INLAND FISHERIES ANNUAL REPORT 2016

IMPROVING THE QUALITY OF FISHING

TEXAS PARKS & WILDLIFE

Carter Smith
Executive Director

Craig Bonds
Director, Inland Fisheries

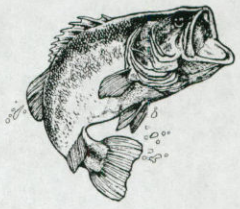
TEXAS PARKS & WILDLIFE

INLAND FISHERIES ANNUAL REPORT 2016

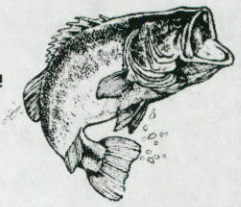
SPORT FISH RESTORATION

TEXAS PARKS AND WILDLIFE DEPARTMENT

TABLE OF CONTENTS



INLAND FISHERIES OVERVIEW



Mission

To provide the best possible fishing opportunities while protecting and enhancing freshwater aquatic resources.

Scope

The Inland Fisheries Division is responsible for managing the fishery resources in approximately 1,100 public impoundments and about 191,000 miles of rivers and streams together totaling 1.7 million acres. These resources are used by 1.85 million anglers, whose fishing activities result in at least $960 million in trip and equipment expenditures.

Agency Goals

Texas Parks and Wildlife Department's Land and Water Resources Conservation and Recreation Plan (2015) establishes four primary goals to direct the agency's division operating plans and decisions regarding the state's conservation and recreation needs.

- Practice, Encourage and Enable Science-Based Stewardship of Natural and Cultural Resources
- Increase Access to and Participation in the Outdoors
- Educate, Inform and Engage Citizens in the Support of Conservation and Recreation
- Employ Efficient, Sustainable and Sound Business Practices

Division Goals

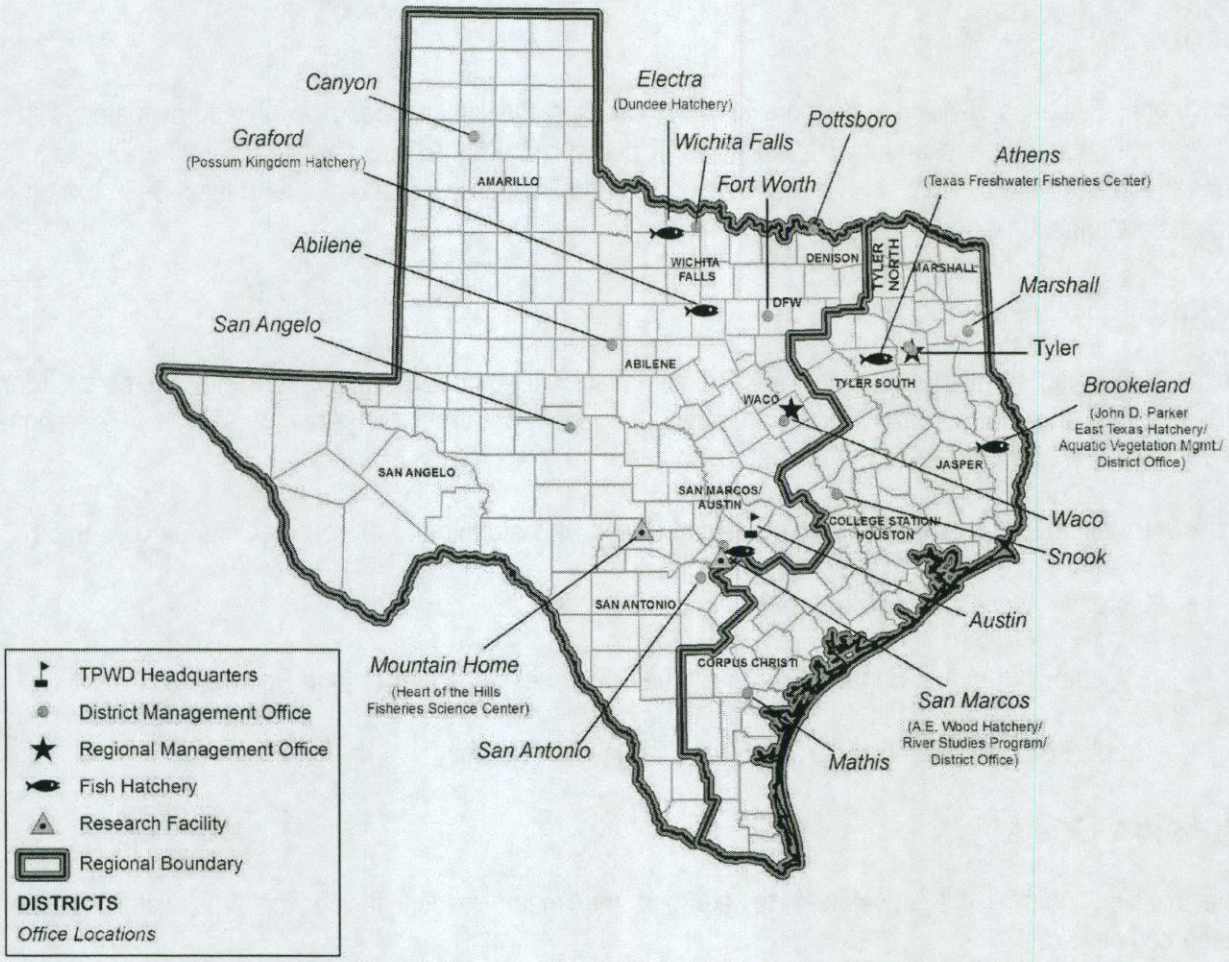
The division goals were developed to address the major issues facing the freshwater fisheries resources of Texas.

- Maintain or restore appropriate conditions to support healthy aquatic ecosystems
- Maintain quality fish communities for recreation and ecological health and value
- Maintain or increase constituent satisfaction, participation or stewardship
- Employ efficient and sustainable business practices in fisheries management

Staff

Inland Fisheries has 218.5 positions assigned to management, hatchery, research, outreach, habitat, analytical services, and administrative branches. For details, see Appendix – Organization Charts.

Facilities



Contact Information

Inland Fisheries Division • Texas Parks and Wildlife Department
4200 Smith School Road • Austin, Texas 78744
(800) 792-1112 or (512) 389-4444 • www.tpwd.texas.gov

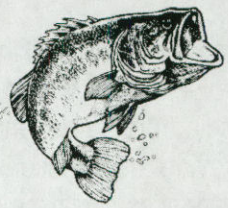
Funding and Allocation

In FY16, $20,147,781 was budgeted for Inland Fisheries (not including fringe benefits or capital construction). Federal Aid grants are expected to reimburse the Department $10,978,082 on eligible Inland Fisheries activities. The allocation of Federal Aid monies was $2,468,892 for Fish Hatchery and Laboratory facilities and $8,509,190 for Management and Research, Habitat, Outreach, and Administrative services.

FY16 Budget by Program

Administration	$1,862,409
Management and Research	$5,950,272
Hatcheries and Laboratory	$5,360,996
Habitat/Aquatic Invasive Species	$5,854,958
Outreach/Texas Freshwater Fisheries Center	$1,119,146
Total FY16 w/o fringe	**$20,147,781**

WHAT WE DO



Administration

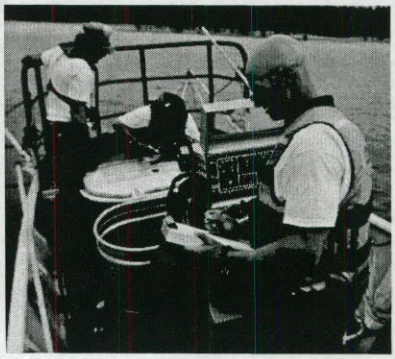
The administrative function of the Inland Fisheries Division occurs at Texas Parks and Wildlife Department headquarters in Austin. The administrative staff provides critical leadership, management of budgets and grants, and managerial support to a large number of field offices that work to carry out the mission of the division, largely outside the walls of headquarters. The Inland Fisheries Division seeks to maximize collaborative efforts between its work groups to accomplish projects and to achieve the larger goals of the division. These efforts, at least in part, are due to the close coordination of a small group of leaders who direct activities of staff in the areas of fisheries management and research, hatcheries, habitat conservation, information and regulations, analytical services, and Texas Freshwater Fisheries Center (outreach).

Habitat Conservation

Healthy fish populations and quality freshwater fishing opportunities depend upon healthy habitats in Texas streams, rivers and reservoir systems. The Inland Fisheries Division's goals and objectives for conservation of freshwater fish habitats are accomplished through science and conservation partnerships with other TPWD divisions, non-governmental organizations, private landowners, local communities, river authorities, local, state and federal agencies, and other conservation organizations.

Specific conservation actions are led and coordinated by the division's Habitat Conservation branch, which consists of 36 employees with multidisciplinary training and expertise in aquatic biology and ecology, hydrology, fluvial geomorphology, riparian and floodplain ecology, instream flow science, toxicology, restoration science, and conservation policy. Responsibilities include a broad range of natural resource issues including watershed protection and restoration; instream flow science; fish conservation; management of aquatic invasive species; environmental response, damage assessment, and restoration; and other topics affecting the health of Texas fisheries, their habitats, and other aquatic resources.

Fisheries Management and Research



The division's fisheries management program assesses fish communities, fish habitat, angler access, and angler use of public water resources. Sampling activities performed by this group are guided through scientifically accepted procedures that ensure a high degree of data quality, integrity, and validity for statistically analyzing trends and making sound fisheries management decisions. This team develops fisheries management plans for individual water bodies, develops the

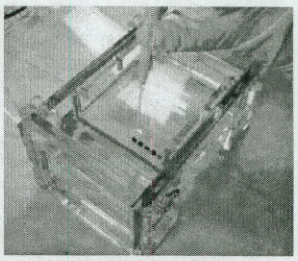
statewide fish stocking plan, recommends changes to harvest regulations, implements habitat improvement projects, assists with treatment of aquatic invasive species, conducts public outreach, manages our urban fishing programs, and performs research to evaluate and improve fisheries management strategies. Staff provide assistance and information to the general public, fishing-related industries, water-controlling authorities, local governments, angling groups, civic groups, property owners, media, universities, and other natural resource agencies. Work teams are located at two regional offices and 16 district offices statewide.

The Inland Fisheries research program at the Heart of the Hills Fisheries Science Center in Mountain Home provides leadership, support, and coordination for all research activities supported by the division. The program also provides intensive research investigations, literature reviews, statistical analyses, staff training, and science-based position papers that inform decision makers on critical aquatic resource-related issues or problems.

