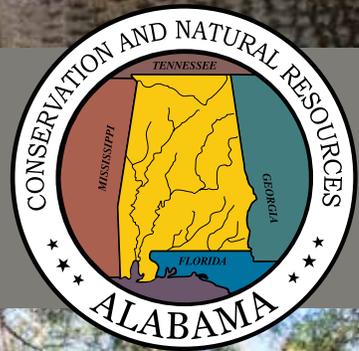




2016-2017 ANNUAL REPORT



**Honorable Kay Ivey
Governor of Alabama
State Capitol
Montgomery, AL 36130**



Dear Governor Ivey:

I am pleased to submit the Department of Conservation and Natural Resources' Annual Report for Fiscal Year 2016-17.

The Department continues to find more efficient ways to communicate and conduct business with our constituents. License purchases, special hunt registrations and park lodge and camping reservations are available through our websites, www.outdooralabama.com and www.alapark.com. In addition, we are communicating to more than half a million people through email newsletters and notices.

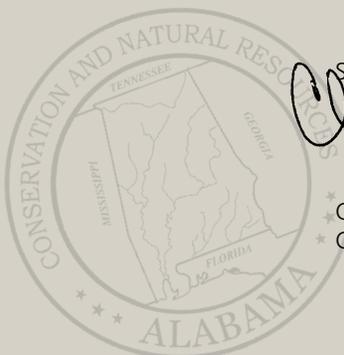
Funds derived from the cap on sales tax discounts were restored to State Parks in FY 2017. These funds have provided much-needed relief in addressing the backlog of park maintenance projects. Park guests totaled just under 5 million this fiscal year.

The federal management of red snapper and other reef fish continues to be a highly volatile issue within the fishing community. Our Marine Resources Division is working with federal agencies and Congress to provide more state oversight of this fishery and a longer season for anglers. Snapper Check, which continued for the fourth year, is an important part of this effort.

The State Lands Division has administered the Coastal Impact Assistance Program (CIAP) on behalf of the State of Alabama since its beginning in 2005. During the life of this program, which closed this year, State Lands administered 49 grants for over \$58 million funding various coastal project activities supporting Mobile and Baldwin counties.

Participation in the state's Game Check system for the recording and reporting of both deer and turkey harvests became mandatory during the 2016/2017 hunting seasons. Though participation in this system had been voluntary in the past, few hunters utilized it. Initial estimates are that roughly 35 percent of deer harvests and 40 percent of turkey harvests were recorded in the first year of mandatory participation. The Division of Wildlife and Freshwater Fisheries will continue to educate hunters on the importance of using Game Check and enforce the law for those who do not comply.

These are just a few of the accomplishments you will find in this report. Thank you for your support and leadership to our agency and the State of Alabama.



Sincerely,

A handwritten signature in black ink that reads "Christopher M. Blankenship". The signature is written in a cursive style.

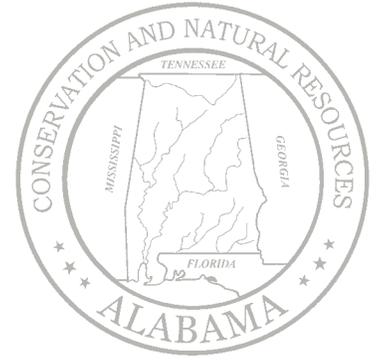
Christopher M. Blankenship
Commissioner

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DEPARTMENT OVERVIEW



The Department of Conservation and Natural Resources is an executive and administrative Department of the State of Alabama created by statute. The Commissioner, appointed by the Governor as a member of her cabinet, advises the Governor and Legislature on management of freshwater fish, wildlife, marine resources, waterway safety, state lands, state parks, and other natural resources.

Scope of Operations

The Department's scope of operations includes the administration, management and maintenance of 21 state parks, 23 public fishing lakes, three freshwater fish hatcheries, one aquatic biodiversity center, 162 public boat ramps, 30 wildlife management areas, 6 special opportunity areas, 12 shooting ranges, a saltwater mariculture center, and 645,000 acres of trust lands managed for the benefit of several state agencies, the General Fund and Alabama Trust Fund. Other Departmental functions include maintenance of a State Land Resource Information Center and administration of the Forever Wild Land Trust program.

Organization

During Fiscal Year 2017, the Department had four operational divisions and seven support sections. The operational divisions were Marine Resources, State Lands, State Parks and Wildlife and Freshwater Fisheries. Support sections were Accounting, Engineering, Information and Education, Information Technology, Legal, Personnel and Payroll, and Property Inventory. The Commissioner was advised by a 13-member Conservation Advisory Board.

Division directors managed the Department's programs under their jurisdiction through authority delegated by the Legislature and the Commissioner. Concerted efforts were made to balance needs and requirements against resources and available funding to satisfy present and future public and resource requirements. Active public education and voluntary participation programs were expanded and new plans were implemented to achieve maximum multiple-use benefits consistent with resource conservation.

Department Goals

The Department's major goal is to promote the statewide stewardship and enjoyment of Alabama's natural resources

and to ensure that future generations will be able to enjoy these resources.

Funding

The Alabama Department of Conservation and Natural Resources receives no General Fund support. Funding for the Department is generated through special revenues, which include federal money, cigarette taxes, user and license fees, mandated interest from endowment and federal regulations. The Forever Wild Program received interest income from the Alabama Trust Fund. Specific revenue sources for the four operational divisions are as follows:

Marine Resources: Saltwater fishing licenses, fines, marine gas tax and federal grants. Marine Resources also has an endowment but it has not grown enough to enhance operations.

State Lands: Management fees from the sale of timber, minerals and various leases on state lands administered under the Lands Asset Management Program. Further, the division receives additional federal grants that support specific programs.

State Parks: User-generated funds in the form of entrance, rental, lodging, golf and other recreational fees. State Parks received a modest amount of funding from cigarette tax revenue.

Wildlife and Freshwater Fisheries: Fishing and hunting licenses and permits; fines; waterfowl stamps; federal allocations from excise taxes on sporting arms, ammunition, archery gear and some fishing tackle; and federal grants. Interest income continues to be generated by the Game and Fish endowment fund for resident lifetime hunting and fishing licenses. Direct donations and voluntary state income tax refund check-offs for the Nongame Wildlife Program continue to decrease from previous fiscal years.

CONSERVATION ADVISORY BOARD

The Conservation Advisory Board, created by statute, is composed of 10 members appointed by the Governor for alternating terms of six years and three ex-officio members in the persons of the Governor, the Commissioner of Agriculture and Industries, and the Director of the Alabama Cooperative Extension System. The Commissioner of Conservation and Natural Resources serves as the ex-officio secretary of the Board.

The Advisory Board assists in formulating policies for the Department of Conservation, examines all rules and regulations and makes recommendations for their change or amendment. By a two-thirds vote of the members present and with the

Governor's approval, the Board can amend, make any changes, repeal or create and promulgate additional rules and regulations. The Board also assists in publicizing the Department's programs and activities.

Meetings

The Advisory Board met two times during FY 2017:

- February 11, 2017, at the State Capitol Auditorium in Montgomery, Ala.
- March 4, 2017, at Lake Guntersville State Park in Guntersville, Ala.

Conservation Advisory Board Members as of Sept. 30, 2017

Members	Home Town	Term Expires
Dr. Warren Strickland, Chairman	Huntsville	September 30, 2017
Austin Ainsworth	Guntersville	September 30, 2017
Brock Jones	Boligee	March 28, 2021
Patrick Cagle	Montgomery	March 28, 2021
Joseph Dobbs, Jr.	Birmingham	March 28, 2021
Grady Hartzog	Eufaula	March 28, 2021
Raymond Jones, Jr.	Huntsville	May 9, 2019
Jeff Martin	Pell City	May 9, 2019
Ben C. Stimpson, Jr.	Mobile	September 30, 2017
Gary Wolfe	Fairhope	March 28, 2021

Ex-officio Members

Kay Ivey, Governor, State of Alabama
Gary Lemme, Director, Alabama Cooperative Extension System, Auburn University
John McMillan, Commissioner, Alabama Department of Agriculture and Industries

Ex-officio Secretary of the Board

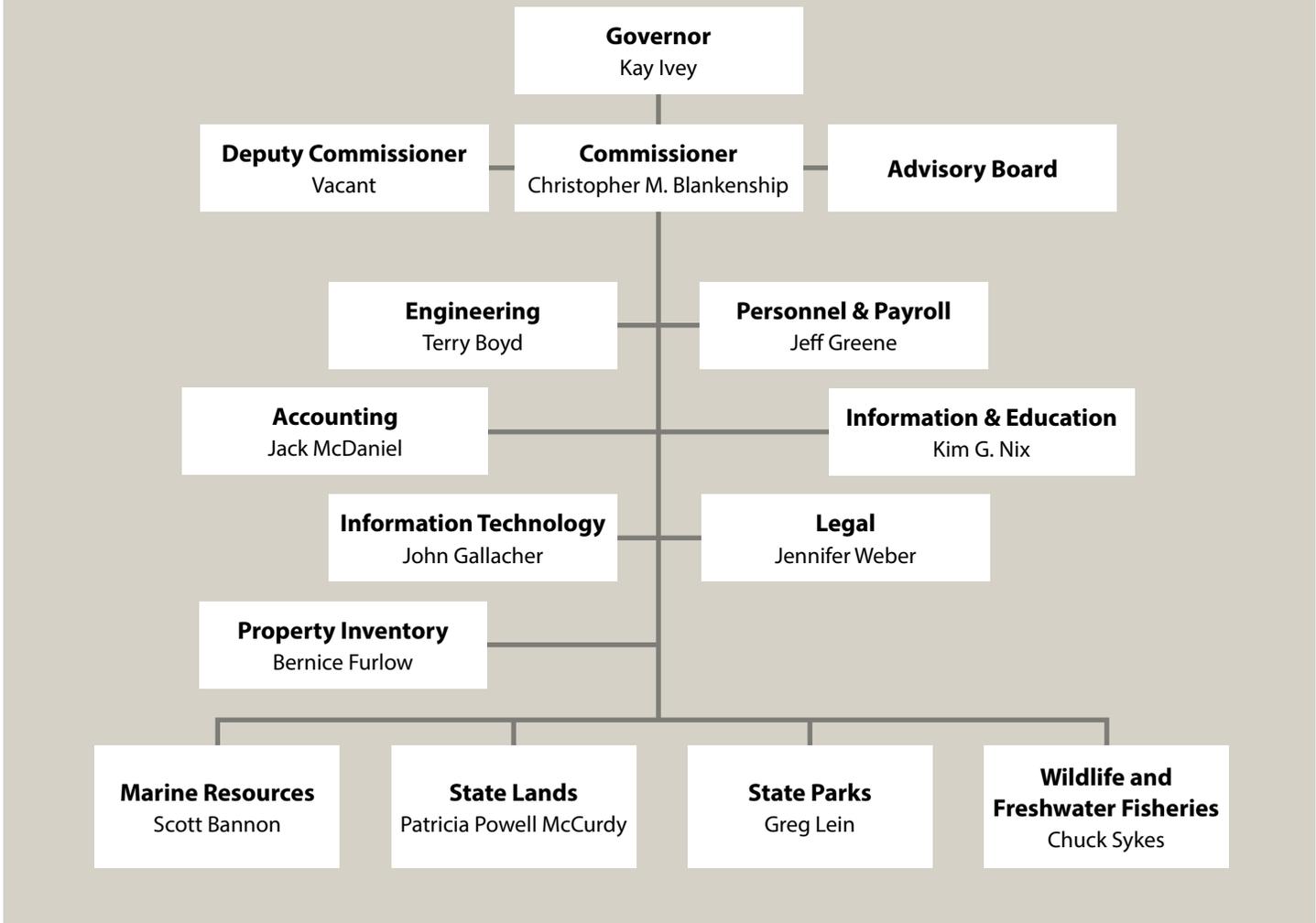
Christopher M. Blankenship, Commissioner, Alabama Department of Conservation and Natural Resources

BUDGETS



	Total ACTUAL 2017	Total BUDGETED 2018	Total REQUESTED 2019
NUMBER OF EMPLOYEES	1,046	1,164	1,149
UNENCUMBERED CASH BALANCE FORWARD	33,026,222	23,932,445	14,615,505
Marine Resources - Gulf States Marine Fisheries Commission	650,150	697,000	565,000
Marine Resources - Commerce	612,549	858,000	691,000
Marine Resources - Interior	592,854	1,600,000	1,300,000
Game & Fish - Interior	21,665,902	17,100,660	23,850,000
Game & Fish - Misc	60,605	125,000	142,000
Lands - Commerce	6,619,349	12,098,511	9,870,384
Lands - Interior	0	1,000,000	1,000,000
Restore Act	0	0	146,201,500
Total Federal Funding	30,201,409	33,479,171	183,619,884
National Fish and Wildlife Foundation	3,630,605	5,100,000	6,800,000
Licenses and Permits	22,955,858	23,432,850	20,843,750
Land Management Fees	6,315,294	4,100,000	5,500,000
User Fees	37,511,256	36,231,474	37,412,662
Timber Sales	228,551	400,000	375,000
Fines	786,306	735,000	740,000
Trust Fund Interest (MR and WFF)	839,137	655,000	595,000
Other	5,025,002	2,227,350	5,123,300
Total Departmental Related Receipts	77,292,009	72,881,674	77,389,712
Cigarette Tax	3,000,000	3,000,000	3,000,000
Gasoline Tax	2,580,921	3,350,000	2,450,000
Use Tax Discount Cap	1,082,111	1,038,000	1,038,000
Sales Tax Discount Cap	5,000,000	5,000,000	5,000,000
GOMESA	283,053	33,600,000	41,600,000
Forever Wild Land Management	600,000	750,000	750,000
BP Oil Spill/NRDA Reimbursements	4,964,270	18,260,000	18,580,000
Total Other Receipts	17,510,355	64,998,000	72,418,000
Administrative Transfer	8,241,008	8,300,000	10,000,000
Actual All Receipts	133,244,781	179,658,845	343,427,596
BFY 2016-2018 Expenditures or Budgeted	142,338,558	188,975,785	353,989,895
Revenues versus Expenditures – Over (Under)	(9,093,777)	(9,316,940)	(10,562,299)
UNENCUMBERED CASH BALANCE	23,932,445	14,615,505	4,053,206
BFY 2016-2018 Expenditures/Budgeted	142,338,558	188,975,785	353,989,895
BFY 2016-2018 Federal Funding	30,201,409	33,479,171	183,619,884
BFY 2016-2018 State Funding	112,137,149	155,496,614	170,370,011

Department Organizational Chart as of September 30, 2017



FY 2017 Budgets and Expenditures for Administrative Division

Section	Budgeted Amount	Actual Expenditures	Over/(Under)
Accounting	1,970,397	1,838,524	(131,873)
Commissioner	646,617	630,076	(16,541)
Engineering	1,451,902	1,008,323	(443,579)
Information & Education	1,206,922	687,131	(519,791)
Information Technology	1,984,020	1,373,451	(610,569)
Legal	944,457	675,866	(268,591)
License	333,798	185,840	(147,958)
Payroll & Personnel	821,655	833,041	11,386
Property Inventory	194,415	151,487	(42,928)
Contingency	607,413		(607,413)
Totals	10,161,596	7,383,739	(2,777,857)

ADMINISTRATIVE DIVISION

ACCOUNTING

The Accounting Section is the central clearinghouse for all departmental financial data. Accounting maintains and records all receipts and disbursements for the Commissioner's office, administrative sections and each of the four operational divisions. Accounting is responsible for six internal functions: Accounts Payable, Accounts Receivable, Budgeting, Procurement, Hunting and Fishing License Sales and Financial Reporting.

Accounts Payable reviews and approves all payment transactions and transfer journal entries for the Department. Over 20,000 transactions are processed on an annual basis.

Accounts Receivable reviews and approves all cash receipts and investment transactions for the Department. Over 12,000 transactions are processed on an annual basis.

The Budgeting office prepares and submits the annual budget. It also processes budget modifications as required during the year. The Department expenses for FY2017 were approximately \$142.3 million.

Procurement provides purchasing assistance to each administrative section and to all divisions. This office is the liaison between DCNR and State Purchasing.

The Hunting and Fishing License office is responsible for receiving revenues from license sales and certifying them into the Wildlife and Freshwater Fisheries and Marine Resources funds.

Financial Reporting processes Comprehensive Annual Financial Report entries, closing entries, reports on grants, calculates federal draws and maintains grant budgets for the Department.

INFORMATION AND EDUCATION

The Information and Education Section provides a variety of creative services for the Department. These include news releases, publication design, graphic design, web and special video productions, photography and a weekly outdoors column sent to media and published on the Department's website. Personnel included seven full-time positions.

In addition, I&E provided marketing and publishing consultation as well as editorial, proofreading, and copywriting service for Departmental staff; responded to information requests from the public, media and other agencies; and coordinated special projects.

Accomplishments

- Partnered with the Alabama Tourism Department and the Alabama Department of Transportation on the Outdoor

Alabama Photo Contest as part of the Alabama Bicentennial celebration. The winning photos will be displayed across the state in a 2018 traveling exhibit.

- Ninety-five press releases were written in support of Department programs.
- Oversaw an email communications network of more than 600,000 people. Emails distributed included e-newsletters, hunting and fishing license expiration reminders, program notifications and more.
- Conducted targeted email fishing license renewal reminders that showed people who received email reminders renewed their license at a higher rate than those who didn't receive email reminders. We will continue these efforts in future years.
- By including links to the license purchase page in our monthly email newsletters, more than \$165,000 in license sales was generated.
- Designed a Crayfishes of Alabama poster and short video that was promoted on social media and through a news release. The section fulfilled hundreds of requests for the posters throughout the year.
- Designed promotional materials including brochures, flyers, banners and other printed materials for State Parks promotions, Game Check, Forever Wild and other Department programs.
- Operated the Department's official social media platforms on Facebook, Twitter, YouTube and Instagram.

INFORMATION TECHNOLOGY

The Information Technology Section provides computer hardware, software and networking services for the Department. Hardware services include setup and installation of computers and mobile devices, management of Departmental servers, and installation and support for printers, monitors, copiers and scanners.

Software services include web-based application development and maintenance, analysis, design and support for the Department's E-Gov applications, support for all mainframe applications, and support and maintenance of Department websites.

Networking services include support for all wired, wireless, and cellular technologies used throughout the Department. IT support is also provided for email through Microsoft Office365 Enterprise Agreement.

Facilities and Personnel

The staff of 12 includes an IT Manager, Account Clerk, Programmer Analysts, Systems Specialists and Technicians and two contractor-filled positions. There are seven vacant positions in IT.

Accomplishments

- Information Technology provided consultation, analysis and design, project management, database management and technical service and support for many Department projects. Major projects included the Game Check phone app that recorded over 84,000 deer harvested in the first season.
- Developed a new accounting system including a distribution of payment processing and automation of payment distributions that replaces an antiquated system of manual payment processing.
- Commercial and recreational license management
- Streamlined public hunts registration by developing an all-encompassing system for the public to register; also provided administrative selection and reporting by Department personnel
- Hunter Education class registration and reporting
- Developed Game Breeders application that manages deer
- Department website management

Problems and Unmet Needs

Staffing issues due to budget constraints, a backlog in new development, and inability to secure adequate network bandwidth for Department initiatives.

LEGAL SECTION

The Legal Section provides legal counsel and advice to the Department Commissioner, Deputy Commissioner, Division Directors and other officials of the Department; the Accounting and Engineering Sections; law enforcement personnel and other employees, through both personnel meetings and advisory memoranda.

The Legal Section also performs all necessary legal work relating to the acquisitions of real estate for the Department, including the procurement of title evidence (title insurance, title opinion, title research), preparation of deeds, issuance of Attorney General Title Opinions, closing acquisitions, recording deeds and obtaining the final title policies/opinions, tax assessments and payment of taxes due.

