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An Audit Report on

# Performance Measures at the Parks and Wildlife Department

May 2012 Report No. 12-033



An Audit Report on

## Performance Measures at the Parks and Wildlife Department

SAO Report No. 12-033 May 2012

#### Overall Conclusion

The Parks and Wildlife Department (Department) reported reliable results for 6 (67 percent) of 9 key performance measures tested for fiscal year 2011 and for 4 (67 percent) of 6 key performance measures tested for the first quarter of fiscal year 2012. A result is considered reliable if it is certified or certified with qualification.

The following key performance measures were <u>certified</u> for fiscal year 2011 and the first quarter of fiscal year 2012:

- Number of Grant Assisted Projects Completed.
- > Number of Combination Licenses Sold.
- Percent of Scheduled Major Repair/Construction Projects Completed.<sup>1</sup>
- Number of Major Repair/Construction Projects Completed.

The following key performance measures were certified with qualification for fiscal year 2011

and the first quarter of fiscal year 2012 because of internal control weaknesses in the Department's processes for calculating and reporting performance measure information and other issues:

- ➤ Percent of Public Compliance with Agency Rules and Regulations. 1
- > Hours Patrolled in Boats.

#### **Background Information**

The Parks and Wildlife Department (Department) is responsible for managing and conserving the natural and cultural resources of Texas. Overall, the Department was appropriated \$291,281,774 and 3,180 employees for fiscal year 2011. The performance measures audited pertain to all four of the Department's goals:

- Conserve natural resources.
- Provide access to state and local parks.
- Increase awareness and compliance.
- Manage capital programs.

The divisions that oversee the performance measures audited are:

- Inland and Coastal Fisheries.
- Infrastructure.
- Law Enforcement.
- Communications.
- Administrative Resources.
- State Parks.

<sup>&</sup>lt;sup>1</sup> The Department reported this performance measure on only an annual basis; therefore, auditors did not test this performance measure for the first quarter of fiscal year 2012.

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The following key performance measures were <u>inaccurate</u> for fiscal year 2011 and the first quarter of fiscal year 2012 because there was a 5 percent or higher error rate in the sample of documentation tested:

- ➤ Percent of Fish and Wildlife Kills or Pollution Cases Resolved Successfully.<sup>2</sup>
- ➤ Number of Fingerlings Stocked Inland Fisheries (in millions).

In addition, for the Number of Students Trained in Hunter Education performance measure:

- ➤ Reported results for fiscal year 2011 were <u>inaccurate</u> because the actual performance was not within 5 percent of reported performance. Specifically, the Department entered an additional 3,427 students (9 percent) into the system it used to calculate the performance measure up to 6 months after the fiscal year ended.
- Factors prevented certification of the reported results for the first quarter of fiscal year 2012 (September 2011 to November 2011) because auditors could not determine an accurate final calculation due to the lag times between the hunter education course dates and the dates on which the Department enters the courses and related student information into its system. As of February 2012, the Department continued to enter students who had taken hunter education courses during the quarter ending November 2011.

Table 1 on the next page summarizes the certification results for the key performance measures tested.

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<sup>&</sup>lt;sup>2</sup> The Department reported this performance measure on only an annual basis; therefore, auditors did not test this performance measure for the first quarter of fiscal year 2012.

Table 1

Parks and Wildlife Department (Agency No. 802)						
Related Objective or Strategy, Classification	Description of Performance Measure	Fiscal Year	Results Reported in the Automated Budget and Evaluation System of Texas (ABEST)	Certification Results <sup>a</sup>		
A, Outcome	Percent of Fish and Wildlife Kills or Pollution Cases Resolved Successfully b	2011	76.04%	Inaccurate		
A.2.2, Output	Number of Fingerlings Stocked - Inland Fisheries (in millions)	2011 2012 - First Quarter	13.39 0.13	Inaccurate Inaccurate		
B.2.1, Output	Number of Grant Assisted Projects Completed	2011 2012 - First Quarter	38 7	Certified Certified		
C, Outcome	Percent of Public Compliance with Agency Rules and Regulations	2011	97.77%	Certified with Qualification		
C.1.1, Output	Hours Patrolled in Boats	2011 2012 - First Quarter	160,654.50 16,332.80	Certified with Qualification Certified with Qualification		
C.2.1, Output	Number of Students Trained in Hunter Education <sup>C</sup>	2011 2012 - First Quarter	38,935 22,446	Inaccurate Factors Prevented Certification		
C.3.1, Output	Number of Combination Licenses Sold	2011 2012 - First Quarter	536,699 497,022	Certified Certified		
D, Outcome	Percent of Scheduled Major Repair/Construction Projects Completed b	2011	32.04%	Certified		
D.1.1, Output	Number of Major Repair/Construction Projects Completed	2011 2012 - First Quarter	42 16	Certified Certified		

<sup>&</sup>lt;sup>a</sup> A performance measure is **certified** if reported performance is accurate within plus or minus 5 percent and if it appears that controls to ensure accuracy are in place for collecting and reporting performance data.