Hatcheries

Hatcheries serve as an important component of Inland Fisheries resource management. Fish stocking is one of several essential tools used to protect, manage and enhance statewide fisheries resources as well as achieve specific fisheries resource objectives. Stocked fish must meet specific requirements including number, size, genetic integrity, disease-free status, and time of stocking. Hatchery-stocked fish are used to start new fish populations, supplement existing fish populations, restore depleted or threatened populations, provide fish in small urban lakes, enhance population genetics and performance, take advantage of improved habitat, and increase angler opportunities and success. Also, TPWD hatcheries play a significant role in public education. Hatchery personnel are involved in outreach programs and agency-sponsored fishing events as well as providing educational hatchery tours to the general public and students of all ages.

Analytical Services



Analytical laboratories serve a unique function within Inland Fisheries by providing state-of-the-science analyses in water quality, fish pathology, and genetics. Analytical Services conducts a variety of chemical analyses in support of divisional, interdivisional, and interagency programs. Analyses are routinely performed for the Kills and Spills Team, Law Enforcement Division's Environmental Crime Unit, and in support of research conducted by Inland Fisheries staff. The collective expertise of the Analytical Services staff allows customized analyses aimed at meeting the changing needs of the department and the state.

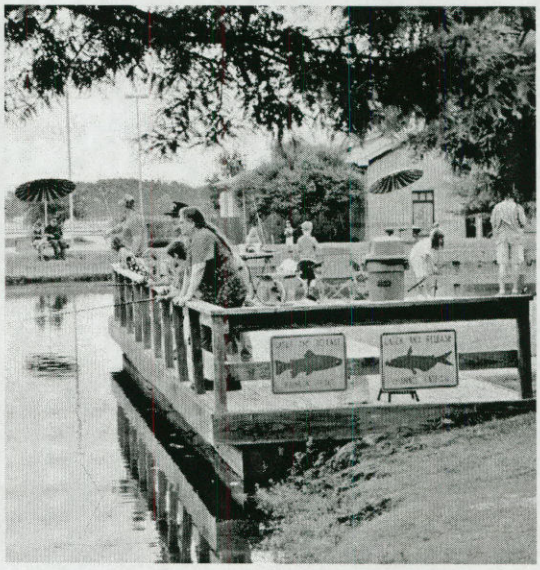
The Fish Health and Genetics Laboratory provides specialized expertise in fish health and genetics and in support of hatchery discharge permits. In-house expertise facilitates timely and efficient response to emerging and ongoing concerns. Fish health expertise imparts an ability to focus on specific pathogens of interest. Genetics expertise and equipment are used to facilitate management and advance scientific knowledge of important sport fish including Largemouth Bass, Striped Bass, and catfishes, along with species of concern such as Guadalupe Bass and the Pecos River Pupfish. In the case of fish kill investigations, the lab may work to analyze both biological and chemical agents of concern.

Information and Regulations

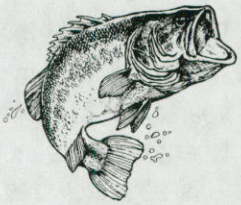
The Information and Regulations group works closely with the Fisheries Management and Research branch to develop fishing regulation change proposals, obtain public input on the changes, and communicate the proposals to the Texas Parks and Wildlife Commission. Staff members also provide administrative support to division staff based in Austin and furnish expertise for division-wide and agency-wide assessments of relevant data. This group coordinates the issue of Triploid Grass Carp permits and handles the freshwater fishing web pages, river access information including Texas Paddling Trails, Angler Recognition, and general information for the public. Staff are located at TPWD headquarters in Austin.

Texas Freshwater Fisheries Center

The Texas Freshwater Fisheries Center (TFFC) in Athens is a multipurpose facility that provides educational experiences to the public while also producing millions of fish annually to meet the stocking needs of fisheries managers. TFFC also serves as headquarters for the Toyota ShareLunker program. More than 50,000 people visit TFFC annually; over 20,000 of those are youth aged 12 and under. The visitor center opens six days a week to individuals and families. In addition, TFFC provides high quality, intensive, hands-on outdoor and science educational experiences for K-12 students, preservice teachers, and educators. Special events are held throughout the year to encourage and enhance constituent participation. These activities result in connections to aquatic resources in Texas, information about Inland Fisheries management and hatchery work, and great fishing experiences.



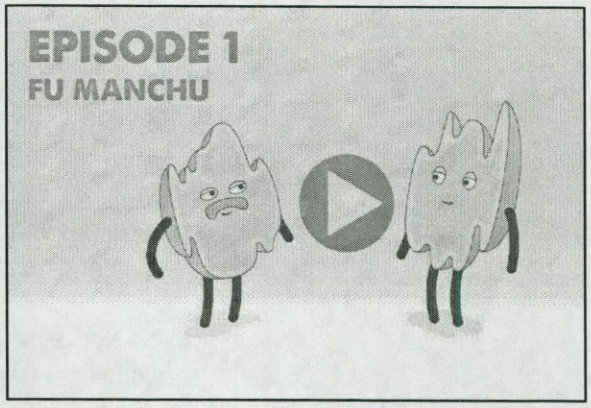
KEY ACCOMPLISHMENTS



Expanded Effort to Manage Aquatic Invasive Species

The 84th Legislature provided $6.3 million, authorized through Legislative Rider 34, to address statewide management of aquatic invasive species in 2016-2017. With this record appropriation, TPWD and partners stepped up the war on aquatic invasive species in 2016. A multi-divisional Aquatic Invasive Species Working Group, led and coordinated by Inland Fisheries, developed plans to make the most effective use of these available dollars and achieve results that would encourage legislative support for these investments in the future. New and expanded partnerships with universities, river authorities, municipal water districts, non-profits, and others allowed the department to leverage existing personnel, equipment, and other resources to deliver projects quickly and efficiently. Here are some highlights:

Zebra Mussel Monitoring & Prevention — TPWD and partners continue to intensively monitor water bodies at risk for zebra mussel infestation and those where zebra mussels were recently detected. In 2016, 56 water bodies were monitored with settlement samplers, plankton sampling, and/or DNA analysis. At year's end, eight Texas lakes in three river basins are classified as infested, meaning the lake has an established, reproducing population. Zebra mussels or their larvae have been found more than once in five other lakes and in rivers downstream of infested waters. As a precaution against further spread of this pest, TPWD and partners continued a targeted outreach campaign encouraging boaters to Clean, Drain and Dry. Boat ramp outreach was expanded to include outreach to marinas, developing partnerships essential to prevention. Between the Memorial Day and Labor Day weekends, 80 marinas received in-person visits and 2,406 incoming and outgoing boats were inspected on 29 reservoirs.



Giant Salvinia Control — In FY 2016, 12,734 acres of giant salvinia were treated with herbicide and 713,993 giant salvinia weevils released on five target lakes in East Texas: Caddo Lake, Toledo Bend Reservoir, Sam Rayburn Reservoir, Lake Striker, and Lake Texana. Through rapid response, new introductions were successfully contained at Lake Fork, Falcon Lake, Brandy Branch Reservoir, and Martin Creek Reservoir. A public awareness campaign utilized billboards, gas-pump topper ads, and other outreach materials in East Texas. Animated "Lake Dudes" characters were featured in radio ads and a series of digital videos, using humor to break through to unengaged audiences.

Riverbank Reeds — Through partnerships with more than 200 riverside landowners in the Nueces River watershed, infestations of giant reed (*Arundo donax*) now seem to be under control. Over the past seven years, TPWD has cost-shared treatment of approximately 300 acres of giant reed along 72 miles of the Nueces and its tributaries. Spot treatments continued in 2016, with only nine acres located and treated. This approach has offered a successful model for other watersheds. Increased funding allowed control efforts to be expanded to the Blanco and Pedernales rivers. More than 115 landowners are now participating in these two basins.

Other Riparian Invaders — To benefit habitat quality for imperiled fishes in the upper Brazos River, staff treated more than 3,500 acres of saltcedar in 2016. They continued to control and monitor invasive elephant ear (including some stands eight feet high) along 25 miles of the Llano River and tributaries.

Research on Endocides — Dr. Shiyou Li at Stephen F. Austin State University isolated chemical compounds from giant salvinia that are toxic to the plants themselves in concentrated doses. Dubbed "endocides," these compounds appear highly selective in early trials, killing only salvinia. Some are industrially synthesized and available commercially at low cost. TPWD's research funding allowed Dr. Li and his staff to identify which compounds were most effective and start field trials that will continue into 2017. Cheap, effective methods of control for this exotic pest plant are essential as TPWD works to improve boating and fishing access to the state's waters.

Zebra Mussels in Texas Lakes — Staff are working with researchers at the University of Texas-Arlington to monitor growth, reproduction, and establishment of young zebra mussels in Texoma, Ray Roberts, Lewisville, Belton, and Eagle Mountain lakes. The Texas climate can cause lake water temperatures to get hotter than zebra mussels can normally tolerate. Observing the response of zebra mussels to environmental conditions in these lakes will provide insight as to appropriate management strategies and economically feasible mitigation and control measures. The City of Dallas and Tarrant Regional Water District are cost-sharing partners in this effort.

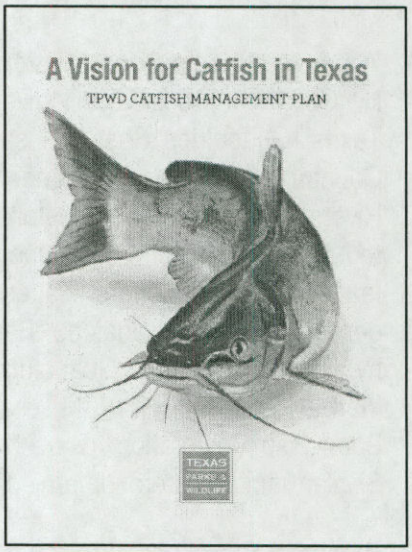
Monitoring, Management Plans and Permits

Reservoir Surveys — Staff conducted 326 surveys of fish populations, habitat, water quality, and angler use on 166 reservoirs covering 1,334,002 surface acres of water. These led to the production of 51 comprehensive reservoir fisheries management plans designed to improve freshwater fishing opportunities.