Departmental contracts and legal instruments of all types, including, but not limited to, oil and gas leases; real estate leases; personal services agreements; construction contracts; engineering contracts; easements; lease purchase agreements; State Park concession contracts and any other documents as required, is also handled by the legal staff.

The Legal Section corresponds/meets with and advises members of the Governor's Office, Alabama Legislature and other State attorneys as well as the public on matters of legal, legislative or regulatory interest related to the Department or in areas of governmental expertise.

The Section drafts, reviews and monitors legislation affecting the Department as well as drafting Departmental rules and regulations, making sure they are compliant with the Alabama Administrative Procedures Act.

Litigation against DCNR and its employees, as well as litigation initiated by the Department, is also managed by the Legal Section. This includes both state and federal courts, appellate courts, State agencies and State Boards (for example, Board of Adjustment and State Personnel Department). Litigation includes oral arguments, preparation of pleadings and briefs, and negotiation of legal conflicts.

PERSONNEL AND PAYROLL

The Personnel and Payroll Section provides personnel-related support services to the Commissioner's office, Division Directors, Section Chiefs, and each employee of the Department. The section serves as liaison to the State Personnel Department for DCNR's personnel actions and activities.

The section is responsible for processing all payrolls, as well as maintaining all employee files and payroll records, for the Department's hourly and semi-monthly personnel.

The section supports the advancement of DCNR's employees in various ways, including facilitating training opportunities and assisting with the administration of benefits.

ENGINEERING SECTION

The Engineering Section provides professional planning and programming, engineering, architectural, landscape architectural, surveying, cartographic and related administrative services to the divisions of the Department. The section's professional staff of engineers, architect, and landscape architect and land surveyors ensures that solutions to conservation planning and programming, design and construction problems and the development of Departmental projects are integrated with ecologically functional and aesthetic aspects within the confines of economic feasibility.

Facilities and Personnel

The Engineering Section had 11 employees during FY 2016-2017: one Conservation Engineering Services Chief, one Civil Engineer, two Design Technicians, one Design Technician Supervisor, one Legal Research Assistant, one Design Assistant, one Plant Maintenance Supervisor III, one part-time Conservation Construction Inspector I, and two Retired State Employees. The section's facilities are in Montgomery.

Accomplishments

The Engineering Section continued to provide on-site professional and technical support in the rebuilding of property and structures damaged or destroyed by storms. The Engineering Section coordinated with FEMA and governmental agencies to assist with project documentation, repairs and reporting of multiple declared disasters in Alabama counties.

While we are working with EMA to recover approximately \$941,180 associated with the damages sustained in the April and May 2011 tornadoes and other severe weather disasters, FEMA notified our agency that no additional funds would be obligated for disasters prior to Hurricane Harvey until further notice. Hurricanes Matthew and Harvey, fires and other disasters that plagued the U.S. during 2017 necessitated this action.

The Engineering Section administered approximately \$10 million in contracts both initiated and coordinated in fiscal years 2016-2017.

Engineering Section programs consist of providing the necessary professional expertise required to reach Department goals. These programs include capital and improvement, using both out-sources and in-house design and in-house construction, master planning and site planning for Depart-

ment facilities. General technical assistance is also performed including construction document preparation, project status reports, annual reports, replies to correspondence, feasibility studies, advisement on proper repair and operation manuals, providing file information, technical field assistance, emergency project involvement, dam inspections, specification writing for material and equipment purchases, field maintenance and training assistance.

Engineering was also involved with surveying assistance and technical advice on construction projects, boundaries and property corners for State Parks, delineation and location of oyster reefs, public access areas, wildlife management areas, public lakes and other state managed property. Approximately 30 percent of Engineering Section time was spent on technical assistance of a general nature involving various Department activities requiring engineering input.

The Engineering Section continues to assist the Commissioner's Office and the State Parks Division in the advertising for, and selection of private architectural/engineering firms to prepare documents for State Parks Renovations and Improvements, State Lands CIAP Projects and the other Divisions as needed. The section remains as a coordinating liaison between the Department of Conservation and these private firms to communicate the needs of the Department and to ensure their inclusion into the completed plans.



MARINE RESOURCES DIVISION



The mission of the **Marine Resources Division (MRD)** is to manage the State's marine fishery resources through research, enforcement, and education for the maximum benefit of the resources and the citizens of Alabama. The Division consists of an enforcement section, a fisheries section and an administrative section.

The **Enforcement Section** is responsible for enforcing state laws and regulations pertaining to Alabama's marine resources and to work cooperatively with other state agencies and federal fisheries enforcement agencies to protect federal fisheries resources in federal waters adjacent to Alabama. The section also works cooperatively with the U.S. Coast Guard, NOAA Office of Law Enforcement and the Alabama Law Enforcement Agency to accomplish their missions.

The **Fisheries Section** works with other Gulf of Mexico state and federal agencies, as well as the public to collect data through various projects to describe Alabama's marine resources and supply information and recommendations for managing these resources at state, regional and national levels. It also oversees a mariculture program located at the Claude Peteet Mariculture Center. Both sections participate in outreach programs throughout the year.

The **Administrative Section** handles accounting, billing, payroll, license sales and public inquiries. The Division is housed at two facilities, one on Dauphin Island and the other in Gulf Shores. The two Division facilities supported an average of 54 full-time employees, two part-time employees, and 10 temporary positions during the 2017 fiscal year. There were 66 full-time employees budgeted and 12 positions unfilled during the year.

Accomplishments and Activities

MRD biologists continue to monitor the oyster density annually on Alabama's public oyster reefs. Between July and September 2017, 580 SCUBA quadrat samples were collected and processed. Samples were collected from reefs that were planted with cultch between 2009 and 2016 as well as on non-planted reef for comparison. Very low oyster densities were recorded on all reefs surveyed, most likely due to a prolonged freshet (<5 ppt) and hypoxic conditions (<4 mg/L) during the months of June and July lasting longer than 25 days.

MRD set oyster larvae and deployed spat on shell 10 times between May and November 2017. This remote set project was funded through a grant from the National Fish and Wildlife Foundation (NFWF). An estimated 50,695,000 oyster larvae were set and the resulting spat (larvae attached to substrate) were deployed on four reefs in Mobile Bay and Mississippi Sound. Post-monitoring of 2016 and 2017 remote set deployment sites began in September 2017. Initial survival and growth of deployed spat is good. MRD will continue to sample deployment sites to determine if survival and growth is improved using this enhancement technique in the long term.

NFWF projects are proceeding with a few exceptions due to vessel issues and volunteer concerns with fishery-dependent projects. Sampling for vertical line (88 events), bottom long-line (40 events) and trawl target stations were (40 events) completed for the year. This work complements current SEAMAP surveys. One hundred and nine wild-caught spotted seatrout were acoustically tagged for the project task of acoustic monitoring of fish movements and mortality. Seven spotted seatrout have been reported as harvested by anglers, five from Dog River and two from Fowl River. Hydrophones are located throughout the estuarine system to assist in tracking acoustically tagged fish and will help document movements and habitat use.

Offshore and estuarine areas targeted within the NFWF project for side-scan imagery acquisition were completed. Offshore side-scanning activities included mapping bottoms adjacent to the vertical, bottom long-line and trawl sampling stations. Estuarine side-scanning sonar activities focused on determining the extent and condition of artificial fishing reefs, natural structures and oyster reef habitats. Sonar images were used in pre-reef construction to assist staff with identifying areas to receive reef



BILLY POPE

material and in post-construction to verify targeted areas were satisfactorily enhanced.

Hard parts (otoliths) are currently being processed and aged from over 700 red snapper from the vertical and bottom-long line surveys. Gut samples met the target of 1,000 samples to identify trophic linkages through species identification and stable isotope analysis of contents. Ovary samples from 161 gray triggerfish and 45 red porgy were collected and will be sent to a private laboratory for processing in 2018.

MRD has continued the operation and maintenance of five continuous water quality monitoring stations throughout Mobile Bay. General results indicate significant periods of anoxic conditions at depths greater than 8 feet.

MRD biologists conducted 12 observer trips on three commercial blue crab harvesting vessels working in upper Mobile Bay, Portersville Bay, Perdido Bay and Wolf Bay systems. Traps were sampled for the number of legal and sub-legal crabs and bycatch species. External parasites and any abnormalities, if observed, were noted. Twenty crabs were randomly selected during each trip and were frozen for further measurement and

analysis. Owners of the crab vessels were compensated for access to their vessels and traps during sampling trips. A total of 1,849 crab traps were sampled of 1,867 traps fished, 4,486 crabs were sexed and measured, and 243 crabs were processed in the laboratory.

The Biological Sampling Program, funded by the Gulf States Marine Fisheries Commission, was conducted during the first half of the reporting period. A total of 1,575 otoliths were collected by MRD staff. Some targets for primary species such as gray triggerfish and greater amberjack were not met due to fishery closures occurring before project start. MRD has processed the majority of otoliths in FY2017. Data will be entered into the Gulf States Marine Fisheries Commission's FIN database.

During the reporting period, a total of 2,808 recreational angler interviews were collected in all modes for the National Marine Fisheries Service per an agreement with the Gulf States Marine Fisheries Commission. Samplers received fish identification training and testing, ongoing survey training and malfunctioning/missing field equipment was replaced.

MRD implemented an at-sea sampling program, in which fishing activity on charter vessels was observed in order to obtain more accurate estimates of released fish and discard mortality. Twenty-nine chartered trips were observed during the reporting period. Outreach is being continued to encourage more captains to voluntarily participate in this activity going forward.

The requirement of captains of recreational vessels with red snapper to report harvested red snapper prior to landing fish in Alabama continued for the fourth year. During the red snapper season, 8,170 vessel reports from charter boats and private fishing vessels were submitted through Snapper Check. Approximately 1.69 million pounds of red snapper were estimated to have been harvested during 2017, which represents approximately 48 percent of the preliminary federal estimate. MRD staff has submitted information from Snapper Check to the federal fisheries statistics staff as part of a certification process in order to include this data in federal management.

During the reporting period, an agreement was entered between Southeast Cooperative Fish Parasite and Disease Laboratory and MRD whereby wild fish were sent to Auburn University for diagnostic checks. The diagnostic results will be added to a fish disease database whereby subsequent diagnostic results can be compared to better understand the incidence of infection and pathogens in wild fish populations throughout the year. Results indicated low levels of fish disease among the fish species sampled.

Red drum and Florida pompano broodstock were maintained at the Claude Peteet Mariculture Center. Photoperiod and water temperatures were manipulated to induce spawning. Multiple spawning events were observed in the red drum tanks and an estimated 1.5 million eggs were fertilized. Nearly 50,000 fry were reared and released into local waters. Additionally, some fish were grown to larger sizes and given to researchers at the University of South Alabama for predator/prey studies. Limited spawning was observed in Florida pompano tanks and eggs that were observed were not fertilized. Poor spawning and fertilization success observed in tanks of both species could be related to the presence of a common parasite on the gills of the fish. Water treatment procedures were refined to reduce levels of the parasite, which should promote increased fertilization and hatching rates.

MRD continued artificial reefing activities to enhance habitats and increase recreational fishing opportunities for coastal salt-water anglers. A total of 134 public artificial reefs were either created or enhanced; 159 private artificial reefs were permitted for deployment in the offshore artificial reef permit zones.

MRD, in partnership with the Mobile Bay National Estuary Program and the NOAA, hosted the Alabama Volunteer Derelict Crab Trap Removal Program on March 25, 2017. Fourteen volunteers removed 84 derelict crab traps from the shallow flats in the Mobile-Tensaw Delta. During this event, 157 live blue crabs were released from the removed derelict traps while one dead blue crab was observed.

Alabama continued a seafood promotional campaign under the direction of the Alabama Seafood Marketing Commission. The

Alabama Seafood Marketing Program consists of public relations, television commercials, print ads and articles, radio ads, billboards, speaking appearances, distribution of marketing materials, sponsorships of events and participation at community festivals and chef events. The website eatalabamaseafood.com was developed and has received rave reviews from the public.

ENFORCEMENT SECTION

From January 1, 2017, to December 1, 2017, AMRD enforcement officers conducted 3,664 commercial fishermen intercepts, 26,970 recreational fishermen intercepts, 16,590 patrol hours, and 8,850 vessel boardings.

MRD officers continue to participate in joint investigations with NOAA/OLE regarding Gulf reef fish. Additionally, they are conducting joint patrols with the uniformed NOAA Enforcement Officer.

MRD Enforcement entered into the 16th Joint Enforcement Agreement with NOAA/OLE. The JEA provides equipment and funding for officers to enforce federal laws and regulations. The JEA provides equipment and funding for officers to enforce federal laws and regulations. The 2017 contract included funding for patrol vehicles, outboard engines and repairs to vessels. Additionally, it provided funding for underway and dockside patrols for priorities such as red snapper and turtle excluder devices.

The Enforcement section is actively involved in the Southern District of Alabama Environmental Crimes Task Force. This partnership has allowed multiple agencies to provide a wide range of skill sets and manpower to enforce state and federal laws. The section also participates in the South Alabama Regional Search and Rescue group (SARSAR) to provide regional search and rescue. During FY 2017, officers worked closely with other state law enforcement agencies in a variety of activities including the apprehension and prosecution of persons in multiple federal fisheries cases covering several states.

Future Issues

The federal management of red snapper and other reef fish continues to be a highly volatile issue within the fishing community. Currently, these fish are managed by the National Marine Fisheries Service (NMFS) since most occur in federal waters. The 2017 federal season for anglers fishing from private fishing vessels for red snapper was initially a three-day season (reduced from 11 days in 2016). Although the fish are primarily harvested in federal waters, the shortened seasons have taken an economic toll on the charter and recreational fishermen and related businesses in coastal Alabama. Through negotiations between federal fisheries officials, state fisheries managers, and members of Congress, the season was increased to 42 days.

There are many proposals and ideas to improve the management of red snapper to allow for increased harvest and an increased season length for this recovering species. One of the initiatives is for the federal government to cede management

of red snapper to the individual states or regions made up of a combination of states. Other initiatives call for increased data collection and a reexamination of the red snapper stock through an improved stock assessment process using the additional data. In early 2018, MRD, including the other Gulf states marine fisheries management agencies, submitted an alternative management plan for management of red snapper off each state for a two-year trial period. The plan will provide a significant increase in the number of days for Alabama's anglers and allow

MRD to calculate harvests through the Snapper Check reporting program which has produced consistently lower landings estimates than the federal data program.

MRD will continue to work with other state and federal agencies in the assessment, monitoring, and rehabilitation efforts needed in response to the Deepwater Horizon oil spill. The Fisheries Section will work closely with the NRDA process to implement fisheries assessment and monitoring plans.

Marine Resources Project Summary

Artificial Reefs Deployed	293 reefs
Marine Tide Calendars	75,000 distributed
Snapper Check Reports	8,170 landing reports submitted
Fisheries Assessment and Monitoring	396 samples taken and analyzed
Adult Finfish Sampling Program	215 net sets taken and analyzed
Cooperative Statistics	645 commercial catch samples collected
Cooperative Statistics	225 commercial fishermen interviewed
Commercial Trip Ticket	12,774 commercial fishing trips entered
Southeast Area Monitoring and Assessment	78 offshore sites sampled
Marine Recreational Information Program	2,808 anglers interviewed
Otolith Sampling program	1,575 fish sampled

Marine Resources 2017 Budget

BUDGETED ITEM	BUDGET	EXPENDITURES
PERSONNEL COSTS	\$2,975,284.00	\$2,776,656.52
EMPLOYEE BENEFITS	\$1,323,257.00	\$1,210,062.53
TRAVEL- IN-STATE	\$17,000.00	\$4,661.25
TRAVEL -OUT- OF-STATE	\$23,000.00	\$14,234.90
REPAIRS AND MAINTENANCE	\$150,000.00	\$61,532.87
RENTALS AND LEASES	\$85,000.00	\$23,648.91
UTILITIES AND COMMUNICATION	\$300,000.00	\$197,338.63
PROFESSIONAL SERVICES	\$7,683,712.00	\$2,266,424.09
SUPPLIES, MATERIALS & OPERATING EXPENSES	\$550,000.00	\$380,922.75
TRANSPORTATION EQUIPMENT OPERATIONS	\$520,000.00	\$291,464.73
GRANTS AND BENEFITS	\$283,239.00	\$151,732.26
CAPITAL OUTLAY	\$5,443,547.00	\$2,875,822.00
TRANSPORTATION EQUIPMENT PURCHASES	\$300,000.00	\$243,106.71
OTHER EQUIPMENT PURCHASES	\$300,000.00	\$245,898.13
ADMINISTRATIVE TRANSFER	\$665,000.00	\$658,739.00
TOTAL	\$20,619,039.00	\$11,402,245.28



BANNER YEAR FOR ARTIFICIAL REEF ZONES

The **Marine Resources Division (MRD)** conducts a variety of activities in any given year such as boat ramp construction and rehabilitation, breeding and releasing red drum, fish data collection, surveying anglers for participation, oyster reef enhancement, shrimp monitoring in addition to the enforcing the rules to ensure we continue to have the resources for the benefit of the citizens of Alabama. In 2017, MRD had a banner year for all aspects of the artificial reef program, from inshore to nearshore and offshore. MRD works diligently to provide habitat enhancement in all zones to promote development of the many species that call underwater structures home and to enhance fish stocks.

Alabama's artificial reef system is a benefit to the state's most popular reef fish, Red Snapper.



MRD

MRD maintains 34 inshore artificial reef sites in the Mobile Bay, Mississippi Sound and Perdido systems. The 8-acre CCA Pelican Bay and 16-acre Heggeman Reefs were constructed in 2017. Eighty anchored pedestal-style reef modules were utilized to construct the Pelican Bay Reef and 52 anchored pedestal-style reef modules were used to construct the Heggeman Reef. The anchored reef modules consist of three 4.5-foot diameter concrete discs placed on piles jettied into the seabed. These reef modules provide quality substrate for bioengineers such as shellfish and encrusting algae, which creates small-scale complexity required by cryptic finfish, crabs and shrimp that allow the concrete structures to function as a stable, diverse reef community.

Additionally, 41,660 tons of 3 inch by 6 inch limestone aggregate were deployed at 16 existing inshore reef sites to refurbish the previously constructed reefs. The addition of the two reefs and enhancement of the existing 14 reef sites will result in additional inshore fishing opportunities for species such as red drum, sand seatrout, spotted seatrout, sheepshead, grey snapper, flounder and other commercially and recreationally important finfish projects. Furthermore, an additional \$980,000 contract has been executed to enhance 28 acres of eight existing inshore reef sites.

In the nearshore zone, out to 9 miles, MRD completed the necessary requirements to permit seven individual reef zones that begin near the Florida state line and extend westward toward the Mississippi state line offshore of Dauphin Island, Alabama. This expansion will provide approximately 30 square miles of reef zone that will promote reef fish and coastal pelagic fishing.

A total of 600 concrete tetrahedron reef modules will be deployed inside the designated reef zones in a variety of patterns to develop a science-based view of what deployment density and spacing provides the maximum benefit (construction contract has been executed). This first-ever opportunity will allow MRD to make decisions on future reef-building projects that maximize the funding, fishing opportunities, and reef fish production. In addition to those seven, MRD completed the

requirements to permit three new reef zones immediately offshore of Baldwin County to enhance habitat for shallow water reef fish species (e.g. grey snapper, flounder, and sheepshead) that inhabit the littoral zone and provide unique snorkeling opportunities that will be accessible from the beach.

BILLY POPE



New Venture

Alabama has one of the world's most significant offshore artificial reef zones. MRD received funding for numerous offshore reef building projects and \$2,388,000 worth of contracts have been executed for offshore reef construction projects. One of the most exciting contracts is for the conversion of a 250 foot vessel into a shipwreck reef. The New Venture is a 250 feet by 56 feet multi-level former surveying and cable-laying vessel. It will have a variety of compartments within numerous decks that will provide a considerable amount of complexity for a diverse finfish and crustacean community assemblage and allow some accessible dive opportunities. It will be deployed approximately 20 miles south of Orange Beach in 120 feet of water with the top of the ship remaining near 60 feet.

