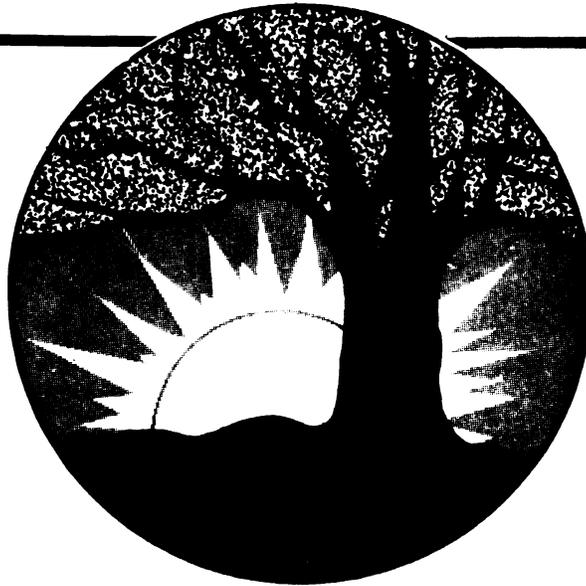


PERFORMANCE AUDIT

River Basin Agencies
July 2013



Justin P. Wilson
Comptroller of the Treasury



State of Tennessee
Comptroller of the Treasury
Department of Audit
Division of State Audit

Deborah V. Loveless, CPA, CGFM
Director

Joseph Schussler, CPA, CGFM
Assistant Director

Dena Winningham, CGFM
Audit Manager

Catherine B. Balthrop, CPA
In-Charge Auditor

Gyasi Kellam
Drew Sadler
Staff Auditors

Amy Brack
Editor

Amanda Adams
Assistant Editor

Comptroller of the Treasury, Division of State Audit
1500 James K. Polk Building, Nashville, TN 37243-1402
(615) 401-7897

Performance audits are available on-line at www.comptroller.tn.gov/sa/AuditReportCategories.asp.
For more information about the Comptroller of the Treasury, please visit our website at
www.comptroller.tn.gov.



STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY
DEPARTMENT OF AUDIT
DIVISION OF STATE AUDIT

SUITE 1500
JAMES K. POLK STATE OFFICE BUILDING
NASHVILLE, TENNESSEE 37243-1402
PHONE (615) 401-7897
FAX (615) 532-2765

July 8, 2013

The Honorable Ron Ramsey
Speaker of the Senate
The Honorable Beth Harwell
Speaker of the House of Representatives
The Honorable Mike Bell, Chair
Senate Committee on Government Operations
The Honorable Judd Matheny, Chair
House Committee on Government Operations
and
Members of the General Assembly
State Capitol
Nashville, Tennessee 37243

Ladies and Gentlemen:

Transmitted herewith is the performance audit of the River Basin Agencies. This audit was conducted pursuant to the requirements of Section 4-29-111, *Tennessee Code Annotated*, the Tennessee Governmental Entity Review Law.

This report is intended to aid the Joint Government Operations Committee in its review to determine whether the agencies should be continued, restructured, or terminated.

Sincerely,

Deborah V. Loveless, CPA
Director

DVL/dww
13009

State of Tennessee

Audit Highlights

Comptroller of the Treasury

Division of State Audit

Performance Audit
River Basin Agencies
July 2013

AUDIT OBJECTIVES

The objectives of the audit were to compare each agency's responsibilities and principal activities; review each agency's financial operations, internal controls, debt obligations, and compliance with applicable statutes; and determine the responsibility for the safety and inspection of the agencies' dams.

FINDINGS

The West Fork Drakes Creek Dam and Reservoir Interstate Authority Does Not Have a Board, Is Not Operating as Statutorily Established, and Has Not Resolved Water Supply Issues for the City of Portland

The authority was created to secure additional water supply from Drakes Creek for the cities of Portland, Tennessee, and Franklin, Kentucky, and Sumner County, Tennessee, and Simpson County, Kentucky, by constructing a dam across the West Fork Drakes Creek. No board members have been appointed. Franklin opted out of the authority when it found an alternative water supply; however, Portland has not secured an alternative water supply. The authority effectively ended when the Kentucky members found other solutions to their water supply issues (page 15).

There Are Inconsistencies between Statutes and the Current Operations of the Chickasaw Basin Authority

State law states that the authority should operate as a state agency and submit its budget request to the Department of Environment and Conservation. However, Shelby County employees provide administrative and operational support to the authority and its budget is submitted to the Shelby County Commissioner (page 19).

The General Assembly May Wish to Amend Statute to Clarify the Legal Status of the River Basin Agencies Regarding Sovereign Immunity

Several of the river basin agencies offer recreational activities to the public and conduct residential and commercial development. It is not clear whether the

agencies can be considered state agencies for liability purposes (page 21).

Some River Basin Agencies Have Inconsistent and Inadequate Internal Controls, Increasing the Risk of Fraud, Waste, and Abuse

As the governing bodies of the river basin agencies, board members are responsible for

establishing a system of internal controls that will safeguard the agency's assets and resources; including procedures preventing the unauthorized use of assets. Improvements in controls include boards voting on audit contracts, board members signing contracts, and board chairs reviewing duplicate bank statements and statement reconciliations (page 24).

OBSERVATIONS AND COMMENTS

The audit also discusses the following issues: The river basin authorities' dams are inspected by the Tennessee Department of Environment and Conservation or the federally owned Tennessee Valley Authority; some agencies have limited programs although they are permitted by statute to perform more activities; board vacancies; the Beech River Watershed Authority statute; and Tipton County's compliance with the statute governing withdrawal from participation in the Chickasaw Basin Authority (page 27).

ISSUES FOR LEGISLATIVE CONSIDERATION

The General Assembly may wish to consider terminating the West Fork Drakes Creek Dam and Reservoir Interstate Authority because the Kentucky members have found other water supply alternatives.

If it concurs that the authority should be administratively and operationally supported by Shelby County Government, the General Assembly may wish to consider amending the Chickasaw Basin Authority statutes.

The General Assembly may wish to consider additional legislation that clarifies whether river basin authorities are state entities for liability purposes. Additional legislation can assist the river basin authorities in determining if additional insurance is needed and what an appropriate level would be.

The General Assembly may wish to amend Section 64-1-101(d), *Tennessee Code Annotated*, in the statute for the Beech River Watershed Authority to remove the reference to the director of the State Planning Office.

Performance Audit River Basin Agencies

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
Purpose and Authority for the Audit	1
Objectives of the Audit	1
Scope and Methodology of the Audit	2
History, Organization, and Activities	2
Staff and Boards of Directors	11
FINDINGS AND RECOMMENDATIONS	15
1. The West Fork Drakes Creek Dam and Reservoir Interstate Authority does not have a board, is not operating as statutorily established, and has not resolved water supply issues for the city of Portland	15
2. There are inconsistencies between statutes and the current operations of the Chickasaw Basin Authority	19
3. The General Assembly may wish to amend statute to clarify the legal status of the river basin agencies regarding sovereign immunity	21
4. Some river basin agencies have inconsistent and inadequate internal controls, increasing the risk of fraud, waste, and abuse	24
OBSERVATIONS AND COMMENTS	27
The river basin authorities' dams are inspected by the Tennessee Department of Environment and Conservation or the federally owned Tennessee Valley Authority	27
Some agencies have limited programs although they are permitted by statute to perform more activities	31
Board vacancies	35

TABLE OF CONTENTS (CONT.)

	<u>Page</u>
Beech River Watershed Authority statute	35
Tipton County did not comply with statute governing withdrawal from participation in the Chickasaw Basin Authority	36
RESULTS OF OTHER AUDIT WORK	36
Review of Conflict-of-Interest Policies	36
RECOMMENDATIONS	38
Legislative	38
Administrative	38
APPENDICES	40
Appendix 1 — Title VI	40
Appendix 2 — Performance Measures Information	45
Appendix 3 — Revenues, Expenditures, Assets, and Liabilities Summary	47
Appendix 4 — Dams Inspected by the Tennessee Department of Environment and Conservation's Water Supply Division Safe Dams Program as of January 28, 2013	50

Performance Audit River Basin Agencies

INTRODUCTION

PURPOSE AND AUTHORITY FOR THE AUDIT

This performance audit of eight river basin agencies was conducted pursuant to the Tennessee Governmental Entity Review Law, *Tennessee Code Annotated*, Title 4, Chapter 29. The audit included the Beech River Watershed Development Authority, the Carroll County Watershed Authority, the Chickasaw Basin Authority, the Sequatchie Valley Planning and Development Agency, the Tellico Reservoir Development Agency, the Tennessee Duck River Development Agency, the West Fork Drakes Creek Dam and Reservoir Interstate Authority, and the West Tennessee River Basin Authority. Under Section 4-29-235, the Beech River Watershed Development Authority, the Chickasaw Basin Authority, the Sequatchie Valley Planning and Development Agency, the Tennessee Duck River Development Agency, and the West Tennessee River Basin Authority are scheduled to terminate June 30, 2014. Under Section 4-29-236, the Carroll County Watershed Authority is scheduled to terminate June 30, 2015. Under Section 4-29-237, the Tellico Reservoir Development Agency and the West Fork Drakes Creek Dam and Reservoir Interstate Authority are scheduled to terminate June 30, 2016. The Comptroller of the Treasury is authorized under Section 4-29-111 to conduct a limited program review audit of these agencies and to report to the Joint Government Operations Committee of the General Assembly. The audit is intended to aid the committee in determining whether the eight river basin agencies should be continued, restructured, or terminated.

OBJECTIVES OF THE AUDIT

The objectives of the audit were to

1. compare each agency's responsibilities, as defined in statute, and the principal activities of the agencies;
2. review each agency's financial operations, internal controls, debt obligations, and compliance with applicable statutes; and
3. determine the responsibility for the safety and inspection of the agencies' dams.

SCOPE AND METHODOLOGY OF THE AUDIT

The activities of the eight river basin agencies were reviewed for the period June 2011 through February 2013. 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. Methods used included

1. review of applicable legislation and policies and procedures;
2. examination of each entity's records, reports, and information summaries;
3. site visits to the agencies and interviews with board members, management, and staff; and
4. interviews with staff of the federally owned Tennessee Valley Authority and staff of the State of Tennessee's Department of Human Services, Department of Agriculture, Department of Economic and Community Development, Wildlife Resources Agency, and Department of Environment and Conservation.

HISTORY, ORGANIZATION, AND ACTIVITIES

The river basin agencies were created to plan, develop, and manage water and land resources in regions surrounding certain river basins in Tennessee. Some emphasize erosion control while others provide for recreational, residential, and commercial development. A map of the river basin agencies is on the following page.

Beech River Watershed Development Authority

The Beech River Watershed Development Authority was established in 1961 under Section 64-1-101, *Tennessee Code Annotated*, for the development of the Beech River watershed, which includes the counties of Decatur and Henderson. The authority's office is located in Lexington, Tennessee. To operate and maintain a system of six lakes and flood control facilities, the Beech River Watershed Development Authority generates revenues through land leases for agricultural purposes, fees for public swimming areas, campground and concessions operations, the sale of residential lots, leases of marina boat slips, and the sale of water to the City of Lexington, Tennessee. The authority has a contract with the Tennessee Valley Authority (TVA) that permits it to develop and sell the land given to it by TVA. TVA constructed the lakes and related structures for recreation and flood control and is responsible for the safety inspections of the dams on the lakes. Plans at the authority include a 2013 auction of residential lots in a subdivision development.



