TEXAS STATE SOIL & WATER CONSERVATION BOARD

SEMI - ANNUAL REPORT

TO THE

GOVERNOR,
LIEUTENANT GOVERNOR,
AND
SPEAKER OF THE HOUSE

JULY 1, 2009

Forward

In response to S.B. 1828 passed by the 78th Texas Legislature in Regular Session, 2003, the Texas State Soil and Water Conservation Board presents this review of its programs and activities. S.B. 1828 added §201.028 to the Texas Agriculture Code to provide that the TSSWCB shall prepare and deliver to the Governor, the Lieutenant Governor, and the Speaker of the House of Representatives a report, not later than January 1 and July 1 of each year, relating to the status of the budget areas of responsibility assigned to the State Board including outreach programs, grants made and received, federal funding applied for and received, special projects, and oversight of soil and water conservation district activities.

The FY09 Operating Budget with expenditures is attached to this report. Information on grants made to local districts and other entities is incorporated within the program section it involves. Ongoing Federal grant program projects under the Clean Water Act are provided in another attachment.

The Texas State Soil & Water Conservation Board takes pride in the accomplishments and remarkable progress that have been made in soil and water conservation in this state. Often environmental successes are slow to be realized. We have realized and previously reported one success story that involves reducing the level of Atrazine in several water bodies, particularly the Aquilla Reservoir in the Hill County-Blackland SWCD.

However, we recognize there remains a continuing challenge and an ongoing need to ensure our land has the capability to produce food and fiber for future Texans. Because of changes in land use, ownership, technology, and population growth, the need for soil and water conservation programs will remain critical. Texas has a finite number of acres to provide for the needs and desires of citizens and visitors, and this places an ever-increasing demand on agricultural land. Farmers and ranchers face complex decisions concerning the best ways to manage and utilize the land available to them.

We believe that soil and water conservation programs must remain dynamic as land uses change and technology improves to make some conservation practices more capable of meeting demands on soil and water resources. We also maintain the belief that the purpose of the soil and water conservation program is to promote the wise use of our renewable natural resources and provide for the conservation and enhancement of the soil and water resources of this state through and by the dynamic decisions of local soil and water conservation districts which promotes the use of each acre of land within its capabilities and treating it according to its needs.

From the beginning, the Texas State Soil and Water Conservation Board and local soil and water conservation districts have formed an organizational framework through which various complex governmental conservation programs are delivered to local landowners and operators. This relationship has successfully been utilized to disseminate sound management techniques and practices to maintain individual productive land uses to provide for the needs of present and future generations.

To the landowners of Texas, the individual soil and water conservation district directors, and the many agencies and organizations assisting and working with our programs, we offer our sincere thanks.

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Historical Background

In the early history of the United States, those involved in agriculture often did not consider the conservation of soil and water resources. Land was cleared and put into farm production. When the land quit producing at a profitable level, the farmers merely moved on to new land farther west and started the process over again. There was no need to be concerned with soil conservation, as there was a seemingly unlimited supply of virgin land waiting to be tilled. This process continued through the 1800s and into the early 1900s. With the outbreak of World War I, farmers in the Great Plains states were encouraged to break out native grassland to grow wheat and other foodstuffs to feed the nation and the world. As a result of these and other unwise management practices and the fact that the farmlands were experiencing long periods of drought, the 1930s produced some of the worst dust storms the nation had ever seen. Clouds of dust rolled across the plains states sending dust storms through the south and into the nation's capital. At the same time, the nation was in the midst of a great economic depression. The federal government, seeking ways to put people back to work and encourage conservation, created the Civilian Conservation Corps and Soil Erosion Service. Through these mechanisms, demonstration projects were initiated to train technicians and to educate the public in ways to conserve soil resources. These programs were successful in putting people back to work, but lacked the local ties to establish lasting conservation programs.

One of the early day leaders in the national effort to control soil erosion was Hugh Hammond Bennett from North Carolina. After graduation from the University of North Carolina in 1903, Hugh Bennett took a job with the Bureau of Soils in the United States Department of Agriculture. Because of his experience, scientific knowledge and leadership ability, he was put in charge of the Soil Erosion Service when it was created in 1933. In 1935, P.L. (Public Law) 46 was passed creating the Soil Conservation Service within the U.S. Department of Agriculture and Hugh Bennett became the first Chief of the agency. He soon became internationally known for his accomplishments in conservation work.

With the help of Congressman Buchannan from Columbus, Texas, Hugh Bennett was able to persuade President Franklin Roosevelt that the soil resources of this nation were being wasted. He convinced the President that a Model Soil Conservation Act should be developed and sent to the governors of each state for passage by their state legislatures. The purpose of this Model Act would be to develop programs at the state and local level to control soil erosion.

In 1936, such a Model Act was sent to the governors with the endorsement of President Roosevelt. The Model Act, developed in Washington, was patterned after the Texas Wind Erosion Act, the Grass Conservation Acts in the Northern High Plains and certain water conservation district law.

In 1937 legislation was introduced in the Texas Legislature based on this Model Act. It is reported that as many as 25 different versions of this soil conservation law were considered before a final version was passed. There was much heated discussion of the proposed legislation. When the final version was adopted, the bill contained many undesirable features. The law would have set up Soil Conservation Districts automatically on a county basis and made County Commissioners Courts the governing body. A portion of the county tax was to be used to finance the program and county agricultural agents were to be the administrative officers.

A number of agricultural leaders from across the state had, by this time, become concerned about the newly passed legislation. It was their opinion that, if the responsibility for installing and maintaining conservation measures lay in the hands of the land owners, the control of such a program should also be

in their hands. As a result of these and other concerns, a group of landowners led by V.C. Marshall of Heidenheimer, Texas, convinced the Governor to veto the 1937 legislation.

Hard feelings among agricultural leaders resulted from the attempt to pass this soil conservation law. Under the leadership of Mr. Marshall, a concerted effort was made during the interim between legislative sessions to heal the old wounds and to put together a version of a law that would be generally accepted by the farmers and ranchers of Texas. Mr. Marshall organized a committee of leaders from across the state to promote the passage of a new Soil Conservation Law. He traveled many miles at his own expense seeking the views of agricultural leaders and promoting the idea of the Soil Conservation District Program.

The key points Mr. Marshall felt should be included in the new law were that (1) farmers and ranchers should determine whether or not a Soil Conservation District was needed and hold a local option election prior to the establishment of the district; (2) the program should be controlled by landowners; and (3) the Soil Conservation Districts should have no taxing authority or the power of eminent domain.

In 1939 the Texas Legislature passed H.B. (House Bill) 20 which incorporated those features and was the first Soil Conservation Law for the state. The law created the State Soil Conservation Board and allowed for the creation of the Soil Conservation Districts. Mr. Marshall was elected as the first Chairman of the Soil Conservation Board and later resigned to become the first Executive Director of the agency.

On April 30, 1940, the Secretary of the State issued Certificates of Organization for the first 16 Soil Conservation Districts paving the way for the program we now operate. Today, Texas has 216 local soil and water conservation districts that encompass more than 99% of the state.

As previously mentioned, the Model Act endorsed by President Roosevelt was in part patterned after the Texas Wind Erosion Act. Texas was already making attempts to address soil conservation as a result of the "Dust Bowl" days of the 1930s. The 44th Legislature in 1935 passed legislation authorizing the establishment of Wind Erosion Conservation Districts. This law provided for the creation of districts to "conserve the soil by prevention of unnecessary erosion caused by winds, and the reclamation of lands that have been depreciated or denuded of soil by reasons of winds." Although a number of Wind Erosion Control Districts were created, the passage of the Soil Conservation District Law in 1939 resulted in those districts becoming dormant.

In 1975, Governor Dolph Briscoe, by Executive Order, designated the TSSWCB as lead agency to assume the planning and management responsibility for control of agricultural and silvicultural nonpoint source pollution as required by the Federal Water Pollution Control Act.

In 1981 the 67th Legislature passed H.B. 1436, which for the first time codified the agricultural laws of Texas. Title 7, Chapter 201 of this code contains the portion pertaining to Soil and Water Conservation.

In 1985 the 69th Legislature passed S.B. 1083 creating a Brush Control Program in Texas and granting new powers and responsibilities, without funding, to the TSSWCB and Soil and Water Conservation Districts under Chapter 203 of the Agriculture Code. In 1999, the TSSWCB received its first appropriation in the FY00-01 biennium to control water-depleting brush and trees, such as cedar and mesquite. The program received $9.1 million to establish a pilot project in the North Concho Watershed.

In 1993, the 73rd Legislature passed S.B. 503 which named the TSSWCB the lead agency to address water quality issues relating to runoff from diffused, or nonpoint sources resulting from agricultural and forestry operations. In 1999, the Legislature expanded the TSSWCB's environmental mission and appropriated money to address water pollution from nonpoint sources under a separate, federally mandated program.

The leaders who framed the Texas Soil and Water Conservation Law in 1939 recognized that landowners and operators of private land constitute the basic resource for the conservation of our renewable natural resources. Without the support and willing participation of private landowners and operators in the development and implementation of soil and water conservation programs there is little hope of success. Local soil and water conservation districts led by farmers and ranchers who know the land and the local conditions and problems have the means to develop conservation plans that address each acre of land specific to its needs to solve or reduce the severity of its problems.

Organization

Since inception, the TSSWCB has been governed by five board members, elected by delegates from each of five regions of the state's 216 local soil and water conservation districts. Elections occur annually at regional conventions of the local soil and water conservation districts, with members serving two-year staggered terms. However, with the enactment of S.B. 1828 by the 78th Legislature, two Governor appointees join the five elected board members to create a seven-member board. The two Governor appointed positions are listed below. The term of one member appointed by the Governor expires February 1 of each odd-numbered year, and the term of the other member appointed by the Governor expires on February 1 of each even-numbered year.

Elected State Board members must be 18 years of age or older; hold title to farmland or ranchland; and be actively engaged in farming or ranching. The Governor appointees must be actively engaged in the business of farming, animal husbandry, or other business related to agriculture and wholly or partly owns or leases land used in connection with that business; and may not be a member of the board of directors of a conservation district.

The State Board elects its own Chair and generally meets every odd month, unless specific programs or issues require more immediate action. The following list shows the current Board members and shows which State Board Region they represent.