Other current contracts are for the deployment of the Gladys B (a 102 foot by 28 foot tug boat built in 1937 to be deployed 24 miles south of Fort Morgan), deployment of 120 concrete reef modules with 25 foot of vertical relief, and the deployment of approximately 250 concrete pipes, culverts, and manholes.

One component of Alabama's artificial reef program that makes it unique is that members of the public can deploy reefs after acquiring a permit from MRD. A total of 159 reefs were constructed by Alabama anglers and non-profit organizations during 2017.

MRD received nearly \$11.8 million to enhance artificial reefs from 2016 through 2018. The efforts made by the division are to maintain a healthy ecosystem, increase productivity of reef fish, and allow access to fishing for tens of thousands of people, and future generations, that take the opportunity to fish anywhere from Alabama's estuaries to 60 miles offshore. ■

MDR



Concrete tetrahedron reef modules deployment.

STATE LANDS DIVISION



The **State Lands Division (SLD)** manages undeveloped, state-owned trust lands that are specific as to their identity as well as to the income beneficiary. The land management program includes Sixteenth Section and Indemnity School Lands of approximately 30,000 acres; approximately 7,000 acres of Department of Mental Health trust lands; Muscle Shoals Grant Lands of approximately 8,000 acres; and other state agency lands, including submerged lands (inland and coastal), of approximately 600,000 acres. Resource uses include oil and gas exploration and development, timber harvesting, farming, coal mining, hunting leases and commercial uses. SLD continues its efforts to identify additional alternative means of revenue generation through management of these trust lands.

The Forever Wild Land Trust program is administered by the SLD at the direction of that program's Board of Trustees. Division personnel provide administrative support including coordination of the assessment and appraisal process, land acquisition transactions, budget preparation and annual reporting to the Governor and legislature. In addition to these administrative services, the SLD also manages many of Forever Wild's 265,000 acres, as well as complimentary tracts owned by the SLD.

The SLD conducts sales of excess state lands pursuant to the State Land Sales and Leasing Act. This law establishes a procedure aimed at ensuring that the state receives full fair market value for lands that state agencies sale or lease and that the process is open, competitive and subject to public scrutiny.

The SLD maintains the state Land Resource Information Center (LRIC), which is a database of all lands owned by the State of Alabama and its Departments, agencies and institutions. The public has the ability to access and search information maintained in the LRIC database. The database can be found by following the state property and then state lands links on the www.open.alabama.gov website.

Animal and plant species and areas of biological significance that make up the rich natural diversity of our state are identified and inventoried as part of the Alabama Natural Heritage Database maintained by the SLD. This effort provides important biological information to conservation organizations, developers, governmental agencies and the public. It also complements the SLD's role in evaluating land acquisition nominations

submitted to Forever Wild and implementing a multiple-use management strategy designed to maximize public access to Forever Wild tracts.

The SLD operates three facilities dedicated to conservation and land stewardship educational programs and a fourth dedicated to sporting dog field trials, habitat restoration, and hunting programs for youth and individuals with physical disabilities. Located in Spanish Fort, the 5 Rivers Delta Resource Center serves as a gateway to outdoor recreation, conservation education, and land stewardship in the Mobile-Tensaw River Delta. The Weeks Bay National Estuarine Research Reserve (NERR), located in Fairhope on Weeks Bay (an estuary of national significance), conducts education and outreach, research, coastal training programs and stewardship related to the estuary and its watershed. The Wehle Land Conservation Center is located in Midway (Bullock County) and consists of the Robert G. Wehle Nature Center and the Elhew Field Station, which is funded in part through the Robert G. Wehle Charitable Trust. Located in Alabama's Black Belt region, the M. Barnett Lawley Forever Wild Field Trial Area is south of Greensboro in Hale County.

The SLD conducts coastal resource management and planning through the Alabama Coastal Area Management Program (ACAMP). ACAMP's purpose is to promote beneficial management of the lands and waters located in Alabama's coastal area through a comprehensive and cooperative program designed to preserve, enhance and develop such valuable resources for the benefit of present and future generations. This program works in cooperation with the Alabama Department of Environmen-

STATE LANDS DIVISION FY16

Sources of Revenue	Total
Coal Bed Methane Royalties	\$315,266.52
Coal Mining Royalties	\$5,568,365.41
State Land Sales & Leasing Act	\$3,507.20
Land leases, farming, hunting, etc.	\$562,704.36
Miscellaneous easements, fees and permits	\$603,394.96
Non-governmental contributions to Forever Wild	\$178,808.59
Non-governmental operating contributions	\$149,438.60
OCS - 8(g) oil and gas payments	\$279,779.00
Oil and gas bonuses/rentals	\$6,412.00
Oil and gas royalties	\$48,812,614.67
Total	\$56,480,291.31

DISTRIBUTION OF STATE LANDS RECEIPTS

Sources of Receipts	Total
Alabama Department of Corrections	\$1,101,137.76
Alabama Department of Education - Institutional Land	\$10,431.76
Alabama Department of Education - Trust Land	\$1,673,981.62
Alabama Department of Mental Health	\$45,853.30
Alabama Forestry Commission	\$451.67
Alabama Historical Commission	\$414,074.21
Alabama Department of Transportation	\$23,342.91
Alabama Trust Fund	\$46,766,520.39
Auburn University	\$803.81
Forever Wild Land Trust	\$18,739.99
Forever Wild Land Trust Stewardship Account	\$177,968.59
Marine Resources Division	\$190.16
State Lands Division	\$6,237,653.67
State Parks Division	\$9,141.47
Total	\$56,480,291.31



Annual bird banding at Fort Morgan in Baldwin County.

tal Management (ADEM) and receives federal funds from the Office for Coastal Resource Management, National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce. The ACAMP, as well as research activities and educational programs at the Weeks Bay NERR, complement the Division's responsibilities for managing submerged lands, which include promoting public trust resource awareness and the understanding of riparian/littoral area development and associated impacts on private property and public use of Alabama's tidal waters.

The SLD administers a regulatory program that manages impacts and improvements to public tidal submerged lands in conjunction with ADEM and the U.S. Army Corps of Engineers and their respective jurisdiction on state and federal waters. The SLD regulations are designed to balance the rights of riparian property owners with the public use of those tidal submerged lands for navigation as well as fishing and other recreational uses.

Since passage of the Energy Policy Act of 2005, the SLD has administered the Coastal Impact Assistance Program (CIAP) on behalf of the State of Alabama. The CIAP, a federally funded program managed by the U.S. Fish and Wildlife Service (USFWS) designed to mitigate impacts from Outer Continental Shelf activities, officially closed during this fiscal year. During the life of this program, SLD administered 49 grants for over \$58 million funding various coastal project activities supporting Mobile and Baldwin counties and further benefiting numerous recipients including, but not limited to, the Town of Dauphin Island; the

City of Bayou La Batre; the Mobile County Water, Sewer, and Fire Protection Authority; the City of Daphne; the Geological Survey of Alabama; Auburn University Shellfish Laboratory; and the Dauphin Island Sea Lab.

The SLD also continued to coordinate administrative and technical aspects of the Deepwater Horizon Oil Spill Natural Resource Damage Assessment (NRDA) pursuant to the Oil Pollution Act. Specific activities included participating in NRDA Trustee Council meetings, participation in Trustee Implementation Groups (TIGs), conducting public meetings related to NRDA activities, solicitation of public input regarding potential restoration ideas, assisting with development of draft restoration plans and implementation of early restoration projects, and representing the interests of the natural resource trustees and the Governor's office.

The SLD assists the Commissioner related to his service as the Governor's designee to the Gulf Coast Ecosystem Restoration Council established pursuant to the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act), which directs 80 percent of Clean Water Act civil penalties resulting from the Deepwater Horizon Oil Spill for restoration projects within the five Gulf states. The SLD also provides administrative support to the Alabama Gulf Coast Recovery Council, which was established by the federal RESTORE Act to oversee certain funds allocated directly to the State of Alabama.

In addition, SLD staff assists the Commissioner and coordinates with the Governor's office in relation to efforts by the National Fish and Wildlife Foundation (NFWF) to distribute grant proceeds for coastal restoration from the Gulf Environmental Benefit Fund. This fund resulted from two plea agreements entered in early 2013 resolving the criminal cases against BP and Transocean arising from the Deepwater Horizon Oil Spill.

These critical efforts to restore the state's valuable natural resources impacted by the Deepwater Horizon Oil Spill and to enhance recovery from associated economic impacts, which are both time and staff intensive, have presented the SLD with the challenge of maintaining other routine activities and services at current staffing levels.

The SLD manages its responsibilities through several sections: Land Management/Administrative (including Land Stewardship/Enforcement, Asset Management, Recreational Programs and the Natural Heritage Program); CIAP and Coastal. At the end of FY17, SLD employed 78 employees in support of its programs.

Several examples of the accomplishments by the various programs and facilities operated by the SLD for this past year follow.

ASSET MANAGEMENT ACCOMPLISHMENTS

- Generated over \$56.4 million in revenue for distribution to a number of state agency beneficiaries including, but not limited to, the Alabama Trust Fund, the General Fund,

Department of Corrections, Department of Mental Health, Historical Commission and the Department of Education.

- Examples of Asset Management activities include:
 - Completion of reforestation on 3,069 acres and initiation of reforestation activities (e.g. site prep) on an additional 3,327 acres, providing potential future revenue streams for state beneficiaries including the Department of Education and the General Fund.
 - Assisting state agencies with revenue generation through initiation of leases and sale of excess property pursuant to the Land Sales and Leasing Act's appraisal and bid process.
 - Administration of revenue generating activities on state-owned land including issuance of hunting leases, shellfish aquaculture easements, riparian easements, river crossing permits, submerged/upland pipeline rights of way, dredge permits, farming/hay leases, oil and gas leases and coal leases.

DEEPWATER HORIZON OIL SPILL RESTORATION ACCOMPLISHMENTS

- Completed planning and began project implementation for Alabama NRDA Trustee Implementation Group (ALTIG) Restoration Plan I focused on restoring lost recreational use. Initiated planning for Alabama NRDA Trustee Implementation Group (ALTIG) Restoration Plan II focused on wetlands, coastal, and nearshore habitat, habitat on federally managed lands, sea turtles, marine mammals, birds, and oysters.
- Continued planning, implementation and monitoring associated with approximately \$123.6 million in NRDA Restoration Projects benefiting Alabama.
 - Marsh Island Restoration Project - \$11,280,000
 - Dune Restoration Project in Gulf Shores and Orange Beach - \$1,480,000
 - Habitat Improvement Project for Nesting Sea Turtles - \$345,000
 - Avian Habitat Enhancement Project - \$279,000
 - Gulf State Park Enhancement Project - \$85,500,000
 - Oyster Reef Restoration in Mobile County - \$3,400,000
 - Swift Tract Living Shoreline Project - \$5,000,080
 - Point aux Pines Living Shoreline Project - \$2,300,000
 - Osprey Restoration in Coastal Alabama Project - \$45,000
 - Fort Morgan Pier Rehabilitation - \$3,075,000

- Laguna Cove Little Lagoon Natural Resource Protection Project - \$4,400,000
- Bayfront Park Restoration and Improvement (E&D) - \$1,000,000
- Dauphin Island Eco-Tourism and Environment Education Area - \$4,000,000
- Mid-Island Parks and Public Beach Improvements (Parcels B and C) - \$1,900,000

Secured award of and/or implemented approximately \$148 million in NFWF Gulf Environmental Benefit Fund Projects benefiting Alabama.

- Secured award of and/or implemented more than \$148 million in NFWF Gulf Environmental Benefit Fund Projects benefiting Alabama.
 - Restoration and Enhancement of Oyster Reefs - \$3,750,000
 - D'Olive Watershed Restoration - \$12,500,000
 - Fowl River Watershed Restoration - \$2,900,000
 - Alabama Barrier Island Restoration Assessment - \$4,200,000
 - Alabama Marine Mammal Conservation and Recovery Program - \$1,300,000

- Coastal Habitat Restoration Planning Initiative - \$2,840,000
- Multifaceted Fisheries and Ecosystem Monitoring in Alabama's Marine Waters (Phases I-III) - \$8,300,000
- Grand Bay Land Acquisition - \$5,777,500
- Mobile Bay Shore Habitat Conservation and Acquisition Initiative (Phases I-II) - \$7,223,800
- Mobile County Conservation Land Acquisition - \$4,200,000
- Alabama Artificial Reef and Habitat Enhancement - \$12,000,000
- Alabama Coastal Bird Stewardship Program - \$1,460,000
- Lightning Point Acquisition and Restoration - \$5,900,000
- Dauphin Island Conservation and Acquisition - \$3,500,000
- Fowl River Watershed Restoration: Coastal Spits and Wetlands Project (Phase I) - \$1,127,000
- Bon Secour-Oyster Bay Wetlands Acquisition Project - \$12,511,400

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Dunes on Dauphin Island

- Gulf Highlands Conservation Acquisition - \$36,000,000
- Little Dauphin Island Restoration Assessment - \$1,481,500
- Salt Aire Shoreline Restoration - \$12,700,000
- Dauphin Island Bird Habitat Acquisition & Enhancement Program - \$4,525,000
- Bon Secour National Wildlife Refuge Acquisition - \$5,914,900

- Dothan Trail Park Phase II (part II) (51 acres, Houston County)
- DeSoto State Park Jones Addition (8 acres, DeKalb County)
- Guntersville State Park Stubblefield Mountain Addition (640 acres, Marshall County)
- Indian Mountain Simmons Addition (520 acres, Cherokee County)
- Monte Sano State Park Dug Hill West Addition (134 acres, Marshall County)
- Old Cahawba Prairie Addition (1,505 acres, Dallas County)
- Shelby County Park Shades Creek Addition (677 acres, Shelby County)
- Skyline WMA Threwer Point Addition (40 acres, Jackson County)
- Skyline WMA Pole Branch Addition (111 acres, Jackson County)
- Uchee Creek Confluence (4,735 acres, Russell County)
- Upper Wolfe Bay Savanna and Marsh (568 acres, Baldwin County)

FOREVER WILD LAND TRUST PROGRAM ADMINISTRATION ACTIVITIES

- Administered the acquisition of 17 tracts totaling 11,102.5 acres and performed two land exchanges totaling 4.67 acres:
 - Autauga WMA Phase II (574 acres, Autauga County)
 - Dallas County WMA Phase II (867 acres, Dallas County)
 - DeSoto State Park Tutwiler Addition (140 acres, DeKalb County)



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- Weeks Bay Reserve Meadow Phase II Additions (242.5 acres, Baldwin County)
- Weeks Bay Reserve Bay Road West Addition (64 acres, Baldwin County)
- Yates Lake North Addition (277 acres, Elmore County)
- Blowing Springs Cave Right-of-Way (0.9 acres, Lauderdale County)
- Pike County Pocosin Exchange (3.77 acres, Pike County)
- Provided administrative support for the Public Education Initiative to improve the awareness and understanding of the Forever Wild Land Trust program and the opportunities it provides to Alabama's citizens.
- Processed and evaluated 32 Forever Wild Land Trust willing seller tract nominations originating from alabamaforeverwild.com website forms.
- Constructed new research boardwalk at Weeks Bay Reserve for coastal research (Baldwin County).
- Implemented a citizen science habitat monitoring project at three locations on (Grand Bay Savanna, Wehle Land Conservation Center, Old Cahawba Prairie), which invites visitors to the location to photograph the habitat from a fixed camera bracket and share via social media (<http://alabamaforeverwild.com/project-habitat-watch>). This will create a long-term photo documentation of the landscape.
- Maintained existing horseback riding, hiking, biking and multi-use trails and boardwalks at the Shoal Creek Nature Preserve (Lauderdale County), Walls of Jericho (Jackson County), Wehle (Bullock County), Splinter Hill Bog (Baldwin County), Old Cahawba Prairie (Dallas County), Jacinto Port (Mobile County), Coldwater Mountain (Calhoun County), Dothan Park Trails (Houston County), Grand Bay Savanna (Mobile County) and Coon Creek (Elmore County) Forever Wild tracts.

RECREATIONAL PROGRAM AND LAND STEWARDSHIP ACCOMPLISHMENTS

- Managed the public physically disabled and youth hunting programs hosting 29 days of hunting, hosted a mentored deer hunt for first-time hunters, and hosted 26 sporting dog field trial/hunt tests at the M. Barnett Lawley Forever Wild Field Trial Area in Hale County. These events brought over 3,000 visitors to the tract and surrounding areas.
- Expanded public access opportunities by offering 88 open woods days at the Forever Wild Land Trust Sipsey River Recreation Area (Tuscaloosa County) and offering open gate weekends during the hunting season at the Red Hills (Monroe County), Old Cahawba (Dallas County), Splinter Hill Bog (Baldwin County) and Lillian Swamp (Baldwin County) Forever Wild tracts.
- Hosted over 2,000 visitors at the Wehle Land Conservation Center facilities for outdoor recreational and educational activities.
- Opened the 19-mile Perdido River Canoe Trail (Baldwin County) in February 2017.
- Completed construction of kiosks associated with the canoe trail at the Perdido River Tract (Perdido River WMA) and Bartram Canoe Trail (Mobile-Tensaw Delta).
- Began improvements to 8 miles of public access roads associated with CIAP grant award supporting the Perdido River Canoe Trail Project near Bay Minette in Baldwin County.
- Continued construction of a hiking trail along the Perdido River located on the Forever Wild Perdido River WMA tracts near Bay Minette in Baldwin County.
- Constructed 10 new horse stalls near the camping area at the Wehle Nature Center (Bullock County).

- Performed prescribed fire on over 2,800 acres as part of maintaining or enhancing the natural plant communities occurring on various Forever Wild tracts.
- Reforested 1,254 acres of longleaf pine on Perdido River WMA.
- Reforested 1,103 acres of shortleaf pine on Freedom Hills and Riverton WMAs.
- Reforested 631 acres of longleaf pine on Coosa WMA.

NATURAL HERITAGE SECTION ACCOMPLISHMENTS

- Performed biodiversity survey work, conducted habitat assessments, participated in trail planning and continued collecting detailed GPS/GIS data of existing Forever Wild tracts to aid with the management and research of these tracts.
- Maintained GIS server software allowing greater transparency of Forever Wild holdings and ADCNR facilities to the public by providing an interactive map online (<http://conservationgis.alabama.gov/fwlt/>). This same software is being used to improve geographic information transmission within the Division and the Department.
- Maintained the Natural Heritage Section (NHS) database, partially funded by a State Wildlife Grant, as a database accessible via a secure Internet website for over 600 approved users, currently containing more than 2.4 million records.
- Continued to enhance the Alabama Natural Heritage Section Herbarium with a current total of 4,240 specimens, all of which have been digitized, imaged and databased.