A performance measure is certified with qualification when reported performance appears accurate but the controls over data collection and reporting are not adequate to ensure continued accuracy. A performance measure is also certified with qualification when controls are strong but source documentation is unavailable for testing. A performance measure is also certified with qualification if agency calculation of performance deviated from the performance measure definition but the deviation caused less than a 5 percent difference between the number reported to ABEST and the correct performance measure result.

A performance measure is **inaccurate** when the actual performance is not within 5 percent of reported performance, or when there is more than a 5 percent error rate in the sample of documentation tested. A performance measure is also inaccurate if the agency's calculation deviated from the performance measure definition and caused more than a 5 percent difference between the number reported to ABEST and the correct performance measure result.

A factors prevented certification designation is used if documentation in unavailable and controls are not adequate to ensure accuracy. This designation also will be used when there is a deviation from the performance measure definition and the auditor cannot determine the correct performance measure result.

b The Department reports this performance measure on an annual basis; therefore, auditors did not test this performance measure for the first quarter of fiscal year 2012.

<sup>&</sup>lt;sup>C</sup> In March 2012, the Department updated its performance measures in ABEST for fiscal year 2011 (42,362) and for the first quarter of fiscal year 2012 (23,470).

#### Summary of Management's Response

The Department agreed with the recommendations in this report.

#### Summary of Information Technology Review

Auditors assessed the information technology controls over the Department's information systems and the automated processes the Department used for performance measure data. Auditors evaluated general information technology controls, including logical access controls, program change management, and physical security processes. Auditors also reviewed application controls, including input controls, process controls, and output controls. With some exceptions, the Department's general and application controls were adequate. The Department should strengthen its administration of user access, program change management, and policies and procedures. It should be noted that auditors did not perform control work on the system that the Department used to track fish stockings from state inland hatcheries because of a hardware failure that occurred in January 2012, which prompted the Department to implement several changes to the system and resulted in a significantly different control environment than was present during the scope of this audit.

Auditors determined that the data in the information systems the Department used in its performance measures calculations for fiscal year 2011 and the first quarter of fiscal year 2012 were sufficiently reliable for the purposes of this audit by testing key access and application controls, reviewing data provided for completeness, and interviewing personnel knowledgeable about the systems.

#### Summary of Objectives, Scope, and Methodology

The objectives of the audit were to determine whether the Department:

- ▶ Is accurately reporting its performance measures to ABEST.
- > Has adequate controls in place over the collection, calculation, and reporting of its performance measures.

The audit scope included nine key performance measures the Department reported for fiscal year 2011 and six performance measures the Department reported for the first quarter of fiscal year 2012. Auditors reviewed the controls over submission of the data used in reporting the performance measures and traced performance measure information to the original source documents when possible.

The audit methodology consisted of selecting nine key performance measures for fiscal year 2011 and six key performance measures for the first quarter of fiscal year 2012, auditing reported results for accuracy and adherence to performance measure definitions, evaluating controls over the Department's performance measure calculation processes and related information systems, and testing of

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original source documentation. Auditors assessed the data reliability of the information used to report performance measures when possible. This assessment included performing an electronic analysis to determine whether anomalies existed in the data.

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#### Detailed Results

Chapter 1

The Department Should Improve Certain Controls and Processes Over Some Performance Measures

> The Parks and Wildlife Department (Department) reported reliable results for 6 (67 percent) of 9 key performance measures tested for fiscal year 2011 and for 4 (67 percent) of 6 key performance measures tested for the first quarter of fiscal year 2012. A result is considered reliable if it is certified or certified with qualification.

**Key Measures** 

**Number of Grant Assisted Projects Completed** 

**Number of Combination Licenses Sold** 

Percent of Scheduled Major Repair/Construction Projects Completed<sup>3</sup>

These key performance measures were certified for fiscal year 2011 and the

Number of Major Repair/Construction Projects Completed

first quarter of fiscal year 2012. The Department accurately reported the performance measure results to the Automated Budget and Evaluation System of Texas (ABEST) within 5 percent of actual performance, based on auditor

recalculations and tests of supporting documentation. The Department also had strong controls over the input, processing, and review of performance measure data, and those controls were operating effectively to ensure that the

Department calculated and reported the performance measures accurately.

A performance measure is certified if reported performance is accurate within plus or minus 5 percent of actual performance and if it appears that controls to ensure accuracy are in place for collecting and reporting performance data.

> <sup>3</sup> The Department reported this performance measure on only an annual basis; therefore, auditors did not test this performance measure for the first quarter of fiscal year 2012.