Texas State Soil and Water Conservation Board

Member Name	Region	Term	Residence
Aubrey L. Russell	#1	May 5, 2009 – May 3, 2011	Panhandle
Marty H. Graham	#2	May 6, 2008 - May 4, 2010	Rocksprings
José O. Dodier, Jr.	#3	May 5, 2009 – May 3, 2011	Zapata
Jerry D. Nichols	#4	May 6, 2008 – May 4, 2010	Nacogdoches
Barry Mahler	#5	May 5, 2009 – May 3, 2011	Iowa Park
Larry D. Jacobs	Appointed	February 1, 2008-February 1, 2010	Montgomery
Joe L. Ward	Appointed	February 1, 2009-February 1, 2011	Telephone

Staff

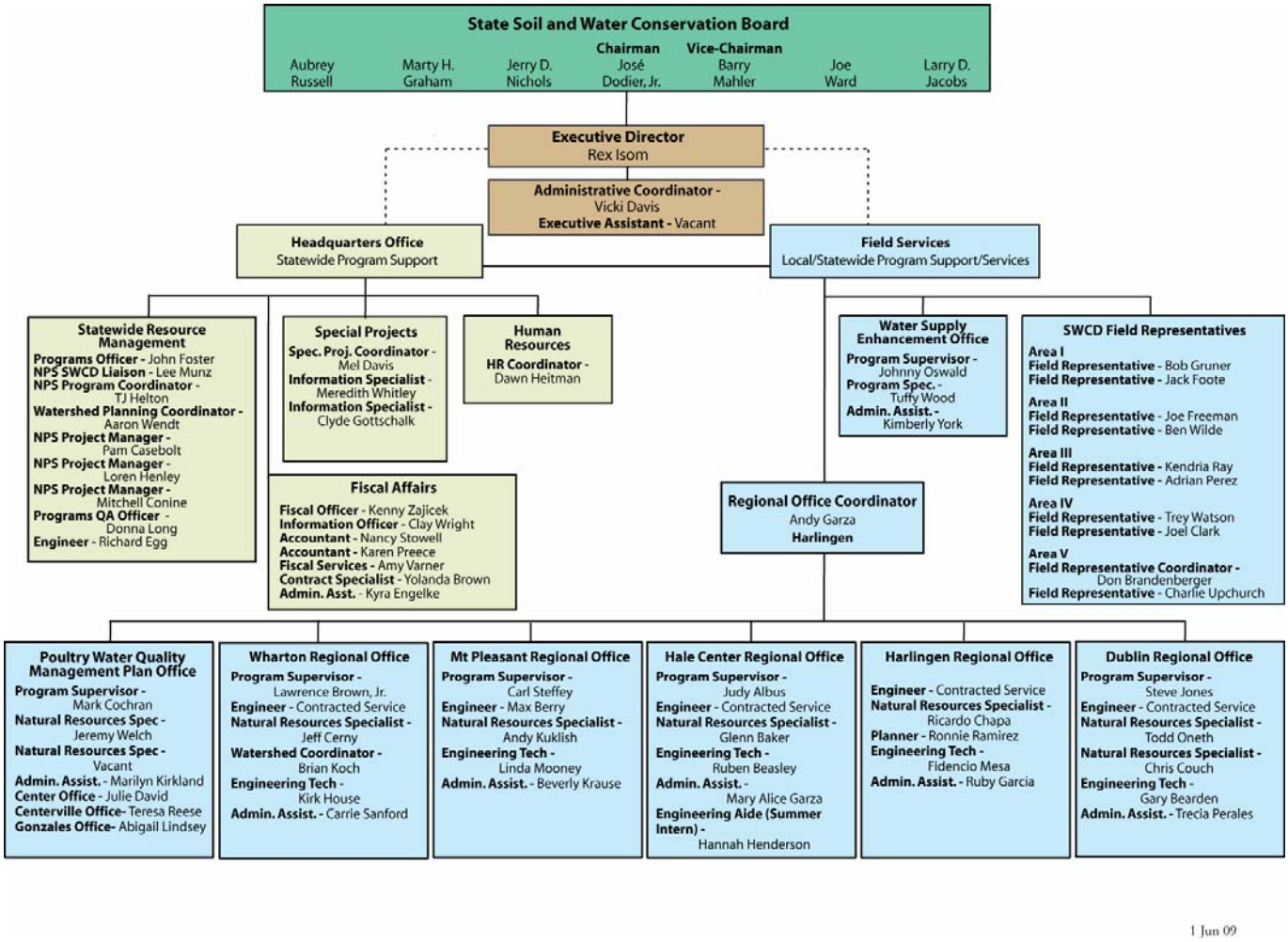
Mr. Rex Isom was named as the Executive Director in January 2004 and continues to carry out the directives of the State Board and directing staff efforts. We emphasize our agency philosophy as stated in our Strategic Plan, "The State Soil and Water Conservation Board will act in accordance with the highest standards of ethics, accountability, efficiency, and openness. We affirm that the conservation of our natural resources is both a public and a private benefit, and we approach our activities with a deep sense of purpose and responsibility." Mr. Isom, as Executive Director, is leading the agency in that direction and expects all employees to follow that lead.

The 81st Legislature authorized appropriations for 6 additional full-time employees (FTEs). These positions are coordinator for the Invasive Species Coordinating Committee as created by HB 865 (81st RS); a GIS/Database Administrator; two Flood Control Program Field positions; a Flood Control Program accounting position and a Water Supply Enhancement accounting position.

As of June 1, 2009 the TSSWCB employed 65 staff, 22 of which work in the Temple headquarters. The remaining employees are field staff, either working out of their homes or located in seven satellite offices; five regional offices and two program specific offices, located throughout the state. Due to difficulty in recruiting engineers, this service is now being contracted with engineering firms. The following organization chart shows the agency's current structure.

The current structure of the TSSWCB reflects efforts to maintain more personnel in the field and away from headquarters for a 66% to 34% ratio of Field personnel to Headquarters personnel.

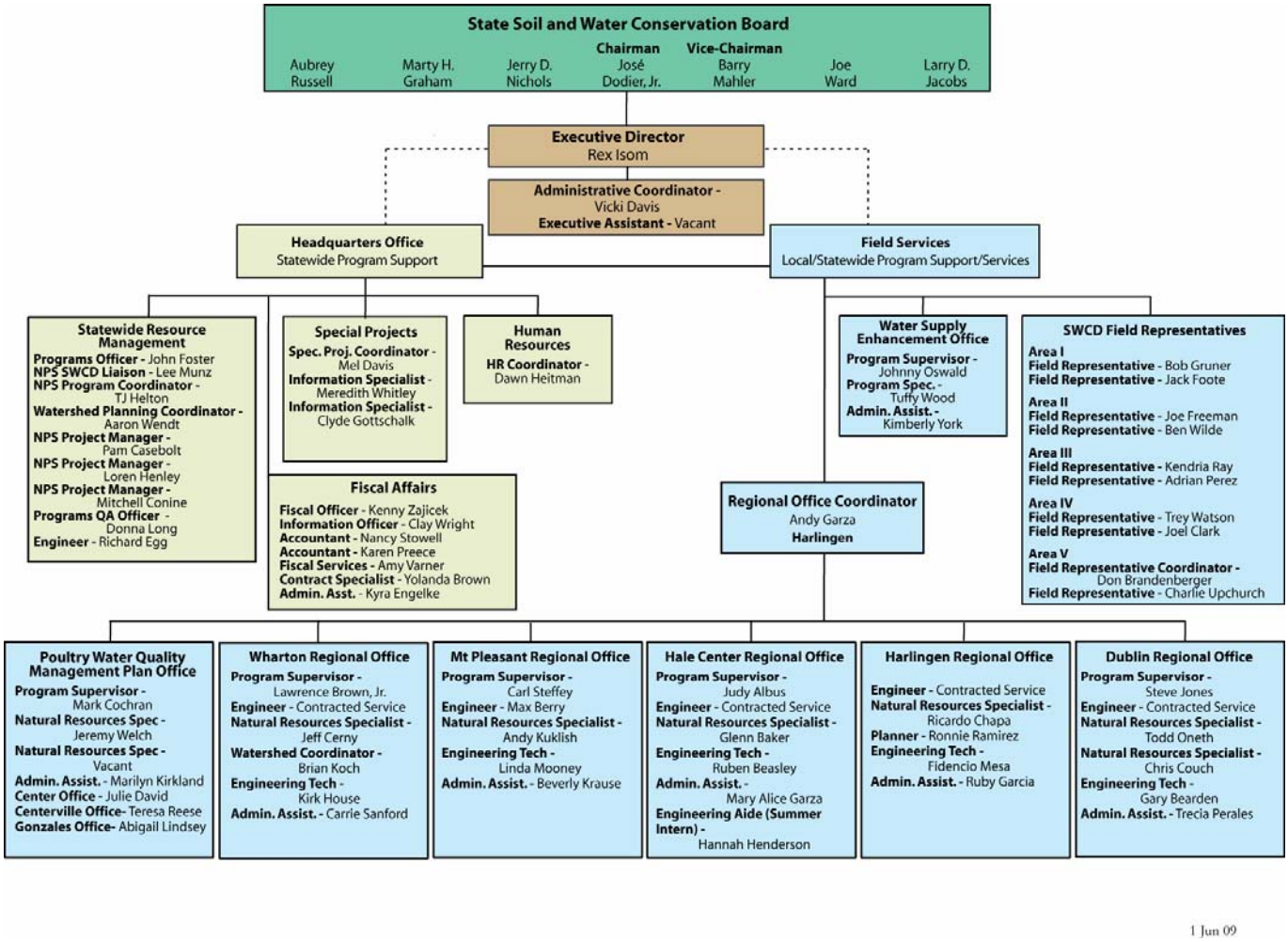
The regional office staff along with the program specific staff provides on-site technical assistance to farmers and ranchers. The field staff serves as a liaison between the TSSWCB and local districts. The field staff also provides assistance to local districts and district employees concerning operations, programs, and activities. The regional office staff and the program specific staff coordinates with the Texas Commission on Environmental Quality (TCEQ), Texas AgriLife Extension Service, and the USDA's Natural Resource Conservation Service (NRCS) to provide technical assistance to landowners to implement Water Quality Management Plans (WQMPs).



Soil and Water Conservation Districts

The TSSWCB performs many of its activities in coordination with the state's 216 local soil and water conservation districts. These local districts are political subdivisions of the state, established through local option elections of agricultural landowners. Districts generally reflect county boundaries, but may also follow river basin or watershed boundaries, depending on the desires of the local landowners.

The following soil and water conservation district map shows the current 216 local districts that cover almost the entire state. That portion of the state not in a soil and water conservation district is in Kenedy County and contains the privately owned King Ranch. The map also shows the grouping of the districts into the five State Board Districts that respectively elect a State Board member and shows the field staff that is assigned to work with each district within a specific area.



Landowners within these local districts elect the five district directors that comprise the districts governing body or board of directors. This board of directors administers the programs and activities of the district. Representatives of the districts within each region then elect the members of the State Board through a series of convention style-elections.

Districts do not have taxing authority and rely on locally generated funds from various activities and programs, federal assistance, county assistance, and state assistance from the TSSWCB. The USDA Natural Resource Conservation Service (NRCS) provides most of the federal assistance available to districts and through cooperative agreements provides technical assistance to farmers and ranchers requesting assistance from the district.

Annual State Meeting Of Soil and Water Conservation District Directors

The Annual State Meeting of Soil and Water Conservation District Directors, required in §201.081, Texas Agriculture Code, was scheduled to convened in Galveston September 29-30 and October 1 2008, however that meeting was cancelled due to Hurricane Ike which hit the Galveston area just days before. The State Board quickly rescheduled and conducted the meeting at the Hyatt Lost Pines Resort near

Bastrop on October 27-28, 2008. There were 120 districts represented, with 244 individual district directors that registered for the meeting. The total registration was 630.

The agency has scheduled the 2009 annual meeting for October 19-21 in Arlington.

Director Mileage and Per Diem

Under Section 201.077(a) of the Agriculture Code, Directors of Soil and Water Conservation Districts are entitled to receive mileage and per diem for official meetings of the District Board. At its July 2009 Meeting, the TSSWCB approved $434,510 in Director Mileage & Per Diem allocations for FY 2010 claims.

District Technical Assistance Funds

The 81st Legislature appropriated a $677,200 increase in Technical Assistance Funds for the 2010-11 Biennium. The TSSWCB disburses Technical Assistance payments to Soil and Water Conservation Districts on a reimbursing basis to supplement their efforts in providing assistance to agricultural producers in the state. Distributions are contingent upon Districts filing annual performance reports with the TSSWCB. At its July 2009 Meeting, the TSSWCB approved $1,778,154 in Technical Assistance allocations for FY 2010 claims.