River Surveys — Staff conducted surveys to assess the status of fish communities, freshwater mussels, benthic invertebrates, and aquatic and riparian habitats in selected rivers throughout the state including mainstem reaches and tributaries of the Blanco, Brazos, Colorado, Guadalupe, Devils, Llano, Neches, Nueces, Pecos, Pedernales, Rio Grande, Sabine, San Antonio, Trinity, and San Marcos rivers. Surveys were used to inform

a variety of river recreation and conservation projects including riparian invasive species control, establishment of new paddling trails and other public access improvements, water management decisions, restoration of Guadalupe Bass populations, and other native fish conservation efforts.

Statewide Catfish Management Plan Completed — More than a third of Texas freshwater anglers prefer to catch Channel, Blue, and Flathead Catfish. Recent surveys revealed that Texas catfish anglers are a diverse group, seeking catfish in different ways and for many reasons. Increasing interest in catfish has inspired new research and more intensive management in recent years. These efforts culminated in our first statewide management plan for catfishes, "A Vision for Catfish in Texas." We aim to provide a diversity of high-quality catfish opportunities by creating, expanding, or maintaining fisheries in waters ranging from large river-reservoir systems to small streams, impoundments, and intensively-managed neighborhood ponds. Two goals guide these efforts: 1) increase fishing opportunities and access for catfish anglers and 2) develop and implement best practices to manage catfish populations statewide. Future efforts will evaluate our success at meeting these goals.



Fish Health Investigations — A.E. Wood and collaborating laboratories investigated 70 fish health cases, analyzing approximately 3,099 fish. A total of 121 samples were processed for zebra mussel larvae or DNA and 127 samples were analyzed for *Prymnesium parvum* (golden alga) toxicity and presence in Texas public lakes. In addition, the laboratories completed seven chemistry projects with 865 samples and 18 genetics projects.

Permits — The division issued 45 permits authorizing private partners to introduce fish into public waters to enhance fishing opportunities. Introduction permits were also issued for aquatic plant restoration (8) and for relocation of aquatic resources (73) to minimize impacts of projects that temporarily disturbed aquatic habitats in creeks and rivers. Staff issued 33 permits for the commercial harvest of native nongame fishes from public waters. There were 180 permits (including renewals) authorizing possession of prohibited exotic fish, shellfish, or aquatic plants for the purpose of invasive plant removal projects (6), possession or culture of non-native species of fish and shrimp (89) or aquatic plants (59) as a food source, invasive species research (12), and holding of invasive species by zoos and aquaria (14). In addition, staff issued 1,018 permits to stock Triploid Grass Carp for control of nuisance vegetation, authorizing a total of 35,411 fish.

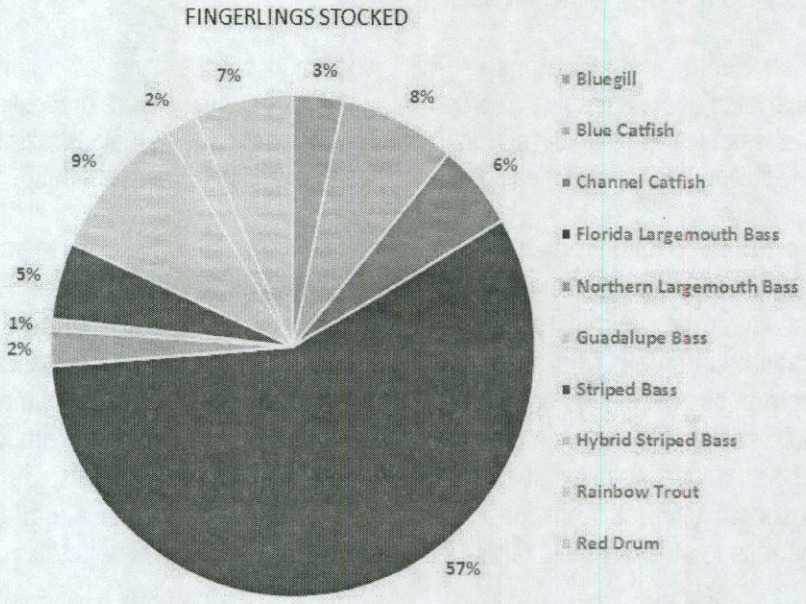
Applied Management and Conservation Actions

Reservoir Habitat Partnerships — Many new partnerships were developed to help improve fisheries habitat in our aging reservoirs. Two new Friends of Reservoirs (FOR) chapters were created, bringing the total number of affiliated organizations to 18 across our state. The division secured a donation and initiated a new partnership with the Brazos River Authority to improve fish habitat in Possum Kingdom, Granbury, and Proctor reservoirs. This partnership is expected to continue for the next four years and facilitate work on additional reservoirs within the basin. The Trinity River Authority provided funds to support fish habitat projects on Lake Livingston, showing

increased interest in these projects among river authority partners. Significant progress was made on a large scale revitalization project at Lake Wichita, a 1,200-acre reservoir, in collaboration with numerous public, private, and local partners. Finally, the Largemouth Bass Conservation License Plate provided $30,000 to fund habitat projects on 12 reservoirs during the fiscal year.

Watershed-Scale Conservation of Hill Country Rivers — The clear, rocky, spring-fed rivers of the Texas Hill Country are ecologically diverse, hosting 14 species of endemic fishes including the official state fish of Texas, Guadalupe Bass. To support watershed-scale restoration and protection of fish habitats in Hill Country rivers, Inland Fisheries initiated a 10-year project (2010-2020) known as the Conserving Texas Rivers Initiative. Major milestones were reached in 2016, including completion of 9,327 acres of habitat restoration projects in the Llano River watershed. These projects restored and protected aquifer recharge features, riparian buffers, instream habitats, and more than 50 springs and spring complexes. By stocking genetically-pure Guadalupe Bass over a five-year period, TPWD was able to reduce the level of hybridization between Guadalupe Bass and non-native Smallmouth Bass in the South Llano River to less than 2%. As a result of these accomplishments, Inland Fisheries was awarded the 2016 Federal Aid in Sport Fish Restoration Award by the Fisheries Administration Section of the American Fisheries Society. Similar habitat restoration projects are ongoing in the Blanco and Pedernales riversheds.

Hatcheries and Stocking — A total of 14.2 million fingerlings were produced and stocked in public water. Species stocked included Largemouth Bass, Guadalupe Bass, Striped and Hybrid Striped Bass, Channel Catfish, Blue Catfish, Smallmouth Bass, Bluegill, Walleye, Rainbow Trout, and Red Drum. The majority of the fingerlings stocked are Largemouth Bass (57%) and Striped or Hybrid Striped Bass (13%). Rainbow Trout are acquired from a commercial producer and Red Drum are produced by the Coastal Fisheries Division. Also, a portion of the advanced Channel Catfish fingerlings (12 to 14 inches) stocked in support of the Neighborhood Fishin' Program are acquired from a commercial producer. Hatchery staff drove 195,320 miles on 899 stocking trips to distribute fish to 288 water bodies.



Dundee Hatchery Reopened — Widespread rain throughout the state brought relief from the persistent drought. Many reservoirs filled to near or above conservation pool level, including Lake Kemp in Baylor County. With the increased water supply, operations at the Dundee Fish Hatchery were allowed to resume with limited manpower. A total of 11,370 catfish fingerlings were produced and stocked, along with 3.8 million Hybrid Striped Bass and 3.2 million Walleye fry.

Oil Spill Recovery — The largest Natural Resource Damage Assessment (NRDA) in United States history concluded in April 2016, when NRDA Trustees settled with BP for injuries stemming from the 2010 Deepwater Horizon well blowout and subsequent oil spill in the Gulf of Mexico. Under the settlement, BP will pay up to $8.8 billion, including $238 million in Texas, for restoration to address natural resource injuries. In the five years following the spill, NRDA staff at TPWD logged many hours working with other trustee agencies to quantify the damage and review public input on proposed restoration projects. The final plan, approved in February 2016, is funding work in Texas to restore wetlands and other coastal habitats, reduce nonpoint source pollution, and restore coastal and marine resources injured by the spill, such as oysters, birds, and sea turtles.

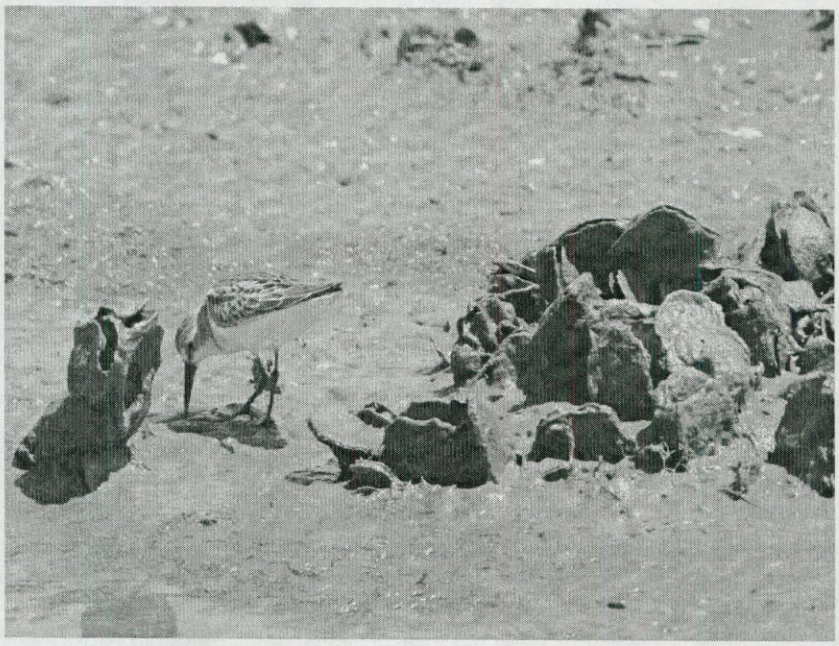


Photo courtesy of Woody Woodrow, USFWS

Regulation Updates — Staff recommended several changes in regulations to improve angling opportunities and protect fisheries resources. The following changes were adopted by the Texas Parks and Wildlife Commission.