Results: Certified

#### Percent of Public Compliance with Agency Rules and Regulations

This performance measure was certified with qualification for fiscal year 2011 because the Department's calculation methodology deviated from the

## Results: Certified with Qualification

A performance measure is certified with qualification when reported performance appears accurate but the controls over data collection and reporting are not adequate to ensure continued accuracy. A performance measure is also certified with qualification if agency calculation of performance deviated from the performance measure definition but the deviation caused less than a 5 percent difference between the number reported to ABEST and the correct performance measure result.

performance measure definition. The performance measure definition states that the Department should "divide the total number of fishing, hunting, water safety, and other contacts (field only) into the total number of persons found to be noncompliant (total number of arrests and warnings)." However, the Department did not count all field contacts made. Instead, the Department used a formula to extrapolate a monthly total based on the number of field contacts made on three randomly assigned days during a month.

While the ABEST performance measure definition does not allow an extrapolated field contact total, the Department's policies and procedures for this performance measure state that extrapolation factors should be used to derive the field contact total. Although the ABEST performance measure definitions for two non-key

performance measures (Hunting and Fishing Contacts and Water Safety Contacts) reference the need to extrapolate the field contacts, the definition for this key performance measure does not include that language.

In addition, because the Department's Law Enforcement Citation System continually updates the total number of citations when there is a change in the status to any citation, there is an increased risk that the Department may report inaccurate results for this performance measure in the future. Because updated citation data is entered sometimes months after the actual event occurred, the report that the Department uses to calculate this performance measure will pull different information every time it is run.

#### Recommendations

The Department should:

- Coordinate with the Legislative Budget Board and the Governor's Office
  of Budget, Planning, and Policy to create an ABEST performance measure
  definition that accurately reflects the use of extrapolation in the
  calculation.
- Retain a detailed report that identifies each citation issued for the given performance measure reporting time period.

#### Management's Response

1. Coordinate with the Legislative Budget Board and the Governor's Office of Budget, Planning and Policy to create an ABEST measure definition that accurately reflects the use of extrapolation in the calculation.

TPWD acknowledges that the definition for Percent of Public Compliance with Agency Rules and Regulations could be clarified to prevent any future misunderstanding about the data used to calculate the measure. On April 20, 2012, the agency submitted a request to modify the definition to the LBB and Governor's Office.

Responsible Staff: Administrative Resources and Law Enforcement

Implementation Date: Completed, awaiting approval from the LBB and Governor's Office

## 2. Retain a detailed report that identifies each citation issued for the given performance measure reporting time period.

The summary report used to provide citation data lists citations by category, specific violation, and disposition and is retained as documentation of figures reported to ABEST. Individual law enforcement offices in the field retain copies of each citation (which includes information on the issuing game warden, violation date, charge(s) filed, violator name and descriptors, and a unique citation number). These records are retained for the reporting year plus 5 years.

The SAO requirements related to retention of detailed documentation state that "the agency should be capable of producing a list of all items counted for a particular measure for the current reporting period or a previous reporting period". The department believes that the retention of the above report and actual citations in the field offices meets this requirement. However, in order to ensure the ability to more easily track and tie back to records reported in the future, the Law Enforcement Division will, at the time of measure reporting, also run a separate report to show all citations issued by officer and will maintain an electronic copy for audit/records retention purposes. Due to the volume and length of such a report, a paper copy will not be retained.

Responsible Staff: Law Enforcement

Implementation Date: October 2012, upon next annual reporting of performance measure for FY12 time frame.

#### **Hours Patrolled in Boats**

This performance measure was certified with qualification for fiscal year 2011 and the first quarter of 2012 because, although reported results were within 5 percent of the actual results for both time periods, auditors identified some control weaknesses. Department employees were able to override a key field in the Department's Electronic Timekeeping System (ETS) that identified whether the hours recorded were by boat, land, or air. On a spreadsheet it used to calculate and report this performance measure, the Department identified and corrected almost all coding changes that were made in error. However, the Department did not correct all errors in ETS.

The Department implemented a control in April 2011 to make that key field in ETS a system-generated field and not editable by users. That improved control structure significantly reduced the number of corrections that were needed on the spreadsheet. For the first and second quarters of fiscal year 2011, the Department corrected 1,899 hours that were miscoded in ETS. In contrast, the Department corrected only 114.50 hours for the third and fourth quarters of fiscal year 2011. Auditors identified additional errors in fiscal year 2011 that the Department had not corrected; however, those errors did not cause the recalculated results to be more than 5 percent different from the reported results. The Department made minimal corrections in the hours for the first quarter of fiscal year 2012, and auditors did not identify any additional errors.

#### Recommendation

The Department should take steps necessary to ensure that ETS accurately reflects information necessary to calculate this key performance measure.