District Conservation Assistance Program

District Conservation Assistance (Matching Fund) grants are awarded on a matching basis requiring Soil and Water Conservation Districts to raise funds from sources other than state appropriations. Districts do not have taxing authority and use locally raised funds with this matching grant to support their operational expenses. At its July 2009 Meeting, the TSSWCB approved $916,364 in Matching Fund allocations for FY 2010 claims.

Programs & Activities of the TSSWCB

The services and programs provided by the TSSWCB target rural Texas farmers and ranchers, but the results of these services benefit all Texans. For example, many of the flood control structures maintained by SWCDs serve to protect heavily populated areas from flood damage, and also prevent sediment from building up in drinking water supplies. Another example is the use of best management practices (BMPs), implemented through TSSWCB-certified water quality management plans (WQMPs), to prevent pesticides, nutrients, bacteria and other pollutants from impairing the use of Texas streams, rivers, lakes, and estuaries.

The agency is responsible for numerous natural resource conservation efforts, the most prominent of which is serving as the lead state agency responsible for planning, implementing and managing programs and practices for preventing and abating agricultural and silvicultural (forestry-related) nonpoint source (NPS) water pollution. To fulfill this mandate, the agency jointly administers the *Texas Nonpoint Source Management Program*. As a result, many of the agency's programs and services, and more than 60% of the agency's FY2009 budget, aim to improve and protect water quality, including the Water Quality

Management Plan Program, the Clean Water Act §319(h) Nonpoint Source Grant Program, the State Nonpoint Source Grant Program, the Total Maximum Daily Load Program, and the Watershed Protection Plan Program. Additionally, the TSSWCB is a statutorily-authorized member of the Coastal Coordination Council and the Texas Groundwater Protection Committee.

The TSSWCB is also responsible for programs affecting water quantity. The major existing program is the Water Supply Enhancement Program which seeks to increase water supply through the selective control of noxious phreatophytic brush. Additionally, many BMPs implemented by farmers and ranchers as prescribed in their WQMP have ancillary water conservation benefits – increasing irrigation efficiency and reducing water demand. The TSSWCB is a statutorily-authorized member of the Water Conservation Advisory Council, which was established by the 80th Texas Legislature.

Other responsibilities include prevention of soil erosion, control of floods, maintaining the navigability of waterways, the preservation of wildlife, protection of public lands, and providing information to landowners regarding the jurisdictions of the TSSWCB and the Texas Commission on Environmental Quality (TCEQ) related to NPS water pollution.

Flood Control Programs

Background

Nearly 2,000 floodwater retarding structures, or dams, have been built over the last 60 years within the State of Texas. The primary purpose of the structures is to protect lives and property by reducing the velocity of floodwaters, and thereby releasing flows at a safer rate. These are earthen dams that exist on private property, and were designed and constructed by the United States Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS). They were built with the understanding that the private property owner would provide the land, the federal government would provide the technical design expertise and the funding to construct them, and then units of local government would be responsible for maintaining them into the future.

Local sponsors of the dams were required before a federal project was begun. Local sponsors signed a watershed agreement which outlined the duties and responsibilities of the federal and local sponsors. In general, local sponsors are required to obtain and enforce easements, conduct operation and maintenance (O&M) inspections, maintain the structures, and implement land treatment measures in the watershed. Soil and water conservation districts (SWCD) are one of the local sponsors in all watershed projects. Other local sponsors include counties, cities, and Water Control and Improvement Districts (WCIDs).

Due to the passage of time and difficulty in raising adequate funds locally, many sponsors approached the Texas Legislature with their concerns over amount of needed O&M and repairs. In recognition that these dams will continue to serve as a critical protection for our state's infrastructure, private property, and lives, the Legislature appropriated $15 million dollars to the Texas State Soil and Water Conservation Board (TSSWCB) for grants to local SWCDs during the 2010-2011 biennium for O&M and structural repairs.

Program Development

The TSSWCB is currently in the process of developing an (1) O&M Grant Program and a (2) Structural Repair Grant Program for the biennium. Rules for the O&M Grant Program were developed by the TSSWCB staff and a representative stakeholder group during the Summer of 2009, and it is anticipated that those rules will be published in the Texas Register on July 31, 2009 for a 30-day comment period. The agency's goal is to have the rules for the Structural Repair Program published for public comment during September 2009.

Texas Nonpoint Source Management Program

The federal Clean Water Act (CWA) requires States to develop a program to protect the quality of water resources from the adverse effects of NPS water pollution. The *Texas NPS Management Program* is the State's official roadmap for addressing NPS pollution. The program publication is updated every five years. The most recent revision was submitted to the U.S. Environmental Protection Agency (EPA) by the Governor in December 2005. The *Texas NPS Program* is jointly administered by the TSSWCB and the TCEQ.

The *Texas NPS Program* utilizes baseline water quality management programs and regulatory, voluntary, financial, and technical assistance approaches to achieve a balanced program. NPS pollution is managed through assessment, planning, implementation, and education. The TSSWCB and the TCEQ have established goals and objectives for guiding and tracking the progress of NPS management in Texas.

On May 13, 2009, TSSWCB and TCEQ released the *2008 Annual Report on Managing NPS Water Pollution in Texas*; the report is jointly published by the TSSWCB and the TCEQ. In accordance with the CWA, the State must annually report to EPA on success in achieving the goals and objectives of the *Texas NPS Program*. The report highlights the State's efforts during FY2008 to collect data, assess water quality, implement projects that reduce or prevent NPS pollution, and educate and involve the public to improve and maintain the quality of water resources for current and future generations of Texans. The report is available at http://www.tsswcb.state.tx.us/reports#nps.

Implementation of the *Texas NPS Program* involves partnerships among many organizations. With the extent and variety of NPS issues across Texas, cooperation across political boundaries is essential. Many local, regional, state, and federal agencies play an integral part in managing NPS pollution, especially at the watershed level. They provide information about local concerns and infrastructure and build support for the kind of pollution controls that are necessary to prevent and reduce NPS pollution. SWCDs are vital partners in working with landowners to implement BMPs that prevent and abate agricultural and silvicultural NPS water pollution. By establishing coordinated frameworks to share information and resources, the State can more effectively focus its water quality protection efforts.

Multiple water quality programs administered by and/or coordinated through TSSWCB collectively represent the agency's efforts in supporting the goals and objectives of the *Texas NPS Program* including:

- Clean Water Act §319(h) Nonpoint Source Grant Program
- State Nonpoint Source Grant Program
- Total Maximum Daily Load Program
- Watershed Protection Plan Program
- Water Quality Management Plan Program

- Coastal Coordination Council
- Texas Groundwater Protection Committee

For more information on the Texas NPS Management Program, visit our website at http://www.tsswcb.state.tx.us/managementprogram.

Clean Water Act §319(h) Nonpoint Source Grant Program

Congress enacted §319(h) of the CWA in 1987, establishing a national program to control NPS water pollution. Through §319(h), federal funds are provided annually through the EPA to States for the development and implementation of each State's NPS Management Program. Texas' share of the §319(h) funding is divided equally between the TCEQ and the TSSWCB. Over the past several years, the State's allocation has been approximately $9 million per year.

TSSWCB is currently administering $14 million in unliquidated federal funds from FY2003-FY2008 CWA §319(h) allocations. There are currently 54 ongoing §319(h) grant-funded projects addressing a wide array of agricultural and silvicultural NPS issues; a list and brief description of ongoing projects is provided in Attachment 2. Specific project activities include developing and implementing Watershed Protection Plans and Total Maximum Daily Loads; supporting targeted educational programs; and implementing BMPs to abate NPS pollution from dairy and poultry operations, silvicultural activities, grazing livestock operations, and row crop operations.

Quarterly progress reports for ongoing projects were received on January 15, 2009 and April 15, 2009. To date, reports have been received for 100% of the projects. These reports are entered semi-annually into EPA's Grants Reporting and Tracking System.

The TSSWCB's FY2009 CWA §319(h) program allocation from EPA is $4,578,700. The TSSWCB received 22 proposals requesting a total of $6,038,897 in federal funds during the fall 2008 request for proposals. Of those, 8 were selected for funding. TSSWCB submitted the FY2009 §319(h) grant application to EPA on July 8, 2009.

For more information on the TSSWCB CWA §319(h) NPS Grant Program, visit our website at http://www.tsswcb.state.tx.us/managementprogram/browseactive.

State Nonpoint Source Grant Program

The 80th Texas Legislature appropriated general revenue funds to the TSSWCB for the purpose of planning, implementing, and managing programs and practices for preventing and abating agricultural and silvicultural NPS water pollution in impaired watersheds. On May 24, 2007, the TSSWCB approved a *TSSWCB Policy on TMDLs* which provides guidance to staff on directing state appropriations for the State NPS Grant Program. TSSWCB is committed to funding projects encompassing monitoring, assessment, modeling, planning, education, and implementation. Subsequently, the TSSWCB approved operating budgets for FY2008 and FY2009 that each allocated $1.2 million in state general revenue to the State NPS Grant Program.

TSSWCB is currently administering $1.9 million in unliquidated state funds from FY2008-FY2009 State NPS Grant Program allocations. There are currently 12 ongoing general revenue-funded projects addressing an array of agricultural and silvicultural NPS issues; a list and brief description of ongoing projects is provided in Attachment 3. These projects support increased analytical infrastructure at public bacterial source tracking (BST) laboratories, implementation of agricultural NPS components of Total Maximum Daily Load Implementation Plans, technical assistance for the development of WQMPs on agricultural lands, and the collection and analysis of water quality data for watersheds with impaired waterbodies.

Quarterly progress reports for ongoing projects were received on March 15, 2009 and June 15, 2009. To date, reports have been received for 100% of the projects.

For more information on the TSSWCB State NPS Grant Program, visit our website at http://www.tsswcb.state.tx.us/managementprogram/browseactive.

Total Maximum Daily Load Program

The CWA requires Texas to identify lakes, rivers, streams, and estuaries failing to meet or not expected to meet water quality standards and not supporting their designated uses (swimming, drinking, aquatic life, etc.). This list of impaired waterbodies is known as the *Texas 303(d) List* and must be submitted to the EPA for review and approval every two years. The *2008 Texas Water Quality Inventory and 303(d) List* was approved by EPA on July 9, 2008. The *2008 List* identifies over 830 impairments (waterbody-pollutant combinations).

The State must then establish a Total Maximum Daily Load (TMDL) for certain waterbodies identified on the *303(d) List*. A TMDL defines the maximum amount of a pollutant that a waterbody can assimilate on a daily basis and still meet water quality standards. The pollution reduction goal set by the TMDL is necessary to restore attainment of the designated use of the impaired waterbody. The maximum amount of pollutant is determined by conducting a detailed water quality assessment that provides the information for a TMDL to allocate pollutant loads between point sources and nonpoint sources. It also takes into account a margin of safety, which reflects uncertainty and future growth.

Based on the environmental target of the TMDL, an Implementation Plan (I-Plan) is then developed that prescribes the measures necessary to mitigate anthropogenic (human-caused) sources of that pollutant in that waterbody. The I-Plan specifies limits for point source dischargers and recommends BMPs for nonpoint sources. It also lays out a schedule for implementation. Together, the TMDL and the I-Plan serve as the mechanism to reduce the pollutant, restore the full use of the waterbody and remove it from the *303(d) List*. EPA must approve the TMDL, but the I-Plan only requires State approval.