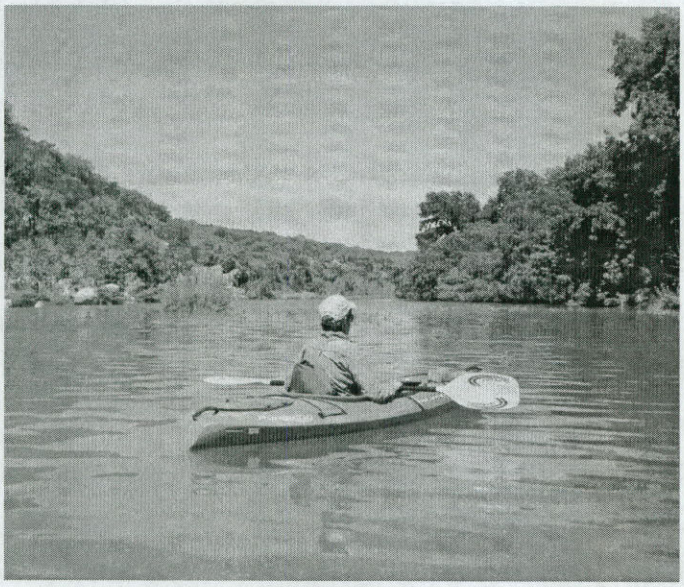
- Changed harvest regulations for Largemouth Bass on Lake Naconiche from an 18-inch minimum length limit to a 16-inch maximum.
- On the Sabine River in Newton and Orange counties, and in Chambers, Galveston, Jefferson, and Orange counties, the minimum length limit for Largemouth Bass decreased from 14 inches to 12 inches.
- On Lake Meredith, eliminated a slot limit on Smallmouth Bass and reinstated the statewide 14-inch minimum, with a 5-per-day bag limit on all black basses combined.
- Modified harvest regulations for Channel and Blue Catfish on Lake Tawakoni. This reservoir no longer has a minimum length limit on catfish, but only seven of the 25-fish daily bag limit can exceed 20 inches in length. Of those seven fish, only two may exceed 30 inches.
- Limits on Saugeye, a Sauger/Walleye hybrid, are now identical to limits on Walleye: daily bag limit of 5 fish, of which no more than 2 can be longer than 16 inches.

Major Research Findings

What Catfish Anglers Want — A recent statewide survey of Texas catfish anglers showed considerable variety in what catfish anglers want from a fishing trip. Some are looking for fish to eat, some want to catch a bunch of fish, and some want trophy-sized fish. We used business analyst tools to reveal differences between "customers" who pursue trophy catfish and those who do not. Mapping these traits across Texas guides us to the most appropriate fishery management objectives for different locations in our major metropolitan cities and suburbs. Tailoring catfish management to the desires of nearby constituencies is part of our effort to provide diverse fishing opportunities to our state's diverse angling population.

High River Flows for Alligator Gar — A study of Alligator Gar and river flows in the middle Trinity River has shown that major floods often produce large year classes. As flood waters inundate low-lying areas adjacent to the river, Alligator Gar move into these areas and spawn. One such flood happened in 2007, producing a year class much more abundant than any produced during the next seven years. Major floods in 2015 are predicted to result in another very large year class. Alligator Gar can live for decades, which helps them withstand times of drought and low river flow. However, periodic floods are necessary for spawning to replenish their populations and sustain these popular recreational fisheries. This new information will help us determine and recommend instream flows for Texas' coastal rivers.

Increased Access to Public Waters



Leased River Fishing Access — Inland Fisheries continued to expand its River Access and Conservation Areas program, securing multi-year lease agreements on private lands that provide public access for bank, wade, and kayak fishing on Texas rivers. In 2012, the first year of the initiative, seven leased access areas were established on four rivers, opening access to spring White Bass spawning runs, winter trout fishing, and year-round fishing for black bass, catfish, and other fishes. Through a partnership with the Texas Council of the International Federation of Fly Fishers (TX-IFFF) and a grant from the USDA Voluntary Public Access and Habitat Incentive Program, the program has expanded to include 17 leased access areas on the Brazos, Colorado, Guadalupe, Llano, Neches, Nueces, San Marcos, and South Llano rivers. The division is partnering with TX-IFFF and the nonprofit Keep Texas Beautiful to organize river cleanups and conservation workshops at leased areas. Workshops provide instruction on streamside best management practices, angling opportunities, and river etiquette. They also furnish local partners with guidance and resources, infrastructure enhancements such as construction of trails or parking areas, and habitat improvements including riparian buffer restoration and bank stabilization. In recognition of these accomplishments, the International Federation of Fly Fishers presented Inland Fisheries with the 2016 Dr. James A. Henshall Warmwater Fisheries Award.

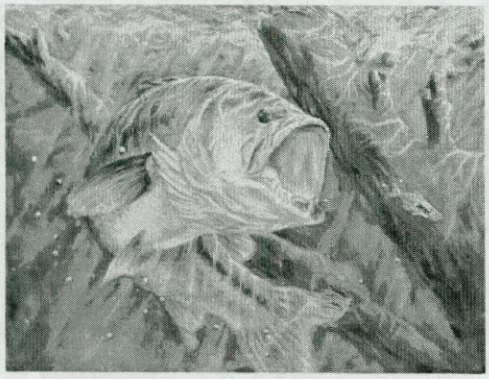
New Neighborhood Fishin' Lake — Kingfisher Lake in Austin became the newest Neighborhood Fishin' site. This family-friendly fishing program includes 18 lakes in 11 major metropolitan areas. The lakes provide easy access for fishing and get frequent stockings of Channel Catfish in summer and Rainbow Trout in winter. Support comes from the Toyota Texas Bass Classic and the host cities and parks. Kingfisher Lake is supported by Travis County Parks and Bass Pro Shops.

New Paddling Trails — Three new inland Paddling Trails opened in FY2016: Cherokee-Neches, the Fort Worth Nature Center & Refuge Padding Trail, and the Chandler Upper Neches trail, which connects with a 20-year public access lease outside the City of Chandler.

Increased Boating Access — Staff worked to identify boat access needs and recommended funding priorities for seven proposed freshwater boat ramp projects. The division worked with an agency team that ultimately approved three projects for funding through a $1.4 million Federal Boating Access Grant.

Outreach

Celebrating the 10th Anniversary of the Toyota Texas Bass Classic (TTBC) — The TTBC is a world championship fishing event established to promote TPWD conservation efforts. Ten events (2007-2016) made possible through a partnership between Gulf States Toyota and professional anglers have employed a catch/weigh/immediate-release tournament format. Bass caught during these tournaments were weighed by trained on-board judges and immediately released, in contrast to typical stage weigh-in practices. These events leveraged many partnerships and communication opportunities. They showcased fishery management practices, promoted proper fish handling, and featured outdoor expos and musical entertainment. Over the past decade, TTBC events have drawn over 200,000 spectators and were nationally televised. They generated $2.5 million to support Neighborhood Fishin' and the Texas State-Fish Art Contest. Our 2016 tournament was held at Lake Ray Roberts. The expo and concerts were held at Toyota Stadium in Frisco.



State-Fish Art Contest — Texas Freshwater Fisheries Center hosts the Texas division of this contest, which is sponsored by the national non-profit Wildlife Forever. In 2016, we had 730 entries from grades K-12, more than any other state. Nasa Xu, a student at Cinco Ranch High School in Katy, placed first in her age division and went on to win a national Best of Show Award. The top 10 contestants in each of four grade divisions were recognized with an awards ceremony, luncheon, fishing gear, and a day at TFFC. First, second, and third place winners receive scholarships and their artwork is displayed annually at TFFC and the Sheffield Education Center in Austin, Texas.

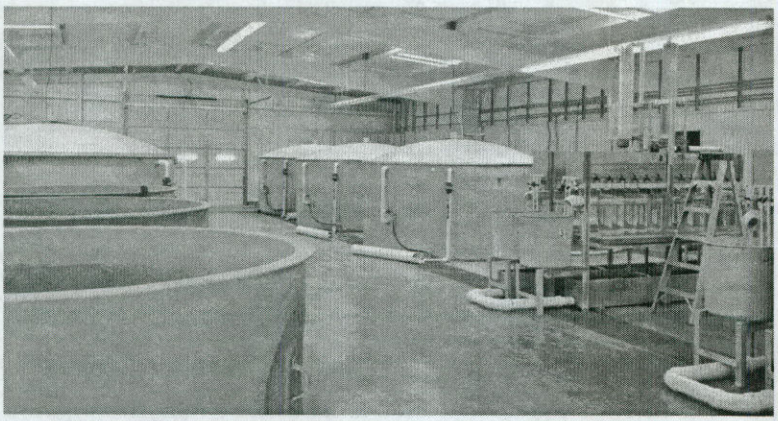
Sharing the Great Outdoors — Texas Freshwater Fisheries Center is our division's primary outreach and education center. Open to the public for 310 days in FY16, the Center provided a high-quality experience including facility tours, workshops, and aquatic education classes. Visitors included 47,727 people from 159 Texas counties, 46 states and 12 foreign countries. TFFC provided hands-on fishing for 24,452 visitors, with 202 receiving First Fish Awards. A total of 16,103 people toured the hatchery ponds via guided tram. The Center also provided support materials for the general public, teachers, and students.

Working with Schools — TFFC facilitated the annual Wetland Adventure, a three-day event involving more than 100 Stephen F. Austin State University School of Education preservice teachers and hundreds of regional school students. The Center also provided its annual STAAR Academy for eighth-grade students of Eustace ISD, offering intensive science education classes to target school-identified weaknesses in standardized tests.

Social Media — Inland Fisheries teams and field offices use Facebook and other social media platforms to share information on surveys, stockings, special events, and what's biting in our diverse freshwater fisheries. As an agency, TPWD is finding many new ways to engage constituents through these interactive communication channels. All 17 Facebook pages managed by division staff gained followers in FY16. Increases of over 100% were logged by Rivers and Streams and the College Station-Houston Fisheries Management District.

Target Audiences — Inland Fisheries staff led 297 outreach events designed to reach youth under 17, minorities, women, and physically challenged individuals. A total of 33,328 people participated in these events. For details on the various audiences, see Appendix – Outreach Events.

Infrastructure Enhancements



Hatchery Renovations continued at the Possum Kingdom Fish Hatchery, Texas Freshwater Fisheries Center, and A.E. Wood Fish Hatchery. Construction of the captive Striped Bass brood fish holding facility began and is scheduled for completion in 2017. The facility will allow hatchery staff to hold approximately 90 female Striped Bass in a controlled environment. The units can manipulate environmental factors and allow the brood stock to reach spawning condition and provide viable eggs when needed. Significant work continued at TFFC to construct a water supply storage reservoir to provide greater operational flexibility, install a water reuse system that allows the capture and reuse of hatchery effluent during extreme drought, and the installation of two freshwater production wells as a contingency to supplement available water in times of need. Also, planning and design was completed for the renovation of existing incubation facilities at the A.E. Wood Fish Hatchery.