#### Management's Response

The core issue with ETS overrides was resolved by the Department in April 2011, dramatically reducing the number of errors and corrections required in subsequent periods. It should be noted that FY2011 marked the first year of implementation of the new employee time sheet system. Recognizing that the initial period of transition to the new system posed some risks in terms of consistency/reliability of data and reporting, the Law Enforcement Division implemented a process to ensure thorough manual verification of employee hours, identification of errors, and manual corrections so that the information reported to ABEST was accurate. The decision to manually correct the excel file rather than have affected employees resubmit timesheets through ETS was deliberate, and based on determination of how best to use of staff time and effort given competing demands. Moving forward, the department plans to continue to use the same verification process, however any errors noted will be sent back to responsible staff for correction in the ETS system.

Responsible Staff: Law Enforcement

*Implementation Date: June 2012, effective for 3<sup>rd</sup> quarter FY2012 performance measure reporting.* 

#### Percent of Fish and Wildlife Kills or Pollution Cases Resolved Successfully

#### Results: Inaccurate

A performance measure is inaccurate when the actual performance is not within 5 percent of reported performance, or when there is more than a five percent error in the sample of documentation tested. A performance measure is also inaccurate if the agency's calculation deviated from the performance measure definition and caused more than a 5 percent difference between the number reported to ABEST and the correct performance measure result.

This performance measure was inaccurate for fiscal year 2011 because, although auditors were able to recalculate the results within 5 percent of the amount that the Department reported, there was a 5 percent error in the sample of documentation that auditors tested. In 3 (5 percent) of 61 cases tested, the case status on the spreadsheet used to calculate the performance measures did not match the status on the complaint investigation form. This performance measure reports the percentage of fish and wildlife kills and pollution cases that a Department biologist investigated and conclusively identified the cause of the case.

#### Recommendation

The Department should ensure that the data used in calculating this performance measure is accurate and is properly supported and recorded.

#### Management's Response

In the three cases cited, the case status on the spreadsheet did not match the complaint investigation form due to data entry errors. For at least two of the three cases, the cause had actually been identified as evidenced by the comments, but staff checked the wrong box on the investigation form. In these cases the final spreadsheet used to report the information to ABEST, while not reflecting the exact same information as the investigation form, was correct.

In order to minimize the possibility of these errors from recurring, the following actions will be implemented:

- 1. Modifications to the field summary sheet to reduce errors in recording of data.
- 2. Shift to use of one data source for the number of cases for which the cause has been confirmed.
- 3. Clarify process and procedures to ensure field investigation forms reconcile with the data base.

Responsible Staff: Coastal Fisheries and Inland Fisheries

Implementation Date: June 30, 2012

#### Number of Fingerlings Stocked - Inland Fisheries (in millions)

This performance measure was inaccurate for fiscal year 2011 and the first quarter of fiscal year 2012 because, although auditors were able to recalculate the results within 5 percent of the amount that the Department reported, there was more than a 5 percent error in the sample of documentation that auditors tested for both time frames.

#### Fingerlings Stocked

Department policies define a fingerling as a fish greater than 1 inch in length that has been reared in a pond or other artificial environment for at least 30 days but less than 1 year. The Department has five inland fish hatcheries for breeding and stocking various species in public waters across the state. Hatcheries weigh and count multiple samples of fingerlings to determine an average number of fingerlings per kilogram and document that information on a culture worksheet.

Department staff multiply that averaged factor by the weight of the fingerlings stocked to determine the total number of fingerlings stocked, which is documented on trip sheets. The Department uses trip sheet documents to record the total number of fingerlings stocked; the date and time of the trip; and other information including the origin, destination, and other characteristics of the stocking. However, the trip sheet does not record the average number of fingerlings per kilogram or variables used for that calculation. That information is recorded on a culture worksheet (see text box for more information).

Auditors identified errors in the calculations of the number of fingerlings stocked for 7 (19 percent) of 37 trip sheets tested for fiscal year 2011 and 4 (18 percent) of 22 trip sheets tested for fiscal year 2012. The errors were primarily caused by mathematical errors on the supporting worksheets. In addition, Department staff did not consistently review the calculations on the culture worksheets to verify that they were mathematically accurate or confirm there was consistent information on the culture worksheets and the trip sheets.

In addition, the Department has two sets of policies and procedures that are contradictory on the number of samples of fingerlings that must be obtained to calculate the average number of fingerlings per kilogram. The Department's *Inland Fisheries Enumeration Manual* sets the required number of samples based on the type of fingerling.

The majority of samples sizes Department employees used did not follow either set of policies during fiscal year 2011 or the first quarter of fiscal year 2012. Specifically, for 56 (95 percent) of the 59 records tested, the number of samples taken did not comply with either the Department's *Inland Fisheries Enumeration Manual* or its performance measure procedures. For 57 of the 59 records tested, the Department should have taken 10 samples for each record. For the other 2 records tested, the Department should have taken 3 samples for each record. In contrast, the Department's performance measure procedures state that the Department should take 5 samples, regardless of the type of fingerling. As a result, Department employees may not know how many samples to take and there is an increased risk that the Department will receive inconsistent information regarding the average number of fingerlings per kilogram and the total fingerlings stocked.

