates, there will be more than 2.2 million Texans over the age of 65 by the year 2005. The U.S. Census Bureau reports that the increase in the number of elderly in Texas will move the state from fifth place in 1995 to third place in 2025 in the ranking of all states. As Texans live longer and become a larger segment of our customer base, Texas Parks and Wildlife must continue to plan for their needs as programs and services are developed.

Increase in the Minority Population
Texas can expect substantial growth in its minority population. In 1980, the minority population was 34 percent of the total population. By 1990 this number had grown to 39 percent. Texas had the second largest Hispanic population, the third largest Black population, the fourth largest Asian population, and the eighth largest Native American population of all states in 1990. When 2000 census data becomes available, we anticipate similar or even higher rankings.

Texas is one of the key minority states in the country. If current patterns continue, Texas is projected to have a larger Hispanic population than Anglo population by 2030. Census Bureau reports also indicate a significant increase in the state’s Black and Asian populations. As growth comes from immigrants and their descendants, many new households in Texas will involve persons largely unfamiliar with the state. They will bring with them a diverse range of public service expectations.
Texas Parks and Wildlife surveys indicate that minorities participate in agency programs and services at lower levels than Anglos. This points to the need for effective education and outreach programs. To serve all Texans we must understand the recreational needs and cultural values of minority citizens and direct our resources accordingly.

**Change in Household Composition**
As the population of the state changes and grows, so does the makeup and number of its households. Average household size in Texas is still on the decline. In 1990 one- and two-person households accounted for 54 percent of all households. Between 1970 and 1990, the proportion of family households declined by 10 percent. Married-couple households declined by 15 percent, while single-parent households increased by nearly 5 percent during the same period. Census data for 2000 will likely reveal similar trends. While the household size is decreasing, the total number of households in Texas will increase as the population increases.

Education and outreach efforts addressing the changes in household composition continue. Texas Parks and Wildlife provides education and recreation opportunities for women through the Becoming an Outdoors Woman program, for single parents and their children at special fishing events, and for "at risk" youth during hunting and fishing camps.

### State Park Visitors

**Did you visit a Texas state park in the last 12 months? Respondents saying Yes include:**

- 48.4% Anglo
- 41.4% Hispanic
- 35.5% Black
- 42.3% Asian
- 42.1% American Indian
- 46.3% Other

*Source: 1998 Texas A&M Study*

### Participation in Hunting and Fishing

<table>
<thead>
<tr>
<th></th>
<th>HUNTING</th>
<th>FISHING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo</td>
<td>20.4%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12.9%</td>
<td>22.4%</td>
</tr>
<tr>
<td>Black</td>
<td>7.9%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Other</td>
<td>14.0%</td>
<td>29.0%</td>
</tr>
</tbody>
</table>

*Source: 1998 Texas A&M Study*
Nature-based tourism continues to be one of the fastest growing segments of the Texas travel business. According to the U.S. Fish & Wildlife Service, nearly 3.6 million state residents 16 years and older participated in wildlife-watching activities such as observing, feeding, or photographing wildlife in 1996. Many staff and constituents consider creation and promotion of eco-tourism opportunities to be the Department’s future niche and financial future.

Despite participation trends of concern, hunting and fishing in Texas continues to be “big business.” Hunting-related dollars trickle down to local counties in the way of increased business at restaurants, hotels, hunting supply stores, filling stations, grocery stores and more. Many of these small businesses rely heavily on the thousands of hunters who make the annual journey to their area. In five Texas counties alone, Webb, Kerr, Llano, Gillespie, and Dimmit, over 22 million hunting-related dollars have poured into the local economy. Total expenditures by hunters 16 years and older in Texas during 1996 was $1.4 billion.

Even more impressive is the contribution anglers make to the Texas economy. In many areas of the state, fishing is a year-round business. The 1996 Economic Impact of Sport Fishing in Texas, a comprehensive study completed by the American Sportfishing Association and funded by the U.S. Fish and Wildlife Service, ranked Texas as second among all states in economic output and third in angler expenditures. During that same year, anglers spent over $2.8 billion for fishing-related goods and services throughout the state. In many small communities, angler expenditures, like hunting expenditures, were central to the economic health and growth of that area. As the Department continues to provide more year-round opportunities for both saltwater and freshwater anglers, expenditures are expected to increase accordingly.

Demographic trends also play a role in determining the future economic health of the state and TPW. Participation in hunting and fishing activities is projected to grow along with state population. However, the overall percentage of Texans who hunt or fish may decline due to continued urbanization and less emphasis on these traditional activities. We know that non-traditional households are growing, and statistics show their financial resources are fewer. Minority Texans also typically have lower incomes, leaving less disposable income for discretionary activities like hunting, fishing and visiting state parks.

As Texas Parks and Wildlife plans for the future, we simply cannot neglect the importance of economic and demographic trends. The Department must continue to enhance education, awareness, and participation opportunities to ensure that all future generations of Texans experience and enjoy these outdoor activities.

★ Seventy-seven million Americans 16 years or older, or 40% of the adult population, enjoyed some form of wildlife-related recreation during 1996. In doing so, they pumped $100 billion into the national economy.

Education and Outreach are key to enlisting Texans' understanding, support, compliance, partnership and action.

Examples of Education and Outreach Efforts

<table>
<thead>
<tr>
<th>Wildlife Expo</th>
<th>Project WILD/Aquatic WILD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Becoming an Outdoors Woman</td>
<td>Adopt-a-Wetland</td>
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<tr>
<td>Buffalo Soldiers</td>
<td>The Natural Classroom</td>
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<td>Youth Camps</td>
<td>Education Partnerships</td>
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<td>Historic Homes Tours</td>
<td>Nongame and Urban Programs</td>
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<td>Historical Reenactments</td>
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<td>Living History Programs</td>
<td>WMA Tours</td>
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<td>Texas Conservation</td>
<td>Service/Distance Learning</td>
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<td>Passport Tours</td>
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<td>Park Interpretation</td>
<td>Hatchery Tours</td>
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<tr>
<td>Mobile Target Range</td>
<td>Hooked on Fishing--Not on Drugs</td>
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<tr>
<td>Angler/Aquatic Education</td>
<td>Texas Freshwater Fisheries Center</td>
</tr>
<tr>
<td>Boater Education</td>
<td>Texas “Coastal Expos”</td>
</tr>
<tr>
<td>Hunter Education</td>
<td>Outdoor Kids</td>
</tr>
<tr>
<td>Firearm/Water Safety</td>
<td>Exploring Texas</td>
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<td>Texas Parks &amp; Wildlife Magazine</td>
<td>Electronic Field Trips</td>
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<tr>
<td>Internet Home Page</td>
<td>Virtual Fishing/Hunting Simulators</td>
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</table>

Education/Outreach

Education and outreach help us strengthen cooperative efforts with the citizens of Texas to achieve our mission. Education is critical to enlisting Texans' understanding, support, compliance, partnership and action. Outreach is important to reaching new customers, especially youth, minorities, women and the elderly, who comprise a small percentage of our traditional user base but a large and ever-increasing percentage of our demographic base. Texas Parks and Wildlife's commitment to education and outreach is expanding. All employees are involved in efforts to reach more people with programs and opportunities that reinforce our message and introduce Texans to the state's great resources.

Need

The need for strong educational programs is based on increasing pressures on Texas' resources. We must ensure that people learn how to enjoy the outdoors safely, responsibly and knowledgeably "leaving it better than they found it!" And, when we find families and youngsters who exhibit the right attitude and behaviors, we must recognize their efforts to conserve cultural and natural resources for future generations.

The need for strong outreach efforts is based on providing increased or enhanced opportunities for more people to participate in outdoor activities. We must initiate strategies which break down the barriers to participation for those who lack the knowledge, skills, finances, time or resources to head outdoors. Strategies may include a shift of Department resources to those areas of the state that will experience the most growth in the next two decades, namely Dallas/Ft. Worth, Houston, San Antonio/Austin and South Texas. Urbanization may necessitate teaching that the "outdoors" is something they can find in urban settings as well as in rural places. For example, a backyard wildscape can be an important place to educate citizens about relationships with our natural world and how management of habitat is critical to wildlife.
Education Continuum
The education continuum is a model of learning that depicts progressively greater involvement of an individual in an educational experience. Since most outdoor activities can be enjoyed and learned over one’s lifetime, the continuum is something that a person can begin at any juncture in his or her life. To Texas Parks and Wildlife educators, the continuum means: 1) making people aware of new outdoor and/or conservation opportunities, 2) teaching them new knowledge and skills, 3) leading them to think critically about their behaviors or responses to outdoor conditions, and 4) mentoring or watching them take what they have learned, then act responsibly regarding cultural and natural resources.

Agencies, employees, partners and volunteers are faced with limited time and resources by which to educate the public. Educators try to find methods where they can most effectively reach as many people as possible to develop awareness of conservation issues. Examples are filming for television, exhibiting at shows and fairs, printing material for mass distribution, presenting to large crowds or sending interactive information over the World Wide Web. These are opportunities at the awareness end of the spectrum that provide people with their initial exposure to outdoor topics, sites or activities.

More involved educational processes deal with targeting smaller groups by using specific training techniques or curricula. People benefitting from instruction at this stage begin to develop mastery through increased knowledge and skills about the outdoors. Examples are workshops, tours or training courses. These efforts target those who are “motivated.” Once developed, people begin to search out opportunities and places to apply new skills in outdoor settings.

The most involved efforts are those that really impact or shape the lives of individuals, such as long-term, community-based outdoor clubs, conservation organizations, sportsmen and women’s groups, mentorships and volunteer service assignments. People incorporate their knowledge and skill into their lifestyle in an independent fashion. Education programs at this level impact fewer individuals, but those who are affected become advocates for the Department’s mission and stewards for conservation.

Partnerships
To educate and reach out to new audiences, TPW must continue to seek out valuable partnerships, especially with schools, volunteers and other natural resource agencies. Community education must become the standard. Local businesses and industries must continue to expand their roles, whether it is through cash and/or in-kind donations or through mentorships. Outdoor education must serve as a selected alternative, steering youth and families away from problems like gang violence and drugs. Visitor centers will play a more critical role in the future as more people seek places to get away and learn about or enjoy the outdoors. The most effective outdoor education programs involve all of these aspects of partnership.

Education and Outreach Philosophies
- Provide fun, outdoor experiences, whereby young minds form positive values
- Provide for lifelong experiences, taking people from awareness to action (education continuum)
- Reach out to non-traditional customers, particularly youth, women, minorities and the elderly
- Maintain efforts to educate traditional customers to be safe, responsible and involved in the Texas outdoors
**Programs and Opportunities**

Educational programs and opportunities are afforded by every division within the Department. The “Education and Outreach Team,” comprised of personnel representing every division, is charged with overseeing strategic direction and examining the needs and challenges faced as we establish or enhance programs. Educational programs today include a wide variety of formats and settings: community-based programs; interpretation at our state parks and wildlife management areas; formal and informal classroom experiences; media and information releases, brochures and books; exhibits at shows, meetings and conferences; one-on-one contacts by game wardens and biologists; hands-on opportunities in the outdoors; visitor centers; and special events and celebrations.

TPW highlights many of its education and outreach programs at its annual special event “Texas Wildlife Expo.” The event attracts tens of thousands of visitors to Texas Parks and Wildlife’s headquarters in Austin the first weekend in October of each year.

The Department also provides educational programs resulting from state and commission mandates like the mandatory hunter and boater education programs. Established as safety courses to reduce outdoor accidents in hunting, fishing and boating, these efforts also stress outdoor ethics and natural resource conservation. The programs employ collectively over 4,000 volunteers, professional educators and youth group leaders, who provide over 500,000 hours of in-kind contribution annually. These and many other efforts reach over 950,000 people each year in direct eye-to-eye contacts that excludes those reached through mainstream media and the Internet.

A new program entitled "Outdoor Kids" is an attempt to combine many of TPW’s family and youth-oriented programs under a single umbrella message. Outdoor Kids acts to recognize all of those families and youngsters who have completed milestones along the "nature, history and recreation" trails and who have completed a conservation service project on behalf of the Department. The Outdoor Kids journal takes youngsters through the education continuum by encouraging them to explore outdoor resources within their realm. It is a process guided by Texas Parks and Wildlife employees, not taught by them. Ideally, the process involves family, friends, community, teachers, local businesses, conservationists, and partners such as scouts, 4-H, recreation centers and civic groups.

Outdoor Kids embodies the spirit of what Texas Parks and Wildlife education and outreach efforts are all about.

Every TPW employee has a role and a stake in seeing that outdoor education opportunities exist. Where public resources are scarce, private partnerships and/or technology must help to reach the masses with quality efforts. Education efforts must seek to maximize time spent with individuals by employing hands-on activities rather than lecture-based approaches. Education programs must be fun! The outdoors is a place to enjoy, and educators need simply to lead and/or mentor newcomers—whether it is to try a new outdoor activity, or to take a hike in the natural landscape, or to watch birds and other wildlife, or to visit a historic site. Through our education and outreach efforts and partnerships, we must involve Texans as stewards of their heritage. By doing so, future generations will value Texas’ rich cultural traditions and diverse natural resources, and the critical role we all have in passing on these legacies.
Private Lands
The vast majority of Texas’ most precious natural and cultural resources are, and will always be, on private lands. Texas Parks and Wildlife’s ability to manage and conserve the state’s natural and cultural heritage, including wildlife and the habitats upon which they depend, is tied directly to the strength of our partnership with private landowners. This partnership involves technical assistance to private landowners in their voluntary efforts to conserve wildlife populations and habitat, and to protect and restore endangered species and plant communities. Many partnerships are already in place, but we must continue efforts to strengthen them and reach out to new partners.

A number of challenges exist today to make achieving our goals, as well as those of most private landowners, more difficult. Increasing absentee ownership and continued break-up of private family lands greatly affect our ability to manage lands effectively. Texas’ present system of taxation, in fact, encourages such fragmentation. Financial incentives to landowners for the use of their land and responsible management are few. Land-use restrictions and unwanted regulations tie the hands of landowners and contribute to negative perceptions which hurt our ability to build essential working relationships. Continuing urbanization and environmental illiteracy among many Texans results in apathy and lack of understanding about natural and cultural resources and their proper management. This lack of conservation education, including the role private landowners play in resource management, is considered a significant barrier to future conservation and enjoyment of wildlife and habitat.

Private Lands Advisory Board
Past concerns over private landowner input have been partially addressed by forming a Private Lands Advisory Board, appointed by the Chairman of the Commission, to act as a sounding board on regulations and private lands issues affecting landowners. Always keeping private landowner rights in mind, the Advisory Board has been instrumental in addressing issues on liability and land conservation, including the revenue neutral Proposition 11 Tax Valuation for Wildlife Management.
Lone Star Land Steward Awards
The public often perceives that "protected" or "well managed" lands are owned by government agencies or conservation organizations. The reality is that many private landowners do an excellent job of conserving habitat, wildlife and cultural resources. In 1995, Texas Parks and Wildlife, in association with the Private Lands Advisory Board, sought to correct public perceptions by implementing a landowner recognition program called the Lone Star Land Steward Awards. The Lone Star Land Steward Awards has since become a well known and widely sought honor for private landowners. Publicizing the best examples of private land management is resulting in an increased awareness among the landowner community and the public that good habitat management is good for the environment. Texas Parks and Wildlife, landowners and other conservationists must continuously work to correct misperceptions and recognize others for responsible land management.

Co-ops
One of the greatest threats to wildlife habitat in Texas today is fragmentation caused by the breakup of large family ranches. An effective means of counteracting this loss of habitat is the voluntary formation of landowner groups called Wildlife Management Associations and Co-ops. The first Wildlife Management Association was formed in 1973. Today, more than 90 of these innovative organizations are working to restore and conserve wildlife habitat. Some landowners join co-ops for the benefit of operating under a wildlife management plan. Some join for enhanced recreation such as hunting, bird watching or fishing, while others want to improve the ecosystem in their area. As they work to organize co-ops, landowners become involved in effective wildlife management practices and learn to approach wildlife management in practical ways, creating numerous benefits for participants.

Landowner Incentive Program
The Landowner Incentive Program (LIP) is an innovative program that develops public/private partnerships for natural resource conservation. Targeted at Texas’ private landowners, LIP provides both technical assistance and financial incentives to those interested in managing their property for the benefit of rare plant and animal species and dwindling habitat types. LIP is the first government program in the country in which incentives are used to directly help landowners improve rare species habitat and populations.

Initiated in 1997 with the strong support of private landowner groups, LIP relied on federal Section 6 funding for encouraging rare species management on private lands. Based on the success of the pilot program, in 1999 the Governor and Texas Legislature appropriated $1.25 million in state funds for landowner incentives and an additional $1.25 million to provide for additional biologists to work with landowners on LIP and other technical assistance programs. Strengthened by this major enhancement, LIP is poised to become a model of public/private cooperation in natural resource conservation.

In Texas today, 97% of our land acreage, approximately 160 million acres, is privately owned.
Aquatic Issues
Texas has 191,000 miles of intermittent and perennial streams and rivers (3,700 named streams and 15 major rivers) that are key to maintaining much of our state’s natural heritage. Those systems provide the water that flows into 212 major reservoirs and 7 major estuaries along the Texas coast, supporting the best inland and coastal fisheries in the United States. Healthy aquatic communities in Texas rivers, reservoirs and estuaries provide direct recreational benefits to millions of Texans. Huge volumes of wastewater discharges and other pollutants also assimilate through these systems, protecting water quality. The wetlands and the riparian corridors associated with streams and rivers are an integral part of aquatic ecosystems. They provide a valuable link with terrestrial ecosystems and are often the only connection between otherwise isolated blocks of upland habitat.

Water, clean and abundant, is a fundamental resource upon which TPW’s success in conserving fish and wildlife resources rests. We must protect the health and productivity of our rivers, reservoirs and estuaries. The Department works closely with other natural resource agencies, like the Texas Natural Resources Conservation Commission (TNRCC) and the Texas Water Development Board (TWDB), to achieve that goal. Protecting water quality, assuring instream flows for rivers and freshwater inflows for estuaries, participating in reservoir management that affects fish and wildlife, restoring wetlands, and acting as a state trustee for natural resources are ways we meet that challenge.

Senate Bill 1
Senate Bill 1 is the landmark Texas water legislation passed by the 75th Legislature in response to projections of rapid population growth, increased competition for a scarce resource and the drought of 1996. This legislation addresses current and future impacts to Texas’ natural
If Texas Parks & Wildlife cannot ensure that fish and wildlife are included in water planning, development, and management decisions now, we will not have another opportunity.

resources through water planning, development and management. Texas' population is expected to double in the next 35 to 40 years with urban areas growing significantly. To ensure that the state's lakes, rivers, wetlands and estuaries are not short-changed, TPW has taken an active role in implementing the new law. Senate Bill 1 provides the tools to meet the Department's goals, but it does not assure they are met. TPW with the TWDB and TNRCC are working in concert toward that end. TPW's primary contribution is in the following areas:

Science - TPW has one of the most extensive biological databases on fish and wildlife resources in the country. Using this data, Department biologists are rapidly completing a series of studies on freshwater inflows necessary to maintain the health and productivity of every Texas estuary. When completed, information on estuary freshwater needs will be available. Conversely, if given an amount of inflow, our biologists can predict the impact. Similar capabilities are under development for Texas rivers.

Support - The grass roots water planning direction engendered in SB1 requires an extraordinary effort to provide the many planning regions with timely, accurate and usable information. The use of Geographic Information System (GIS) capabilities to transform data into more accessible forms, dedication of regional staff to assist local planners, and regionally-specific studies to support these groups assures that TPW meets its obligations to assist the regions. TPW also supplies valuable technical support to TWDB and TNRCC by providing environmental flow recommendations, supporting advanced modeling efforts, and leading field investigations. TPW, through its participation in the Water Availability Model Management (or WAMM) Team, works closely with TNRCC to create new water availability models for all river basins as well.

Policy - TPW continues to take the lead in identifying unique ecological sites and in working with local planners on water conservation. The Water Trust provisions of SB1 are a key focus for the Department. As the development of water markets accelerate because of provisions in SB1, the ability of conservation minded individuals and organizations to set aside water for the environment will become more critical. TPW coordinates with all interested parties to develop the Trust.

Regional Planning - Sixteen regional water planning groups (RWPGs) were established under SB1. These regional water planning groups (RWPGs), assisted by the TWDB, TNRCC and TPW, are responsible for developing regional water plans that ensure sufficient water will be available at a reasonable cost to safeguard public health, safety and welfare, to further economic development, and to protect the agricultural and natural resources of the area. TPW participates by providing information and technical assistance necessary to protect natural resources. Each RWPG identifies river and stream segments of unique ecological value and sites of unique value for construction of reservoirs and offers recommendations for their protection.
Wetlands Conservation
Texas has a great variety of wetlands, from the playas and cienegas of West Texas to the marshes and wet prairies of the Coastal Plain. Wetlands provide nesting, nursery and feeding habitat for a variety of fish and wildlife species, and in certain vast stretches of arid land, serve as the only water source for wildlife. Our growing understanding of their importance, not only to wildlife and fisheries, but to the control of water quality, flooding and erosion, has shifted society from a predominantly destructive stance to one of stewardship. Unfortunately, Texas has already lost over 50% of its wetlands, due to withdrawals from groundwater and surface waters and clearing, draining and filling for agriculture, industry, transportation and housing. Initiatives which reduce wetland losses now are critical for many of Texas' natural resources.

To this end, TPW ensures adequate consideration of these resources in decision-making, whether by private landowners or other governmental agencies. Department biologists review proposed projects and permits to see that mitigation for fish and wildlife impacts is incorporated into final plans. Other biologists assist private landowners with wetland restoration and enhancement projects. Still others work at Department properties to properly manage sensitive resources and to develop and promulgate better management approaches that can transfer to private or other public lands. To better integrate conservation efforts, in 1997 the Department adopted a Texas Wetlands Plan, in consultation with a wide array of interested citizens, which outlines problems and priorities. Approved by the Governor, the Plan establishes a goal of "no net loss" of wetlands in Texas. The Department also assists regional water planning groups by
providing information on resources and possible impacts of proposals. TPW staff work to obtain grants to restore marshes in coastal bays and to assist landowners in restoring bottomland forests. These efforts, among others, represent the Department’s commitment to conserving Texas’ precious wetlands.

**Exotic Aquatic Plant Management**

Aquatic vegetation is an extremely important component of most freshwater systems, providing habitat, refuge, and food for a wide variety of organisms. Unfortunately, over abundant aquatic vegetation may detrimentally affect fisheries. During one study, the lowest average weight of fish caught during largemouth bass fishing tournaments occurred when plant coverage was at its peak.

Typically, aquatic vegetation problems result when exotic plant species outcompete native plants and grow unchecked by natural herbivores or parasites. Texas’ two most problematic aquatic plant species, hydrialla and waterhyacinth, are not native to North America. Hydrialla was introduced into Florida in the early 50’s. In 1969 hydrialla was first found in Texas in a pond at the Houston Zoo, and has spread to thousands of public and private bodies of water since. Similarly, waterhyacinth is believed to have been introduced into the United States at the World’s Industrial and Cotton Centennial Exposition of 1884-1885 in New Orleans, Louisiana. It has since spread throughout the South and Southwest.

Unfortunately, the most problematic exotic plants are not easy to control or manage. While a variety of management techniques are available to resource managers, none has proven to be a panacea,
TPW has drafted rules to implement the provisions of HB 3079, and these are scheduled for adoption in August 2000. The proposed rules would permit governing entities of public bodies of surface water to adopt, subject to TNRCC, TDA and TPW approval, local plans that are at least as stringent as the state plan. The proposed rules would require that TPW receive notification of all proposed control measures for nuisance aquatic vegetation, and give the Department an opportunity to amend, reject, or make recommendations regarding proposed control measures under the state plan.

Seagrass Conservation
Submerged seagrass meadows are a dominant, unique subtropical habitat in many Texas bays and estuaries. These highly evolved marine flowering plants play critical roles in the coastal environment, serving as nursery habitat for estuarine fisheries, a major source of organic biomass for coastal food webs, effective agents for stabilizing coastal erosion and sedimentation, and major biological agents in nutrient cycling and water quality processes. Recent studies show that seagrasses are sensitive to nutrient enrichment and water quality problems, as well as physical stress from human disturbances. As a result, many Texas scientists, resource managers and environmentally aware citizens have concerns about the ecosystem health of these seagrass resources.


and each has certain drawbacks. For example, mechanical harvesters are often very expensive, labor intensive, incapable of controlling large areas, and prone to be ineffective in shallow water or water with stumps and rocks. Herbicide use is often hampered by label restrictions. In some cases treated water cannot be used for other purposes for a specified time period after application, or until concentrations have declined. Herbicides may also require a long contact time, which reduces their utility in flowing water. A number of biological controls are available for particular plant species, and some are very effective. However, no consistently effective and species-specific biological controls are available for some of the most problematic plants. For instance, triploid grass carp do not readily eat waterhyacinth, and although they prefer hydriella to most other plant species, their utility in open systems is reduced by their ability to swim long distances and escape from targeted areas.

The role of TPW in exotic aquatic plant management was established by passage of HB 3079 in the 76th Legislative Session. Provisions of the bill direct TPW to adopt a statewide vegetation management plan that incorporates the requirements of the statute and protects and enhances aquatic resources. The statewide plan would require that measures undertaken to control nuisance aquatic vegetation be consistent with the principles of integrated pest management as described in a guidance document to be prepared by the Department. The guidance document will encourage beneficial aquatic vegetation, prevention of nuisance aquatic vegetation and public education. The statewide plan would also require, consistent with statute, that public drinking water suppliers receive notice of proposed aquatic herbicide application.
In July 1999 TPW assembled a citizen’s advisory group to help staff begin the process of developing a management strategy for seagrass conservation. The members were carefully selected to represent the broad diversity of social, recreational and economic interests in this area.

In fulfilling its charge under the Seagrass Conservation Plan, TPW staff and constituents identified the first coastal areas that will require active boater education, seagrass restoration and protection. Redfish Bay (located in Aransas, San Patricio and Nueces Counties) is a jewel of the Texas Coast. However, the excellent fishing, ease of access and increases in boat traffic have led to a significant fragmentation of seagrass resources which threaten the ecological integrity of this system. Further, user-conflicts between traditional and recently evolved fishing strategies have begun to rapidly escalate.

A second site, located south of Baffin Bay in an area called the "Nine-mile Hole," was selected as a pilot site to determine the effects of boat traffic on fishing experience. Although seagrass fragmentation and loss are not significant in this expansive, shallow, off-channel depression, the "Hole" provides an opportunity for assessing strategies for reducing user-conflicts and providing quality fishing experiences.

Rules proposed by TPW to implement management strategies include creation of the Redfish Bay State Scientific Area and the Nine-Mile Hole State Scientific Area. Through its rulemaking process, TPW will begin embark on a series of strategies aimed at providing angling and boating access while protecting seagrass resources. Voluntary "prop up areas" will be established in three areas of Redfish Bay. Each area will be marked with appropriate signage and boaters will be encouraged to avoid operation of propeller-driven vessels. Access to a fourth area of Redfish Bay will be improved by marking three routes through this low lying maze of islands, creeks and saltwater lakes. A mandatory "no run" area is proposed for the northwest quadrant of the Nine-Mile Hole. Boaters and anglers could no longer operate any boat outside of designated running lanes in this area, except by drifting, poling, paddling, wading or use of a trolling motor. Implementation of rules is scheduled for June 2000.
"Fixin it Up Right. Now." has become a reality and not just a catchy slogan. The 75th Texas Legislature authorized $60 million in revenue bonds giving Texas Parks and Wildlife the needed funding to make critical repairs and upgrades to our aging infrastructure. The first bond issue of $11.5 million became available in March 1998, and the last issue will be available in January or February 2001. These funds are being used to reduce a $75 million critical repair backlog. The backlog includes $50 million in critical water/wastewater projects; $5 million for projects necessary to comply with the Americans with Disabilities Act; and $20 million for projects that ensure the basic health and safety of our visitors and employees.

**Challenges**

Many of the almost 240 sites operated by Texas Parks and Wildlife are more than 50 years old and have integral components such as water/wastewater and electrical systems that have far exceeded their expected lifespan. Twenty-five percent of state parks and fish hatcheries were built by the Civilian Conservation Corps (CCC) during the 1930's and 1940's. Age, heavy visitation, lack of funding for routine maintenance, and commitments to capital development have resulted in a growing infrastructure with mounting repair problems.

In the last twenty years, 26 new parks have been added to the State Park System. Decisions to build a majority of these parks were made during the late 1970s and early 1980s when finances were not so strained. A "balancing act" between spending limited dollars to develop new parks and properly maintaining existing parks has been the resulting dilemma for Texas Parks and Wildlife. Historically, capital expenditures have been "imbalanced" because of our commitments to new park development. From FY 85 to FY 95 about 75% of the agency's capital dollars were spent on construction versus 25% for repairs.