Strategic Planning for Hatchery System — The division held a series of meetings with the US Geological Survey Cooperative Fish and Wildlife Research Unit at Texas Tech University, focusing on our ability to meet current and future conservation and recreational needs for hatchery-reared fish. A Structured Decision Making approach was used to 1) define the problem, 2) identify hatchery program objectives, 3) develop a suite of alternative plans for meeting those objectives, and then 4) assess the alternatives based on both data and expert opinion. Each alternative had different costs, actions, and tradeoffs. Eventually, the suite of alternatives was reduced to a subset with highest likelihood of success. Results were used to recommend re-establishing fish production at the Dundee State Fish Hatchery with provisions for ozone treatment of incoming water and pumpback of hatchery effluent to the Lake Diversion water supply. A final report was prepared and presented to agency leadership.

Agency-wide Collaboration

Chronic Wasting Disease — Inland Fisheries team members were called upon to help when Chronic Wasting Disease was found in Texas deer herds. Applying their statistical modeling expertise to this new challenge, our division's scientists helped colleagues in the Wildlife Division develop a defensible monitoring plan for captive herds that was sensitive to the needs of competing interests. Modeling expected outcomes, under various scenarios and assumptions, allowed TPWD to better understand the effectiveness of different regulatory options and monitoring approaches. This helped the agency and Texas Parks and Wildlife Commission to adopt an efficient, science-based deer-herd sampling strategy as their response to the threat of the disease spreading in Texas.

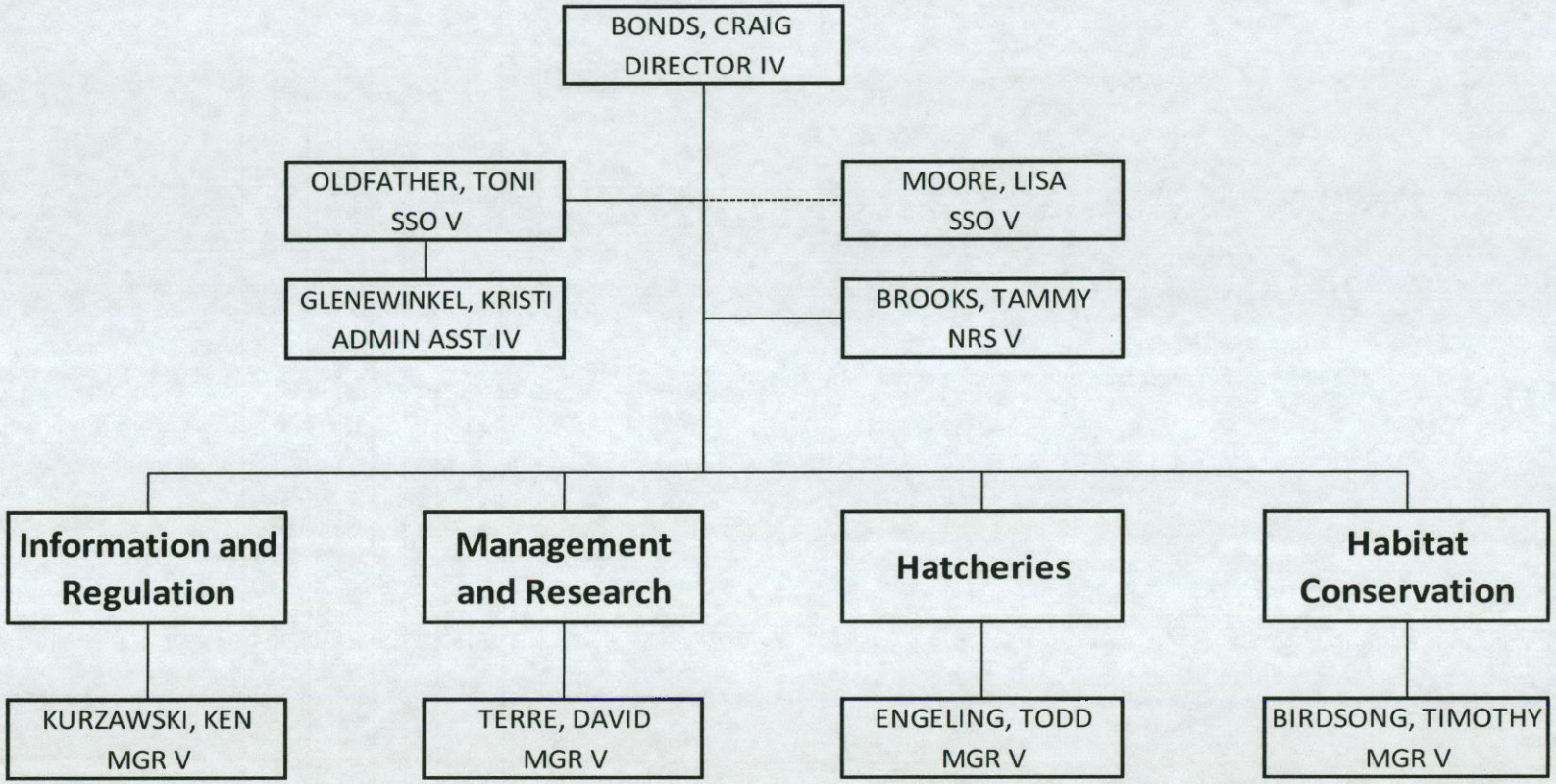
APPENDIX

Organization Charts

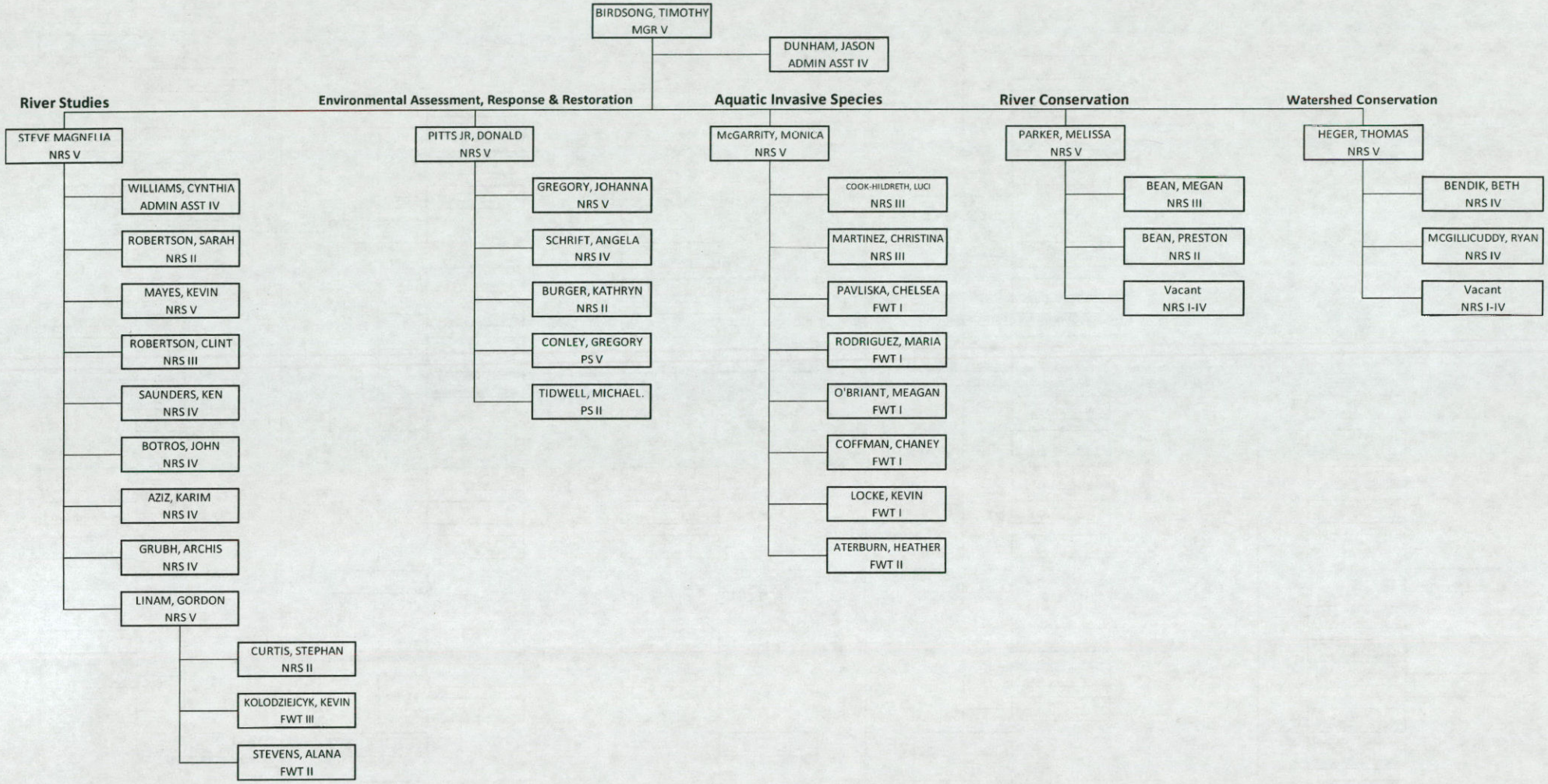
Legend

Abbreviation	Job Title
ADMIN ASST	Administrative Assistant
FWT	Fish and Wildlife Tech
MAINT SUPER	Maintenance Supervisor
MGR	Manager
NRS	Natural Resources Specialist
PS	Program Specialist
SSO	Staff Services Officer
WEB ADMIN	Web Administrator

