



FY2010 Performance Summary Report

Water Quality Protection Division Region 6

Protecting and preserving
the aquatic ecosystems and
water resources of Arkansas,
Louisiana, New Mexico,
Oklahoma, Texas, and Tribal
lands within Region 6

Region 6 WE CARE Values

EPA Region 6 has a diverse workforce dedicated to these collective values, and we base our practices and decisions on them.

Workforce Diversity

- We value a diverse workforce in which each person strengthens our ability to achieve our goals.
- We strive to hire, develop, and maintain a workforce that represents diverse backgrounds.
- We utilize cross-cultural skills in communication and problem-solving, and promote open dialogue and education to perform successfully in our diverse environment.
- We interact with the constituencies we serve in a way that demonstrates an understanding of their cultural values.

Environmental Stewardship

- We carry out the public trust in protecting human health and the environment.
- We work as a team to clean the air, restore and protect water, recycle and renew polluted land, and help protect the security of America.
- We work in partnership with States, Tribes, local communities, and vulnerable populations to carry out our mission.
- We are committed to reducing our environmental footprint.

Character

- We have integrity and exhibit ethical behavior in all that we do.
- We are committed to making good decisions, even if it is not easy, expedient, or popular.
- We walk the talk and set a good example.
- We are honest and trustworthy - we don't betray trust and confidentiality.

Accountability

- We accept responsibility for all we do, both positive and negative.
- We hold each other accountable, and give feedback to each other.
- We take initiative to do what needs to be done, and step forward to lead when needed.
- We learn from mistakes, problems, and other situations.
- We communicate openly, invite feedback, and listen.

Respect

- We treat each other with consideration and dignity.
- We act without prejudice or favoritism.
- We show respect regardless of level, title, position or agency.
- We do not tolerate discrimination or demeaning remarks by others.

Excellence

- We strive to be the best we can be, and are committed to continuous improvement through innovation and sound science.
- We lead by thinking strategically, communicating openly, and working collaboratively both internally and with States, Tribes, local communities, and other partners.
- We provide high-quality service to our internal and external customers.
- We make the best of difficult situations, and avoid complaining and making excuses.
- We support and are open to new ideas or concepts.



Acknowledgements

The FY10 Performance Summary Report was produced by the Planning and Analysis Branch under the direction of James R. Brown - Associate Director, Planning and Analysis Branch

Technical Advisor....Olivia R. Balandran - Deputy Associate Director, Planning and Analysis Branch
Editor.....Terry L. Branch - Planning and Analysis Branch
Graphic Design.....John Stadelman - Planning and Analysis Branch

Special Thanks To Branch Contributors:

Matt Hubner - Ecosystems Protection Branch Angela Restivo - Source Water Protection Branch
Virginia Vietti - Assistance Programs Branch Joshua Waldmeier - NPDES Permits & TMDLs Branch

Cover Photo by Eric Vance, EPA



A Message from the Director

Dear Colleagues, Friends and Partners:

It gives me great pleasure to share with you our Water Quality Protection Division (WQPD) FY2010 Performance Summary Report. I want to thank the WQPD staff and all of our partners in Arkansas, Louisiana, New Mexico, Oklahoma, Texas, and Tribal lands for their contributions in assisting Region 6 EPA with another successful year in meeting our water quality protection and restoration goals. Our collaborative efforts with other federal agencies, local government, private sector, and academia also contributed significantly to making our 2010 accomplishments a success.

In FY2010, Region 6 again turned in one of the top regional performances under the National Water Program guidance measures, meeting 41 of 44 commitments. In particular, Region 6 again led the nation in the issuance rate of current, nontribal NPDES permits,

and was among the top performers in the Underground Injection Control program.

Without clean water, no part of a community, its ecology, economy or health can thrive. Clean water is at the core of our communities and is crucial to the vitality of our rural areas. The call to action has never been more urgent, especially in light of national trends in water quality and recent environmental disasters. We cannot build sustainable communities and restore and protect the quality of our nation's water for future generations without the help of all of our state, tribal and community partners.

We have a lot of work ahead of us, and coming together with all of our partners will strengthen our mission and guide our work in 2011 and the years ahead. An electronic copy of this report is available for downloading at www.epa.gov/region6/water/index.htm.

Miguel I. Flores, Director
Water Quality Protection Division, EPA Region 6

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Region 6 Water Quality Protection Division

Mission and Vision

Our Mission

The mission of EPA is to protect human health and to safeguard the natural environment – air, water, and land – upon which life depends. Working in partnership with States, Tribes and other stakeholders, EPA implements numerous statutory programs established by Congress to protect and preserve our natural ecosystems and the life they sustain. In particular, the Water Quality Protection Division of EPA Region 6 focuses its resources on protecting and preserving the aquatic ecosystems and water resources of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas, as well as the Tribal lands located within our Region.



Our Vision

Our vision is to provide leadership and assistance to support protection and restoration efforts so that all waters in Region 6 meet all designated uses, and all citizens have access to safe drinking water.



EPA Region 6 serves the states of Arkansas, Louisiana, New Mexico, Oklahoma, Texas and 65 Native American tribes.

About the Water Quality Protection Division

Organization and Leadership

Miguel I. Flores, Director

William K. (Bill) Honker, Deputy Director

The Water Quality Protection Division (WQPD) is staffed by more than 160 employees. The Division is managed by the Director, Deputy Director and five Associate Directors that provide oversight of the water programs in Region 6. The WQPD communicates EPA's National and Regional operating guidance to the States and Tribes and assists them in developing comprehensive water programs through Federal funding and technical assistance. With these and other resources, States develop the capability to assume Federal water programs through delegation agreements. Technical and financial assistance is also provided to local agencies and Indian Tribes.

The regional water programs managed by the WQPD include water quality planning, public water supply, groundwater protection, State revolving funds, wastewater infrastructure activities for the U.S.-Mexico Border program and NPDES oversight, to name just a few. These and other programs are managed by the following five branches:

Assistance Programs Branch

Troy Hill, Associate Director

Clean Water and Drinking Water State Revolving Fund (SRF) Programs, State and Tribal Water Quality Grant Programs, Wetland Program Development Grants, U.S.-Mexico Border Environment Infrastructure Fund (BEIF) Program, Performance Partnership Agreements and Grants

Ecosystems Protection Branch

Jane Watson, Associate Director

Water Quality Standards, Monitoring and Assessment, Nonpoint Source Program, Marine & Wetlands Programs, Coastal and National Estuary Programs, Ocean Dredged Material Disposal Program

NPDES Permits & TMDLs Branch

Claudia Hosch, Associate Director

National Pollutant Discharge Elimination System (NPDES) Permits Program, Total Maximum Daily Load (TMDL) Program, Stormwater Program, Green Infrastructure

Planning and Analysis Branch

James R. Brown, Associate Director

Strategic Planning, Tracking of National Water Program's Program Activity Measures, Partnerships and Communications, Geographic Information Systems (GIS), Climate Change, Water Conservation Initiatives, Surface Water Center

Source Water Protection Branch

Stacey Dwyer, Associate Director

Public Water Supply Program, Underground Injection Control (UIC) Program, Sole Source Aquifers, Tribal Drinking Water and UIC Programs, Ground Water Center

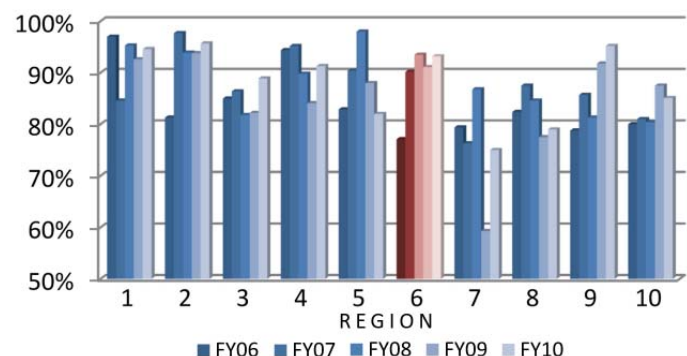
Summary Of Water Program Accomplishments

Performance Measurement Summary

In FY2010, Region 6 again turned in one of the top regional performances under the National Water Program guidance measures, meeting 41 of 44 commitments, for a 93.2% success rate. Notably, Region 6 led the nation in the issuance rate of current, nontribal NPDES permits at 98%, and was among the top performers in permitting, operating, and enforcing permits issued in the Underground Injection Control program.