Beech Lake Dam



Beech Lake Dam Spillway and Walking Trail

Carroll County Watershed Authority

The Carroll County Watershed Authority was established in 1984 under Section 64-1-801, *Tennessee Code Annotated*, to develop the resources of Carroll County, including agriculture, forestry, drainage and flood control, land reclamation, electric power utilization, irrigation, and water conservation. The authority has constructed a 1,000-acre lake that opened in March 2013. A county wheel tax, state appropriations, federal grants, and bonds issued by the Town of Huntingdon funded the cost of the lake and dam construction. The authority's offices are in Huntingdon, Tennessee.



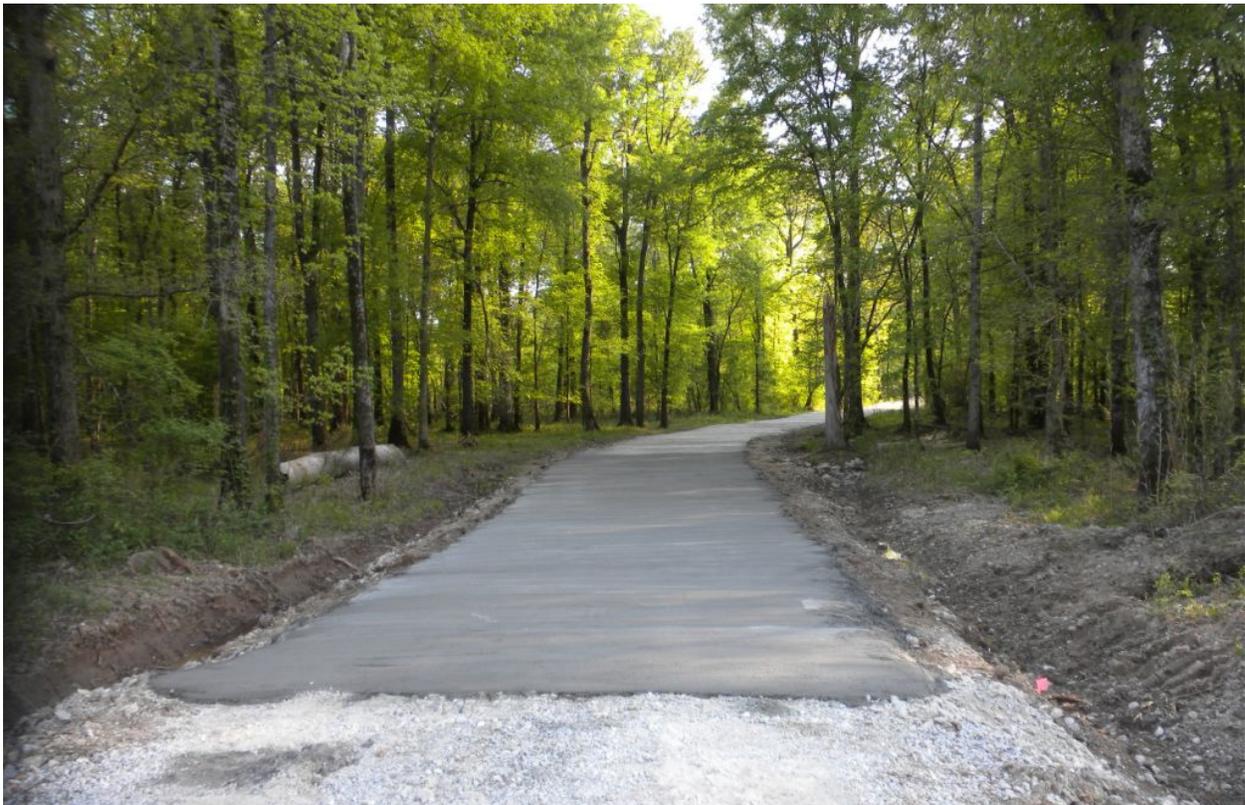
Carroll County Dam



Carroll County Lake

Chickasaw Basin Authority

The Chickasaw Basin Authority was authorized in 1973 under Section 64-1-201, *Tennessee Code Annotated*, for water resources planning and recreational and conservation development of the Chickasaw River Basin and includes programs for the development of the water and land resources in the drainage area of the Wolf and Loosahatchie Rivers and the Nonconnah and Horn Lake Creeks. Chickasaw Basin Authority maintains and operates the Wolf River restoration area, maintains the North Fork Creek flood control dam located near Millington, and is coordinating a study with the West Tennessee River Basin Authority for the development, utilization, and conservation of water and related resources in the Big Creek drainage basin. In conjunction with the U.S. Corps of Engineers, the authority is working on a groundwater management study of the Upper Mississippi Embayment area. The authority's revenues are generated through agricultural leases and grants, and its office is located in Memphis.



Wolf River Restoration Project Trail



Wolf River Sandbar



North Creek Dam



North Creek Dam - Inside

Sequatchie Valley Planning and Development Agency

The Sequatchie Valley Planning and Development Agency was authorized in 1968 under Section 64-1-501, *Tennessee Code Annotated*, for planning and developing the resources of the counties of Bledsoe, Marion, Rhea, Grundy, and Sequatchie including “programs in the fields of education, public health, industrial development, highways, water resources and recreation.” With offices in South Pittsburg, Tennessee, the agency operates a Head Start Program with 11 locations and 22 classrooms and a separate daycare center. Agency revenues are program funds from the federal Head Start Program, the State of Tennessee’s Child and Adult Care Food Program, and the State of Tennessee’s Child Care Certificate Program.



Sequatchie Valley Planning and Development Agency Office in South Pittsburg



South Pittsburg Head Start Center

Tellico Reservoir Development Agency

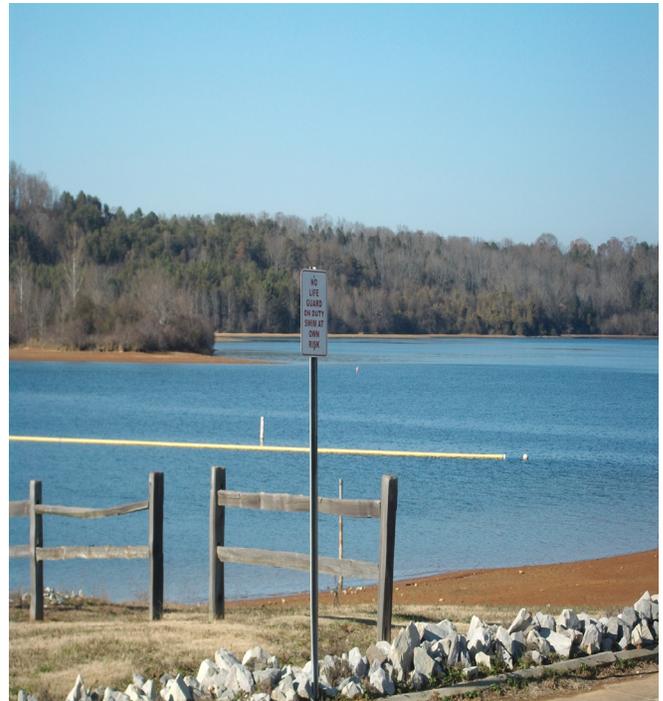
The Tellico Reservoir Development Agency, authorized in 1982 under Section 64-1-701, *Tennessee Code Annotated*, is responsible for the development of the Tennessee Valley Authority Tellico Reservoir project area. Located in Vonore, Tennessee, the agency sells and leases land for industrial development and operates a child care center, Tellico West Conference Center, campgrounds, and a wastewater treatment plant.



Tellico Reservoir Development Agency Office in Vonore



Tellico West Conference Center



Tellico's Toqua Campground Swimming Area

Tennessee Duck River Development Agency

The Tennessee Duck River Development Agency was authorized in 1965 under Section 64-1-601, *Tennessee Code Annotated*, for the control and development of the water resources of the Upper Duck River watershed in Coffee, Bedford, Hickman, Marshall, and Maury counties. The agency's office is located in Shelbyville, Tennessee. The Tennessee Duck River

Development Agency has an agreement with seven water systems in the region to fund operations by the systems contributing five cents for every 1,000 gallons of water sold. In March 2011, the agency developed the Duck River Comprehensive Regional Water Supply Plan to address the management of the area's water resources. According to the Executive Director, the Regional Drought Management Plan will focus on Normandy Reservoir and the management of its water levels as well as environmental issues.



Tennessee Duck River Development Agency Office in Shelbyville

West Fork Drakes Creek Dam and Reservoir Interstate Authority

The West Fork Drakes Creek Dam and Reservoir Interstate Authority was created by Section 64-1-901, *Tennessee Code Annotated*, in 1991 for the purposes of securing additional water supply from Drakes Creek for both cities of Portland, Tennessee, and Franklin, Kentucky; creating a water plan; and developing alternative water supplies for Simpson County, Kentucky, and Sumner County, Tennessee. Although, the original plan was to construct a dam and reservoir on the West Fork Drakes Creek, neither a dam nor a reservoir has been constructed. Simpson County and Franklin, Kentucky, opted out of the authority in 1992, when they found an alternative water supply; however, Portland has not secured an alternative water supply.

West Tennessee River Basin Authority

The West Tennessee River Basin Authority was established in 1996 under Section 64-1-1101, *Tennessee Code Annotated*, to preserve the natural flow and function of the Hatchie, Obion, and Forked Deer river basins. The authority is under the administrative control of the Department of Environment and Conservation and is funded by state appropriations. To provide

for the operation of the authority, statute permits county members of the authority to either levy a tax or appropriate general funds.

The West Tennessee River Basin Authority maintains earthen dams and conducts stream restoration and stabilization through projects such as the Reelfoot Bayou Flood Reduction Study; the Channel Instability and Public Roadway damages in the Hatchie, Obion, and Forked Deer river basins; and the North Fork Obion River Stream Restoration. The authority's office is in Humboldt, Tennessee.



Stream Clearing with Trackhoe



Beaver Dam

Appendix 3 summarizes the revenues, expenditures, assets, and liabilities of each river basin agency in this audit.

STAFF AND BOARDS OF DIRECTORS

The Beech River Watershed Development Authority employs an Executive Director, a part-time administrative assistant, two maintenance workers, and nine seasonal workers. Its board meets quarterly and has nine board members, who are

- the Commissioner of the Department of Environment and Conservation,
- the Decatur County mayor,
- the Henderson County mayor,

- five Decatur or Henderson County residents appointed by the Governor, and
- a board member emeritus.

The Carroll County Watershed Authority does not have any employees. The board meets monthly and has six members, who are county residents appointed by the Governor.

The Chickasaw Basin Authority is staffed by five Shelby County Government Public Works Department employees, whose job responsibilities include authority functions. The board meets two times a year, more if needed, and board membership consists of appointees from member counties. Shelby County and Fayette County are the only members. In the past, Tipton County was a member, but it is now a part of the West Tennessee River Basin Authority. Statute requires the following representation on the board:

- the presiding officer of the county legislative body or a representative of each county that is a member,
- one other member from the county legislative body of each county that is a member,
- the chair of the Memphis City Council or a representative,
- one member at large appointed by the Governor,
- the Shelby County mayor or an authorized representative,
- one member from each county soil conservation district board of supervisors from each county that is a member, and
- the mayor or the mayor's representative of each incorporated municipality within each member county.

The number of board members is determined by the number of counties participating in the authority and the number of incorporated municipalities in each of those participating counties.