With authority as the lead agency in Texas for planning, implementing, and managing programs and practices for preventing and abating agricultural and silvicultural NPS water pollution, TSSWCB shares responsibility with the TCEQ for the development and implementation of TMDLs. TSSWCB is committed to funding and collaborating with the TCEQ, on TMDL projects encompassing monitoring, assessment, modeling, planning, education, and implementation.

On September 27, 2006, at a joint meeting, the TSSWCB and the TCEQ renewed this partnership and approved a revised *Memorandum of Agreement on Total Maximum Daily Loads, Implementation Plans,*

and Watershed Protection Plans. This framework for collaboration between the two agencies describes the programmatic mechanisms employed to develop and implement TMDLs and I-Plans.

TSSWCB is engaged in implementation activities that support approved I-Plans addressing agricultural or silvicultural NPS load reductions described in adopted TMDLs; collaborating with stakeholders on the development of I-Plans for adopted TMDLs that contain agricultural or silvicultural NPS load reductions; and, actively engaged in the development of TMDLs for waterbodies impaired due to known or suspected agricultural or silvicultural NPS pollution.

TSSWCB funded activities are mitigating bacteria, atrazine, dissolved oxygen, phosphorus and salinity impairments through TMDLs and I-Plans. Specific watersheds where TSSWCB efforts to restore water quality are channeled through TMDL development and implementation are discussed in the *Watershed Approach to Water Quality Planning and Implementation* section of this Report.

In order to abate agricultural and silvicultural NPS pollution, TMDLs and I-Plans will implement components of other TSSWCB Programs, such as the Water Quality Management Plan Program or the Water Supply Enhancement Program. Additionally, the TSSWCB CWA §319(h) NPS Grant Program and the State NPS Grant Program frequently serve as funding sources to implement the agricultural and silvicultural NPS components of I-Plans. These programs are described in detail in other sections of this Report.

For more information on the TSSWCB TMDL Program, visit our website at http://www.tsswcb.state.tx.us/tmdl.

Recreational Use Attainability Analyses

According to the *2008 Texas Water Quality Inventory and 303(d) List*, two hundred ninety-five (295) waterbodies are impaired because they do not meet surface water quality standards for bacteria established to protect contact recreation use (in freshwater or saltwater) and/or oyster water use. The magnitude of bacteria impairments in Texas is evident when compared to all other types of water quality impairments. These bacteria impairments represent over 48% of all impairments on the *303(d) List*.

Critical to solving the breadth of bacteria impairments statewide is ensuring that the water quality standards designed to protect recreation use are appropriate and credible. Major revisions to the Texas Surface Water Quality Standards are currently being drafted by the TCEQ, including significant modifications to contact recreation use and associated bacteria criteria. TSSWCB is engaged in this process. TCEQ adoption of the proposed Standards changes is not expected until late spring 2010 at the earliest. EPA must then take action to approve any changes to the Standards.

Irregardless of what Standards changes are finally approved, in order to change the presumed level of recreation use of a waterbody and the associated bacteria criterion, a Recreational Use Attainability Analysis (RUAA) would need to be completed and approved by TCEQ and subsequently EPA. TCEQ has recently developed draft procedures for conducting RUAAs; previously there were no RUAA protocols in Texas.

The purpose of an RUAA is to ascertain the actual recreation occurring on a waterbody, establish or verify a presumed use, and, if necessary, assign a more appropriate use. During an RUAA information is

collected on water recreation activities, stream flow type, and stream depth; additionally, interviews from users who are present during surveys and those familiar with the waterbody may be conducted and a review of historical information may be completed. If the results of the RUAA indicate that a different, more appropriate use is warranted, the resulting change in the associated bacteria criterion may result in the waterbody no longer being identified on the *303(d) List* as impaired, thus negating the need to adopt a TMDL.

The TCEQ is conducting RUAAs during summer 2009 and summer 2010 on nearly 90 waterbodies across the state. Prior to conducting the surveys, local stakeholders will be contacted to seek input on each project's monitoring plan. Specifically, citizens will be asked to provide input on potential sites near stream crossings to perform evaluations, and landowners will be asked to provide access to evaluate those stretches of the river that are not readily accessible to the public. TCEQ is coordinating communication with SWCDs through the TSSWCB. After the RUAAs are conducted, TCEQ will evaluate the information and again consult with stakeholders regarding potential site-specific revisions to the surface water quality standards for each waterbody.

Because proposed changes to the surface water quality standards affecting recreation use and bacteria criteria must first be approved by TCEQ and EPA, and this is not expected until late spring 2010 at the earliest, any changes to specific waterbodies as a result of this suite of RUAAs being conducted will not be reflected until the *2012 303(d) List* is published in April 2012.

Watershed Protection Plan Program

Watershed Protection Plans (WPPs) are locally-driven efforts that serve as a mechanism for voluntarily addressing complex water quality problems that cross multiple jurisdictions. WPPs are coordinated frameworks for implementing prioritized and integrated water quality protection and restoration strategies driven by environmental objectives. Through the WPP process, TSSWCB encourages stakeholders to holistically address all the sources and causes of impairments and threats to both surface and ground water resources within a watershed.

WPPs serve as tools to better leverage the resources of local governments, state and federal agencies, and non-governmental organizations. WPPs integrate activities and prioritize implementation projects based upon technical merit and benefits to the community, promote a unified approach to seeking funding for implementation, and create a coordinated public communication and education program. Developed and implemented through diverse, well integrated partnerships, a WPP assures the long-term health of the watershed with strategies for protecting unimpaired waters and restoring impaired waters.

WPPs have a variety of ingredients and can take many forms. TSSWCB-sponsored WPPs are consistent with guidelines promulgated by the EPA in 2003. These guidelines describe nine elements fundamental to a potentially successful plan. The TCEQ also sponsors WPPs based on EPA's guidelines. EPA requires certain expenditures through §319(h) grants to be in accordance with a WPP.

TSSWCB provides technical and financial assistance to local stakeholder groups to develop and implement WPPs. Entities are provided financial assistance necessary to facilitate the WPP process in specific watersheds with significant agricultural or silvicultural NPS pollution. Additionally, TSSWCB staff provide technical assistance in developing WPPs which are funded and facilitated by other entities, such as the TCEQ.

Partnerships with the Texas AgriLife Extension Service, the Texas Water Resources Institute and the TCEQ have resulted in the development of training programs for local stakeholder groups and watershed coordinators. The Texas Watershed Steward Program (http://tws.tamu.edu/) supports the development and implementation of WPPs by promoting a sustainable proactive approach to managing water quality at the local level by empowering individuals to take leadership roles in the management of water resources. The Texas Watershed Planning Short Course (http://watershedplanning.tamu.edu/) delivers training to watershed coordinators and water resource professionals to ensure WPPs are adequately planned, coordinated, implemented, and results properly assessed and reported.

On September 27, 2006, at a joint meeting, the TSSWCB and the TCEQ approved a revised *Memorandum of Agreement on Total Maximum Daily Loads, Implementation Plans, and Watershed Protection Plans*. This framework for collaboration between the two agencies describes the programmatic mechanisms employed to develop and implement WPPs.

WPPs currently sponsored by TSSWCB have significant agricultural or silvicultural NPS pollution components and are all funded through CWA §319(h) NPS Grants. While WPPs sponsored by TCEQ have significant water quality issues related to urban NPS pollution or wastewater treatment, most, to varying degrees, have agricultural or silvicultural NPS pollution components. There are several other watershed planning efforts across the state which are funded and sponsored by entities and agencies other than the TSSWCB or the TCEQ. These third-party WPPs may or may not adequately satisfy EPA's nine elements; although, those that do, are eligible to receive CWA §319(h) NPS Grants from the TSSWCB to support implementation of agricultural or silvicultural NPS pollution components of the WPP.

Specific watersheds where TSSWCB efforts to restore water quality are channeled through WPP development and implementation are discussed in the *Watershed Approach to Water Quality Planning and Implementation* section of this Report.

In order to abate agricultural and silvicultural NPS pollution, WPPs will implement components of other TSSWCB Programs, such as the Water Quality Management Plan Program or the Water Supply Enhancement Program. Additionally, the TSSWCB CWA §319(h) NPS Grant Program and the State NPS Grant Program serve as funding sources to implement the agricultural and silvicultural NPS components of WPPs. These programs are described in detail in other sections of this Report.

For more information on the TSSWCB WPP Program, visit our website at http://www.tsswcb.state.tx.us/wpp.

Water Quality Management Plan Program

In 1993, the Texas Legislature passed Senate Bill 503 that directed the TSSWCB to implement Water Quality Management Plans (WQMPs) in Texas. The agency has implemented more than 6000 WQMPs since the inception of the program.

The WQMP Program is administered from five Regional Offices around the state. A poultry WQMP office was opened in Nacogdoches in January 2005. The Regional Offices are:

Dublin Regional Office
Hale Center Regional Office
Harlingen Regional Office
Mount Pleasant Regional Office
Wharton Regional Office
Poultry Program Office (Nacogdoches)

A WQMP is a site-specific conservation plan developed through (and approved by) SWCDs for agricultural or silvicultural lands. The plan includes appropriate land treatment practices, production practices, management measures, technologies or combinations thereof. The purpose of WQMPs is to achieve a level of pollution prevention or abatement determined by the TSSWCB, in consultation with local soil and water conservation districts that is consistent with state water quality standards.

The TSSWCB selected requirements for a WQMP based on the criteria outlined in the *Field Office Technical Guide (FOTG)*, a publication of the United States Department of Agriculture's Natural Resources Conservation Service (NRCS).

Nutrient management must be included if nutrients are applied. If an animal feeding operation is involved (such as an unpermitted dairy), a WQMP will be planned with practices that individually or in combination with other practices will properly manage animal wastes. Waste utilization will be considered when agricultural wastes are applied. These WQMPs also have subcomponents for irrigation waters, erosion control, and are flexible enough to cater to a wide range of operating systems.

Agricultural and forestry landowners may enter into these cooperative agreements with their local district to control nonpoint source pollution from their operations. While the decision to develop a plan is voluntary, landowners have many reasons to do so. These plans provide for landowners to use best management practices in their operations to protect their most precious agricultural resources by controlling erosion, conserving water, and protecting water quality. In addition, certified plans have the same legal status as Texas Commission on Environmental Quality (TCEQ) point source pollution permits, without having to go through that agency's regulatory process. Landowners may also receive financial incentives to help pay for implementing these plans.

It should be noted that an animal feeding operation that is required by law to operate within the confines of a water quality permit issued by the TCEQ may not participate in the TSSWCB program.

Water Quality Management Plans are especially useful for animal feeding operations. Depending on their size, animal feeding operations may be regulated by TCEQ as a point source or are unregulated and eligible for the TSSWCB's voluntary program. Generally, these feeding operations are classified according to the number of animals they have, calculated as "animal units"; however, TECQ has adopted rules that provide if you have or exceed a certain number of animals, you will be regulated. Animal feeding operations with more than the number of animals listed in TCEQ rules must apply for a permit. Most animal feeding operations in Texas are not large enough to require a permit, which makes this program critical to protecting Texas' water quality.

In developing the Water Quality Management Plan, the TSSWCB, SWCDs, and the USDA Natural Resources Conservation Service (NRCS) provide technical assistance to help the landowner meet the criteria of the plan. A plan establishes practices and installations on the farm that adhere to best

management practices specific for that area. The various installations that a plan calls for depend on the operation. A farm may include a combination of cropland, dairy cows, poultry, hogs or cattle.