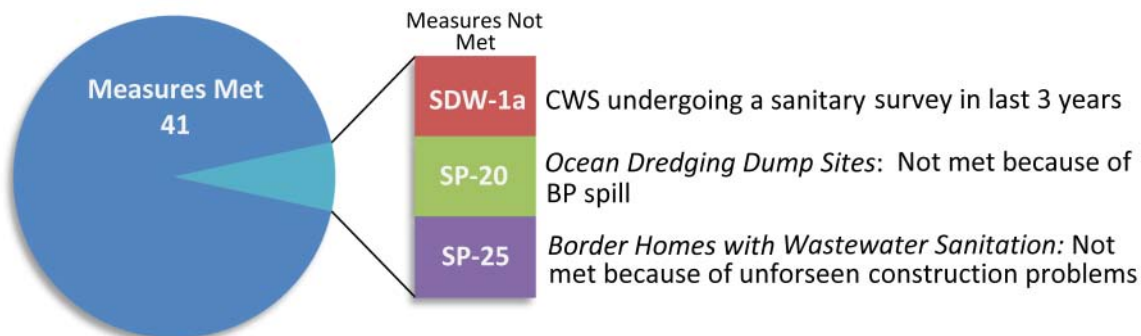
Percent of Commitments Achieved by Region: FY06-10

Region	FY06	FY07	FY08	FY09	FY10
1	97.0%	84.6%	95.3%	92.6%	94.6%
2	81.3%	97.7%	93.9%	93.8%	95.7%
3	85.0%	86.4%	81.8%	82.2%	88.9%
4	94.4%	95.2%	89.8%	84.1%	91.3%
5	82.9%	90.4%	98.0%	88.0%	82.0%
6	77.1%	90.2%	93.5%	91.1%	93.2%
7	79.4%	76.3%	86.8%	59.3%	75.0%
8	82.4%	87.5%	84.6%	77.5%	79.0%
9	78.8%	85.7%	81.3%	91.8%	95.2%
10	80.0%	81.0%	80.4%	87.5%	85.1%



Only three measures were not met during FY2010 and two were beyond the control of Region 6. Measure SP-20, which monitors ocean dredging dumping sites was not met due to complications related to the BP Oil Spill, and SP-25, which counts the number of hook-ups to centralized wastewater treatment services along the U.S.-Mexico Border was not met due to a construction accident resulting in the death of two workers that led to the suspension of the project for several months. The final measure, SDW-1a, the completion of sanitary surveys at community water systems, was not met due to a lag in the reporting of completed sanitary surveys in Texas.

Measures Not Met by Region 6



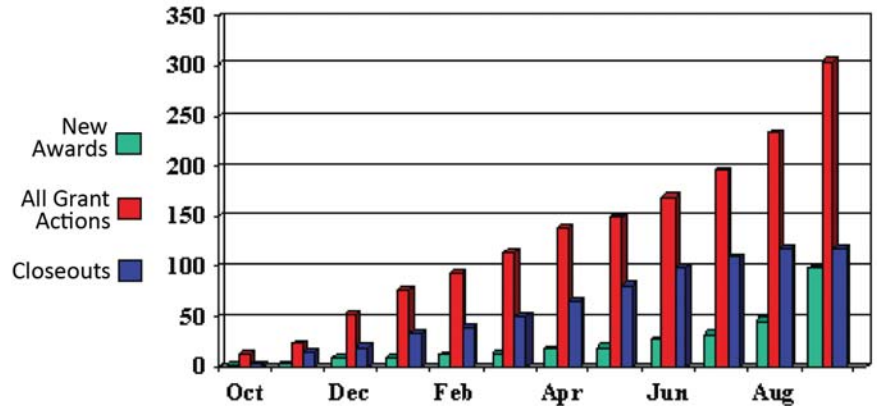
Financing Environmental Improvements

Assistance Programs Branch

Introduction

The Assistance Programs Branch annually awards and manages over 80% of all the grant dollars awarded by the Region to States, Tribes, local governments, non-profits and other partners to achieve environmental goals. During this year, the Branch was responsible for managing over \$2 billion in 478 assistance agreements. This includes over \$402 million in new funding for FY10. There were 98 new assistance agreements awarded; 118 were closed out, and 207 amendments were processed.

Division Grant Action in FY10 - Monthly Totals



Tribes Increasing Capacity to Administer Water Quality Programs

Two applications for "Treatment as a State," submitted by the Choctaw Nation and the Pueblo of San Felipe for the Clean Water Act (CWA) Section 106 Water Quality Program, were approved on September 2, 2010. This approval gives the tribes authority to receive Federal funding for activities supporting the establishment and maintenance of their overall water quality program. Key areas that funds can support include monitoring, permitting, enforcement, planning, and implementation. Currently, there are 46 Region 6 tribes eligible for CWA 106 funding.

Region 6 Tribes Selected in National Competition

The Pueblo of Taos and the Peoria Tribe of Indians of Oklahoma received FY 2011 CWA Section 319 Nonpoint Source Tribal Program funds in a national competition. EPA conducts the competition annually for the Nonpoint Source Tribal Program, inviting eligible tribes to submit project proposals to compete for up to \$150,000 in grant awards. The Peoria Tribe received \$65,278 to decrease streambank erosion and to increase the number of native plants and habitat for fish and other aquatic species. The Pueblo of Taos received \$97,879 to focus on implementation of sediment control in the Encebado Burn area and the coordination of riparian restoration efforts on the lower Rio Pueblo. The tribes were selected for funding from among 60 competing tribes across the nation.

Unprecedented Funding for Water and Wastewater Infrastructure Projects Benefit Over 230 Region 6 Communities



The signing of the \$787 billion American Recovery and Reinvestment Act (ARRA) on February 17, 2009, provided a significant increase in financial resources to address water and wastewater infrastructure needs through the Clean Water and Drinking Water State Revolving Funds (SRFs). Although the implementation of the ARRA brought challenges for the states to commit funds by the deadline of February 17, 2009, Region 6 SRF management and staff led unprecedented collaborations with the state partners in successfully achieving the goal. ARRA funding was provided to 103 communities throughout the Region to install new drinking water plants, and/or upgrade existing infrastructure, supplying safe drinking water to more than 100,000 residents. The stimulus bill also provided funding to 131 communities throughout the Region to upgrade their deteriorating wastewater facilities, resulting in a substantial decrease in raw waste entering U.S. waters.



ARRA Project Highlights

Arkansas: City of Batesville

The city of Batesville is using \$10 million of Recovery Act funds to replace the existing wastewater mains to their treatment facility with a 3,100 linear foot gravity sewer. The project will provide effective wastewater treatment and will yield a 62 percent energy savings or about 700,000 kW hours/year, over the minimum 40 year life of the tunnel. Meanwhile, the project has also created over 40 jobs. This two-phase project which began in February 2010 continues on schedule.

On September 17, 2010, Vice President Biden released a report entitled "100 Recovery Act Projects that are Changing America". The report highlights some of the most innovative and effective Recovery Act projects across the country that are not only putting people back to work, but helping transform our economy for years to come. EPA had eight projects that were highlighted in the report, one being the wastewater improvement project located in Batesville, Arkansas.



ARRA funding at work in Batesville, Arkansas

Louisiana: City of West Monroe

Thanks in part to a \$4,750,000 ARRA loan with 100 percent principal forgiveness, West Monroe is seeing the full-scale installation of their tested treatment process into an existing 7.5 MGD wastewater treatment plant. This water efficiency project is part of the Green Project Reserve, and the new treatment plant will virtually eliminate the current pollution discharged in the Ouachita River by the existing treatment facility.

New Mexico: City of Carlsbad

Carlsbad received \$ 1,428,661, of which \$1,369,949 was principal forgiveness, to replace approximately 18,000 feet of 8" and 4" waterlines along Canal Street from Pompa Street to East Pierce Street for the city's drinking water infrastructure needs.