The Sequatchie Valley Planning and Development Agency employs a director, administrative staff, teachers, bus drivers, nutrition workers, and other staff necessary for operations. The board meets quarterly and is composed of

- the county mayor of each member county (Bledsoe, Marion, Rhea, Grundy, and Sequatchie);
- one Governor-appointed member from each of the five member counties; and
- one member from each of the five member counties appointed by the mayors of the incorporated municipalities within each member county.

The Tellico Reservoir Development Agency employs an Executive Director and administrative staff, child care center staff, and a conference center manager. The agency has nine board members that meet quarterly. Board members include

- the county mayors of Monroe, Loudon, and Blount counties; and
- two additional members from each member county, appointed by the county mayor.

The Tennessee Duck River Development Agency employs an Executive Director and a Director of Finance and Administration. The board meets quarterly and has 12 members:

- one resident member from each county (Coffee, Bedford, Hickman, Marshall, and Maury), appointed by the Governor;
- one member of the Governor's cabinet or staff;
- the mayors from two counties and from two cities of the member counties, appointed by the Governor; and
- two additional members appointed by the Governor.

The West Fork Drakes Creek Dam and Reservoir Interstate Authority does not have employees, and a board has not been appointed. Statute requires the following board members:

- a member of the county legislative body of Sumner County, Tennessee;
- a member of the county legislative body of Simpson County, Kentucky;
- the mayors of Portland, Tennessee, and Franklin, Kentucky;
- a member of the city legislative body of Portland, Tennessee;
- a member of the city legislative body of Franklin, Kentucky;
- a member of a Portland and Franklin industrial foundation board;
- a member chosen by the board of commissioners of the Simpson County Water District; and
- a member chosen by the board of commissioners of the Sumner County Water Authority.

The West Tennessee River Basin Authority employs an Executive Director and 14 other employees. The board meets quarterly, and members include

- the county mayor of each county participating in the river basin authority;
- the Commissioner of the Department of Agriculture;
- a Soil Conservation District supervisor;
- two members each from the House of Representatives and the Senate who represent the area;
- the Commissioner of the Department of Environment and Conservation;
- the Executive Director of the Tennessee Wildlife Resources Agency; and
- one member from each of these organizations, who is a resident of the area, appointed by the Governor from a list of nominees submitted by the Tennessee Forestry Association, the Tennessee Conservation League, and the Tennessee Farm Bureau.

FINDINGS AND RECOMMENDATIONS

1. The West Fork Drakes Creek Dam and Reservoir Interstate Authority does not have a board, is not operating as statutorily established, and has not resolved water supply issues for the city of Portland

Finding

The West Fork Drakes Creek Dam and Reservoir Interstate Authority was created in 1991 to develop the resources of Sumner County, Tennessee, and Simpson County, Kentucky, by constructing a dam across the West Fork Drakes Creek. The reservoir created by the dam was to foster recreational and economic development in the area. Statute refers to a drought and the effect on the area, stating that an adequate water supply is essential for continued growth of the area. Statute also provides the authority permission to construct, operate, and maintain the dam on West Fork Drakes Creek after approval is obtained from regulatory bodies. However, in 1992 Franklin, Kentucky, and Simpson County, Kentucky, both pursued plans that secured additional water supply independent of the authority. Portland's efforts to improve its water supply have been unsuccessful, although it continues to pursue an additional water supply.

History

The lack of a sufficient water supply has been a concern for Portland, Tennessee, for decades. Franklin, Kentucky (Simpson County), and Portland, Tennessee (Sumner County), began researching the feasibility of a dam and reservoir in the 1960s, and in the 1980s the two cities agreed to collaborate on a regional dam and reservoir. Statute creating the authority provided an official structure to the proposed plans between the two counties.

Before the authority's board members were appointed and prior to work on a dam and reservoir, Simpson County, Kentucky, contracted with the White House (Tennessee) Utility District in 1992 for an additional water supply for the county. Also in 1992, Franklin, Kentucky, decided to modify an existing dam to create an additional water supply for the city. The authority was effectively ended in 1992 when the Kentucky members found other solutions to their water supply issues.

Portland's Continued Water Supply Problems

Portland was still faced with a lack of sufficient water supply and continued with a dam and reservoir project independent of the West Fork Drakes Creek Dam and Reservoir Interstate Authority. Since 1992, Portland has pursued obtaining the necessary permits to construct a dam, but has been unsuccessful. The most recent setback was in September 2007, when the city was denied a permit by the Tennessee Department of Environment and Conservation to construct an

earthen dam on the Caney Fork Creek due to adverse environmental impact. The Tennessee Wildlife Resources Agency had similar concerns about the proposal.

Portland currently has three water supply sources—West Fork Drakes Creek, Portland City Lake, and an emergency connection to White House Utility District that, if used, would only connect to a small part of Portland’s service area. In addition, use of this emergency connection requires state permission. Portland is the only water utility in the study area that does not rely on Old Hickory Lake as its principal water supply source. The 2007-2008 droughts raised serious concerns about the ability of Portland’s water supply system to meet the city’s increasing customer needs.

Water Resources Technical Advisory Committee (WRTAC) 2011 Study

In 2011, the Water Resources Technical Advisory Committee (WRTAC), serving as an advisory group to the Department of Environment and Conservation, issued the North Central Tennessee Regional Water Resources Planning Study. The study disclosed that during the 2007-2008 drought, Portland was the only water system in the North Central study area that suffered serious shortages, and because drought is one of the biggest risks to Portland’s water supply, the “city’s growth potential is somewhat constrained.” The study describes four alternatives to supply additional water to the Portland area. Of the four choices, the final recommendation of the study was for Portland to contract with the White House Utility District to purchase finished water. Although this option requires a substantial investment (the study estimated \$4.7 million) by Portland to upgrade infrastructure, the study presented it as the least expensive option and one that can be completed relatively quickly and would ensure Portland can sustainably meet its water supply needs through 2030.

Current Status of Portland’s Efforts

Portland has not acted on the North Central Regional Water Planning study recommendation. The mayor of Portland said he has two concerns—infrastructure costs which would result in higher consumer prices for water (Portland estimates infrastructure improvements at \$20 million—a much higher cost than the study estimated) and the U.S. Army Corps of Engineers’ (USACE) existing moratorium on water extraction from Old Hickory Lake. The USACE issued the moratorium in 2010 and will keep it in place until a comprehensive study of Old Hickory Lake can be completed. As of November 2012, the USACE has not started its study because it lacks funding. However, in the North Central Regional Water Planning Study, the USACE said it is willing to review Old Hickory Lake withdrawal requests on a case-by-case basis for projects that are important from a regional perspective and have broad state, local, and federal support.

City of Portland Representing Authority

At the 2010 Sunset Hearing for the West Fork Drakes Creek Dam and Reservoir Interstate Authority, the Portland mayor represented the authority and asked that the authority be continued to allow the City of Portland to exhaust every possible option in securing an additional water supply. The authority was continued for five years. During this audit, the Portland mayor

still requested the authority be continued as Portland is pursuing alternatives such as water harvesting and increasing the capacity of the city lake.

Recommendations

The City of Portland and the Department of Environment and Conservation should work together to identify a safe, reliable, and cost-effective water supply in compliance with the provisions of the Tennessee Water Quality Control Act.

The General Assembly may wish to consider terminating the West Fork Drakes Creek Dam and Reservoir Interstate Authority because the Kentucky members have found other water supply alternatives.

Management's Comments

City of Portland

As stated in our letter of May 31, we were set to meet with State Senator Ferrell Haile and State Representative William Lamberth on June 12, 2013. At that meeting, Senator Haile was in agreement that the Caney Fork Dam and Reservoir option that we have pursued for so many years seems to be our best and most viable option for supplemental water supply. He was very receptive to pleading our case with TDEC officials for direction on whether or not they can/will continue to deny renewal of the Aquatic Resources Alteration Permit (ARAP) that is required.

With the city's investment of approximately \$10 million—much of that borrowed—we believe we have made every effort to find and secure a supplemental water supply that is the most viable, reliable, and affordable for Portland and the many water customers that we serve in a large outlying area of northern Sumner County and parts of Robertson County.

We also believe that our past commitment toward this project is evidence of our continued commitment.

Until such time as we are absolutely refused the permit or are given the “go-ahead” on this water supply option, we again request that this West Fork Drakes Creek Dam and Reservoir Interstate Authority be left intact if possible, in the event we need it to complete the process.

Your consideration of our request will be very much appreciated.

Department of Environment and Conservation

Management of the Department of Environment and Conservation (TDEC) concurs with the finding that the authority does not have a board, is not operating as established, and the Portland water supply issues have not been resolved. However, as to the recommendation that TDEC work together with Portland to identify a water supply, we do not concur with the implication that the alternative recommended in the study is not viable. TDEC is highly supportive of regional approaches to long-term water supply, as indicated by the Water Resources Technical Advisory Committee's assistance and recommendations for Portland in particular.

There are statements made in the discussion of the study by the Water Resources Technical Advisory Committee¹ on the alternative approaches to provide Portland with additional water that leave the impression that the two concerns mentioned, infrastructure costs and the Corps of Engineer's moratorium on withdrawals from Old Hickory Lake, prevent implementation of the alternative recommended by the Advisory Committee. We do not agree that this is an accurate understanding of the situation.

In regard to infrastructure costs, it has now been almost two years since much of the work was done on that study and 18 months since it was completed. It is possible that infrastructure costs of all of the alternatives have increased since then. If this is being used to compare the alternatives, it is necessary to address increase for all of them. If that comparison has been done, it is important to put it in context. In other words, these costs would have to be quantified to see if they are significant when the study found that the costs of the White House alternative are approximately one-third of the other options. Finally, as is explained in the study, within the concept of White House supplying water to Portland, there are alternatives in which different volumes of water can be spread out over time; it is not an approach like a dam or a new pipeline where most of the costs have to be incurred on the front end even if the project will supply more than the current need of the system.

The fact that the White House alternative has options within it for different amounts of water is also relevant to the moratorium the Corps has on withdrawals. If Portland were to decide to design for the minimum amount of water needed, that would not require water to be supplied by White House on a daily basis, but rather just in times of drought. Therefore, it is possible that there will be no significant increase in the amount withdrawn by White House and no change to their existing withdrawal facility. If that is the case, the moratorium may not be an impediment.

This discussion has focused on one factor, albeit a very important one, cost. The study also evaluated other factors including impacts on the environment and barriers to implementation. Your recommendation by referencing that the solution must be in compliance with the Water Quality Control Act acknowledges the importance of these other factors.

¹ In addition to having a link to the published study, this site describes some of the background and the work that was done by the Advisory Committee: <http://tn.gov/environment/regionalplanning/>.

For all these reasons, TDEC's recommendation is that Portland not reject outright the conclusion of the study and continue to evaluate its options, including the approach of entering into an arrangement with White House that would allow for differing amounts of water to be supplied as Portland grows. To this end, we helped Portland link up with UT CIS to have some neutral assistance in evaluating its options. TDEC would be pleased to evaluate any proposals Portland makes and provide technical assistance as we are able to, just as we would for any municipality or utility. However, we do not anticipate using limited resources of the department to conduct another study comparable to the one already done by the advisory committee, or taking other action to find additional sources for Portland, when our information indicates that some form of the recommended solution is still viable.

2. There are inconsistencies between statutes and the current operations of the Chickasaw Basin Authority

Finding

The Chickasaw Basin Authority was created in 1973 to assist local governments with the development of water and land resources within the drainage area of the Wolf and Loosahatchie rivers and Nonconnah and Horn Lake creeks. Shelby and Fayette counties are members of the authority programs.

Shelby County government employees provide administrative and operational support to the authority's board. Administrative functions include fiscal management, budget preparation, and financial statement preparation, while operational functions include engineering, maintenance, and project development.