The Department also does not have a standard form to document the samples taken by the hatcheries. As a result, each hatchery uses a different form, which increases the risk that the Department will receive inconsistent

information. For example, some forms do not have space for recording the samples, some forms label the average number of fingerling calculation differently, and one hatchery calculates the samples in pounds and then converts them to kilograms.

#### Recommendations

The Department should:

- Record the average number of fingerlings per kilogram on trip sheets.
- Review the calculations on the culture worksheets and trip sheets to verify that the calculations are accurate and the information is consistent, and it should periodically reconcile the information on the two documents.
- Ensure that its *Inland Fisheries Enumeration Manual* and performance measure procedures are consistent, and verify that employees are collecting the required number of samples of fingerlings in compliance with its policies.
- Develop standard forms for documenting samples of fingerlings. Standard forms should incorporate guidelines, such as providing space to record performance measurement samples, making clear what variables are to be recorded, how they are to be calculated, and what units to use.

#### Management's Response

TPWD concurs with the audit findings and recommendations related to this performance measure. However, it should be noted that while the errors identified in the audit exceeded the threshold set for each record reviewed, the magnitude of the error is not likely to change the total reported in ABEST, as the number of fingerlings is reported in the millions and not as an exact total.

#### The Department should:

1. Record the average number of fingerlings per kilogram on trip sheets.

The standard trip worksheet will be modified to include the number of fingerlings estimated per kilogram. Additionally, a field will be added to the stocking database so that the data is preserved with the official stocking record.

2. Review the calculations on the culture worksheets and trip sheets to verify that the calculations are accurate and the information is consistent, and it should periodically reconcile the information on the two documents.

Data on the harvest and trip worksheets will be reconciled and verified as accurate by an independent reviewer prior to being entered in to the stocking database.

3. Ensure that its Inland Fisheries Enumeration Manual and performance measure procedures are consistent, and verify that employees are collecting the required number of samples of fingerlings in compliance with its policies.

The Inland Fisheries Enumeration Manual will be updated and modified to make it consistent with the performance measures procedures requiring a minimum of 5 samples.

4. Develop standard forms for documenting samples of fingerlings. Standard forms should incorporate guidelines, such as providing space to record performance measurement samples, making clear what variables are to be recorded, how they are to be calculated, and what units to use.

A standard harvest worksheet will be developed and employed at each facility.

Responsible Staff: Inland Fisheries

Implementation Date: June 30, 2012

#### Number of Students Trained in Hunter Education

For fiscal year 2011, this performance measure was inaccurate. Factors prevented certification of this performance measure for the first quarter of fiscal year 2012.

For fiscal year 2011, this performance measure was <u>inaccurate</u> because auditors' recalculation differed by more than 5 percent from the reported performance. The Department's policies and procedures state that all instructors are to submit the number of students enrolled to Department headquarters within seven days of course completion. However, the

Department did not receive or enter the information in a timely manner. It entered an additional 3,427 students (9 percent) into the system it used to calculate the performance measure up to 6 months after the fiscal year ended. Because the Department sometimes entered updated enrollment data months after the actual class occurred, the report that the Department uses to calculate this performance measure will likely pull different information every time it is run.

For the first quarter of fiscal year 2012, <u>factors prevented certification</u> of this performance measure because auditors could not determine an

#### **Factors Prevented Certification**

A factors prevented certification designation is used if documentation is unavailable and controls are not adequate to ensure accuracy. This designation also will be used when there is a deviation from the performance measure definition and the auditor cannot determine the correct performance measure result.

accurate final calculation due to the lag times between hunter education course dates and the dates on which the Department enters the courses and related student information into its system. As of February 2012, the Department continued to enter into its system students who had taken hunter education courses during the first quarter of fiscal year 2012, which ended November 30, 2011.

In March 2012, the Department updated in ABEST its reported results for fiscal year 2011 and the first quarter of fiscal year 2012.

#### Recommendations

The Department should:

- Work with hunter education instructors to increase compliance with the Department's internal policies and procedures to help ensure that the Department receives and enters the number of students enrolled in hunter education courses in a timely manner.
- Update ABEST information, when necessary, in a timely manner.

#### Management's Response

#### 1. Work with hunter education instructors to increase compliance

Currently, TPWD communicates requirements related to timely submission of records by volunteer instructors through a number of means, including information listed in the instructor's manuals provided to each volunteer instructor, and through regular reminders via direct mail, newsletters, and instructor workshops. This communication occurs on a regular basis. TPWD will continue these efforts to notify volunteer instructors of the due dates for records submission.