Oklahoma: City of Duncan

The Duncan Public Utilities Authority in Oklahoma received \$340,000 for an upgrade of their wastewater treatment works, which was completed on April 7, 2010. These funds financed the replacement of existing aerators with improved energy efficient aerators in the activated sludge nitrification basin. The energy footprint of aeration is, traditionally, a large proportion of the energy demand of wastewater treatment; therefore, EPA anticipates that this project will significantly reduce Duncan Public Utilities' energy-related expenditures. New motors and variable frequency drives are also included as part of this project, which will enhance system-wide hydraulic efficiency. The project is intended to reduce the system's energy demand by approximately 600,000 kilowatt hours each year.

Texas: City of Amarillo

Amarillo received a \$2,575,016 ARRA loan for "green" infrastructure improvements. The city proposes to replace an existing pump station with a new combined high service and transfer pump station. The existing high service pump station (HSPS) is over 40 years old and has an overall low efficiency rating. The proposed new combined high service and transfer pump station is a functional replacement of equipment including an upgrade of existing facilities on the same site.

The proposed project is expected to increase by at least 20 percent the electrical efficiency by using new pumps and motors.



ARRA-funded infrastructure upgrades in Amarillo, Texas

ARRA Project Highlights continued



Tribes: Nambe Indian Reservation, New Mexico

The Nambe Indian Reservation in New Mexico received \$1,010,580 to provide a water reclamation facility with discharge back into the existing lagoon cells for evaporation/percolation, serving 38 homes on the Nambe Indian Reservation. Most of Nambe was being served by separate collection systems each with an unlined facultative sewage treatment lagoon. The existing lagoon systems were in need of repair/replacement since they were undersized and were unlined, causing untreated or under-treated wastewater to percolate into the ground resulting in degradation of groundwater quality. The Albuquerque Indian Health Service area office recently upgraded Nambe Indian Reservation's Lagoon systems and completed this Clean Water Indian Set-Aside ARRA project.



ARRA Progress in the SRF Program

Over 230 SRF ARRA projects have initiated construction that will bring safe drinking water to many people across the Region, as well as finance infrastructure improvements for public wastewater systems and other water quality projects. Both the CWSRF and DWSRF had all funds under contract by the December 31, 2010, deadline. All states contracted 20% of their funds to green projects (i.e., green infrastructure, energy or water efficiency, and environmentally innovative activities) with many surpassing the 20% minimum and the average amount of green reserve totaling close to \$138 million or 24% of all funds. As construction continues, Region 6 staff is focusing on ARRA outlays. R6 states have expended 57% of their ARRA funds as of December 31, 2010.

The Recovery Act will create or retain jobs through its implementation over the next several years, and many of these positions will be green jobs created through EPA Recovery Act funds. Region 6 has reported a total of 6,165 jobs created as of December 31, 2010. To view EPA recipient reported data for each state, visit EPA Recipient Reporting on www.recovery.gov.

604(b) ARRA Accomplishments

All R6 States met the deadline to have all projects under contract by February 17, 2010, for their Section 604(b) ARRA grants. The States have been very conscientious in meeting the requirements of the ARRA Section 1512 quarterly reporting through the national reporting web site, FederalReporting.gov, for the Section 604(b) ARRA Program.

Border Infrastructure Program

The US/Mexico Border Infrastructure Program, through EPA's Border Environment Infrastructure Fund (BEIF), awarded \$22.1 million to border area water and wastewater projects this year. Through these projects, the work of the US/Mexico Border Program provided safe drinking water to 19,751 homes in the border area that previously did not have access to safe drinking water. The program also provided 71,296 homes with new connections to wastewater treatment facilities. As of December 2010, BEIF funded wastewater projects have eliminated the discharge of nearly 400 million gallons per day of untreated or improperly treated sewage.



Reynosa, Mexico

Replaced an inoperable lagoon wastewater treatment plant that discharges into a canal and eventually into the Rio Grande. The treatment capacity is 22.8 MGD (million gallons per day).



Nuevo Laredo, Mexico

Construction of the Nuevo Laredo wastewater treatment plant with a capacity of 4.6 MGD. The project was completed in FY10.



Ojinaga, Mexico

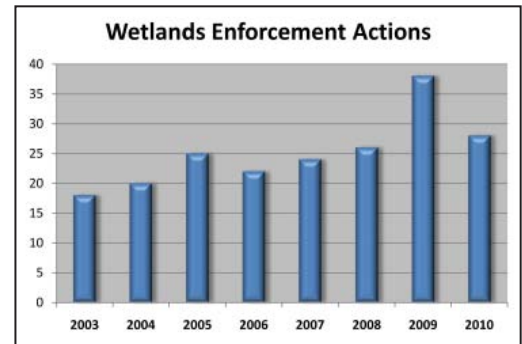
The Ojinaga Wastewater Treatment Plant and Collections System project was a stalled project. While the wastewater treatment plant was complete a few years ago, it was damaged during flooding in September 2008. The project was completed in 2010 and now provides wastewater treatment and collection to most of the community of Ojinaga, Chihuahua.

Watershed Restoration and Ecosystem Protection

Ecosystems Protection Branch

Continuing High Performance in Wetland Enforcement Actions

The Region 6 Wetlands Enforcement Program has continued to excel in enforcement actions against violators of the CWA section 404. In FY 2010, 28 formal enforcement actions were issued, which is the second highest total in the history of the program. In addition to this total, the Enforcement Program continued work on a successful elevation of a civil referral to the Department of Justice. Also, a total of \$168,530 was collected in penalties and violators spent an estimated \$512,000 in compliance costs, primarily the cost of wetland and stream restoration. In addition, 44 inspections were conducted, resulting in the preservation of over 178 wetland acres and 9,745 linear feet of stream. As always, the deterrence effect, as reported to EPA by the COE and other partners, protects many times these amounts of natural resources.



Protecting, Planning, and Restoring Coastal Wetlands



Aerial View of mid-construction of Marsh Creation/ Marsh Nourishment Project Area

EPA Region 6 partnered with Louisiana’s Office of Coastal Protection and Restoration (OCPR) on the implementation of four projects. Of those projects, two were completed (Whiskey Back Barrier Marsh Creation and Mississippi River Sediment Delivery, Bayou Dupont), one is currently under construction (East Marsh Island Marsh Creation), and one Demonstration 5-year project was implemented (Enhancement of Barrier Island Vegetation). The Whiskey Back Barrier Marsh Creation restored 316 acres of marsh and 13,000 linear feet of dune habitat on Whiskey Island in south Louisiana. Included was a pilot project to test the feasibility of pre-constructing tidal creeks and ponds in order to expedite

the habitat functionality. The vegetative planting included approximately 98,000 plants strategically placed on the newly created habitat. The construction contract for the sediment placement was \$23,255,778.20, and the fully funded cost for the entire 20-year life of the project is approximately \$30.4 million. The Bayou Dupont Mississippi River Sediment Delivery Project completed construction of 580 acres of marsh using renewable sediment from the Mississippi River. The project included creation of approximately 100 acres of additional marsh using \$3 million of stimulus funding provided by National Oceanic and Atmospheric Administration (NOAA) plus some the contingency funds for the project. The fully funded cost for the 20 year project is \$31.8 million.



Plantings and sand fencing along Whiskey Back Barrier Marsh Creation Project

The East Marsh Island Marsh Creation Project has implemented the restoration of 165 acres of marsh and 197 acres of marsh nourishment on Marsh Island. Furthermore, because the project bids and site conditions were more favorable than anticipated, the sponsors were able to expand the scope of the project without increasing the budget. The exact acreage of the project expansion has yet to be determined. Lastly, in April 2010, Region 6 began implementation of a 5-year long experiment to develop methodologies to enhance successful vegetation planting to existing barrier island restoration projects. The experiment implementation was delayed due to impacts from the BP oil spill, however, it is not anticipated that it will adversely affect the outcome.