Section 64-1-205(6), *Tennessee Code Annotated*, states that the authority should operate as a state agency subject to all fiscal requirements and procedures that apply to other state departments and agencies. The other river basin agencies in this audit do not have the same requirement in their statutes. This language may have been included in the statute to provide oversight to funding the authority received from the state. However, the authority does not currently receive recurring state appropriations.

Section 64-1-205(5), *Tennessee Code Annotated*, requires Chickasaw Basin Authority by October 1 of each year, to transmit to the Commissioner of the Tennessee Department of Environment and Conservation (TDEC) an estimated budget with a request for an amount to be included in the Governor's budget recommendations for the next fiscal year. Because the authority no longer receives recurring state appropriations, its budget is submitted to the Shelby County Commissioner and not to TDEC.

In 2001, the State of Tennessee's Department of Finance and Administration, acting through the authority, contracted with the Shelby County government for water management

capital construction projects oversight that the state was funding. In that contract are statements acknowledging that the Chickasaw Basin Authority is without staff “to pursue the purposes of carrying out statutorily defined programs of the authority,” that there is a history of cooperative assistance provided to the authority by Shelby County, and that the state and the county desire to continue the cooperative arrangement.

Based on the above, it is not clear whether the General Assembly intends for the authority to 1) operate as a state agency subject to all fiscal requirements and procedures that apply to other state departments and agencies and 2) submit an annual budget to the Department of Environment and Conservation.

Recommendations

The Chickasaw Basin Authority should determine whether it is required to comply with Sections 64-1-205(5) and 64-1-205(6), *Tennessee Code Annotated*.

If it concurs that the authority should be administratively and operationally supported by Shelby County government, the General Assembly may wish to consider amending the Chickasaw Basin Authority statutes.

Management’s Comment

Chickasaw Basin Authority

We concur in part. The Chickasaw Basin Authority was created as a State of Tennessee agency and it would prefer to continue as a state agency. The Chickasaw Basin Authority will submit an estimated annual budget to the Tennessee Department of Environment and Conservation. The Chickasaw Basin Authority received funds from the state in this year’s budget and will work toward getting additional recurring state appropriations each year.

The Chickasaw Basin Authority has been active in flood control and conservation projects for many years. The Chickasaw Basin Authority has worked on the Wolf River to provide flood control and greenways for the benefit of the community.

The Chickasaw Basin Authority can continue to operate through the contract between Shelby County government and its Department of Finance and Administration, if necessary. There is a long history of cooperative assistance between Chickasaw Basin Authority, Shelby County government and the state which continues to support the Chickasaw Basin Authority.

3. The General Assembly may wish to amend statute to clarify the legal status of the river basin agencies regarding sovereign immunity

Finding

Several of the river basin agencies in this audit offer recreational activities to the public and conduct residential and commercial development. One of the agencies administers a Head Start Program. Management and staff expressed concern about liability for boating, drowning, or playground accidents. A review of the river basin statutes found that they are not clear concerning whether the river basin agencies in this audit can be considered state agencies for liability purposes. In Opinion No. 02-077, the Attorney General opined that the Carroll County Watershed Authority is a state agency for liability purposes. The courts have also ruled that the Chickasaw Basin Authority is a state agency by listing the state as defendant in the case of *David Ciarloni v. State of Tennessee*.

The General Assembly may wish to consider additional legislation to clarify the legal status of the river basin authorities, thereby providing the authorities more information regarding liability and whether or not they are afforded the same sovereign immunity granted to state agencies.

Under the doctrine of sovereign immunity, the state cannot be sued except for those cases where the state has expressly consented to be sued, or where the U.S. Congress has said there is no immunity. Additionally, under state law, state officers and employees are absolutely immune from liability for acts or omissions within the scope of their employment. The doctrine does not apply for acts or omissions that are willful, malicious, criminal, or done for personal gain. Also, state employee liability immunity does not apply to violations of federal constitutional or statutory law.

Each authority must be viewed in the light of the test found in *Hastings v. So. Central Human Resource Agency* (829 S.W.2d 679, 682 (Tenn. App. 1991)), which outlines the test to include 1) legislative statutory intent; 2) state or political subdivision involvement in the operation, supervision, and control of the entity; 3) whether the entity serves as a conduit for the state to carry out a public or governmental function; and 4) whether state funds are appropriated to the entity. Attorney General Opinion 02-77 determined that Carroll County is a state agency for liability purposes. Each remaining authority must be examined under this standard to determine whether it is a state agency. If it is, then sovereign immunity applies. This is important because the state can only be sued for the causes of action it has consented to. Evidently, this analysis has also been used on the Chickasaw Basin Authority, as evidenced by the lawsuit filed against the authority where the state was named as defendant in the Claims Commission case, *David Ciarloni v. State of Tennessee*.

Under Section 9-8-108(a)(4), *Tennessee Code Annotated*, the entities are authorized to purchase additional insurance, subject to approval by the Claims Commission. This insurance may be of assistance where sovereign immunity may not apply to the actions of the employee, or where there are violations of federal constitutional or statutory law. However, additional insurance should not be used to increase the liability limits found under Section 9-8-307(e).

Auditors have found that most of the river basin authorities have purchased coverage through the Tennessee Risk Management Pool or through independent insurance companies to protect themselves in cases where the authority is not covered under sovereign immunity.

Recommendation

The General Assembly may wish to consider additional legislation that clarifies whether river basin authorities are state entities for liability purposes. Additional legislation can assist the river basin authorities in determining if additional insurance is needed and what an appropriate level would be.

Management's Comments

Beech River Watershed Development Authority

This issue has been a concern for our agency as well. Executive Secretary Jeffrey Griggs along with State Representative Steve McDaniel met with the staff of the Attorney General's office in Nashville last year on this very issue. The statute is not clear as to what the Beech River Watershed Development Authority really is. The only thing it states is that we are a Body Politic. Because our board is appointed by the Governor, the Attorney General's office will only represent the authority on a case by case basis. We were not purchasing liability insurance at the time, but after that meeting our board approved a motion to purchase coverage through the Tennessee Risk Management Pool. This satisfied the Attorney General's office, but the question remains as to what the Beech River Watershed Development is in regard to statute.

Your recommendation of having the General Assembly consider additional legislation that clarifies whether the river basin/watershed authorities are state entities for liability purposes has merit. I think this finding has great importance and is capable of being done. Our agency has already spoken to Deputy Speaker of the House, Steve McDaniel, about such legislation and he is very familiar with this issue. We plan to meet with him and request him to help with a solution and possible introduction of legislation at next year's legislative session addressing this issue.

Carroll County Watershed Authority

We concur that additional legislation that clarifies whether river basin authorities are state entities for liability purposes, can assist the river basin authorities in determining if additional insurance is needed and what an appropriate level would be.

Chickasaw Basin Authority

We concur in part. The Chickasaw Basin Authority would hope to remain a state agency for liability purposes. As pointed out in the audit report, a court found that the Chickasaw Basin Authority is a state agency. To require the Chickasaw Basin Authority to purchase insurance will remove resources from the stated mission of the authority which is, among other things, flood control and conservation.

Sequatchie Valley Planning and Development Agency

We concur that clarification regarding sovereign immunity should be issued by the General Assembly. The Sequatchie Valley Planning and Development Agency has purchased liability insurance through the Tennessee Risk Management Pool, which includes coverage of our playgrounds.

Tennessee Duck River Development Agency

We concur that additional legislation clarifying whether the Tennessee Duck River Development Agency (the “TDRDA”) and its officers and board are protected by sovereign immunity because this information would be helpful in determining whether existing insurance policies are adequate or unnecessary. This finding does not require implementation by the TDRDA.

It would be of great value to determine if the TDRDA is covered under sovereign immunity as a political subdivision of the state. If the General Assembly confirms that sovereign immunity extends to the TDRDA, then the TDRDA may be able to reduce insurance expenditures. If the General Assembly confirms that sovereign immunity does not extend to the TDRDA, then the TDRDA can assess whether additional coverage is required. Such clarification is highly feasible, as it requires only legislative action by the General Assembly.

Tellico Reservoir Development Agency

We concur that the legal status of river basin agencies should be clarified regarding sovereign immunity. The Tellico Reservoir Development Agency does not know if it is considered a state agency for liability purposes. We purchase liability insurance as well as errors and omissions insurance from the Tennessee Risk Management Trust. The agency purchases additional liability insurance from United States Liability Insurance Group and Auto-Owners Mutual Insurance Co.

4. Some river basin agencies have inconsistent and inadequate internal controls, increasing the risk of fraud, waste, and abuse

Finding

As the governing body of the river basin agencies, board members are responsible for establishing a system of internal controls that will safeguard the agency's assets and resources, including the procedures the agency has implemented to prevent the unauthorized use or disposition of assets and resources. Effective internal controls are essential to these agencies because 1) some board members are elected and, therefore, members are subject to change after each election; and 2) some agencies have a small office staff to process financial transactions, and trying to separate duties becomes complicated. Risks of fraud, waste, and abuse are mitigated by effective internal controls. Although external auditors include testing of controls as part of their audit procedures, these procedures are not a substitute for the ongoing monitoring required of management.

We interviewed board members, management, staff of all the operational river basin agencies, and staff of the audit firms preparing agency financial statements to obtain an understanding of internal controls in place. We found some river basin agencies have adopted best practices that would benefit other agencies if implemented. All levels of management assured us there were no known instances or allegations of fraud.

Board Committee and the Annual Financial Audit

Internal control guidance in the *Statement on Auditing Standards No. 99* (SAS 99) by the American Institute of Certified Public Accountants recommends oversight by the board of directors or an audit committee. Section 4-35-101 et seq., *Tennessee Code Annotated*, "State of Tennessee Audit Committee Act of 2005," requires state entities to establish audit committees. Although the river basin agencies in this audit are not subject to the act, implementing policies outlined in the statute would increase the boards' oversight and reduce the likelihood of fraud or collusion. The board or a committee of the board should be responsible for overseeing the financial reporting and related disclosures, including approval of the contract for the annual financial audit and requiring the audit firm to report results to the board.

The board of the Tennessee Duck River Development Agency has implemented board responsibility for financial reporting. According to board meeting minutes and documentation, the board voted to approve the contract for the annual financial audit, the board chair signed the contract, and the audit firm presented audit results to the board at a regularly scheduled board meeting.

Our review found that other agencies may have the board approve the contract or may ask the audit firm to report results to the board at a meeting, but those agencies had not implemented all of the practices. For example, management, not the board, of the Beech River Watershed Development Authority and the Tellico Reservoir Development Agency signed the audit contract, and the audit results were not presented to the board by the audit firm. The board

chair of the Sequatchie Valley Planning and Development Agency did not sign the contract with the audit firm, although the audit results were presented to the board by the firm.

Separation of Duties, Check Issuance, and Review by Board

Several of the authorities have a small office staff whose responsibilities include depositing receipts, processing accounts payable, and reconciling bank statements; therefore, separation of duties is difficult. When duties cannot be separated, compensating controls—internal controls that are intended to reduce the risk of an existing or potential control weakness—should be in place. Although the agencies have check-signing policies that require two signatures and/or a board member signature, more board oversight would promote public accountability and safeguard the assets. For example, the board chair of the Sequatchie Valley Planning and Development Agency receives a duplicate bank statement directly from the bank and then receives a copy of the completed bank statement reconciliation from the agency. This is a best practice that would benefit all of the river basin agencies.