In addition to addressing the backlog of critical repairs, Texas Parks and Wildlife remains committed to ensuring the proper conservation of natural and cultural resources at our sites and the acquisition and development of new sites in high demand.
demand by our constituents. One-time funding sources often have specific restrictions on how those funds can be spent. In some cases, the "allowable use" of the funds excludes repairs. This uncertainty about long-term available revenues makes infrastructure planning all the more challenging.

Since FY 95, the Department has made great strides in shifting our focus towards addressing critical repairs by effectively earmarking increased capital dollars for major repair work. Consequently, spending for major repair has steadily increased while new development and acquisition expenditures have decreased over the past few years.

**Initiatives**

To meet these challenges, TPW has undertaken several new initiatives. First, organizational refinements include an implemented regional team approach to project management. Five multi-disciplined project teams, each lead by a project manager and a field-based construction manager, work directly with customer divisions to manage capital projects and identify current and future needs. Contracting authority was expanded to facilitate shorter contracting lead times and rapid response capability. With the help of a consultant, a new automated Project Management Information System (PMIS) was developed to provide scheduling, project controls, and program management. Through the PMIS, the Department evaluated its production capacity and dramatically increased the number of projects out-sourced for design and construction services.

During the 76th Legislature, TPW sought authority from the Texas Legislature to use contracting methods other than the traditional design-bid-build approach. In 1999, Senate Bill 874 was enacted, and the Department adopted rules which allow negotiated procurement of project delivery to include project management, "design-build," and construction administration. This permits Texas Parks and Wildlife to use request for proposals in a broad and innovative fashion.

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**Increased Project Delivery**

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**Increased Outsourcing of Design and Construction Services**

<table>
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<td>65</td>
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Source: TPW Infrastructure Division

**Texas Parks & Wildlife's challenge is to reduce the repair backlog to a manageable, acceptable level while still providing safe, quality outdoor facilities.**
Another strategic initiative is the full implementation of a Facility Management System (FMS) to identify and plan for the long-term resolution of the backlog. FMS will provide a standard, accurate system for identifying, costing and prioritizing projects and will include maintenance scheduling and cost-saving techniques like life cycle analysis, sustainable design, and cost benefit analysis from the perspective of our visitors. This can be best accomplished by working closely with field staff who are most knowledgeable about our infrastructure problems.

The initial phase of a statewide, automated Facility Management System was completed in February 2000. The lack of an adequate inventory system has hampered our ability to properly assess our facilities and forecast needs. Through the Facility Management System, we will have the tools to maintain an automated inventory of all Department facilities, establish life-cycle costs, and develop a systematic maintenance and repair program for use by field staff. It will also provide data on short and long-term capital planning which will be used directly in the preparation and prioritization of the Department’s annual capital program.

Substantial funding has been established for maintenance and minor repairs at state parks and other Department facilities. Managed at the field level, routine maintenance of facilities and minor repairs are necessary to prevent further deterioration of structures and facilities and to prevent the existing backlog from increasing in future years. Work being accomplished includes painting, roof patching, HVAC replacement, and some electrical and plumbing work. Continued funding for maintenance and minor repairs will remain a priority in years to come.

The use of offenders through the TPW/TDCJ Conservation Work Corp Program continues to provide a valuable resource for maintaining our facilities. Hours of work by inmates repairing old CCC structures, replacing roofs, constructing trails, painting, brush clearing, and general maintenance have accounted for well over $10 million in direct cost savings. This translates to approximately 1,500,000 free man-hours since 1995 for facility maintenance and repairs. Establishing work camps at selected sites may be a viable consideration as we look to increase the use of TDCJ offenders to reduce the critical repair backlog.

Finally, we must recognize that the sheer volume of capital dollars needed may prevent us from ever completely eliminating our backlog. Our challenge for the future will be to make the backlog more manageable, while still providing Texans the highest quality, safest outdoor recreation facilities in the country.
Technology

Throughout the past decade, information technology has played an increasingly important role in the progress Texas Parks and Wildlife has made in meeting its goals. Without technology, many of the improvements that have directly impacted customer service would not have been possible. For example, TPW now uses a statewide network of vendors to issue hunting, fishing and other licenses through an automated point-of-sale system and operates a central reservation system for booking facilities in state parks. TPW staff must continue to closely monitor technology directions and adopt those that provide cost-effective ways to enhance agency programs, products and services.

Our goal in the use of technology is always to provide better, more timely and more cost effective service to our customers, both internal and external. We accomplish this through responsible acquisition, management and use of information and communications technologies. The strategies we employ to meet this goal are: 1) to build a sound technology infrastructure that allows TPW staff to accomplish their work effectively and efficiently; 2) to use technology to allow our external customers to have more direct access to our products and services as well as input to our planning processes; and 3) to establish automated systems which enhance our ability to forecast trends and to proactively deal with changing conditions.

Accomplishments

Much has been accomplished in the past few years through the expanded use of technology at TPW. Most of the data that was once stored in mainframe computer files is now directly available to agency staff in relational databases accessed through local area networks. The Department's wide area networks now serve 52 locations, and access to financial and other data by field staff has been significantly expanded. Employee productivity has increased due to the growing use of desktop computers which now number more than 2,400. A new integrated system is being used to capture financial data and provide more timely reports to agency managers. Other key technologies used include executive and geographic information systems, electronic mail communications, radio telecommunications for game wardens, and interactive voice response applications for access to boat registration, public hunts and other data.
TPW is a member of the Texas Geographic Information Council (TGIC), a collaborative effort of 48 state agencies, organizations, and universities to develop and share data and expertise regarding information associated with Texas’ geography. Geographic Information Systems (GIS) refers to the technology used to work with geographic information. In combination with other modern computerized analysis and communication technologies, GIS provides an efficient means to address very complex issues facing governmental organizations. TPW’s GIS goals include: support of the Strategic Mapping Program (Stratmap) to include the National Hydrology Dataset (NHD) and statewide soils, land use/land cover and vegetation mapping; the distribution of digital geographic data through nonduplicative data storage and the utilization of high-speed/broad band internet; and increased outreach and education on the use of GIS.

Perhaps the most visible technology projects, in terms of impact for our external customers, are the "Texas Outdoor Connection," a client/server-based system for the sale of hunting and fishing licenses, and the Central Reservation Center (CRC) for state park reservations. Located at headquarters, the CRC provides "one-stop shopping" convenience for park visitors and increases the efficiency of the reservation processes in general. This system currently handles over 27,000 reservations per month, representing an average $600,000 in revenues. The system provides necessary reservation information to field staff charged with final delivery of services to park customers.

The Texas Outdoor Connection represents our commitment to improve service to license purchasers and almost 3,000 retailers who use the system to sell more than three million licenses annually. Hunting and fishing licenses are no longer handwritten, nor are sales reports manually processed. Timely and accurate data on license purchasers and sales is available to agency managers through this automated system. Lower costs resulting from reduced administration have been an added bonus from the system.

Efforts are underway to acquire an even more ambitious automated licensing system to replace the Texas Outdoor Connection when its contract expires in August 2001. Planned additional features include license sales through telephone voice response system and license purchases over the Internet using electronic commerce technologies.

Some of the more important recent applications of technology are associated with the Internet. TPW has a large presence on the "World Wide Web," with an average 375,000 visitors to our site each month. There are current plans to expand services to include Web-based electronic commerce applications beyond that for license sales and for more capabilities for customers to directly access information they need. The ability to make park reservations over the Internet was provided in 1998. The ability for customers to view fishing and related water data statistics is planned for inclusion on the Internet this year.

Implementation of the TPW Intranet in August 1998 has further empowered employees, enabling highly effective internal communications and quick, easy access to vital information. Use of the Intranet has saved a significant amount of time in communicating information to TPW personnel.
The Future
As new technologies emerge, TPW must take advantage of those that improve the way we work and do business. Technologies that will have increasing presence in the future include video conferencing, Web development, electronic commerce, and computer telephony integration.

Efforts to build into our systems more interactive applications and services should continue, always bearing in mind the diverse needs of our users. Software products and their versions are being standardized to the greatest extent possible. Over the next biennium, we will be placing great emphasis on software management and auditing, to ensure a solid accounting of the software we are currently using and any changes being made to that software.

Major improvement in radio communications capabilities is needed, as TPW’s radio system is over 20 years old. Federal Communications Commission changes on radio bandwidth and interoperability issues demand that upgrades or replacements be made to our equipment. In our efforts to plan for a new system, TPW contacted other state agencies to determine if they were interested in exploring a statewide system. In the fall of 1998, an ad hoc group of state agencies began the process of gathering data and conducting a needs assessment. Their goal was to determine the feasibility of establishing a common statewide radio system. The 76th Legislature formalized this body into the Statewide Radio System Task Force which consists of the executive directors of ten state agencies with radio communication needs. TPW continues to chair this group. The Task Force will report its findings to the 77th Legislature.

The rapidly changing nature of technology drives standardization issues and fiscal concerns at all organizations. Texas Parks and Wildlife’s capital planning and budgeting process for technology must continue to be developed and managed effectively, to include long-range goals, cost-benefit analysis, lease versus purchase analysis and amortization of costs when possible. More importantly, continual capital investment in personal computers, database servers, and voice and data networks is needed if we are to further improve the way we operate. Adequate funds for staff training and support will be critical as we rapidly incorporate new technologies into the workplace. Acquiring and implementing the technologies that must enhance services, products, and programs, with limited financial resources, will continue to be one of Texas Parks and Wildlife’s most important challenges for the future.

Technology Needs
- Radio Telecommunications for Law Enforcement
- Statewide Telecommunications Network for Data
- Satellite Telecommunications to Remote Areas
- Data Warehousing & Data Mining
- E-Government and E-Commerce
- Document Management System
- Expanded/Enhanced Network Security
- Mobile/Cellular Database Access
- Hand-Held Portable Data Collection Devices
Benchmarking is not new to Texas Parks and Wildlife. We’ve been pushing for higher levels of excellence by comparing ourselves to other successful states and organizations for many years. This powerful technique serves the Department well, helping us achieve status as one of the best natural resource agencies in the world.

Past and ongoing benchmarking efforts by TPW focus on the recreational opportunities we provide. With respect to hunting and fishing, we look to other states, particularly those that adjoin us, to guarantee that Texas’ opportunities are comparable or better, both in terms of cost and quality of outdoor experiences provided. Similar comparisons are made on the park side of our business. Ensuring that Texans’ public lands and recreational facilities are as numerous as other states, and provide equally attractive amenities, is important. The caliber of outdoor recreational opportunities in Texas has economic growth and development impacts and affects quality of living as well.

Benchmarking for internal areas of operation has also been part of our drive to be the best. Support services like printing, accounts payable, and others have been critiqued against other agencies to ensure maximum efficiency and effectiveness. We frequently evaluate employee compensation levels too, particularly for key positions like game wardens, scientists, park superintendents and for upper levels of management. If Texas Parks and Wildlife cannot match the salary performance of other organizations, it becomes difficult to attract and retain a workforce that can accomplish our mission.

Governor Bush’s Vision Texas emphasizes the importance of benchmarking and establishes a number of statewide benchmarks for natural resources. Texas Parks and Wildlife has three goals. Certain performance measures under each goal link to the Governor’s natural resource benchmarks:

- **Goal 01:** Percent of Maintenance Needs Met
  Percent of Repair Needs Met

- **Goal 02:** Percent of Department’s Natural Area and Wildlife Acreage Priority Needs Met

- **Goal 03:** Percent of Total Projects and Activities Requiring Agency Review that Avoid or Minimize Adverse Impacts to Fish, Wildlife, or their Habitats.
TEXAS PARKS & WILDLIFE GOALS

STRENGTHEN COMMITMENT TO CORE CONSTITUENCIES

BROADEN EFFORTS TO REACH NEW CONSTITUENCIES

INCREASE OUR CAPACITY TO DEFEND THE ENVIRONMENT AND MANAGE THE HERITAGE OF TEXAS
0101 Objective:
Increase by 3 percent public hunting and by .1 percent public fishing opportunities annually by acquiring, improving, or providing access to public fisheries, wildlife and their habitat.

Outcome Measures:
- Annual percent change in hunter opportunity days provided
- Annual percent change in recreational catch rate

010101 Strategy:
Provide public hunting and fishing opportunities by acquiring, improving, and providing access to public fisheries, wildlife and their habitat.

Output Measures:
- Number of fingerlings stocked (in millions)
- Acres of public hunting lands provided
- Number of hunting licenses sold
- Number of fishing licenses sold

Efficiency Measure:
- Ratio of fingerlings produced to hatchery employees

Explanatory Measure:
- Number of state parks open to public hunting

0102 Objective:
Ensure that 100 percent of TPW developed sites are open to the public, safe for use, and have a plan implemented for proper use and protection of facilities and resources by the end of FY 05; satisfy 16.7 percent annually of the agency’s priority needs for natural, cultural and outdoor recreational resources by acquiring and developing natural areas, wildlife areas, historic sites, and parks.

Outcome Measures:
- Percent of maintenance needs met
- Percent of repair needs met
- Rate of reported accidents/incidents per 100,000 visits
- Percent of priority needs met annually for parkland acreage
- Percent of priority needs met annually for historic sites acreage
- Percent of Department’s natural area and wildlife acreage priority needs met

010201 Strategy:
Plan for proper use and operate existing state parks and wildlife management areas safely and cost effectively.

Output Measures:
- Number of state parks in operation
- Number of new parks opened to the public
- Number of major new facilities within existing parks
- Number of new park sites acquired

Efficiency Measure:
- Percent of operating costs for public lands recovered from revenues

Explanatory Measures:
- Value of labor, cash and service contributions
- Number of paid park visits (in millions)
- Number of WMAs available for wildlife viewing and other non-hunting forms of outdoor recreation
- Amount of fee revenue collected from state park users
01 GOAL:
Strengthen Commitment to Core Constituencies (cont.)

010202 Strategy:
Implement capital improvement, major repair, and cultural and natural resource management programs for existing facilities; and acquire identified priority natural, cultural and recreational resources and develop according to a site management plan.

Output Measure:
- Number of repair/conservation projects completed
- Number of acres acquired
- Number of new wildlife management areas open to the public

Efficiency Measure:
- Program costs as a percent of major repair/capital improvement costs

Explanatory Measure:
- Amount expended for facility maintenance and small repair
- Number of acres in Department’s Public Lands System per 1,000 Texans

02 GOAL:
Broaden Efforts to Reach New Constituencies

0201 Objective:
Increase by 2 percent annually outreach opportunities for participation by targeted user groups (youth, physically challenged, women and minorities) in traditional activities.

Outcome Measure:
- Annual percent change in opportunities provided for target groups, youth, minorities, and the physically challenged

020101 Strategy:
Design and implement outreach programs which effectively communicate TPW’s natural and cultural resource conservation messages while expanding fishing, hunting, and wildlife viewing opportunities for targeted user groups.

Output Measure:
- Number of fish and wildlife events and programs held for targeted user groups
- Number of students trained in hunter education
- Number of students trained in boater education
- Number of Texas Conservation Passports sold
02 GOAL: Broaden Efforts to Reach New Constituencies (cont.)

*Efficiency Measure:*
- Percent of magazine expenditures recovered from revenues

*Explanatory Measure:*
- Number of estimated people reached by programs and events
- Number of Texas Parks & Wildlife magazine subscriptions
- Number of customer-related research surveys conducted

*Outcome Measure:*
- Local grant dollars awarded as a percent of local grant dollars requested

*020102 Strategy:*
Provide grants and technical assistance to strengthen the ability of local governments to provide outdoor recreation opportunities.

*Output Measures:*
- Number of grant assisted projects completed
- Number of local assistance planning project requests fulfilled

*Efficiency Measure:*
- Program costs as a percent of total grant dollars awarded

*Explanatory Measure:*
- Percent of local park grant dollar requests unmet
- Boat ramp program grant dollars awarded (in millions)

03 GOAL: Increase Our Capacity to Defend the Environment and Manage the Heritage of Texas

*0301 Objective:*
Promote compliance with Parks and Wildlife Code statutes and adopted rules and ensure a public compliance rate of 95%.

*Outcome Measures:*
- Public compliance rate with Texas Parks and Wildlife rules and regulations
- Hunting accident rate (number of accidents/100,000 licensed participants)
- Boating fatality rate

*030101 Strategy:*
Supervise the users of natural resources in Texas and ensure public safety on state waterways.

*Output Measures:*
- Miles patrolled in vehicles (in millions)
- Hours patrolled in boats
- Number of criminal environmental investigations ongoing
- Hunting and fishing contacts
- Water safety contacts

*Explanatory Measures:*
- Conviction rate for hunting and fishing violators
- Conviction rate for water safety violators
- Number of criminal environmental investigations completed
0302 Objective:
Minimize adverse human impacts to the state’s fish, wildlife and plant resources and their habitats, and conserve and manage the function and biological diversity of all Texas ecosystems.

Outcome Measures:
- Percent of total projects and activities requiring Department review that avoid or minimize adverse impacts to fish, wildlife, or their habitats
- Percent of fish and wildlife kills or pollution cases resolved successfully
- Percent of Texas’ streams with instream flow needs determined
- Percent of private land acreage in Texas managed to enhance wildlife

030201 Strategy:
Conserve and manage Texas’ fish, wildlife and plant resources.

Output Measures:
- Number of environmental documents receiving substantial review
- Number of responses to requests for technical guidance, recommendations and information regarding endangered species

- Number of pollution and fish kill complaints investigated
- Number of active management agreements with landowners
- Number of presentations and consultations regarding wildlife resource enhancement
- Number of endangered resource research studies completed
- Number of fish and wildlife management research studies underway
- Number of population and harvest surveys conducted

Efficiency Measure:
- Average number of staff hours per management agreement

Explanatory Measures:
- Number of private landowners reached through Department presentations
04 GOAL:
Foster Meaningful and Substantial Relationships with Historically Underutilized Businesses (HUBs).

0401 Objective:
To include HUBs in all purchasing and contracting opportunities at levels consistent with or above the six statewide HUB utilization goals.

Outcome Measure:
- Percent of total dollar value of all purchasing and public works contracts and subcontracts awarded to HUBs

040101 Strategy:
Continue good faith efforts to include HUBs in all agency purchases and contracts through effective policies and procedures, assistance to HUBs, and coordination of programs that promote their involvement.

Output Measure:
- Dollar value of HUB contracts and subcontracts awarded
APPENDICES
## Texas Parks & Wildlife’s Strategic Planning Process

### January 2000
- Division staff evaluate and propose changes to measures and structure.
- Sunset review internal/external input
- Agency representative training

### February 2000
- Receipt of Instructions for Plan Development from Governor’s Office and Legislative Budget Board (LBB)
- Administrative Resources designated as responsible for plan
- Sunset self evaluation

### March 2000
- Budget and planning structure changes submitted to Governor’s Office and LBB
- Proposed edits to performance measures submitted to Governor’s Office and LBB

### April 2000
- Meeting with Governor’s Office and LBB staff to discuss changes to budget and planning structure
- Sunset “draft” report

### May 2000
- Strategic Plan Committee meeting to discuss identified issues
- Revisions to *Natural Agenda*, based on employee and constituent input
- Sunset hearing

### June 2000
- Submission of *Natural Agenda* to Governor’s Office and LBB
## Table A.1 Executive Committee

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Director</td>
<td>Andrew Sansom</td>
</tr>
<tr>
<td>Chief Operating Officer</td>
<td>Robert Cook</td>
</tr>
<tr>
<td>Chief of Staff</td>
<td>Gene McCarty</td>
</tr>
</tbody>
</table>

### Division Directors

- **Chief Financial Officer - Suzy Whittenton**
- **Communications - Lydia Saldaña**
- **Human Resources - Annette Dominguez**
- **Inland Fisheries - Phil Durocher**
- **Law Enforcement - Jim Robertson**
- **Water Resources - Larry McKinney**
- **Infrastructure - Vacant**
- **Coastal Fisheries - Hal Osburn**
- **Wildlife - Gary Graham**
- **State Parks - Walt Dabney**

## Table A.2 Strategic Planning Committee

<table>
<thead>
<tr>
<th>Administrative Resources</th>
<th>Law Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suzy Whittenton</td>
<td>Jack King</td>
</tr>
<tr>
<td>Debbie Pendley</td>
<td></td>
</tr>
<tr>
<td>Cindy Sunvison</td>
<td></td>
</tr>
<tr>
<td>Melanie Callahan</td>
<td></td>
</tr>
<tr>
<td>Gayle Frye</td>
<td></td>
</tr>
<tr>
<td>Alice Antilley</td>
<td></td>
</tr>
<tr>
<td>Jim Martino</td>
<td></td>
</tr>
<tr>
<td>David Spencer</td>
<td></td>
</tr>
</tbody>
</table>

### Coastal Fisheries

- **Paul Hammerschmidt**

### Communications

- **Kathleen Martin**
- **Linda Shew**
- **Janice Elledge**
- **Roxane Eley**

### Executive Office

- **Ernie Gammage**
- **Emily Armitano**
- **Jayna Burgdorf**

### Human Resources

- **Dennis Murff**

### Inland Fisheries

- **Earl Chilton**

### Law Enforcement

- **Jack King**

### Infrastructure

- **Karen Marshall**
- **Ruby Gault**
- **Steve Whiston**

### State Parks

- **Sudie Pool**

### Wildlife

- **Larry Hartman**
- ** Kirby Brown**
- **Dennis Gissell**
- **Linda McMurry**

### Resource Protection

- **Toni Oldfather**
- **Steve Hall**
- **Bob Spain**
- **Kim Ludeke**
- **Bill Harvey**
- **Rollin MacRae**

### Chief Operating Office

- **Susan Harris**
- **Shorty Vaughan**
- **Mike Herring**

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- **APPENDIX A PAGE 42**
The policy-making body of Texas Parks and Wildlife is a nine-member commission with overlapping six-year terms, appointed by the Governor with concurrence of the Texas Senate. An executive director selected by the commission oversees agency administration.
### Five-Year Projections for Outcomes

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual percent change in hunter opportunity days provided</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Annual percent change in recreational catch rate</td>
<td>.1%</td>
<td>.1%</td>
<td>.1%</td>
<td>.1%</td>
<td>.1%</td>
</tr>
<tr>
<td>Percent of maintenance needs met</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Percent of repair needs met</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Rate of reported accidents/incidents per 100,000 visits</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Percent of priority needs met annually for parkland acreage</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Percent of priority needs met annually for historic sites acreage</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Percent of Department's natural area and wildlife acreage priority needs met</td>
<td>.82%</td>
<td>.82%</td>
<td>.82%</td>
<td>.82%</td>
<td>.82%</td>
</tr>
<tr>
<td>Annual percent change in opportunities for target groups, youth, minorities and physically challenged</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Local grant dollars awarded as a percent of local grant dollars requested</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Public compliance rate with Texas Parks &amp; Wildlife rules and regulations</td>
<td>92%</td>
<td>92%</td>
<td>92%</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Hunting accident rate (Number of accidents/100,000 licensed participants)</td>
<td>4.5%</td>
<td>4.4%</td>
<td>4.3%</td>
<td>4.2%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Boating fatality rate</td>
<td>8.5</td>
<td>8.5</td>
<td>8.5</td>
<td>8.5</td>
<td>8.5</td>
</tr>
<tr>
<td>Percent of total projects and activities requiring Department review that avoid or minimize adverse impacts to fish, wildlife, or their habitats</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Percent of fish and wildlife kills or pollution cases resolved successfully</td>
<td>71%</td>
<td>71%</td>
<td>71%</td>
<td>71%</td>
<td>71%</td>
</tr>
<tr>
<td>Percent of Texas’ streams with instream flow needs determined</td>
<td>25%</td>
<td>28%</td>
<td>30%</td>
<td>35%</td>
<td>40%</td>
</tr>
<tr>
<td>Percent of private land acreage in Texas managed to enhance wildlife</td>
<td>7.4%</td>
<td>7.5%</td>
<td>7.6%</td>
<td>7.7%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Percent of total dollar value of all purchasing and public works contracts and subcontracts awarded to HUBs</td>
<td>8%</td>
<td>10%</td>
<td>12%</td>
<td>14%</td>
<td>16%</td>
</tr>
</tbody>
</table>

NOTE: Projections are based on current resources and in some cases historical performance. All are rough estimates of future performance, made without knowledge of funding levels.
## Performance Measure Definitions

### 01-01 Objective: Public Hunting and Fishing Opportunities

| Outcome Measure: Annual percent change in hunter opportunity days provided | Short Definition: A public hunting day is defined as any day, or part of the day, in which hunting opportunity is provided on a public hunting area, i.e., a wildlife management area, park or leased private land. Data is cumulative for all public hunting areas and is collected from a compilation of calendar dates. This includes dates for hunts conducted under special drawing permits, regular (daily) permits, annual public hunting permits and "no permit required" hunts. Purpose/Importance: This measure reflects hunting opportunities provided to the public on an annual basis, which is in direct support of the objective. Source/Collection of Data: Wildlife Division (Austin HQ Excel spreadsheet) Method of Calculation: Measure is calculated by dividing the increase in public hunting days (current days less previous days) by the previous number of public hunting days (base level). Data Limitations: Measure includes hunts held on private lands. This portion of the measure can vary from year to year. Private landowners may decide from one year to the next to limit participation or increase participation. These factors are beyond the agency’s control. Calculation Type: Non-cumulative New Measure: No Desired Performance: Higher (positive change) than target |

| Outcome Measure: Annual percent change in recreational catch rate | Short Definition: "Catch rate" is measured by the number of fish caught and landed per unit of effort, and "unit of effort" is one hour of fishing. Freshwater catch rate data is currently unavailable; therefore, the agency calculates catch rate based on saltwater anglers only (finfish). Catch and release fishing is excluded from the estimate. Purpose/Importance: This measure reflects fishing opportunities provided to the public on an annual basis, which is in direct support of the objective. Source/Collection of Data: Coastal Fisheries Division (Austin HQ Excel spreadsheet generated from Division’s server database) Method of Calculation: Measure is calculated by dividing the change in recreational catch rate (current year catch rate less previous year catch rate) by the previous year recreational catch rate (base level). Data Limitations: Factors beyond the agency’s control include: severe weather factors that prevent anglers from fishing; red tide events; public health advisories; and the public’s perceptions about health issues in handling and eating seafood. Calculation Type: Non-cumulative New Measure: No Desired Performance: Higher (positive change) than target |
### 01-01-01 Strategy: Provide Public Hunting and Fishing Opportunities

<table>
<thead>
<tr>
<th>Output Measure: Number of fingerlings stocked (in millions)</th>
<th>Short Definition: Measure counts the estimated number of fingerlings (produced at state fish hatcheries) stocked in public fresh and salt waters across the state, including reservoirs, rivers, streams, ponds, bays, estuaries, and state waters in the Gulf of Mexico.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose/Importance: This measure tracks fingerlings stocked which ties directly to providing fishing opportunities for the public.</td>
<td></td>
</tr>
<tr>
<td>Source/Collection of Data: Coastal and Inland Fisheries Divisions. (Austin HQ Excel spreadsheet generated from a summary of the Divisions’ trip sheets.)</td>
<td></td>
</tr>
<tr>
<td>Method of Calculation: Automated tabulation.</td>
<td></td>
</tr>
<tr>
<td>Data Limitations: New initiatives may include delayed release of fingerlings until they are larger. These types of initiatives may impact performance of this measure and should be considered when calculating future target numbers. This activity is seasonal by nature. Spring and summer months are the highest production months, while fall and winter months are lower production months.</td>
<td></td>
</tr>
<tr>
<td>Calculation Type: Cumulative</td>
<td></td>
</tr>
<tr>
<td>New Measures: No</td>
<td></td>
</tr>
<tr>
<td>Desired Performance: In most instances a higher (positive increase) performance would be desired.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output Measure: Acres of public hunting lands provided</th>
<th>Short Definition: Measure counts the total number of acres of land managed by the Department (leased and owned) that offer some type of public hunting during the reporting period.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose/Importance: Providing public hunting lands is essential to providing hunting opportunities to the public. This measure tracks acres of lands provided for such activities.</td>
<td></td>
</tr>
<tr>
<td>Source/Collection of Data: Wildlife Division. (Austin HQ Excel spread sheet)</td>
<td></td>
</tr>
<tr>
<td>Data Limitations: Public hunts for specific species of game are held on various lands. Throughout the year there will be overlap among acreage and species. This measure best reflects performance on an annual basis.</td>
<td></td>
</tr>
<tr>
<td>Calculation Type: Non-cumulative</td>
<td></td>
</tr>
<tr>
<td>New Measure: No</td>
<td></td>
</tr>
<tr>
<td>Desired Performance: Higher (positive increase) than target</td>
<td></td>
</tr>
</tbody>
</table>
### Output Measure: Number of hunting licenses sold

**Short Definition:** Measure counts the number of hunting licenses sold during the license year (a license year is almost parallel to a fiscal year). A license is counted when actually sold. Specific licenses included in the count are Resident Combination Hunting and Fishing (entire number sold), Resident "Super combo" License Package (entire number sold), Resident Hunting, Special Resident Hunting, Non-resident Special Hunting, General Non-resident Hunting, and Non-resident 5-day Special Hunting.