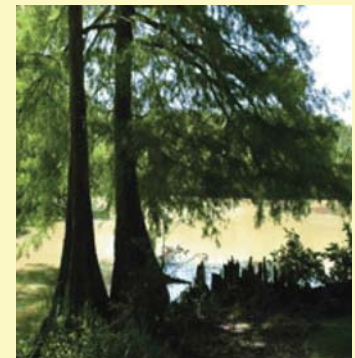
Louisiana: Bayou Plaquemine Brule Waterbody Improved Agencies and Farmers Coordinate to Reduce Bacteria



The Bayou Plaquemine Brule watershed in southwestern Louisiana

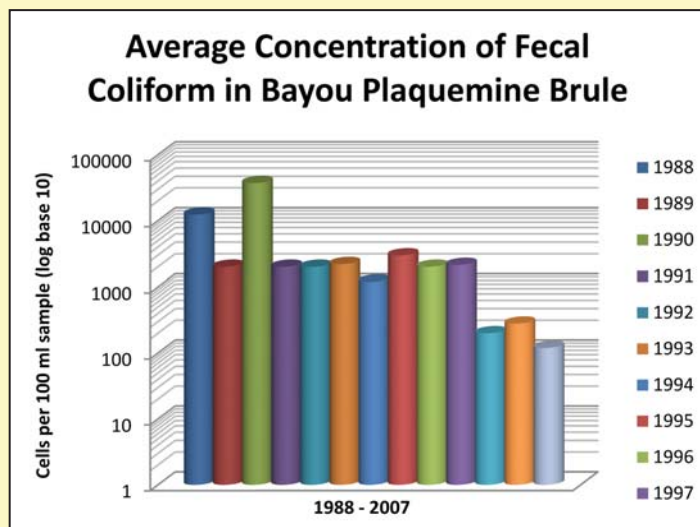
Runoff from agricultural lands and leaking home sewage tanks transported fecal coliform, suspended solids and turbidity to the Bayou Plaquemine Brule, impairing contact recreational uses. As a result, the Louisiana Department of Environmental Quality (LDEQ) added the Bayou Plaquemine Brule to the CWA section 303(d) list of impaired waters in 1998. From 2004 to 2008, farmers implemented agricultural best management practices (BMPs) on more than 70,000 acres within the watershed. In addition, the Louisiana Department of Health and Hospitals worked with homeowners to install more than 3,300 aerobic treatment systems with effluent-reduction systems to reduce the problems associated with home sewage systems. As a result, LDEQ determined that Bayou Plaquemine Brule had attained bacteria standards and removed it from the CWA section 303(d) list for fecal coliform in 2008.

Stakeholders completed a watershed plan in 2000 and launched a series of projects to help local landowners implement BMPs to reduce nonpoint source pollutant loads. The St. Landry and Acadia Soil and Water Conservation Districts (SWCDs) estimate that the Bayou Plaquemine Brule watershed supports approximately 330 farms. The U.S. Department of Agriculture (USDA) implemented more than 70,656 acres of BMPs in the Bayou Plaquemine Brule watershed between 2004 and 2008.



The waters of the slow-moving Bayou Plaquemine Brule are often turbid.

In addition to USDA's efforts, LDEQ directed CWA section 319 funds to St. Landry and Acadia SWCDs to implement BMPs in Cole Gully and Bayou Wikoff. The most common BMPs implemented include irrigation water management and drill planting of rice, rotational grazing and fencing for pasture lands. The water management practices for rice allow the sediment and bacteria to remain on the rice fields rather than be discharged to the bayous. Rotational grazing allows grasses to revegetate and reduces overgrazing by livestock. The major objective of this cost-share project was to demonstrate that agricultural nonpoint source loads in Bayou Plaquemine Brule could be reduced to prescribed levels by implementing BMPs. The Bayou Wikoff and Cole Gully watersheds were monitored at the edge-of-field level and at the in-stream/watershed level.



Monitoring data in the Bayou Plaquemines Brule watershed from 1998 to 2007 shows a significant decline in bacteria counts. Graph based on LDEQ results.

Monitoring data show a significant decline in bacteria levels from 1998 to 2007, with annual average fecal coliform counts of 164 cells per 100 mL sample. Bayou Plaquemine Brule meets both the primary and secondary contact recreation designated uses, prompting LDEQ to remove the entire 55-mile segment from the CWA section 303(d) list of impaired waters in 2008. Approximately \$234,979 in CWA section 319 funds in the cost-share program to help farmers pay to install agricultural BMPs. Section 319 funds were also used to pay a portion (60 percent) of the salary of one staff member who wrote the watershed implementation plan and managed the projects implemented within the watershed. EQIP provided an additional \$235,815 for cost-share of BMPs.

Responding to Deepwater Horizon Oil Spill

Region 6 EPA WQPD responded in a number of ways to assist in the cleanup and monitoring of the effects of the oil spill on Gulf ecosystems. The WQPD provided technical assistance on developing monitoring plans for the collection of water and sediment data as well as assisting in the review and interpretation of the results. Throughout the spill, the Division coordinated with multiple agencies involved in the spill response, including EPA Region 4, NOAA, Coast Guard, and EPA headquarters. WQPD staff also assisted in the collection and processing of water samples in the field.

On June 3, 2010, the NOAA vessel, Thomas Jefferson, departed New Orleans as part of the federal response effort.



All crew members aboard the Thomas Jefferson were required to demonstrate the ability to suit up in survival gear in less than one minute.

The mission objectives of this eight day cruise were to develop methods to detect dispersed submerged oil and study the movement and structure of submerged oil near the deep water horizon wellhead. Staff from the EPA Region 6 Monitoring and Assessment Section

was asked to assist in the collection and processing of water samples onboard. Over 700 samples were collected at various depths and sent to laboratories for analysis of compounds normally associated with fugitive oil. Results of these analyses were to be used by NOAA and other federal agencies for Natural Resource Damage Assessments (NRDA) related to the spill.



The Thomas Jefferson

Success in the Nonpoint Source Program

The Region 6 Nonpoint Source Program succeeded in coordinating efforts with federal and state agencies to implement BMPs to improve water quality in Oklahoma and Louisiana. In Oklahoma Wolf Creek, Little Wewoka Creek, California Creek, and Little Elk Creek had been listed as impaired for various parameters. Through Oklahoma’s locally-led cost-share program and local Natural Resources Conservation Service (NRCS) programs, installation of BMPs to improve water quality, such as but not limited to; improving grazing land through cross-fencing, alternative water supplies, brush and weed management, diversion terraces, alternative water sources, pasture planting, weed control, establishment of riparian buffers, conservation tillage, and nutrient management planning were employed as necessary. Turbidity in Wolf Creek has declined and the stream is now in full attainment of its Fish and Wildlife Propagation designated use. Likewise, turbidity decreased in Little Wewoka Creek, allowing it to be delisted for turbidity impairment. California Creek had no samples exceed turbidity criteria in 2008, while Little Elk Creek was delisted for low dissolved oxygen and E. coli impairments in 2008. In Louisiana, Bayou Plaquemine Brule was listed for fecal coliform in the 1998 303(d) list. Stakeholders completed a watershed plan in 2000 and launched a series of projects to help local landowners implement BMPs to reduce nonpoint source pollutant loads, which included irrigation water management and drill planting of rice, rotational grazing and fencing for pasture lands. Bayou Plaquemine Brule now meets both the primary and secondary contact recreation designated uses, and the entire 55-mile segment has been removed from the state’s 303(d) list of impaired waters.



Protecting Surface Water

NPDES Permits and TMDLs Branch

Continued Leadership in Current Permits

In FY10, R6 continued to be a leader in the number of current discharge permits, achieving a permit issuance rate of 98%, exceeding the Regional commitment of 94%. The Region also regulates the largest permitting universe with approximately 40,000 industrial and municipal wastewater discharges, representing 25% of the universe in the United States.

Vessel General Permit Outreach

Two years ago, the NPDES Program began regulating certain discharges from non-recreational vessels ending a long standing exemption from NPDES regulation. The Vessel General Permit (VGP), considered the best mechanism for regulating vessel discharges, was issued in 2008. In FY10, the Branch continued successful outreach efforts with the maritime community speaking at six events, and soliciting preliminary comments on the next version of VGP.

Region 6 is home to nine of the top twenty-five ports in the U.S., responsible for nearly 50% of the trade volume. With such a large vessel community consisting of domestic and foreign flagged vessels, the Region is recognized by EPA Headquarters for its outreach efforts and national expertise to vessel owners and operators of many classes of vessels. Vessel discharges include ballast water, bilgewater, graywater (e.g., water from sinks, showers), and anti-foulant paints (and their leachate). These discharges may result in negative environmental impacts via the addition of traditional pollutants or, in some cases, by contributing to the spread of Aquatic Invasive Species.