Recommendations

The Beech River Watershed Development Authority, the Sequatchie Valley Planning and Development Agency, and the Tellico Reservoir Development Agency boards should add additional board oversight of audit processes. The boards should vote on an audit contract, a member should sign the contract, and the audit results should be presented to the board.

The Beech River Watershed Development Authority, the Tellico Reservoir Development Agency, and the Tennessee Duck River Development Agency should have duplicate bank statements and copies of bank statement reconciliations mailed to the board chair for review.

Once the Carroll County Watershed Authority hires staff for its operations, the board should continue to vote on an audit contract, the board chair should sign the contract, and the audit results should be presented to the board. The board should have duplicate bank statements and copies of bank statement reconciliations mailed to the board chair for review.

Management's Comments

Beech River Watershed Development Authority

We concur. Audit oversight: The Beech River Watershed Development Authority Board has already added additional board oversight of audit processes. The board voted at its quarterly March 2013 meeting to approve an audit contract and the contract was signed by a board member. The audit firm has been contacted and instructed to attend annually the March or June quarterly board meeting of the authority to present the audit results and answer any questions the board may have. (The authority provided a copy of the signed audit agreement for fiscal year 2013.)

Bank Statement: The Beech River Watershed Development Authority's Executive Secretary has been instructed to mail or hand deliver a duplicate bank statement and copies of bank statement reconciliations to its board chairman each month effective May 2013.

Carroll County Watershed Authority

We concur that the board shall continue to vote on an audit contract, that the board chair should sign the contract, and that the audit results should be presented to the board. We concur that the board should have duplicate bank statements and copies of bank statement reconciliations mailed to the board chair for review. Administrative activities of the Carroll County Watershed Authority will continue to be administered by the Town of Huntingdon Department of Finance and Administration office staff.

Sequatchie Valley Planning and Development Agency

We concur in part. Sequatchie Valley Planning and Development Agency has instituted segregation of duties and internal controls to mitigate the risk of fraud, waste, and abuse. Procedures and policies are already in place to guide board oversight to include, but not limited to, selecting and approving the audit firm and meeting with the auditors after the completion of the audit at a regularly scheduled board meeting. In addition, the board chair of Sequatchie Valley Planning and Development Agency receives a copy of the monthly bank reconciliation.

Management does concur that board oversight may be further strengthened by designating the responsibility for signing the annual audit contract to the board chair. Because our board is comprised of elected mayors from five counties, we do have concerns about accountability, logistics, and the timeliness of securing the electronic signature. However, Sequatchie Valley Planning and Development Agency will implement a plan to accomplish this action and integrate this plan into our policies and procedures. Action steps will include: 1) requesting that our current board chair set up an account for the Tennessee Comptroller of the Treasury Contract and Report System, 2) alerting our current audit firm that the board chair will become the signatory for the agency effective with this audit period, and 3) devising a communication system by which the Finance Director will receive notification from the audit firm and the board chair that electronic signatures have been completed and that the audit contract has successfully been submitted to the Comptroller's Office.

Tennessee Duck River Development Agency

We concur with the finding and agree that all practical measures should be taken to ensure proper oversight and decrease the risk of fraud, waste, and abuse. Subsequent to the initiation of the performance audit, the agency has implemented a procedure that provides for additional board oversight. The finance director is required to provide the board secretary/treasurer with a copy of the agency's operating checking account statement monthly, in addition to trust fund statements. As the audit recommends, the agency will immediately begin sending copies of monthly bank statements and bank statement reconciliations to its chairman, as well as the secretary/treasurer. In fact, this has already been done for the month of May.

The recommendation that the agency should have duplicate bank statements and copies of bank statement reconciliations mailed to the board chair for review is valuable for the reasons stated in the audit and feasible.

Tellico Reservoir Development Agency

We concur with the recommendation that we need to implement further internal control measures. The Tellico Reservoir Development Agency is one of the agencies with a small office staff thus limiting our ability to separate duties. However, in order to increase the board's oversight and reduce the likelihood of fraud or collusion, at our June 13 Board of Directors meeting:

1. We will ask the chairman to expand the duties of our Budget and Finance Committee which is comprised of three members of the board. The expanded responsibilities will include reviewing and recommending approval of the audit contract followed by a vote of the board, as well as participating in the audit process by communicating directly with the auditing firm.
2. We will ask the board to vote its approval of the audit contract, require a board member to sign the contract, and require the audit firm to make a presentation of the audit results at a quarterly board meeting.
3. We will ask the Budget and Finance Committee to appoint one committee member to receive duplicate bank statements for the General Operating Fund directly from the bank along with a copy of the bank reconciliation prepared by agency staff.

Additionally, we will continue to prepare and transmit monthly the Treasurer's Report to the full board.

OBSERVATIONS AND COMMENTS

The topics discussed below did not warrant a finding but are included in this report because of their effect on the operations of the River Basin Authorities and on the citizens of Tennessee.

The river basin authorities' dams are inspected by the Tennessee Department of Environment and Conservation or the federally owned Tennessee Valley Authority

All of the river basin agencies in this audit except the Sequatchie Valley Planning and Development Agency and the West Fork Drakes Creek Dam and Reservoir Interstate Authority have one or more dams. Some of the dams are earthen and are for erosion and flood control,

while others impound water for water supply or recreational use. Inspections of these dams are the responsibility of either the Tennessee Department of Environment and Conservation or the federally owned Tennessee Valley Authority.

Agency	Numbers of Dams	Dam Names	Inspected by
Beech River Watershed Development Authority	7	Beech Dam, Cedar Dam, Dogwood Dam, Lost Creek Dam, Pine Dam, Redbud Dam, Sycamore Dam	Tennessee Valley Authority
Carroll County Watershed Authority	1	Carroll County Dam	Tennessee Department of Environment and Conservation
Chickasaw Basin Authority	1	North Fork Creek #5 Dam	Tennessee Department of Environment and Conservation
Tennessee Duck River Development Agency	1	Normandy Dam	Tennessee Valley Authority
Tellico Reservoir Development Agency	1	Tellico Dam	Tennessee Valley Authority
West Tennessee River Basin Authority	96	See Appendix 4	Tennessee Department of Environment and Conservation

Dams Maintained by the Carroll County Watershed Authority, the Chickasaw Basin Authority, and the West Tennessee River Basin Authority are in compliance with the Tennessee Safe Dams Act

The Tennessee Department of Environment and Conservation Division of Water Supply’s Safe Dams Program is responsible for conducting inspections, reviewing plans, and permitting dams and reservoir projects as required in the Safe Dams Act of 1973, Section 69-11-101 et seq., *Tennessee Code Annotated*. The purpose of the program is to protect the public from dam failures. All non-federal dam owners are required to have a certificate of approval from the department to construct, alter, remove, or operate a dam.

The Department of Environment and Conservation adopted rules to administer the Safe Dams Act of 1973 in order to

- safeguard the public by reducing the risk of failure of such dams,
- effect the orderly inventory and inspection of existing dams in Tennessee,

- provide for pre-construction review and approval of all future dam construction and alteration of dams, and
- allow for a program of regular inspection of dams within the state.

Of the 98 dams inspected by the department, 96 are maintained by the West Tennessee River Basin Authority, one is maintained by the Chickasaw Basin Authority, and one is maintained by the Carroll County Watershed Authority. Auditors reviewed the inspection reports and found that all 98 dams have been inspected within the department's policy requirements. (A list of dams, locations, hazard potential categories, and inspection information is in Appendix 4 of this report.)

Hazard Categories

The department has assigned a hazard potential category for each dam inspected as required in the Safe Dams Act, Section 69-11-115, *Tennessee Code Annotated*. There are three categories:

Category 1 dams are located where failure would probably result in any of the following: loss of human life; excessive economic loss due to damage of downstream properties; excessive economic loss, public hazard, or public inconvenience due to loss of impoundment (water or liquid substance that is or will be stored by a dam); and/or damage to roads or any public or private utilities.

Category 2 dams are located where failure may damage downstream private or public property, but such damage would be relatively minor and within the general financial capabilities of the dam owner. Public hazard or inconvenience due to loss of roads or any public or private utilities would be minor and of short duration. Chances of loss of human life would be possible but remote.

Category 3 dams are located where failure may damage uninhabitable structures or land, but such damage would probably be confined to the dam owner's property. No loss of human life would be expected.

According to department officials and documentation received by the audit team, dams are monitored on a scheduled basis depending on the hazard category rating as stipulated by Section 69-11-113, *Tennessee Code Annotated*. Dams assigned to category 1 are inspected every year, category 2 dams are inspected once every two years, and category 3 dams are inspected once every three years. The following table summarizes dams by hazard potential category:

Number of Dams in Each Hazard Potential Category

Hazard Potential Category	Number of Tennessee Dams
1	7
2	29
3	62
Total	98

Department of Environment and Conservation rules and regulations also require dams to be inspected at least once every five years for reclassification purposes. According to documentation provided by department officials, reclassification is included in each inspection and listed on the inspection reports. Auditors reviewed the inspection reports and found that the department is meeting this requirement.

West Tennessee River Basin Authority Dams

While dams are located all across the state, the highest concentration of dams is in west Tennessee. These are maintained by the West Tennessee River Basin Authority (see Appendix 4). The authority maintains 117 dams; 96 are inspected by the Tennessee Department of Environment and Conservation's Division of Water Supply Safe Dams Program. The remaining 21 dams fall below the threshold set out in the department's *Rules and Regulations Applied to the Safe Dams Act of 1973*—less than a water storage capacity of 30 acres per foot and less than 20 feet in height. According to officials with West Tennessee River Basin Authority, dams below the threshold are maintained by authority staff on an annual basis, timed to be maintained in conjunction with larger dams nearby. The officials also rely on landowners to inform the authority of any issues. (See Appendix 4 for a list of dams maintained by the authority and inspected by the Department of Environment and Conservation.)

Tennessee Valley Authority Dams

There are nine river basin authority dams inspected by the Tennessee Valley Authority (TVA). (See page 31 for the list of dams.) In accordance with *Federal Guidelines for Dam Safety*, TVA has issued Standard Programs and Processes—Inspection of Dams, which states that dams are to be inspected informally every month along with an intermediate inspection every 15 months, and formal inspections every five years. The guidelines specify that a TVA Dam Safety Officer is responsible for performing and documenting periodic assessments to ensure inspection requirements are met.

Informal inspections consist of observations of the dam and appurtenances (the spillways, reservoir, and its rims; the water level outlet works; access bridges; and water conduits) to identify and report any abnormal conditions.

Intermediate inspections are conducted by experienced dam maintenance engineers and include a field inspection and a review of inspection records since the last formal inspection. Inspectors are alternated periodically so that multiple inspectors appraise the dam and related structures.

Formal inspections are conducted by a team of personnel including licensed professional engineers familiar with dam design, construction, and operations. The safety and integrity of the dam and appurtenant structures is assessed. The team determines whether the dam meets currently accepted design criteria and practices. The team reviews documentation and conducts an underwater inspection.

The following table includes TVA inspection data for the nine dams inspected by the river basin agencies in this audit.