**Purpose/Importance:** The sale of hunting licenses ties directly to the strategy of providing hunting and fishing opportunities. Revenue from these sales is critical to the funding of TPW.

**Source/Collection of Data:** Administrative Resources Division. (License contractor automated computer reports)

**Method of Calculation:** Manual tabulation using computer generated report data.

**Data Limitations:** An external vendor provides this data. In the event they have down time, the reporting of data may be delayed. TPW continues to market new licenses and offer special license packages (Super Combo). These efforts are to encourage the purchase of licenses. Ultimately, TPW does not have full control over the decision by an individual to purchase a license. Other factors beyond the agency's control, such as economic conditions, changing attitudes towards hunting, and severe weather, may also impact performance of this measure.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target

---

### Output Measure: Number of fishing licenses sold

**Short Definition:** Measure counts the number of fishing licenses sold during the license year (a license year is almost parallel to a fiscal year). A license is counted when actually sold. Specific licenses included in the count are Resident Combination Hunting and Fishing (entire number sold), Resident "Super combo" License Package (entire number sold), Resident Fishing, Special Resident Fishing, Temporary 3-day Resident Sportfishing, Temporary 14-day Resident Sportfishing, Non-resident Fishing, and Temporary 5-day Non-resident Fishing.

**Purpose/Importance:** The sale of fishing licenses ties directly to the strategy of providing hunting and fishing opportunities. Revenue from these sales is critical to the funding of TPW.

**Source/Collection of Data:** Administrative Resources Division. (License contractor automated computer reports)

**Method of Calculation:** Manual tabulation using computer generated report data.

**Data Limitations:** An external vendor provides this data. In the event they have down time, the reporting of data may be delayed. TPW continues to market new licenses and offer special license packages (Super Combo). These efforts encourage the purchase of licenses. Ultimately, TPW does not have full control over the decision by an individual to purchase a license. Other factors beyond the agency's control, such as economic conditions, changing attitudes towards fishing, and severe weather, may also impact performance of this measure.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
### 01-01-01 Strategy: Provide Public Hunting and Fishing Opportunities (cont.)

| Output Measure: Number of fishing licenses sold (cont.) | Calculation Type: Cumulative  
New Measure: No  
Desired Performance: Higher (positive increase) than target |
|--------------------------------------------------------|--------------------------------------------------|
| **Efficiency Measure:** Ratio of fingerlings produced to hatchery employees | **Short Definition:** Measure is a ratio between fingerlings produced at state hatcheries (freshwater and saltwater) and employees at those hatcheries.  
**Purpose/Importance:** To monitor the efficiency of fish production, while ensuring adequate staffing at each hatchery.  
**Source/Collection of Data:** Inland and Coastal Fisheries Divisions. (Austin HQ Excel spreadsheet generated from fingerlings stocked spreadsheet and current list of hatchery workers.)  
**Method of Calculation:** Measure is calculated by dividing the total number of fingerlings produced at state inland and coastal hatcheries by the total number of full time equivalents working in production at those hatcheries, including seasonals. Manual tabulation.  
**Data Limitations:** Employees at each hatchery may be responsible for several duties including fingerling production. Few employees are only responsible for this one activity. It is difficult to split time between fish production and other duties. Additionally, reduced employee levels can impact performance of this measure.  
**Calculation Type:** Non-cumulative  
New Measure: No  
Desired Performance: Lower than target |
| **Explanatory Measure:** Number of State Parks open to public hunting | **Short Definition:** Measure counts the total number of state parks which were open for public hunting at least one day, or part of one day, during the reporting period.  
**Purpose/Importance:** By providing public hunts at state parks, TPW increases hunting opportunities to the public.  
**Source/Collection of Data:** Wildlife Division (Excel spreadsheet and published list)  
**Method of Calculation:** Manual tabulation  
**Data Limitations:** TPW provides this activity based on demand from the public for public hunting. Public opinions, attitudes, and economic conditions influence the demand for this activity.  
**Calculation Type:** Non-cumulative  
New Measure: No  
Desired Performance: Higher (positive increase) than target |
## 01-02 Objective: Ensure that Lands and Facilities are Open to the Public

<table>
<thead>
<tr>
<th>Outcome Measure:</th>
<th>Percent of maintenance needs met</th>
<th>Percent of repair needs met</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Definition:</strong></td>
<td>A &quot;maintenance need&quot; is defined as a minor maintenance project, which does not exceed $7,500. In most cases, projects are less than $2,500 and result in enhancement of state park services, protection of public safety and/or the proper upkeep of park facilities. Examples include plumbing repairs, electrical repairs, painting, general facility maintenance such as minor roof repairs, etc. A project in this category will include all projects under $2,500 regardless of the funding source, and any project under $7,500 with funding not from the &quot;M&quot; budget type (major repairs). Also included are any projects accomplished with funds transferred to regional budgets from the &quot;M&quot; budget type specifically for locally controlled projects. Projects in this category will not be double counted with major repair projects. A project is counted as completed when a regional maintenance supervisor logs a work order as complete in his/her regional maintenance database.</td>
<td>A &quot;repair need&quot; is defined as a repair project that is required to enhance services, protect public safety, and/or for proper upkeep of a facility, e.g. electrical wiring, new roof, restroom renovation, etc. The definition includes emergency repairs made during the year that usually were not included in the original Capital Program budget.</td>
</tr>
<tr>
<td><strong>Purpose/Importance:</strong></td>
<td>As identified in the Infrastructure Task Force Report, TPW is faced with a backlog of repairs at our aging sites. As those repairs are completed, it is critical that ongoing maintenance at each site continue. This routine maintenance will prevent a reoccurrence of critical repairs on such a large scale.</td>
<td>As identified in the Infrastructure Task Force Report, TPW is faced with a backlog of repairs at our aging sites. It is critical that these repairs are completed in a timely manner. In addition, this measure includes repairs due to emergencies.</td>
</tr>
<tr>
<td><strong>Source/Collection of Data:</strong></td>
<td>State Parks Division. (Regional maintenance supervisors report annually to HQ the number of projects identified and the number of projects completed. Data compiled at HQ.)</td>
<td>Infrastructure Division. (Data is received from the Integrated Financial System and compiled on Excel spreadsheet at Austin HQ.)</td>
</tr>
<tr>
<td><strong>Method of Calculation:</strong></td>
<td>Measure is calculated by dividing the number of completed routine maintenance projects by the total number of needs identified. Manual tabulation</td>
<td>Measure is calculated by dividing the dollar value expended on repair projects each fiscal year by the total dollar value of major repair needs identified. Manual tabulation.</td>
</tr>
<tr>
<td><strong>Data Limitations:</strong></td>
<td>The accuracy of this performance measure is dependent on field employees across the state completing all the required paperwork accurately and in a timely manner.</td>
<td></td>
</tr>
<tr>
<td><strong>Calculation Type:</strong></td>
<td>Non-cumulative</td>
<td></td>
</tr>
<tr>
<td><strong>New Measure:</strong></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td><strong>Desired Performance:</strong></td>
<td>Higher (positive increase) than target</td>
<td></td>
</tr>
</tbody>
</table>
### Outcome Measure:  
Rate of reported accidents/ incidents per 100,000 visits

**Short Definition:** Measure counts the number of accidents at State Parks per 100,000 visitors. Accident reports are required from each site.

**Purpose/Importance:** This measure helps TPW monitor accidents at state parks. TPW must ensure the safety of both our visitors and employees. Corrective actions can be taken with information gained.

**Source/Collection of Data:** Administrative Resources Division (Completed forms from each site are sent annually to HQ. Data compiled at HQ)

**Method of Calculation:** Measure is calculated by dividing the number of reported visitor accidents/incidents occurring at all state park sites by the estimated number of park visits stated in 100,000s. Manual tabulation.

**Data Limitations:** The accuracy of this performance measure is dependent on field employees across the state completing all the required forms accurately and in a timely manner. Some accidents/incidents are not within full control of the agency. TPW educates all visitors of potential risk and injury at each site.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Lower than target
01-02 Objective: Ensure that Lands and Facilities are Open to the Public (cont.)

<table>
<thead>
<tr>
<th>Outcome Measure: Percent of priority needs met annually for parkland acreage</th>
<th>Short Definition: The agency establishes priority needs for parkland acreage. Measure reflects percent of those identified needs that are met. Priority needs are defined in the agency's Strategic Acquisition Plan. For confidentiality reasons, the plan is not published or distributed widely. TPW Commission reviews and acknowledges this planning tool in assessing conservation needs. Purpose/Importance: By providing additional parkland acreage, TPW can increase the number of lands and facilities open to the public. Source/Collection of Data: Wildlife Division Method of Calculation: This measure is calculated by dividing the number of acres actually acquired for parks by the total priority needs for parkland acreage. Manual tabulation Data Limitations: The availability of private and public lands that meet the agency's needs is unpredictable. Due to fluctuations in available funds and suitable land tracts, performance for this measure will vary. Calculation Type: Non-cumulative New Measure: No Desired Performance: Higher (positive increase) than target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome Measure: Percent of priority needs met annually for historic sites acreage</td>
<td>Short Definition: The agency establishes priority needs for historic sites acreage. Measure reflects percent of those identified needs that are met. Priority needs are defined in the agency's Strategic Acquisition Plan. For confidentiality reasons, the plan is not published or distributed widely. TPW Commission reviews and acknowledges this planning tool in assessing conservation needs. Purpose/Importance: By providing additional acreage for historic sites, TPW can increase the number of lands and facilities open to the public. Source/Collection of Data: Wildlife Division Method of Calculation: This measure is calculated by dividing the amount of historic sites acreage actually acquired by the total priority needs for historic sites acreage. Manual tabulation. Data Limitations: The availability of historic sites that meet the agency's needs is unpredictable. Due to fluctuations in available funds and suitable sites, performance for this measure will vary. Calculation Type: Non-cumulative New Measure: No Desired Performance: Higher (positive increase) than target</td>
</tr>
</tbody>
</table>
01-02 Objective: Ensure that Lands and Facilities are Open to the Public (cont.)

<table>
<thead>
<tr>
<th>Outcome Measure:</th>
<th>Short Definition: The agency establishes priority needs for natural area and wildlife acreage. Measure reflects percent of those identified needs that are met. Priority needs are defined in the agency’s Strategic Acquisition Plan. For confidentiality reasons, the plan is not published or distributed widely. TPW Commission reviews and acknowledges this planning tool in assessing conservation needs. Purpose/Importance: By providing additional wildlife acreage and natural area acreage, TPW can increase the number of lands and facilities open to the public. Source/Collection of Data: Wildlife Division Method of Calculation: This measure is calculated by dividing the number of acres actually acquired for wildlife and natural areas by the total priority needs for natural area and wildlife acreage. (Calculation from a manual ledger at Austin HQ) Manual tabulation. Data Limitations: The availability of private lands that meet the agency’s needs is unpredictable. Due to fluctuations in available funds and suitable land tracts, performance for this measure will vary. Calculation Type: Non-cumulative New Measure: No Desired Performance: Higher (positive increase) than target</th>
</tr>
</thead>
</table>

01-02-01 Strategy: Plan and Operate Parks and WMAs

| Output Measure: | Short Definition: Measure counts the number of state parks that are operating and open to the public at the end of the period reported. State parks included in the count are all categories of parks (excluding wildlife management areas) operated by the agency and/or under the direct jurisdiction of the agency, i.e. excludes parks owned by the state but operated under the direct jurisdiction of local units of government. Purpose/Importance: Measure directly reflects the purpose of this strategy. Source/Collection of Data: State Parks Division. (Austin HQ PC-based software. Internal list.) Method of Calculation: Manual tabulation. Data Limitations: New legislative initiatives to transfer suitable sites to local governments may impact performance of this measure. Historically this number was consistent with little or no change. Calculation Type: Non-cumulative New Measure: No Desired Performance: As sites are identified for potential transfer, performance could be below the target identified. If no sites are transferred, level performance will occur. Neither circumstance reflects poor performance. |
### Output Measure: Number of new parks opened to the public

**Short Definition:** Measure counts the number of new state parks that are opened to the public during the period reported. Included in the count are all categories of parks (excluding wildlife management areas) operated by the agency and/or under the direct jurisdiction of the agency, i.e., excludes parks owned by the state but operated under the direct jurisdiction of local units of government.

**Purpose/Importance:** The opening of new parks across the state increases performance under this strategy.

**Source/Collection of Data:** State Parks Division. (Austin HQ; Internal list)

**Method of Calculation:** Manual tabulation

**Data Limitations:** Funding limitations and restrictions often delay the opening of new parks. Also, construction delays may impact performance of this measure.

**Calculation Type:** Cumulative

**New Measure:** No (revised definition, but performance will not vary by 5%)

**Desired Performance:** Higher (positive increase) than target

### Output Measure: Number of major new facilities within existing parks

**Short Definition:** Measure counts the number of major new facilities within existing parks (visitors centers, trailways, etc.) that are opened to the public during the period reported. Facilities included are those located within all categories of parks (excluding wildlife management areas) operated by the agency and/or under the direct jurisdiction of the agency, i.e., excludes facilities within parks owned by the state but operated under the direct jurisdiction of local units of government.

**Purpose/Importance:** While the opening of new parks may be limited, TPW frequently opens new facilities within existing parks. These new facilities enhance and increase recreation opportunities for the public.

**Source/Collection of Data:** State Parks Division. (Austin HQ. Internal list)

**Method of Calculation:** Manual tabulation

**Data Limitations:** Funding limitations and restrictions often delay the completion of new facilities.

**Calculation Type:** Cumulative

**New Measure:** Yes (split from previous measure)

**Desired Performance:** Higher (positive increase) than target
### Output Measure: Number of new park sites acquired

**Short Definition:** Measure counts the number of new state park sites acquired during the reporting period. Included are all categories of parks such as natural areas, historic sites, and recreation areas (does not include wildlife management areas), as well as unique sites, i.e. the tramway or Battleship. Sites may have been acquired through purchase, donation, special sale, or other method.

**Purpose/Importance:** In order to increase recreational opportunities for Texans, TPW must continue to acquire new sites.

**Source/Collection of Data:** State Parks Division (Austin HQ, Internal List)

**Method of Calculation:** Manual tabulation

**Data Limitations:** Funding limitations and restrictions, as well as the availability of suitable sites, impact performance of this measure.

**Calculation Type:** Cumulative

**New Measure:** Yes (split from previous measure)

**Desired Performance:** Higher (positive increase) than target

### Efficiency Measure: Percent of operating costs for public lands recovered from revenues

**Short Definition:** Public lands revenues include park entrance fees, camping and other use fees, Texas Conservation Passport license sales, concession and lease collections, and fines. Public lands operating costs include monies necessary to staff and operate all parks, historic sites, natural areas, wildlife areas, plus costs and expenses for support personnel located at division and regional levels. Operation costs do not include expenditures for acquisition, development, construction, major repairs, or capital improvements.

**Purpose/Importance:** To review the revenue recovery percentage for operational costs at state parks.

**Source/Collection of Data:** State Parks and Administrative Resources Divisions (Mainframe report F04735 and Excel spreadsheet)

**Method of Calculation:** Measure is calculated by dividing public lands revenues by operating costs for public lands. Automated tabulation.

**Data Limitations:** Revenues received from state parks vary during any given reporting period. Historically, spring and summer months have increased revenues, while winter months demonstrate reduced revenues. Additional factors beyond the agency’s control include severe weather conditions, natural disasters, economic conditions, public attitudes, etc.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
### Explanatory Measure: Value of labor, cash and service contributions

**Short Definition:** Measure counts the estimated total dollar value of labor, cash, equipment, goods and services donated to the agency. Contributions include equipment and goods donations, services like repairs, and volunteer labor, including hours contributed by prison inmates. Contributions are estimated at market value. Labor value is calculated by multiplying hours contributed by the current minimum wage.

**Purpose/Importance:** As TPW increases repairs and construction at sites, it is increasingly relevant to track the hours of labor contributed by inmates. Other donations included in this measure are key to the success of many TPW projects and activities.

**Source/Collection of Data:** All applicable divisions. (Standard form from each division. Data compiled at HQ)

**Method of Calculation:** Manual tabulation

**Data Limitations:** Multiple divisions within the agency report activity on this measure. Data should be reported in a timely manner.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target

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### Explanatory Measure: Number of paid park visits (in millions)

**Short Definition:** Measure counts the number of paid visits to state parks, historic sites, and natural areas during the reporting period. The count does not include children as they are not required to pay entrance fees. The total includes an estimate of visits (based on an average number of visits) by Texas Conservation Passport (TCP) holders and Parklands Passport (PP) holders.

**Purpose/Importance:** Visitation at state parks is not only a source of revenue for the agency, but also an indication that customers’ needs and wants are being met.

**Source/Collection of Data:** State Parks and Administrative Resources Divisions

**Method of Calculation:** Measure is calculated by adding the following three items: entrance fee revenue divided by per person entrance fee; number of TCP holders multiplied by the average number of TCP visits as determined by survey; and number of PP holders multiplied by the average number of PP visits as determined by survey.

**Data Limitations:** The calculation for this measure includes an average number of visits from TCP and PP holders. This average may not reflect the actual number of visits made to each park. Park visitation is historically a seasonal activity. Spring and summer months typically have the highest visitation. Factors beyond the agency’s control include extreme weather conditions, natural disasters, and economic conditions.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
### Explanatory Measure: Number of WMAs available for wildlife viewing and other non-hunting forms of outdoor recreation

**Short Definition:** Measure counts the total number of wildlife management areas during the fiscal year which were open at least one day, or part of a day, to non-hunting forms of outdoor recreation, including wildlife viewing, hiking, bicycling, bird watching, photography, etc.

**Purpose/Importance:** To increase opportunities at WMAs, additional non-hunting forms of outdoor recreation are provided.

**Source/Collection of Data:** Wildlife Division. (Excel spreadsheet and published list)

**Method of Calculation:** Manual tabulation

**Data Limitations:** At this time, all WMAs provide non-hunting forms of recreation. The number is not expected to change.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Performance is expected to remain constant. An increase would only come from the opening of a new WMA. Measure is still relevant because it highlights WMAs and non-consumptive opportunities provided by the agency.

### Explanatory Measure: Amount of fee revenue collected from state park users

**Short Definition:** Measure is calculated by totaling fee revenue collected at state parks. State park revenue includes park entrance fees, camping and other use fees, Texas Conservation Passport license sales concession and other miscellaneous fees.

**Purpose/Importance:** Revenue derived from park entrance fees and other related fees is an important source of funding for the agency.

**Source/Collection of Data:** State Parks and Administrative Resources Divisions. (Excel spreadsheet from monthly PWD-211 reports)

**Method of Calculation:** Automated tabulation

**Data Limitations:** The agency currently has 2 categories of revenue reporting for parks, manual and automated. Revenue reports from each of these types must be included in the total. Written (manual) reports must be completed accurately and in a timely manner. Park revenue is based on visitation, which varies by season. Spring and summer months historically reflect increased revenue. Factors beyond the agency’s control include extreme weather conditions, natural disasters, and economic conditions.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
<table>
<thead>
<tr>
<th><strong>Output Measure:</strong></th>
<th><strong>Number of repair/conservation projects completed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Definition:</strong></td>
<td>Measure counts the number of repair, capital improvement, and resource conservation projects completed at all facilities and sites, including fish hatcheries, wildlife areas and state parks. Capital improvements significantly increase the value or life of facilities and include landscaping projects and road or fence construction. Examples of resource conservation projects include food plantings, archaeological stabilization, and salvage operations. A resource conservation project is counted as completed when administrators: write an accepted project report; complete a resource plan; assess, inventory or survey the project and formally transmit the results; conclude technical assistance to the project; or complete similar task directives as defined in performance plans. A repair or capital improvement project is counted as completed when an acceptance letter and/or project completion form is submitted.</td>
</tr>
<tr>
<td><strong>Purpose/Importance:</strong></td>
<td>This measure directly supports the strategy. Existing and new facilities will always need repairs. This measure tracks the number of projects completed.</td>
</tr>
<tr>
<td><strong>Source/Collection of Data:</strong></td>
<td>Infrastructure Division. (Project completion forms received from all divisions; data compiled on Excel spreadsheet at Austin HQ)</td>
</tr>
<tr>
<td><strong>Method of Calculation:</strong></td>
<td>Manual tabulation</td>
</tr>
<tr>
<td><strong>Data Limitations:</strong></td>
<td>Each year repair, capital improvement and resource conservation projects are scheduled. Measure counts only completed projects. Factors beyond the agency's control, which could impact performance of this measure, include delays related to weather, natural disasters, routine construction, and other priorities (such as emergency repairs).</td>
</tr>
<tr>
<td><strong>Calculation Type:</strong></td>
<td>Cumulative</td>
</tr>
<tr>
<td><strong>New Measure:</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Desired Performance:</strong></td>
<td>Higher (positive increase) than target</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Output Measure:</strong></th>
<th><strong>Number of acres acquired</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Definition:</strong></td>
<td>Measure counts the total number of acres acquired, and subsequently protected, for all purposes (parks, historic sites, wildlife areas, etc.)</td>
</tr>
<tr>
<td><strong>Purpose/Importance:</strong></td>
<td>To provide more recreation opportunities to the public and protect important sites, TPW must acquire suitable acreage.</td>
</tr>
<tr>
<td><strong>Source/Collection of Data:</strong></td>
<td>Wildlife Division. (Count from an automated list)</td>
</tr>
<tr>
<td><strong>Method of Calculation:</strong></td>
<td>Manual tabulation</td>
</tr>
<tr>
<td><strong>Data Limitations:</strong></td>
<td>The acquisition process can be lengthy. Funding limitations, as well as the availability of suitable acreage, directly impact the performance of this measure.</td>
</tr>
<tr>
<td><strong>Calculation Type:</strong></td>
<td>Cumulative</td>
</tr>
<tr>
<td><strong>New Measure:</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Desired Performance:</strong></td>
<td>Higher (positive increase) than target</td>
</tr>
</tbody>
</table>
01-02-02 Strategy: Improve, Repair and Implement Programs for Existing Facilities (cont.)

<table>
<thead>
<tr>
<th>Output Measure: Number of new wildlife management areas opened to the public</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Definition:</strong> Measure counts the number of new wildlife management areas, developed and undeveloped, that become accessible for public use.</td>
</tr>
<tr>
<td><strong>Purpose/Importance:</strong> This measure reflects increased opportunities provided to the public at wildlife management areas.</td>
</tr>
<tr>
<td><strong>Source/Collection of Data:</strong> Wildlife Division. (Austin HQ PC-based software and automated list)</td>
</tr>
<tr>
<td><strong>Method of Calculation:</strong> Manual tabulation</td>
</tr>
<tr>
<td><strong>Data Limitations:</strong> Full development and access at any new site can take several years to complete.</td>
</tr>
<tr>
<td><strong>Calculation Type:</strong> Cumulative</td>
</tr>
<tr>
<td><strong>New Measure:</strong> Yes (substantial change to measure and definition from prior year - could result in a more than 5% variance to performance)</td>
</tr>
<tr>
<td><strong>Desired Performance:</strong> Higher (positive increase) than target</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficiency Measure: Programs costs as a percent of major repair/capital improvement costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Definition:</strong> Program costs are those operating costs associated with the Infrastructure Division, which is responsible for planning and implementing major repair and capital improvement projects. This measure provides a basis for comparing program costs to major repair and capital improvement project costs each year.</td>
</tr>
<tr>
<td><strong>Purpose/Importance:</strong> Measure compares operating costs to dollars expended for major repairs and capital improvements. Major repairs and capital improvements remain a high priority.</td>
</tr>
<tr>
<td><strong>Source/Collection of Data:</strong> Infrastructure Division. (Data retrieved from Integrated Financial System; compiled on Excel spreadsheet at Austin HQ)</td>
</tr>
<tr>
<td><strong>Method of Calculation:</strong> Measure is calculated by dividing program costs by the total major repair/capital improvement costs. Manual tabulation.</td>
</tr>
<tr>
<td><strong>Data Limitations:</strong> The primary factor which impacts measure performance is delays in the completion of capital improvement and major repair projects. Weather, natural disasters, archeological finds, and endangered species finds are examples of delays which can lead to reduced expenditures for major repairs/capital improvements in a given year.</td>
</tr>
<tr>
<td><strong>Calculation Type:</strong> Non-cumulative</td>
</tr>
<tr>
<td><strong>New Measure:</strong> No</td>
</tr>
<tr>
<td><strong>Desired Performance:</strong> Lower than target</td>
</tr>
</tbody>
</table>
## Explanatory Measure: Amount expended for facility maintenance and small repairs

**Short Definition:** Measure represents the amount expended for small repairs and ongoing facility maintenance needs at TPW facilities, including WMAs, parks and fish hatcheries. This amount will change based on agency funding levels.

**Purpose/Importance:** This measure reports dollars expended for routine maintenance and small repairs. It is important that ongoing maintenance and small repairs be completed at all sites in order to avoid major repairs in the future.

**Source/Collection of Data:** Administrative Resources Division. (Integrated Financial System)

**Method of Calculation:** Automated tabulation

**Data Limitations:** Agency funding availability can impact performance of this measure.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target

## Explanatory Measure: Number of acres in Department's public lands system per 1,000 Texans

**Short Definition:** Measure is calculated by dividing the total number of acres in the agency's Public Lands System (including state parks, historic sites and wildlife acreage owned by the agency) by the current population estimate of Texas, as provided by the State Comptroller's Office, divided by 1,000. Data reported is not a measure of park acreage alone, which is often used in state-by-state comparisons. This measure includes all lands owned by the agency.

**Purpose/Importance:** This measure reflects the ratio of public lands in TPW's system to the current population of Texas. The population is increasing at a rapid pace. It is important in the long-term for TPW to increase land acreage available for public use and enjoyment as well.