COASTAL IMPACT ASSISTANCE PROGRAM (CIAP) ACCOMPLISHMENTS

- Prior to close-out of the CIAP by the USFWS, examples of CIAP activities completed in this fiscal year include:
 - Installation of over 181,000 linear feet of sanitary sewer lines in south Mobile County. These funds also funded lift stations and sewer connections for approximately 650 homes and businesses as well and the decommissioning of nearly 540 septic tanks. Two maintenance vehicles were also purchased for the City of Bayou La Batre to help maintain the sewer lines.
 - Road improvements on 13.5 miles along the Perdido River corridor, adding over 9,000 tons of stone to help stabilize public access to the Perdido River canoe trail. Several low water crossings and bridges were also installed or repaired to facilitate access to the newly constructed canoe/kayak launches. An additional 170 tons of rip-rap was added to low water crossings and deteriorating bridges along River Road.
 - Installation of nine kiosks at several locations along the Bartram and Perdido Canoe trails in Baldwin and Mobile counties.
 - Improvements to the inshore and offshore artificial reef areas in coastal Alabama. Inshore and offshore reef deployments included concrete material, pipe, rock, pyramid reefs and oyster shell.
 - Addition of a 4,000-square-foot pole barn for staging and harvesting of fish species at the Claude Petet Mariculture Center in Gulf Shores.
 - Site improvements at the Delta Port Marina near Portersville Bay in Mobile County including a new wharf, boat launch, fishing pier, pole barn, wave attenuators and an ADA-accessible kayak/canoe launch.
 - Removal of understory, enhancement of gopher tortoise habitat and longleaf reforestation at Gulf State Park. Mulching/longleaf restoration was completed on nearly 70 acres and exotic plant removal (35 acres of cogon grass, 8 acres of cattail, and areas of Chinese tallow). Over 3.5 miles of land management/travel corridors was also established and the enhancement of gopher tortoise habitat was completed on 44 acres. A prescribed fire was completed on over 100 acres and containerized longleaf pines were planted on over 65 acres.
 - Prescribed fires on seven coastal Alabama tracts covering over 6,300 acres.
 - Installation of educational exhibits, an ADA-accessible sidewalk, tables, facility signage and a motorized gate at the Five Rivers Delta Resource Center.

COASTAL ZONE MANAGEMENT SECTION ACCOMPLISHMENTS

- The Alabama Coastal Area Management Program provided funding and oversight to 19 sub-awards to local governments in Mobile and Baldwin counties, the Dauphin Island Sea Lab (DISL) and the Mobile Bay National Estuary Program (MBNEP). These sub-awards, totaling over \$513,177 in federal funds provided by the NOAA, supported the following:
 - Development of a parks and recreation master plan for the City of Mobile.
 - Development of a comprehensive zoning ordinance and zoning map for the City of Bayou La Batre.
 - Development of low-cost, public access improvements to coastal areas including the cities of Gulf Shores and Orange Beach.
 - Restoration of coastal habitats in the Town of Dauphin Island.
 - Technical assistance, training and support to communities related to the FEMA Community Rating System.
- Sponsorship and organization of the 30th Annual Coastal Cleanup, resulting in 5,300 volunteers removing over 43,000 pounds of marine debris. Additionally, volunteers collected over 2,000 pounds of rigid plastics that will be recycled through a partnership with Terracycle Company into new plastic consumer goods.

SUBMERGED LANDS REGULATORY ACCOMPLISHMENTS

- Received, reviewed and/or approved over 196 permit applications for activities impacting near-shore public trust submerged lands through the Notice of Intent to Impact State Owned Submerged Lands (NOI) permit application process and conducted 65 onsite inspections.
- Received two applications for Shellfish Aquaculture Easements and issued three preliminary approval letters. Four applicants received notices to proceed and executed easement contracts.
- Continued to coordinate with local governments, homeowner associations and individual riparian property owners to provide information about SLD regulations as a means to efficiently manage uses of public submerged lands.

5 RIVERS DELTA RESOURCE CENTER ACCOMPLISHMENTS

- Hosted over 57,478 visitors from 40 states and 13 foreign countries.



- Hosted over 590 events, receptions, meetings, guided tours, field trips and educational classes and summer day camp programming.
- Delta Safaris, a concessioner, continued to offer a variety of tours into the Mobile-Tensaw River Delta and served over 11,360 guests via pontoon boat tours and canoe/kayak rentals and guided tours.
- 5 Rivers staff conducted more than 190 guided educational programs serving over 7,890 students of all ages.
- Utilizing grant funding from the Coastal Impact Assistance Program, the facility installed a new gate and enhanced lighting at the front entrance and installed new conference tables in the Blakeley Hall Conference Center. CIAP funds were also utilized to renovate the audiovisual system in the facility's Tensaw Theater.
- The Cypress Gift Shop at 5 Rivers had over \$88,800 in sales.
- Education staff represented 5 Rivers and ADCNR at various community events including the Greater Mobile Boat Show, Dauphin Island Discovery Days, Bay Area Earth Day, Graham Creek Earth Day, Bellingrath Gardens Kids Gulf Discovery Day, Southwest Mobile Community Day, I-10 Welcome Center Tourism Day, Stockton Sawmill Days, Alabama Coastal BirdFest Conservation Expo, Explore Mobile Alabama 200 Celebration and Baldwin County Fair.
- 5 Rivers and the City of Spanish Fort hosted the 9th Annual Delta Woods and Waters Expo, a three-day conserva-

tion event that served over 2,900 participants, including 720 students.

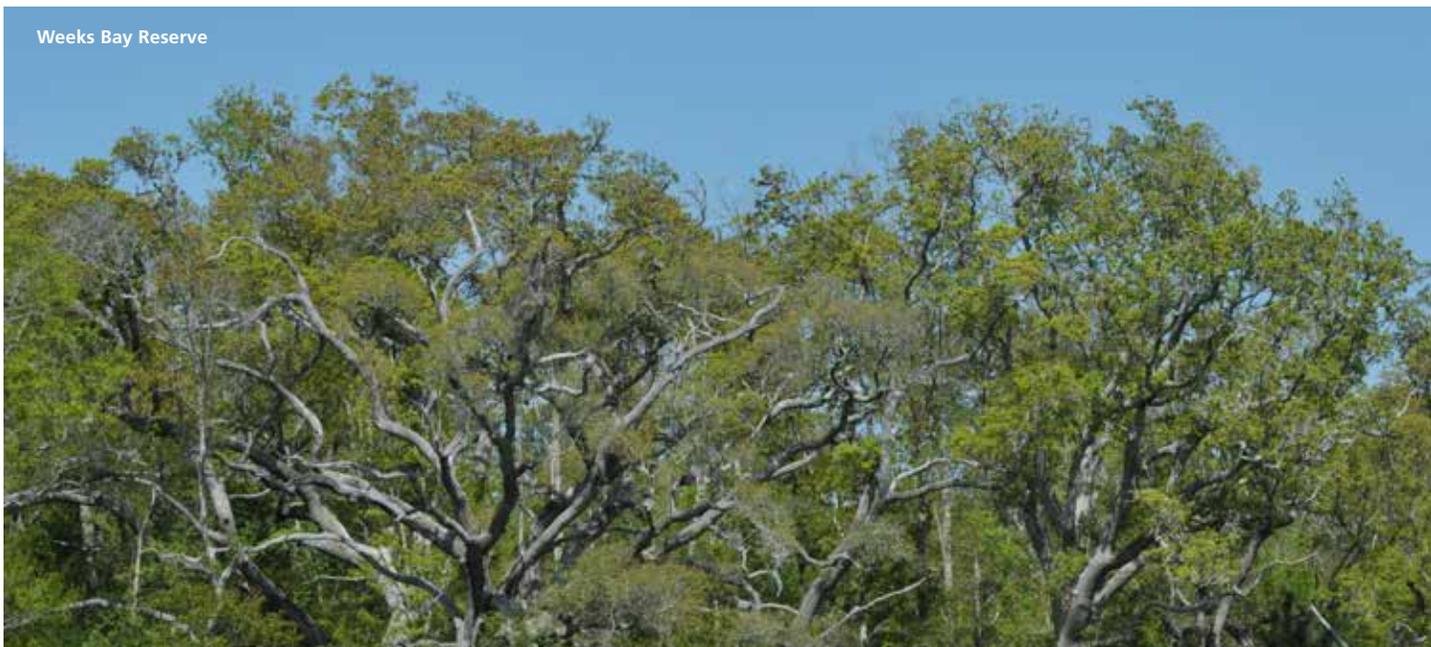
- The facility served as host site of several annual community fundraising events, including the Kiwanis Taste of the Towns (in its 10th year at 5 Rivers) and ACF Cocktails for the Coast, as well as various 5K run/walk events. The facility also hosted public information meetings and press conferences on a variety of topics.
- Served as host site for the 14th Annual Alabama Coastal Birdfest, which drew over 357 participants from 16 states and the United Kingdom, for three days of guided birding tours.

WEEKS BAY NATIONAL ESTUARINE RESEARCH RESERVE ACCOMPLISHMENTS

- The Weeks Bay National Estuarine Research Reserve hosted an estimated 7,500 visitors at the Weeks Bay Visitor Center from more than 46 states and 21 foreign countries, and was involved in a number of administrative activities including:
 - Securing a NOAA Acquisition grant award for acquisition of 67 acres of wetland habitat adjacent to the Meadows Tract in the Weeks Bay Coastal Area.

- Hosted quarterly meetings of Weeks Bay Advisory Committee and coordinating with the Weeks Bay Foundation in publishing quarterly newsletters.
- The Weeks Bay Education and Coastal Training programs activities included the following:
 - Conducting education programs for approximately 1,065 K-12 students and 3,844 adults.
 - Planting approximately 270 native salt marsh plants in a living shoreline project near the mouth of Weeks Bay with 50 students through the Baldwin County Grasses in Classes Program.
 - Conducting 10 workshops for 255 coastal decision-makers providing 2,822 training hours.
 - Completing an exercise and additional staff training in support of the Weeks Bay Reserve Disaster Response Plan.
 - Leading the Gulf Regional Training Program by conducting science communication, behavior change marketing, carbon sequestration, and smart growth workshops in locations along the Gulf of Mexico.
- The Reserve's Research and Stewardship program activities included the following:
 - Coordinating research from universities and agencies on seven research projects.
 - Collecting water quality and weather data from five sites in Weeks Bay as part of the Reserve System-wide Monitoring Program and staff serving on the program's data management committee.
 - Creating digital elevation model and continued collection of sediment surface and water level data as elements of the ongoing SWMP Sentinel Site Application Module 1 project.
- Continuing to serve as a member of the Northern Gulf of Mexico Cooperative Sentinel Site program sponsored by NOAA to focus research and monitoring efforts on tools and products to aid coastal resource use and management as well as coastal resiliency planning. <http://oceanservice.noaa.gov/sentinelsites/pdf/sentinelsite-gomex.pdf>
- Recruiting U.S. Coast Guard and Weeks Bay volunteers to plant 2,560 *Spartina alterniflora* plants along the Swift Tract shoreline as a component of the NERRS Science Collaborative research project: End-user derived research to improve the effectiveness, sustainability, and prevalence of coastal restoration projects.
- Conducting 27 vessel tours of Weeks Bay and its tributaries for students and Reserve visitors.
- The Reserve's Volunteer program continued to be a critical source of operational and financial assistance providing more than 3,000 volunteer hours. Supporting activities included:
 - Coordinating, advertising and facilitating the 25th Annual Native Plant Sale and the Baldwin County Master Gardeners Annual Spring Plant Sale as fundraising events.
 - Providing financial and logistical support for more than 27 Reserve-supported activities including, workshops, research projects, summer education programs and special events.
 - Presenting educational programs and tours to 19 organizations while also maintaining the Reserve's herbarium, arboretum and longleaf pine restoration site.

Weeks Bay Reserve



BILLY POPE

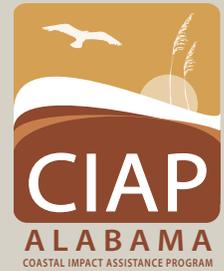
WEHLE LAND CONSERVATION CENTER/ELHEW FIELD STATION ACCOMPLISHMENTS

- Hosted 692 students in grades 2-6 from Bullock and surrounding county schools for over nine weeks of environmental outreach programs.
- Hosted 461 visitors during 16 Open Trail weekends.
- Hosted over 360 visitors associated with state and county agency meetings, technical workshops, church retreats, boy/girl scouts, and regional council meetings.
- Hosted 303 students at the Bullock County Water Festival and Forestry and Wildlife for Youth events.
- Hosted 290 students and teachers at the annual Classroom in the Forest event of the Barbour County Extension System.
- Hosted 142 youth for the Bullock County fishing derby co-sponsored by the Wildlife & Freshwater Fisheries Division, Bullock County Sheriff's Department, and Osprey Fishing Organization.
- Hosted 24 youth and adults for overnight field trips for the Children and Mentors Outdoors (CAMO) Group.
- Hosted an overnight Youth Smart Camp for 24 students and seven adults through Tuskegee University's Department of Agricultural and Environmental Sciences.
- Hosted a six-day Beginner Bird Banding Class for eight students and two instructors.
- Hosted two Auburn University graduate students and field technicians for two separate Southeastern Pocket-Gopher research projects on the Wehle Forever Wild tract and adjacent Barbour WMA.
- Administered and participated in USGS Breeding Bird Survey in Alabama.
- Monitored and oversaw management actions for red-cockaded woodpecker population on the Forever Wild Coosa WMA through an ESA Section 6 Grant.
- Continued operation of a Monitoring Avian Productivity and Survivorship Banding Station on the Wehle Forever Wild Tract for the 12th year.
- Continued long-term reptile and herpetofaunal inventory through passive capture techniques and vocal recording programs on the Wehle Forever Wild Tract.
- Continued a comprehensive floristic survey of the Wehle Forever Wild Tract in cooperation with other state field botanists.
- Continued Eastern bluebird monitoring, Northern bobwhite covey count surveys and operation of a migratory bird night-flight call program on the Wehle Forever Wild Tract.
- Published findings from select EFS research projects and/or partnerships in peer-reviewed journals to disseminate findings to the research community.
- Treated Lespedeza bicolor and Sorghum halepense infestations with spot herbicide application throughout tract.
- Conducted a prescribed fire covering 424 acres on the Wehle Forever Wild Tract as part of maintaining or enhancing the natural plant communities and benefitting a suite of associated wildlife species.

STATE LANDS 2017 BUDGET AND EXPENDITURES

Section Name	Budget	Expenditures
Land Management/Administrative	\$12,613,290	\$5,753,536
Administrative Transfer to Department	\$855,000	\$855,000
CIAP (100% Federal)	\$2,430,045	\$3,699,102
CIAP Capital Outlay (100% Federal)	-	\$1,018,705
Coastal Zone Management Program	\$2,463,958	\$1,924,694
Weeks Bay NERR	\$2,453,663	\$1,209,648
Total per State Lands Fund	\$20,815,956	\$14,460,685
Forever Wild Land Trust Fund	\$19,426,628	\$32,267,524*
Forever Wild Stewardship Fund	\$1,500,000	\$999,507

**Expenditures exceeded budget in accordance with rollover of prior FY Capital Outlay Spending Authority.*



COASTAL IMPACT ASSISTANCE PROGRAM COMPLETES ITS MISSION

The State of Alabama **Coastal Impact Assistance Program (CIAP)** drew to its anticipated close during this fiscal year. Established by the Energy Policy Act of 2005, the CIAP provided federal funds to offshore energy producing states to support a variety of conservation projects in coastal areas. The U.S. Fish and Wildlife Service administered the program on the federal level, and ADCNR was designated the lead state agency in Alabama for development and implementation of the program. The State Lands Division provided day-to-day administration of the program, which utilized over \$58 million to accomplish the goals of 49 separate grants. In addition to the state efforts, Mobile and Baldwin counties also received over \$31 million in CIAP funding for project implementation over the course of the program.

Over its lifespan, CIAP funded water quality improvements, public access, environmental education, land acquisition, research, construction of research and conservation facilities, and habitat protection and restoration projects throughout the coastal counties. For example, CIAP grants funded projects to improve water quality through upgrades to sewer infrastructure in coastal areas and to reduce hazards to navigation by removing derelict vessels from area waterways.

Eight grants provided funding for public access and environmental education, providing improved access to coastal waterways, additional overnight kayak/canoe trail shelters, and improvements to educational facilities. Five land acquisition grants were awarded to conserve nearly 3,000 acres. Research grants focused on topics that included GIS data collection, flora and fauna surveys, submerged aquatic vegetation surveys, artificial reef surveys, as well as investigations and modeling of the water quality in coastal



Paddlers enjoying the Perdido River Canoe Trail.

Alabama. Thirteen grants funded projects to restore and protect coastal habitats, including the removal and control of invasive species, restoration of longleaf pine forests, restoration of streams and wetlands, prescribed burning, re-establishment of native flora/fauna species, shoreline stabilization, and the enhancement of inshore and offshore artificial reefs.

CIAP FUNDING SUPPORTS DELTA TRAIL IMPROVEMENTS IN THE DELTA AND PERDIDO RIVER

The State Lands Division utilized CIAP funds to complete a series of improvements and expansions to its canoe trail system in coastal Alabama. ADCNR's State Lands Division originally opened the Bartram Canoe Trail in the upper reaches of the Mobile-Tensaw River Delta in 2003. CIAP funds were utilized in subsequent years to expand the existing trail by adding new launches, suggested routes, informational kiosks, and camping facilities in the lower delta. CIAP funds were also used to create a brand new Perdido River Canoe Trail in eastern Baldwin County. In addition, both trails were launched under a single website, www.alabamacanoetrails.com. Interested paddlers are encouraged to visit the site for planning information, rules, maps and overnight camping reservations for both trails.

The Perdido River Canoe Trail, which launched in February 2017, provides access to a 19-mile segment of the Perdido River in Baldwin County. This section of the river is characterized by gently flowing black water over coastal white sand along the border between Alabama and Florida. The river's many, massive sandbars provide opportunities for paddlers to take breaks, camp or have lunch. The trail corridor is surrounded by state-owned and Forever Wild Land Trust acreage that contributes to the Perdido River Wildlife Management Area (WMA) managed by ADCNR's Wildlife and Freshwater Fisheries Division.

CIAP grants funded the construction of six camping shelters as well as two launch/takeout locations and one boat ramp along the Perdido River. Paddlers and hikers can utilize the www.alabamacanoetrails.com website to reserve the camping shelters, each of which can accommodate up to eight people for a flat rate of \$26.50 per night. Massive sandbars adjacent to each camping shelter location are also available for free primitive camping without the need for reservations. Access to the Perdido River Canoe Trail is available via the roads of the Perdido River WMA which were also graded and graveled using CIAP funds.

In addition to the Perdido River Canoe Trail, the Perdido River WMA Hiking Trail was also constructed and is available to hikers through a partnership between the ADCNR's State Lands Division and the Alabama Hiking Trail Society. The trail is blazed in yellow and is a mixture of WMA roads and newly constructed path that follows the river for most of the hike. Hikers are authorized to use the camping shelters, but are required to park in the designated areas. For more information about the hiking

trail, visit www.hikealabama.org.

Since 2003, the Bartram Canoe Trail system has provided paddling opportunities on the rivers, streams, lakes, sloughs and bayous of the upper Mobile-Tensaw Delta. CIAP funds were used to expand the existing Bartram Canoe Trail to the lower end of the Mobile-Tensaw Delta and connect the trail to the 5 Rivers Delta Resource Center and Meaher State Park facilities. The Lower Delta trail improvements were completed in 2017. In addition to the existing three land-based campsites and four floating platform campsites within the Upper Delta, two land based campsites were added in the central Delta (at the entrance to McReynolds Basin and on the Forever Wild Jacintoport tract). Four pile-supported camping shelters were also constructed in the Lower Delta.



Shelter along the Perdido River Canoe Trail.

The CIAP funding also supported the installation of ADA-accessible kayak launches at the 5 Rivers Delta Resource Center and Meaher State Park. The launch at 5 Rivers provides a unique bench system for transitioning from a wheelchair to a kayak. A similar dock and ramp system was also installed at the Justins Bay camping shelters to provide accessible water-based primitive camping opportunities to paddlers. The two Justins Bay camping shelters are located on uplands overlooking Justins Bay and the Apalachee River and are reachable via a tributary off of Justins Bay. The other two pile-supported camping shelters are located along backwaters of the lower tidal marshland managed by ADCNR (Mudhole Creek) and the Forever Wild Land Trust (Yancey Branch). The pile-supported campsites are limited to groups no larger than eight and are available for a flat rate of \$26.50 per night by online reservation at www.alabamacanoetrails.com.