Inspections of Dams by TVA

River Basin Agency	Dam Name	Most Recent Formal Inspection (5-year interval)	Most Recent Intermediate Inspection (15-month interval Inspection)	Most Recent Monthly Inspection
Tennessee Duck River Development Agency	Normandy Dam	08/28/2009	02/13/2012	12/06/2012
Tellico Reservoir Development Agency	Tellico Dam	06/07/2012	03/08/2011	12/20/2012
Beech River Watershed Development Authority	Beech Dam	08/12/2008	05/03/2012	12/27/2012
Beech River Watershed Development Authority	Cedar Dam	08/12/2008	05/03/2012	12/27/2012
Beech River Watershed Development Authority	Dogwood Dam	08/12/2008	05/03/2012	12/27/2012
Beech River Watershed Development Authority	Lost Creek Dam	08/12/2008	05/03/2012	12/27/2012
Beech River Watershed Development Authority	Pine Dam	08/12/2008	05/03/2012	12/27/2012
Beech River Watershed Development Authority	Redbud Dam	08/12/2008	05/03/2012	12/27/2012
Beech River Watershed Development Authority	Sycamore Dam	08/12/2008	05/03/2012	12/27/2012

Some agencies have limited programs although they are permitted by statute to perform more activities

The powers, duties, and authorities of the river basin agencies vary. Some statutes emphasize particular activities such as education or economic development; others focus on water resources and supply.

Several of the river basin statutes include statements emphasizing the importance of Tennessee’s water resources. For example, the statute authorizing the Beech River Watershed Development Authority states that the General Assembly “finds and declares that the tributaries and subtributaries of the major waterways of Tennessee are among the basic resources of the state” and that it is essential to the future economic welfare of the state to develop them as a domestic, municipal, industrial, and agricultural water source. To accomplish this, the authority maintains a system of six lakes and flood control facilities for economic and recreational use.

The West Tennessee River Basin Authority and the Chickasaw Basin Authority are focused on flood prevention. Among other items, the Chickasaw Basin Authority has statutory authority to organize, plan, and develop water and land resources and to “build, construct, operate, manage, lease and maintain . . . facilities and programs needed for water controls, channel improvements, navigation, drainage irrigation, water conservation, water quality, water supply, recreation, fish and wildlife conservation and open space.” The Chickasaw Basin Authority is managing the Wolf River Restoration Project to provide public walking and riding trails and is also managing a dam in Millington, Tennessee, to prevent flooding. The West Tennessee River Basin Authority is responsible for building, operating, and managing facilities and programs for water controls, channel improvements, navigation, drainage, irrigation, water conservation, water quality, water supply, recreation, fish and wildlife, and open space. It has responsibility for 117 dams to control flooding and to protect infrastructure.

The Tennessee Duck River Development Agency completed an alternative water resources study for the area as part of a long-term development plan to promote economic growth. The March 2011 *Duck River Comprehensive Regional Water Supply Plan* identified several water-supply alternatives for further study by the agency and its board:

- prepare a regional drought management plan,
- optimize releases from Normandy Reservoir,
- commence a water-use efficiency program,
- improve the capacity of the Normandy Reservoir, and
- construct a new intake for Columbia Power and Water Systems.

The plan estimates the cost of these alternatives to be \$62 million.

The Sequatchie Valley Planning and Development Agency was established for “education, public health, industrial development, highways, water resources, and recreation, and other fields for planning and development for the region.” The agency has restricted its activities to operating a Head Start Program in its five-county area—Bledsoe, Marion, Rhea, Grundy, and Sequatchie counties—and a daycare center in South Pittsburg. The agency is initiating a community education program about healthy eating and diabetes prevention funded by a Tennessee Department of Health grant, but no programs have been initiated for water conservation and supply, erosion control, flood control, or recreational, residential, industrial, or agricultural development. There is not another agency operating those programs or planning for the region, according to agency management.

The table on the following page compares statute to programs and activities the agencies operate.

**River Basin Agencies
Principal Activities Compared to Responsibilities in Statute
As of February 1, 2013**

Activity	Agency Name															
	Beech River Watershed Development Authority		Carroll County Watershed Authority		Chickasaw Basin Authority		Sequatchie Valley Planning and Development Agency		Tellico Reservoir Development Agency		Tennessee Duck River Development Agency		West Fork Drakes Creek Dam and Reservoir Interstate Authority		West Tennessee River Basin Authority	
	Statute	Program	Statute	Program	Statute	Program	Statute	Program	Statute	Program	Statute	Program	Statute	Program	Statute	Program
Agricultural Development	Y	Y	Y	N	N	N	N	N	N	N	N	N	Y	N	N	N
Economic or Industrial Development	Y(1)	N	Y(1)	N	N	N	Y	N	Y	Y	Y	Y	Y	N	N	N
Education	Y	N	Y	N	N	N	Y	Y	N	N	N	N	N	N	N	N
Electric Power Utilization	Y	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
Fish and Wildlife	N	Y	N	N	Y	N	N	N	N	N	N	N	N	N	Y	Y
Flood and /or Erosion Control	Y	Y	Y	N	Y	Y	N	N	N	N	Y	Y	N	N	Y	Y
Forestry	Y	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
Irrigation	Y	N	Y	N	Y	N	N	N	N	N	Y	Y	N	N	Y	Y
Land Reclamation	Y	N	Y	N	N	N	N	N	N	N	N	N	N	N	Y	Y
Public Health	Y	N	Y	N	N	N	Y	Y	N	N	N	N	N	N	N	N
Recreation	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	N
Residential Development	Y(2)	Y	N	N	N	N	N	N	Y	Y	N	N	Y	N	N	N
Transportation	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N
Water Conservation	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	N	N	Y	Y
Water Supply	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	Y	N	Y	Y

(1) referred to as manufacturing and trade in statute

(2) The General Assembly amended Section 64-1-102, *Tennessee Code Annotated*, in April 2013 to give the authority the power for residential development.

The river basin agency statutes do not describe the extent to which the responsibilities of the river basin agencies are distinct from those of the development districts, the soil conservation districts, or the Department of Environment and Conservation. We contacted other state agencies about the river basin agency programs—the Department of Agriculture, the Department of Economic and Community Development, and the Tennessee Wildlife Resources Agency. All were familiar with a few of the agencies and/or their programs; however, they were not aware of any similar programs or whether programs could be managed by other entities.

Contracts

The river basin agencies' statutes give each of them the power to enter into contracts and cooperative agreements. All of the entities have exercised this power with the exception of the West Fork Drakes Creek Dam and Reservoir Interstate Authority. Three agencies—Beech River Watershed Development Authority, Tellico Reservoir Development Agency, and Tennessee Duck River Development Agency—have contracts with the Tennessee Valley Authority governing the development of the area. As of September 30, 2012, Beech River owed TVA \$1,174,691. The Tellico Reservoir Development Agency is further committed by contract with private entities for industrial development. As of August 31, 2012, Tellico owed TVA \$6,018,392.

The employees of the Beech River Watershed Development Authority, the Sequatchie Valley Planning and Development Agency Authority, and the Tennessee Duck River Development Agency, are participants in the Political Subdivision Pension Plan administered by the Tennessee Consolidated Retirement System.

Bond Issuance

The river basin agencies have statutes allowing them to issue bonds. The Beech River Watershed Development Authority is permitted to issue bonds up to \$1 million; the Carroll County Watershed Authority can issue bonds up to \$12 million; and the Sequatchie Valley Planning and Development Agency Authority can issue up to \$2 million in bonds. The Chickasaw Basin Authority and the West Tennessee River Basin Authority statutes require approval by the General Assembly for bond issues with the general obligation of the state attached. The Tellico Reservoir Development Agency statute requires bond payments to be paid “solely out of the revenues and receipts derived from the agency’s projects.” The Tennessee Duck River Development Agency has authority to issue bonds up to \$800 million subject to the review of the Comptroller of the Treasury’s Office of State and Local Finance and approval of the State Funding Board. The West Fork Drakes Creek Dam and Reservoir Interstate Authority is permitted to issue bonds subject to approval of the State Funding Board. The Carroll County Watershed Authority is the only river basin agency in this audit that has bond debt—\$6.8 million as of June 30, 2012.

Eminent Domain

Two of the river basin agencies have eminent domain powers—the Beech River Watershed Development Authority, and the Carroll County Watershed Authority. The West Tennessee River Basin Authority statute requires cities and counties within the authority area to exercise their powers of eminent domain for authority projects.

Board vacancies

We identified vacancies in board member appointments for three river basin agencies. Statute for the Beech River Watershed Development Authority states that the Commissioner of Environment and Conservation is a non-voting member. However, the commissioner is not attending meetings. The Sequatchie Valley Planning and Development Agency board has six vacancies it is trying to fill—a combination of Governor appointees and members appointed by the mayors of incorporated municipalities in the counties that are members of the agency. The Chickasaw Basin Authority is missing 15 board members, including several from Fayette County. The board has the following vacancies:

- a member each of the Fayette County and Shelby County legislative bodies,
- the chair of the Memphis City Council,
- a member of the Fayette County Soil Conservation District,
- the mayor of the City of Memphis or the mayor’s designee, and
- one representative each from the ten incorporated cities of Fayette County.

The Chickasaw Basin Authority is in the process of filling the vacancies.

Beech River Watershed Authority statute

Section 64-1-101(d), *Tennessee Code Annotated*, which pertains to the board of the Beech River Watershed Development Authority, contains a reference to the State Planning Office Director serving on the board in an advisory capacity. The State Planning Office was repealed by 1995 Public Acts, chapter 501, section 4. The General Assembly may wish to amend the statute to remove the reference to the director of the State Planning Office.

Tipton County did not comply with statute governing withdrawal from participation in the Chickasaw Basin Authority

According to management and staff of the Chickasaw River Basin Authority and the Tipton County Mayor, Tipton County has chosen to not participate as a member of the Chickasaw Basin Authority and has opted to be a member of the West Tennessee River Basin Authority. Tipton County is not contributing support to the Chickasaw authority or participating in board meetings. While statute does not prohibit a county from participating in more than one river basin, the Chickasaw Basin Authority’s statute, Section 64-1-212, *Tennessee Code Annotated*, specifies that a county may withdraw from the authority if its legislative body adopts a withdrawal resolution by a two-thirds vote. Since Tipton County has not complied with this statute, it is considered to be a member of both authorities. The Chickasaw Basin Authority statute is the only river basin agency statute that specifies counties should adopt a withdrawal resolution.

RESULTS OF OTHER AUDIT WORK

Review of Conflict-of-Interest Policies

We asked the river basin agencies to provide us with their conflict-of-interest policies applicable to board members. Their responses are summarized in the table below. The Beech River Watershed Development Authority, the Chickasaw Basin Authority, the Tellico Reservoir Development Agency, and the Sequatchie Valley Planning and Development Agency have conflict-of-interest policies for their board members. The Tennessee Duck River Development Agency and the Sequatchie Valley Planning and Development Agency have a conflict-of-interest policy for employees. The West Tennessee River Basin Authority is in the process of adopting a conflict-of-interest policy for its directors and obtaining signed disclosures. The Carroll County Watershed Authority does not have a conflict-of-interest policy for board members.

Conflict-of-Interest Policies

Name	Response to Request for Conflict-of-Interest Policy for Board Members	Follow-up to Response
Beech River Watershed Development Authority	A conflict-of-interest policy is not in place. During the annual audit, the audit firm, using staff and board member inquiries, completes a Related Party Disclosure Form that describes any transactions between persons connected to the authority.	The conflict-of-interest policy adopted by the board in September 2012 applies to board members and requires an annual written disclosure acknowledging they have read the policy and have disclosed conflicts in writing. Copies of disclosures were provided also.
Carroll County Watershed Authority	The authority does not have a conflict-of-interest policy.	