**Source/Collection of Data:** Comptroller’s Office (population figures) and State Parks and Administrative Resources Divisions. (Austin HQ Excel spreadsheet)

**Method of Calculation:** Manual tabulation.

**Data Limitations:** One factor beyond the agency's control is the population of Texas. Availability of funding for acquisition purposes can also impact performance.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
## 02-01 Objective: Increase Outreach Opportunities for Targeted User Groups

| Outcome Measure: | Short Definition: Opportunities under this objective are defined as events, programs and field trips designed for youth, physically challenged, women and minorities. Measure is calculated by dividing the change in opportunities provided (current opportunities less previous opportunities) for targeted user groups by the number of opportunities provided during the previous fiscal year (base level). The number of opportunities provided is reported as an output measure under the related strategy.  
Purpose/Importance: This measure reflects the extent to which new constituents are introduced to agency activities.  
Source/Collection of Data: Law Enforcement, Coastal Fisheries, Inland Fisheries, Wildlife, and Education Divisions. (Austin HQ Excel spreadsheet generated from data sheets & summaries submitted from field & regional offices where applicable)  
Method of Calculation: Manual tabulation  
Data Limitations: This measure is based on the output measure under this same strategy. The number of events held from year to year can vary due to several factors beyond the agency's control. If one year there is an exceptionally high number of events and the next year there is an average number of events, it will appear that performance was less than desirable.  
Calculation Type: Non-cumulative  
New Measure: No  
Desired Performance: Higher (positive increase) than target |
|---|---|
| **Outcome Measure:** | Local grant dollars awarded as a percent of local grant dollars requested | **Short Definition:** Requests by political subdivisions for grant dollars are usually more than double available grant dollars in the Texas Recreation and Parks Account and the Federal Land and Water Conservation Account. This measure indicates the ability of the agency to meet political subdivisions’ requests for grant dollars needed to acquire and develop local parks.  
**Purpose/Importance:** Typically, TPW receives twice as many requests for grant dollars as there are dollars available. This measure indicates the relationship between dollars awarded and dollars requested.  
**Source/Collection of Data:** State Parks Division  
**Method of Calculation:** Measure is calculated by dividing the amount of grant dollars awarded by the amount of grant dollars requested. Manual tabulation  
**Data Limitations:** TPW does not have full control over the number or amount of requests received for grant dollars. Other factors beyond the agency's control include appropriation levels, economic conditions, public attitudes, etc.  
**Calculation Type:** Non-cumulative  
**New Measure:** No  
**Desired Performance:** Higher (positive increase) than target, given grant requests have merit and reflect local recreational needs. |
| Output Measure: Number of fish and wildlife events and programs held for targeted user groups | **Short Definition:** Fish and wildlife events and programs include fishing events, hunting events, educational programs and interpretive displays (antique hatchery truck, mobile aquariums), youth camps, field trips and programs presented to minority groups, women, classes of school children, orphans, and other youth groups. Measure counts the number of events and programs held.  
**Purpose/Importance:** To increase awareness, participation and outreach, it is important that the agency count the number of events held for targeted constituents.  
**Source/Collection of Data:** Coastal Fisheries, Inland Fisheries, Wildlife, Education, and Law Enforcement Divisions. (Data compiled at Austin HQ Excel spreadsheet from various forms/reports from each division)  
**Method of Calculation:** Manual tabulation  
**Data Limitations:** Many of these opportunities are provided in response to a direct request from the public. TPW does not have full control over the number of requests received from year to year.  
**Calculation Type:** Cumulative  
**New Measure:** No  
**Desired Performance:** Higher (positive increase) than target |
| --- | --- |
| Output Measure: Number of students trained in hunter education | **Short Definition:** Measure counts the number of students trained in hunter education programs presented by staff and other qualified, agency-approved instructors. Hunter education courses are required for all persons born after September 1, 1971 who wish to hunt (proof of course completion must be carried by persons hunting).  
**Purpose/Importance:** This measure reflects the number of students trained in mandatory hunter education.  
**Source/Collection of Data:** Education Division/Instructors’ Reports. (Austin HQ Access software)  
**Method of Calculation:** Automated tabulation  
**Data Limitations:** Factors beyond the agency's control include population increases and the overall participation in hunting. Courses are offered year round to meet the demand for this activity. Historically, this activity is seasonal with increases occurring during hunting season and decreases during the remainder of the year.  
**Calculation Type:** Cumulative  
**New Measures:** No  
**Desired Performance:** Higher (positive increase) than target |
<table>
<thead>
<tr>
<th>Measure Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output Measure:</strong> Number of students trained in boater education</td>
</tr>
<tr>
<td><strong>Short Definition:</strong> Measure counts the number of students trained in boater education programs presented by staff and other qualified, agency-approved instructors. Boater education courses are required for all persons born on or after September 1, 1984 who wish to operate certain motorboats and sailboats in Texas (proof of course completion must be carried by persons boating).</td>
</tr>
<tr>
<td><strong>Purpose/Importance:</strong> This measure reflects the number of students trained in boater education.</td>
</tr>
<tr>
<td><strong>Source/Collection of Data:</strong> Education Division/Instructors' Reports. (Austin HQ Access software)</td>
</tr>
<tr>
<td><strong>Method of Calculation:</strong> Automated tabulation</td>
</tr>
<tr>
<td><strong>Data Limitations:</strong> Factors beyond the agency's control include population increases as well as an overall increase in participation in boating activities. Courses are offered year round to meet the demand for this activity. Historically, this activity is seasonal with increases occurring during the boating season and decreases during the remainder of the year.</td>
</tr>
<tr>
<td><strong>Calculation Type:</strong> Cumulative</td>
</tr>
<tr>
<td><strong>New Measure:</strong> No</td>
</tr>
<tr>
<td><strong>Desired Performance:</strong> Higher (positive increase) than target</td>
</tr>
</tbody>
</table>

| **Output Measure:** Number of Texas Conservation Passports sold |
| **Short Definition:** Measure counts the number of Texas Conservation Passport licenses sold during the reporting period. Count includes both gold and silver TCPs. |
| **Purpose/Importance:** Texas Conservation Passports are sold annually to customers as an incentive to visit parks more often. |
| **Source/Collection of Data:** Administrative Resources Division. (License contract automated computer reports). |
| **Method of Calculation:** Automated tabulation |
| **Data Limitations:** TPW does not have full control over the number of licenses sold during any given reporting period. TPW continues to market and promote Texas Conservation Passports to increase sales. Factors such as economic conditions, changing attitudes, weather, etc. may also impact performance of this measure. |
| **Calculation Type:** Cumulative |
| **New Measure:** No |
| **Desired Performance:** Higher (positive increase) than target |
### Efficiency Measure:
**Percent of magazine expenditures recovered from revenues**

**Short Definition:** Measure is calculated by dividing the Department’s total revenue from the Texas Parks and Wildlife Magazine (including subscription sales, newsstand and single copy sales, advertising, and ancillary products and services) by the total cost of producing the magazine (including staff salaries, employee benefits, printing, postage, promotions, etc.).

**Purpose/Importance:** Measure reports the percent of expenditures recovered from magazine revenues.

**Source/Collection of Data:** Communications Division. Tabulation prepared at fiscal year end by a CPA; therefore, there will not be quarterly reports available.

**Method of Calculation:** Provided by external contractor.

**Data Limitations:** Magazine sales and subscription rates can vary from month to month and year to year. Expenditures for postage, employee benefits, etc. can also vary thus impacting performance of this measure.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target

---

### Explanatory Measure:
**Number of estimated people reached by programs and events**

**Short Definition:** Measure counts the number of estimated people reached by all outreach programs and events. Events and programs are defined as those where direct contact is made with the public with the purpose of educating people about the Department and Texas’ natural and cultural resources and/or teaching participatory skills. Events and programs include: Outdoors Woman workshops; fishing and hunting events; presentations to classrooms, civic organizations, conservation groups and landowners; hatchery visitation; and recruiting contacts with minorities, youth camps, etc. They do not include mass media campaigns, phone calls, etc.

**Purpose/Importance:** TPW strives to make contact with as many people as possible in order to deliver its conservation messages. This measure reports the number of people reached by agency programs and events.

**Source/Collection of Data:** Resource Protection, Infrastructure, Administrative Resources Division, Human Resources, State Parks, Executive Office, Coastal Fisheries, Inland Fisheries, Education, Wildlife, Communications, and Law Enforcement Divisions. (Data compiled at Austin HQ. Excel spreadsheet from various forms/reports from each division)

**Method of Calculation:** Manual tabulation. Calculation is an estimate. Estimates are derived from various sources including car counts, numbers provided by external hunting/fishing show producers, ticket/turnstile counts, capacity of venues, block grid methods, etc.

**Data Limitations:** Not all TPW programs or events require formal registration or sign up. Participation in some programs and events is difficult to determine.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
### Explanatory Measure: Number of Texas Parks & Wildlife magazine subscriptions

**Short Definition:** The Texas Parks & Wildlife magazine is a valuable tool the agency uses to communicate its conservation messages, educate the public about Texas' natural resources, and promote its facilities and services. Measure counts the total number of Texas Parks & Wildlife magazine subscriptions managed (including paid and non-paid) during the reporting period.

**Purpose/Importance:** Measure reflects the number of subscribers to magazine. This is another component of outreach and awareness activities by the agency.

**Source/Collection of Data:** Communications Division

**Method of Calculation:** Automated tabulation by contract fulfillment vendor

**Data Limitations:** Factors beyond the agency's control include an overall decline in the industry, limited money for promotion to solicit new subscribers, and Internet sites providing similar information.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target

### Explanatory Measure: Number of customer related research surveys conducted

**Short Definition:** Measure counts the number of customer related surveys conducted each year. Surveys included in this count are those conducted by the agency, as well as cooperative efforts with other entities which provide customer information.

**Purpose/Importance:** TPW relies on participation and support from a diverse group of constituents. It is critical that the agency understand the needs and wants of our customers. Customer satisfaction is key to the success of most programs.

**Source/Collection of Data:** Communications Division

**Method of Calculation:** Manual tabulation

**Data Limitations:** Measure is reported by Communications Division only. Other divisions complete surveys as well. The primary focus of other surveys is not customer research, but many of these surveys do include customer satisfaction questions. Limited funding and staff priorities could impact the number of surveys completed each year.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
## Measure Definitions

### 02-01-02 Strategy: Strengthen Local Governments

**Output Measure:**
Number of grant assisted projects completed

| **Short Definition:** Grant assisted projects are those local park projects which receive a 50% matching grant from the Texas Recreation and Parks Account or the Federal Land and Water Conservation Account. Measure counts the number of grant assisted park projects completed by political subdivisions. |
| **Purpose/Importance:** Measure directly reflects the purpose of this strategy. |
| **Source/Collection of Data:** State Parks Division. (Austin HQ PC-based software) |
| **Method of Calculation:** Manual tabulation |
| **Data Limitations:** Political subdivisions may take longer to complete a project than originally anticipated due to weather delays, routine construction delays, etc. |
| **Calculation Type:** Cumulative |
| **New Measure:** No |
| **Desired Performance:** Higher (positive increase) than target |

**Output Measure:**
Number of local assistance planning projects requests fulfilled

| **Short Definition:** The agency provides local assistance to incorporated political subdivisions based upon their size (counties with 28,000 people or less and cities/towns with 17,500 or less). The more substantive requests for local assistance relate to initial site planning. This measure counts the total number of local assistance requests for site planning completed. |
| **Purpose/Importance:** Measure directly reflects the purpose of this strategy. |
| **Source/Collection of Data:** State Parks Division. (Austin HQ PC-based software) |
| **Method of Calculation:** Manual tabulation |
| **Data Limitations:** This service is provided in response to requests the agency receives from external customers. TPW does not have full control over the number of requests received during any given reporting period. |
| **Calculation Type:** Cumulative |
| **New Measure:** No |
| **Desired Performance:** Higher (positive increase) than target |
**Efficiency Measure:**
Program costs as a percent of total grant dollars awarded

**Short Definition:** This measure is calculated by dividing Recreation Grants Program costs by the total grant dollars awarded to political subdivisions, including park grants and boat ramp grants (total of data provided by explanatory measures). Recreation Grants Program costs include salaries and operating expenses for agency personnel responsible for providing technical assistance to local governments and for recommending and administering these grants.

**Purpose/Importance:** TPW supports local governments’ efforts to provide recreational opportunities. Given relatively constant operating costs over a period of years, this measure can be used to measure success in providing more local grant dollars.

**Source/Collection of Data:** State Parks Division

**Method of Calculation:** Manual tabulation

**Data Limitations:** The TPW Commission does not allocate funds for grants every quarter of the year; therefore, the first quarter will always be reported as zero.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Lower than target

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**Explanatory Measure:**
Percent of local park grant dollar requests unmet

**Short Definition:** Measure indicates the portion of local grant dollar requests received from political subdivisions for recreation grants which is not funded by TPW. Included in this measure are dollars requested for local park grants, indoor recreation grants, and outreach grants.

**Purpose/Importance:** TPW administers a Recreation Grants Program, including local park grants, indoor recreation grants, and outreach grants. Requests from political subdivisions for these grants continue to exceed dollars available for funding. Measure reflects the percent of dollars requested that are unmet.

**Source/Collection of Data:** State Parks Division

**Method of Calculation:** Manual tabulation. The Commission agenda item will contain a full list of requests received and projects receiving funding (full or partial funding). Percent will be calculated by dividing total dollars awarded by total dollars requested.

**Data Limitations:** Grant dollars are awarded twice a year. TPW does not have full control over the number of requests received during any given reporting period. Additionally, individual request amounts are capped.

**Calculation Type:** Cumulative

**New Measure:** Yes

**Desired Performance:** Lower than target.
### Explanatory Measure:

**Boat ramp program grants dollars awarded (in millions)**

<table>
<thead>
<tr>
<th>Short Definition</th>
<th>Purpose/Importance</th>
<th>Source/Collection of Data</th>
<th>Method of Calculation</th>
<th>Data Limitations</th>
<th>Calculation Type</th>
<th>New Measure</th>
<th>Desired Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure indicates the amount of Boat Ramp Program grant dollars awarded to political subdivisions or used for the rehabilitation of existing boat ramps.</td>
<td>TPW administers a Recreation Grants Program. Measure reports dollars awarded under the boat ramp portion of this program.</td>
<td>State Parks Division</td>
<td>Manual tabulation</td>
<td>Historically, requests for boat ramp dollars have not been as high as local park dollars. Grant dollars are awarded twice a year.</td>
<td>Cumulative</td>
<td>No</td>
<td>Grant dollars are appropriated each legislative session. Target numbers for dollars to be awarded are parallel to appropriated dollars. New initiatives under this program include rehabilitation of existing boat ramps.</td>
</tr>
</tbody>
</table>

### Outcome Measure:

**Public compliance rate with Texas Parks & Wildlife rules and regulations**

<table>
<thead>
<tr>
<th>Short Definition</th>
<th>Purpose/Importance</th>
<th>Source/Collection of Data</th>
<th>Method of Calculation</th>
<th>Data Limitations</th>
<th>Calculation Type</th>
<th>New Measure</th>
<th>Desired Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Enforcement personnel check hunters, boaters, anglers and other persons in the field for compliance with all relevant rules and regulations governing fish and wildlife resources and safe boating. Of those persons participating in outdoor activities supervised by the agency, a percentage will be in compliance.</td>
<td>To determine constituent compliance with statutes and regulations that TPW is charged with implementing and enforcing.</td>
<td>Law Enforcement Division. Game wardens complete Contact Data Reports each month which report the number of contacts with hunters, boaters, and anglers. Data compiled at Austin HQ and entered and maintained in an Excel spreadsheet. Number of people not in compliance is acquired from M204 mainframe system &quot;LECS&quot; reports.</td>
<td>This measure is calculated by dividing the total number of hunters, boaters, and anglers checked by game wardens into the number of persons found to be non-compliant. This calculation provides the percentage of persons who are non-compliant, which is then subtracted from one hundred percent to provide the percentage of persons in compliance. Manual tabulation.</td>
<td>TPW game wardens do not have full control over how many individuals will be in compliance when checked. Rate will be calculated based on contacts made by staff. This rate does not reflect overall compliance.</td>
<td>Non-cumulative</td>
<td>No</td>
<td>Higher (positive increase) than target</td>
</tr>
</tbody>
</table>

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*02-01-02 Strategy: Strengthen Local Governments (cont.)*

*03-01 Objective: Ensure Compliance*
| **Outcome Measure:** Hunting accident rate (number of accidents/100,000 licensed participants) | **Short Definition:** Measure is the number of hunting accidents (including fatalities) in Texas per 100,000 licensed participants for the calendar year tabulated.  
**Purpose/Importance:** Measure reflects efforts to reduce and prevent hunting accidents in Texas.  
**Source/Collection of Data:** Education Division. (Austin HQ Access software)  
**Method of Calculation:** Manual tabulation  
**Data Limitations:** Factors beyond the agency's control include the number of accidents that occur each year. One year of data is not a true reflection of success gained in reducing accidents. If several years of data are compared, an overall reduction in the number of hunting accidents should be seen.  
**Calculation Type:** Non-cumulative  
**New Measure:** No (moved from being an Explanatory measure to an Outcome measure)  
**Desired Performance:** Lower than target |

| **Outcome Measure:** Boating fatality rate | **Short Definition:** Measure is the number of boating fatalities in Texas per 100,000 registered boats.  
**Purpose/Importance:** Measure reflects efforts to educate boaters and prevent fatalities on Texas waterways.  
**Source/Collection of Data:** Law Enforcement Division. (Tabulated from data from mainframe LE WET System and AR Boat Registration System Austin HQ)  
**Method of Calculation:** Manual tabulation  
**Data Limitations:** Factors beyond the agency's control include the number of boating accidents and the number of fatalities associated with those accidents. One accident can include several fatalities.  
**Calculation Type:** Non-cumulative  
**New Measure:** No (moved from being an Explanatory measure to an Outcome measure)  
**Desired Performance:** Lower than target |
## 03-01-01 Strategy: Supervise the Users of Resources

### Output Measure: Miles patrolled in vehicles (in millions)

<table>
<thead>
<tr>
<th>Short Definition</th>
<th>Purpose/Importance</th>
<th>Source/Collection of Data</th>
<th>Method of Calculation</th>
<th>Data Limitations</th>
<th>Calculation Type</th>
<th>New Measure</th>
<th>Desired Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure counts the number of miles patrolled in state vehicles by game wardens across the state. Patrols serve to apprehend violators of fish and wildlife rules and regulations, and the presence of game wardens often deters illegal activities.</td>
<td>Measure reports routine patrol activity for game wardens.</td>
<td>Law Enforcement Division</td>
<td>Manual tabulation (Monthly vehicle reports)</td>
<td>This activity is ongoing, but during peak boating season (spring and summer months) patrol activity is shifted toward boating law enforcement.</td>
<td>Cumulative</td>
<td>No</td>
<td>Higher (positive increase) than target</td>
</tr>
</tbody>
</table>

### Output Measure: Hours patrolled in boats

<table>
<thead>
<tr>
<th>Short Definition</th>
<th>Purpose/Importance</th>
<th>Source/Collection of Data</th>
<th>Method of Calculation</th>
<th>Data Limitations</th>
<th>Calculation Type</th>
<th>New Measure</th>
<th>Desired Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure counts the number of hours patrolled in state boats by game wardens. The purpose of boat patrols is to apprehend violators of fish and wildlife rules and regulations, deter illegal activities, and enforce the Texas Water Safety Act including Boating While Intoxicated statutes.</td>
<td>Measure reports hours patrolled on Texas waterways by game wardens.</td>
<td>Law Enforcement Division (Employee time sheets)</td>
<td>Manual tabulation</td>
<td>This activity is seasonal. During the spring and summer months, there will be an increase in the number of hours patrolled, while during the remainder of the year there will be a decrease.</td>
<td>Cumulative</td>
<td>No</td>
<td>Higher (positive increase) than target</td>
</tr>
</tbody>
</table>
### Measure Definitions

#### 03-01-01 Strategy: Supervise the Users of Resources (cont.)

| Output Measure: Number of criminal environmental investigations ongoing | Short Definition: Measure counts the number of criminal environmental law enforcement investigations initiated, implemented, and conducted by the Law Enforcement Division Environmental Investigations Unit for violations of state and federal law, including but not limited to the Resource Conservation Act, Toxic Substance Control Act, Comprehensive Environmental Response, Compensation, and Liability Act, the Federal Insecticide, Fungicide, and Rodenticide Act, Parks and Wildlife Code, and Penal Code. To increase Texas Parks and Wildlife’s ability to defend the environment, investigators respond to and investigate reports of environmental violations from various sources, including the public and private sector. This measure counts the number of investigations which increase and enhance Texas Parks and Wildlife’s ability to minimize adverse human impacts to the state’s fish, wildlife, plant and water resources and by seeking criminal remedies for pollution violations in Texas. | Purpose/Importance: This measure reflects the efforts of environmental crime response and enforcement. | Source/Collection of Data: Law Enforcement Division. (Computer files) | Method of Calculation: Manual tabulation | Data Limitations: TPW game wardens do not have full control over the number of environmental crimes committed or reported. | Calculation Type: Cumulative | New Measure: No | Desired Performance: Higher (positive increase) than target |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| Output Measure: Hunting and fishing contacts | Short Definition: Law Enforcement personnel check hunters and anglers and other persons in the field for compliance with, and through telephone and personal contacts provide information about, all relevant rules and regulations governing fish and wildlife resources, including licensing requirements. This measure reports the number of these contacts. | Purpose/Importance: Measure reflects ongoing efforts of game wardens to contact hunting and fishing constituents. These contacts improve relationships with these constituents and may deter violations of regulations and rules. | Source/Collection of Data: Law Enforcement Division. (Summaries submitted by Regional Offices maintained at Austin HQ LE Division Contact Data Report) | Method of Calculation: Manual Tabulation | Data Limitations: TPW game wardens check hunters and anglers throughout the year. Participation in each activity is historically seasonal, thus impacting the performance of this measure. | Calculation Type: Cumulative | New Measure: No | Desired Performance: Higher (positive increase) than target |
## Output Measure: Water safety contacts

**Short Definition:** Law Enforcement personnel check boat operators on public waterways for compliance with, and through telephone and personal contacts provide information about, all relevant TPW rules and regulations and the Texas Water Safety Act, including Boating While Intoxicated statutes. This measure reports the number of these contacts.

**Purpose/Importance:** Measure reflects ongoing efforts of game wardens to contact boating constituents. These contacts improve relationships with these constituents and may deter violations of regulations and rules.

**Source/Collection of Data:** Law Enforcement Division. (Summaries submitted by Regional Offices maintained at Austin HQ LE Division Contact Data Report)

**Method of Calculation:** Manual Tabulation

**Data Limitations:** TPW game wardens check boaters throughout the year. Participation in this activity is historically seasonal, thus impacting the performance of this measure.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target

## Explanatory Measure: Conviction rate for hunting and fishing violators

**Short Definition:** Measure reports the rate of conviction of those individuals contacted who were not in compliance with all relevant rules and regulations governing fish and wildlife resources, including licensing requirements.

**Purpose/Importance:** Measure reflects conviction rate of violators.

**Source/Collection of Data:** Law Enforcement Division. (Austin HQ manually calculated from mainframe M204 "LECS" data)

**Method of Calculation:** Manual Tabulation

**Data Limitations:** TPW game wardens file cases. The actual conviction rates are determined in the court / justice system.

**Calculation Type:** Non-cumulative

**New Measure:** No (moved from being an Outcome to an Explanatory Measure)

**Desired Performance:** Higher (positive increase) than target
<table>
<thead>
<tr>
<th><strong>Explanatory Measure:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conviction rate for water safety violators</td>
</tr>
</tbody>
</table>

| **Short Definition:** |
| Measure reports the rate of conviction of those individuals contacted who were not in compliance with provisions of the Texas Water Safety Act, including Boating While Intoxicated statutes. |

| **Purpose/Importance:** |
| Measure reflects conviction rate of violators. |

| **Source/Collection of Data:** |
| Law Enforcement Division. (Austin HQ manually calculated from mainframe M204 "LECS" data). |

| **Method of Calculation:** |
| Manual Tabulation |

| **Data Limitations:** |
| TPW game wardens file cases. The actual conviction rates are determined in the court/justice system. |

| **Calculation Type:** |
| Non-cumulative |

| **New Measure:** |
| No (moved from being an Outcome to an Explanatory measure) |

| **Desired Performance:** |
| Higher (positive increase) than target |

| **Explanatory Measure:** |
| Number of criminal environmental investigations completed |

| **Short Definition:** |
| This measure reports the number of criminal environmental investigations conducted by the Environmental Investigations Unit that are brought to closure each fiscal year. |

| **Purpose/Importance:** |
| This measure reflects environmental crime response and enforcement. |

| **Source/Collection of Data:** |
| Law Enforcement Division. (Computer files) |

| **Method of Calculation:** |
| Manual tabulation |

| **Data Limitations:** |
| TPW game wardens do not have full control over the number of environmental crimes committed or reported. Factors beyond the agency’s control include economic conditions, attitudes toward environmental crimes, the public’s perception of reporting environmental crimes, etc. |

| **Calculation Type:** |
| Cumulative |

| **New Measure:** |
| No |

| **Desired Performance:** |
| Higher (positive increase) than target |
### Measure Definitions

#### 03-02 Objective: Minimize Adverse Human Impacts

<table>
<thead>
<tr>
<th>Outcome Measure:</th>
<th>Short Definition: The agency reviews coastal management documents, Section 404 permits, wastewater permits, federal project documents, endangered resource reviews, water right permits, and numerous other conservation related rules, regulations and documents to determine whether these projects and activities impact fish and wildlife resources or their habitats. Many reviews take several years to resolve. Therefore, reviews are only counted when they are completed within the current fiscal year. Purpose/Importance: Measure reflects activities that directly support the purpose of this objective. Source/Collection of Data: Resource Protection and Wildlife Divisions. (Data is compiled from mainframe M204 Environmental Database &amp; Excel files. Manual count based on Finding of Fact on 404 permits. Freshwater Conservation Branch count from monthly reports in Excel spreadsheet). This measure is calculated by dividing the number of projects and activities reviewed which avoid or minimize adverse impacts (either initially or as a result of the Resource Protection Division's review and comment process) by the total number of projects and activities reviewed in the same year. Method of Calculation: Automated and manual tabulation. This measure is calculated by the Wildlife Division by adding together numbers of each type of project received, reviewed, and commented on during the fiscal year. Data Limitations: Reviews are done in response to requests from outside sources. TPW does not have full control over the number of requests received during any given reporting period. Other factors beyond the agency's control include economic conditions, weather, natural disasters, etc. Calculation Type: Non-cumulative New Measure: No Desired Performance: Higher (positive increase) than target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome Measure: Percent of fish and wildlife kills or pollution cases resolved successfully</td>
<td>Short Definition: Measure is calculated by dividing the number of fish and wildlife kills and pollution cases, including Natural Resource Damage Assessment cases, resolved successfully (to the agency's satisfaction) by the number of cases being actively managed by the Resource Protection Division. Many cases take several years to resolve due to litigation, length of assessments or severity of impacts. Therefore, cases are only counted in the year they are resolved. Purpose/Importance: Measure reflects activities that directly support the purpose of this objective. Source/Collection of Data: Resource Protection Division. (Excel spreadsheet format from monthly report) Method of Calculation: Automated tabulation Data Limitations: Factors beyond the agency's control include the fact that many cases take several years to resolve and that ultimately the court system makes the decisions on these cases. Calculation Type: Non-cumulative New Measure: No Desired Performance: Higher (positive increase) than target</td>
</tr>
<tr>
<td>Outcome Measure:</td>
<td>Short Definition: Measure is calculated by dividing the cumulative number of subbasins where the agency has completed a study or evaluation to determine instream flow needs into the total number of subbasins in Texas (205). Each major river basin in Texas has been categorized into 205 hydrological subbasins by the U.S. Geological Survey. Each subbasin may have a number of intermittent tributaries and/or perennial streams.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>03-02 Objective: Minimize Adverse Human Impacts (cont.)</td>
<td></td>
</tr>
<tr>
<td>Outcome Measure:</td>
<td>Percent of Texas' streams with instream flow needs determined</td>
</tr>
<tr>
<td>Short Definition:</td>
<td></td>
</tr>
<tr>
<td>Percentage of private land acreage in Texas managed to enhance wildlife</td>
<td></td>
</tr>
<tr>
<td>Short Definition: Cooperative management agreements represent formal partnerships between private landowners and the agency to manage private lands for the benefit of wildlife resources. Measure is calculated by dividing the acreage of private land for which there is a cooperative management agreement by the total acreage of private land in Texas.</td>
<td>Purpose/Importance: This measure reflects the continued support of private landowners to manage lands for the benefit of wildlife resources.</td>
</tr>
</tbody>
</table>
### Measure Definitions

#### 03-02-01 Strategy: Conserve and Manage Resources

<table>
<thead>
<tr>
<th>Output Measure:</th>
<th>Short Definition:</th>
<th>Purpose/Importance:</th>
<th>Source/Collection of Data:</th>
<th>Method of Calculation:</th>
<th>Data Limitations:</th>
<th>Calculation Type:</th>
<th>New Measure:</th>
<th>Desired Performance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of environmental documents receiving substantial review</td>
<td>Measure counts the number of environmental documents, permits, and regulations receiving substantial review by agency staff. A substantial review includes an assessment to determine a potential for adverse impacts to fish and wildlife and their habitats, including any documented communication, oral or written, necessary to identify and explain agency concerns. Many reviews take several years to resolve. Therefore, reviews are only counted when they are completed within the current reporting period.</td>
<td>Measure reflects activities that directly support the purpose of this strategy.</td>
<td>Resource Protection and Wildlife Divisions. (Calculated from mainframe M204 Environmental database, Excel spreadsheet log and manual tabulation from office files; information is compiled and recorded on paper form)</td>
<td>Manual and automated tabulation</td>
<td>Reviews are done in response to requests from outside sources. TPW does not have full control over the number of requests received during any given reporting period. Factors beyond the agency's control include economic conditions, weather, natural disaster, etc.</td>
<td>Cumulative</td>
<td>No</td>
<td>Higher (positive increase) than target</td>
</tr>
<tr>
<td>Number of responses to requests for technical guidance, recommendations and information regarding endangered species</td>
<td>Measure counts the number of responses to requests for endangered species technical guidance, recommendations, presentations, information and reviews. &quot;Requests&quot; include environmental assessment actions, research proposal reviews, study reviews, in house and external environmental reviews (e.g. from TDA and TNRCC), public education, and media requests. A &quot;response&quot; includes any documented communication, oral or written, participation in meetings and/or participation in field assessment activities which are necessary to adequately communicate concerns about impacts to fish and wildlife and their habitats. Many reviews take several years to resolve. Therefore, a response is only counted when it is completed within the current reporting period.</td>
<td>To increase awareness and education regarding endangered species.</td>
<td>Wildlife Division</td>
<td>Manual tabulation. (Count of manual files)</td>
<td>Activity for this measure is the result of requests from outside sources. TPW does not have full control over the number of requests received during any given reporting period. Factors beyond the agency's control include economic conditions, attitudes towards conservation/endangered species, etc.</td>
<td>Cumulative</td>
<td>No</td>
<td>Higher (positive increase) than target</td>
</tr>
</tbody>
</table>
### Output Measure: Number of pollution and fish kill complaints investigated

**Short Definition:** Measure counts the number of pollution and fish kill complaints affecting state resources, which are reported by the public and other governmental agencies and then investigated by staff in the Resource Protection Division.