These plans may also include erosion control measures such as terraces or grass waterways; or they may address nutrient management to help landowners avoid over-fertilizing their land, or over-applying animal waste. Although a plan will take into consideration each farm's unique components, all WQMPs generally attempt to control erosion, conserve water, and protect water quality.

Upon TSSWCB certification of a WQMP, a landowner may apply for a financial incentive that will help pay for implementing the plan. Local districts have varying rates for sharing the cost of plan implementation; however cost-share may not exceed 75% with a maximum $10,000 grant limit per plan. Landowners receiving financial incentive have approximately are now given a specific time period to implement conservation practices, otherwise, their applications are cancelled automatically and the funds are reallocated to another plan. This approach hopefully will reduce the amount of lapsed funds.

The TSSWCB allocates money to local districts for financial incentives based on whether the area has impaired water bodies as determined by TCEQ, or if the TSSWCB had previously designated it as a priority. Most of these financial incentives were appropriated from General Revenue funds. Some plans received financial incentives from federal funds. State appropriations provided to local districts in FY08 amounted to $2,171,740.00 to carry out a WQMP cost-share program in their district.

In addition to certifying WQMPs to ensure that they help abate nonpoint source pollution, the TSSWCB monitors WQMPs to ensure they are properly implemented. Each year, the TSSWCB conducts status reviews on a minimum of 10% of the plans. Additional technical assistance may be offered to a landowner when a WQMP is found noncompliant. In the unlikely case that the landowner does not achieve compliance with the WQMP, the TSSWCB may decertify the plan.

During FY03, the WQMP Program was administered from the TSSWCB office in Temple. The staff reductions in the FY04 budget made it necessary for the program to be reorganized and the Regional Offices activities are now coordinated through the Harlingen Regional Office. Additionally, plan certification authority was shifted from the Temple headquarters to each regional office. This change is already expediting the certification process and reducing postage expenditures, while maintaining the integrity and standards of the program.

The last adjustment involved the complaint process, which was also administered out of the headquarters office during FY03. Headquarters office no longer has an individual to do complaint inspections and all complaints are investigated from the appropriate Regional Office.

Current Status

A total of 642 water quality management plans have been certified by the State Board through the end of the 3rd quarter of FY-2009. This is 3.5% greater than the yearly goal.

District cost-share fund allocations for FY-10 have been approved by the State Board. The period for obligating FY-10 cost-share funds goes from September 1, 2009 to April 30, 2010.

For FY-09, the Hall-Childress #109, Salt Fork #133, Atascosa #307, Hill Country #534 and Mills County #554 were designated as priority districts because of impaired water bodies within their boundaries. These districts are now eligible to receive cost-share allocations.

Lapsed cost-share funds have been reduced by 53% in the last four years. Approximately 12.5% of total cost-share funds are being lapsed statewide at the present time.

Poultry Water Quality Management Plan Initiative

Background

In 1994, the Texas State Soil and Water Conservation Board (TSSWCB) began assisting poultry operations with the establishment of the Northeast Texas - Senate Bill 503 Cost-share Area. Since 1994, over $300,000 of WQMP Program funding has been provided annually to six soil and water conservation districts (SWCDs) in Northeast Texas to address animal feeding operations (AFOs). Shelby SWCD began receiving SB 503 funds in FY 2005 and the Nacogdoches SWCD began receiving SB 503 funds in FY 2007.

In 1995, the TSSWCB initiated three federal Clean Water Act, §319(h) projects to demonstrate composting as a means for dead bird disposal, buffer strips, and proper land application of poultry litter. In 1996, the TSSWCB expanded its efforts by initiating a composting and marketing project. This effort to promote the installation of composters and other means of mortality management on poultry farms resulted in accelerated WQMP development.

In 1997, the Texas Legislature passed Senate Bill 1910, which required all poultry farms to have a TCEQ-approved method of dead bird disposal. The law took effect in March 1998. However, the rules were not adopted and did not take effect until fall 1999. It was during this time that requests for poultry WQMPs significantly increased due to pursuit of cost-share for mandated mortality management. This activity intensified the TSSWCB's poultry initiative.

In 1999, in response to water quality concerns and the initiation of TMDL development in the Big Cypress/Lake O' the Pines watershed, the TSSWCB began using §319 funds for cost-share in the area in addition to the Senate Bill 503 cost-share funds already directed to the watershed. The current implementation process of the TMDL has shown that the WQMP program has resulted in reduced nutrient loadings in the watershed. Due to rising concerns in nearby watersheds, the TSSWCB also included the Sam Rayburn and Toledo Bend Reservoir watersheds in its initiative in 1999. The TSSWCB expanded the poultry initiative again in 2001 to the Gonzales area.

Beginning in 2001, seven soil and water conservation district (SWCD) technicians were employed under federal Clean Water Act §319 contracts to develop WQMPs in poultry producing areas. Six of those contracts expired in 2004 and the seventh expired in 2005. An eighth §319 district technician was hired in 2003 with the Shelby SWCD and that contract expired in August 2007. Two more positions were hired by local SWCDs in FY 2007 to help with WQMP development for the Sanderson Farms expansion in the Waco area. Those contracts have also expired.

In 2001, the 77th Legislature passed Senate Bill 1339, which requires all poultry facilities in Texas to operate in accordance with a WQMP certified by the TSSWCB. The review and certification process assures the plan includes appropriate practices, management measures, and schedules of implementation.

This law provided for a staggered-schedule of deadlines by which each producer, depending on their initial date of operation, must have requested the development of a WQMP from their soil and water conservation district. Any commercial poultry facility constructed after January 1, 2002 is required to have a WQMP prior to the receipt of any birds. All other commercial poultry facilities were required to have a WQMP no later than December 31, 2007.

In October 2007, two technicians were hired by local Soil and Water Conservation Districts, with one expiring in August 2008 and the other in August 2009. Because of expiring contracts and difficulty retaining temporary contract SWCD staff, TSSWCB submitted a 2008-2009 Legislative Appropriations Request for 4 additional FTEs to replace the expiring SWCD technician positions, so as to continue technical assistance for poultry producers in these areas. The budget request was approved by the 80th Texas Legislature and took effect September 1, 2007. The four new positions are located in the four most heavily poultry populated areas of the state which are Shelby, Nacogdoches, Gonzales, and Leon Counties and they also serve the poultry producers in surrounding counties. The 4 new positions are part of the TSSWCB Poultry Program reporting to the Nacogdoches Poultry Office.

Due to changes made by the U.S. Environmental Protection Agency (EPA) to the federal regulations for concentrated animal feeding operations (CAFOs), the Texas Commission on Environmental Quality (TCEQ) adopted a rule change in 2004 that required dry-litter poultry operations larger than 125,000 broilers or pullets, 82,000 layers or breeders, or 55,000 turkeys to operate under a water quality permit. However, due to a federal court decision by the U.S. 2nd Circuit Court of Appeals in February 2005, the EPA issued a notice that the date by which a permit and a Nutrient Management Plan must be obtained was extended to July 31, 2007 and EPA then further extended the date to February 27, 2009. Also in compliance with the court decision, the EPA released additional proposed rule changes in June 2006. Under the new rule, farms that do not actually discharge wastes to waters of the U.S. are not required to apply for permit coverage, thereby eliminating the need for dry-litter operations to apply. In advance of EPA's final rule, TCEQ made a rule change in September 2006 to allow CAFO size dry-litter poultry farms an exemption to permitting if they obtain and follow a WQMP certified by TSSWCB. A supplemental guidance document is available from the TSSWCB for poultry producers that provides requirements in addition to the WQMP that are necessary to stay in compliance with the CAFO rules. Meetings were held in seven different poultry producing locations in January, February, and June 2008 to inform poultry producers of those additional requirements.

Current Issues

Currently, the TSSWCB is aware of 1310 total dry-litter poultry farms, of which 460 (35%) are defined as Concentrated Animal Feeding Operations (CAFO). However, there is an ongoing challenge of identifying new poultry farms continually being constructed and put into production, others going out of business, learning of farms that have changed bird placement numbers, and locating other poultry farms not yet identified. Sanderson Farms has completed its new contract farms in the Waco area to supply a new processing plant that began operation in August 2007. TSSWCB staff has developed or is currently developing WQMPs for all of the known new farms.

In FY 2009, staff in the Poultry WQMP Program continues to develop, update, and review Water Quality Management Plans for poultry producers and provide assistance with all issues related to the Poultry WQMP Program. The Program Supervisor and two Natural Resource Specialists staff the Nacogdoches Poultry Office. There are also three Natural Resource Specialists located in Center, Centerville, and

Gonzales. In addition, two technicians continue to work for local Soil & Water Conservation Districts (SWCD) in Nacogdoches and Shelby Counties to assist the Poultry WQMP Program in the Nacogdoches area. Approximately 537 (41%) of the estimated 1310 dry-litter poultry farms in Texas are located in an eight-county area surrounding Nacogdoches. About 121 (23%) of the 537 farms in the 8-county area are large enough to be defined as Concentrated Animal Feeding Operations (CAFO), which require inspections conducted by TSSWCB staff which could result in needed revisions to their WQMP. In addition, the other existing WQMPs are reviewed regularly for needed updates and revisions. The office also assists other SWCDs in the state with poultry WQMP development and revision and complaint investigations as needed.

Comprehensive Nutrient Management Plan Program

The TSSWCB Comprehensive Nutrient Management Plan (CNMP) Program was developed in response to a control measure recommended in the TMDL *I-Plan for Soluble Reactive Phosphorus in the North Bosque River Watershed*. The I-Plan recommended that dairy producers in the watershed voluntarily develop and implement a CNMP; however, the TCEQ adopted a rule that made the recommendation a requirement. The CNMP Program is confined to the North Bosque River and Leon River watersheds by TSSWCB rule.

A CNMP is a resource management plan containing a grouping of conservation practices and management activities which, when combined into a conservation system, will help ensure that both agricultural production goals and natural resource concerns dealing with nutrient and organic by-products and their adverse impacts on water quality are achieved. A CNMP incorporates practices to utilize animal manure and organic by-products as a beneficial resource. The TSSWCB selected requirements for a CNMP based on the TCEQ rules and regulations required for permitted and unpermitted animal feeding operations and criteria outlined in the Field Office Technical Guide (FOTG), a publication of the USDA NRCS. The FOTG represents the best available technology and is already tailored to meet the needs of SWCDs all over the nation. To be certified by the TSSWCB, the local SWCD, the producer, and the local NRCS Field Office must approve a CNMP.

As of June 1, 2009 the TSSWCB has certified 90 of the 90 CNMPs that have been submitted for approval. The TSSWCB, NRCS, and the Texas Association of Dairymen have held numerous meetings with dairy producers and technical service providers since January 2006 in an effort to facilitate development and submittal of CNMPs.

Coastal Coordination Council

The Texas Coastal Management Program (CMP) was created to coordinate state, local, and federal programs for the management of Texas coastal resources. The program brings federal Coastal Zone Management Act (CZMA) funds to Texas to implement projects and program activities for a wide variety of purposes. The Texas General Land Office (GLO) is responsible for coordinating activities associated with the CMP. The Coastal Coordination Council (CCC), established by the Texas Legislature, administers the CMP; the TSSWCB is a statutorily-authorized member of the CCC.