Given issues with ensuring reporting compliance from a volunteer force, TPWD will also seek changes to the measure definition to mitigate problems stemming from late entry of data. These include:

- Extending the date by which hunter and boater education information must be submitted in ABEST to December 15;
- Language specifying that throughout any given fiscal year, updates will be made to each previous quarter during the following reporting period;
- Language specifying that any records entered after December 15 for the previous fiscal year will not be counted for the purpose of the measures reporting.

If changes to the measure definition are not approved by the LBB and Governor's Office, the Department will need to re-evaluate options to address the concerns cited. These may involve added staff and resources that are not available to the agency at this time.

Over the long-term, a more effective solution to addressing the issues cited by the SAO would be development of a new hunter and boater education system, through an outside vendor, to streamline the overall process, reduce the reporting burden on volunteer instructors, and ultimately allow for more timely recording of student and class information. The Communications Division is currently evaluating this possibility.

Responsible Staff: Communications Division and Administrative Resources

Implementation Date: Changes to implement measure definition changes, if approved, will take place for the first quarterly reporting period of the 2014-15 biennium. Evaluation of a new system is estimated to be complete over the next 9 months.

#### 2. Update ABEST information, when necessary, in a timely manner.

It should be noted that the mandated change (instituted in 2010) to report this measure based on actual class date rather than "date entered" has served to exacerbate issues related to accurate reporting of this measure within the required timeframes.

As part of TPWD's revised internal process, for each quarterly reporting period (2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup>) the Communications Division will submit updated figures for the prior quarter to Administrative Resource Division performance measure staff, and these updates will be made in ABEST as part of quarterly measure reports.

Responsible Staff: Communications Division and Administrative Resources.

Implementation Date: Process for ABEST updates will be implemented effective for the next quarterly reporting period due date.

#### The Department Should Improve Certain Controls Over Its Information Systems

Overall, the Department's general information technology controls and application controls provide for the security and integrity of the information within automated systems, with some exceptions. Specifically, the Department should improve its controls over access management and program change management for the systems the Department uses. Auditors reviewed five information systems for the nine performance measures audited:

- The Hunter, Angler, and Boater Education System is a Department-designed application that allows Department staff to track students who enrolled, attended, and were certified in hunter education classes that the Department offers. The Department used that system in its calculations for the Number of Students Trained in Hunter Education performance measure.
- The Employee Time System is a Department-designed application that allows employees to record time to the various activities they perform while on duty. The Department used that system in its calculations for the Hours Patrolled in Boats performance measure.
- Tripsheet is a Department-designed application that records various fish stocking activities throughout Texas. The Department used that system in its calculations for the Number of Fingerlings Stocked Inland Fisheries (in millions) performance measure. Auditors did not perform control work for that system due to a hardware failure that occurred in January 2012 that prompted the Department to implement several changes to the system and resulted in a significantly different control environment than was present during the scope of this audit.
- The Law Enforcement System is a Department-designed system that helps track the Law Enforcement Division's activities, including the issuance of warnings and citations related to the various regulations that Department employees enforce. The Department used this system in its calculations for the Percent of Public Compliance with Agency Rules and Regulations performance measure.
- Texas License Connection is used by authorized sales agents for the sale of individual and commercial hunting and fishing licenses. The Department used that system in its calculations for the Number of Combination Licenses Sold performance measure.

The Department should improve certain general and application controls.

Access management. Auditors identified some areas in which the Department should improve its administration of access management. Specifically:

- Both the Hunter, Angler, and Boater Education System and Tripsheet lacked adequate segregation of duties for programmers to help prevent inadvertent changes to the data in those systems. Those two systems allow users to delete records without any type of audit trail. For example, Tripsheet could not account for 29 potentially missing trips between September 1, 2010, and November 30, 2011, that may have resulted from Department staff deleting the records.
- The Hunter, Angler, and Boater Education System allows the modification of historical data that could result in unauthorized changes to the data. In addition, the Hunter, Angler, and Boater Education System does not limit user access to only what is needed for business purposes.
- The Department did not modify access in a timely manner for temporary employees who either left employment or changed duties within the Hunter, Angler, and Boater Education System and the Law Enforcement System. For example, the Department did not remove the access for two temporary employees until three months after they left employment.
- Network access to the underlying performance measure data (1) allowed employees in entire divisions to modify the files and (2) was not updated or removed in a timely manner.

Program change management. Auditors identified some areas in which the Department should improve its processes for making changes to its systems. Specifically:

- The Hunter, Angler, and Boater Education System allows users to make changes that could lead to data reliability issues within the system.
- The Department could not provide documentation requesting and approving one change made to the Employee Time System.
- The Department could not provide documentation of various changes made to Tripsheet. In addition, when changes were required, programmers could make the changes without any additional review of the changes.

Properly managing changes could help the Department ensure that changes are required, tested, and approved prior to implementation to reduce the risk of data integrity problems.