**Purpose/Importance:** Measure reflects activities that directly support the purpose of this strategy.

**Source/Collection of Data:** Resource Protection Division

**Method of Calculation:** Automated tabulation. (Monthly report on Excel spreadsheet from Kills and Spills Team)

**Data Limitations:** Activity for this measure is the result of requests from outside sources. TPW does not have full control over the number of requests received during any given reporting period. Factors beyond the agency’s control include natural disasters, severe weather, economic conditions, etc.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Measure reflects number of pollution and fish kill investigations. While it would seem that a higher than target performance would be desired (more investigations completed) it should also be noted that it would be just as desirable to have a lower than target performance (less adverse activities occurred).

---

### Output Measure: Number of active management agreements with landowners

**Short Definition:** Measure counts the number of active cooperative management agreements.

**Purpose/Importance:** This measure reflects the continued partnership between private landowners to enhance and manage lands for the benefit of wildlife resources.

**Source/Collection of Data:** Wildlife Division

**Method of Calculation:** Manual tabulation. (Data entered from standard form into spreadsheet by field staff then validated by regional directors and forwarded to Austin HQ on hard copy)

**Data Limitations:** Activity for this measure is primarily the result of requests from private landowners. TPW does not have full control over the number of landowners that request and complete agreements. Factors beyond the agency’s control include economic conditions, public attitudes, conservation issues, etc.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
### Output Measure: Number of presentations and consultations regarding wildlife resource enhancement

**Short Definition:** The agency makes presentations to and consults with private landowners, wildlife and conservation professionals, sportsmen, students, civic groups and others regarding proper management of resources and habitat and various conservation methods available, including easements and other long-term protection options. This measure counts the number of presentations and consultations made.

**Purpose/Importance:** To continue education and awareness activities provided by TPW staff to all constituents.

**Source/Collection of Data:** Wildlife Division

**Method of Calculation:** Manual tabulation. (Totals entered into Excel spreadsheet by region. Validated by Austin HQ staff)

**Data Limitations:** Activity for this measure is completed in response to requests from outside sources. TPW does not have full control over the number of requests received during any given reporting period.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target

### Output Measure: Number of endangered resource research studies completed

**Short Definition:** Measure counts the number of endangered resource research studies completed during the fiscal year.

**Purpose/Importance:** Measure reflects activities that directly support the purpose of this strategy.

**Source/Collection of Data:** Wildlife Division (Manual count of files)

**Method of Calculation:** Manual tabulation.

**Data Limitations:** Research studies are key components to enhancement and protection of endangered species. There are shifts in priorities which could impact completion of these studies. Many studies are field studies and can be impacted by weather and other natural occurrences.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
**03-02-01 Strategy: Conserve and Manage Resources (cont.)**

| Output Measure: | Short Definition: Fish and wildlife management research studies are designed to improve our understanding of animal ecology and user group impacts (hunters, anglers, commercial fishers), plus increase the effectiveness of resource management techniques. Measure counts the number of such studies in process at the time of reporting. |
| Purpose/Importance: Measure reflects activities that directly support the purpose of this strategy. | |
| Source/Collection of Data: Coastal Fisheries, Inland Fisheries and Wildlife Divisions. (Standard Coastal Fisheries numbers set at Austin HQ. Wildlife manual count of studies from operations plan and published list.) | |
| Method of Calculation: Manual tabulation | |
| Data Limitations: Research studies are key components to enhancement and protection of fish and wildlife resources. There are shifts in priorities which could impact completion of these studies. Many studies are field studies and can be impacted by weather and other natural occurrences. | |
| Calculation Type: Non-cumulative | |
| New Measure: No | |
| Desired Performance: Higher (positive increase) than target | |

| Output Measure: | Short Definition: Population and harvest surveys are conducted in order to measure population dynamics of fish and wildlife resources and angler/hunter use of targeted species in targeted habitat. Measure counts the total number of samples taken that constitute discrete units of an analysis for projecting overall population and harvest estimates. "Discrete units" include samples such as terrestrial transect, gill net, creel survey day, etc. |
| Purpose/Importance: Measure reports harvest and population data. This data is key to maintaining and developing rules and regulations which ensure that resources are managed and protected. | |
| Source/Collection of Data: Coastal Fisheries, Inland Fisheries and Wildlife Divisions. (Austin HQ Excel spreadsheet generated from data sheets and summaries submitted from field and regional offices and manual count of survey data sheets/sets.) | |
| Method of Calculation: Automated tabulation. | |
| Data Limitations: Surveys are key to monitoring populations and harvest. Many studies are field studies and can be impacted by weather and other natural occurrences. | |
| Calculation Type: Cumulative | |
| New Measure: No | |
| Desired Performance: Higher (positive increase) than target | |
### Efficiency Measure:
**Average number of staff hours per management agreement**

**Short Definition:** Measure reflects average number of staff hours expended on each management agreement during the period. Measure is derived by taking the total number of hours expended on development and maintenance of wildlife management agreements and dividing by the total number of cooperative landowner management agreements in effect.

**Purpose/Importance:** To measure the efficiency of staff time spent developing and completing agreements with landowners.

**Source/Collection of Data:** Wildlife Division

**Method of Calculation:** Manual tabulation. (Mainframe / Employee Time Sheets / Excel spreadsheets)

**Data Limitations:** Each agreement is unique and requires various levels of staff involvement. Small tracts of land are usually covered by simple agreements, while large tracts of land may involve multiple, complex agreements.

**Calculation Type:** Non-cumulative

**New Measure:** No

**Desired Performance:** Lower than target

### Explanatory Measure:
**Number of private landowners reached through Department presentations**

**Short Definition:** Measure indicates the number of private landowners in Texas reached through agency presentations regarding wildlife resource enhancement.

**Purpose/Importance:** To continue education and awareness activities provided by TPW staff to all constituents. By providing these services, TPW can develop more meaningful partnerships with private landowners and increase their participation in programs that enhance wildlife resources and their habitat.

**Source/Collection of Data:** Wildlife Division

**Method of Calculation:** Manual tabulation. (Austin HQ Excel spreadsheet)

**Data Limitations:** Activity for this measure is primarily the result of requests from outside sources. TPW does not have full control over the number of requests received during any given reporting period. Factors such as public interest and overall attitudes toward conservation can impact the performance of this measure.

**Calculation Type:** Cumulative

**New Measure:** No

**Desired Performance:** Higher (positive increase) than target
Customer Inventory
Texas Parks and Wildlife serves a wide array of customers. We consider the citizens of Texas our most important "customer" group--it is our mission to manage and conserve Texas' resources for the benefit of current and future generations, regardless of whether they support our efforts with their dollars.

Each of the strategies in Natural Agenda directs an effort to provide or enhance a facility, program, activity or service that benefits our customers directly and all Texans indirectly:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description of Services</th>
<th>Customers Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>010101</td>
<td>Public hunting lands, wildlife habitat acquisition, hatcheries for fish production, and fish stocking.</td>
<td>Hunters, Anglers, Commercial Fishers</td>
</tr>
<tr>
<td>010201</td>
<td>Operation of state parks, historic sites and wildlife areas.</td>
<td>State Park Visitors, Non-consumptive Users</td>
</tr>
<tr>
<td>010202</td>
<td>Capital improvements, major repairs and cultural/natural resource management programs at TPW sites. Acquisition of new priority sites.</td>
<td>State Park Visitors</td>
</tr>
<tr>
<td>020101</td>
<td>Outreach programs which communicate TPW's conservation messages.</td>
<td>Youth, Women, Minorities, Physically Challenged, Texas Parks &amp; Wildlife Magazine Readers, the General Public (TPW News Releases/PBS Series).</td>
</tr>
<tr>
<td>020102</td>
<td>Grants and technical assistance to local governments.</td>
<td>Local Governments and their Park Visitors, Boaters</td>
</tr>
<tr>
<td>030101</td>
<td>Law enforcement—protection of natural resources and human lives.</td>
<td>Hunters, Anglers, Boaters, Private Landowners</td>
</tr>
<tr>
<td>030201</td>
<td>Conservation of Texas' fish, wildlife and plant resources.</td>
<td>Hunters, Anglers, Private Landowners</td>
</tr>
<tr>
<td>040101</td>
<td>Historically Underutilized Business Program.</td>
<td>Business Owners</td>
</tr>
</tbody>
</table>
Two distinct customer groups, Texas Conservation Passport holders and State Park visitors who utilize the Central Reservation Center, were recently surveyed to determine their satisfaction levels and gather other useful information.

**Texas Conservation Passport (TCP) Program Research**
TCP is an annual $50.00 membership that grants "free entry" to state parks, one free tour at historical parks, the quarterly *Texas Conservation Passport Journal*, discounted subscription to TPW magazine, access to restricted public and private land, and special outings and tours.

In January 1999, marketing research was initiated to determine the revenue implications of the TCP program, develop a market profile of TCP members, and to discover the market segments that best describe TCP members. A mail survey was conducted between January and May 1999 of TCP members with current memberships paid as of 01/01/99.

**Outcome Measures**

- **Percentage of Responding Surveyed Customers Expressing Overall Satisfaction with Services Received**

The survey asked respondents to rate their satisfaction with the TCP program benefits they used. Results are for each benefit, with percent responding combined for "slightly satisfied" to "extremely satisfied."

<table>
<thead>
<tr>
<th>Benefit &amp; Results</th>
<th>Campgrounds</th>
<th>Lodging</th>
<th>Restrooms</th>
<th>Interpretive Tours</th>
<th>TPW Staff</th>
<th>CRC</th>
<th>Overall experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covers entrance fee to TX State Parks</td>
<td>99.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One free tour at State Historical Park</td>
<td>90.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly <em>TCP Journal</em></td>
<td>95.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to state Wildlife Management Areas</td>
<td>93.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to Private Lands</td>
<td>86.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discount on TPW Magazine</td>
<td>90.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discount on Passport Adventures travel packages</td>
<td>88.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Respondents were also asked to rate their satisfaction with the TPW facilities and services used. Results are for each benefit, with percent responding combined for "extremely satisfied" and "very satisfied."

- **Percentage of Responding Surveyed Customers Identifying Ways to Improve Service Delivery**
TCP members were asked if they could change one thing about the TCP program, what would it be. Over 63 percent offered one or more suggestions to improve the program.

**Output Measures**

- **Number of Customers Surveyed**

The effective sample of current TCP members was 2,033. The effective sample represents the final number of respondents who were sampled after exclusions from the original sample of 2,099 were made for non-deliverable mail, refusals to complete the survey, or respondents who had died.

- **Number of Customers Served**

The sample of customers surveyed was drawn from 44,310 current TCP members as of 01/01/99.
Efficiency Measures

★ Cost Per Customer Surveyed

The cost per customer surveyed, excluding staff costs, was $3.10.

★ Timeframe

The mail survey, including questionnaire design, printing and mailing, was conducted from January 1999, with data collection completed in May 1999.

★ Methodology

A well-known methodology for maximizing return rates on mail surveys, the Dillman Technique, was used to assure a statistically valid response rate. The technique calls for a series of mailings. Initially, the survey questionnaire with a cover letter is mailed, and is followed by a series of reminder letters and additional questionnaires, with self-addressed, postage-paid return envelopes.

A sample of 2,099 was randomly drawn from the total member database of 44,310.

★ Limitations

The limitation to this research effort was the length of the survey, 39 questions. Many of the questions included multiple parts, such as the satisfaction with member benefits question. However, the length of the survey did not adversely affect the response rate. The other limiting factor is the time involved to complete a mail survey. The Dillman Technique takes seven weeks to complete the mailings.

★ Response Rates

The response rate for the effective sample of current TCP members was 63%.

Explanatory Measures

★ Number of Customers Identified

The total number of customers identified as of 01/01/99 was 43,310. This membership list was obtained from the point-of-sale license system.

★ Number of Customer Groups Inventoried

For the purposes of this survey, only the TCP members were included.

Central Reservation Center (CRC) Customer Research

The CRC is the primary location for customers to make overnight reservations to camp at Texas State Parks.

In December 1999 the Central Reservation Center Task Force determined that there was a need for a survey of customers utilizing the CRC to determine their satisfaction with the service and policies, the methods of making reservations, and the check-in procedures when arriving at the state park. A telephone survey was initiated in January 2000.

Outcome Measures

★ Percentage of Responding Surveyed Customers Expressing Overall Satisfaction with Services Received
Overall, customers of the CRC were satisfied with their experience of making reservation through the CRC, with 86% indicating they were "satisfied" or "very satisfied."

Percentage of Responding Surveyed Customers Identifying Ways to Improve Service Delivery

CRC customers were asked what changes they feel should be made to improve the quality of service from the Reservation Center. Over 57% offered one or more suggestions to improve service at the CRC. In addition, 43% offered suggestions on ways to improve the check-in procedures when registering at a Texas State Park.

Output Measures

Number of Customers Surveyed

Telephone calls were attempted to 902 individual CRC customers. This includes the refusals, ineligible phone numbers (disconnected, fax number), and numbers attempted at least five times but never reached.

Number of Customers Served

The CRC customer database represents over 100,000 individuals that have made reservations for overnight stays at Texas State Parks.

Efficiency Measures

Cost Per Customer Surveyed

The cost per customer surveyed, excluding staff costs, was $10.40. This amount also includes training of staff in conducting telephone surveys by an outside contractor.

Timeframe

This survey, including questionnaire design, printing and data collection, was completed in January 2000.

Methodology

A sample of 1,800 names and phone numbers was randomly drawn from the CRC customer database. This sample consisted of individuals who made at least one reservation and arrived at a state park during calendar year 1999. Data collection was conducted over the course of 11 days. A postcard was send in advance of data collection to inform customers that they could be called to participate in the survey. Out of the total sample pool of 1,800, over 900 customer contacts were attempted. Call attempts were made on five different occasions, one attempt was made during the day (morning or afternoon, three attempts were made during weekday evenings (5:00 pm - 9:00 pm), and one attempt on Saturday (9:30 am -2:00 pm). This sampling scheme ensured that the responses were random and that no bias was associated with the time or day that the survey was conducted.

Limitations

The initial limitation was the lack of time to complete the survey. This lead to the decision to conduct a telephone survey. The second limitation for this survey was the lack of experience by staff and agents in conducting telephone surveys. Outside consultants were brought in to train phone...
operators and supervisors, assist in the design of the questions and the physical layout of the questionnaire, and to assist operators in filling in the customer responses. The third limitation was that the surveys still had to be completed manually by the phone operators, which then necessitated data entry after the surveys were complete. The final limitation was the cost per customer.

☆ Response Rates

A total of 575 surveys were completed, yielding a 75% response rate.

Explanatory Measures

☆ Number of Customers Identified

The customer reservation database yielded approximately 29,000 names that had made reservations and completed a stay at Texas State Parks in 1999.

☆ Number of Customer Groups Inventoried

The only customers surveyed were individuals that had made a reservation at the CRC for an overnight stay at Texas State Parks.

Compact With Texans

A Customer Compact is an agreement made with the customers of an institution to provide services that follow a predetermined set of guiding principles. Simply stated, it defines the standards that customers should expect. The following compact is provided to the many diverse customers of Texas Parks and Wildlife.

Texas Parks and Wildlife provides outdoor recreational opportunities by managing and protecting fish and wildlife and their habitat and by acquiring and managing parks, historic sites, wildlife areas, and fish hatcheries. Over the years it has inherited the functions of many state entities created to protect Texas’ natural and cultural resources. More information about the history of Texas Parks and Wildlife can be found at www.tpwd.state.tx.us/admin/about_us/desc.htm.

Texas Parks and Wildlife has 10 internal divisions: Wildlife, Coastal Fisheries, Inland Fisheries, Law Enforcement, State Parks, Infrastructure, Resource Protection, Communications, Administrative Resources, and Human Resources. Intergovernmental Affairs and Internal Audit and Investigations are administered through the Executive Office. Texas Parks and Wildlife headquarters is located at 4200 Smith School Road, Austin, TX 78744. State parks, wildlife management areas, fish hatcheries, and field offices are located across the state.

Texas Parks and Wildlife is largely user-funded. As a result, the Department works diligently to listen to our customers and adjust our programs and services to meet their needs.

Our Customer Service Philosophy is:

We affirm that excellent customer service is essential to our mission of managing and conserving natural and cultural resources for the use and enjoyment of present and future generations.
Our goal is to provide highly responsive service to our customers. We will achieve exemplary customer service through:

- Listening to our internal and external customers, to better understand them,
- Courtesy,
- Personal responsibility,
- Professionalism,
- Problem solving,
- Respect, and
- Being open, friendly, flexible and caring.

**Texas Parks and Wildlife’s Service Standards**

In serving you, Texas Parks and Wildlife employees will strive to do the following:

1. Answer your correspondence (including faxes and e-mails) quickly and clearly.
2. See people as promptly as possible in all our offices.
3. Provide current information about services on the Internet and at field offices across the state. TPW’s home page is at www.tpwd.state.tx.us. Frequently asked questions can be found at www.tpwd.state.tx.us/howdoi/index.htm.
4. Answer telephone calls quickly and helpfully. Our toll free number is 1-800-792-1112. More information on specific TPW telephone numbers can be found at www.tpwd.state.tx.us/admin/about_us/tele.htm.
5. Respond to your inquiries typically within 10 working days of receipt.
6. Do everything reasonably possible to make services available to everyone, including those with disabilities.

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**WHAT IS A CUSTOMER?**

Customers are the most important people in this office.

Customers are not dependent on us…
- *we are dependent on them.*

Customers are not an interruption of our work …
- *they are the purpose of it.*

Customers are not doing us a favor by our serving them…
- *they are doing us a favor by giving us the opportunity to do so.*

---

If you should ever have a concern about TPW’s customer service, please send your written complaint to:

Texas Parks and Wildlife Department
Communications Division
4200 Smith School Road
Austin, Texas 78744

e-mail: customer.feedback@tpwd.state.tx.us

Please include specific information, including the location, date, time and name of TPW employee(s) if applicable.

The agency’s customer service representative is Lydia Saldaña, Director of Communications. She can be reached at 512-389-4994 or 512-389-4448 (fax).
Customer-Related Performance Measures

A major customer research project in FY00-01 has been contracted with Texas Tech University to follow up on the FY98 statewide research by Texas A&M University. Texas Tech University along with their subcontractor, Responsive Management, will conduct research to "gain a better understanding of the values and attitudes of Texans and different constituent groups and users' and nonusers' constraints to participating in various outdoor recreation activities." The project is titled Texas Parks and Wildlife for the 21st Century. Where applicable, the Standard Customer Service Performance Measures are addressed, and performance is estimated for FY 2000.

★ Outcomes

This study is a public opinion survey. This survey is intended to:

★ Establish benchmarks of their attitudes to these issues, which will allow future periodic measurement of progress in meeting these needs

Methodology

A series of 12 focus groups of 8-12 participants each is the first step of the project. Focus group participants will be drawn from existing TPW customer databases, and the stakeholder and general population groups will be drawn from other outside sources. Focus groups include:

Key constituents and customers:
- ★ Hunters
- ★ Anglers (salt and freshwater)
- ★ Boaters
- ★ Day use state park visitors
- ★ Overnight use state park visitors

Major stakeholders
- ★ Rural landowners (agricultural)
- ★ Rural landowners (ranchers)
- ★ Outdoor recreationists (non-consumptive users, e.g. wildlife watchers, rock climbers, mountain bikers and other important recreational groups)

General Population
- ★ Urban residents
- ★ Suburban residents
- ★ Hispanics
- ★ African Americans
The second step in the survey is a series of eight telephone surveys of Texas general population and key constituent groups. The objective of the surveys is to quantify the issues identified in the focus groups. The following population groups will be surveyed:

2,000 completed surveys of:
   ★ General population of Texas age 18 and older

800 completed surveys each from:
   ★ Hunters
   ★ Anglers
   ★ Boaters
   ★ State park day users
   ★ State park overnight users
   ★ Outdoor recreationists
   ★ Landowners

**Output Measure**

★ Number of Customers Surveyed (Completed)

FY00 estimated performance is 7744.

**Efficiency Measure**

★ Cost Per Customer Surveyed (Completed)

The cost of this survey is $300,000, making the cost per customer surveyed (completed) approximately $38.74.

**Explanatory Measures**

★ Number of Customers Identified

The total number of customers and non-customers will be identified prior to the initiation of any research.

★ Number of Customer Groups Inventoried

Customer groups (4) to be inventoried include:

★ Hunters
★ Anglers
★ Park users
★ Boaters

Non-customers include:

★ Landowners
★ Non-consumptive users
★ General population
Survey of Organizational Excellence

Data Summary Report

Prepared Especially for

Texas Parks and Wildlife Commission
(802)

Fall 1999
## Survey Respondent Information

<table>
<thead>
<tr>
<th>Total Respondents: 1221</th>
<th>Number of Survey Respondents</th>
<th>Percent of Survey Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male:</td>
<td>802</td>
<td>65.68%</td>
</tr>
<tr>
<td>Female:</td>
<td>343</td>
<td>28.09%</td>
</tr>
<tr>
<td><strong>Race/Ethnic Identification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American:</td>
<td>29</td>
<td>2.38%</td>
</tr>
<tr>
<td>Hispanic-American:</td>
<td>134</td>
<td>10.97%</td>
</tr>
<tr>
<td>Anglo-American:</td>
<td>897</td>
<td>73.46%</td>
</tr>
<tr>
<td>Asian-American or Pacific Islander or Native American:</td>
<td>20</td>
<td>1.64%</td>
</tr>
<tr>
<td>Other:</td>
<td>40</td>
<td>3.28%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 20 years old:</td>
<td>Less Than Five</td>
<td>Not Available</td>
</tr>
<tr>
<td>20 to 29 years old:</td>
<td>97</td>
<td>7.94%</td>
</tr>
<tr>
<td>30 to 39 years old:</td>
<td>257</td>
<td>21.05%</td>
</tr>
<tr>
<td>40 to 49 years old:</td>
<td>436</td>
<td>35.71%</td>
</tr>
<tr>
<td>50 to 59 years old:</td>
<td>298</td>
<td>24.41%</td>
</tr>
<tr>
<td>60 years and older:</td>
<td>52</td>
<td>4.26%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not finish high school:</td>
<td>136</td>
<td>11.14%</td>
</tr>
<tr>
<td>High school diploma (or GED):</td>
<td>136</td>
<td>11.14%</td>
</tr>
<tr>
<td>Some college:</td>
<td>285</td>
<td>23.34%</td>
</tr>
<tr>
<td>Associate degree:</td>
<td>108</td>
<td>8.85%</td>
</tr>
<tr>
<td>Bachelor's degree:</td>
<td>412</td>
<td>33.74%</td>
</tr>
<tr>
<td>Graduate degree:</td>
<td>183</td>
<td>14.99%</td>
</tr>
</tbody>
</table>

I am currently in a supervisory role.

| Yes: 425 | 34.81% |
| No: 695  | 56.92% |

My employment status in the organization is:

| Regular: 1113 | 91.15% |
| Temporary: 34  | 2.78%  |

Hours per week employed:

| 40 or more hours: 1064 | 87.14% |
| 21 to 39 hours: 38      | 3.11%  |
| Less than 21 hours: 18  | 1.47%  |

I received a promotion during the last two years:

| Yes: 319 | 26.13% |
| No: 795  | 65.11% |

I received a merit increase in the last two years:

| Yes: 253 | 20.72% |
| No: 886  | 72.56% |

I plan to be working for this organization in two years:

| Yes: 1010 | 82.72% |
| No: 113   | 9.25%  |
Total Respondents: 1221
Surveys Distributed: 3051
Response Rate: 40%

My length of service with this organization is:

- Under 1 year: 92 (7.53%)
- 1 to 2 years: 106 (8.68%)
- 3 to 5 years: 164 (13.43%)
- 6 to 10 years: 225 (18.43%)
- 11 to 15 years: 168 (13.76%)
- Over 15 years: 387 (31.70%)

I am the primary wage earner in my household:

- Yes: 835 (68.39%)
- No: 271 (22.19%)

There is more than one wage earner in my household:

- Yes: 757 (62.00%)
- No: 382 (31.29%)

The number of persons in my household is:

- 1 person: 154 (12.61%)
- 2 persons: 397 (32.51%)
- 3 persons: 239 (19.57%)
- 4 persons: 248 (20.31%)
- 5 persons: 75 (6.14%)
- 6 persons: 20 (1.64%)
- 7 persons or more: 6 (0.49%)

My annual gross (before taxes) salary is:

- Less than $11,000: 39 (3.19%)
- $11,001 to 15,000: 36 (2.95%)
- $15,001 to 19,000: 60 (4.91%)
- $19,001 to 23,000: 175 (14.33%)
- $23,001 to 27,000: 114 (9.34%)
- $27,001 to 31,000: 83 (6.80%)
- $31,001 to 35,000: 113 (9.25%)
- $35,001 to 39,000: 128 (10.48%)
- $39,001 to 43,000: 123 (10.07%)
- $43,001 to 47,000: 90 (7.37%)
- $47,001 to 51,000: 43 (3.52%)
- $51,001 to 55,000: 37 (3.03%)
- $55,001 to 59,000: 19 (1.56%)
- $59,001 to 63,000: 23 (1.88%)
- $63,001 to 67,000: 13 (1.06%)
- Over $67,000: 24 (1.97%)
- Less than 2 years: 27 (2.21%)
- 2 to 10 years: 62 (5.08%)
- Over 10 years: 1054 (86.32%)

Survey Constructs

The Survey assessment is a framework, which at the highest level, consist of five Workplace Dimensions capturing the total work environment. Each Workplace Dimension consists of several Survey Constructs designed to broadly profile areas of strength and concern so that interventions may be targeted appropriately. Survey Constructs are developed from the Primary Questions series. Appendix A1 contains a summary of Survey Constructs and related Primary Questions. Scores for the Constructs range from a low of 100 to a high of 500.
In this section, the reported data are categorized by Workplace Dimension and include the current score for each Dimension’s Construct. If available the past three Construct scores for your organization are provided. Comparative construct average benchmarks include a statewide score, a construct average for organizations of similar size (FTE Category), and an average construct score for organizations of similar mission.

### Workplace Dimensions
Survey Constructs

#### General Organizational Features
- Change oriented
- Goal Oriented
- Holographic
- Strategic Orientation
- Quality

#### Personal Demands
- Time and Stress Management
- Burnout
- Empowerment

#### Physical Work Setting/Accommodations
- Fair Pay
- Adequacy of Physical Environment
- Benefits
- Employment Development

#### Team Perceptions
- Supervisor Effectiveness
- Fairness
- Team Effectiveness
- Job Satisfaction
- Diversity

#### Communication Patterns
- Internal Communication
- Availability of Information
- External communication

<table>
<thead>
<tr>
<th>Highest Scoring Constructs: Areas of Strength</th>
<th>Lowest Scoring Constructs: Areas of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Score</strong></td>
<td><strong>Construct</strong></td>
</tr>
<tr>
<td>381</td>
<td>Strategic Orientation</td>
</tr>
<tr>
<td>353</td>
<td>Benefits</td>
</tr>
<tr>
<td>340</td>
<td>External Communication</td>
</tr>
<tr>
<td>334</td>
<td>Quality</td>
</tr>
<tr>
<td>334</td>
<td>Adequacy of Physical Environment</td>
</tr>
</tbody>
</table>
Team Perceptions
This dimension relates to employees’ activities within their immediate work vicinity. They include factors that concern how employees interact with peers, supervisors and all of the persons involved in day-to-day work activity. This is the immediate work environment of the employee.

### Supervisor Effectiveness
Supervisor Effectiveness provides insight into the nature of supervisory relationships in the organization, including the quality of communication, leadership, and fairness that employees perceive exist between supervisors and themselves.

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<tr>
<td></td>
<td>273</td>
<td>266</td>
<td>253</td>
<td>Not Available</td>
<td>293</td>
<td>277</td>
<td>281</td>
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### Fairness
Fairness measures the extent to which employees believe that equal opportunity exists for all members of the organization.

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<td>255</td>
<td>252</td>
<td>240</td>
<td>Not Available</td>
<td>289</td>
<td>272</td>
<td>273</td>
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</table>

### Team Effectiveness
Team Effectiveness captures employees’ perceptions of the effectiveness of their work group and the extent to which the organizational environment supports teamwork among employees.