The CCC is charged with adopting uniform goals and policies to guide decision-making by all entities regulating or managing natural resource use within the Texas coastal area. The CCC reviews significant actions taken or authorized by state agencies and subdivisions that may adversely affect coastal natural

resources to determine consistency with CMP goals and policies. In addition, the CCC oversees the CMP Grants Program and the Small Business and Individual Permitting Assistance Program.

The Coastal Zone Act Reauthorization Amendments (CZARA) §6217, requires each State with an approved coastal zone management program (CMP) to develop a federally approvable program to control coastal NPS pollution. The National Oceanic and Atmospheric Administration (NOAA) and the EPA jointly administer §6217 at the federal level. In Texas, the TSSWCB and the TCEQ hold primary responsibility for the coastal NPS program's development and implementation.

CZARA §6217 calls for implementation of management measures that will control significant NPS pollution to coastal waters. Six source categories are addressed by these measures: agriculture, forestry, urban and developing areas, marinas, wetland/riparian areas, and hydromodification. States can use voluntary approaches combined with existing state authorities to achieve implementation of management measures. However, if the voluntary mechanisms are not effective, States must have backup enforcement authorities in place to ensure that management measures are implemented.

Texas submitted the *Texas Coastal NPS Pollution Control Program* to EPA and NOAA in December 1998. In July 2003, NOAA and EPA issued conditional approval of the Texas Coastal NPS Program. The agricultural and silvicultural portions of the program were approved without conditions. Texas had five years to meet the remaining conditions to gain full approval. States that fail to submit an adequate program (full approval) face penalties including loss of EPA and NOAA funds, including CWA §319(h) NPS grant monies.

In July 2008, the CCC responded to the conditional approval findings of NOAA and EPA. It was anticipated that this response would address the remaining conditions resulting in a fully approved program. However, on May 29, 2009, GLO received comments from NOAA and EPA which concluded that enough progress had been made to lift only one of the conditions. TSSWCB, TCEQ, and GLO plan to meet with NOAA and EPA in the near future to discuss requirements for Texas to fully meet all conditions.

Mechanisms the TSSWCB implements in order to abate agricultural and silvicultural NPS pollution in the coastal zone include the agency's Water Quality Management Plan Program, CWA §319(h) NPS Grant Program, State NPS Grant Program, Total Maximum Daily Load Program, and Watershed Protection Plan Program. These programs are described in detail in other sections of this Report.

Many of the WPPs and TMDLs that the TSSWCB is engaged in are in the coastal zone. WPPs being developed or implemented in the Coastal Zone include Arroyo Colorado, Bastrop Bayou, Armand Bayou and Dickinson Bayou. TMDLs being developed or implemented in the Coastal Zone include Adams and Cow Bayous, Copano Bay and Aransas and Mission Rivers, Dickinson Bayou, and Oso Bay and Creek.

For more information on the Texas Coastal NPS Pollution Control Program, visit our website at http://www.tsswcb.state.tx.us/coastalnps.

Texas Groundwater Protection Committee

Established by the Texas Legislature in 1989, the Texas Groundwater Protection Committee (TGPC) bridges the gap between State groundwater programs, improves coordination between member agencies

and works to protect groundwater as a vital resource; the TSSWCB is a statutorily-authorized member of the TGPC.

The Texas Water Code sets non-degradation of the State's groundwater resources as the goal for all State programs and asserts that groundwater be kept reasonably free of contaminants that interfere with its present and potential uses. The TGPC implements the State's groundwater protection policy which:

- Requires that pollution discharges, waste disposal and other regulated activities not harm public health or impair current or potential groundwater use;
- Recognizes the variability between aquifers;
- Acknowledges the importance of water quality;
- Balances the protection of the environment and the long-term economic health of the state; and,
- Recognizes the use of the best professional judgment of the responsible state agencies to implement the policy.

The Texas Groundwater Protection Committee:

- Reports on its activities and recommends new protection programs to the Legislature.
- Publishes numerous reports.
- Advises the TCEQ on the development of agricultural chemical plans for groundwater.
- Develops, implements and updates a comprehensive Texas Groundwater Protection Strategy and an annual Joint Groundwater Monitoring and Contamination Report.

Mechanisms the TSSWCB implements in order to prevent and abate agricultural and silvicultural NPS pollution impacting groundwater include the agency's Water Quality Management Plan Program, CWA §319(h) NPS Grant Program, State NPS Grant Program, Total Maximum Daily Load Program, and Watershed Protection Plan Program. These programs are described in detail in other sections of this Report. High priority aquifers where TSSWCB has historically committed agency resources include the Seymour Aquifer and the Ogallala Aquifer.

The Texas Water Code requires that the TGPC biennially prepare a report that provides recommendations to improve groundwater protection for legislative consideration and that describes the TGPC's activities for the preceding biennium. The report, *Activities and Recommendations of the Texas Groundwater Protection Committee: A Report to the 81st Legislature*, was published in January 2009. Fourteen groundwater protection recommendations are presented in the report requesting legislative consideration in three topical areas: 1) strengthen groundwater conservation and water quality protection efforts, 2) advance groundwater management and protection through enhanced data collection and availability, and 3) support of groundwater research. Two of the fourteen recommendations specifically are targeted to TSSWCB programs, one of which addresses agricultural NPS pollution:

- Fund Brush-Control Projects to Increase Groundwater Yield – Continue to fund the TSSWCB State Brush Control Program and expand it as funds become available in areas where it is found to be effective and will increase long-term availability of groundwater by increasing recharge of aquifers.
- Encourage On-Farm Agricultural BMP Incentives through Continued Support of Water Conservation Plan Program – Continue support of a program to implement certified water-conservation plans on irrigated agricultural lands through the TSSWCB, with cost-share to assist in implementation of on-farm BMPs.

More information on the TGPC is available at http://www.tgpc.state.tx.us/.

Watershed Approach to Water Quality Planning and Implementation

Protecting the State's rivers, streams, lakes, bays, and aquifers from the impacts of NPS pollution is a complex process. Texas uses a Watershed Approach to focus efforts on the highest priority water quality issues of both surface and ground water. The Watershed Approach is based on the following principles:

- Geographic focus based on hydrology rather than political boundaries;
- Water quality objectives based on scientific data;
- Coordinated priorities and integrated solutions; and,
- Diverse, well-integrated partnerships.

For groundwater management, the geographic focus is on aquifers rather than watersheds. Otherwise, the approach is the same. Wherever interactions between surface and ground water are identified, management activities will support the quality of both resources.

The TSSWCB applies the Watershed Approach to managing NPS pollution by channeling its efforts to restore water quality through WPP and TMDL development and implementation. Specific watersheds where TSSWCB believes agricultural and/or silvicultural NPS pollution may be contributing to a water quality impairment or concern to an extent which is sufficient to justify expenditure of agency resources are listed below and shown on the map (Figure #). Specific information on each watershed, including waterbody name and segment number, overall water quality condition, pollutants of concern, specific mechanism (TMDL, I-Plan, WPP, UAA) being utilized to restore water quality with lead agency indicated, and links to relevant activities associated with restoration of the waterbody, is available at http://www.tsswcb.state.tx.us/watersheds.

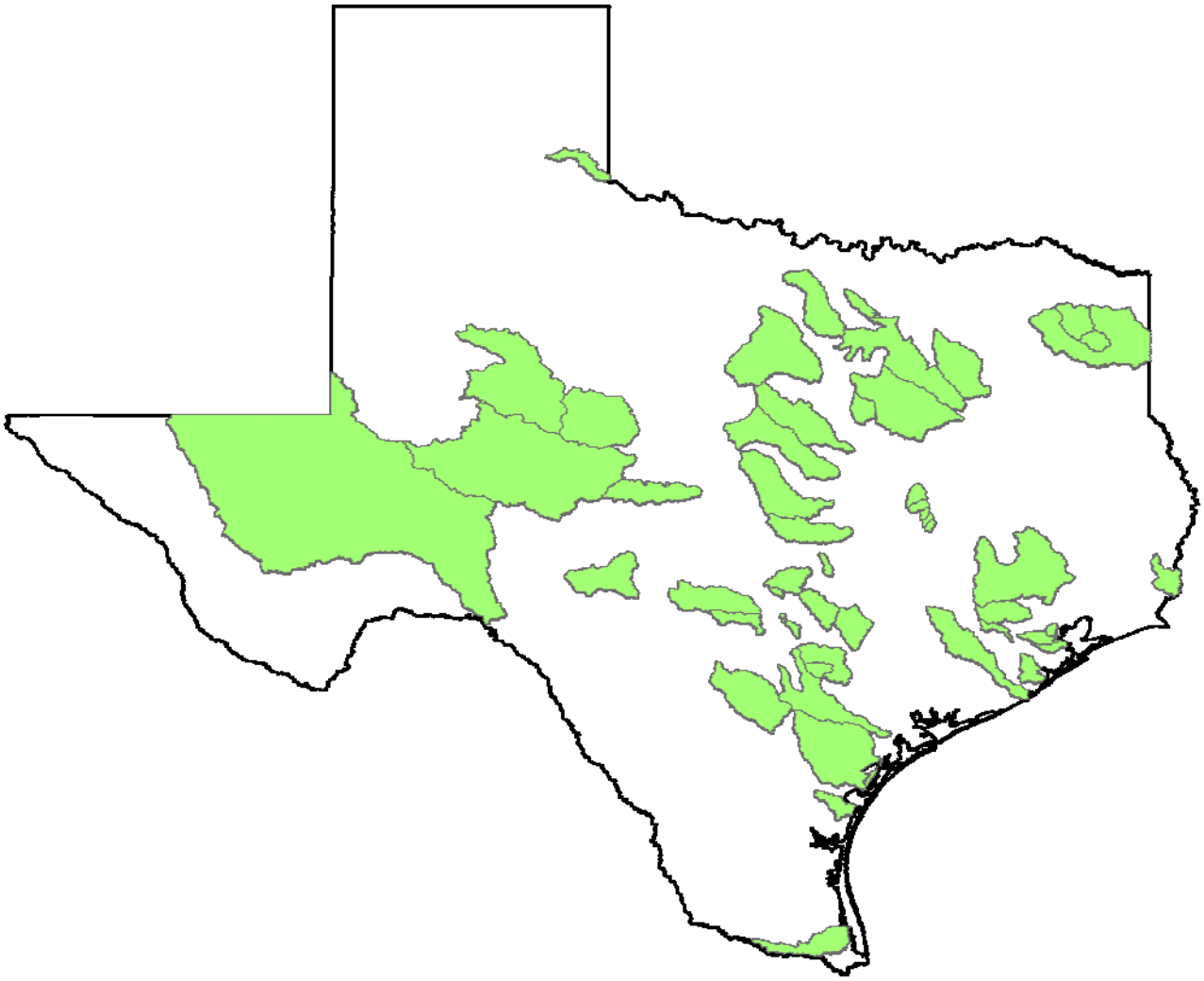


Figure 1 – Map of watersheds where TSSWCB is engaged in water quality planning and implementation.

Adams & Cow Bayous
Aquilla Reservoir
Armand Bayou
Arroyo Colorado
Atascosa River
Bastrop Bayou
Big Cypress Creek
North Bosque River
Brady Creek
Buck Creek
Buffalo & Whiteoak Bayous
Caddo Lake
Cedar Creek Reservoir
Upper Cibolo Creek
Clear Creek
Colorado River below E.V. Spence Reservoir
Concho River
Copano Bay & Mission & Aransas Rivers
Cypress Creek
Dickinson Bayou
Eagle Mountain Reservoir
Elm & Sandies Creeks
Geronimo Creek
Gilleland Creek
Lake Granbury
Lake Granger
Guadalupe River above Canyon Lake
Hickory Creek
Lake Houston
Lake O' the Pines
Lampasas River
Leon River
Little Brazos River Tributaries
Onion Creek
Oso Bay & Creek
Peach Creek
Pecos River
Plum Creek
Richland-Chambers Reservoir
Lower San Antonio River
San Bernard River
South Llano River
E.V. Spence Reservoir
Upper Trinity River
Upper Oyster Creek

This list of "priority" watersheds is frequently updated by the TSSWCB.