Ships docked in the Houston Ship Channel

Green Infrastructure Workshops

Region 6 continued efforts to bring green infrastructure into the mainstream of stormwater management, as well as integration in other programs through increased outreach and education. In FY10, to promote the use of green infrastructure, disseminate data, tools, guidance and



Green infrastructure practices offer water quality, water quantity, and socio-economic benefits.

other useful information throughout the region, five Green Infrastructure Workshops were conducted in Albuquerque, New Mexico; Dallas, Texas; Tulsa, Oklahoma; Fayetteville, Arkansas; and Las Cruces, New Mexico. Through these workshops, approximately 1000 developers, contractors, consultants, engineers, planners, stormwater managers and staff were informed of the multitude of water quality and quantity benefits, as well as socio-economic benefits, projects of all scales (site, neighborhood, and region/watershed) may achieve with incorporation of green infrastructure. In addition, the NPDES Branch proposed the Albuquerque Phase I MS4 draft permit which incorporates conditions promoting the implementation of green infrastructure methods.

The NPDES Branch is working with the Office of Sustainable Communities and the City of Las Cruces on the Smart Growth Implementation Assistance grant awarded for the El Paso Corridor to identify and incorporate green infrastructure in strategic policies/regulatory tools to support new/ revised street standards and land uses.

The Pretreatment Program

EPA Region 6 in partnership with the Region VI Pretreatment Association hosted the 26th Annual Pretreatment Workshop in Irving, Texas, August 2-5, 2010. Over 300 persons attended the workshop, including professionals at the local and state level of government as well as regional and national EPA officials and many exhibitors. This workshop is viewed by many in the field as one of the premier industrial pretreatment workshops. There are 145 approved Pretreatment Programs regulating 281 Publicly Owned Treatment Works (POTWs). In total, these POTWs have the capacity to treat over 4.1 billion gallons of water a day. There are currently more than 2,000 regulated industries contributing over 200 million gallons of industrial wastewater a day to POTWs located throughout the Region.



Concentrated Animal Feeding Operations (CAFOs)

During September 2010, the Region authorized coverage to a CAFO under the New Mexico CAFO general permit. In 2010, the NPDES program reviewed 21 nutrient management plans (NMPs) developed for CAFOs seeking coverage under the general permit for CAFOs in New Mexico, and established procedures to implement the requirements of the 2008 CAFO Rule, including public review of NMPs and the establishment of site specific permit terms and conditions. The general permit is designed to prevent nutrients and bacteria originating from CAFOs from entering and impairing nearby streams.



The Branch is currently working with the Fish and Wildlife Service to complete its Endangered Species Act consultation on the CAFO general permit for Oklahoma and final issuance of the permit is anticipated in the spring of 2011.

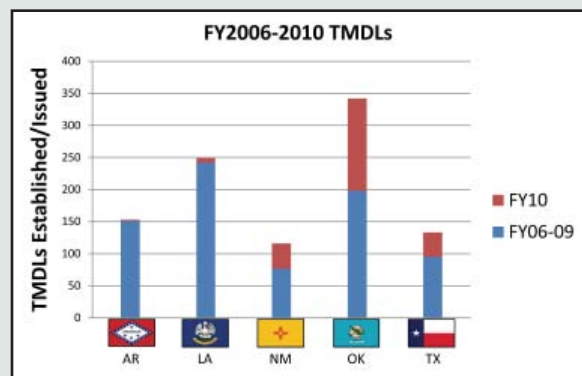
In FY10 the NPDES program continued to assist the states with the implementation of the 2008 CAFO Rule through state regulation updates and the development of CAFO permits. The Branch also participated in a State outreach workshop in Hopkins County, Texas to educate dairy operators on the federal CAFO regulations.

Total Maximum Daily Load (TMDL) Performance Activity Measure

Region 6 approved or established a total of 230 TMDLs in FY10, exceeding the Region 6 commitments of 222.

TMDLs calculate the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

The TMDLs were established as follows: EPA Region 6/Arkansas - 1 TMDL, EPA Region 6/Louisiana - 7 TMDLs, Oklahoma - 144 TMDLs, Louisiana - 0 TMDLs, Texas - 38 TMDLs and New Mexico - 39 TMDLs. ADEQ, NMED, ODEQ and TCEQ wrote a total of 222 TMDLs to surpass their FY10 target number of 198.



Strategic Planning and Community Outreach

Planning and Analysis Branch

Introduction

In line with EPA's goal of promoting an ethic of improving water use practices to increase efficiency, eliminate waste and conserve water resources, the Planning and Analysis Branch continues to provide leadership and innovation in several regional and national initiatives by building partnerships and promoting stewardship opportunities. The three areas that the branch focuses on are: 1) establishing partnerships; 2) providing support to permitting programs; and 3) analyzing water information utilizing Geographic Information Systems (GIS) capabilities, to develop reports for the programs.

The Surface Water Center

In 2010, the Surface Water Center completed over 200 projects, while continuing to expand its role in supporting regional watershed protection efforts and achieving the goals, priorities, and objectives for the regional water programs.

The primary focus of the Surface Water Center during the year was to provide training, analysis and technical expertise on GIS and data related issues. In January, the Center completed its analysis of data, which was the basis of a New Mexico Environment Department (NMED) study of sediment benchmarks, and received positive reviews from the EPA's Office of Research and Development. The Center also continued to provide support to the Enforcement Division and Permits Branch by mapping CAFO and AFO operations in Region 6 and the surrounding states. Other notable accomplishments included the development of a mapping application allowing for the exchange of information on climate change mitigation and adaptation projects, data support for the Deep Water Horizon Oil Spill Response, development of an oil and gas well salinity impairment tool, and a tool to show water quality improvements from the 2002 baseline assessment. The Center was also responsible for Environmental Justice (EJ) analysis of specific areas using the Region 6 EJ Tool.

Irma Rangel Young Women's Leadership School

As part of the EPA Region 6 school partnership with Irma Rangel Young Women's Leadership School in Dallas, Texas, EPA participated in the school's Career Day Event. This event was an opportunity to share information about careers in science, technology, engineering, and mathematics. Region 6 also provided environmental water education to the Advanced Placement Environmental Class and encouraged students of Irma Rangel School to apply for summer internship programs offered by EPA.



Outreach To Science Educators

The Partnerships and Communications Team led development, coordination and on-site operation of the Texas Partnership for Water Education (TPWE) exhibit booth at 2010 Conference for the Advancement of Science in Texas (CAST). EPA spearheaded the creation of TPWE, a collaboration with the Texas Section American Water Works Association (TAWWA) and Water Environment Association of Texas (WEAT) to take advantage of an extraordinary event (CAST) that effectively maximizes our capacity to establish communication and promote EPA water education information, materials & classroom resources to the gathering of 8,000 K-12 science educators from across the state.

Energy Management

EPA Region 6, in partnership with the Border Environment Cooperation Commission (BECC), jointly hosted an Energy Management Workshop in McAllen, Texas, on November 4, 2010. One hundred people attended the workshop; 75 on-site and 25 remote participants, professionals working in the water and wastewater utilities along the U.S.-Mexico border. The workshop emphasized the “Plan-Do-Check-Act” framework in developing an energy management plan, highlighting case studies of utilities implementing an energy management plan, and State agencies sharing energy management activities related to water and wastewater utilities.

The U.S.-Mexico border workshop was designed in similar format as a previous energy management workshop held in Dallas, Texas for EPA Headquarters and the Regional Offices earlier in 2010. Seventy people attended this workshop.

Webinars and Distance Collaboration

The Water Information and Analysis Team has implemented the use of e-learning technologies within the Division. These technologies add long-term value, are affordable and convenient technologies for internal and external audiences and reduce carbon emissions.

As part of this effort, the Division Webinar Team was formed and has made huge strides in producing, hosting and originating successful webinars. The first broadcast webinar topic presented was the “FY 2011 National Water Program Guidance”, on July 1, 2010, enabling 19 state employees to attend without traveling to the regional office. Eliminating travel for this virtual event resulted in an estimated and conservative monetary savings of \$6,000 and prevented approximately 8,500 pounds of CO₂ emissions. Additional savings not quantified include increased productivity by eliminating travel time.