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<tr>
<td></td>
<td>293</td>
<td>291</td>
<td>281</td>
<td>Not Available</td>
<td>319</td>
<td>299</td>
<td>302</td>
</tr>
</tbody>
</table>
**Job Satisfaction**
Job Satisfaction addresses employees’ satisfaction with their overall work situation. Weighed heavily in this construct are issues concerning employees’ evaluation of the availability of time and resources needed to perform jobs effectively.

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<tr>
<td><strong>1999</strong></td>
<td>313</td>
<td>311</td>
<td>296</td>
<td>Not Available</td>
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<td>314</td>
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**Diversity**
Diversity addresses the extent to which employees feel that individual differences, including ethnicity or lifestyle, may result in alienation and/or missed opportunities for learning or advancement.

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<td>291</td>
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<td><strong>1994</strong></td>
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</table>

**Physical Work Setting/Accommodations**
This dimension looks at the physical work setting and the factors associated with compensation, work technology and tools. It is the “total benefit package” provided to employees by the organization.

**Fair Play**
Fair Play is an evaluation from the viewpoint of employees of the competitiveness of the total compensation package. It addresses how well the package “holds up” when employees compare it to similar jobs in their own communities.

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</table>
### Adequacy of Physical Environment
Adequacy of Physical Environment captures employees’ perceptions of the work setting and the degree to which employees believe that a safe and pleasant working environment exists.

<table>
<thead>
<tr>
<th>Score Period</th>
<th>Current Score</th>
<th>1998 Score</th>
<th>1996 Score</th>
<th>1994 Score</th>
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</thead>
<tbody>
<tr>
<td>1999/2000 Statewide</td>
<td>334</td>
<td>328</td>
<td>310</td>
<td>Not Available</td>
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<tr>
<td>1999/2000 FTE Category 5</td>
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<tr>
<td>1999/2000 Mission 6</td>
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</table>

### Benefits
Benefits provides an indication of the role that the employment benefit package plays in attracting and retaining employees.

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<th>Score Period</th>
<th>Current Score</th>
<th>1998 Score</th>
<th>1996 Score</th>
<th>1994 Score</th>
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</thead>
<tbody>
<tr>
<td>1999/2000 Statewide</td>
<td>353</td>
<td>360</td>
<td>353</td>
<td>Not Available</td>
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<tr>
<td>1999/2000 FTE Category 5</td>
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<td></td>
</tr>
<tr>
<td>1999/2000 Mission 6</td>
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</table>

### Employment Development
Employment Development captures perceptions of the priority given to the career and personal development of employees by the organization.

<table>
<thead>
<tr>
<th>Score Period</th>
<th>Current Score</th>
<th>1998 Score</th>
<th>1996 Score</th>
<th>1994 Score</th>
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<tbody>
<tr>
<td>1999/2000 Statewide</td>
<td>310</td>
<td>307</td>
<td>306</td>
<td>Not Available</td>
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<tr>
<td>1999/2000 FTE Category 5</td>
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<tr>
<td>1999/2000 Mission 6</td>
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</table>
**General Organizational Features**

This dimension addresses the organization’s interface with external influences. It is an internal evaluation of the organization’s ability to assess changes in the environment and make needed adjustments. Also included are assessments of the quality of relations the organization shares with the public. In essence, this dimension captures the “corporate” culture.

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<tbody>
<tr>
<td><strong>Change Oriented</strong></td>
<td>298</td>
<td>295</td>
<td>323</td>
<td>305</td>
<td>308</td>
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<tr>
<td></td>
<td>1996 Score: 287</td>
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<td>1994 Score: Not Available</td>
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<tbody>
<tr>
<td><strong>Goal Oriented</strong></td>
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<td>303</td>
<td>338</td>
<td>318</td>
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<td></td>
<td>1996 Score: 299</td>
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</thead>
<tbody>
<tr>
<td><strong>Holographic (Consistency)</strong></td>
<td>296</td>
<td>293</td>
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<tr>
<td></td>
<td>1996 Score: 286</td>
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<td></td>
<td>1994 Score: Not Available</td>
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</tbody>
</table>
**Strategic Orientation**
Strategic Orientation secures employees’ thinking about how the organization responds to external influence, including those which play a role in defining the mission, services and products provided by the organization. This construct includes an assessment of the organization’s ability to seek out and work with relevant external entities.

<table>
<thead>
<tr>
<th>Year</th>
<th>Score</th>
<th>1998 Score</th>
<th>Statewide</th>
<th>FTE Category 5:</th>
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<tbody>
<tr>
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<tr>
<td>1996 Score</td>
<td>377</td>
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<td>1994 Score</td>
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<tr>
<td>1999/2000</td>
<td>392</td>
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</table>

**Quality**
Quality focuses upon the degree to which quality principles, such as customer service and continuous improvement, are a part of the organizational culture. This construct also addresses extent to which employees feel that they have the resources needed to deliver quality services.

<table>
<thead>
<tr>
<th>Year</th>
<th>Score</th>
<th>1998 Score</th>
<th>Statewide</th>
<th>FTE Category 5:</th>
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</thead>
<tbody>
<tr>
<td>Current Score</td>
<td>334</td>
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<td></td>
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<tr>
<td>1996 Score</td>
<td>330</td>
<td></td>
<td></td>
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<tr>
<td>1994 Score</td>
<td>Not Available</td>
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<tr>
<td>1999/2000</td>
<td>360</td>
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</table>

**Communication Patterns**
This dimension refers to how consistent and structured communication flow is within the organization and to outside groups. It examines the degree to which communication is directed towards work concerns. How focused and effective it is, as well as, how accessible information is to employees.

**Internal Communication**
Internal Communication captures the nature of communication exchanges within the organization. It addresses the extent to which employees view information exchanges as open and productive and the degree to which computerized information is efficiently exchanged across the entire organization.

<table>
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<tr>
<th>Year</th>
<th>Score</th>
<th>1998 Score</th>
<th>Statewide</th>
<th>FTE Category 5:</th>
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<tr>
<td>1996 Score</td>
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<tr>
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<tr>
<td>1999/2000</td>
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</table>
Availability of Information
Availability of Information provides insight into whether employees know where to get needed information and whether they have the ability to access it in a timely manner.

|---------------|-----|-------------|-----|---------------------|-----|

External Communication
External Communication looks at how information flows in and out of the organization. It captures the ability of the organization to synthesize and apply external information to work performed by the organization.

|---------------|-----|-------------|-----|---------------------|-----|

Personal Demands
This dimension reports on how much internalization of stress is occurring and the extent to which debilitating social and psychological conditions appear to be developing at the level of the individual employee. It addresses the important interface between employees’ home and work lives, and how this relationship may impact job performance and organizational efficiency.

Time and Stress Management
Time and Stress Management looks how realistic job demands are given time and resource constraints, and also captures employees’ feelings about their ability to balance home and work demands.

|---------------|-----|-------------|-----|---------------------|-----|
**Burnout**

Burnout is a feeling of extreme mental exhaustion that can negatively impact employees' physical health and job performance, leading to lost resources and opportunities in the organization. (Standard scoring methodology is maintained; therefore, the higher the score the less likely that employees perceive that burnout exists in the organization.)

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<tbody>
<tr>
<td>2000</td>
<td>302</td>
<td>300</td>
<td>290</td>
<td>Not Available</td>
<td>325</td>
<td>304</td>
<td>307</td>
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**Empowerment**

Empowerment measures the degree to which employees feel that they have some control over their jobs and the outcome of their efforts.

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<td>2000</td>
<td>286</td>
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<td>276</td>
<td>Not Available</td>
<td>304</td>
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<td>287</td>
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</table>
Executive Summary

The Department’s mission is to manage and conserve the natural and cultural resources of Texas for the use and enjoyment of present and future generations. In support of this mission, the Department has established three major goals:

- Strengthen Our Commitment to Core Constituencies
- Broaden Efforts to Reach New Constituencies
- Increase Our Capacity to Defend the Environment

The Department has identified Department values and commitments that are supported by the Department goals, as well as strategies to attain the goals. Values, commitments and strategies affecting information resources include:

- **Environmental Protection** - Strengthen Habitat Protection, Increase Research and Analytical Capability
- **Resource Conservation and Management** - Increase Public Hunting and Fishing Opportunities. Increase Public involvement in Fisheries and Wildlife Management
- **Outdoor Recreation** - Increase interpretive and Educational Opportunities, Strengthen Research, Planning, and Marketing
- **Knowledge** - Continue to Enhance Internal Communications, Expand the Executive Information System, Cultivate, Educate, and Efficiently Serve both Internal and External Data Users
- **Employees** - Streamline Management Functions, Provide Needed Training, Pay Competitive Wages
- **Communication** - Improve Relations and Dialogue with Our Constituencies and Employees, Communicate the Departments Role and Responsibilities

- **Efficiency** - Increase Automation and Improve Technological Capabilities, Strengthen Cost Control and Cost/Benefit Procedures
- **Quality** - Ensure all Employees are Trained, Improve Customer Services, Both Internal and External, in All Areas of Operation
- **Decentralization** - Push Decision-Making to the Lowest Possible Level, Empower Field Staff to Make Customer Service Decisions
- **Enterprise** - Promote and Recognize Innovation Throughout the Department

TPW envisions a future where its customers are empowered through direct and easy access to the specific information and services they need, allowing them to fulfill their needs and express their opinions directly, wherever they are, any time of day. Department administration and staff understand that effective use of technology is a key to realizing this future.

Convenient global access to information and communications systems will challenge the Department to meet citizen and staff needs in new ways. Initiatives presented in this plan allow for the continued expansion of the TPW web site, utilization of the Internet for browser enabled application access and the expansion of the Department's Intranet. Other predominant strategies include effective staff and client training, comprehensive contingency planning, standardization of methods and data formats, and timely and efficient data access.

In support of the State Strategic Plan for Information Resources, TPW has adopted both the vision and philosophy of that plan as guiding principles. While all of the statewide information resources goals and objectives will have an impact on TPW’s mission and goals, those having the greatest impact consist of:
State Goal 1
Texas state government will deliver seamless, integrated government services to citizens through coordinated, statewide information resources.

State Objectives:
1. Services will be delivered directly to the public via a single point of entry to online state government services.
2. Information technology will be aligned with business processes, irrespective of organizational boundaries.
3. All citizens will have access to online government services at times and locations that citizens select, taking into account special needs and social, economic, and ethnic considerations.

State Goal 2
Texas state government will enhance the performance of its agencies' mandates, missions, and core competencies through appropriate application of information resources.

State Objectives:
1. The focus will be on the government services, rather than on the technology used to provide the services.
2. There will be appropriate application of technology through the adoption and application of information resources standards and guidelines.
3. Services and information will be shared between agencies because common frameworks and processes will be in place for technology.

State Goal 3
Texas state government will ensure the privacy, security, and historical integrity of the information and information resources entrusted to government by the people of Texas.

State Objectives:
1. Data will be collected and used appropriately and securely to ensure the privacy of information managed by the state.
2. Appropriate security and authentication will be in place for information and services provided by the state.
3. The state's mission-critical information resources will be continuously available.
4. Records management processes will ensure the long-term viability of electronic records.

State Goal 4
Texas state government's acquisition, use, and management of information resources will be driven by customer needs.

State Objectives:
1. Processes will exist to identify and categorize end-user needs for government information.
2. Simple, comprehensive user interfaces will be available for state-provided information and services.
3. Accurate and timely state documents, data, and services will be available and linked electronically.

Strategically, TPW continues to move away from the proprietary mainframe arena with the implementation of the Integrated Information System, Executive Information System, Employee Information System and the Integrated Financial System. The department has made major strides in E-Government with the implementation of the State Park on-line Reservation System and the planned implementation of the Web supported License Point of Sale System. TPW is also actively expanding its Internet and Intranet environments. These systems have been installed on a network using distributed relational database management system servers. Other major initiatives addressed in this plan include expansion
of the Department’s Geographic Information System capabilities and additional migrations of all applications from the mainframe to the Web-enabled client/server environment, the continuous upgrade and expansion of both voice and data telecommunications and expansion of the LANs, the WAN, and other technology infrastructures, such as video conferencing.

In pursuit of these and other initiatives, the Department will face obstacles. Availability of funds for automation expansion/improvements, IR training, and workforce maintenance will continue to be a major challenge. The limited availability of funds can result in the postponement of projects, outdated resources and technology, and the inability to hire and retain qualified personnel. In addition to the financial obstacles, the Department has been undergoing major paradigm shifts with the standardization of hardware and software, the adoption and enforcement of standardized business practices, and adherence to common formats for data.

This IR plan represents a logical extension to the Department’s own strategic plan from it was drawn. It constitutes the primary working document on which all IR operational plans are based.

Policies and Practices

Method of Setting Priorities - Management advisory committees exist to guide the decisions involved with information resources. These groups assist in coordinating projects, spending issues, and setting strategic directions. Within this structure, the Department identifies key technology issues/areas that could benefit from additional guidance and attention. In some instances, these areas are addressed by focus groups or committees established with an executive sponsor, chairperson, and committee members who study an issue and make recommendations.

IR Planning Methodology - Strategic planning at the Texas Parks and Wildlife Department is taken very seriously by the TPW Commissioners and executive management. Because the effective use of technology is an integral part of achieving its mission, the Department maintains a separate document, entitled "Strategic Directions for Information Technology at TPW." This document provides a detailed discussion of planned uses of technology to supplement "Natural Agenda." The instructions for preparing and submitting Department strategic plans, issued by the Governor’s Office and the LBB, present a methodology for strategic planning which is easily adapted to IR strategic planning. This methodology focuses on vision, functional goals, mission, philosophy, and external and internal assessments. The methodology then shifts to Department goals and objectives and produces the plans (strategies and action plans) to follow to achieve these goals. For this IR strategic plan, it was extremely beneficial to have the Department’s goals and objectives clearly defined so that IR and division management could determine areas where information technology could assist them in accomplishing their objectives. Furthermore, this IR strategic plan represents a detailed version of TPW’s own internal strategic plan for information technology mentioned previously.

Operating System Standards - TPW uses industry standard operating systems for both networks and microcomputers. Microcomputer operating systems support RISC, and Intel compatible platforms.

Development Methodology - The Applications Development (AD) Section has historically used a "home-grown" methodology based on structured design techniques. Based on the staff's experiences, it was decided that a more flexible project management system was needed to support AD projects. The Department uses Microsoft Project for Windows to track major project status, MS Excel is used to track smaller projects. The functionality provided by Project and Excel continues to meet most of the project management needs of the AD Staff.

For the Integrated Information System (IIS) project, the Department has used a system development life cycle (SDLC) tailored to the needs and constraints of client/server development. This SDLC was developed by in-house staff familiar with project development and consultant staff who had previous client/server expertise. As the IIS project continues, appropriate changes are made to the SDLC to better accommodate the client/server development effort.
Software Audit and Management - The Department has established a Software Audit function, administered by the Planning/Quality Assurance Section (P/QA), that will conduct scheduled reviews. Software licenses will be reconciled to software products residing on the Department’s network attached workstations. TPW has implemented Department-wide standards and guidelines for software acquisition by Department staff.

Quality Assurance and Risk Management - The Department has established a quality assurance function, administered by the Planning/Quality Assurance Section (P/QA), that conducts quality reviews at points during development. Projects undertaken by the AD Section of Information Resources must use the services of the QA unit. The P/QA Section has Department-wide standards and guidelines for software and database development by Department staff outside of Information Resources. As part of the software development process, the P/QA section has identified risk analysis steps that projects must include. This involves identifying the risks, assessing the probability of occurrence and probable loss, and identifying ways to manage or mitigate the risks. Ongoing, periodic project status and review meetings ensure that the identified risks are being effectively managed. In addition to the internal risk management, IR staff works with the Quality Assurance Team to ensure that risks associated with major automation projects are also effectively managed. Early in the planning stages for automation projects, approval from the TPW Management Advisory Committee (LMAC) is secured. Executive level project updates and solicitation of project approvals are handled at the LMAC’s quarterly meeting, or on demand, if needed. When project steering committees are formed, they meet on a regular basis to address project issues and approve the project’s direction. In addition, during the development and after implementation, the Department conducts quality assurance reviews with the project’s users.

Consistent with the DIR guidelines for internal quality assurance, IR distinguishes the level of focus to be placed on a project before establishing the development controls. Historically, all but a few projects have required fewer than six months and less that one FTE, have been of low risk, and were benefit-justified by the requester or executive sponsor. For major projects, project development plans, benefit and risk analyses, management-control processes, and detailed budget projections have been required. Effectiveness, satisfaction, and lessons learned have been evaluated and reported. Action items addressing enhancements to QA in the IR Strategic Planning Goals and Objectives include staffing to expand the capabilities. Activity will include phasing in more standard IR controls for non-major projects, in line with the DIR guidelines, and to revise the Department-wide development standards. Emphasis during the coming two years will be placed on project planning, risk assessment, development tracking, and management control processes. Enhancing benefit analysis, effectiveness and efficiency measures, post-implementation evaluations, and budgeting will be emphasized after the first two years.

E-Government TPW continues to expand the number of services available via the Internet. Currently, the forms required to obtained most services, instructions for their use and a vast depository of educational data are available on the Department’s public Internet site. Applications are being evaluated for Internet deployment and written to accommodate this architecture. The Campsite reservations system allows payments via a third party vendor. New web applications are tested on the Department’s intranet before Internet deployment. A firewall, gateway scanners, and intrusion detection provide for security on the Internet.

Change Control - TPW maintains three distinct instances for applications. Initial development or modifications occur in the development instance. When the tests in that instance are approved by the client as meeting the specifications the code is installed in the Beta instance and re-tested with the clients. Only after this set of tests is completed successfully is the code moved into the production instance.

Security - TPW uses logon and application password security as the standard to control access. Physical and resource access controls exist, such as firewalls on the Internet, and continue to be implemented to minimize the risk of unauthorized access. TPW also has a computer security policy that is distributed and formally acknowledged by every Department employee. The policy covers
data ownership, data access, security administration, and intentional misuse. In addition, the Department has a computer security manual that addresses security issues beyond the scope of the security policy. This manual is updated on a yearly basis, distributed to appropriate staff and published on the TPW Intranet. The Department also conducts a yearly security risk analysis to identify and mitigate potential security risks. Training for Department staff is provided to all new employees at New Employee Orientation through the use of a pamphlet and instructions. Ongoing training is addressed through publishing security information on the Intranet for all employees.

**GIS Implementation** - The Department uses a GIS steering committee to coordinate existing GIS operations within the Department and to assist in the planning and formulation of GIS strategy, standards and policy. The committee consists of staff identified from each division who supervise and conduct the different GIS applications planned for the divisions. The committee also works with an Executive Sponsor representing the Management Advisory Committee (MAC) to develop, review, and publicize GIS policies, technical issues, data exchange and sharing needs, and budgetary procurement requirements throughout the Department. A GIS Business Plan guides the Department’s GIS efforts. TPW staff is also actively involved in Department of Information Resources GIS coordination through executive representation to the Texas Geographic Information Council, participation on various GIS technical and policy committees. The Department will continue to work with the Texas Geographic Information Council and will implement GIS applications under the guidelines and recommendations of the council.

**Disaster Recovery** - The Department currently has in place disaster recovery plans for the client/server environment and for headquarters telecommunications, maintained by using Sunguard software. The Department also has set in place a schedule for continuous testing, review, and updating of these plans. Additional contingency plans for other major automation environments are established including: R-Cubed, License Point of Sale and WTDROC mainframe applications. The future direction is to establish business resumption plans with each division that will encompass pocket processing centers.

**Use of Computing Resources** - The Department has three major categories of microcomputers and accessories that have distinctly separate purposes. The categories are as follows:

1. **Standard Desktop Computing Activities**
   - Computers employing PC applications and used for personal productivity, client workstations or 3270 emulation, database management, and/or complex scientific/engineering/statistical data analysis. Each is selected and configured according to the needs of the applications to be used, while maintaining currency with the industry. Our direction is to migrate to the Windows 2000 platform running in native mode and to continue maintaining currency.

2. **Desktop RISC Workstations**
   - Used primarily for GIS applications and Internet administration. These are single user desktop RISC workstations designed for desktop use where Intel processors are not as well suited. Use of this technology is not widespread within the Department, and is limited to high-end scientific or administrative use. High-resolution graphics and network attachments are generally included.

3. **Servers**
   - These are not desktop computers. They are used as file or database servers and include both high end Pentium and RISC processors. Depending on storage requirements, availability requirements, and number of concurrent users, these machines may be configured with RAID level 5 disk subsystems of up to 100 Gigabytes. RAM requirements may be as high as four Gigabytes; and many are equipped with Fast Ethernet connections to the high-speed network backbone.
PC Software Standards
TPW has adopted standards for desktop hardware and software that further enhance desktop compatibility and support. These standards include a migration to an IBM compatible environment (no more MACs) and use of standard application software for word processing, spreadsheets, presentation graphics, and databases.

Cabling Practices
TPW has a voice and data cabling system that uses Category 5 UTP for data and Category 3 UTP for voice. All changes are documented and central control is maintained over the Department network via the cabling system.

Use of Contract Services and Consultants - The Department has a stated policy/strategy for the acquisition of information technology through outsourcing. This policy explains the rationale for analyzing alternative acquisition sources, specifically from other agencies or the private sector. It also presents information on several areas of technology, which are well suited for outsourcing. Furthermore, the Department complies with DIR and/or GSC rules/guidelines for the use of contractors or consultants. Contract services are currently being used or planned for such things as data entry, systems programming, training, application conversions, and web/client/server development projects.

Use of GSC's Technology Catalog - TPW has a set of guidelines for using the QISV catalog system. These guidelines help to ensure that best value is obtained and that vendors are treated fairly in the acquisition of technology.

InterDepartment Data Communications and Information Sharing - TPW is in the process of migrating all SNA networks to networks utilizing TCP/IP and SNA tunneling. Voice and data networks are being migrated from TEXAN III to TEXAN 2000. The voice and data long distance provider is GSC. Some of the financial and human resources needs have been met by the host-to-host link established with the Comptroller’s Office. We also follow the Department of Public Safety’s policy when using the communications link to the TCIC/NCIC system. However, there are no current links in the scientific or resource-related areas. As future needs are identified, TPW will attempt to address the OSI trends that are evolving within state government.

Staff Training and Continuing Education - Currently, managers in the IR Branch have performance goals related to the establishment of training funds and the accomplishment of training plans for IR staff. With this in mind, IR has established training guidelines that pertain to the types of training IR staff may take, including mandatory training, project-related training, and elective training. Each IR employee has a training plan drafted for the fiscal year with allocated funds and time to complete the planned training. The Department also has an educational assistance program in place whereby employees may be reimbursed for tuition for classes taken at the college level or beyond.

Data Center Operations - At the end of FY 1999 TPW's mainframe operations were outsourced to the West Texas Disaster Recovery and Operations Center (WTDROC). This action has reduced TPW's operating costs and these applications will continue to be supported at the WTDROC until they are fully converted to the client/server environment.
Statutory Citations Which Authorize the Goals - The Department's goals are authorized/affected by the following:

- Rivers and Harbors Act of 1899
- Migratory Bird Conservation Act (17 U.S.C. 715 et seq. as amended numerous times)
- U.S. Fish and Wildlife Coordination Act of 1958 (16 U.S.C. 661 et seq.)
- Fishery Conservation and Management Act (PL. 94-265)
- Gulf States Marine Fisheries Compact (PL. 81-66)
- Convention on International Trade in Endangered Species
- National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321-47; PL. 91-190)
- Federal Water Pollution Control Act (Clean Water Act) of 1972 (33 U.S.C. 1251 et seq.)
- Clean Air Act (1970)
- Land and Water Conservation Act of 1965 (78 Stat. 897, as amended; PL. 88-578; as amended)
- Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (42 U.S.C. 9601-9626)

- Oil Pollution Act (OPA, 1990)
- National Forest Management Act of 1976 (90 Stat. 2949)
- Texas Parks and Wildlife Code
- Americans with Disabilities Act
- State of Texas Administrative Code (TAC)
- DIR-related Statutes, Directives, Standards, and Guidelines
- Texas Open Records Act
- Texas Family Code
- Texas Government Code
- Texas Antiquities Code
- Texas Natural Resources Code
- Texas Water Code
- Texas Health and Safety Code
- Texas Tort Claims Act
- Texas Penal Code
- S.B. 1
- H.B. 1895
IR Goal #1 Establish and maintain information technology facilities and infrastructures which are reliable and dependable, safe and secure from unauthorized access and physical catastrophes, and in concert with the Department’s current and planned goals and objectives. Supports TPW Goal #1 Strengthen commitment to core constituencies and TPW Goal #2 Broaden efforts to reach new constituencies. Supports the State’s Strategic Goal #3 - Texas state government will ensure the privacy, security, and historical integrity of the information and information resources entrusted to government by the people of Texas.

IR Objective #1 Ensure that the integrity of the computing facilities and associated data and processes is not compromised. Outcomes: Appropriate security measures are in place that ensure continued accountability. Appropriate policies are in place to guide electronic records management. Web publication of data privacy and open records policy.

Action Item #1 Enforce logon password security throughout all levels of the computing facilities.

Action Item #2 Maintain an up-to-date Information Security Policy and develop an electronic records management policy. Publish policies on data privacy and open records on the Internet web site.

Action Item #3 Enforce the computer/network security administration plan controlled by the designated administrators.

Action Item #4 Perform security audits and acquire additional system software to control security of data and programs.

Action Item #5 Provide security instructions at the New Employee Orientation classes and at selected field locations.

IR Strategy #1 Provide for mainframe, client/server, and network security through appropriate security measures.

IR Strategy #2 Provide for the security of sensitive and/or confidential data within the computing facilities.

Action Item #6 Use production control personnel to control access to printed output.

Action Item #7 Review all data files annually with appropriate custodians to assess changes in sensitivity of data.

Action Item #8 Restrict the keying of sensitive or confidential data and revenue transactions through adequately controlled authorized applications.

Action Item #9 Consult with legal staff to mitigate concerns regarding sensitive or proprietary data with regard to the Texas Open Records Act.

Action Item #10 Conduct a bi-annual security audit of the Internet and Intranet facilities.
IR Objective #2 Provide computing facilities that are reliable and dependable for Department staff and other customers. Outcomes: The clients will maintain their confidence in the reliability and accuracy of the IR services. Major information systems are completed on time and within budget.

IR Strategy #3 Provide for dependable up-time during prime shifts for all computing facilities.

Action Item #11 Achieve an average annual prime shift up-time of 98% for the wide area networks.

Action Item #12 Achieve an average annual prime shift up-time of 98% for the local area networks.

Action Item #13 Achieve an average annual prime shift up-time of 98% for the Sybase client/server platform.

Action Item #14 Achieve an average annual prime shift up-time of 98% for the Internet and Intranet sites.

Action Item #15 Achieve an average annual prime shift up-time of 98% for the local PBX.

Action Item #16 Achieve an average annual prime shift up-time of 98% for the Oracle platform.

Action Item #17 Monitor service levels for all applications on the mainframe computer.

IR Strategy #4 Provide a quality assurance (QA) function to support all applications on the computing facilities.

Action Item #18 Expand the quality assurance functions by identifying and implementing additional QA checkpoints within the life cycles of software development.

Action Item #19 Increase the number of risk assessments done by the QA function.

Action Item #20 Acquire additional staff, as necessary, to expand and sustain the quality assurance function throughout all applications on the computing facilities.

IR Strategy #5 Provide reliable production control/data entry services

Action Item #21 Meet existing production standards for the Data Entry Section.

Action Item #22 Meet all production schedules.
IR Strategy #6 Employ the Department’s principles of “Total Quality Management” throughout the administration of the Department’s computer facilities.

Action Item #23 Send appropriate IR employees to quality awareness training.

Action Item #24 Conduct post-implementation user surveys for services provided by the IR Branch between six months and a year after implementation.

Action Item #25 Periodically conduct the customer satisfaction surveys.

IR Strategy #7 Implement a methodology that provides appropriate capacity and performance planning for the local and wide area networks.

Action Item #26 Utilize network management and performance monitoring software to determine network needs and growth trends.

Action Item #27 Acquire and implement LAN/WAN hardware and software in a timely fashion to prevent backlogs of pending requests due to inadequate capacity or performance.

IR Objective #3 Provide for contingency planning for the computing facilities. Outcomes: Rigorously test disaster recovery and business contingency plans.

IR Strategy #8 Provide workable disaster recovery plans for the computing facilities.

Action Item #28 Maintain the disaster recovery plan for the client/server environment and its critical applications, and test segments of the plan annually.

Action Item #29 Maintain the disaster recovery plan for TPW Headquarters telecommunications, and test segments of the plan annually.