Statewide Bacterial Water Quality Impairment Reduction Initiative

According to the *2008 Texas Water Quality Inventory and 303(d) List*, two hundred ninety-five (295) waterbodies are impaired because they do not meet surface water quality standards for bacteria established to protect contact recreation use (in freshwater or saltwater) and/or oyster water use. The magnitude of bacteria impairments in Texas is evident when compared to all other types of water quality impairments. These bacteria impairments represent over 48% of all impairments on the *303(d) List*.

As the lead agency in Texas responsible for the prevention, abatement, and management of NPS pollution from agricultural and/or silvicultural activities, the TSSWCB plays a critical role in addressing water quality impairments for bacteria. Many of these impairments have been attributed, at least in part, to grazing livestock or animal feeding operations.

In order to address these bacteria impairments, TSSWCB has continued to strengthen partnerships with industry commodity organizations including the Texas Farm Bureau, the Texas and Southwestern Cattle Raisers Association, the Independent Cattlemen's Association of Texas, the Texas Poultry Federation, the Texas Association of Dairymen and the Texas Pork Producers Association. Voluntary participation by the members of these organizations in TSSWCB programs, such as the Water Quality Management Plan Program, is crucial to ameliorating any potential contributions of livestock to bacteria impairments.

Working with the USDA Natural Resources Conservation Service (NRCS) and the State Technical Advisory Committee, an Environmental Quality Incentives Program (EQIP) State Resource Concern for Water Quality in South Central Texas was established to provide livestock producers in the Peach Creek, Elm and Sandies Creeks, Atascosa River and Lower San Antonio River watersheds financial assistance in implementing BMPs to prevent and abate NPS pollution from their operations which may be contributing to the bacterial water quality impairment in those watersheds. This financial assistance is leveraged with technical assistance provided by the local SWCDs through CWA §319(h) NPS Grants from TSSWCB.

The magnitude of water quality impairments from excessive bacteria in Texas has resulted in a marked increase in the number of bacteria-related education, assessment, demonstration, and implementation projects initiated and directed by the TSSWCB. Most of these projects are funded through the agency's CWA §319(h) NPS Grant Program, but the agency has utilized other funding mechanisms such as the TSSWCB State NPS Grant Program and the USDA NRCS Grassland Reserve Program. Nearly two dozen projects are currently focused on the abatement of bacterial NPS pollution.

For more information on the TSSWCB Statewide Bacterial Water Quality Impairment Reduction Initiative, visit our website at
http://www.tsswcb.state.tx.us/managementprogram/initiatives/bacteria.

Information Technology

Mobile Workforce Smartphone Rollout
Gone are the days when being out of the office freed an employee from the need to stay connected to coworkers via voice and data services. To better equip the mobile workforce of the TSSWCB, the agency began providing employees with smartphones that include email. calendaring, contact and task management capabilities in addition to voice service.

These devices have worked well for staff due to the good cellular service coverage across most of the state and the flexibility of the devices themselves. User feedback has been positive, with staff noting that smartphone devices can be more easily transported than laptops and that network connectivity is much less problematic while working on a cellular network when compared to the WiFi networks needed by most agency laptops.

In order to reduce costs, the agency is using email polling services through AT&T that are provided at no additional expense. The email polling system connects to the agency's email servers, which are themselves running on open source software, resulting in no direct cost to the agency for software licensing or support.

Making Smartphones (and PCs) Smarter With Groupware

Closely related to the smartphone rollout is an in-house groupware project to provide the backend support for managing some of the data services being provided to smartphone users.

After trials of several groupware products, the agency chose an open source groupware platform that provides calendaring, contact and task management through solutions based on open standards.

The impetus behind this project was to provide a means for managing data between employees' smartphones and their desktop PCs. As the agency has standardized on the open source Mozilla Thunderbird client for email management, the groupware field was narrowed considerably. The groupware product chosen, however, integrates very tightly with the Thunderbird email client on the desktop and uses the open source Funambol server to provide PIM synchronization capabilities with smartphones.

While originally conceived of as an aid to users of smartphones, the groupware system has been recognized as providing a useful expansion of the capabilities of all desktop PC users and an expansion of the groupware's use agency-wide is planned.

As with all network services currently in use at the TSSWCB, this project makes exclusive use of open source software, resulting in no costs to the agency related to software licensing. Support for this project is provided by in-house staff.

Virtual Servers Ease Hardware Migration

A few years ago, the TSSWCB migrated most of its application and network servers to virtual servers as a means of increasing hardware utilization and reducing hardware costs and administrative overhead associated with managing several physical servers.

The move to a virtualized server environment paid out another benefit earlier this year when the TSSWCB accomplished its smoothest, most trouble-free server migration to date.

As part of its continuing efforts to provide robust, secure and highly available network services, the agency migrated a group of its primary application servers from aging server hardware to a new system featuring enhanced component redundancy and improved system monitoring capabilities.

This project involved moving the virtual environments, or containers, of multiple virtual servers that are all hosted on a single physical server. After the new server was installed with a base operating system and

then configured to support virtual server containers, the migration consisted of simply transferring the server containers from one system to another. The result was an incredibly streamlined process that was much faster and easier to accomplish than migrating non-virtualized servers to new hardware.

While there are many virutalization products on the market, the TSSWCB has found a good fit in a mature open source project that is freely available for commercial and private use. An upgrade path to a commercially supported product is available with this software, but thus far the agency has had excellent results running the freely-distributed software with in-house support.

PC Hardware Upgrades
The first half of 2009 also saw a continuation of the work to replace the oldest and most problematic agency desktop PCs with more capable and reliable units. This work was part of a continuous process that aims to lessen the risk of unacceptable levels of downtime that could occur following PC hardware failures.

Each of the machines replaced was at or, in most cases, significantly beyond the PC life cycle recommendations from the Texas Department of Information Resources (DIR).

All purchases were made in accordance with DIR guidelines through a DIR-approved vendor. Most purchases were made using DIR's Buyer's Alert Program, which resulted in notable cost-savings during the purchase phase of this work.

Public Information /Education Report

General Overview

The purpose of the public information/education program is to provide leadership and coordination of information/education programs relating to the agency and district programs, services, operations and resources. The TSSWCB prepares and disseminates public information relative to the agency and district functions, programs, events and accomplishments for the public and to farmers and ranchers. TSSWCB staff coordinates seminars, conferences, workshops, displays at trade shows and training for district directors and district bookkeepers, conservation professionals, youth groups and other entities. Staff provides guidance to districts with their own individual information/education programs as well as regional and state information/education programs initiated by districts. Staff prepares and disseminates press releases, news stories and printed promotional products. The TSSWCB monitors the use of the publications and use of information. Staff represents the agency as needed with various information/education groups and entities. The TSSWCB has a cooperative agreement with the Association of Texas Soil and Water Conservation Districts to provide assistance and help coordinate district involvement and participation with Association’s Information/Education Committee and its programs.

2009 Summer Teacher Workshop

Several teacher workshops are held each summer by soil and water conservation districts in cooperation with the TSSWCB on conservation and natural resource issues. The Texas Environmental Education Advisory Committee to the Texas Education Agency approves the content of these workshops, sponsored

by the TSSWCB. As an approved Environmental Education Professional Development Provider, teachers are able to get 16 credit hours toward their required continuing education units (CEUs) for recertification while experiencing nature and the outdoors.

Pedernales SWCD hosted a Teachers Workshop in Blanco, Texas at the Franklin Family Ranch on June 9-11, 2009. Topics covered were soils, the water cycle, plants in the Texas Hill Country, prescribed burning, and wildlife biology.

2009 Texas Conservation Awards Program

Each year, the Texas State Soil and Water Conservation Board and the Association of Texas Soil and Water Conservation Districts co-sponsor the Texas Conservation Awards Program to recognize and honor those who dedicate themselves and their talents to the conservation and wise use of renewable natural resources. The 2009 Awards Program marks the 31st year of this joint program.

Local districts select their outstanding individuals as winners and submit them by mid-February each year for regional judging. Those selected as regional winners are honored each May at regional Awards Banquets. From these regional winners, a state winner is selected for the Outstanding Conservation Districts, Outstanding Conservation Teacher, Poster Contest, and the Essay Contest. These individuals are invited to the Annual State Meeting for recognition.

The conservation awards program provides competition and incentives to expand and improve conservation efforts, resource development, and increase the wise utilization of renewable natural resources. As a result, soil and water conservation districts, and both rural and urban citizens of Texas are benefited.

Soil and water conservation districts may enter their local recognition honorees in any of 10 categories (East Texas has an additional category of Forestry Conservationist), depending on appropriateness to the category description. For the youth of the district, there is also a poster and essay contest. The categories and a brief description of each are:

Outstanding Conservation District

Awarded to the winning soil and water conservation district in each area for the most outstanding program during the past fiscal year.

Resident Conservation Rancher

Awarded to the outstanding resident conservation rancher in each area. They must be a resident of the district, perform ranching activities within the district and be a cooperator with the district from which the entry was submitted. The rancher may have other business or professional interests.

Resident Conservation Farmer

Awarded to the outstanding resident conservation farmer in each area. They must be a resident of the district, perform farming activities within the district, and be a cooperator with the district from which the entry was submitted. The farmer may have other business or professional interests.

Absentee Conservation Farmer/Rancher

Awarded to the outstanding absentee conservation farmer or rancher in each area. They must reside outside the district, but operate farming or ranching activities within the district and be a cooperator with the district from which the entry was submitted. The person may have other business or professional interests.

Water Quality Management Plan

Awarded to the outstanding Water Quality Management Plan recipient in each area. They must be a district cooperator who has a district approved Water Quality Management Plan and has incorporated water quality into their farming or ranching activities and soil and water conservation work.

Essay Contest –Two Categories (Those 13 and under and those 14 to 18 years of age)

Essays (topic: "Celebrate Conservation") are to be submitted to local soil and water conservation districts for local judging. Each local district will judge the entries and submit three essays to the TSSWCB for competition on the area level. Plaques will be awarded to 1st, 2nd and 3rd place winners on the area level and state winners will be selected from the area winners. This contest is open to students, in two categories, one for those ages 13 and under, and the other category for those ages 14 to 18 years of age and does not jeopardize Texas University Interscholastic League eligibility.

Poster Contest

Posters should address one of the following subjects: "Food for the Future" or "The Living Soil". Posters shall be submitted to local soil and water conservation districts for local judging. Each local district will judge the entries and submit three posters to the TSSWCB for competition on the area level. Plaques will be awarded to the 1st, 2nd and 3rd place winners on the area level and state winners will be selected from the area winners. This contest is open to students, 12 years and under, and does not jeopardize Texas University Interscholastic League eligibility.

Business/Professional Individual

Awarded to the outstanding man or woman in the business community who has rendered the most unselfish conservation service in each area. Representatives of the news media (radio, television, newspaper, magazines, etc) who contribute to or provide support for conservation shall also be considered eligible for this award. (This award is not for individual conservation practices or individuals who, because of employment, assist with or augment the work of the soil and water conservation district.)