After more than seven years, the CIAP program has reached its conclusion. However, the State Lands Division is excited that citizens throughout Alabama and beyond will be able to appreciate the legacy the program has provided for many years to come. ■

STATE PARKS



The **State Parks Division** operates and maintains 21 state parks encompassing approximately 45,300 acres of land and water in Alabama. The parks range from Gulf Coast beaches to Appalachian Mountains providing opportunities and facilities from basic day-use activities, to resort convention lodging, restaurant and park adventure.

The mission of the Division is to acquire and preserve natural areas; to develop, furnish, operate and maintain recreational facilities, and to extend the public's knowledge of the state's natural environment.

The Division's goals are to manage and operate the State Parks system in an economically sound and efficient manner on the most self-sustaining basis possible; to provide and maintain high quality facilities and services to meet the needs of visitors; to provide an opportunity for personal growth and development of individuals through outdoor experiences; to promote use of State Parks facilities; to preserve unique natural features and integrity of State Parks for future generations and to promote good will and enhance the public image of Alabama, and the Alabama State Parks through dedicated, courteous employees.

Accomplishments

The Division continues to administer 21 state parks serving about 5 million guests annually. Additional significant accomplishments were made in improving purchasing procedures, computer systems, operation and maintenance policies, financial management analysis, advertising and marketing, natural resource management and the continuous coordination, supervision and implementation of a comprehensive statewide, state parks renovations program.

Facilities and Personnel

Among the 21 parks, 17 are maintained with an internal park staff determined by size, development and operation of each area. Total employees for all parks vary from approximately 800 during peak season to approximately 600 during the off-season. Four parks are staffed and operated through management agreements with local governments or concessionaires.

The Parks Division central office in Montgomery includes six sections: Administrative, Operations and Maintenance, Manage-

ment Analysis, Natural Resources and Advertising/Marketing, and operates with 13 full-time staff.

Problems and Solutions

The recent lack of sufficient maintenance funds has limited our options for attending to a backlog of maintenance and renovation needs, as well as attending to the replacement of basic equipment required to manage the parks. The restoration of these maintenance funds derived from the cap on sales tax discounts in FY 2017 has provided much-needed relief in addressing the problems.

As we have approached these challenges, we have undertaken numerous cost sharing initiatives with our local government partners to leverage the impact of these funding opportunities. We have also given close scrutiny to the return on the investment that these projects provide. Special attention has been given to parks and recreational programs which have demonstrated utilization trends that confirm that these efforts will yield supporting customer revenue as these improvements are completed. The continued availability of these maintenance funds and the efforts to apply them in the most cost effective manner will be crucial to seeing that the parks and their amenities are cared for and made available for public use. These efforts, coupled with an ongoing review and adjustment of recreational rates and programs will provide the best solutions to address the park's short and long-term management goals.

We have also given special attention to expanding our day-use recreational opportunities, especially those associated with families and trail user communities. Great progress has been made by partnering with trail clubs and professional trail organizations as we advance these recreational goals. Lastly, we have achieved new success in providing cost effective recreational venues by partnering with concessionaires who are making financial investments in these facilities at several of our parks.



Wind Creek State Park

BILLY POPE

We expect that these forms of innovation and opportunities for improved public services will continue in FY 2018.

MANAGEMENT ANALYSIS SECTION

The responsibilities and functions of the Management Analysis Section are to provide general administrative direction and coordination for management control, administrative cost analysis, performance reporting, data processing, general accounting, budgeting, payables, receivables and purchasing.

Accomplishments

Section personnel received, processed and analyzed 2,184 performance reports for all state parks; prepared Park System Performance Reports as required by the Budget Management Act; received, processed and analyzed operations plans, budget reports and related reports; prepared Park System Operation Plans and fiscal year budgets; processed approximately \$44,100,000 in receipts and approximately 13,000 payment types; and disbursed approximately 13,558 warrants and approximately 15,000 payroll checks through and from the State Accounting System.

Section staff also continuously monitored data processing output, distributed it to statewide park cost centers, and monitored managerial audits as well as personnel actual versus budgeted funds for each park. Management Analysis is continuing to work on transitioning to STAARS and developing detailed monthly financial statements as it relates to overall financial aspects of the State Parks System as well as specific operations. Management Analysis continues to revise resale inventory procedures to promote better accountability.

OPERATIONS AND MAINTENANCE SECTION

The Operations and Maintenance Section provides supervision of five District Supervisors responsible for 21 State Parks throughout the state. This section manages daily park operations, overall maintenance program of parks, law enforcement, Division's property and automobile insurance programs, property inventory, small concession contracts, Board of Adjustment claims, Volunteers in Parks program, and processes all personnel actions for approximately 600 hourly and merit employees.

The Section is divided into a North Region and a South Region. The North Region consists of the Northeast, Northwest and Central Districts. The South Region consists of the Southeast, Southwest Districts and the Montgomery Office staff. The Montgomery Office has two full-time employees. The North Region is managed by an Operations and Maintenance Supervisor. The South Region position is vacant and is being managed by the Deputy Director.

Accomplishments

- Over 4.922 million total park visitors, 1.8 percent decrease from last year.
- More than 580 accident/incident/offense and arrest reports were submitted by the Parks to this section for review and analysis.
- Parks were awarded 13 Trip Advisor Awards of Excellence.
- All park enforcement officers were certified in Active Shooter Training.
- Took in record receipts at many parks.

- Issued and trained officers with e-citation equipment.
- Implemented new \$3 million projects program to initiate recovering from several years of funding diversion. Most of these projects are completed.
- Established Disaster Relief Strike Teams consisting of four persons per district with each having an alternate. Secured dedicated equipment for teams for rapid response to disasters.
- Established three- to five-year deferred maintenance schedule based on life expectancy of facilities/equipment.
- New rental cabins (tiny houses) provided by concessionaire agreement at Roland Cooper State Park and Lake Guntersville State Park.
- New A/C unit installed in the lodge kitchen at Lakepoint State Park.
- Meaher State Park sustained damage from storm tides caused by Hurricanes Nate. However, thanks to the dedicated, hardworking staff from Meaher, Gulf and Lakepoint state parks, the Park was reopened in just two days.
- Two lakeside cottages at Gulf State Park were heavily damaged by storm winds.
- The trails subsection worked with the Deputy Director on securing grants and administrating grants for trails. Trails coordinator is in the process of administrating \$1,381,000 in RTP trail grants and LWCF grants of \$400,000.
- Marinas were inspected by certified electrical contractor and repairs were made.
- Prepared and began implementing a 2018 projects list.
- Established equipment needs list using park profits to initiate recovering from years of deferred equipment purchases, caused by fund diversions.
- Worked with Shelby County and Conservation Engineering Section on using gas tax/road use monies to widen bike lanes at Oak Mountain and improve campground roads/sites at Cheaha State Park.
- Used \$15,000 of innovation funds and turned it into \$105,000 in receipts in 22 days at Santa's Underground Workshop event at Rickwood Caverns Park. This park operated in the black for the first time.
- Submitted updated hourly pay rate plan to Conservation Personnel.
- Continued filling vacancies in management and enforcement.



Meaher State Park

Unmet Needs

Internet issues are an ongoing problem for several parks, especially those in remote locations. Customers and staff are unable to obtain adequate internet connectivity with the current State Parks infrastructure. Work has begun on rebuilding some of the existing networks that are good, while abandoning some and replacing with fiber.

Parks are still recovering from years of fund diversions. A projects list each year is starting to address some of these areas. Parks will follow a 3- to 5-year deferred maintenance plan to continue this progress. Large renovations projects like campgrounds will have to continue to be deferred until additional funds become available.

Online reservations are still not where we would like them to be. HQ and field staff are working with the current vendor to see if our needs can be fulfilled. Staff met with several other companies to see if we need to consider alternate reservation solutions.

NATURAL RESOURCES SECTION

The Natural Resources Section was created to help the parks accelerate enhancement of the quality of aesthetic, biological, historic and recreational aspects of their land and water resources and to increase the public's understanding, appreciation and enjoyment of those resources. Section staff currently consists of the Natural Resource Planner at Montgomery and six Interpretive Naturalists in field locations at DeSoto, Gulf, Lake Guntersville, Cheaha, Chewacla, and Cathedral Caverns state parks.

The Natural Resources Section currently has two unfilled positions with one of those positions being the Chief/Natural Resource Section. These personnel use the latest science and technology to assist the parks with diverse natural resource, recreation and environmental education objectives each year. This section also administers and coordinates grants for natural resource improvement projects.

Accomplishments

Contributions to the quality of natural resource health and vitality above and beyond what the parks would normally be able to accomplish on their own include:

- A three-year Coastal Impact Assistance Program designed to enhance longleaf restoration, forest mulching, invasive species control, fire lane construction, tree planting and prescribed fire at Gulf State Park has ended.
- Assisted with the continued use of herbicides for invasive and undesirable vegetation control within parks.
- Assisted with land encroachment, boundary line disputes/discrepancies and conflicts. The section continues to upgrade Alabama State Parks deed files to maintain verified boundaries.

Contributions to the public's understanding, appreciation and enjoyment of natural resources above and beyond what the parks would normally be able to accomplish on their own include:

- Park Naturalists entertain and educate many visitors to the parks by conducting recreational activities, interpretive environmental education programs and special events. They also provide a variety of public outreach programs on topics such as flora and fauna identification, habitat needs and management, and air and water quality.
- Naturalists contribute to new trail construction, maintenance of existing trails and upgrading trail maps.
- Many Naturalists also contribute information, photos and videos for Alabama State Parks' social media sites.
- Section personnel assisted with Wildlife and Freshwater Fisheries Division fishing and archery events.
- Staff enhanced plans to manage the existing Montane Longleaf community at the Oak Mountain State Park and Dam sites. The removal of invasive plant understory on three dam sites has enabled park personnel to more effectively control growth with prescribed fire and herbicide application.
- Section enhanced Memorandums of Understanding with the Nature Conservancy, the Alabama Forestry Commission, Alabama A&M University, U.S. Fish and Wildlife Service and Auburn University to assist with prescribe fire, exotic species control and to provide lab/classroom experience for students in a park/forest environment.
- Facilitated the annual Oak Mountain deer hunt in cooperation with the Bowhunters of Alabama.
- Refined a Memorandum of Agreement with the Alabama Forestry Commission allowing commission personnel and forest contractors, under Parks' guidance, to assist in timber management practices on Parks' lands. Park projects completed under this MOU include prescribed burning a portion of the campground at Gulf State Park.
- Natural Resource Management personnel continued to participate in the Forever Wild land acquisition program by evaluating nominated tracts of land as to their potential benefit to State Parks.

Projects finalized at Gulf State Park

- Invasive species control targeting cogongrass, pampasgrass and cattail, forest mulching adjacent to the new primitive campsites and the planting of 15 acres of sea oats within the beach dune system.

Projects finalized at Joe Wheeler State Park

- Thinned timber based on a long-range management plan.

Projects finalized at Wind Creek State Park

- Archery Park was completed in cooperation with Wildlife and Freshwater Fisheries and opened to the public.

- Applied herbicide to control bamboo in quail habitat and firebreak zones.
- Prescribed burned land within the campground zone.
- Expanded the park interpretive program to better serve the campground with a volunteer naturalist.

Projects Implemented at Lakepoint State Park

- Planning a site for future Archery Park and the continuation of developing new birding programs.
- Prescribed burning planning of all land within the campground, land previously used as a golf course and other adjacent park property.

Projects Implemented at Blue Springs State Park Include

- Section staff designed and built a new trail system of 2.5+ miles on the acquired adjacent Forever Wild property.

Natural Resource Planner Accomplishments and Projects

- Projects during the year included assisting with the Alabama National Archery in the Schools Program State Tournament, 23rd Annual Exceptional Anglers event Oak Mountain, Becoming an Outdoors-Woman Workshop, hunter safety instructor training workshop and a University of Huntsville OLLIE workshop.
- Natural Resource Planner Training included Hunter Education Instructor training, Leave No Trace awareness training, Prescribed Fire Council Annual Meeting and a Southeastern Park Program Seminar.
- The Natural Resource Planner assisted park naturalists with the following events by presenting programs for: Great Outdoors Day (DeSoto), All About Nature (Lake Lurleen), Lake Guntersville Fall Festival and Eagle Awareness, Bigfoot Biobash at Cheaha State Park, and a Dutch oven demo at Gulf State Park.
- National Resource Planner assisted the Trails Coordinator with GPS marking of existing trails at Lakepoint and Blue Springs, and developed a partnership with the Wiregrass and Piedmont Plateau Birding trails to present programs and field trips at all the Alabama State Parks within this region. This partnership created the First Annual Wiregrass Birding Tour, First of the Year Bird Walk and additional programs at Frank Jackson State Park.
- Organized the 2nd Fins, Feathers and Flowers weekend event at Lakepoint Resort State Park. This included guest speakers and field trips.
- Natural Resource Planner worked with the Cheaha naturalist to develop an action plan to implement the Leave No Trace program in all Alabama State Parks. The Leave No Trace program teaches and promotes good land and conservation stewardship. When completed, Alabama will be the first state park system to have a Leave No Trace presence in all parks.

Problems and Solutions

The Section continues to deal with the problems of insufficient funding to address lake siltation at numerous parks, the addition of fish habitat structure, expanding the environmental education program, constructing much-needed nature centers and controlling populations of invasive plant species with herbicide.

STATE PARK PROMOTIONS

The Alabama State Parks Promotions Section was created to coordinate the overall advertising, marketing and promotional efforts of the Alabama State Parks system. The section currently employs two people in the Montgomery office.

Administrative functions include coordination of radio and television public service announcements; preparation and distribution of promotional literature; coordination of print and photographic material for magazines, campground directories, and newspaper articles; cooperation and coordination with the Alabama Bureau of Tourism and Travel, chambers of commerce, convention and visitors bureaus, Alabama Department of Transportation rest areas, tourist associations and special events promoters; evaluation of advertising opportunities; purchasing of advertising space; production of ads and advertising materials, assistance with individual State Parks promotional efforts; special events, various promotional exhibit expos, and continuous updating of photos; presentation of programs for various organizations, and the continued operation of the toll free nationwide phone line; social media marketing, website management and promotion, digital mobile-ready marketing, development of promotional park videos, and continued pursuit of affordable and effective marketing opportunities.

Accomplishments

- To promote our Parks as destinations for user groups, we continue to create messages and relationships that are better targeted.
- We continue to partner with the Alabama Bureau of Tourism and Travel and specifically the Welcome Centers. Together we promote the great state of Alabama, and our special destination state parks scattered throughout the state. We also partner with the Department of Transportation's rest areas throughout the state.
- The Promotions Section worked to create and provide continued growth of our social media accounts to further enhance the visibility of the Parks, primarily through Facebook, Twitter, Instagram and YouTube.
- The monthly State Parks GovDelivery e-newsletter continues to go out monthly to over 230,000 subscribers.
- The "Partners Pay the Way" campaign that was introduced to raise awareness of the many individuals, user groups, civic partners, and elected officials we depend on to keep our Alabama State Parks open and operational continues to be a success.

- In the FY2016, we implemented a new program for our user trail groups entitled “Dirt Pass Trails Program,” where trail users are encouraged at a nominal fee to support state parks by buying a trail pass entitling them to usage at all the trails within our state parks system by showing the wristband that was purchased. All money from this promotion goes back in the State Parks system to support a stand-alone trails program. As we enter FY 2017, this program continues to be an asset program for our trail users.
- An assortment of park videos produced and accessed on our website continues to be a way of utilizing the latest video technology to further promote the parks system.
- The Alabama State Parks Pocket Ranger Smart Phone App continues to be an asset for state parks user groups.
- We continue to produce various state parks printed literature as well as maintain an inventory of individual state park brochures. We maintain a healthy working relationship with Alabama Department of Transportation and the Alabama Bureau of Tourism and Travel for distribution of brochures.
- In FY2017, we updated our individual State Park brochures with a more uniform look; specifically Cheaha, Lake Lurleen and Monte Sano state parks. All future park brochures will have consistent branding elements.
- In FY2017, we participated with the University of Alabama and several of our State Parks were listed in the new Top Trails booklet that went out statewide to various locations.
- Implemented in FY2018 was a new Parks for Patriots program to honor the veterans who have served our country by allowing them free admission to the parks that charge an entrance fee. To accomplish this, we asked park guests to consider sponsoring a veteran by making a donation.
- We continue to participate in the Alabama Press Association Directory, which goes out to all daily and weekly Ala-

bama newspapers, top ad agencies, PR firms in the state, and legislative and congressional office personnel. This puts Alabama State Parks in front of 500+ media outlets in Alabama.

- We continue to advertise in Business Alabama and Alabama Advantage magazines. The ads focus on our meeting and conference facilities. These magazines are distributed to the Alabama Legislature.
- In FY2017, we created the Alabama State Parks car tag promotional plates, rack cards, etc. to help promote the purchase of the new Alabama State Parks car tag to all who wish to help support the Alabama State Parks by buying a car tag. Approximately 80 percent of this revenue goes directly to the State Parks.
- State Parks Boat Registration is now also available to the public. This new program will provide us an additional form of revenue.
- The Promotions and Marketing Section worked diligently to bring awareness to the Constitutional Amendment 2 on the 2016 ballot. This amendment was overwhelmingly passed by an 80 percent “Yes” vote to keep funding in Alabama State Parks. Since its passage, new capital improvement projects are being promoted to make the public aware that we are addressing their comments and feedback.
- We continue to promote our concessionaire partnerships on new park activities and management.

Problems and Solutions

With limited staff and funding, the Promotional and Marketing Section continues in all endeavors and with the latest in marketing technology to promote our remaining Alabama State Parks through various traditional and contemporary marketing and promotional platforms.

MARK LAMKIN



Gulf State Park



PARKS MAKES IMPROVEMENTS TO SERVE USERS MORE EFFECTIVELY

Alabama State Parks continues to make steady progress in a rapidly changing marketplace. The fact that we are a self-funded agency creates unique challenges. These challenges were amplified in recent times due to the more than \$15 million that was transferred from State Parks into the General Fund. These transfers led to park closures, staff reductions and restricted budgets. The uncertainty of the future was demoralizing to our staff and visitors. However, with the support from legislators and Alabamians, the passage of Amendment 2 improved our outlook and became a historical milestone for us. We look forward with renewed enthusiasm as we have reopened those parks and our earned money now stays where it belongs – at the parks.

The future provides us with aspirations and plans to become more of a destination for our guests. Our priority is to improve our product so we can provide a better experience for our guests. To achieve this, the Operations Section has created capital improvement project lists and we are working diligently to complete those tasks. From highly visible improvements like new bedding in lodges, to behind the scenes equipment upgrades like cooling towers, our upgrades are in constant motion. We also work toward improving our staffing limitations, with the idea that a revamped employee structure combined with improved facilities will give us a product we have confidence in.

Our visitors continue to be supportive and very loyal. Our revenue numbers reflect that. Attendance figures remain stable with an approximate 4.9 percent growth since FY15/16. They were passionate during our financial hardships and continue to be a steady force in our new vision. One of our new goals is to focus more on the day-users and develop pricing and fees so that they may help contribute more to our revenue. Currently, the overnight guests spend the most money, provide most of the revenue, but make up the smaller percentage of visitation.

Some of these new plans and programs will be driven more by science than ever before. State Parks is developing and implementing surveys that not only provide us quality information,



Peavine Falls at Oak Mountain State Park

but allows visitors to understand that we are sensitive to their needs. This new initiative is in the pilot stage, but software products like Qualtrics have been secured and will help us tremendously on the reporting aspect of the survey projects. Currently, we are surveying fishermen of the Gulf State Park pier to see if we can improve the experience of that user group.