Action Item #30 Maintain additional contingency plans within other major automation areas, such as the Parks Reservation Center.

Action Item #31 Incorporate all contingency plans for computing facilities into Department wide plan for disaster recovery.

Action Item #32 Utilize training, facilities, contracts, and other assistance provided by DIR and other agencies.

IR Strategy #9 Concentrate efforts on preventing the occurrence of conditions such as electrical power surges which lead to disabling of the computing facilities.

Action Item #33 Maintain proper warning equipment such as; fire, water, temperature, to alert of potential problems and protect mission critical applications with an UPS and a motor generator.
Action Item #34 Require education and training of staff in prevention of disabling problems.

Action Item #35 Use contractors for safekeeping and rotation of data files at off-site locations.

IR Strategy #10 Assist the divisions with the creation of Business Unit Service Resumption Plans.

Action Item #36 Use divisional Information Resources Coordinators as the developers of the business unit service resumption plans

Action Item #37 Establish a project plan with target dates for completion of the business unit service resumption plans

Action Item #38 Define validation strategies for testing modifications and assessing the business unit service resumption plans.

IR Objective #4 Expand the infrastructure of the existing computing environments to provide technology facilities and information to additional Department staff. Outcomes: Deploy access irrespective of location.

IR Strategy #11 Maintain and improve Voice and Data Network Operations and field office telephone support.

Action Item #39 Assist field locations in upgrading their communication systems for best value and within Department voice, radio and network standards.

Action Item #39A Upgrade the voice and data networks by migrating them from TEXAN III to TEXAN 2000.

IR Goal #2 Develop, acquire, implement and maintain application hardware and software to support the business and research operations of the Department. Supports Department Goal #2 Broaden efforts to reach new constituencies and TPW Goal #3 Increase our capacity to defend the environment and manage the heritage of Texas. Supports the State’s Strategic Goal # 2 - Texas state government will enhance the performance of its agencies’ mandates, missions, and core competencies through appropriate application of information resources. Also supports the State’s Strategic Goal # 4 - Texas state government’s acquisition, use, and management of information resources will be driven by customer needs.

IR Objective #1 Maintain the Department’s automated databases and applications to achieve expected results in a timely and accurate manner. Outcomes: Standards are followed for technical interoperability.

IR Strategy #12 Continue to use a "problem and change management" system to effectively manage maintenance.

Action Item #40 Conduct weekly and on-demand meetings to discuss proposed changes to the production environment.
Action Item #41 Use and maintain an automated system to handle problems and changes.

IR Strategy #13 Continue to use a "Help Center" approach for reporting and resolving problems and requests for information.

Action Item #42 Maintain statistics on calls received, problems resolved or referred, and user satisfaction as measures of effectiveness.

Action Item #43 Train Help Desk staff to support new technologies.

IR Strategy #14 Provide information from the Department’s databases to internal and external customers as required by the Texas Open Records Act.

Action Item #44 Provide information to satisfy requests and receive reimbursements to recover costs.

Action Item #45 Provide an Ad-hoc report service for internal and external clients.

IR Objective #2 Develop and/or acquire new automation technologies and applications to extend technology and information to Department staff. Outcomes: Use of private sector technology skills and resources when it is in the best interest of the Department.

IR Strategy #15 Expand the acquisition of information technology through outsourcing appropriate projects or phases of projects.

Action Item #46 Make thorough use of QISVs listed in the GSC technology catalog.

Action Item #47 Conduct cost-benefit analyses or "competitive cost reviews" on appropriate projects. Use other agencies, private vendors, or commercial off-the-shelf (COTS) software where appropriate.

Action Item #48 Continue to promote the use of commercial off-the-shelf software as an alternative to custom-written software.

IR Strategy #16 Continue the Department’s migration of all mainframe-based computing environment to a client/server environment.

Action Item #49 Implement new PC-based systems that take advantage of thin client technology.

Action Item #50 Continue to provide enterprise data and information in an open systems, thin client environment.

Action Item #51 Continue to support an application architecture that embraces multi-tier applications and provides a common structure for internal and web development tools.
Enable Department personnel in the use of thin client technologies via formal training, literature, and involvement in production of new systems.

**IR Strategy #17**  
*Continue to expand the capabilities of existing GIS projects and develop new projects.*

Continue to expand the GIS Research Lab as needed to service GIS needs for all divisions of the Department.

Continue to design, implement, and maintain geo-referenced natural and cultural resource databases.

Continue to share and promote the integration of GIS databases through a distributed network.

Work with the Texas Geographic Information Council (TGIC) on Texas base mapping, which includes the Texas Strategic Mapping (Stratmap) and Texas Orthoimagery Program (TOP), National Hydrology Dataset, statewide soils, landuse/landcover, color infrared aerial photography, and other programs. With these programs, create, maintain, and distribute one set of common digital base maps for use by all Texas State agencies.

Comply with the State’s GIS standards and guidelines.

**IR Strategy #18**  
*Acquire new or advanced technologies and applications for use by Department staff, including extending technology and information to the field staff.*

Expand the current use of e-commerce technology in support of certain automation projects where cost effective.

Implement additional voice response systems and other computer telephony integration in the next biennium.

Expand the use of electronic forms to reduce paper consumption and facilitate the transfer of data from source documents to automated systems.

Acquire additional hand-held data collection devices, which incorporate GPS technology, for biological census and monitoring, to facilitate single entry of data in accordance with standards, during the next biennium.

Acquire a new system with a new vendor for the Texas Outdoor Connection (License Point-of-Sale) and contract for continued maintenance of this state-wide application.
Action Item #63  Acquire contaminant detection technology and update it as it develops.

Action Item #64  Pursue the possibility of implementing an on-line mobile information access system to allow Law Enforcement personnel the ability to link directly to local, state, or national information without engaging dispatchers.

Action Item #65  Continue to expand and support the TPW web site on the Internet, which was established in November 1995.

Action Item #66  Support the Intranet server and continue to expand the Intranet infrastructure for web enabled Department applications during the biennium.

Action Item #67  Consider placing automated point-of-sale devices in suitable locations to provide unattended information and product sales to the Department’s customers, as appropriate, or consider partnering with another state Department in such an endeavor.

Action Item #68  Expand the use of electronic data interchange (EDI) and electronic commerce (EC), as appropriate.

Action Item #69  Continue to evaluate products and expand automation at state fish hatcheries.

Action Item #70  Expand the scope and add new data layers to the Terrestrial Wildlife Database, in compliance with Department GIS standards.

Action Item #71  Continue to evaluate products and expand the use of interactive multi-media technology to bring video, audio and computer media together.

Action Item #72  Expand the use of video teleconferencing and telecommuting technologies to the benefit of off-site meetings, public hearings and education.

Action Item #73  Evaluate and acquire specialized document management applications for standardized data collection.

IR Strategy #19  Expand the Executive Information System (EIS) which draws upon enterprise data.

Action Item #74  Add the data from R-Cubed system and Texas Outdoor Connection data to the EIS.

Action Item #75  Continue to develop Impromptu and PowerPlay catalogues and scripts.

Action Item #76  Add EIS interfaces to new client/server systems where appropriate.

IR Strategy #20  Implement a flexible Customer Information System.
IR Goal  #3  **Develop, adopt, promote and monitor compliance with standards, guidelines and planning processes to ensure that business practices support rather than inhibit the Department's technology initiatives.** Supports TPW Goal #1 Strengthen commitment to core constituencies TPW Goal #2 Broaden efforts to reach new constituencies and TPW Goal #3 Increase our capacity to defend the environment and manage the heritage of Texas. Supports the State's Strategic Goal #1 - Texas state government will deliver seamless, integrated government services to citizens through coordinated, statewide information resources. Also State Strategic Goal #4 - Texas state government's acquisition, use, and management of information resources will be driven by customer needs.

IR Objective  #1  Support statewide technology mandates, initiatives, and projects as they consolidate and standardize automation technologies. Outcomes: Inter-Department sharing of information. Use of common information portals.

**IR Strategy #21** Cooperate with and comply with statewide standards and guidelines for GIS, telecommunications, security administration, USAS and USPS.

Action Item  #80  Continue to serve on statewide committees which set GIS policies and standards, and which develop plans.

Action Item  #81  Adopt and comply with the statewide GIS standards and guidelines and make an annual report of compliance to DIR.

Action Item  #82  Pursue use of other Department networks, when considering expansion of the existing Department network.

Action Item  #83  Continue to evaluate and implement telecommunication technologies to combine voice and data telecommunications where appropriate.

Action Item  #84  Continue to support expanded service to county tax-assessor/collector offices to assist with boat registration as necessary.

Action Item  #85  Continue to participate in the Asset Protection Council coordinated by DIR and comply to web standards issued via the Public Electronic Systems on the Internet Group coordinated by DIR.

**IR Strategy #22** Continue migration to open system computing to be able to operate in a vendor-neutral environment.
Action Item #86  Receive training in TCP/IP and OSI solutions as migration occurs.

Action Item #87  Replace aging hardware and software systems with new technologies which are compatible with OSE standards during migration period.

IR Objective #2  Develop and adopt internal standards, guidelines and planning processes for business practices to support the Department’s technology initiatives. The TPW web team has developed web development standards that encompass State ADA guidelines and surpass them. As a group, they enforce these standards. Also, TPW is looking at technology solutions to maintenance of state web page standards. Outcomes: Provides access to state-provided data. Acceptance of electronic payments and transactions. Formal processes for Web development. Web site is accessible to all citizens. Easy access to public information.

IR Strategy #23  Establish and foster a "master planning" approach for planning and implementing technology-based solutions.

Action Item #88  Continue to use a centralized information technology staff that addresses the major common needs of the Department.

Action Item #89  Continue to support staff in program divisions in development of their individual needs.

Action Item #90  Continue to use Department-wide committees to establish business practices and technology standards and to provide guidance on strategic directions for information technology at the Department.

IR Strategy #24  Develop and closely adhere to standards to ensure that files and information can be shared with the minimum amount of technical intervention.

Action Item #91  Maintain, review and enforce standards on widely deployed applications such as word processing, e-mail and spreadsheets.

Action Item #92  Continue to standardize on personal computers to greatly reduce problems related to network connection, modem use, and upgrades; maintain standards for voice and data networking.

Action Item #93  Standardize certain business practices and formats so data can be easily integrated or shared.

Action Item #94  Evaluate and develop spatial data standards and metadata standards for both spatial and attribute data.

Action Item #95  Maintain the plan to help install the new desktop application software on existing machines and to provide training in the new software statewide.

IR Strategy #25  Abide to a conceptual model for electronic data access to provide timely and accurate information to staff and constituents.
Action Item #96  Make use of centralized repositories (data warehouses).

Action Item #97  Maintain an infrastructure which includes PCS, database servers, application servers, LANs, WANs (including the public Internet network) and the Intranet.

Action Item #98  Provide transaction processing programs such as the EIS, R-Cubed and Texas Outdoor Connection systems to create data for the centralized repositories.

Action Item #99  Comply with data storage and retrieval standards to ensure that data from different sources can be easily integrated and retrieved.

IR Goal #4  Recruit, train, sustain and retain a competent technology work force, skilled in current technology, which maintains the infrastructure and acts as trainers, enablers and consultants for internal customers. This goal supports all of the State Strategic Goals and all of the Department Strategic Goals.

IR Objective #1  Provide an internal training facility to enable on-going education of IR staff and Department staff. Outcomes: Enables the professional support of the new and existing IR technology.

IR Strategy #26  Provide work space and equipment to enable on-going education and training of staff.

IR Strategy #27  Provide staff who have the ability to train Department staff in appropriate technology.

Action Item #100  Expand the TPW field training program.

Action Item #101  Expand the number of software courses taught.

Action Item #102  Evaluate and pursue the use of computer-based training to supplement staff-led training.

Action Item #103  Evaluate and pursue the use of Internet/online training to supplement staff-led training.

Action Item #104  Train staff in support of career ladders.

Action Item #105  Enhance the training capability by utilizing TPW staff as "expert" trainers in selected disciplines.

Action Item #106  Intensify field site visits for troubleshooting and staff training.
IR Objective #2 Provide necessary funding and reserve staff work hours to enable the education and training of IR staff through internal and external training and education. Outcomes: Provides a technically competent staff to support the changing environments.

IR Strategy #28 Provide time and/or funds for both internal and external training of IR staff.

Action Item #107 Reserve appropriate work hours for training associated with IR projects which require internal training.

Action Item #108 Reserve appropriate work hours for training and education for staff’s general professional development in technology subjects.

Action Item #109 Reserve staff hours for participation in training and practical application of Total Quality Management methods and tools.

Action Item #110 Continue to take advantage of seminars, conferences, and technical courses in appropriate technology areas.

Action Item #111 Expand upon the use of locally provided education and training by DIR, other agencies, and local vendors.

IR Objective #3 Provide appropriate career ladders and career paths, for information technology employees, that are consistent with those provided by other state agencies and are competitive enough to attract and retain talented employees.

IR Strategy #29 Conduct position audits and recommend reclassifications where appropriate.

Action Item #112 Work with the Department’s Human Resources function to prepare career ladders and conduct the audits and execute reclassifications as needed.

IR Strategy #30 Work through DIR, TASSCC and SACC to gather and analyze data and to keep Department executives and other officials informed regarding compensation and related issues.

Action Item #113 Participate in data gathering efforts of these organizations

Action Item #114 Present results of the survey(s) to Department executives.
### Major Applications

<table>
<thead>
<tr>
<th>Application Name</th>
<th>Maintenance Division</th>
<th>Software</th>
<th>Hardware</th>
<th>Location</th>
<th>Batch/Online Status</th>
<th>Application Description</th>
<th>Sharing</th>
<th>Future</th>
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</thead>
<tbody>
<tr>
<td>Angler Recognition Program</td>
<td>T</td>
<td>DBASE IV</td>
<td>PC Microcomputer</td>
<td>Tyler, TX</td>
<td>Update/Inquiry</td>
<td>Names and addresses of people who catch fish of a certain size and species. Hard copy reports provided to universities and any state Department that requests the information.</td>
<td></td>
<td>Normal maintenance and enhancements</td>
</tr>
<tr>
<td>Angler Activity Program</td>
<td>T</td>
<td>Delphi 2</td>
<td>PC Microcomputer</td>
<td>Austin, HQ</td>
<td>Batch</td>
<td>Anglers participating in outreach events. E-mail and CD-ROM provided to universities and any state Department that requests the information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artificial Reef</td>
<td>V</td>
<td>Access</td>
<td>PC NT Microcomputer</td>
<td>Austin, HQ</td>
<td>Update/Inquiry</td>
<td>Location of Structures and Donor data.</td>
<td></td>
<td>Normal maintenance and enhancements</td>
</tr>
<tr>
<td>Bays And Estuaries Management</td>
<td>V</td>
<td>ARC/INFO</td>
<td>SUN/PC DOS Microcomputer</td>
<td>3001 S I-35 Suite 100 Austin, TX</td>
<td>Update/Inquiry</td>
<td>Develop geographic inventories of coastal habitats and wildlife resources and perform analyses to enhance coastal resources, coastal wetlands, and fish and wildlife distribution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Conservation Database</td>
<td>W</td>
<td>Revelation/Grass</td>
<td>PC DOS Microcomputer</td>
<td>3001 S I-35, Suite 100 Austin, TX</td>
<td>Inquiry/Update</td>
<td>Collection of endangered and threatened species. Hard copy reports are provided in response to specific requests for information.</td>
<td></td>
<td>Normal maintenance and enhancements</td>
</tr>
<tr>
<td>Boat Marine Dealers</td>
<td>A</td>
<td>MODEL 204</td>
<td>HDS EX44 mainframe</td>
<td>San Angelo, Texas</td>
<td>On-line Update/Inquiry</td>
<td>Track boat dealers licensing. Candidate for re-engineering as a Client/Server or Web application.</td>
<td></td>
<td>Candidate for re-engineering as a Client/Server or Web application.</td>
</tr>
<tr>
<td>Boat Registration and Titling</td>
<td>A</td>
<td>MODEL 204</td>
<td>HDS EX44 mainframe</td>
<td>San Angelo, Texas</td>
<td>On-line Update/Inquiry/Batch</td>
<td>Boat and motor registration and titling. Hard copy reports, tapes, and mailing labels are available on request for a fee. County Tax Collectors have on-line inquiry and a receipt system available for their use.</td>
<td></td>
<td>Candidate for re-engineering as a Client/Server or Web application.</td>
</tr>
<tr>
<td>Boat Receipt System</td>
<td>A</td>
<td>PowerBuilder/Windows, Sybase/Unix Operating System</td>
<td>486/586 PCs, NCR System 3400</td>
<td>TPW Headquarters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Section 2, Water Resources, Category C, August 18, 1992 edition.**

Currently transferred on tape or CD-ROM. Future transfers planned on the Internet.

**GIS Data Classification:**

- Biological Conservation Database
- Angler Recognition Program
- Angler Activity Program
- Artificial Reef
- Bays And Estuaries Management
- Boat Marine Dealers
- Boat Registration and Titling
- Boat Receipt System

**Sharing:**

- Currently transferred on tape or CD-ROM. Future transfers planned on the Internet.
- Hard copy reports provided to universities and any state Department that requests the information.
- Candidate for re-engineering as a Client/Server or Web application.

**Future:**

- Normal maintenance and enhancements
- Candidate for re-engineering as a Client/Server or Web application.

---

**Section 2, item 1.d. of GIS Standards and Guidelines, August 18, 1992 edition.**

Hard copy reports are provided in response to specific requests for information.

**Sharing:**

- Hard copy reports are provided in response to specific requests for information.

**Future:**

- Normal maintenance and enhancements
<table>
<thead>
<tr>
<th>Application Name</th>
<th>Maintenance Division</th>
<th>Application Description</th>
<th>Batch/Online Status</th>
<th>Application Description</th>
<th>Batch/Online Status</th>
<th>GIS Data Classification</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Tracking Module</td>
<td>A</td>
<td>Tracks consignment and processing of boat receipts by boat dealers.</td>
<td>Update/Inquiry</td>
<td>Tracks service time for Commissioned Peace Officers.</td>
<td>Update/Inquiry</td>
<td>None</td>
<td>TPW Headquarters</td>
</tr>
<tr>
<td>Coastal Zone Management Program</td>
<td>V</td>
<td>Mapping of fish distribution areas, and coastal resource areas.</td>
<td>Update/Inquiry</td>
<td>Maintains Public lands boundaries inventory.</td>
<td>Update/Inquiry</td>
<td>Section 2, Discipline 1, Category H, Land Parcels, August 18, 1992 edition</td>
<td>ARC/INFO</td>
</tr>
<tr>
<td>Commissioned Peace Officers</td>
<td>A</td>
<td>Data is provided to various state agencies upon request via tapes and telecommunications lines. The Gulf State Marine Fisheries Council receives data via diskette and in hard copy format.</td>
<td>Normal maintenance and enhancements</td>
<td>Currently transferred on tape or CD-ROM. Future transfers planned on the Internet.</td>
<td>Normal maintenance and enhancements</td>
<td>Section 2, Discipline 1, Category H, Land Parcels, August 18, 1992 edition</td>
<td>ASP/NT Server 4.0, Oracle RDBMS 7.3.4/Unix Operating System</td>
</tr>
<tr>
<td>Creel Program</td>
<td>T</td>
<td>Development of Public Lands Boundary Layer</td>
<td>Inquiry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correspondence Tracking System</td>
<td>A</td>
<td>Tracks status of correspondence received in the Executive Office.</td>
<td>Update/Inquiry</td>
<td>None</td>
<td>Normal maintenance and enhancements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of Public Lands Boundary Layer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application Name</td>
<td>Maintenance Division</td>
<td>Software</td>
<td>Hardware</td>
<td>Location</td>
<td>Batch/Online Status</td>
<td>Application Description</td>
<td>Sharing:</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>--------------------</td>
<td>----------------------------</td>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Environmental Impact Statement</td>
<td>A</td>
<td>MODEL 204</td>
<td>HDS EX44 mainframe</td>
<td>San Angelo, Texas</td>
<td>On-line Update/Inquiry</td>
<td>Logs, retrieve, maintain and report the various Environment Impact Statements, Section 10 and Section 404 permits.</td>
<td>None</td>
</tr>
<tr>
<td>Federal Aid Report</td>
<td>T</td>
<td>Delphi 2</td>
<td>PC Microcomputer</td>
<td>Austin, HQ</td>
<td>Batch</td>
<td>Streamlines time required for Federal Aid Reports that requests the information.</td>
<td>E-mail and CD-ROM provided to universities and any state Department that requests the information.</td>
</tr>
<tr>
<td>Film Distribution</td>
<td>K</td>
<td>TekData Film Booking System</td>
<td>Macintosh Centrix 650</td>
<td>TPW Headquarters</td>
<td>On-line Update/Inquiry</td>
<td>Maintenance of lending films for hunter and boater education to independent educational institutions.</td>
<td>None</td>
</tr>
<tr>
<td>Finfish Invoice Tracking</td>
<td>A</td>
<td>MODEL 204</td>
<td>HDS EX44 mainframe</td>
<td>San Angelo, Texas</td>
<td>On-line Update/Inquiry</td>
<td>Tracks invoicing from fish wholesalers and retailers related to controlled fish species.</td>
<td>None</td>
</tr>
</tbody>
</table>

**Fish Hatchery Data System**

- **Application Name:** Fish Hatchery Data System
- **Maintenance Division:** A
- **Software:** Sybase SQL Anywhere
- **Hardware:** Intel running Windows NT 4.0
- **Location:** Austin Headquarters
- **Batch/Online Status:** Update/Inquiry/Batch
- **Application Description:** Tracks invoicing from fish wholesalers and retailers related to controlled fish species.
- **Sharing:** None
- **Future:** Candidate for re-engineering as a Client/Server or Web application.

**Fish Landings System**

- **Application Name:** Fish Landings System
- **Maintenance Division:** A
- **Software:** PowerBuilder/Windows, Sybase/Unix Operating System
- **Hardware:** 486/586 PCs, SUN Enterprise 3000
- **Location:** TPW Headquarters
- **Batch/Online Status:** Update/Inquiry/Batch
- **Application Description:** Monitors the landings and value of marine fish, oyster, crab, and shrimp reported by seafood and bait dealers.
- **Sharing:** None
- **Future:** Normal maintenance and enhancements

**FMF (Fish Monitoring File)**

- **Application Name:** FMF (Fish Monitoring File)
- **Maintenance Division:** T
- **Software:** ObjectPAL
- **Hardware:** PC Microcomputer
- **Location:** Austin, HQ
- **Batch/Online Status:** Batch
- **Application Description:** Anglers participating in outreach events.
- **Sharing:** Available via GIS Lab.
- **Future:** Combine into MS SQL Server as an Internet application.

**Fish Stocking**

- **Application Name:** Fish Stocking
- **Maintenance Division:** T
- **Software:** Visual Basic
- **Hardware:** PC Microcomputer
- **Location:** Austin, HQ
- **Batch/Online Status:** Batch
<table>
<thead>
<tr>
<th>Application Name</th>
<th>Maintenance Division</th>
<th>Application Description</th>
<th>Hardware</th>
<th>Location</th>
<th>Batch/Online Status</th>
<th>Application Description</th>
<th>Hardware</th>
<th>Location</th>
<th>Batch/Online Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish stocking by Inland Fisheries.</td>
<td>A</td>
<td>E-mail and CD-ROM provided to universities and any state Department that requests the information.</td>
<td>Microsoft Access</td>
<td>Fountain Park Plaza - Austin</td>
<td>On-line Update/Inquiry</td>
<td>Combine into MS SQL Server as an Internet application.</td>
<td>Sun ES-4000</td>
<td>TPW Headquarters</td>
<td>On-line Update/Inquiry</td>
</tr>
<tr>
<td>Grants-In-Aid</td>
<td>A</td>
<td>Data provided to the Comptroller of Public Accounts Uniform Statewide Accounting System (USAS) and to Uniform Statewide Payroll System (USPS) as a reporting Department via on-line access and tapes.</td>
<td>None</td>
<td>TPW Headquarters</td>
<td>None</td>
<td>Normal maintenance and enhancements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historic Data Conversion</td>
<td>P</td>
<td>None</td>
<td>ARC/INFO</td>
<td>TPW Headquarters</td>
<td>Update/Inquiry</td>
<td>Normal maintenance and enhancements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunter/Angler/Boater Education (HABES)</td>
<td>A</td>
<td>None</td>
<td>MS-Access97; Sybase/UNIX Operating System; NT Server 4.0; MS-IIS4.0</td>
<td>TPW Headquarters</td>
<td>On-line Update/Inquiry/Batch</td>
<td>Normal maintenance and enhancements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Financial System</td>
<td>A</td>
<td>None</td>
<td>Sun Enterprise 3000, Dell 2300</td>
<td>TPW Headquarters</td>
<td>On-line Update/Inquiry/Batch</td>
<td>Normal maintenance and enhancements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Categorization File</td>
<td>T</td>
<td>None</td>
<td>PowerBuilder/Windows, Sybase/Unix Operating System</td>
<td>Austin, HQ</td>
<td>Update/Inquiry</td>
<td>Tracks information on land that is being reviewed for acquirement by the department.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Conservation Tracking</td>
<td>A</td>
<td>None</td>
<td>SAS</td>
<td>Austin, TX</td>
<td>Update/Inquiry</td>
<td>Normal maintenance and enhancements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Ledger</td>
<td>A</td>
<td>None</td>
<td>SAS</td>
<td>San Angelo, Texas</td>
<td>On-line Update/Inquiry</td>
<td>Will be rewritten as part of the Integrated Financial System in FY 2000.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Application Name: Landowner Assisted Management Permit System
Maintenance Division: W
Software: Paradox
Hardware: NT PC
Location: TPW Wildlife Office in Tyler, TX
Batch/Online Status: On-line Update/Inquiry
Application Description: The issuance of antlerless deer permits. Used to address antlerless deer harvest needs.
Sharing: None
Future: Being rewritten to Delphi

Application Name: Law Enforcement Citation System
Maintenance Division: A
Software: MODEL 204
Hardware: HDS EX/4 mainframe
Location: San Angelo, Texas
Batch/Online Status: On-line Update/Inquiry/Batch
Application Description: Operation of citations, arrest warrants, and civil restitutions.
Sharing: Attorney General
Future: Candidate for re-engineering as a Client/Server or Web application.

Application Name: List Management Module
Maintenance Division: A
Software: PowerBuilder/Windows, Sybase/Unix Operating System
Hardware: 486/586 PCs, SUN Enterprise 3000
Location: TPW Headquarters
Batch/Online Status: Update/Inquiry/Batch
Application Description: Tracks various contact list for mailing purposes throughout the Department.
Sharing: None
Future: Normal maintenance and enhancements

Application Name: Mapping Of State Parks
Maintenance Division: P
Software: ARC/INFO
Hardware: NT
Location: TPW Headquarters
Batch/Online Status: Update/Inquiry
Application Description: Maintenance of data for the master plans of state parks
Sharing: On-line access planned on the Internet for state universities.
Future: Additional state parks added each fiscal year.

Application Name: MTML
Maintenance Division: W
Software: Visual Basic
Hardware: NT PC
Location: Austin HQ
Batch/Online Status: On-line Update/Inquiry
Application Description: Maintains mailing list for the news.
Sharing: None
Future: Normal maintenance and enhancements, may be rewritten in Delphi

Application Name: NOA Coastwatch Habitat Monitoring
Maintenance Division: V
Software: ARC/INFO
Hardware: SUN
Location: 3001 S I-35 Suite 100 Austin, TX
Batch/Online Status: Update/Inquiry
Application Description: Bay and estuaries monitoring cooperative program.
Sharing: Currently transferred on tape or CD-ROM. Future transfers planned on the Internet.
Future: Normal maintenance and enhancements

Application Name: Non-Game Permitting System
Maintenance Division: W
Software: Access
Hardware: NT PC
Location: Austin HQ
Batch/Online Status: On-line Update/Inquiry
Application Description: Maintains non-game permit data.
Sharing: None
Future: Normal maintenance and enhancements, may be rewritten in Delphi.