The WDPD continues to expand the use of this new collaborative mechanism to share information while saving time, money, and carbon emissions.

National Drug Disposal Day

Appropriate disposal of unused or outdated (unwanted) medications is one effective way to decrease the volume of Pharmaceuticals and Personal Care Products (PPCPs) entering community waterways. The Partnerships and Communications Team has partnered with Federal and state government, local law enforcement, poison control centers, universities, schools, health facilities and other organizations to assist in drug take back events.

In FY10, the Team collaborated with the Drug Enforcement Agency (DEA) and participated in the first National Drug Take Back Event on September 25. In North Texas, 33 law enforcement agencies participated and collected approximately 3,000 pounds of pharmaceuticals. According to the DEA, 4,000 collection sites across the country participated in this event and 242 million pounds of pharmaceuticals were collected. The number of sites reported in Region 6 is as follows: Arkansas-10; Louisiana-72; New Mexico-42; and Texas-127.



EPA teams-up with the Duncanville Police Department at the DEA National Take-Back Event on Sept. 25, 2010

“No Drugs Down The Drain” Message is Spreading

The Partnerships and Communications Team was very active through various collaborative partnerships providing education and participation in medicine take back events. EPA Region 6 hosted Operation Rx Round-up: A Prescription for a Clean and Safe Environment, the first employee drug back event as a part of Earth Day activities. The Texas Commission on Environmental Quality (TCEQ), University of North Texas, North Texas Poison Center Choices: Safe and Drug Free Schools and Communities and local law enforcement provided presentations. The Region collected 4-10 gallon containers provided by Sharps Compliance, Inc. which also hauled and disposed at no-cost to the Agency.

In addition the Team, along with many diverse stakeholders, participated on the TCEQ Pharmaceutical Disposal Advisory Group (SBI757) to discuss current methods and alternatives for the disposal of unused pharmaceuticals and to develop options the Legislature can consider for dealing with this issue. A report containing Advisory Group recommendations was completed.

WaterSense Partnerships, Products Continue to Grow

The Partnerships and Communications Team has developed a successful marketing strategy promoting EPA’s WaterSense Program. In FY10, Region 6 enlisted 41 new WaterSense Partners. As of 2010, over 600 toilets and 2,100 faucets and accessories, more than 200 labeled showerheads and 41 urinals have been approved and received the WaterSense label. Region 6 highlights for the WaterSense Program include promoting water efficiency utilizing social marketing principles, promoting stewardships with WaterSense Partners and a successful Fix A Leak Week and “We’re For Water” Campaigns.

Fix A Leak Week

EPA’s WaterSense Program hosted the second annual Fix A Leak Week on March 15-21, 2010. The Region 6 WaterSense Promotional Partner, the City of Dallas, won the National WaterSense Media Event Contest to publicize Fix A Leak Week by proposing a week-long effort to erase their low-income households leak repairs. The City of Dallas partnered with area local organizations to sponsor the “Great Dallas Fix A Leak Roundup.” During the Roundup, the City ramped up its plumbing repair program for qualified low-income residents and completed all the projects that were on the waiting list. The City estimated that these repairs will save over 2 million gallons of water a year. City of Dallas and EPA Region 6 representatives made presentations at the event and were interviewed by the local media at City Hall and at homes enrolled in the program.



WQPD staff presenting WaterSense information at a public event



We're for Water kickoff event, College Station, Texas

We're for Water

In the summer of 2010, The WaterSense Program launched a new consumer outreach campaign-“We’re for Water.” EPA created the We’re for Water campaign as a way to help people feel good about using WaterSense labeled products and water-efficient behaviors. Flo, the We’re for Water “spokesgallon”, traveled across the country for two weeks educating the public on water efficiency. As part of the national road trip, Region 6 partnered with a regional WaterSense Partner, College Station, Texas, in a media event to promote the kickoff campaign. We’re for Water campaign also offers WaterSense partners access to a suite of materials and artwork to promote the campaign and simple ways to save water in their communities.

WQPD recognized at Waters To The Sea: Trinity River Premiere

The Partnerships and Communications Team received a Special Award in recognition of outstanding leadership, guidance and unrelenting support of the Waters to the Sea: Trinity River (WTTS), an interactive water education program specifically designed for use in Texas classrooms but also appropriate as an engaging instructional resource for the general public. The award was presented at the Premiere Celebration and CD Release Party which was held on October 20, 2010, at the Colonial Country Club in Fort Worth, Texas.

WTTS was developed by the Center for Global Environmental Education (CGEE) of Hamline University’s School of Education in St. Paul, Minnesota. The Trinity River edition was made possible via an unprecedented collaboration of 18 independent partnering organizations.



Project producers and an actor portraying Sam Houston in the Waters to the Sea: Trinity River interactive CD join WQPD project contributors at the premiere celebration.

Drinking Water and Source Water Protection

Source Water Protection Branch

Tribal Team Improves Water Quality Through Sanitary Surveys and Follow-Up Actions

Sanitary surveys are required under both the Surface Water Treatment and Groundwater Rules. The sanitary survey inspections conducted in Indian Country have led to noticeable improvements at Tribal public water systems that are regulated by Region 6. Recent surveys have shown that the Tribes have addressed or are addressing significant deficiencies found in sanitary surveys. Our sanitary survey efforts allow us to identify significant deficiencies and notify the Tribe of our findings. The Tribe can then work on correction of these deficiencies with assistance from Region 6 Drinking Water staff and the Technical Assistance provider. In a recent sanitary survey, the Tribal Drinking Water Team found significant deficiencies at three water systems which posed an imminent and substantial threat to public health. As a result of the collaborative efforts between the Tribe, the Water Quality Protection Division (WQPD), and the Enforcement Division, the Tribe has taken important steps to comply with the emergency order issued by EPA, including cleaning and super-chlorinating the contaminated spring boxes, leading to improved drinking water quality to consumers.

Carbon (CO₂) Geosequestration

Region 6 is recognized nationally as a leader in the developing area of carbon geosequestration using deep well injection. In FY10, Region 6 was active in the development of the final UIC geosequestration regulations, signed November 22, 2010. Because of the Source Water Protection Branch's expertise with deep well injection technologies, EPA HQ requested the Region's input on several areas of the rule. The Region will continue to play a key role in this promising approach to mitigating greenhouse gas effects on climate change by working with Region 6 states and EPA headquarters to authorize state implementation of these rules.



CO₂ Geosequestration Wells
Photo courtesy of the U.S. Department of Energy

Regional Ground Water Summit Looks at Increasing Alternative Water Supplies Through Emerging Technologies

The Ground Water Center held a three-day meeting in San Antonio, Texas in February, that focused on expanding water supplies through the use of aquifer storage and recovery (ASR) wells and desalination of brackish ground water. Participants included representatives from several federal and state agencies and researchers from universities in the region. These topics are increasingly important methods of climate adaptation in the arid Southwest, as populations increase and stress the existing water supplies.

Outreach to Vietnamese Fishermen Affected by the BP Oil Spill in the Gulf

During May through August 2010, a representative of the WQPD stationed at the Incident Command Post in Houma, Louisiana, played a prominent role in assisting the Vietnamese community impacted by the BP spill. The representative translated documents on dispersants, waste management, monitoring of air, water, and sediments, and seafood contamination for U.S. Coast Guard, BP, and other federal, state, and local agencies reaching out to Vietnamese fishermen in the area. Critical translation assistance on BP's Health, Safety, and Environmental training was also provided. This information was printed as a booklet for distribution to fishermen and others participating in the cleanup. In addition, the Agency participated in many BP community open houses to answer questions related to the potential effects of the oil spill on their livelihood.

Mossville, Louisiana Public Water System and Port Arthur, Texas Water Purification Plant Evaluations

In response to requests by local citizen groups and public meeting testimony, the WQPD conducted comprehensive performance evaluations of two water systems in communities expressing environmental justice concerns. Region 6 Drinking Water Section staff communicated their findings to city officials and members of the community for these two plants, which showed drinking water samples were in full compliance with all health based standards established under the Safe Drinking Water Act; however, the Agency discovered that maintenance activities and design factors needed to be improved at the public water systems to ensure adequate water quality in the future.