#### Recommendations

The Department should implement:

- Adequate segregation of duties within the Hunter, Angler, and Boater Education System and Tripsheet so that no one person has control over the system, program code, and data. In addition, users should not be able to delete records without an audit trail.
- Controls to limit access to only what the user needs for business purposes for the network and systems.
- Processes to help ensure the timely modification and/or removal of all access for temporary staff.
- Controls to prevent users from modifying the Hunter, Angler, and Boater Education System code.
- Processes that help ensure that changes to systems are properly documented.
- Processes that require changes to Tripsheet code to be reviewed by another staff member before the changes are migrated to the production environment.

#### Management's Response

1. Adequate segregation of duties within the Hunter, Angler, and Boater Education System and Tripsheet so that no one person has control over the system, program code, and data. In addition, users should not be able to delete records without an audit trail.

The Department agrees that the Hunter, Angler, and Boater Education System lacked adequate segregation of duties. This is due to the underlying Microsoft Access technology that the application is written in which allows desktop users to manipulate data. The Information Technology Division (IT) plans to create an executable file of the Microsoft Access application to be loaded on each client machine that will prevent application, program code and data from being modified. Additionally, the application will be modified to institute group security that limits access to only duties that group should perform based on business need. IT management also agrees that the Hunter, Angler, and Boater Education System should have a process by which users must document any deletions. To address this issue, the database will be modified to archive deleted records.

Responsible Staff: Information Technology

Implementation Date: September 2012

The Department agrees with this recommendation as it relates to the Tripsheet Application and will develop procedures to ensure segregation of duties by designating staff responsible for making changes to the data that are separate from staff that develop the application and program code.

The Department agrees that the Tripsheet application should have a process by which users must document any deletions. To address this issue, we will reinstate a process to track deleted records by sending the program administrator an email to be logged whenever a deletion of a record occurs. The log entry will include information related to why the record was deleted. We continue working on a more advanced solution to archive deleted records to a database table.

Responsible Staff: Inland Fisheries

Implementation Date: June 30, 2012

## 2. Controls to limit access to only what the user needs for business purposes for the network and systems.

The Department agrees with the recommendation to limit network access to only those users who require it from a business perspective. We will work immediately to implement permissions controls for the specific directories and files noted in the audit. We expect the process to take 2 weeks. IT management has a long range plan for the classification of data that resides on Network drives. We will provide users with procedures describing when they are responsible for requesting limited access to data stored on network drives. We will separate a controlled area for this type of data and work with the requesting user to ensure that the data is properly protected. It should be noted that there was limited access to these files through the folder structure, and the directories and file address in this audit are not easily accessible by unauthorized users/normal means of accessing files at the agency. It should also be noted that all files in one specific directory are all password protected via Excel.

Responsible Staff: Information Technology

*Implementation Date:* June 2013

The Department agrees that controls at the application level are necessary to provide limited access based on business needs for the Hunter, Angler, and Boater Education System. IT management plans to implement controls through instituting group security at the application level.

Responsible Staff: Information Technology

Implementation Date: September 2012

## 3. Processes to help ensure the timely modification and/or removal of access for temporary staff.

The Department agrees with this finding and has removed the access for the particular findings that were discovered in this audit. Long range, IT management plans to put a process in place that will remove access to temporary employees upon a predetermined dismissal date. IT management also plans to put an agency standard in place documenting the process by which supervisors are required to inform the Help Desk when an employee transfers to a different division.

Responsible Staff: Information Technology

*Implementation Date:* December 2012

## 4. Controls to prevent users from modifying the Hunter, Angler and Boater Education System code.

The Department agrees that the Hunter, Angler, and Boater Education System lacked adequate controls to prevent users from modifying the application code. This is due to the underlying Microsoft Access technology that the application is written in which allows desktop users to manipulate data. We plan to create an executable file of the Microsoft Access application to be loaded on each client machine that will prevent application, program code and data from being modified. Additionally, the application will be modified to institute group security that limits access to only duties that group should perform based on business need.

From a data perspective, the agency has a legitimate business need to update historical data. As a control feature of the application, there is a comment field that users are required to fill out based on their standard operating procedures. This mitigates the risk of unauthorized changes to data.

Responsible Staff: Information Technology

*Implementation Date:* September 2012

## 5. Processes that help ensure that changes to systems are properly documented.

For the finding specific to the Employee Time System, the department was able to locate the documentation requesting and approving changes made. A change management process is in effect at TPWD; however, the process was not adequately executed for this change. The Information Technology Division is in the process of updating the Software Development

Methodology document that outlines the proper processes for making changes to all standard Information Technology Division developed custom applications, including the Employee Time Sheet application.

Responsible Staff: Information Technology

Implementation Date: December 2012

6. Processes that require changes to Tripsheet code to be reviewed by another staff member before the changes are migrated to the production environment.

The Department agrees with this recommendation and will develop a change control process that ensures changes to the application are documented and that application code is reviewed by staff separate from the staff that develop the application and program code.