As we shift from the lodge and resort settings to more adventure-based activities, we continue to implement new ideas, strategies and activities. Working with concessionaire vendors has been successful as we have transitioned from small pilot projects to complete park management partnerships. These concessionaire arrangements allow us to provide professional products and services to the public without a full investment from us. Again, a better park experience for our visitors. Some of the more prominent concessionaire relationships include:

- **Food vendors on the pier at Gulf State Park**
- **Cable skiing adventure at Oak Mountain State Park**
- **Rock climbing, rappelling and kayaking at DeSoto State Park**
- **Zip line adventure at Lake Guntersville and Wind Creek state parks**
- **Roland Cooper State Park management by a vendor, Recreational Resource Management**
- **Tiny house cabins at Lake Guntersville State Park by a vendor, Recreational Resource Management**

Our technology tools such as the website (alapark.com), social media, mass email services (GovDelivery) and smartphone apps continually play a bigger role for pushing our brand and messages. We have seen our website numbers continue to expand with an average growth rate of 100,000 unique visitors each year. Our website vendor for hosting and maintenance continues to be Alabama Interactive. This is a fruitful relationship and we are currently working on launching version 4.0 later this year. The biggest challenge is consistency in style from park to park. Our current structure forces us to have multiple admins that manage each park page. Best practices suggest a singular person and style would create consistency.

Our social media presence is better than ever and remains our best tool for the money. With no cost, it has allowed us to be in front of our customers during a time when no other product could. Not only are we more active on all of the park accounts, our content has improved and therefore we are more relevant. With approximately 250,000 unique followers on the individual park FB pages combined we can promote, inform or alert our audience quickly. The parks staffs have embraced this tool and most have attended training classes for this responsibility.

We believe that an integrated marketing program is most effective. The utilization of the GovDelivery email tool completes the circle for our technology-based communication to the public. The Parks Division has a Super Admin in Montgomery and sev-

eral field admins. Currently, there are six different sources that send routine emails to recipients. They are Division, Cheaha, DeSoto, Gulf, Joe Wheeler and Lake Guntersville state parks. All of these locations have been fully trained. With over 230,000 unique email subscribers, this tool delivers massive amounts of revenue-generating information in a professional manner. We actively use this tool to help promote our programs and plans with a cross-marketing approach.

Traditional marketing also plays a role for State Parks. Printed literature pieces remain in high demand. Most of these pieces are antiquated, but we are updating the entire offering with consistent branding elements. Collaborative work between Parks and our Information and Education section has been ongoing and templates have been designed and approved, thus streamlining the process. Distribution of these resources is done in a variety of ways. Our relationship with the Alabama Bureau of Tourism and Travel allows us to send to Welcome Centers and likewise with Alabama Department of Transportation rest areas. Our literature program will continue to be improved and is a constant work in progress.

Advertising continues to be our weakest aspect of the marketing program. Because of the cost associated with both print and digital ads, combined with our financial situation, we have not participated in many advertising programs. We have utilized what fits our model and spending money on these expensive programs has not been an option. We have promoted some of our overnight programs in this medium with moderate success, but only for short periods of time. As we complete some of our capital improvement projects we would be served well to budget towards more advertising.

Because State Parks is a self-funded Division, we have private sector similarities. Developing revenue-generating programs to market the State Parks is an important element of business for us. Our staffing structure creates challenges. Creating marketing resources and instructions, communicating and delivering these to the field and having the staff embrace them is crucial to the success of these programs. Examples of some of these programs include:

- **Parks for Patriots Veterans Program**
- **Dirt Pass Trail Crew**
- **Car Tag**
- **Boat Tag**
- **ATV Parks**

The Alabama State Parks is in a time of evolution; capital improvements are being made, internal structure is being revamped, feedback is being captured, park activities are shifting, and technology is being used more than ever. Our staff has endured and are resilient. They have persevered and they care. Because of that, we will constantly provide a quality outdoor experience for the people of Alabama. ■

WILDLIFE AND FRESHWATER FISHERIES



The **Wildlife and Freshwater Fisheries Division**, charged by law with protection, management and enhancement of the state's fish and wildlife resources, is composed of the Administrative Fisheries, Law Enforcement, and Wildlife Sections. The Division meets these responsibilities by carrying out coordinated, scientifically-sound enforcement, management, research, development, and educational programs designed to ensure protection and enhancement of fish and wildlife populations and habitats for the sustainable benefit of the people of Alabama.

ADMINISTRATIVE SECTION

Wildlife Diversity: State Wildlife Grants and the Landowner Incentive Program are two federal funding sources intended to focus management on declining wildlife species and avoid their eventual listing under the Endangered Species Act. Federal funding to the State Wildlife Grants program in FY17 was \$766,332. These funds are used to support research and species restoration efforts, including the following projects:

- Reintroduction of the federally threatened Eastern indigo snake
- Distribution, abundance, health assessment of the gopher tortoise
- Support of the Alabama Aquatic Biodiversity Center
- Comprehensive examination of black bear ecology and management in Alabama
- Aquatic snail survey of Alabama
- Crayfish Survey of Alabama
- Implementation of the State Wildlife Action Plan.

For FY17, the Landowner Incentive Program received \$125,000 for habitat restoration on private lands. These federal funds were awarded through the U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program. These programs are administered by one biologist, the Habitat and Species Conservation Coordinator, in the Administrative Section, who works

closely with the Wildlife Section and Fisheries Section staff. Both programs interact with and engage a broad range of partners including federal and state agencies, universities, non-government organizations and private landowners.

FISHERIES SECTION

Responsibilities and Functions

The Fisheries Section's mission is to protect, conserve and increase the freshwater aquatic resources of Alabama.

Accomplishments

Technical Assistance: District fisheries biologists conducted 304 biological checks of private ponds. Individuals requesting assistance with problems were given appropriate solutions in writing. Staff members participated in meetings and conference calls concerning the licensing and relicensing of hydroelectric projects. District biologists investigated 25 reported fish kills and cases of pollution. Formal reports prepared by the investigators were sent to the appropriate agencies.

Environmental Affairs: The Fisheries Section reviewed, investigated, and commented on 206 water-related permits and environmental impact statements with potential adverse impacts to state aquatic resources.

Public Fishing Lakes: A total of 119,489 anglers harvested 215,175 fish weighing 150,061 pounds from 21 of the 23



Eastern Wild Turkey

**WILDLIFE AND FRESHWATER FISHERIES
BUDGET AND EXPENDITURES**

Section	Budgeted Amount*	Expenditures
Admin	\$1,521,775	\$929,574
Law Enforcement	\$14,004,491	\$12,765,330
Fisheries	\$10,007,064	\$8,650,449
Wildlife	\$23,103,560	\$21,496,029
Wildlife Diversity	\$1,235,000	\$692,572
Transferred to Department Administrative Expenses	\$4,275,000	\$3,864,209
TOTAL	\$54,146,890	\$48,398,163

* Funding includes Federal Aid in Wildlife and Sportfish Restoration monies apportioned to Alabama based on the state's geographical size and hunting and fishing license sales.

The highly favorable budget variance is due to an internal budget cut decision made by the Division.

**WILDLIFE AND FRESHWATER
FISHERIES DIVISION STAFFING**

	FILLED	VACANT**
FULL TIME POSITIONS	320	16
PART TIME POSITIONS	19	12

** Vacancy count is based on the 2017 operations plan.

State-operated Public Fishing Lakes (PFLs). Each angler averaged 1.3 pounds of fish per trip and 1.8 fish per trip which is similar to the weight and number of fish harvested in FY16. The number of anglers fishing on Alabama's PFLs increased approximately 3 percent from FY16. This increase is due to the first full year of operation after renovation at DeKalb and Pike County PFLs in the summer of 2016. Fayette and Lower Clay County PFLs remained closed for renovation.

Fisheries biologists and support personnel made 249 visits to PFLs to evaluate the condition of fish populations and to conduct various operational and maintenance activities. The Carbon Hill, Eastaboga, and Marion fish hatcheries stocked a total of 1,890,553 fish into Alabama's PFLs. Species stocked include bluegill sunfish, channel catfish, golden shiner, largemouth bass, redear sunfish and threadfin shad. Additionally, 3,600 pounds of rainbow trout were stocked into Madison County PFL for a winter fishery.

One new lake manager was contracted during FY17 at Chambers County PFL. Lake managers at Escambia County, Lee County, and Washington County PFLs resigned. In addition, the contract at Madison County PFL was terminated by the state. Contracts for lake managers will be executed in FY18 for these PFLs. Due to poor fishing and low permits sales, Washington County PFL will be drained and restocked in FY18-19. Heavy rainfalls delayed the renovation at Fayette County PFL, which is now scheduled to reopen in the spring of 2019. The water well system was completed at Bibb County PFL. In addition, Bibb County Commission completed access road improvements at the PFL.

ANGELA REGNIER

Access Areas: Routine maintenance and inspection visits of 114 access areas were made by Fisheries Section personnel. These facilities are comprised of 142 boat ramps with 174 launch lanes, 117 courtesy piers, and parking for 3,537.

Wooden courtesy piers were repaired/treated at 14 boating access areas, statewide. Weeds were clinically treated or bush-hogged at one 1 access area. Dead trees/ limbs were trimmed or removed at 14 access areas. Rip-rap was placed to control erosion at three access areas. Signs were replaced or maintained at 15 access areas. General inspections were completed at 304 access areas. Six potential sites were inspected for future boating access projects. Boundary surveys were completed at one access area. Project planning and development was initiated or completed for 11 new facilities or renovations.

Eight potential sites were inspected for future boating access projects. Project planning and development was initiated or completed for 15 new facilities or renovations. Two access areas had parking lots patched/repared. Parking bumpers were installed at Brown's Creek (Marshall County) access area. Striping plans were developed for Lay Lake (Shelby County). Four boundary surveys at access areas were completed for the development of striping plans. A Boating Access Program summary was developed and published.

Fisheries Habitat: The habitat enhancement program installed 791 fish attracting devices (FADs) on 10 public reservoirs and 215 FADs on four PFLs. Aquatic habitat improvements in the form of native aquatic vegetation establishment took place on five reservoirs. Martin, West Point, Logan Martin, Smith, and Weiss received 750, 200, 300, 600, and 1000 buttonbush (*Cephalanthus occidentalis*) plants, respectively. Smith and Martin reservoirs received approximately 1,200 square feet of water willow (*Justicia americana*). Thirty-six fish attractor buoys were installed on seven reservoirs to assist anglers in locating FADs. Underwater camera surveys and monitoring of all habitat enhancement activities are ongoing.

Fish Hatcheries: FY 2017 fish production goals were met or exceeded for black bass species, channel catfish, striped bass, hybrid striped bass, bluegill and redear sunfish. A pilot effort to develop protocols for rearing advanced size lake sturgeon fingerlings at the Eastaboga and Marion hatcheries was continued in 2017. Other fish species were also stocked into public waters statewide through the Fisheries Section's program, which included public fishing lakes, totaling 3,464,644 fish. Other fish species were also stocked into public waters statewide (see Table 1).

Public Water Fish Stockings by Permit Holders: Seven permits for stocking fish in public waters were issued to agencies and organizations that desired to stock fish to support youth fishing events or supplement unique fisheries (see Table 2).

Presentations: Fisheries Section biologists attended public meetings and workshops on fisheries resource topics and made 35 presentations on various fisheries topics.

Publications: Four peer-reviewed scientific journal articles were prepared for publication by Fisheries Section staff.

Fisheries Research: Through the Investigation and Management Techniques for Public Waters Project (Sport Fish Resto-

ration F-40), there were three ongoing contractual studies with investigators from the Auburn University School of Fisheries, Aquaculture, and Aquatic Sciences (AU-SFAAS) and Alabama A&M, College of Agricultural, Life, and Natural Sciences that were initiated in a prior fiscal year. These studies included: "Contributions of Genotype and Environment in Hybridization and Performance of Native and Introduced Largemouth Bass Populations in Alabama," "Potential Striped Bass Recruitment and Distribution of Larvae in Wheeler Reservoir, Alabama," and "Assessing the Impact of the Introduction of Blueback Herring in Alabama."

Three new contractual studies were initiated in FY 2017 with AU-SFAAS. These included: "Economic Value of Recreational Fishing on Lake Eufaula (AL)," "Investigation of the Trout Fishery in the Sipsey Fork Below Lewis Smith Lake," and "Literature Review of the Impacts of Hydropeaking on Riverine Warm Water Biota." The first two of these studies will continue through FY 2018, while the latter one-year study was completed in FY17.

Reservoir Management: Largemouth bass, spotted bass, black crappie, white crappie, sauger, white bass, bluegill, threadfin shad, gizzard shad, alligator gar, blue catfish and flathead catfish populations were sampled by several methods such as electrofishing, trap netting, gill netting, prod pole, seining, and/or trawling in the following water bodies: Pickwick, Guntersville, Wilson, Wheeler, Weiss, Logan Martin, Mobile Delta, Claiborne, Martin, Mitchell, Aliceville, Gainesville, Lake LU (University of West Alabama), Demopolis, Duck River, Eufaula, Millers Ferry, Big Creek, Pea River, Chattahoochee River and Lake Jackson. Collected specimens were measured, weighed, and many were aged in order to determine growth rate. Thermal and oxygen profiles were collected from the majority of these reservoirs. Reservoir reconnaissance surveys were completed on some reservoirs where standardized sampling was performed. The results of these surveys are incorporated into reservoir management reports. Relative values of angler harvest, effort, and pressure were collected by creel surveys on selected reservoirs.

General Survey: The rainbow trout fishery, associated habitat, and angler habits were assessed in the Sipsey Fork River below Lewis-Smith Dam. The paddlefish population was sampled on Guntersville, and Pickwick was sampled to determine the presence of Asian carp. Black Water Creek and Mulberry Fork were sampled to determine the abundance of southern walleye. Bass were sampled in the Black Warrior River to assess genetic composition. An IBI was conducted in the Weiss Bypass. Lay Lake was electrofished to investigate reports of exotic fish species. A vegetation survey was conducted at Neely Henry.

Endangered Species (Section-6) Studies: Through the Cooperative Endangered Species Conservation Fund (Traditional Section 6 of the Endangered Species Act), the following studies were conducted: Tennessee River mussel and snail recovery; Alabama and Gulf sturgeon survey; molecular sequencing of aquatic snails; imperiled fish eDNA determination; pygmy sculpin population monitoring; restoration priorities for slack-water darter; Big Canoe Creek mollusk survey; population structure of the round rocksnail; and status of the snail darter. The following projects were funded with reverted Section 6 funds: status of the bridled, trispot, and holiday darters; and frecklebelly madtom.

**TABLE 1:
FISH STOCKED BY WFF FISHERIES SECTION INTO
ALABAMA PUBLIC WATERS DURING FISCAL YEAR 2017**

Species	Inch Group	Number
Largemouth Bass - Florida	1-2	330,894
Largemouth Bass - Northern	1	226
Striped Bass - Gulf Race	1	641,890
Hybrid Striped Bass	1	308,320
Channel Catfish	3-14	224,297
Bluegill Sunfish	1-4	1,364,000
Redear Sunfish	1-2	429,725
Black Crappie	3-8	93,860
Alligator Gar	18	42
White Bass		30,672
Southern Walleye		4,535
Lake Sturgeon	5-12	1,000
Rainbow Trout	6-18	35,183
Total		3,464,644

**TABLE 2:
FISH STOCKED BY PERMIT HOLDERS INTO
ALABAMA PUBLIC WATERS DURING FY 2017**

Species	Location	Number or Weight
Florida Largemouth Bass	Weiss Lake	5,000 Fish
Rainbow Trout	Sipsey Fork	250 Fish
Rainbow Trout	Tannehill State Park	500 lbs.
Channel Catfish	R.L. Harris Lake	600 lbs.
Channel Catfish	Neely Henry Lake	1,000 lbs.
Channel Catfish	Guntersville Lake	850 lbs.
Channel Catfish	Blue Eye Creek	500 lbs.

Aquatic Education Program: The Fisheries Section, with assistance from other sections of the Wildlife and Freshwater Fisheries Division, conducted 39 fishing events, reaching over 5,072 participants plus their families and volunteers. Fishing classes were conducted for various audiences (mostly youth) during 125 sessions that reached 3,987 participants. One hundred and forty-four casting classes were taught for 6,835 participants. One hundred forty-one talks about Alabama's aquatic resources were presented to a total audience of 6,056. Additional information was presented to the public through displays for 10 events, and the Sportfishin' Simulator was used at one event. Seven presentations were made to 60 instructors about casting, fishing and/or aquatic education.

Freshwater Mussel Management and Research: A total of 64 biological field trips to sample streams were made statewide during this fiscal year for general and specialized surveys of mussel and snail populations and to locate brood stock sources for use at the Alabama Aquatic Biodiversity Center. Assistance and consultation regarding mollusk issues were provided to the U.S. Fish and Wildlife Service, U.S. Geological Survey, Tennessee Valley Authority, and the University of Alabama Huntsville.

River and Stream Fish Activities: A total of 136 biological trips were conducted by staff with the River and Stream Fishes Program. Sampling continued for the most endangered sturgeon species in world, the Alabama Sturgeon. However, none were collected this past fiscal year. For the seventh consecutive summer, tagged Gulf Sturgeon were detected from other river systems in the Mobile River Basin. Water samples were collected in the Tombigbee and Alabama rivers to employ eDNA detection as a method to determine the presence or absence of Alabama or Gulf sturgeon. Alabama Sturgeon eDNA was detected in the Tombigbee and Alabama rivers, and Gulf Sturgeon eDNA in the Mobile Delta and Alabama River.

A total of 1,457 egg-bearing paddlefish were harvested during the 2017 commercial paddlefish season in the Alabama River. These fish yielded 6,322.80 pounds of screened eggs with an average retail value of \$2.8M. Fishery-independent paddlefish tagging and collection continued in the Alabama, Tombigbee, and Tennessee rivers.

Sampling efforts began for bighead and silver carp to determine the distribution and abundance in the Tennessee River. As part of a cooperative project among Gulf States, we began collecting American eel to assess the species status in Alabama.

We continued to assess the status of the saltmarsh topminnow in Alabama, a petitioned species. Collection continued for the soon to be described southern walleye to establish a broodstock. Population monitoring of the threatened Pygmy Sculpin continued with staff conducting monthly standardized visual snorkeling counts in Coldwater Spring. The Stream Fish Assessment Project continued with 4,032 fishes collected from 25 sites in five watershed management districts by contracted personnel with Auburn University. A total of 220 Alabama scientific collection aquatic permit applications (general and state-protected) were reviewed.

Alabama Aquatic Biodiversity Center: Plumbing was replaced in the administration building of the Alabama Aquatic Biodiversity Center (AABC). The existing water pressure regula-

tor malfunctioned and a plumbing junction failed beneath the building slab. The new plumbing was completed in September 2017. A one-year inspection of the new fish building was completed in March 2017. The building is now fully complete and will be used in support of future nongame and sportfish restoration and recovery efforts.

The AABC stocked 22,515 individuals of four different GCN and threatened and endangered freshwater mussels into five different drainages in FY 2017 (Table 3).

Staff completed a total of 67 biological trips conducted in support of aquatic species research and recovery activities statewide. AABC staff provided technical assistance 106 times to other state, federal, and non-governmental organizations, and participated in 44 different technical meetings. AABC staff was involved in 10 outreach activities. There were no mollusk kill investigations in FY 2017.

Significant Problems/Solutions

Public Fishing Lakes: Bass crowding continues to be a problem statewide. Removal of bass by anglers and/or electrofishing gear, along with effective use of marginal treatments and length limits, will be employed to manage overcrowded bass populations. Investigation into reducing bass stocking rates will be conducted. Recruitment of qualified lake managers at rural lakes, low participation at rural lakes and aging facilities (such as concession buildings) is a significant problem. Alternative management options will be evaluated at lakes with low angler use.

Riverine Habitat: The loss of riverine habitat in Alabama has resulted in the decline or loss of obligate riverine fishes. Efforts continue to document habitat loss and provide suitable riverine habitat where possible. Alabama needs to complete the task of developing a statewide comprehensive water plan that includes instream flow protection as its cornerstone.