Region 6 National Experts Provide Injection Well Technical Training

Region 6 national experts provided training on deep injection well reservoir analysis, mechanical integrity testing, and permitting issues at the Region 9 office, per their request. Region 9 staff, state officials and Tribal staff were in attendance. This training is designed to strengthen the attendees' capacity to evaluate and safely regulate deep injection wells, including Class VI geosequestration wells. Additionally, Region 6 staff assisted in providing mandatory UIC Inspector Training at the Region 8 office to EPA staff, state, and Tribal UIC staff and inspectors, which illustrates the proper well construction, operation and plugging of the various well classes.

Capacity Building for Our Tribal Partners

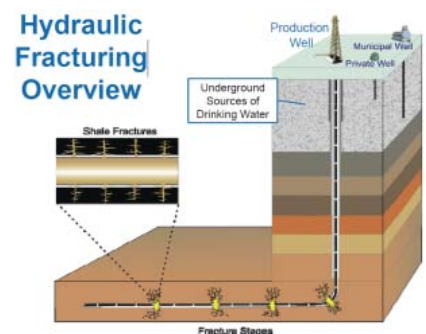
In FY10, Region 6 provided \$60,000 to New Mexico State University (NMSU) to develop and deliver a series of training sessions specifically targeting members of tribes and pueblos in the Region. NMSU presented four separate two-day training sessions on various topics relating to wastewater systems. The sessions focused on the principles of handling waste streams generated by facilities and sources likely to be found on tribal lands. The 143 attendees were primarily Native American government officials, regulators, and utility operators from 14 of the Pueblos and Tribes located within New Mexico. The Navajo Nation, located within Region 9, sent attendees from three of their chapters. NMSU visited three of the New Mexico facilities and provided advice on how to best improve their operations.

Hydrofracking

The WQPD's unique experience in oil and gas operations, and Barnett Shale issues provided the basis for the Region's prominent role in the Agency's Hydrofrac Steering Committee. Specifically, the Division was influential in determining the scope of the study, developing the field study strategy, and educating other committee members on the technical aspects of hydrofracing. Region 6 held the first listening session in the nation on the hydrofracing study, with 600 people in attendance. As public interest in hydrofrac technology and its possible impacts increases, the Region 6 has ramped up collaboration with other EPA offices.

EPA Regional Science Workshop on Using Treated Graywater as an Environmental Solution Workshop

The workshop was a collaborative effort between EPA Regions 6 and 4, and the Office of Research and Development that took place from May 18-20, 2010, in Atlanta, Georgia. It provided a forum to exchange information on graywater with a focus on water quality characteristics relevant to protecting public health and ecosystems, treatment technologies, performance standards, and approaches to management and regulations. The workshop highlighted research advances, case studies, challenges, and regulatory issues. The role of graywater reuse in water scarce regions and expanding urban settings was also examined as a means of improving water use efficiency, reducing the carbon footprint of water systems, and improving water availability. Barriers to implementing graywater reuse were discussed and participant input was solicited on needs for standardization of requirements. Water scarcity, increased water demands, and the carbon footprint of water reuse necessitate a national coordination of water strategies and policies. These strategies include conservation measures coupled with water reclamation, recycling, and reuse.





U.S.-MEXICO BORDER 2012 FOUR-STATE REGIONAL WORKGROUP

Texas • Tamaulipas • Nuevo León • Coahuila

2010 Accomplishments

The U.S.-Mexico Border Environment Program continues to be a model of cooperation and collaboration between neighboring nations, and has achieved tangible, on-the-ground, environmental and public health results for communities in the U.S.-Mexico Border region. Through this program, the U.S. Environmental Protection Agency (EPA), Mexico's Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT), and local and state partners are working to address the most significant environmental and public health risks, and addressing disproportionate environmental impacts in border communities.

This year, the Four-State Regional Workgroup made significant progress in the waste, water, environmental health, and in the emergency response areas. Some examples include:

- Exceeded EPA targets for drinking water and wastewater connections along the four-state region and is on target to meet wastewater connections.
- Total scrap tires collected: 685,417 among the various United States and Mexico communities.
- Total electronic waste collected: 1,361,447 pounds among the various United States and Mexico communities.
- Total household hazardous waste collected: 453 tons, 30,172.5 liters, among the various United States and Mexico communities.
- City of Laredo-EPA children's health effort reached 5,416 students & parents. Fifty-one outreach workers and medical participants received formal training on emerging environmental health issues affecting children.
- EPA - NORTHCOM Partnership to train and equip emergency responders is one of the best examples of local, state and federal collaboration. As a result, partners hosted a series of knowledge exchange workshops, and have facilitated equipment exchanges within the region.

Día Del Río Celebration

One of the most notable achievements this year was the Día Del Río Celebration. On October 6, 2010, the Día Del Río kicked off with hundreds of events that attracted thousands of educators, environmentalists, citizens, elected officials, Native American pueblos, state and federal agencies, NGO's and the media. Community celebrations were held in Colorado, New Mexico and Texas, as well as the Mexican states of Durango, Coahuila, Nuevo Leon and Tamaulipas. Activities included river cleanups, tree plantings, talks, art exhibits, kayaking races and festivals. The organizers formalized a vision and mission statement for creating a watershed network called the Rio Grande/Rio Bravo Watershed Alliance. The Alliance will serve as a catalyst to promote events fostering conservation and sustainable use of the river.



Students taking part in Día Del Río.

Día Del Río Project Highlights

- The Día Del Río attracted 175 schools participating schools, clubs, foundations, governmental organizations both in the United States and Mexico (an estimated 25,000 participants).
- The event hosted a Río Research Roundup, where 42 United States and Mexican teams used water testing kits provided by the Gulf of Mexico Foundation to test their section of the river's watershed.
- A Río Relay was initiated in Creed, Colorado, ending 1,250 miles downstream at Boca Chica, Texas. Relay participants collected water samples at schools and international bridges before conducting a ceremonial "pouring of the waters" into the Gulf of Mexico.

Beyond Translation

Cultivating Hispanic
Community Involvement

Through the Beyond Translation effort, EPA has taken an important step toward engaging the Hispanic community, a significant component of the U.S. population, in a meaningful, productive dialogue to help identify and address environmental and health problems of priority concern to Spanish-speaking communities, and to include Hispanics in developing solutions to those challenges. During 2010 EPA Region 6, under the guidance of Miguel I. Flores, has surpassed expectations and is leading the nation in partnerships and collaborations to expand the environmental conversation in underserved communities.

As follow-up to last year's Beyond Translation Forum in Las Cruces, New Mexico, a series of Permitting 101 Workshops, initiated by New Mexico Environment Department (NMED), were implemented. The workshops are designed to reach the most underserved and rural communities in the state of New Mexico.

On July 12-17, 2010, EPA joined the League of United Latin American Citizens (LULAC) in Albuquerque, New Mexico, to discuss some of the most pressing environmental issues affecting Hispanics. At a gathering of more than 20,000 participants, EPA served as partner and key presenter. EPA sponsored events included a forum involving the Hispanic community, job fair activities and a session where environmental resources and opportunities were shared.

Region 6 also took advantage of the National Organization for Mexican American Rights' (NOMAR) National Convention to continue the conversation with community leaders about environmental priorities requiring involvement and action. One of the key agenda topics was the discussion on pesticide risks to farm workers and their families.

Increasing Pesticide Awareness in Farmworker Communities

On Saturday, October 23, 2010, migrant and seasonal farmworker students from the Children in the Fields Campaign's UT-Pan American Texas Youth Council performed the play "El Moscas" y Los Pesticidas to over 700 community members at the Basilica of Our Lady of San Juan del Valle, in San Juan, Texas. "El Moscas" y Los Pesticidas is an interactive play created by EPA that aims to increase safety awareness for families and individuals who work in areas treated with pesticides, broadening the audience's understanding of pesticide exposure and the take-home risks related to it. Early this year, EPA Region 6 led a day-long workshop at the Association of Farmworker Opportunity Programs (AFOP) National Conference on how to design and implement a theater-based outreach effort in farmworking communities. Plans are underway with Region 10 to expand this concept to the western states.