Application Name: Park Office Suite
Maintenance Division: P
Software: 486/586 PCs
Hardware: All State Park Offices
Location: All State Park Offices
Batch/Online Status: On-line Update and Inquiry
Application Description: Registration and Reporting
Sharing: Fisheries Division
Future: Normal maintenance and enhancements
<table>
<thead>
<tr>
<th>Application Name</th>
<th>Maintenance Division</th>
<th>Software</th>
<th>Hardware</th>
<th>Location</th>
<th>Batch/Online Status</th>
<th>Application Description</th>
<th>Sharing</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Revenue</td>
<td>A</td>
<td>PowerBuilder/Windows, Sybase/Unix Operating</td>
<td>486/586 Pcs, SUN Enterprise 3000</td>
<td>TPW Headquarters</td>
<td>On-line Updates and Inquiry</td>
<td>Facility non-automated park utilization records and revenues</td>
<td>None</td>
<td>Normal maintenance and enhancements</td>
</tr>
<tr>
<td>Pollution Response Inventory and Species Mortality (PRISM)</td>
<td>R</td>
<td>MS-Access and MS-OutLook/Exchange</td>
<td>Hard drives on local IBM compatible PC's</td>
<td>Austin Headquarters and Waco, Tyler, San Marcos, Seabrook and Corpus Christi field offices</td>
<td>Online updates, queries and reports; batch data transfer between Austin and field offices</td>
<td>Information about fishkills and pollution complaints in Texas and the Gulf of Mexico.</td>
<td>None</td>
<td>Normal maintenance and enhancements</td>
</tr>
<tr>
<td>Public Hunts</td>
<td>A</td>
<td>PowerBuilder/Windows, Sybase/Unix Operating System</td>
<td>Sun ES-3000</td>
<td>TPW Headquarters</td>
<td>On-line Update/Inquiry/Batch</td>
<td>Maintains the selection of participants in public hunts.</td>
<td>Hard copy reports provided upon request</td>
<td>Normal maintenance and enhancements</td>
</tr>
<tr>
<td>Revenue</td>
<td>A</td>
<td>Model 204</td>
<td>HDS EX/4 mainframe</td>
<td>San Angelo, Texas</td>
<td>On-line Update/Inquiry/Batch</td>
<td>Maintains the revenue data for the Department's Boats and Law Enforcement applications in Model 204.</td>
<td>Data transmitted to the Treasury Department via telecommunications lines.</td>
<td>Continued migration to IFS.</td>
</tr>
<tr>
<td>San Marcos Hatchery Electrophoretic Database</td>
<td>T</td>
<td>GENE1/WordPerfect</td>
<td>PC DOS Microcomputer</td>
<td>San Marcos, TX</td>
<td>Update/Inquiry</td>
<td>Genotypes of large mouth bass from different reservoirs, categorized by reservoir.</td>
<td>Hard copy reports provided to universities and any state Department that requests the information.</td>
<td>Normal maintenance and enhancements</td>
</tr>
<tr>
<td>Section 7 v 2.0</td>
<td>T</td>
<td>Delphi 2</td>
<td>PC Microcomputer</td>
<td>Austin, HQ</td>
<td>Batch</td>
<td>Threatened and endangered species</td>
<td>E-mail and CD-ROM provided to universities and any state Department that requests the information.</td>
<td>Combine into MS SQL Server as an Intranet application.</td>
</tr>
<tr>
<td>Texas Outdoor Connection</td>
<td>(Outsourced application maintained by TransActive, Inc.)</td>
<td>Transactive</td>
<td>Windows NT 3.51 Server, MS SQL Server 6.0</td>
<td>DEC Alpha Server 2100</td>
<td>Replicated data is stored at TPW Headquarters</td>
<td>Data replication is currently only under investigation.</td>
<td>Names, addresses and license/permit related information is captured by Texas Outdoor Connection system at approximately 3,000 - 4,000 point-of-</td>
<td></td>
</tr>
</tbody>
</table>
### Natural Sale Sites

Sale sites across Texas and replicated in a database at TPW Headquarters.

**Sharing:** None  
**Future:** The application vendor will be changed in FY 2001.

**Application Name:** Texas Outdoor Recreation Plan  
**Maintenance Division:** P  
**Software:** FoxPro  
**Hardware:** PC DOS Microcomputer  
**Location:** 2900 S I-35 Suite 104 Austin, TX  
**Batch/Online Status:** On-line Update/Inquiry  
**Application Description:** Maintains the Texas Outdoor Recreation Inventory.  
**Sharing:** Research information provided on hard copy reports or 3.5” diskette.  
**Future:** Normal maintenance and enhancements

**Application Name:** Texas Plant Information  
**Maintenance Division:** W  
**Software:** Java Builder  
**Hardware:** Server - Wildlife  
**Location:** Austin HQ  
**Batch/Online Status:** On-line Update/Inquiry  
**Application Description:** Maintains Texas Plant Information.  
**Sharing:** Internet  
**Future:** Data expansion

**Application Name:** Triploid Grass Carp Permitting System  
**Maintenance Division:** T  
**Software:** ObjectPAL  
**Hardware:** PC Microcomputer  
**Location:** Austin, HQ  
**Batch/Online Status:** Batch  
**Application Description:** Carp Permitting and stocking.  
**Sharing:** E-mail and CD-ROM provided to universities and any state Department that requests the information.  
**Future:** Combine into MS SQL Server as an Internet application.

**Application Name:** Trout Utilization and Allocation Program  
**Maintenance Division:** T  
**Software:** Delphi 2  
**Hardware:** PC Microcomputer  
**Location:** Austin, HQ  
**Batch/Online Status:** Batch  
**Application Description:** Outreach events involving rainbow trout stocking.

---

### Water Data Access

E-mail and CD-ROM provided to universities and any state Department that requests the information.

**Application Name:** Water Data Access  
**Maintenance Division:** A  
**Software:** HTML, PowerBuilder 6.5, MS-SQL Server 7.0, MS-NT Server 4.0, MS-Internet Information Server 4.0, MO, MOIMS 2.0, ArcSDE 3.0, Iview, GetClip  
**Hardware:** DELL 6300  
**Location:** TPW Headquarters  
**Batch/Online Status:** Web Inquiry Only; Batch Update  
**Application Description:** Allows the public to access historical aquatic resource data from the Coastal Fisheries, Inland Fisheries and Resource Protection Divisions through a web-based map or text interface as mandated by the Texas Legislature through Senate Bill 1.  
**Sharing:** TPW IntrAnet (WILDnet)  
**Future:** InterNet

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### Water Event Tracking

**Application Name:** Water Event Tracking  
**Maintenance Division:** A  
**Software:** Model 204/PowerBuilder/Windows, Sybase/Unix Operating System  
**Hardware:** HDS EX44 mainframe/SUN Enterprise 3000  
**Location:** San Angelo, Texas  
**Batch/Online Status:** On-line Update/Inquiry  
**Application Description:** Maintains inventory of water-related accidents and fatalities. The fatalities are in the PowerBuilder environment and boating accident in Model 204.  
**Sharing:** Reports to the US Coast Guard  
**Future:** Boating accidents to use the US Coast Guards BAR (Boat Accident Reporting) System due out the summer of FY 2000.

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### Wildlife Survey Systems

**Application Name:** Wildlife Survey Systems  
**Maintenance Division:** W  
**Software:** MODEL 204, SAS, PL/1, PASCAL, FORTRAN  
**Hardware:** HDS EX44 mainframe  
**Location:** San Angelo, Texas  
**Batch/Online Status:** On-line Update/Inquiry  
**Application Description:** Collection of game surveys conducted by mail. Data provided to universities (primarily Texas A & M) on tape.  
**Sharing:** Candidate for client/server migration.

---
### Natural Application Name: Wildlife Survey
**Maintenance Division:** W  
**Software:** Delphi  
**Hardware:** NT PC  
**Location:** Austin HQ  
**Batch/Online Status:** On-line Update/Inquiry  
**Application Description:** Maintains the data for annual mailout surveys.  
**Sharing:** None  
**Future:** Normal maintenance and enhancements

#### Major Data Bases

<table>
<thead>
<tr>
<th>Database Name</th>
<th>Software</th>
<th>Hardware</th>
<th>Location</th>
<th>Batch/Online Status</th>
<th>Estimated physical storage requirements</th>
<th>Application Description</th>
<th>GIS Data Classification</th>
<th>Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angler Recognition Program</td>
<td>DBASE IV</td>
<td>PC DOS Microcomputer</td>
<td>Tyler, TX</td>
<td>Update/Inquiry</td>
<td>1.5 Megabytes</td>
<td>Names and addresses of people who catch fish of a certain size and species.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artificial Reef</td>
<td>Access</td>
<td>PC NT Microcomputer</td>
<td>Austin HQ</td>
<td>Update/Inquiry</td>
<td>90 Megabytes</td>
<td>Track the location and characteristics of structures and information about potential donors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bays And Estuaries Management</td>
<td>ARC/INFO</td>
<td>SUN/PC DOS Microcomputer</td>
<td>3001 S I-35 Suite 100 Austin, TX</td>
<td>Update/Inquiry</td>
<td>10 - 12 Gigabytes</td>
<td>(data also used by Coastal Zone Management)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Application Description:** Geographic inventories of coastal habitats and wildlife resources and perform analyses to enhance coastal resources, coastal wetlands, and fish and wildlife distribution.  
**GIS Data Classification:** Biological Conservation Database  
**Sharing:** None  
**Future:** Normal maintenance and enhancements

- **Database Name:** Biological Conservation Database  
  **Software:** Revelation/Grass  
  **Hardware:** PC DOS Microcomputer  
  **Location:** 3001 S I-35, Suite 100 Austin, TX  
  **Batch/Online Status:** Inquiry/Update  
  **Estimated physical storage requirements:** 30 Megabytes  
  **Application Description:** Collection of endangered and threatened species. Hard copy reports are provided in response to specific requests for information.  
  **GIS Data Classification:** Section 2, item 1.d. of GIS Standards and Guidelines, August 18, 1992 edition.  
  **Sharing:** Hard copy reports are provided in response to specific requests for information.

- **Database Name:** MODEL 204  
  **Software:** MODEL 204  
  **Hardware:** HDS EX44 mainframe  
  **Location:** San Angelo, TX  
  **Batch/Online Status:** On-line Update/Inquiry/Batch  
  **Estimated physical storage requirements:** 2.5 Gigabytes  
  **Application Description:** Boat and motor registration and title databases. Hard copy reports, tapes, and mailing labels are available on request for a fee. County Tax Collectors have on-line inquiry and a receipt system available for their use.  
  **GIS Data Classification:**  
  **Sharing:** Hard copy reports, tapes, and mailing labels are available on request for a fee. County Tax Collectors have on-line inquiry and a receipt system available for their use.

- **Database Name:** Central Reservation Center  
  **Software:** Fox Pro  
  **Hardware:** Network Server  
  **Location:** TPW Headquarters  
  **Batch/Online Status:** Update/Inquiry  
  **Estimated physical storage requirements:** 11 Megabytes  
  **Application Description:** Logs and reports Copy Center activity.  
  **GIS Data Classification:** Central Reservation Center  
  **Sharing:** None
GIS Data Classification: Section 2, Discipline 1, Category H, Land Parcels, August 18, 1992 edition.

Sharing: On-line access planned on the Internet.

Database Name: Coastal Zone Management Program
Software: Oracle
Hardware: SUN UNIX Enterprise 4000
Location: TPW Headquarters
Batch/Online Status: On-line Update/Inquiry/Batch
Estimated physical storage requirements: 40 Gigabytes
Applicaiton Description: Automated databases for budgets, expenses, encumbrances, general ledger, and warrant tracking.
Sharing: Data provided to the Comptroller of Public Accounts Uniform Statewide Accounting System (USAS) as a reporting Department via on-line access and FTP.

GIS Data Classification: Financial Management System
Sharing: None

Database Name: Film Distribution
Software: TekData Film Booking System
Hardware: Macintosh Centrix 650
Location: TPW Headquarters-Communications
Batch/Online Status: On-line Update/Inquiry
Estimated physical storage requirements: 3 Megabytes
Application Description: List of films loaned for hunter and boater education to independent educational institutions.
Sharing: None

GIS Data Classification: Finfish Invoice Tracking
Sharing: None

Database Name: Fish Hatchery Data System
Software: Sybase SQL Server / Unix
Hardware: Sun Enterprise 3000
Location: TPW Headquarters
Batch/Online Status: Update/Inquiry
Estimated physical storage requirements: 20 Megabytes
Application Description: Removal of controlled fish species.
AGENDA

Application Description: So that remotely located managers may see hatchery data on a state wide basis. Updates of information in a centralized database are replicated to their computers when they dial-in to the Austin LAN. Based on this near real-time data, the directors may then generate reports and perform ad hoc queries.

Sharing: None

Database Name: Fishkills and Pollution Complaints
Software: Microsoft Access and MS Exchange
Hardware: Hard drives on local IBM compatible PC's
Location: TPW Headquarters and Waco, Tyler, San Marcos, Seabrook and Corpus Christi field offices
Batch/Online Status: Online updates, queries and reports; batch data transfer between Austin and field offices
Estimated physical storage requirements: Data databases - 3 Megabytes; Application databases - 5 Megabytes
Applicaton Description: Information about fishkills and pollution complaints in Texas and the Gulf of Mexico.

Application Description: So that remotely located managers may see hatchery data on a state wide basis. Updates of information in a centralized database are replicated to their computers when they dial-in to the Austin LAN. Based on this near real-time data, the directors may then generate reports and perform ad hoc queries.

Sharing: None

Database Name: Indian Data Classification
Software: Microsoft Access
Hardware: Networked server
Location: Fountain Park Plaza - Austin
Batch/Online Status: On-line Update/Inquiry/Batch
Estimated physical storage requirements: 20 Megabytes
Application Description: Inventory of park development projects being funded with federal and state support.

Sharing: None

Database Name: Historic Data Conversion
Software: ARC/INFO
Hardware: PC DOS Microcomputer
Location: TPW Headquarters
Batch/Online Status: Update/Inquiry
Estimated physical storage requirements: 2 - 3 Gigabytes (data also used by Development of Public Lands Boundary Layer)
Application Description: Natural and cultural resource data collections.
GIS Data Classification: Section 2, Discipline 6, Categories A, B, August 18, 1992 edition.
Sharing: On-line access planned on the Internet.

Database Name: Hunter/Angler/Boater Education (HABES)
Software: Sybase/Unix

Hardware: Sun enterprise 3000
Location: TPW Headquarters
Batch/Online Status: On-line Update/Inquiry/Batch
Estimated physical storage requirements: 108 Megabytes
Application Description: Student and instructor database.
Sharing: Class Schedule data available on Internet.

Database Name: Lake Categorization File
Software: Paradox
Hardware: PC DOS Microcomputer
Location: Tyler, TX
Batch/Online Status: On-line Update/Inquiry
Estimated physical storage requirements: 2.04 Megabytes
Application Description: Data base of descriptive characteristics of all state public reservoirs.
Sharing: Hard copy reports are given to the Texas Water Commission.

Database Name: Land Ledger
Software: SAS
Hardware: HDS EX44 mainframe
Location: San Angelo, TX
Batch/Online Status: On-line Update/Inquiry
Estimated physical storage requirements: 4 Megabytes
Application Description: Contains information related to all land owned by TPW.
Sharing: Hard copy reports given to the General Land Office.

Database Name: Landowner Assisted Management Permits
Software: Paradox
Hardware: NT PC
Location: TPW Wildlife office in Tyler, TX
Batch/Online Status: On-line Update/Inquiry
Estimated physical storage requirements: 100 Megabytes
Application Description: Contains information about landowners who were issued antlerless deer permits. Used to address antlerless deer harvest needs.
Sharing: None

Database Name: Law Enforcement Citation System
Software: MODEL 204
Hardware: HDS EX44 mainframe
Location: San Angelo, TX
Batch/Online Status: On-line Update/Inquiry/Batch
Estimated physical storage requirements: 1 Megabytes
Application Description: Contains information about law enforcement officers.
Sharing: Hard copy reports are given to the Texas Water Commission.
<table>
<thead>
<tr>
<th>Database Name</th>
<th>Application Description</th>
<th>Sharing</th>
<th>Estimated physical storage requirements:</th>
<th>GIS Data Classification</th>
<th>Location</th>
<th>Hardware</th>
<th>Software</th>
<th>Database Name</th>
<th>Application Description</th>
<th>Sharing</th>
<th>Estimated physical storage requirements:</th>
<th>GIS Data Classification</th>
<th>Location</th>
<th>Hardware</th>
<th>Software</th>
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</thead>
<tbody>
<tr>
<td>Mapping of State Parks</td>
<td>600 Megabytes Citations, arrest warrants, and civil restitution database.</td>
<td>Attorney General</td>
<td>600 Megabytes</td>
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<td>Update/Inquiry</td>
<td>SUN</td>
<td>ARC/INFO</td>
<td>TPW Headquarters</td>
<td>Park Revenue and Statistics</td>
<td>None</td>
<td>100 Megabytes</td>
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<td>Update/Inquiry</td>
<td>TPW Headquarters</td>
<td>Informix</td>
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<tr>
<td>Master plans for state parks</td>
<td>7 Megabytes Section 2, Discipline 1, Category H, August 18, 1992 edition.</td>
<td>On-line access the Internet.</td>
<td>7 Megabytes</td>
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<td>Update/Inquiry</td>
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<td>ARC/INFO</td>
<td>TPW Headquarters</td>
<td>GIS Data Classification</td>
<td>None</td>
<td>30 Megabytes</td>
<td>Facility non-automated park utilization records and revenues.</td>
<td>Update/Inquiry</td>
<td>TPW Headquarters</td>
<td>Informix</td>
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<tr>
<td>Media Industry Contacts</td>
<td>3.5 Megabytes Section 2, Discipline 1, Category D, Category 2, Category D, August 18, 1992 edition.</td>
<td>Intranet</td>
<td>3.5 Megabytes</td>
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<td>Update/Inquiry</td>
<td>ARC/INFO</td>
<td>SUN</td>
<td>TPW Headquarters</td>
<td>Media Industry Contacts</td>
<td>None</td>
<td>413 Kilobytes</td>
<td>Inventory of Project Wild facilitators, attending teachers, and workshops.</td>
<td>Update/Inquiry</td>
<td>TPW Headquarters</td>
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<tr>
<td>NOAA Coast-watch Habitat Monitoring</td>
<td>10 - 12 Gigabytes (data also used by Bays and Estuaries Management and Coastal Zone Management Program)</td>
<td>On-line Inquiry</td>
<td>10 - 12 Gigabytes (data also used by Bays and Estuaries Management and Coastal Zone Management Program)</td>
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<td>Update/Inquiry</td>
<td>ARC/INFO</td>
<td>SUN</td>
<td>TPW Headquarters</td>
<td>NOAA Coast-watch Habitat Monitoring</td>
<td>None</td>
<td>18 Megabytes</td>
<td>Logs and reports activity at the Print Shop.</td>
<td>Update/Inquiry</td>
<td>TPW Headquarters</td>
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<td>Non-Game Permitting</td>
<td>202 Megabytes Section 2, Discipline 1, Category D, Category 2, Category D, August 18, 1992 edition.</td>
<td>On-line Update/Inquiry</td>
<td>202 Megabytes</td>
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<td>Update/Inquiry</td>
<td>Access</td>
<td>SUN</td>
<td>Server - Wildlife</td>
<td>Non-Game Permitting</td>
<td>None</td>
<td>202 Megabytes</td>
<td>Data for the Department’s public hunts program used for the selection of participants in public hunts.</td>
<td>Update/Inquiry</td>
<td>Server - Wildlife</td>
<td>SUN</td>
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<tr>
<td>Database Name</td>
<td>Application Description</td>
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<td>Public Hunts History</td>
<td>Contains information pertaining to hunter's harvest results from public hunts.</td>
<td>3 Megabytes</td>
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<td>PRISM</td>
<td>Pollution response inventory and species mortality.</td>
<td>20 Megabytes</td>
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<td>On-line Update/Inquiry-PRISM Web for public access</td>
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<td>Revenue</td>
<td>Maintains the revenue data for all of the Department's Boat and Law Enforcement revenue-bearing applications.</td>
<td>81 Megabytes</td>
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<td>San Marcos Hatchery Electrophoretic Database</td>
<td>Genotypes of large mouth bass from different reservoirs, categorized by reservoir.</td>
<td>1.5 Megabytes</td>
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<td>Spacial Database Engine (SDE)</td>
<td>Manus database used in conjunction with the Water Data Assess database.</td>
<td>50 Megabytes</td>
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<td>Texas Outdoor Connection (Outsourced application maintained by TransActive, Inc.)</td>
<td>Names, addresses and license/permit related information is captured by Texas Outdoor Connection system at approximately 3,000 - 4,000 point-of-sale sites across Texas and replicated in a database at TPW Headquarters.</td>
<td>10 Gigabytes</td>
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<td>Windows NT 3.51 Server, MS SQL Server 6.0</td>
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<td>Replicated data is stored at TPW Headquarters</td>
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<td>Texas Outdoor Recreation Inventory</td>
<td>Inventory of all outdoor state recreation areas available to the public free or for a fee.</td>
<td>10.1 Megabytes</td>
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<td>Texas Plant Information</td>
<td>Inventory of all outdoor state recreation areas available to the public free or for a fee.</td>
<td>500 Megabytes</td>
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<td>Application Description:</td>
<td>Data entry and printing of mailing labels</td>
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<th>VideoFile</th>
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<tbody>
<tr>
<td>Software:</td>
<td>MS-SQL</td>
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<tr>
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<td>Dell</td>
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<td>Batch/Online Status:</td>
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<td>1.6 Gigabytes</td>
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<td>Application Description:</td>
<td>Public access to aquatic resource data.</td>
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<table>
<thead>
<tr>
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<th>Water Event Tracking</th>
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<tbody>
<tr>
<td>Software:</td>
<td>Sybase/UNIX</td>
</tr>
<tr>
<td>Hardware:</td>
<td>Sun Enterprise</td>
</tr>
<tr>
<td>Location:</td>
<td>TPW Headquarters</td>
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<td>Batch/Online Status:</td>
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<tr>
<td>Estimated physical storage requirements:</td>
<td>7 Megabytes</td>
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<td>Application Description:</td>
<td>Information on water-related accidents and fatalities.</td>
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<td>Sharing:</td>
<td>None</td>
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<table>
<thead>
<tr>
<th>Database Name:</th>
<th>Wildlife Mailout Survey Systems</th>
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<tbody>
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<td>Software:</td>
<td>SQL Server</td>
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<td>Hardware:</td>
<td>Server - Wildlife</td>
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<td>Location:</td>
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<td>Batch/Online Status:</td>
<td>On-line Update/Inquiry</td>
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<table>
<thead>
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<th>ZIP Code</th>
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<td>Software:</td>
<td>Assess</td>
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<td>Hardware:</td>
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<td>Batch/Online Status:</td>
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<td>Application Description:</td>
<td>Matches EXPO Survey to zip codes</td>
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<td>Sharing:</td>
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### Non-TPW Data Sets Utilized

<table>
<thead>
<tr>
<th>Database Name:</th>
<th>Department of Public Safety/License Name File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>Department of Public Safety</td>
</tr>
<tr>
<td>Access:</td>
<td>Send data file of Driver's License Numbers (DLN) via tape. Receive data file listing DLNs, name, and address via tape.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Name:</th>
<th>GSC Statewide Fleet Management Module Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>General Services Commission</td>
</tr>
<tr>
<td>Access:</td>
<td>Submit vehicle, fuel, mileage, expense information via ftp to GSC server.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Name:</th>
<th>Human Resources Information System (HRIS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>Comptroller of Public Accounts</td>
</tr>
<tr>
<td>Access:</td>
<td>Report Human Resource information via tapes. Hard copy reports are received in return. USPS will take over the reporting in January 1995.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Database Name:</th>
<th>Integrated Employee Benefits System (IEBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>Employee Retirement System</td>
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<table>
<thead>
<tr>
<th>Database Name:</th>
<th>Statewide Property Accounting (SPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>Comptroller of Public Accounts</td>
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<table>
<thead>
<tr>
<th>Database Name:</th>
<th>Texas Identification Number System (TINS)</th>
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</thead>
<tbody>
<tr>
<td>Owner:</td>
<td>Comptroller of Public Accounts</td>
</tr>
<tr>
<td>Access:</td>
<td>On-line access to send data updates and occasionally receive downloads, principally for lists of vendors on hold.</td>
</tr>
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</table>
Database Name: Texas Law Enforcement Telecommunications System (TLETS), National Crime Information Center/Texas Crime Info. Center (NCIC/TCIC)
Owner: Department of Public Safety
Access: Telephone line and modem to DPS switches.

Database Name: Uniform Statewide Accounting System (USAS)
Owner: Comptroller of Public Accounts
Access: On-line access as a reporting Department. Receive hard copy reports and data files transmitted via telecommunications lines.

Database Name: Uniform Statewide Payroll-Personnel Sys. (USPS)
Owner: Comptroller of Public Accounts
Access: On-line access as of 12/01/94. Use to manage TPW’s payroll. Receive hard copy reports and data files transmitted via telecommunications lines.
### Department Platforms and Systems

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TYPE</th>
<th>OPERATING SYSTEM</th>
<th>DATABASE MGMT. SYSTEM</th>
<th>CAPACITY/SIZE COUNT</th>
<th>COMMENTS/DESCRIPTIVE INFORMATION</th>
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<tbody>
<tr>
<td><strong>Mainframe</strong></td>
<td>Manufacturer</td>
<td>Hitachi</td>
<td>Primary O/S used</td>
<td>Primary DBMS Used</td>
<td>Capacity (MIPS)</td>
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<td>VM/ESA</td>
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<td><strong>Minicomputer</strong></td>
<td>Manufacturer</td>
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<tr>
<td><strong>Servers (Central)</strong></td>
<td>Intel/Risc</td>
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<tr>
<td>SUN</td>
<td></td>
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<tr>
<td>SUN</td>
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<td>Solaris 7</td>
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<td>SUN</td>
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<td>Solaris 2.5.1</td>
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<td>Citrix/Winframe-RAPPS</td>
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<td>PC Dell</td>
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<td>MS Exchange</td>
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<tr>
<td>PC Dell</td>
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<td>NT 4.0</td>
<td>Web/Outlook</td>
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<td>TPW Domain Controller</td>
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<td>Internet/Intranet web servers</td>
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<td>Remote Access Server</td>
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**AGENDA**

Natural Department Platforms, Systems, and Telecommunications

### Department Platforms and Systems

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<tr>
<th>CATEGORY</th>
<th>TYPE</th>
<th>OPERATING SYSTEM</th>
<th>DATABASE MGMT. SYSTEM</th>
<th>CAPACITY/SIZE COUNT</th>
<th>COMMENTS/DESCRIPTIVE INFORMATION</th>
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<tbody>
<tr>
<td>Servers (Remote)</td>
<td>Intel/Risc</td>
<td>Primary O/S used</td>
<td>Primary DBMS used</td>
<td>Number of Servers</td>
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<td>Includes WAN Field Sites</td>
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<td>Primary DBMS used</td>
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<td>LAN Client/Workstations (Remote)</td>
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<td>Primary DMBS used</td>
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<td>Standalone PC Workstations</td>
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## Department Platforms, Systems, and Telecommunications

### Telecommunications Information

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TYPE</th>
<th>CAPACITY/SIZE COUNT</th>
<th>COMMENTS/DESCRIPTIVE INFORMATION</th>
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<tbody>
<tr>
<td>Hubs</td>
<td>Vendor/Manufacturer/Cisco/Cabletron/3Com</td>
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<td>Hub Routers &amp; Switches (Remote)</td>
<td>Vendor/Manufacturer Cisco Switches/Cisco Routers/3Com Hubs</td>
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<td>Remote Bandwidth Analog</td>
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<tr>
<td>Remote Bandwidth Digital 56K or less</td>
<td>N/A</td>
<td>Number of Lines 7</td>
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<tr>
<td>Remote Bandwidth Digital T1</td>
<td>N/A</td>
<td>Number of Lines 4</td>
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<tr>
<td>Remote Bandwidth ISDN (BRI)</td>
<td>N/A</td>
<td>Number of Lines 18</td>
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<tr>
<td>Remote Bandwidth FRAME-RELAY 256K or 512K</td>
<td>Tex-an 2000 Field sites</td>
<td>26</td>
<td>Field installations completed by July</td>
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<tr>
<td>DTE/End user Equipment Arrangement</td>
<td>Workstations, LANs, Mainframe Devices, Other</td>
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<tr>
<td>Supported Protocols</td>
<td>Network supported protocols</td>
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<td>Internet Service Provider</td>
<td>Vendor General Services Commission</td>
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<tr>
<td>Shared Network</td>
<td>General Services Commission, HHSCN, University (specify), Own, Other</td>
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<tr>
<td></td>
<td>General Services Commission/AT&amp;T</td>
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</tbody>
</table>
InterDepartment Data Needs

The Texas GIS Planning Council has identified TPW as the custodial Department responsible for developing and distributing GIS data on the biological and recreational resources of Texas. In the role TPW distributes its data with a multitude of other agencies.

TPW's Integrated Financial System provides a direct link for the transfer of data with the USPS and USAS.

The Committee headed by Senator Harris has identified TPWD as the custodial Department responsible for the hosting of the Tick Texas web site.