Aquatic Nuisance Species: Aquatic Nuisance Species pose a significant problem and a threat to recreational and commercial fishing resources. Little funding is available to address this problem.

Fish Hatcheries: Many production ponds, including drain kettles, water supply lines, drainage lines and power supply to the ponds need renovations.

Fishing License Sales: The continued trend of flat to falling revenue from the sale of fishing licenses remains a concern. The Fisheries Section's efforts to positively reverse this trend include an increase in staff time conducting casting and fishing classes as well as increased assistance with 4-H programs. Renewed and increased marketing efforts with evaluation are being conducted to encourage license renewals.

LAW ENFORCEMENT SECTION

The Law Enforcement Section of the Wildlife and Freshwater Fisheries Division provides assistance in the protection and management of Alabama's wildlife resources and the safety of the public through a fair and balanced enforcement program.

**TABLE 3:
PROPAGATED MOLLUSKS RELEASED BY AABC DURING FISCAL YEAR 2017**

Species	Release Locality	Date Released	Number Released
<i>Lampsilis virescens</i> Alabama Lampmussel	Bear Creek, adjacent to Natchez Trace Parkway Rest Stop, Colbert Co., AL	July 17, 2017	1,500
<i>Lampsilis virescens</i> Alabama Lampmussel	Bear Creek, adjacent to Natchez Trace Parkway, Colbert Co., AL	July 17, 2017	1,500
<i>Lampsilis virescens</i> Alabama Lampmussel	Bear Creek, adjacent to Natchez Trace Parkway, shoal above Rock Creek confluence, Colbert Co., AL	July 17, 2017	1,500
<i>Lampsilis virescens</i> Alabama Lampmussel	Bear Creek, below CR 1 (Bishop) Bridge, Colbert Co., AL	July 17, 2017	1,500
<i>Lampsilis virescens</i> Alabama Lampmussel	Elk River, Stairstep Shoals, Giles Co., TN USFWS and TWRA release	July 21, 2017	4,500
<i>Lampsilis virescens</i> Alabama Lampmussel	Elk River, Shoal below Veto Bridge launch, Giles Co., TN USFWS and TWRA release	July 21, 2017	1,500
<i>Lampsilis virescens</i> Alabama Lampmussel	Sequatchie River, below Kettner's Mill, Marion Co., TN – TWRA release	August 11, 2017	2,458
<i>Lampsilis virescens</i> Alabama Lampmussel	Paint Rock River, Butler's Mill, Madison/Marshall Co., TN	Sept. 7, 2017	1,000
<i>Lampsilis virescens</i> Alabama Lampmussel	Elk River, Shoal below Veto Bridge launch, Giles Co., TN USFWS and TWRA release	Sept. 7, 2017	1,800
<i>Hamiota perovalis</i> Orangenacre Mucket	Locust Fork Black Warrior River, above Vaughn's Bridge, Blount Co., AL	Sept. 25, 2017	910
<i>Medionidus conradicus</i> Cumb. Moccasinshell	Bear Creek, adjacent to Natchez Trace Parkway, shoal above Rock Creek confluence, Colbert Co., AL	Sept. 26, 2017	114
<i>Toxolasma cylindrellus</i> Pale Lilliput	Paint Rock River, Tractor Ford, PRM 50.7, Jackson Co., AL	Sept. 28, 2017	569
<i>Toxolasma cylindrellus</i> Pale Lilliput	Paint Rock River, Jones Property, PRM 33.3, Jackson Co., AL	Sept. 28, 2017	518
<i>Lampsilis virescens</i> Alabama Lampmussel	Paint Rock River, Jones Property, PRM 33.3, Jackson Co., AL	Sept. 28, 2017	1,087
<i>Lampsilis virescens</i> Alabama Lampmussel	Paint Rock River, 8 Stockings, PRM 33-34, Jackson Co., AL	Sept. 28, 2017	2,059
AABC Propagated Mollusks Released in FY 2017			22,515

Accomplishments

2017 marked the 110th anniversary of our agency. The enactment of the statute that made the Department of Game and Fish a State Department, and provided ample laws for the preservation and protection of the game and fish of Alabama occurred in February of 1907.

The Law Enforcement Section began a research project to identify all Conservation Enforcement Officers who had lost their lives in the line of duty since the agency's founding in 1907. By year end, 12 officers had been identified. A memorial wall was dedicated on the fifth floor of the Folsom Administrative building to these officers. Portraits of all 12 fallen officers are prominently displayed. The Alabama Conservation Enforcement Officers Association provided funding for this long overdue project.

This year all Conservation Enforcement Officers attended the Below 100 training program. The annual number of law enforcement officers killed in the line of duty hasn't been below 100 since 1940. This training gives several common-sense approaches to the day to day challenges that a law enforcement officer faces and methodologies to make them safer while doing so. The training was universally well received and makes our agency the first Alabama state agency to be 100 percent certified in this training program.

The Division was able to procure new Glock duty handguns and Safariland holsters for the enforcement officers. New Glock 19 9mm handguns were purchased through a trade-in program for

less than the cost of replacing night sights and rebuilding magazines for the aging .40 caliber pistols. All officers received extensive training on the new handguns and holsters to integrate the recommended break-in period and identify any potential issues.

Awards

The Alabama Chapter of the National Wild Turkey Federation presented their Conservation Officer of the Year award to Jeff Shaw of Sumter County. The Shikar Safari International Club awarded C.E.O. Sr. Kevin Kirby of Marshall County with their Officer of the Year award. Sergeant Clay Miller County was the Alabama Wildlife Federation Officer of the Year. C.E.O. Sr. Brad Hasamear received the Southeastern Association of Fish and Wildlife Agencies award for Officer of the Year. These recognitions were based upon superior performance in the field of wildlife law enforcement in their respective regions during the past year.

Enforcement Actions: Participation in the state's Game Check system for the recording and reporting of both deer and turkey harvests became mandatory during the 2016/2017 hunting seasons. Though participation in this system had been voluntary in the past, few hunters utilized it. Upon becoming mandatory, initial estimates are that roughly 35 percent of deer harvests and 40 percent of turkey harvests were recorded in the first year of mandatory participation. This percentage of participation is slightly higher than was seen in other states when similar systems were put into place. The data collected and published gives Alabama hunters an accurate and invaluable resource of hunting statistics that was never available to them in the past.

BILLY POPE



Conservation enforcement officers train for every situation

Chronic Wasting Disease (CWD) was detected in Arkansas last year, which brings the threat of this disease closer to our state. The commercial deer breeder industry operating in Alabama continues to be one of the most likely avenues for the importation of this disease to our state as they have been in other states. Though the importation of live deer was banned in Alabama in 1973, profit continues to motivate some in this industry to violate state and federal law and continue to import deer. Changes to our licensed game breeders regulation that sought to require stricter traceability of captive deer were introduced this year. This immediately drew fierce resistance from the Alabama Deer Association, an association that solely represents the business interests of Alabama deer breeders. Though the singular reason for these changes is the protection of Alabama's deer herd, the future of this regulation is not clear.

Officers of the Law Enforcement Section in conjunction with the U.S. Fish and Wildlife Service and the U.S. Attorney's Office charged a licensed Alabama deer breeder and his associate with unlawfully importing live whitetail deer into the state in violation of regulations of the State of Alabama and the Lacey Act. Such unlawful acts subject the state's entire deer herd to risks such as Chronic Wasting Disease and jeopardize Alabama's annual \$1.8 billion hunting industry. This prosecution resulted in the largest fine ever collected by the Wildlife and Freshwater Fisheries Division totaling \$750,000. Fines of this magnitude underscore the severe risks associated with actions like these motivated solely by profit.

The regulation banning importation of deer carcasses from CWD-positive states continues to have an impact as officers are consistently prosecuting individuals knowingly violating this ban. Deer processors continue to notify the agency about the importation of banned parts. We have disposed of multiple carcasses with the assistance of Auburn University that could have put the state at risk. The number of states that are known to be CWD positive stands currently at 25, so the task of monitoring deer carcasses imported from those states is daunting.

New changes to the longstanding organized field trials regulation were put in place this year that sought to limit the number of permits that were being issued across the state. The majority of the permits being issued were for raccoon hunts. Raccoons now have no closed season in Alabama so the only remaining reason for clubs to obtain this permit was to allow non-residents to come to Alabama and hunt without having to obtain a license. Though initially controversial, this change met no continued resistance and curbed some abuse of the permits.

As other states restrict or limit the ability to possess dangerous exotic animals we have received inquiries from individuals that would like to move to the state and bring with them various exotic animals. Tigers, elephants, lions, and varied reptiles are often the focus of these inquiries. Though there are limited regulations prohibiting importation of some animals, Alabama does not currently have laws or regulations to prevent the import or possession by private collectors of these dangerous exotic animals. Continuing to be a refuge for these animals may fuel the illegal trade in wildlife on a global scale and possibly endanger our citizens should an animal escape. The numbers and locations of dangerous non-native animals being housed in the state are not completely known.

Problems and Unmet Needs

The Law Enforcement Section was able to hire eight new officers during the past year. Due to retirements, we are still at historically low staffing levels. Budget cuts are likely due to a continued decrease in hunting license sales, it is unknown when we will be able to significantly increase our staffing levels. Additional dedicated funding from license sales or other sources is necessary to safeguard public resources and continue current levels of public service.

Communication remains a major officer safety concern as we continue to rely on a commercial carrier for law enforcement dispatch. As other local agencies have upgraded their own communications, our officers continue to struggle for reliable communications with local agencies when assistance is needed. In addition, our own system is often inadequate in emergency situations. We have spent thousands of dollars in equipment in recent years attempting to improve officers' ability to communicate with local agencies. This stop-gap measure is temporary, expensive and not a long-term solution to a statewide need.

WILDLIFE SECTION

The mission of the Wildlife Section is to manage and enhance the wildlife resources of Alabama for the sustainable benefit of the resource and the people of Alabama.

Accomplishments

Research and Surveys: Research and biological surveys were conducted throughout the state to obtain information on wildlife and their habitats to enable our wildlife biologists to make better management decisions. Aerial waterfowl censuses and hunter bag checks were continued in the Mobile-Tensaw Delta and on the Tennessee River during fall and winter. The winter aerial survey is conducted in conjunction with other states and the U.S. Fish and Wildlife Services as part of the annual mid-winter waterfowl survey to assess wintering populations of waterfowl.

The annual mourning dove study, as part of a nationwide project, consists of trapping, banding, and releasing mourning doves and call count survey routes. Data from the surveys routes was submitted to the National Dove Task Force and will be analyzed by the U.S. Fish and Wildlife Service to determine population trends and as a basis for determining an index to population size during the breeding season.

As part of a nationwide project, 949 mourning doves were banded and released and the data was submitted to the Migratory Bird Office of the U.S. Fish and Wildlife Service. Data from reported band returns will be analyzed to provide parameters needed for dove population modeling such as band return rates and estimates for mortality and survival.

Furbearer populations were evaluated by a survey that records the number of road kills and sightings of live animals near roads to develop population indices. For this report period, the project averaged 16 observers per month. Road kill observations averaged 201.3 per month for a yearly total of 2,416 animals. Live sightings totaled 708 animals. This project is not

scheduled to continue in the upcoming years, as the program will be transitioning to utilizing game cameras to better assess these populations.

Spring turkey hunter cooperators participated in an avid turkey hunter survey to collect statewide data on gobbling activity (number of gobblers and gobbles heard), turkeys seen, and gobblers harvested for each day hunted during the season. Wildlife personnel and volunteer cooperators collected statewide observational wild turkey brood data in July and August. Field staff and volunteers recorded observations of all turkeys (hens, poults, and gobblers) and each observation during any day was recorded separately. Observations were collected statewide and the data were subdivided by five WFF districts and six ecoregions (Piedmont, Southeastern Plains, Ridge and Valley, Southwestern Appalachians, Interior Plateau, and Southern Coastal Plain), and then separated by public or private lands. The results of the avid turkey hunter survey and brood survey were published in the annual wild turkey report entitled "Full Fans & Sharp Spurs."

In addition, Wildlife personnel continue to conduct game camera brood surveys in July and August. These surveys were conducted on WMAs statewide that have a spring turkey season. The game camera survey results will be compared to incidental observation results on WMAs where both methods are employed.

Wildlife biologists participated in annual surveys to monitor the status of breeding birds in Alabama. Participation continues in the continent-wide Breeding Bird Survey (BBS). Fourteen total BBS routes were conducted in the state. BBS routes were conducted across Alabama, which increased the number of completed BBS routes to 167 over a span of nearly 25 years. Seven routes were run in southwest Alabama, five in central Alabama, and two in north Alabama. The BBS program is the most important census program for tracking the population trends of land birds across the landscape.

One Christmas bird count was conducted in south Alabama to assess winter bird populations. Wading bird rookery surveys were conducted across the state to monitor known breeding locations and survey for additional sites. A total of 50 rookeries were surveyed with 11 wading bird species detected. Surveys will continue to better assess trends of breeding wading birds in Alabama.

Shorebird populations were monitored in Mobile County where all of Alabama's colonial shorebird colonies are located. Gaillard Island in Mobile Bay, the most important locale, contained some 10,000 pairs of brown pelicans and laughing gulls. Island work under the supervision of the U.S. Army Corps of Engineers created conditions thwarting accurate ground surveys, but in addition to pelicans and gulls, estimates of 5,000 pairs of royal tern, sandwich tern, Caspian tern, gull-billed tern, and black skimmers were found on the island.

In the Mississippi Sound, brown pelicans persist on shrinking Cat Island. The 100-200 pairs of pelicans threaten to usurp the nesting wading birds on the island in the years to come. American oystercatcher, snowy plover, and Wilson's plover were scattered on Cat Island, Isle Aux Herbes, and the undeveloped west end of Dauphin Island. Less than 20 pairs of these species

were found in Mobile County. In cooperation with U.S. Fish and Wildlife Service and Conservation, Inc., a private shorebird conservation group, protective signage was erected at two sensitive nest sites on public beaches on Dauphin Island. Additionally, assistance was provided to Gulf State Park to erect signage and symbolic fencing on stretches of public beach to keep beachgoers from intruding on potential shorebird nest areas.

Summer bat surveys this year focused on improving the understanding of the range and distribution of Species of Greatest Conservation Need (SGCN) bats to support management of imperiled bats in Alabama. We conducted 11 surveys for SGCN bats at various locations in Alabama. These included mist-netting, harp-trapping, emergence counts, and video surveillance. Considerable effort was invested in revising the current database that houses all data collected from bat field work in Alabama.

After two years of failed efforts to radio-track Indiana bats from an Alabama hibernaculum to their summer grounds, this year our success exceeded expectations. Our biologists found a previously unknown summer population in the Oakmulgee Ranger District of Talladega National Forest. The roost trees discovered there are the southernmost known for the species. This information is critical to improve conservation efforts for the endangered Indiana bat in Alabama. The knowledge of a new summer population will enable the U.S. Forest Service to better manage habitats for these bats.

Nongame staff and Alabama Bat Working Group partners conducted annual winter cave surveys in 35 caves in 14 counties. Caves were surveyed for the devastating bat affliction White-Nose Syndrome (WNS) and documentation of important hibernacula. WNS or the fungus that causes the disease has been confirmed in 14 counties in Alabama: Bibb, Blount, Calhoun, Colbert, DeKalb, Franklin, Lauderdale, Lawrence, Limestone, Jackson, Madison, Marshall, Morgan and Shelby. A Southeastern bat from a cave in Shelby County was confirmed as the first documented case of WNS infecting this species.

Counts of tricolored bats at monitored caves in Alabama have declined by 70-95 percent from peak numbers. At the two Indiana bat hibernacula for which we have longterm data, Armstrong and Sauta caves, the number of bats has dropped 94 percent from historic averages.

A winter survey of Fern Cave was conducted for the first time since 2013. This requires a considerable effort due to the technical challenges of the cave and involves a coordinated effort with numerous partners. The resultant survey was the most comprehensive winter survey of Fern Cave ever conducted. Estimated numbers of bats were 887,998 in the Morgue Pit and 401,850 in Little Morgue, for a total estimate of 1,289,848 gray bats. Thirteen Indiana bats were observed.

As part of an effort to better understand the Eastern spotted skunk in Alabama, we began two projects. Once considered common in Alabama, the range, distribution and population size of the Eastern spotted skunk is now unclear following an apparent precipitous decline of the species. In cooperation with the University of West Georgia, we conducted a statewide camera survey for Eastern spotted skunks. We surveyed 210 individual camera sites on 22 different properties. We had an



Wildlife and Freshwater Fisheries Director Chuck Sykes releases an Eastern Indigo in the Conecuh National Forest with biologists Tracy Wood and Carrie Threadgill.

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average deployment per site of 15 nights. Despite that effort, we only had two spotted skunk detections, one at Yates Lake WMA and one at Cheaha State Park. We also initiated a citizen science project to raise awareness of the skunk and engage the public in conservation. We solicited photographs of spotted skunks captured on game cameras, found dead on the road, or other sightings, via multiple media outlets. The project has logged 16 photo verified records across Alabama, suggesting the species maintains a statewide distribution.

A biologist in the Nongame Program serves as the leader of the Alabama Bat Working Group. The group continues to grow and this year the ABWG had the largest ever attendance at its annual events. The fall meeting and bat blitz each had over 50 attendees. This year's blitz was hosted by Ruffner Mountain and targeted the greater Birmingham area, a location that had not previously been a focus of bat surveys. Eighteen sites were surveyed, capturing 619 bats and six species. Sixty people attended the education events for the general public. The fall meeting was hosted by Alabama Power, also in Birmingham, to advance communication and coordination of bat conservation efforts in the state.

The Division received \$401,395 in federal funds for projects on fish and wildlife species eligible for funding under Section 6 of the Endangered Species Act. Approximately one-half of the total funds were for projects administered by the Wildlife Sec-

tion. Population and status surveys for the gray bat, red-cockaded woodpecker, gopher tortoise, manatee and red-cockaded woodpecker restoration on state lands are examples of projects made possible by those funds. Implementation of a Safe Harbor Plan for red-cockaded woodpeckers continued for the state through Section 6 funding in an effort to secure habitats for this imperiled bird.

Captive breeding and re-introduction of the Eastern indigo snake began in 2007 through a State Wildlife Grant project in cooperation with Auburn University, The Orianne Society, Zoo Atlanta, U.S. Forest Service, Georgia DNR and the U.S. Fish and Wildlife Service. These efforts are aimed at restoring the indigo snake as a self-sustaining species on Alabama's landscape. Our nongame wildlife biologists play an integral role in this project. In 2010, juvenile indigo snakes were first released into the wild on the Conecuh National Forest. Efforts continued in 2011, 2012, and 2013 with mid-May and June, captive-reared, juvenile indigo snake releases into the national forest.

Due to problems obtaining gravid females, no juvenile indigo snakes were released in 2014. Releases were back on track in 2015 with 11 juveniles released. Due to the detection of parasites in juvenile snakes in 2016, the decision was made to retain these snakes in captivity and not risk the potential disease transmission into the wild. Thirty juvenile indigo snakes were released in May 2017. A total of 109 juvenile indigos have been

released over a six-year period and the project is scheduled to continue captive releases for four more years.

Some of the snakes being monitored from the first release have reached reproductive maturity and gravid females have been captured and released, which is the first indication that the project is achieving the objective of the establishment of a viable population. Solid proof of reproduction will be the capture of a wild indigo snake that has not been PIT tagged by researchers. To date, no such capture has taken place.

Since removal of the bald eagle from the Threatened and Endangered Species List in 2007, Alabama bald eagle nests have been randomly monitored for productivity and survivorship. Biologists continued to record any newly discovered or reported eagle nests and biologists also monitored the number of bald eagles overwintering in Alabama as part of the nationwide 2017 Mid-winter Bald Eagle Survey. The number of bald eagles wintering in Alabama remains stable.