Deepwater Horizon Response

On April 20, 2010, the Mobile Offshore Drilling Unit (MODU) Deepwater Horizon experienced an explosion and subsequently sank to the floor of the Gulf of Mexico 50 miles south of Venice, Louisiana, resulting in a release of crude oil from the Macondo well lasting eighty-five days. In addition to the Region 6 Regional Emergency Operations Center (REOC) effort, WQPD staff contributed over 2,500 hours to the BP oil spill response, providing technical support for decisions associated with berm and barrier island construction, water and sediment quality monitoring, review and interpretation of laboratory analytical results, and NPDES permitting requirements for various cleanup activities.

Representatives from the Monitoring and Assessment and the Water Quality Standards Sections assisted REOC and Environmental Unit in multiple technical support activities, by providing information on dispersant application risks and benefits, toxicity testing, developing multiple monitoring plans, and reviewing water sampling data collected at the surface of the actual wellhead site. Staff was also involved in the review, interpretation and decision making of EPA near shore water and sediment sampling results. Staff collected and processed over 700 water samples onboard the NOAA vessel Thomas Jefferson, at various depths that were later sent to laboratories for analysis of compounds normally associated with fugitive oil. Results of these analyses were to be used by NOAA and other federal agencies for Natural Resource Damage Assessments (NRDA) related to the spill.



A large part of EPA's response to the BP oil spill was sampling for background environmental conditions in the Gulf.



Collecting water for testing at Grand Isle State Park, Louisiana

The NPDES Branch provided early regulatory guidance on the role of NPDES permits and discharges authorized by the Federal On-Scene Coordinator using authority granted under the CWA and Oil Pollution Act of 1990. The Branch mapped critical infrastructure such as power plant and refinery cooling water intake structures and aquaculture locations that may have been affected by the encroachment of the expanding oil plume. Staff also provided technical review of response and management plans including the Liquid Waste and Materials Management Plan.

The Drinking Water Section along with the Louisiana Department of Health and Hospitals provided technical assistance on the risk of oil from the spill contaminating sources of drinking water through surface water intakes and ground water wells. Staff also provided maps showing all public water supply intakes and public water supply

ground water wells, reviewed and commented on drinking water documents that included frequently asked questions, as well as an assessment of all scenarios involving the oil spill and the affect on drinking water.

The Division's Coastal and Wetland programs collaborated with the Office of Water on the Ecological Impact Analysis of the Gulf Coast, which included coordinating with NOAA on restoration projects that were impacted by the spill.

The Planning and Analysis Branch provided support to the EPA's Emergency Response Team to the BP Oil Spill. The Partnerships and Communications Team provided technical and logistical support to EPA Headquarters and Region 4, and the Information & Analysis Team provided GIS mapping support.



Water Sampling in the Gulf.



Evaluating efforts to protect marshes.



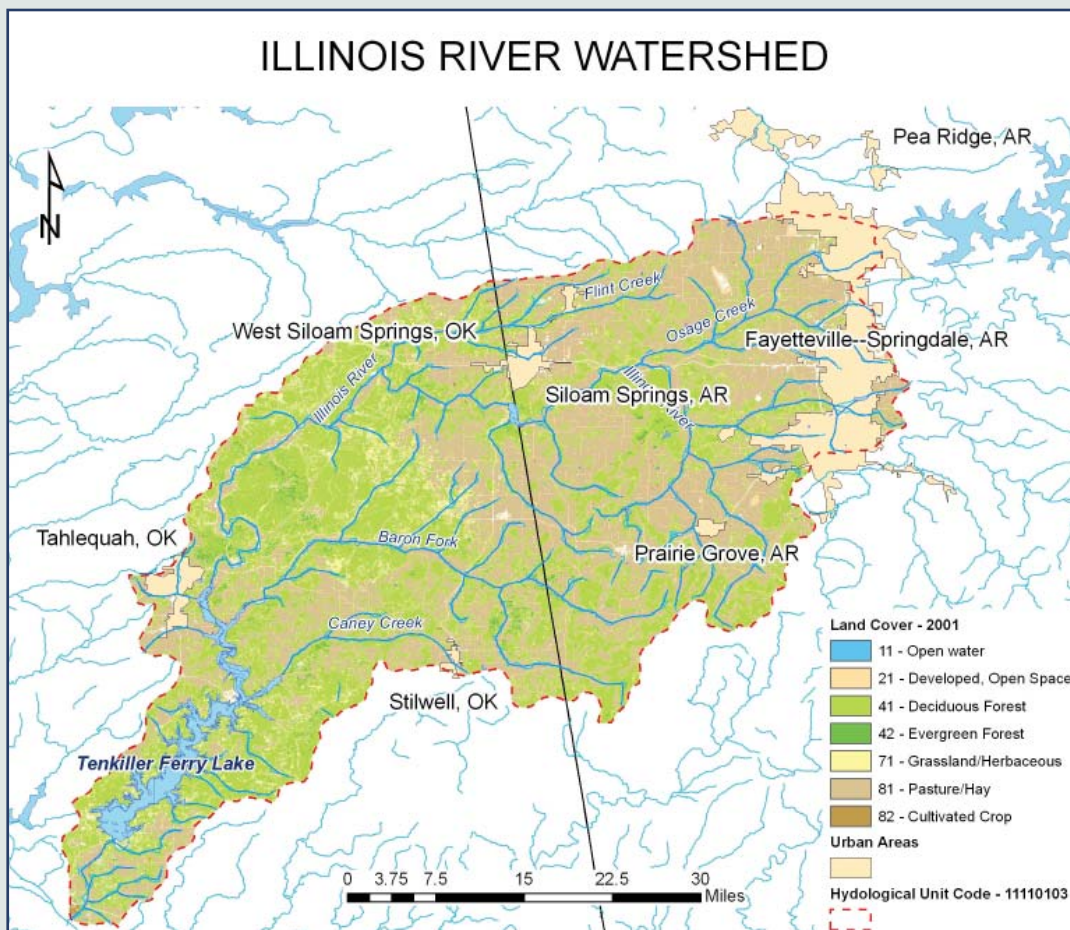
EPA at work along the Gulf coast.

Illinois River Watershed Project

Water quality in the Illinois River watershed declined throughout the 1990s. Excessive amounts of phosphorus, primarily from fertilized agricultural field runoff, may have caused excessive aquatic vegetation to become a problem in Lake Tenkiller. The U.S. Supreme Court ruled in 1992 that Oklahoma could establish its own standards for phosphorus in the Illinois River. Since the Illinois River starts in Arkansas and flows into Oklahoma, this would require Arkansas to lower the phosphorus amounts sent downstream into Oklahoma.

On November 20, 2009, EPA launched the Illinois River Watershed modeling project, a collaborative effort that includes multiple branches throughout the WQPD. In addition to EPA, the group consists of technical representatives from Arkansas, Oklahoma, and Tribal Nations in the Illinois River watershed. This initiative is to develop a comprehensive multi-jurisdictional watershed strategy for addressing nutrients impairment in the Illinois River watershed from Lake Tenkiller in Oklahoma upstream to the headwaters in Arkansas.

Since the inception of the project, the NPDES Permitting and TMDL Branch hosted two public meetings with over 100 attendees to work with both agriculture producers and cities to ensure they are engaged throughout the entire project. A critical component of this strategy is comprehensive watershed modeling to determine phosphorus load reductions needed to meet water quality standards in both States. The Standards, Monitoring and Non-point source groups have been actively involved in reviewing the Oklahoma and Arkansas watershed based plans and providing comments, based on national guidelines, ensuring consistency between the plans. A representative from the Standards group is a member of a Technical Advisory Group sponsored by Oklahoma to evaluate the total phosphorous criteria. The Groundwater Center provided technical support regarding the location of karst features in the watershed area. The modeling project, once completed, will be used to develop nutrient TMDL(s) for the Illinois River watershed, and include Lake Tenkiller.





United States Environmental Protection Agency, Region 6
Water Quality Protection Division (6WQ)
1445 Ross Avenue
Dallas, Texas 75202

For an electronic copy of this report, please visit
www.epa.gov/region6/water/index.htm