Name	Response to Request for Conflict-of-Interest Policy for Board Members	Follow-up to Response
Chickasaw Basin Authority	The authority has adopted the June 2007 Shelby County government Code of Ethics. It requires disclosure of personal interest prior to voting on any measure. The disclosure is made part of the minutes. Financial disclosures are made annually in writing. The authority provided signed disclosure statements for 10 of the 12 current board members.	
Sequatchie Valley Planning and Development Agency	The agency has a Standards of Conduct Policy required by the U.S. Department of Health and Human Services, the grantor for the Head Start program. The agency provided copies of annual disclosure statements signed by board members and employees as part of the Standards of Conduct Policy.	There is a familial relationship between a board member and an employee. The board chair said that board member has refrained from voting on issues directly affecting the employee; however, the relationship has not been disclosed on the board member's conflict-of-interest form.
Tellico Reservoir Development Agency	The agency has a Code of Ethics applicable to board members and employees. A disclosure statement is signed at the time of the appointment or the beginning of employment. No periodic updates to the disclosures are required. Copies of disclosures were provided.	
Tennessee Duck River Development Agency	The agency does not have a conflict-of-interest policy for board members. The agency requires staff to submit an annual letter to the board chair declaring they have complied with the agency's conflict-of-interest policy. That policy requires no ownership in or position with any entity receiving funding from the agency; the policy also requires not serving as officer or in another leadership position in any not-for-profit organizations whose goals are in conflict with the agency's mission.	
West Fork Drakes Creek Dam and Reservoir Interstate Authority.	There is no policy; a board has not been appointed.	
West Tennessee River Basin Authority	The authority has an Ethics and Conflict-of-Interest Statement and is in the process of obtaining signed disclosures.	

RECOMMENDATIONS

LEGISLATIVE

This performance audit identified areas in which the General Assembly may wish to consider statutory changes to improve the efficiency and effectiveness of the river basin agencies' operations.

1. The General Assembly may wish to consider terminating the West Fork Drakes Creek Dam and Reservoir Interstate Authority because the Kentucky members have found other water supply alternatives.
2. If it concurs that the authority should be administratively and operationally supported by Shelby County government, the General Assembly may wish to consider amending the Chickasaw Basin Authority statutes.
3. The General Assembly may wish to consider additional legislation that clarifies whether river basin authorities are state entities for liability purposes. Additional legislation can assist the river basin authorities in determining if additional insurance is needed and what an appropriate level would be.
4. The General Assembly may wish to amend Section 64-1-101(d), *Tennessee Code Annotated*, in the statute for the Beech River Watershed Authority to remove the reference to the director of the State Planning Office.

ADMINISTRATIVE

The river basin agencies should address the following areas to improve the efficiency and effectiveness of their operations.

1. The city of Portland and the Department of Environment and Conservation should work together to identify a safe, reliable, and cost-effective water supply in compliance with the provisions of the Tennessee Water Quality Control Act.
2. The Chickasaw Basin Authority should determine whether it is required to comply with Sections 64-1-205(5) and 64-1-205(6), *Tennessee Code Annotated*.
3. The Beech River Watershed Development Authority, the Sequatchie Valley Planning and Development Agency, and the Tellico Reservoir Development Agency boards should add additional board oversight of audit processes. The boards should vote on

an audit contract, a member should sign the contract, and the audit results should be presented to the board.

4. The Beech River Watershed Development Authority, the Tellico Reservoir Development Agency, and the Tennessee Duck River Development Agency should have duplicate bank statements and copies of bank statement reconciliations mailed to the board chair for review.
5. Once the Carroll County Watershed Authority hires staff for its operations, the board should continue to vote on an audit contract, the board chair should sign the contract, and the audit results should be presented to the board. The board should have duplicate bank statements and copies of bank statement reconciliations mailed to the board chair for review.

Appendix 1 Title VI

All programs or activities receiving federal financial assistance are prohibited by Title VI of the Civil Rights Act of 1964 from discriminating against participants or clients on the basis of race, color, or national origin. In response to a request from members of the Government Operations Committee, we compiled information concerning Title VI Plans and any federal financial assistance received by the river basin agencies in this audit. The results of the information gathered are summarized below.

The Tennessee Human Rights Commission (THRC) is responsible for monitoring Title VI compliance for state governmental entities. The West Tennessee River Basin Authority is administratively attached to the Tennessee Department of Environment and Conservation (TDEC), and TDEC's Title VI compliance is reviewed by THRC. In its *Tennessee Title VI Compliance Program Report* dated September 2012, THRC reported that TDEC

- timely submitted its Title VI Implementation Plan on September 30, 2011 (statute requires submission by October 1 of each year),
- did not have any Title VI complaints filed during the fiscal year ended June 30, 2012, and
- did not have any noncompliance findings for its Title VI Implementation Plan.

The other river basin agencies are not required to submit Title VI plans to the THRC. See Table 1 for the response by those agencies to our request for their Title VI Implementation Plan.

**Table 1
Responses to Requests for Title VI Information**

Name	Response
Beech River Watershed Development Authority	Not subject to Title VI. No federal funding.(1)
Carroll County Watershed Authority	Yes, has a Title VI Policy.
Chickasaw Basin Authority	Yes, uses the Title VI Plan for Shelby County government.
Sequatchie Valley Planning and Development Agency	Yes, has a Title VI Plan.
Tennessee Duck River Development Agency	Not applicable.
Tellico Reservoir Development Agency	Yes, uses Tennessee Valley Authority's Title VI statement.
West Fork Drakes Creek Dam and Reservoir Interstate Authority	Authority inactive. The City of Portland sent its Title VI Complaint and Hearing Procedure.

(1) As of May 23, 2013, Beech River has developed a Title VI plan for board approval at the June 2013 meeting.

The Sequatchie Valley Planning and Development Agency was the only agency that received federal financial assistance in the fiscal year ended June 30, 2012.

**Sequatchie Valley Planning and Development Agency
Federal Financial Assistance Received
Fiscal Year 2012**

Type	Grantor Agency	Amount	Description
Direct	U.S. Department of Health and Human Services Administration for Children and Families	\$3,009,882	Head Start Grant
Indirect	Tennessee Department of Human Services	\$198,790	USDA Child and Adult Care Food Program

The tables below summarize gender and ethnicity information for the river basin agencies' staff and board members.

**Beech River Watershed Development Authority
Staff***

As of March 1, 2013

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Administrative Assistant		1	1			1	1
Executive Director	1		1			1	1
Maintenance Labor	2		2			2	2
Total	3	1	4			4	4
Percentage	75%	25%	100%			100%	100%

*Nine seasonal positions were vacant as of March 1, 2013.

**Beech River Watershed Development Authority
Board of Directors***

As of March 1, 2013

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Board Member	8		8			8	8
Percentage	100%		100%			100%	100%

*Statute provides for nine members—the Commissioner of Environment and Conservation is a non-voting member but is not attending meetings.

**Carroll County Watershed Authority
Board of Directors***

As of March 1, 2013

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Board Member	5	1	6		1	5	6
Percentage	83%	17%	100%		17%	83%	100%

*The Carroll County Watershed Authority did not have any employees as of March 1, 2013.

**Chickasaw Basin Authority
Staff*
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Executive Director	1		1			1	1
Real Estate Coordinator	1		1			1	1
Staff Engineer	1		1			1	1
Title VI Coordinator	1		1			1	1
Total	4		4			4	4
Percentage	100%		100%			100%	100%

*These are full-time employees of Shelby County, Tennessee, government whose job responsibilities include Chickasaw Basin Authority assignments.

**Chickasaw Basin Authority
Board of Directors*
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Board Member	11	1	12			12	12
Percentage	92%	8%	100%			100%	100%

*The board has 15 vacancies.

**Sequatchie Valley Planning and Development Agency
Staff
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Head Start Program Staff	3	85	88	2	9	77	88
Daycare Center Staff		4	4			4	4
Total	3	89	92	2	9	81	92
Percentage	3%	97%	100%	2%	10%	88%	100%

**Sequatchie Valley Planning and Development Agency
Board of Directors*
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Board Member	9		9			9	9
Percentage	100%		100%			100%	100%

*The board has six vacancies.

**Tellico Reservoir Development Agency
Staff
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Administrative Assistant		1	1			1	1
Campground Manager	1	2	3			3	3
Campground Worker		2	2			2	2
Child Development Director		1	1			1	1
Child Development Assistant Director		1	1			1	1
Child Development Teacher		12	12			12	12
Conference Center Manager		1	1			1	1
Executive Director	1		1			1	1
Maintenance Worker	4		4			4	4
Secretary		1	1			1	1
Services Manager	1		1			1	1
Operations Manager	1		1			1	1
Wastewater Treatment Plant Operator	1		1			1	1
Total	9	21	30			30	30
Percentage	30%	70%	100%			100%	100%

**Tellico Reservoir Development Agency
Board of Directors
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Board Member	8	1	9			9	9
Percentage	89%	11%	100%			100%	100%

**Tennessee Duck River Development Agency
Staff
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Executive Director	1		1			1	1
Finance Director		1	1			1	1
Total	1	1	2			2	2
Percentage	50%	50%	2			100%	100%

**Tennessee Duck River Development Agency
Board of Directors
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Board Member	11	1	12		2	10	12
Percentage	92%	8%	100%		17%	83%	100%

**West Tennessee River Basin Authority
Staff
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Clerk 2		1	1			1	1
Equipment Operator Supervisor	3		3			3	3
Equipment Operator	8		8			8	8
Executive Director	1		1			1	1
Operations Specialist Supervisor 2	1		1			1	1
OPD Project Manager	1		1			1	1
Total	14	1	15			15	15
Percentage	93%	7%	100%			100%	100%

**West Tennessee River Basin Authority
Board of Directors
As of March 1, 2013**

Title	Gender			Ethnicity			
	Male	Female	Total	Hispanic	Black	White	Total
Board Member	29	1	30		2	28	30
Percentage	97%	3%	100%		7%	93%	100%

Appendix 2 Performance Measures Information

As stated in the Tennessee Governmental Accountability Act of 2002, “accountability in program performance is vital to effective and efficient delivery of governmental services, and to maintain public confidence and trust in government.” In accordance with this act, all executive branch agencies are required to submit annually to the Department of Finance and Administration a strategic plan and program performance measures. The department publishes the resulting information in two volumes of *Agency Strategic Plans: Volume 1 - Five-Year Strategic Plans* and *Volume 2 - Program Performance Measures*.

The West Tennessee River Basin Authority is administratively attached to the Department of Environment and Conservation. The department began submitting performance-based budgeting requests effective fiscal year 2004-2005.

Detailed below are the West Tennessee River Basin Authority’s performance standards and performance measures, as reported in the September 2012 *Volume 2 - Program Performance Measures*. Also reported below is a description of the agency’s processes for 1) identifying/developing the standards and measures; 2) collecting the data used in the measures; and 3) ensuring that the standards and measures reported are appropriate and that the data is accurate.

Performance Standard 1

Perform environmentally sensitive stream maintenance and continue routine maintenance on infrastructure.

Performance Measure

Number of flood control/sediment retention minor maintenance projects (mowing, resolving annual inspection issues, and structural deficiencies) completed.

Actual (FY 2011-2012)	Estimate (FY 2012-2013)	Target (FY 2013-2014)
58	55	55

Performance Standard 2

Perform major maintenance on structures and construct stream-floodplain restoration projects throughout West Tennessee.

Performance Measure

Number of major maintenance or stream-floodplain restoration projects completed.

Actual (FY 2011-2012)	Estimate (FY 2012-2013)	Target (FY 2013-2014)
4	3	4

The authority’s management and staff identify needed projects, estimate their cost, and submit the projects to the board for approval and prioritization. The board tracks the progress and completion of each project and reports the results.