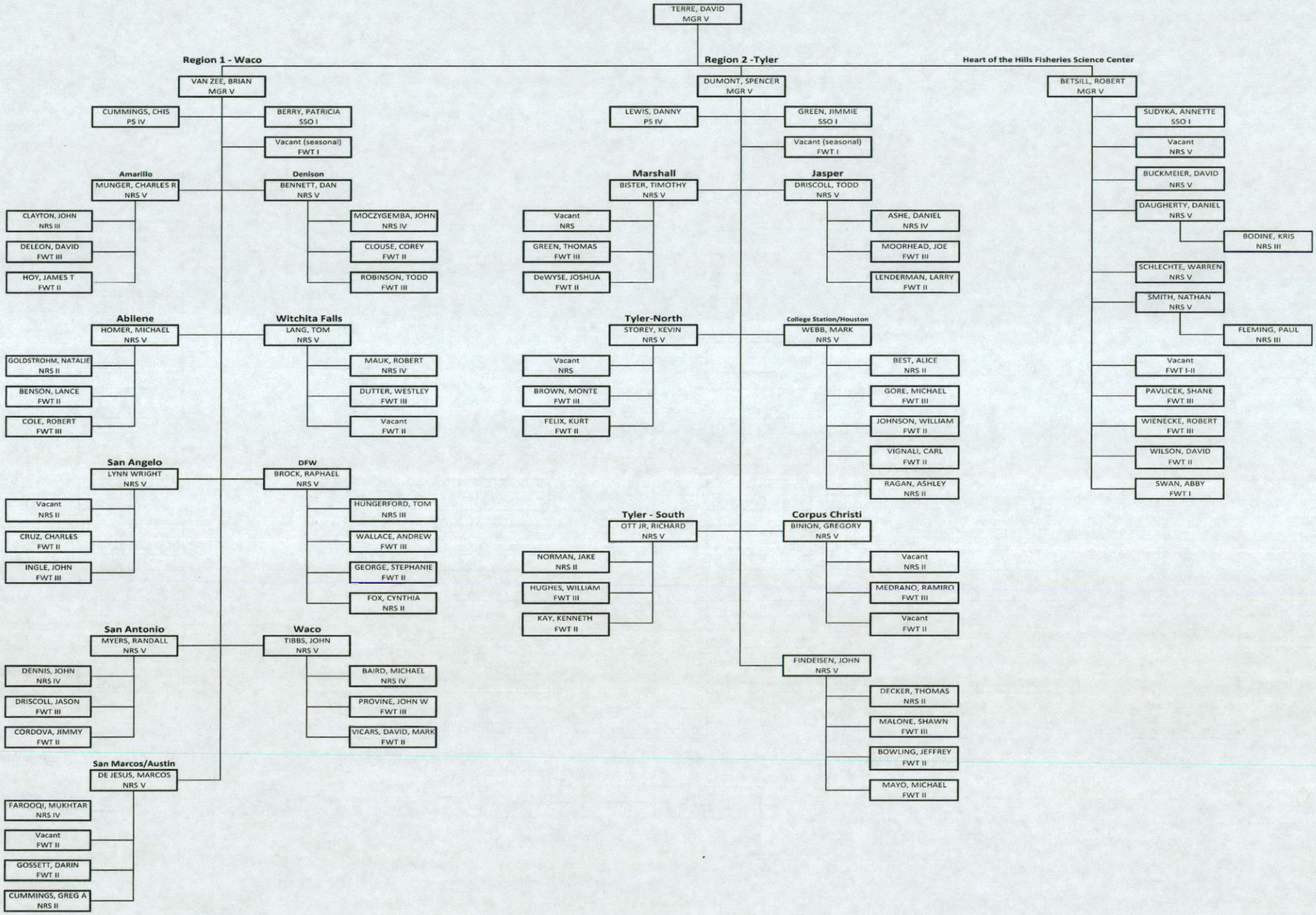
Inland Fisheries Administration



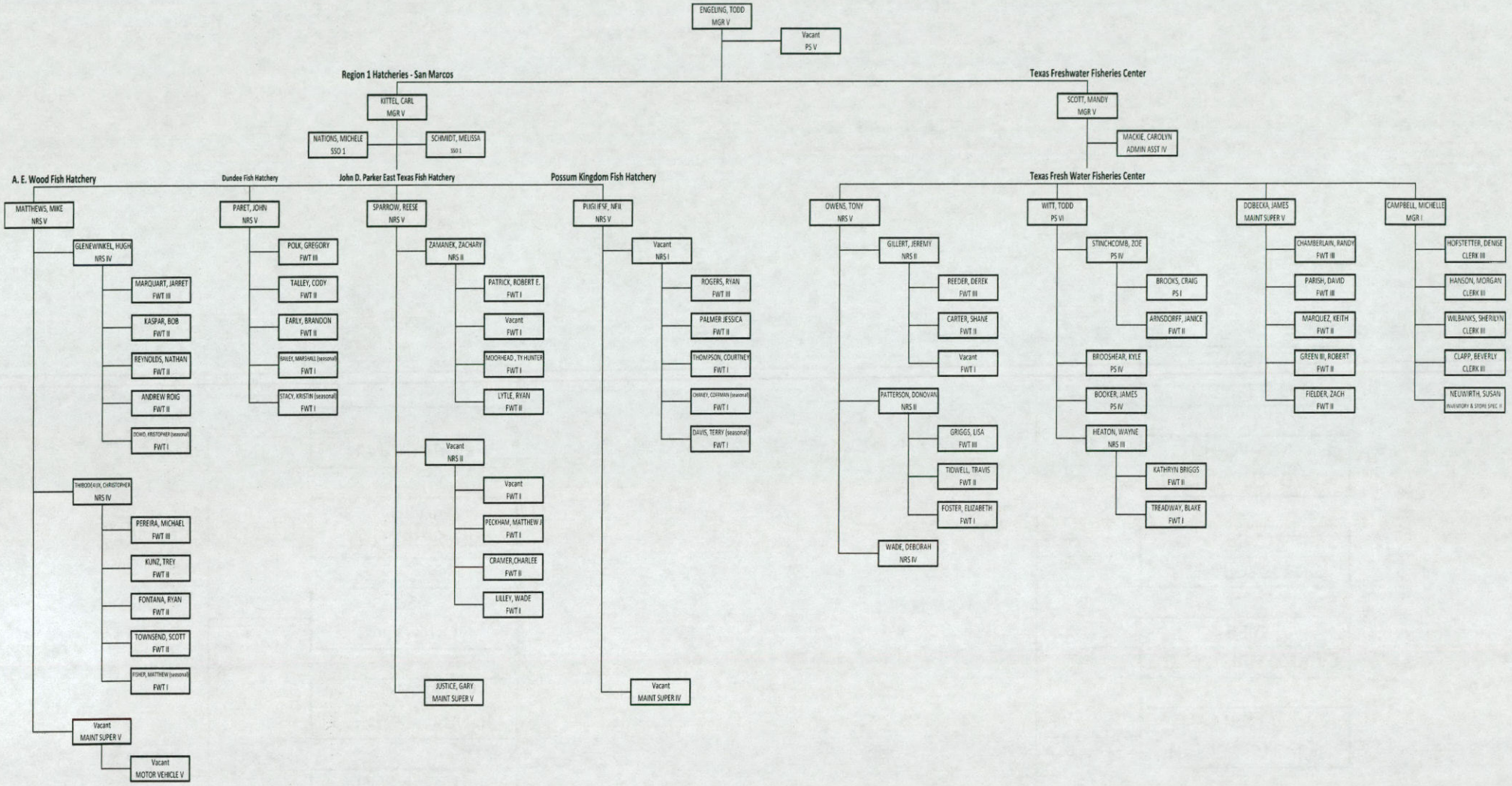
Habitat Conservation



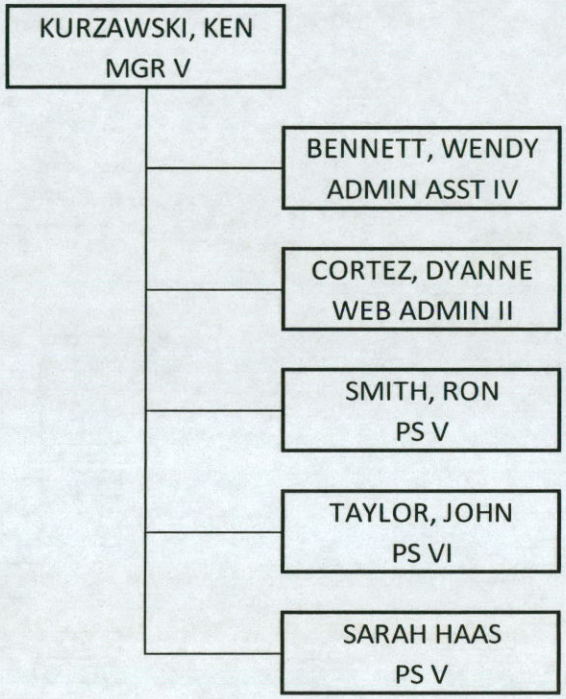
Fisheries Management and Research



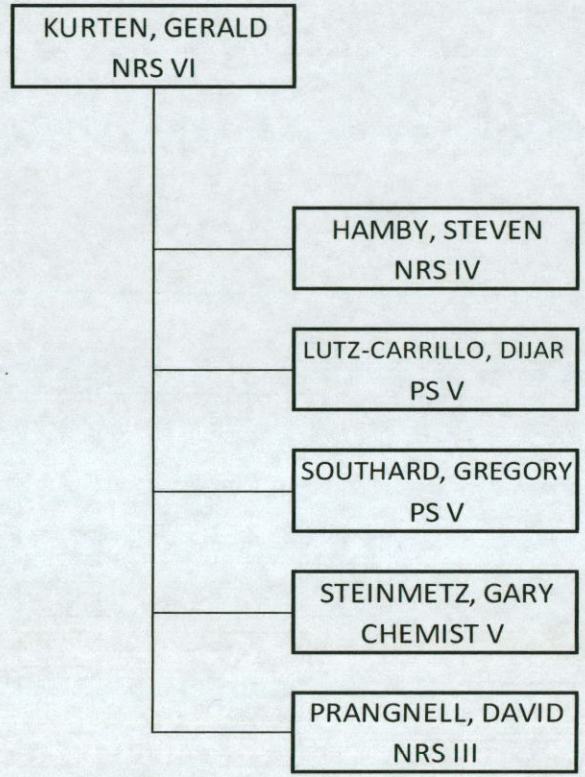
Hatcheries


ENGELING, TODD
MGR V
Vacant
PS V
Region 1 Hatcheries - San Marcos
KITTEL, CARL
MGR V
NATIONS, MICHELE
SSO 1
SCHMIDT, MELISSA
SSO 1
Texas Freshwater Fisheries Center
SCOTT, MANDY
MGR V
MACKIE, CAROLYN
ADMIN ASST IV
A. E. Wood Fish Hatchery
MATTHEWS, MIKE
NRS V
GLENEWINKEL, HUGH
NRS IV
MARQUART, JARRET
FWT III
KASPAR, BOB
FWT II
REYNOLDS, NATHAN
FWT II
ANDREW ROIG
FWT II
DOWD, KRISTOPHER (seasonal)
FWT I
THIBODEAUX, CHRISTOPHER
NRS IV
PEREIRA, MICHAEL
FWT III
KUNZ, TREY
FWT II
FONTANA, RYAN
FWT II
TOWNSEND, SCOTT
FWT II
FISHER, MATTHEW (seasonal)
FWT I
Vacant
MAINT SUPER V
Vacant
MOTOR VEHICLE V
Dundee Fish Hatchery
PARET, JOHN
NRS V
POLK, GREGORY
FWT III
TALLEY, CODY
FWT II
EARLY, BRANDON
FWT II
BAILEY, MARSHALL (seasonal)
FWT I
STACY, KRISTIN (seasonal)
FWT I
John D. Parker East Texas Fish Hatchery
SPARROW, REESE
NRS V
ZAMANEK, ZACHARY
NRS II
PATRICK, ROBERT E.
FWT I
Vacant
FWT I
MOORHEAD , TY HUNTER
FWT I
LYTLE, RYAN
FWT II
Vacant
NRS II
Vacant
FWT I
PECKHAM, MATTHEW J
FWT I
CRAMER,CHARLEE
FWT II
LILLEY, WADE
FWT I
JUSTICE, GARY
MAINT SUPER V
Possum Kingdom Fish Hatchery
PUIGHFSF, NFII
NRS V
Vacant
NRS I
ROGERS, RYAN
FWT III
PALMER JESSICA
FWT II
THOMPSON, COURTNEY
FWT I
CHANEY, CORMAN (seasonal)
FWT I
DAVIS, TERRY (seasonal)
FWT I
Vacant
MAINT SUPER IV
Texas Fresh Water Fisheries Center
OWENS, TONY
NRS V
GILLERT, JEREMY
NRS II
REEDER, DEREK
FWT III
CARTER, SHANE
FWT II
Vacant
FWT I
PATTERSON, DONOVAN
NRS II
GRIGGS, LISA
FWT III
TIDWELL, TRAVIS
FWT II
FOSTER, ELIZABETH
FWT I
WADE, DEBORAH
NRS IV
WITT, TODD
PS VI
STINCHCOMB, ZOE
PS IV
BROOKS, CRAIG
PS I
ARNSDORFF, JANICE
FWT II
BROOSHEAR, KYLE
PS IV
BOOKER, JAMES
PS IV
HEATON, WAYNE
NRS III
KATHRYN BRIGGS
FWT II
TREADWAY, BLAKE
FWT I
DOBECKA, JAMES
MAINT SUPER V
CHAMBERLAIN, RANDY
FWT III
PARISH, DAVID
FWT III
MARQUEZ, KEITH
FWT II
GREEN III, ROBERT
FWT II
FIELDER, ZACH
FWT II
CAMPBELL, MICHELLE
MGR I
HOFSTETTER, DENISE
CLERK III
HANSON, MORGAN
CLERK III
WILBANKS, SHERILYN
CLERK III
CLAPP, BEVERLY
CLERK III
NEUWIRTH, SUSAN
INVENTORY & STORE SPEC II

Information and Regulations



Analytical Services



Stocking Reports

Inland Fisheries Hatchery Stockings

Species	Adult	Fingerling	Fry	Total
Blue Catfish		1,128,591		1,128,591
Bluegill		485,980		485,980
Channel Catfish	305	806,121		806,426
Florida Largemouth Bass	107	8,348,485	907,065	9,255,657
Guadalupe Bass		113,026		113,026
Largemouth Bass		330,591		330,591
Palmetto Bass (Striped x White Bass hybrid)		1,099,197	4,894,836	5,994,033
Rainbow Trout	322,969			322,969
Red Drum		965,525		965,525
Striped Bass		726,030	1,331,519	2,057,549
Sunshine Bass (White x Striped Bass hybrid)		282,221	387,429	669,650
Walleye			3,244,298	3,244,298
Grand Total	323,381	14,285,767	10,765,147	25,374,295

Research and Special Projects

Research works to improve the efficiency and effectiveness of division operations and programs. This year's Inland Fisheries research focused on the following areas.

Increasing hatchery production of fish (10 studies)

Highlights:

- Increasing production of Guadalupe Bass for restoration efforts
- Developing best practices for spawning Smallmouth Bass
- Fish disease control in Channel Catfish rearing ponds

Managing River Fisheries (10 studies)

Highlights:

- Assessing Guadalupe Bass populations in Central Texas rivers
- Importance of river flows and connectivity of backwaters for river fisheries
- Development of sampling gears and strategies for assessing river fish populations
- Relating environmental conditions to year-class strength of Alligator Gar

Largemouth bass genetics and management (9 studies)

Highlights:

- Comparing growth of ShareLunker offspring and other Florida Largemouth Bass
- Economic value of large fishing tournaments at Lake Fork
- Genetic assessment of relatedness among ShareLunker program entries

Fish habitat improvement and other studies (7 studies)

Highlights:

- Low cost side-scan sonar technology for mapping fish habitat and aquatic vegetation
- Assessing fish use and biological productivity of various aquatic plant species
- Using fish attractors to enhance aquatic habitat

Catfish management and urban-suburban community fisheries (7 studies)

Highlights:

- Survey of Neighborhood Fishin' program participants: numbers, catch, and expectations
- Assessing harvest of catfish by hand fishing in East Texas
- Statistical modeling to predict harvest regulation outcomes
- Measuring survival and harvest of catfish in Community Fishing Lakes

Aquatic invasive species management or control (5 studies)

Highlights:

- Chemical treatments for preventing zebra mussel transfers during fish transport
- Chemical treatments for controlling golden alga blooms and toxicity

Publications and Presentations

Scientific Publications and Reports

Ashe, D. E., M. T. Driscoll, and J. W. Schlechte. 2016. Stocking contribution of fingerling Largemouth Bass in three aquatic vegetation types in Toledo Bend Reservoir, Texas-Louisiana. Journal of the Southeastern Association of Fish and Wildlife Agencies 3:46-49.

Baird, M. S., D. J. Lutz-Carrillo, J. W. Schlechte, J. G. Martinez, M. A. Farooqi, T. J. Hungerford, T. J. Bister. 2016. Comparison of growth of selectively bred and resident Largemouth Bass in Texas small impoundments. Journal of the Southeastern Association of Fish and Wildlife Agencies 3:57-63.

Botros, J., K. Mayes, C. Robertson, and A. Grubh. 2016. Fish habitat suitability criteria development for the lower Brazos River. Texas Water Development Board, Austin, Texas.

Buckmeier, D. L., N. G. Smith, J. W. Schlechte, A. M. Ferrara, and K. Kirkland. 2016. Characteristics and conservation of a trophy Alligator Gar population in the middle Trinity River, Texas. Journal of the Southeastern Association of Fish and Wildlife Agencies 3:33-38.

Cook-Hildreth, C., T. H. Bonner, D. G. Huffman. 2016. Reproductive biology of an exotic suckermouth Armored Catfish (Loricariidae) in the San Marcos River, Hays County, Texas, with observations on environmental triggers. Bioinvasion Records 5:173-183.

Dege, M., E. Jones, M. Clifford, and C. Kittel. 2016. Providing a safe haven for sensitive aquatic species in a changing climate. Fisheries 41:395-396.

Kurten, G. L., and A. Barkoh. 2016. Evaluation of community-level physiological profiling for monitoring microbial community function in aquaculture ponds. North American Journal of Aquaculture 78:34-44.

Mauk, R. J. 2015. Angler catch, harvest, and characteristics at Neighborhood Fishin' Program lakes. Management Data Series 288. Texas Parks and Wildlife Department, Austin.

McDonald, D., H. Glenewinkel, P. Cason, and C. Kittel. 2016. Cold weather event simulations on the survival of larval Guadalupe Bass. Management Data Series 289. Texas Parks and Wildlife Department, Austin.

Moczygemba, J. 2015. A catch-card survey of anglers at Lake Mineral Wells. Management Data Series 285. Texas Parks and Wildlife Department, Austin.

Munger, C., L. Wright, J. Dennis, J. Moczygemba, M. Gore, and D. Smith. 2016. Temporal patterns of angler use and abundance of stocked 229-mm Channel Catfish in twenty small Texas impoundments. Journal of the Southeastern Association of Fish and Wildlife Agencies 3:144-152.

Randklev, C. R., N. Ford, S. Wolverton, J. H. Kennedy, C. Robertson, K. Mayes, and D. Ford. 2016. The influence of stream discontinuity and life history strategy on mussel community structure: a case study from the Sabine River, Texas. Hydrobiologia 770(1):173-191.

Robertson, S. M., T. H. Bonner, and J. N. Fries. 2016. Effects of habitat utilization on the life histories of two imperiled, sympatric Dionda (Cyprinidae) in the Rio Grande Basin, Texas. American Midland Naturalist 175: 222-232.

Rodger, A. W., K. B. Mayes, and K. O. Winemiller. 2016. Preliminary findings for a relationship between instream flow and Shoal Chub recruitment in the lower Brazos River, Texas. Transactions of the American Fisheries Society 145(5):943-950.

Rodger, A. W., K. B. Mayes, and K. O. Winemiller. 2016. Larval fish abundance in relation to environmental variables in two Texas Gulf Coast rivers. Journal of Freshwater Ecology 31(4):625-640.

Schlechte, J. W., K. A. Bodine, D. J. Daugherty, and G. R. Binion. 2016. Size selectivity of multifilament gill nets for sampling Alligator Gar: modeling the effects on population metrics. North American Journal of Fisheries Management 36:630-638.

Schlechte, J. W., B. P. Fleming, and K. S. Reeves. 2012 (published fall, 2015). Predation on Largemouth Bass fingerlings in artificial habitat of varying hydrilla stem density and architecture. Texas Journal of Science 64:173-193.

Schlechte, J. W., and B. P. Fleming. 2015. Response of Devils River Minnow and other fish in Pinto Creek, Kinney County, Texas during a severe drought. The Southwestern Naturalist 60(1):45-55.

Smith, N. G., and D. L. Buckmeier. 2016. Living on the edge: persistence of a fringe Striped Bass population. Journal of the Southeastern Association of Fish and Wildlife Agencies 3:50-56.

Thomas, Z.A., T. Arsuffi, and S.J. Magnelia. 2015. Fishing warmwater streams with limited public access: angling behavior, economic impact, and the role of Guadalupe Bass in a twenty-four-county region of Texas. In: Tringali, M., M. Allen, T. Birdsong, and J. Long, Editors. Black Bass Diversity: Multidisciplinary Science for Conservation. American Fisheries Society, Bethesda, Maryland.