Additionally, golden eagle camera surveys were conducted in Alabama on several WMAs with assistance from Wildlife staff to assess the Eastern population of golden eagles. The surveys are helping us learn more about their winter ecology to help us manage for them. Along with surveys, an additional golden eagle was captured in 2017 and outfitted with a cellular tracker to track its migration pathways and movements. There have now been 15 golden eagles captured in Alabama. Data provided from the tagged birds will help us better determine habitat usage and timing of birds wintering in Alabama.

Public Hunting: Wildlife Section staff managed over 739,000 acres within the WMA system. During FY17 Section staff held over 6,900 managed hunt days across the State. Harvest figures reached anticipated levels. These areas also provided opportunities for trapping, fishing, hiking, picnicking, camping, research, and nature study. Supporting these opportunities for public use of the WMA system, staff maintained over 2,400 miles of boundary lines and over 2,150 miles of area roads. Additionally, staff performed habitat management actions on over 44,570 acres through maintaining wildlife openings and food plots, timber management, prescribed fire and water management.

Annual population surveys are conducted throughout the range of the American alligator. Data from these surveys are used to generate harvest recommendations for each of the state's four hunt zones. Long term trend data from these surveys continue to indicate that the majority of Alabama's alligator population is stable and the conservative harvest rate for the hunts is sustainable. Hunter harvest data is also collected from all alligators within each zone. Information such as body weight, length, sex and harvest location is collected. This data is also valuable in showing trends of harvested alligators and is used in conjunction with population surveys in managing this resource. Additionally, research has begun with other state agencies and universities addressing issues such as hunter harvest management, public satisfaction, and baseline population health within the Mobile-Tensaw Delta.

Participation in the hunts is stable with a total of 3,797 applications being received in 2017 for the 260 available tags. This is a 1.3 percent decrease from the 3,845 applications received in 2016. Hunter success rates increased 4.6 percent from 2016

with a 48 percent success rate throughout the four hunt zones. Success rates within each hunt zone are as follows:

Zone	Success Rate	#Harvested
Southwest	67 percent	101
West Central	70 percent	35
Southeast	30 percent	12
Lake Eufaula	25 percent	5

The Hunting Trail for People with Physical Disabilities provides opportunities for individuals with physical disabilities to participate in hunting in an environment developed to meet their needs. Twenty sites were available last year in this program. To date, 233 permits have been issued to physically disabled hunters.

Wildlife Section staff continued efforts supporting youth hunting programs. The youth dove hunt program hosted 38 hunts in 23 counties. The program is a cooperative effort between ADCNR, Auburn University, organizations like Ducks Unlimited and the National Wild Turkey Federation, local vendors and private landowners. The 2017 youth dove hunts had 698 youth participants. Of those, 129 (18.4 percent) were first-time hunters. Additionally, 21 WMAs hosted youth deer hunts and 23 WMAs hosted youth turkey hunts the weekend prior to the opening of regular gun seasons.

Deer Management: Information was collected on various WMAs and other sites to determine deer hunter participation and success, the physical condition of deer and the current status of deer populations. Deer were collected at 31 sites throughout Alabama to assess reproductive health and characteristics within those populations. The data collected from a hunting survey was used to assist in developing recommendations for hunting seasons and bag limits and evaluating the success of each hunting season. Hunters reported 82,484 harvested deer through the online deer and turkey harvest reporting system (Game Check) during the 2016-17 hunting season. The 2016-17 season was the first year for mandatory reporting of all deer harvests.

Cooperative Research: This past fiscal year, \$1.175 million in Wildlife Restoration Federal Assistance funds and approximately \$575,000 in external sponsorship funds were used to support 13 cooperative research projects between WFF and four different universities. Nine of these cooperative research projects were ongoing from previous years and four new cooperative research projects were established in FY2016.

Agency staff worked with Auburn University (AU) and Mississippi State University (MSU), University of Tennessee (UT) and the University of Georgia (UGA) with ongoing cooperative research projects related to deer recruitment, tick-borne diseases, genetics, wild turkey survival and recruitment rates, coyote spatial distributions, black bear home range selection, and wildlife habitat management. WFF personnel assisted AU researchers assessing the direct effects of tick born-diseases on deer by collecting ticks from 397 hunter killed deer at 12 WMAs and 55 deer in 11 counties during reproductive health checks. Staff also collected 24 tissue samples from hunter harvested deer as part of the research project being conducted by MSU that will at-

tempt to develop and validate a protocol for identifying genetic stock of deer in Alabama.

Wildlife personnel assisted AU researchers capture, band, and radio-mark 85 wild turkeys on Barbour, Oakmulgee and James D. Skyline WMAs to obtain data on wild turkey reproduction, survival and harvest. Approximately 30 man-hours were spent assisting AU researchers trap nine bears and PIT tag six bears to investigate genetic diversity, and 12 man-hours were expended determining attributes and distribution of denning sites of female black bears.

Three research theses were completed. The theses included research conclusions and management implications related to "Home Range and Excursion Movements of White-tailed Deer" (Jacobsen 2017), "Survival Rates of Adult White-tailed Deer and Movement Relative to Temporal Patters of Predation Risk" (Wiskirchen 2017), and "Estimating Use, Density, and Productivity of Eastern Wild Turkey in Alabama" (Gonnerman 2017).

Four new cooperative research projects with AU were established. Two projects focus on wildlife habitat management, where research efforts are aimed at quantifying effects of canopy reduction, thinning intensities, and prescribed fire in hardwood and pine ecosystems on habitat value for game species. The third cooperative research project is designed to evaluate the motivation for and economic impacts of hunting Alabama's WMAs. Whereas, the objective of the fourth cooperative research project is expected to improve our understanding of waterfowl population dynamics, movement patterns, habitat use, and hunting pressure of wintering waterfowl within the Tennessee River Valley to better inform decisions regarding waterfowl management on public and private lands that would increase hunter satisfaction.

Technical Assistance: 1,038 man-days were devoted to providing technical assistance to private landowners, corporations, hunting clubs, and government agencies. Biologists made 8,328 contacts and provided on-site inspections, reviewed and drafted management plans, and conducted various other management outreach activities to enhance wildlife management of Alabama's wildlife resources. One of the most popular avenues for dispensing wildlife management advice is through the agency's Deer Management Assistance Program (DMAP). DMAP included 87 cooperating landowners and hunting clubs in FY2017.

Providing landowners and land managers technical assistance to assist in implementing strategies to improve wildlife habitat on their lands continued to grow. As a result, a mutually beneficial 10-year partnership continued with the Natural Resources Conservation Service (NRCS). This partnership helps private landowners obtain farm bill program assistance while delivering better wildlife management advice. Under a cooperative agreement, seven WFF wildlife biologists worked out of NRCS offices and worked with NRCS personnel to deliver the programs. Biologists met with landowners to develop conservation plans and contracts. Biologists also participated in numerous workshops, tours, presentations, working groups, and trainings which reached hundreds of landowners and dozens of natural resource agency personnel.

Wildlife staff continued meetings and site visits with personnel from Alabama Power Company (APC) associated with the Coosa Wildlife Management Plan and Martin Dam APC hydroelectric relicensing projects. Staff reviewed documents regarding the development of wildlife, shoreline, threatened and endangered species and recreation management plans for the Martin, Jordan, Mitchell and Weiss hydro-electric projects. Plans are required by the Federal Energy Regulatory Commission. Notable

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Black bear near Satsuma in northern Mobile County.

accomplishments during this past year were final planning of the Pruitt's Island Waterfowl Area on Weiss Reservoir and the Martin Community Hunting Area on Martin Reservoir. Wildlife staff will continue active involvement in the development of wildlife, shoreline, threatened and endangered species and recreation management plans for all projects associated with hydro-electric power generation.

Wildlife Section personnel continue to participate in four joint ventures (JV): East Gulf Coastal Plain JV, Gulf Coast JV, Central Hardwoods JV, and Appalachian JV. A JV serves to lead a regional habitat conservation movement founded upon a science-based, landscape scale strategy. The partnerships can more effectively secure a sustainable future for birds and habitats. The staff also participates in the Gulf Coastal Plain and Ozarks Landscape Conservation Cooperative (LCC). The LCC will encompass more than one JV and will provide management direction and set priorities for conservation delivery. The LCC will address all taxa.

Nuisance wildlife information was disseminated to the public through a variety of media outlets, educational workshops, technical literature, and by personal correspondence. Due to their destructive nature and negative impact on wildlife habitat, feral hogs are a serious concern in Alabama. Partnerships continued across the state with personnel from ADCNR, the Alabama Cooperative Extension System, and USDA-Wildlife Services to provide informative workshops regarding feral hog biology, impacts of feral hogs on wildlife habitat, disease implications, current control methods and techniques, and the need to eliminate relocation of this species. Control of other nuisance and predator species, such as beavers, coyotes, and raccoons generate many requests for assistance from landowners and land managers due to their potential impacts on other game species, including white-tailed deer and wild turkeys. Personnel conducted and assisted with numerous workshops and seminars

around the state to educate landowners, hunting clubs, forestry owners, etc. with information to be proactive in their nuisance wildlife management activities. Additionally, informative articles about dealing with these species were made available to the public through the outdooralabama.com website. The ADCNR nuisance manual was used by personnel to provide the public with current information on nuisance wildlife species and nuisance issues ongoing across the state.

Forest Management: A major longleaf pine restoration project continued on Barbour WMA. When completed, this multiyear project will have restored longleaf pine habitat on approximately 4,000 acres at Barbour WMA.

A small area on the Lauderdale WMA received a salvage harvest due to Southern Pine Beetle infestation on the Manbone section of the WMA. Additional areas will be evaluated and marked for thinning during the next fiscal year. Invasive species, such as cogongrass, tallow tree, Japanese climbing fern, and bicolor lespedeza were scouted and treated on the WMA system. Cogongrass is a highly flammable non-native invasive plant listed on the Federal and Alabama noxious weed lists. Wildlife Section staff have been monitoring cogongrass on the wildlife management areas throughout the state, especially in central and south Alabama. Scattered areas of the grass have been undergoing treatment on the Fred T. Stimpson area, Upper State Sanctuary, and Barbour WMA for several seasons. The infested areas have been significantly reduced. The monitoring and chemical control will continue.

Education, Outreach and Range Development: Nine shooting ranges on WMAs, the Etowah Public Shooting Range, the Marengo Public Shooting Range, and the Conecuh National Forest Range continue to receive excellent public use. These ranges are open to the public on a daily basis during daylight hours. Maintenance is conducted throughout the year by staff mem-



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bers and volunteers. This provides a total of 12 agency operated shooting ranges in Alabama.

Twelve community archery parks receive excellent use and public support. All facilities have a youth range, adult range, and an elevated platform for simulating bow hunting conditions from a tree stand. A simulated ground blind is available for bow hunters to practice shooting from a kneeling or seated position. These ranges were constructed through a partnership with the respective city and the Archery Trade Association.

This was the 25th year that completing the Alabama Hunter Education Program was mandatory for first-time license buyers born on or after August 1, 1977. Throughout Alabama, 5,379 students participated in the 236 courses offered by certified instructors. The courses were taught by approximately 443 instructors, mostly volunteers, and totaled 3,544 hours of instruction. The time and expertise contributed by volunteers is essential to the success of the Hunter Education Program. Another 7,936 students took the online hunter education course, for a total of 13,315 students receiving certification.

Approximately 3,463 Alabamians participated in 63 youth shooting sports events that were conducted throughout the state to promote safe, responsible firearms handling and improve marksmanship skills. These one-day events are designed to introduce participants to muzzleloaders, shotguns, .22 rifles, pellet guns, and archery. Sport shooting is closely related to hunting activities and it is important for the public to have safe areas to participate in that sport. We will continue our efforts to increase developed shooting range sites.

Alabama's National Archery in the Schools Program (NASP) continued to show growth and now has approximately 400 schools participating. Teachers from approximately 700 schools have been certified to conduct the two-week target style archery curriculum. The 12th annual NASP state championship was held on April 7, 2017 and featured 1,248 participants from 62 schools. Approximately 4,124 student archers from 183 schools participated in nine regional qualifying events for the state championship. Teachers and school administrators have made positive statements regarding this program and report that student behavior, attendance, and attitudes have improved since implementing the NASP.

The Wildlife Section conducted 11 furbearer trapping workshops. Workshops were held in Baldwin, Butler, Geneva, Hale, Jackson, Franklin, Marion, Mobile, St. Clair and Lowndes counties. Additionally, a trapping workshop was conducted in Bullock County for Auburn University Wildlife Society members. Seventeen students attended, 10 of which were female. These cooperative trapper education workshops were a collaborative effort of the WFF, the United States Department of Agriculture Wildlife Services, the Tennessee Valley Authority, Safari Club International, the Alabama Trappers and Predator Control Association, The Alabama Forestry Commission and State Lands Division. One hundred and seventy students ranging from six to 18 years of age and 157 adults participated in the workshops. Females made up 9.7 percent of the attendees. Many of the students were accompanied by a parent or guardian.

Falconry Permits: As of September 30, there were 65 permitted falconers in Alabama at the following classification levels:

apprentice: 13; general: 29; and master: 23. This represents the highest total of permitted falconers Alabama has ever achieved with four new apprentice falconers obtaining permits. A regional falconry meet in February 2017 in Wilcox County was well attended and attracted falconers from several states. Falconers are located in 30 Alabama counties topped by Lee County with seven falconers, followed by Madison County with six.

Problems and Unmet Needs

Public Hunting: The loss and threat of losing non-agency owned land in WMAs is a significant problem. Land acquisitions for WMAs were made during the past year. Using Pittman-Robertson Federal Assistance funds, 4,111 acres were purchased and added in Dallas County to form the new Cedar Creek Special Opportunity Area (SOA), and 1,272 acres were purchased and added at Charles D. Kelley Autauga WMA. Forever Wild program funds were used as state match for federal assistance grant funds. This resulted in Forever Wild purchasing 1,441 acres serving as the state match at Cedar Creek SOA; and purchasing 574 acres, serving as the state match for the addition to Charles D. Kelley Autauga WMA. Several more tracts are being assessed for additions to Autauga WMA and the new Cedar Creek SOA in Dallas County. The Forever Wild Land Trust purchased 4,735 acres that is the new Uchee Creek SOA in Russell County. More non-agency owned land is likely to be lost in the future. The Wildlife Section will attempt to purchase other lands and provide additional incentives to encourage landowners to include lands in the program. We will also continue to work with Forever Wild to secure more land for public hunting.

Nuisance Wildlife: The occurrence of nuisance wildlife problems and conflicts continue to rise, especially as we deal with an increasingly urbanized society. This portion of the public is typically not skilled in dealing with wildlife issues. Also, the urban/suburban setting limits common solutions to deal with many of these problems. At the district level, a considerable amount of work time is spent assisting the public with nuisance wildlife calls. As the Division becomes more active in dealing with these non-traditional wildlife issues, time management and funding will become more challenging. The Wildlife Section has issued approximately 107 nuisance wildlife control operator permits across the state. These permits allow private companies/individuals to deal with nuisance wildlife issues.

State Funding: Federal funding associated with the Federal Aid to Wildlife Restoration Act has increased significantly during the past five years. The matching state dollars required to fully utilize all of the federal dollars (25:75) have been limited and could lead to reversions of federal dollars if matching opportunities are not available. WFF staff has collaborated with the Forever Wild Board and worked cooperatively to utilize the Forever Wild funding as a state match source to capture the federal apportionment that is beyond the amount our traditional state dollars can capture to assist with land acquisitions for WMAs. We are exploring other options to fully utilize our federal dollars through partnerships with outside entities and third party in-kind match.



MANDATORY GAME CHECK—WHAT DID WE LEARN?

By Chuck Sykes, Wildlife and Freshwater Fisheries Director

Despite what conspiracy theorists and the anti-government crowd had to say, the world of deer hunting didn't come to an end this year and more than 80,000 deer were reported into the Game Check system. I would like to think that the hard work and miles on the road conducting more than 50 educational seminars paid off. The best numbers produced by voluntary Game Check occurred during the 2013-14 deer season when fewer than 20,000 deer were reported. A combined total of 51,267 deer were reported during the three seasons of voluntary Game Check while 82,414 were reported during the inaugural year of mandatory Game Check.

WFF Wildlife Biologist Justin Gilcrest assist First time hunter Don Prator fill out a paper harvest record.



More than 50 percent of the deer reported through voluntary Game Check were entered by telephone. This method of reporting was not only costly to the WFF Division, but it also yielded the most incomplete data of the three available reporting methods. By contrast, this year only about 30 percent of the hunters used the 800 number to report their harvests. I consider these stats to be an enormous success for our Division.

The update of the Outdoor Alabama App made the reporting process a breeze. Once the app had been downloaded and the user's profile established, the actual process of reporting a harvest took less than one minute. This could be accomplished whether cell service was available or not. Almost 50 percent of the hunters chose to report using the Outdoor Alabama app. Many of the Game Check critics were silenced when they realized they no longer had to carry a paper license or paper harvest record if they simply downloaded the app. Deer could be entered into the system through the app even if you didn't have cell service. This data was stored on the phone through the app until cell service was again gained and the information was downloaded. How much easier could we possibly make it for the hunters?

Anyone who attended one of the seminars knows that our Division has been estimating deer numbers and harvest numbers based on a mail survey. This survey is distributed to approximately 10,000 licensed hunters each year. Roughly 3,000 recipients participate and return the completed survey. The data from the participant responses is then extrapolated for the entire state. Last year, the mail survey estimated 295,000 deer (115,000 bucks and 180,000 does) harvested. That's about 60 percent does and 40 percent bucks that were accounted for in the yearly harvest. I would have guessed the ratio to be more on the lines of 70-30. Remember that Game Check had 82,414 deer (45,529 bucks and 36,850 does) reported this year. That's quite a bit lower than what the mail survey estimated.

Based on an informal study conducted by our staff, we are estimating 35 percent of the hunters participated in Game Check this year. Based on that, approximately 235,500 deer were actually harvested. That's a bit more in line with what the mail survey estimated. I can with confidence attribute the reduced estimated harvest numbers to the severe drought that occurred during the late summer and fall.

Some other interesting preliminary findings have come to light when comparing the annual mail survey results to mandatory Game Check. First, the highest reported county with a total harvest of 2,513 was . . . Unknown! Those came in from the 800 number. The county with the top harvest according to the 2015-16 mail survey was Macon. According to Game Check, Macon was twelfth. Jackson County was the leader during all three years of voluntary Game Check and finished number two when it became mandatory. But, according to the mail survey, Jackson was nothing special, falling in the middle of the pack.



The one piece of data that I thought was most significant was the buck-to-doe ratios. For instance, Dallas County, the number one reported county in Game Check, showed 2,497 deer (1,181 bucks and 1,315 does). That's practically a 1:1 ratio. The mail survey had Dallas County with almost 10,000 deer harvested and approximately 1:3 buck-to-doe ratio. Many of the top counties also had these same results. I guess that is what surprised me the most. I would definitely not have counted on Alabama hunters harvesting more bucks than does. Is this really the way it is or did hunters just simply not feel the need to report does? Who knows? I guess time will give us the answers.

Turkey hunters reported 9,174 birds, which was almost twice as many as the first three years of voluntary Game Check, combined at 5,182. We estimated approximately 40 percent of the turkeys harvested were reported giving us an estimated total harvest of approximately 23,000. Only 22 percent of turkey hunters chose to use the 800 number to report their harvests.

I would like to thank the hunters who did participate in Game Check. We know it is a big step to take, but it will be worth it for the overall health of our deer herd and the management of one of our most precious natural resources. We are not going to make knee-jerk reactions and initiate changes based on one year of data. This is going to be a long-term process. Trend data must be established before any changes are implemented.

However, I can say a couple of things with total confidence: 1. Game Check worked. 2. We need more hunters to participate. If you want to see all the data referenced in this article, you can find it at www.outdooralabama.com. All of the mail survey results as well as Game Check data can be found there. ■



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