Responsible Staff: Inland Fisheries

Implementation Date: June 30, 2012

## **Appendices**

Appendix 1

#### Objectives, Scope, and Methodology

#### **Objectives**

The objectives of this audit were to determine whether the Parks and Wildlife Department (Department):

- Is accurately reporting its performance measures to the Automated Budget and Evaluation System of Texas (ABEST).
- Has adequate controls in place over the collection, calculation, and reporting of its performance measures.

#### Scope

The scope of this audit covered nine key performance measure results that the Department reported for fiscal year 2011 and six key performance measures the Department reported for the first quarter of fiscal year 2012 (September 2011 through November 2011).

#### Methodology

The audit methodology consisted of selecting nine key performance measures for fiscal year 2011 and six key performance measures for the first quarter of fiscal year 2012, auditing reported results for accuracy and adherence to performance measure definitions, evaluating controls over performance measure calculation processes, testing documentation, and assessing the reliability of the data obtained from Department's information systems that support performance measure data.

Auditors assessed the reliability of Department data by (1) determining population completeness and reasonableness, (2) reviewing queries used to generate data related to the calculation of the performance measures, (3) performing logical access control testing, and (4) interviewing Department employees knowledgeable about the data and systems. Auditors determined that the data was sufficiently reliable for the purposes of this audit.

#### <u>Information collected and reviewed</u> included the following:

- Performance measure data stored in multiple information systems, databases, and spreadsheets, as well as hard-copy information.
- Internal audit reports and working papers.

- Information technology system reports, manuals, and code.
- Available Department policies and procedures.

#### Procedures and tests conducted included the following:

- Interviewing Department staff to gain an understanding of the processes the Department used to calculate performance measures.
- Evaluating the adequacy of policies and procedures to determine whether they were adequate to help ensure the correct calculation of performance measures.
- Evaluating internal audit work to determine whether an automated system provided reliable data.
- Auditing performance measure calculations for accuracy and to determine
  whether the calculations were consistent with the methodology on which
  the Department; the Legislative Budget Board; and Governor's Office of
  Budget, Planning, and Policy agreed.
- Testing a sample of documentation to verify the accuracy of reported performance.
- Reviewing queries used to report and calculate performance measures.
- Performing logical access control testing.
- Assessing performance measure results in one of four categories: certified, certified with qualification, inaccurate, and factors prevented certification.

#### Criteria used included the following:

- Guide to Performance Measure Management (State Auditor's Office Report No. 06-329, August 2006).
- ABEST performance measure definitions.
- Department policies and procedures.

#### **Project Information**

Audit fieldwork was conducted from January 2012 through April 2012. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The following members of the State Auditor's staff performed the audit:

- Ann E. Karnes, CPA (Project Manager)
- Catherine K. Fallon, MPAff, CGAP (Assistant Project Manager)
- Joe K. Fralin, MBA
- Arnton W. Gray
- Brian Jones, CGAP
- Namita Pai, CPA
- Michael Yokie, CISA
- Dennis Ray Bushnell, CPA (Quality Control Reviewer)
- James Timberlake, CIA (Audit Manager)

#### Related State Auditor's Office Work

Related State Auditor's Office Work				
Number	Product Name	Release Date		
12-704	A Classification Compliance Audit Report on the Parks and Wildlife Department	January 2012		
11-040	An Audit Report on Data Security Related to the Disposal of Surplus and Salvage State Data Processing Equipment at the Texas Department of Criminal Justice and Selected State Agencies	July 2011		
11-706	A Classification Compliance Review Report on the State's Program Specialist Positions at Selected Natural Resources Agencies and Selected Business and Economic Development Agencies	May 2011		
11-027	An Audit Report on Selected State Entities' Compliance with Requirements Related to the Historically Underutilized Business Program and the State Use Program	March 2011		

Copies of this report have been distributed to the following:

#### **Legislative Audit Committee**

The Honorable David Dewhurst, Lieutenant Governor, Joint Chair

The Honorable Joe Straus III, Speaker of the House, Joint Chair

The Honorable Steve Ogden, Senate Finance Committee

The Honorable Thomas "Tommy" Williams, Member, Texas Senate

The Honorable Jim Pitts, House Appropriations Committee

The Honorable Harvey Hilderbran, House Ways and Means Committee

#### Office of the Governor

The Honorable Rick Perry, Governor

#### Parks and Wildlife Department

Members of the Parks and Wildlife Commission

Mr. T. Dan Friedkin, Chair

Mr. Ralph H. Duggins, Vice Chairman

Dr. Antonio Falcon

Ms. Karen J. Hixon

Mr. Dan Allen Hughes, Jr.

Mr. Bill Jones

Ms. Margaret Martin

Mr. S. Reed Morian

Mr. Dick Scott

Mr. Lee Marshall Bass, Chairman-Emeritus

Mr. Carter Smith, Executive Director, Parks and Wildlife Department



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