Popular Articles

Eighty-two popular articles were written and published by Inland Fisheries staff in 13 different publications. Popular articles were produced by Dyanne Cortez (10), Habitat Conservation (4), and six Inland Fisheries management district offices: Abilene (33), San Marcos/Austin (8), Jasper (12), San Angelo (7), College Station/Houston (7), and Tyler South (1). More than 200 press releases on aquatic natural resources, fisheries management, and recreational fishing opportunities were provided to TV, radio, news, and outdoor-related media outlets by management district offices and habitat conservation teams.

Technical Presentations

A total of 63 presentations were given by staff as author or co-author, at 14 professional meetings or conferences. Venues included:

- World Aquaculture Society annual meeting, Las Vegas, NV
- Southwest Stream Restoration Conference, San Antonio, TX
- Southeastern Association of Fish and Wildlife Agencies annual meeting, Asheville, NC
- American Fisheries Society annual meeting, Kansas C ty, MO
- Association of Fish and Wildlife Agencies annual meeting, Tucson, AZ
- Reservoir Fish Habitat Partnership annual meeting, Ogden, UT
- Desert Fish Habitat Partnership annual meeting, Albuquerque, NM
- World Fisheries Council meeting, San Marcos, TX
- 38th Mid-Continent Warm Water Fish Culture Workshop, Ashland, NE
- Texas Mollusk Symposium, Dallas, TX

Outreach Events

Inland Fisheries staff members were event leaders at 297 outreach events for targeted user groups (youth under 17, minorities, women, and physically challenged) in which 33,328 individuals participated.

	Youth 17 & under	Adults	Total
Males (1)	11,711	5,090	16,801
Females (2)	11,026	5.501	16,527
Minorities	8,452	1,792	10,244
Physically Challenged	755	72	827
Total (1+2)	22,737	10,591	33,328

Work with Other Organizations

Program Contracts and Agreements — Outgoing Awards

Angelina and Nacogdoches Counties Water Control and Improvement District	Lake Striker Salvinia Control	$20,000
Armand Bayou Nature Center	Armand Bayou Preserve Water Hyacinth Treatment	$12,000
Brazos River Nature Center	Leased Angler Access to the Brazos River	$36,000
Caddo Biocontrol Alliance	Biological Control of Giant Salvinia	$10,000
Camp Huaco Springs	Public Leased Access to the Guadalupe River Trout Fishery	$2,600
Central Michigan University	Alligator Gar in Texas' Coastal Zone: Setting the scale for Management of Populations and Habitats	$4,985
Chautauqua Foundation	Leased Angler Access to the Lower Colorado River at Texas River School River Camp	$12,000
Chris Rankin	Public Leased Access to the Colorado River at 458 Brody Lane, Bastrop	$11,670
Coastal Water Authority	Control of water hyacinth in Lake Houston and its tributaries	$60,000
Cypress Valley Navigation District	Boat lane maintenance and boater access on Caddo Lake and Big Cypress Bayou	$30,500
Dick's Canoes	Public Leased Access to the Brazos River	$25,950
Environmental Conservation Alliance (Tom Hayes)	Riparian Productivity along the Lower Brazos River	$40,000
Environmental Conservation Alliance (Tom Hayes)	Riparian Assessment on the Guadalupe and Brazos Rivers	$55,000
Environmental Conservation Alliance	Riparian Productivity along the Middle Trinity River	$75,535
Georgia Gwinnett College	Daily Age Estimation of Age-0 Alligator Gar from Texas Rivers	$20,000

Guadalupe-Blanco River Authority	Control of water hyacinth, hydrilla, and other aquatic or riparian plant species in the Guadalupe River, Guadalupe River reservoirs, lower Guadalupe River and Guadalupe River tributaries	$80,000
Hill Country Alliance	Private Landowner Incentive-Based Watershed Conservation in the Edwards Plateau Ecoregion - Coordinating Implementation of the Aquatic Resources Conservation Objectives of the Texas Conservation Action Plan	$150,000
John Cooke II	Public Leased Access to the Sabine River at FM 1794, Beckville	$16,000
Karrie Lera McKeown	Public Leased Access to the Colorado River at 203 Hidden Shores Loop, Smithville	$24,858
Keep Texas Beautiful	Organization and Implementation of Litter Clean-up at TPWD River Access and Conservation Areas	$61,654
Kingsland Slab Group, LLC	Public Leased Access to the Llano River	$23,500
Kona Coast Ventures	Public Leased Access to the Guadalupe River Trout Fishery at Whitewater Sports	$5,000
Lavaca-Navidad River Authority	Control of water hyacinth, hydrilla, giant salvinia, and other invasive aquatic or riparian plant species in Lake Texana and its tributaries	$60,000
Lower Neches Valley Authority	Vegetation Management on B.A. Steinhagen and Sam Rayburn reservoirs	$500,000
Mississippi State University	Bass Study	$19,007
Mountain Breeze, LLC	Public Leased Access to the Guadalupe River Trout Fishery at Mountain Breeze Campground	$4,615
Nol Dear	Public Leased Access to the South Llano River at KC 150	$22,500
Nueces River Authority	Creative design and printing of "Troubleshooting Invasives Pocket (TIP) Guide"	$47,344
Nueces River Authority	Project 23: Upper Nueces River	$50,000
Rio Guadalupe Resort (Rio Raft)	Public Leased Access to the Guadalupe River Trout Fishery at the River Valley Campground	$4,615

Sandra Hightower	Public Leased Access to the Colorado River at 750 Hwy FM 2571, Smithville	$28,032
Stephen F. Austin University	Control of Giant Salvinia with an Endocide	$80,000
Texas A&M University, AgriLife Research	Host Fish Use of Three Rare Central Texas Mussel Species	$137,563
Texas A&M University, AgriLife Research	Landa Lake Armored Catfish Processing	$5,775
Texas A&M University, AgriLife Research	Lower Guadalupe Nutrient Exchange	$70,794
Texas A&M University, AgriLife Research	Native aquatic vegetation restoration and effects of native aquatic vegetation restoration on fish and wildlife communities in Texas reservoirs	$155,240
Texas A&M University, AgriLife Research	Trinity River Mussel Survey	$65,000
Texas State University	Analytical Services Genetics Student Worker Laboratory Assistant	$27,398
Texas State University	Assessment and Modeling of Environmental Flows To Support Riparian Areas, Native Fishes and Unionid Mussels	$83,839
Texas State University	Dispersal and Migration of Freshwater Mussels	$95,840
Texas State University	Dispersal of Zebra Mussels Downstream of an Invaded Reservoir and Assessing the Risk of Dreissenid Mussel Invasion into Lakes of Texas	$73,027
Texas State University	Guadalupe Benthics	$26,000
Texas State University	Lower Guadalupe Inundation Analysis	$104,206
Texas Tech University	Assessing the risk of Dreissenid mussel invasion in Texas based on lake physical characteristics and potential for downstream dispersal	$24,443
Texas Tech University	Assessment and Monitoring of TPWD Public River Access Leases to Guide Sustainable Management	$249,651
Texas Tech University	Environmental DNA-based range delineation of invasive bigheaded carp in Texas	$69,415

Texas Tech University	Recruitment Dynamics and Reproductive Ecology Of Blue Sucker in Texas	$166,157
Texas Tech University	Variation and Plasticity and their interaction with Urbanization in Guadalupe Bass populations on and off the Edwards Plateau	$134,951
Thomas A. Goynes	Public Leased Access to the San Marcos River at San Marcos River Retreat	$25,000
Trout Unlimited	Feasibility Study for Native Fish Establishment in West Texas Streams, including Potential Reestablishment of Rio Grande Cutthroat Trout in McKittrick Creek, Guadalupe Mountains National Park	$26,225
University of Alabama	Impacts of Zebra Mussels on Reservoir Water Quality: Spatio-temporal Patterns	$48,213
University of Texas Arlington	An Ongoing Study of Zebra Mussel Population Dynamics in Infested Texas Water Bodies	$36,653
University of Texas Austin	Age, Growth, and Environmental Exposure Histories of Threatened Freshwater Mussels	$31,601
University of Texas Austin	Blanco River Restoration Educational Materials Workshop	$28,030
University of Texas Austin	Conserving Texas Biodiversity: Status, Trends and Conservation Planning for Fishes of Greatest Conservation Need	$534,857
University of Texas Austin-BEG	Monitoring Hydrologic Effects of Saltcedar Control in the Upper Brazos River Basin, Texas	$820,908
University of Texas Tyler	Demographic Data for Two State-Threatened Mussels in the Neches River	$44,231
University of North Texas	Experimental Determination of Host Suitability for Six State-Threatened Mussel Species	$74,189
University of So. Mississippi	Relevance of River-Reservoir Interface Backwaters to Floodplain-Adapted Fish Communities	$16,980
William H. Haley, III	Public Leased Access to the Nueces River at 12317 Figueroa St., Corpus Christi	$24,000

Grants and Donations — Incoming Funds

Texas Parks and Wildlife Foundation	Student Intern	$15,000
Texas Parks and Wildlife Foundation	Neighborhood Fishin'	$2,500
Texas Parks and Wildlife Foundation	A.E. Wood Fish Hatchery	$500
Texas Parks and Wildlife Foundation	Toyota ShareLunker Program Operations	$57,000
Texas Parks and Wildlife Foundation/ Toyota Texas Bass Classic	Toyota Texas Bass Classic	$250,000
Water Oriented Recreation District	Comal County Habitat Improvements	$500
Guadalupe River Trout Unlimited	Student Intern	$7,000
Doyle Watson Memorial–Edwards	Fishing for Future Generations	$25
Doyle Watson Memorial–Johnson	Fishing for Future Generations	$60
Doyle Watson Memorial–Naylor	Fishing for Future Generations	$30
Doyle Watson Memorial–Berg	Fishing for Future Generations	$30
Doyle Watson Memorial–Mote	Fishing for Future Generations	$100
Doyle Watson Memorial–Landrey	Fishing for Future Generations	$20
Doyle Watson Memorial–Pate	Fishing for Future Generations	$25
Doyle Watson Memorial–Quint	Fishing for Future Generations	$25
Doyle Watson Memorial–Rammelsberg	Fishing for Future Generations	$50
Doyle Watson Memorial–Weikum	Fishing for Future Generations	$35

4200 Smith School Road ▪ Austin, Texas 78744
www.tpwd.texas.gov

In accordance with Texas State Depository Law, this publication is available at the Texas State Publications Clearinghouse and/or Texas Depository Libraries.