Conservation Teacher

Awarded to the outstanding teacher of conservation in schools in each area. Teachers of all grade levels are eligible for this award.

Wildlife Conservationist

Awarded to the outstanding wildlife conservationist in each area. They must be a district cooperator who has incorporated wildlife conservation into their farming and ranching activities.

Conservation Homemaker

Awarded to the outstanding conservation homemaker in each area. The homemaker and or family must own or operate a farm or ranch, be a district cooperator and have knowledge of the conservation programs being implemented.

Conservation District Employee

Awarded to the outstanding soil and water conservation district employee who exhibits a degree of knowledge, skill, ability, and leadership that clearly results in superior job performance far above the basic requirements of the position.

Forestry Conservationist (Area IV only)

Awarded to the outstanding forestry conservationist for the most outstanding farm forestry conservation program in the commercial forest areas of Texas. They must be a district cooperator or an individual who has implemented conservation practices on their land and has done missionary work for conservation and the district program.

Soil & Water Stewardship Public Speaking Contest

The Soil & Water Stewardship Public Speaking Contest is open to high school FFA students interested in soil, water and related renewable natural resource conservation. The contest is aimed at broadening students' interest and knowledge of conservation and how individuals must depend on and take care of the world around them for survival. The contest is coordinated through the Texas FFA, with contests at the local, area and state level. Local winners compete in the 10 state FFA areas and the first and second place winners at the area level compete for the state title. The theme of the 2009 contest is “Dig It! The Secrets of Soil.”

To prepare for the contest, students were to consult with their Agriculture Science teacher and work with their local soil and water conservation district. Students are encouraged to visit with their local SWCD to find out more about conservation practices in their area.

This project is a partnership between the Texas FFA, the Vocational Agriculture Teacher's Association of Texas, The Texas State Soil and Water Conservation Board, and the Association of Texas Soil and Water Conservation Districts. The State Winner of the Soil and Water Stewardship Public Speaking Contest is invited to attend the Annual State Meeting each year and asked to deliver their winning address.

Wildlife Alliance For The Youth

The Wildlife Alliance for Youth (WAY) contests offer opportunities at the local district level for 4-H and FFA students to demonstrate their knowledge of the outdoors on wildlife habitat and management,

wildlife laws, sportsmanship and other factual information on wildlife. The program offers awards to the high scoring FFA chapter in each of the five state regions and awards to the first, second and third place high scoring teams at the state event. It is a powerful tool for students to become involved in conservation and obtain an appreciation for wildlife.

Agriculture Science students, who compete in the WAY Contest, first acquire the foundational knowledge and skills for this event through the Agscience 381 - Wildlife and Recreation Curriculum. The WAY contests address the following nine subject areas in Wildlife and Recreation Management: Wildlife Plant Identification; Wildlife Plant Preferences; Wildlife Biological Facts; Wildlife Habitat; Habitat Management; Game Laws; Hunter and Boater Safety; Compass and Pacing; and Identification Techniques. FFA and 4-H youth should have an understanding of these subject areas before they compete.

The WAY contests are held in the five Texas State Soil and Water Conservation Board areas. Area IV (East Texas) holds their contest in the fall. Area V (North Central), Area I (Panhandle), Area II (West Texas) and Area III (South Texas) all hold their contests in the spring. Each team is certified to the area level by their local SWCD. The WAY State Contest is held each year in one of the geographical areas of the state. Approximately 2,400 youth participate in the statewide competition.

The TSSWCB is the lead agency in sponsoring and organizing the contests. The Association of Texas Soil and Water Conservation Districts, USDA- Natural Resources Conservation Service, Texas Parks and Wildlife Commission, Cooperative Extension service, and the Texas Education Agency, along with local soil and water conservation districts (SWCD), all partner in the success of the youth organization.

State Woodland Clinic and Contest

The Texas State Woodland Clinic and Contest is held annually in the month of April. It is a joint effort between local soil and water conservation districts, Stephen F. Austin University School of Forestry and the NRCS-USDA.

The contest is an opportunity for 4-H and FFA youth to demonstrate their expertise in different aspects of forestry management and skills in identification of needed practices and management techniques. Competition is between teams composed of four members representing either a 4-H Club or a FFA Chapter. Prior to the state contest several local districts conduct contests for 4-H Clubs and FFA Chapters within their district and the surrounding area.

The contest began in the late 1950s and was initiated by local SWCDs and timber industry personnel to develop forestry and woodland curriculum in schools in the commercial timber area of the state (East Texas Piney Woods). The clinic and contest have experienced widespread popularity and now has participation from outside of the commercial timber area on a regular basis. The state participation level for teams averages around 55 teams per year, with the vast majority of teams being composed of FFA Chapters. Winners at the state level are eligible to participate in the four states regional woodland contest held each May in one of four states. Texas, Louisiana, Arkansas and Oklahoma host the regional contest on a rotational basis.

Regional Woodland Contest

The four states regional woodland contest is sponsored by soil and water conservation districts in each of the four states with program and technical support provided by USDA-NRCS and Resource Conservation and Development (RC&D), state organizations and industry personnel. The soil and water conservation districts in Texas hosted the first four states or southern regional woodland contest in 1984.

Each state is allowed to send a maximum of six teams to the regional contest. Each state has a competition that determines the six teams from that state that may enter in the regional contest. Those teams may be composed of individuals representing either a 4-H Club or an FFA Chapter.

Conservation Education Video Library

The Association of Texas Soil and Water Conservation Districts has established and updated a conservation related video library that is maintained by TSSWCB staff on their behalf for the benefit of local districts and educators. Currently, there over 200 conservation-related videos in the library that are available to districts and teachers which includes 30 new titles in DVD format. The Association of Texas Soil and Water Conservation Districts' Public Information/Education Committee pays the first transit postage costs to mail the video(s) to the requester. Postage for returning will be the responsibility of the borrower and all videos must be insured upon return. Borrowing privileges are for a length of two weeks and must be returned upon date specified by the librarian. Videos can be ordered through your local soil and water conservation district or by contacting the TSSWCB. From January to June, there have been 28 videos and 1 DVD of various titles loaned out to districts and teachers across the state..

Nonpoint Source (NPS) Pollution Watershed Flow Model

The NPS model is a hands-on representation of a landscape that allows students to understand how water sources can become polluted from nonpoint sources. The plastic landscape structure has industrial, undeveloped, agricultural, and residential and roadway features complete with individual houses, trees, cars, tractors and cows. When "rain" falls on the model, the runoff flows into a city lake. Using various products to add color to the water, the model demonstrates how potential pollutants are picked up by run-off.

The model is a layout of a watershed that includes all the factors that may contribute to polluting our water. (Urban features such as: factories, parking lots, construction sites, lawn chemicals and golf courses and Rural features such as: forested land, dairies, feedlots, cropland and pastureland). To demonstrate how each type of potential pollutant can enter a water body Kool-Aid and cocoa are used to color “runoff”. Grape Kool-Aid is used to represent pollution from factories and oil from parking lots and roads. Orange Kool-aid represents pollution from lawn chemicals, golf courses, and cropland and pastureland chemicals. Cocoa is used to represent pollution from construction sites, forested land, dairies and feedlots. The Kool-aid and Cocoa are sprinkled on the model in the areas that represent each type of pollutant. Once all the pollutants are sprinkled on the model a spray bottle with water is use to represent rainfall. As the pollutants get wet and start to runoff the students can see how the water carries them to the streams and into the lake where we get our drinking water. Once all the pollutants have run into the lake the students can see how these factors have the potential to make surface waters unattractive and unsafe. This demonstration leads to a discussion about how to protect the water quality and prevent our water from looking like the model.

WATER SUPPLY ENHANCEMENT PROGRAM STATUS REPORT

BACKGROUND:

The 81ST Legislature continued funding for the Water Supply Enhancement Program by providing $4,503,641.00 in General Revenue Funds in FY10. These funds were directed to be used for continuation of brush control projects designated by the Soil and Water Conservation Board.

- Provided the following SWCDs with Water Supply Enhancement Program Updates, Water Supply Enhancement Program Certification, and /or Contracts

Area 2 Districts

North Concho River SWCD
Middle Concho SWCD
Tom Green SWCD
Gillespie County SWCD
Nolan County SWCD
Eldorado-Divide SWCD
Pedernales SWCD

Area 3 Districts

McMullen County SWCD
Caldwell-Travis SWCD
Webb SWCD
LaSalle County SWCD
Comal-Guadalupe SWCD

Area 4 Districts

Harris County SWCD

Area 5 Districts

Archer County SWCD
Lower Clear Fork of the Brazos SWCD
Pecan Bayou SWCD
Bosque SWCD
Little Wichita SWCD

Current Water Supply Enhancement Projects throughout the State and Project Managers:

- Canadian River Project- Rod Goodwin; Canadian River Municipal Water Authority
- Twin Buttes- Tuffy Wood; TSSWCB
- Little Wichita River (Archer and Clay Counties)- Cody York
- Pedernales Project- Melissa Grote
- Guadalupe River Project- Melissa Grote
- Edwards Aquifer Project (Bandera County)-Melissa Grote
- Lake Brownwood Project- Cody York
- Nueces River Project- Tuffy Wood
- Bosque Project- Cody York
- Sam Houston Area Council Boy Scout of America (Bandera)- Cody York
- Sam Houston Area Council Boy Scout of America (Wimberley)- Cody York

Evaluating Watersheds is based on the following criteria as per Chapter 203.053:

In ranking areas under the plan, the board shall consider:

(1) the location of various brush infestations;
(2) the type and severity of brush infestations;
(3) the various management methods that may be used to control brush;
(4) the amount of water produced by a project and the severity of water shortage in the project area; and any other criteria that the board considers relevant to assure that the brush control program can be most effectively, efficiently, and economically implemented

Evaluating Limits on Cost Share Participation as per Chapter 203.154

(a) Not more than 70 percent of the total cost of a single brush control project may be made available as the state's share in cost sharing.
(b) A person is not eligible to participate in the state brush control program or to receive money from the state brush control program if the person is simultaneously receiving any cost-share money for brush control on the same acreage from a federal government program.
(c) The board may grant an exception to Subsection (b) if the board finds that joint participation of the state brush control program and any federal brush control program will:
  (1) enhance the efficiency and effectiveness of a project;
  (2) lessen the state's financial commitment to the project; and
  (3) not exceed 80 percent of the total cost of the project.
(d) A political subdivision is eligible for cost sharing under the brush control program, provided that the state's share may not exceed 50 percent of the total cost of a single project.
(e) Notwithstanding any other provision of this Section, 100 percent of the total cost of a single project on public lands may be made available as the state's share in cost sharing.

Staff Activities

- Evaluate pending application sub basin criteria from all projects
- Assisted Guadalupe Blanco River Authority with potential areas for Water Supply Enhancement Projects
- Assisted 15 landowners with Brush Certifications
- Assisted 1 landowner with Brush Contracts
- Working with TWRI on the Water Supply Enhancement Program to develop a Priority system using GIS
- Met with field staff and discuss potential new projects in respective areas throughout the State

- Pedernales work group meeting held in Johnson City with the Pedernales SWCD and the Gillespie County SWCD

- Met with Rep. Heflin to review Water Supply Enhancement Program

- Attended Independent Cattlemen's Association convention in San Marcos

- Attended Interagency Task Force on Economic Growth and Endangered Species

Attachments