One facet of Performance Standard 1 is determined by the number of dams to be inspected for the year. The Safe Dams Section of the Department of Environment and Conservation provides a list of dams to be inspected, which determines the number of times the authority will need to mow for the inspectors.

The other river basin authorities are not attached to an executive branch agency and thus do not submit performance measures.

Appendix 3
Revenues, Expenditures, Assets, and Liabilities Summary

Beech River Watershed Development Authority

The Beech River Watershed Development Authority generates revenue through agricultural land use leases, sale of water to the City of Lexington, Tennessee; sale of subdivision lots; boat slip rentals; permits for special events and recreation; and campground operations.

	September 30, 2012	September 30, 2011	September 30, 2010
Revenues	\$305,809	\$293,961	\$427,970
Expenses	\$409,423	\$442,045	\$446,449
Assets	\$3,448,312	\$3,544,772	\$3,649,169
Liabilities	\$1,491,179	\$1,513,014	\$1,504,111
TVA Debt	\$1,174,691	\$1,174,691	\$1,174,691

Chickasaw Basin Authority

Revenues for the Chickasaw Basin Authority are generated by agricultural land use leases and the sale of landscape products.

	June 30, 2012	June 30, 2011
Revenues	\$88,936	\$81,100
Expenses	\$22,419	\$51,509
Fund Balance*	\$409,062	

*Revenues are restricted for Chickasaw Basin Authority projects. If not used, revenues accrue in the authority's Fund Balance.

Sequatchie Valley Planning and Development Agency

The Sequatchie Valley Planning and Development Agency receives funding for its Head Start Program through a grant from the U.S. Department of Health and Human Services, an indirect grant from the U.S. Department of Agriculture for its Child Care Food Program, and fees generated by a child care program.

	June 30, 2012	June 30, 2011	June 30, 2010
Revenues	\$3,432,601	\$3,285,418	\$3,557,201
Expenses	\$3,392,121	\$3,328,699	\$3,570,490
Assets	\$532,307	\$520,889	\$513,681
Liabilities	\$88,162	\$117,224	\$66,735

Tennessee Duck River Development Agency

According to the 2008 Sunset Hearing information submitted by the agency, there were three trust accounts associated with the agency: the Water Supply Escrow Fund, Trust Fund B, and the Water Supply Fund. As of June 30, 2012, there are now two accounts—Trust Fund B and the Water Supply Escrow Fund. A comparison of the balance of the funds appears below:

	June 30, 2007	June 30, 2012
Water Supply Escrow Fund	\$10.7 million	\$12.4 million
Trust Fund B	\$2.7 million	\$2.1million
Water Supply Fund	\$0.5 million	\$0

Seven public water systems provide financial support to the Tennessee Duck River Development Agency at the rate of five cents per thousand gallons of water sold.

	June 30, 2012	June 30, 2011	June 30, 2010
Revenues	\$385,984	\$551,941	\$1,686,652
Expenses	\$372,720	\$552,134	\$1,681,536
Assets	\$110,309	\$101,170	\$124,740
Liabilities	\$24,783	\$28,908	\$52,285

Tellico Reservoir Development Agency

The Tellico Reservoir Development Agency’s revenues are from land sales, land leases, agricultural land leases, wastewater treatment fees, building permit fees, child care center fees and campground fees.

	August 31, 2012	August 31, 2011	August 31, 2010
Revenues	\$2,427,970	\$1,856,749	\$2,168,557
Expenses	\$2,795,040	\$2,686,960	\$2,737,156
Assets	\$28,192,857	\$28,613,321	\$29,363,941
Liabilities	\$6,617,085	\$6,736,978	\$6,699,100
TVA Debt	\$6,018,392	\$ 6,042,817	\$ 6,042,817

Carroll County Watershed Authority

The authority's revenues are grants for construction of a lake and dam, and wheel tax receipts from the local government.

	June 30, 2012	June 30, 2011	June 30, 2010
Revenues	\$579,436	\$952,751	\$6,222,970
Expenses	\$732,011	\$7,124,782	\$630,083
Assets	\$14,633,973	\$14,466,696	\$14,778,928
Liabilities	\$7,681,976	\$7,362,124	\$1,343,992

West Fork Drakes Creek Dam and Reservoir Interstate Authority

This entity does not have any revenues or expenditures.

West Tennessee River Basin Authority

The West Tennessee River Basin Authority is administratively attached to the Department of Environment and Conservation. State appropriations and county member appropriations fund the operations and maintenance activities of the authority.

	June 30, 2013 Estimated	June 30, 2012	June 30, 2011	June 30, 2010
Authority Appropriations from State and County	\$1,325,600	\$1,485,300	\$1,285,900	\$1,225,800
Maintenance Appropriations	\$580,400	\$1,215,400	\$861,500	\$861,500

Appendix 4

Dams Inspected by the Tennessee Department of Environment and Conservation's Water Supply Division Safe Dams Program as of January 28, 2013			
Dam Name	County	Hazard Potential Category	Date Inspected
In Carroll County Watershed Authority			
REEDY CREEK	CARROLL	1	4/23/2012
In Chickasaw Basin Authority			
NORTH FORK CREEK #5	SHELBY	1	10/17/2012
In West Tennessee River Basin Authority			
BARKER BRANCH	HENDERSON	3	4/14/2011
BEECH BRANCH	MADISON	3	12/1/2010
BETHANY	HENRY	2	11/8/2012
BLAKE (See picture at end of appendix)	HENRY	3	8/9/2011
BROWN CREEK	MADISON	3	8/10/2010
BRUCE CREEK	OBION	3	10/26/2011
BURROW CREEK	CARROLL	3	6/8/2012
CALEDONIA CREEK #1	CARROLL	3	6/8/2012
CALEDONIA CREEK #2	HENRY	3	4/2/2012
CALEDONIA CREEK #3	HENRY	2	10/4/2011
CANE CREEK	HENDERSON	3	6/28/2012
CENTRAL POINT	HENRY	2	11/8/2012
CLARK CREEK	CHESTER	2	3/22/2011
CLAYBROOK	MADISON	2	9/12/2012
CLEAR CREEK	HENRY	3	8/9/2011
CLEAR CREEK #4	CARROLL	2	4/13/2012
COBB CREEK #1	HAYWOOD	3	6/13/2012
COBB CREEK #2	HAYWOOD	3	11/2/2012
COKER	LAUDERDALE	3	8/22/2012

Dam Name	County	Hazard Potential Category	Date Inspected
COON CREEK	DYER	1	11/26/2012
COTTON GROVE	MADISON	2	11/1/2012
CROCKETT CREEK	DYER	2	1/3/2013
CROCKETT CREEK TRIBUTARY	DYER	2	1/3/2013
CUB CREEK #1	MADISON	3	4/20/2012
CUB CREEK #2	MADISON	3	9/15/2011
DIAMOND GROVE	MADISON	3	2/17/2012
DRY BRANCH	GIBSON	3	10/13/2010
DYER CREEK	MADISON	3	8/7/2012
EUBANK BRANCH #1	MADISON	3	8/2/2012
EUBANK BRANCH #2 (See picture at end of appendix)	MADISON	3	12/11/2012
FINLEY DITCH #1	DYER	2	7/10/2012
FINLEY DITCH #2	DYER	2	7/10/2012
GILMER'S CREEK	MADISON	3	2/17/2012
GLADY HOLLOW	OBION	1	9/5/2012
GLENDALE	CHESTER	3	7/26/2011
GRASS CREEK	OBION	3	10/19/2010
HICKS CREEK	MADISON	3	12/14/2012
HICO	HENRY	2	11/8/2012
HICO CREEK	CARROLL	3	7/19/2012
HOWLEY CREEK #5	CARROLL	3	10/5/2011
HOWLEY CREEK #6	CARROLL	3	10/5/2011
HUGHES CREEK	MADISON	2	3/13/2012
IDLEWILD	GIBSON	2	8/17/2012
JOHNS CREEK	CARROLL	3	5/4/2012
JONES CREEK	MADISON	2	1/5/2012
JONES CREEK #1	CHESTER	2	3/22/2011
LEWIS CREEK	DYER	1	3/5/2012
LEWIS CREEK #2	DYER	1	3/5/2012
LITTLE CYPRESS CREEK	WEAKLEY	3	8/2/2011

Dam Name	County	Hazard Potential Category	Date Inspected
LOST CREEK	LAUDERDALE	3	8/22/2012
LURAY	HENDERSON	3	7/26/2011
MCKELLAR CREEK	MADISON	3	1/18/2012
MILL CREEK	HENRY	3	8/13/2010
MILLER CREEK	MADISON	3	1/18/2012
MOSS CREEK #3	CARROLL	2	10/4/2012
MOSS CREEK #4	CARROLL	2	10/06/2011
MOUNT GILEAD	HENDERSON	3	7/26/2011
MOUNT OLIVE	GIBSON	3	11/17/2011
MUD CREEK	HAYWOOD	3	6/13/2012
NAT BRANCH	CARROLL	3	10/5/2011
NEW BOSTON	HENRY	3	5/17/2012
NEW CARMEL	MADISON	3	8/2/2012
NEW ENTERPRISE	GIBSON	3	10/13/2010
NEW HOPE	GIBSON	3	10/13/2010
OSAGE	HENRY	3	5/17/2012
PALMER SHELTER	CARROLL	3	7/19/2012
PEARSON CREEK	CROCKETT	3	10/11/2012
PHILLIPS CREEK	MADISON	3	3/13/2012
PISGAH CREEK	CHESTER	3	7/6/2011
PORTERS CREEK #15	HARDEMAN	3	4/27/2010
PORTERS CREEK #16	HARDEMAN	3	5/10/2011
PORTERS CREEK #17	HARDEMAN	3	4/29/2010
PORTERS CREEK #3	HARDEMAN	2	9/1/2011
PORTERS CREEK #4	HARDEMAN	3	5/11/2011
PORTERS CREEK #5	HARDEMAN	3	4/29/2010
PORTERS CREEK #6	HARDEMAN	2	5/10/2011
PORTERS CREEK #7	HARDEMAN	2	5/10/2011
PORTERS CREEK #8	HARDEMAN	2	9/1/2011
PORTERS CREEK #9	HARDEMAN	3	5/10/2011

Dam Name	County	Hazard Potential Category	Date Inspected
POWELL CREEK	MADISON	3	9/15/2011
ROELLEN	DYER	3	11/26/2012
ROWE CREEK	HENRY	3	8/9/2011
SALEM	CROCKETT	3	10/11/2012
SHEFFIELD BRANCH	CHESTER	2	3/3/2011
SHELL BRANCH	HENRY	3	8/9/2011
SPENCER CREEK	HENDERSON	2	2/14/2011
SPRING CREEK #1	CHESTER	2	3/3/2011
SPRING CREEK #2	MADISON	2	3/13/2012
SPRING CREEK TRIB #1	HENDERSON	2	2/14/2011
SPRING CREEK TRIB #2	WEAKLEY	3	8/2/2011
SUSAN BRANCH #1	HENDERSON	2	2/14/2011
SUSAN BRANCH #3	HENDERSON	3	4/14/2011
WALNUT FORK	HENRY	3	8/13/2010
WEBB CHAPEL	OBION	1	9/5/2012
WILLOUGHBY	MADISON	3	9/27/2012
YOUTHTOWN	MADISON	2	2/1/2012

The following pictures of the Blake and Eubanks #2 dams are examples of the type of dams maintained by West Tennessee River Basin Authority for flood control.



Blake Dam – Henry County



Eubanks #2 Dam – Madison County