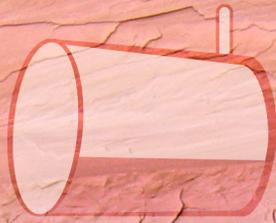


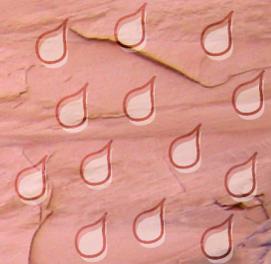


Janet Napolitano, Governor
Stephen A. Owens, ADEQ Director

2008 DIRECTOR'S REPORT



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A Message from the Director...

Fiscal year 2008 was another year of great progress at ADEQ. The department implemented several successful initiatives and continued to improve delivery of services and increase focus on the central functions of our mission: to protect and enhance Arizona's environment and the health and safety of our state's citizens.

Our Children's Environmental Health Project has continued to draw an enthusiastic response from school officials, children's health experts, parents and educators. The School Bus Idling Project, which began as a pilot effort in 2004 with seven school districts to reduce children's exposure to harmful diesel emissions from buses idling near schools, has grown to 1,015 schools in 158 districts, benefiting more than 700,000 children riding nearly 5,000 buses throughout the state. In addition, ADEQ launched a Source Water Protection Program to protect drinking water supplies at schools and a new program to support high school environmental clubs by providing funding for the clubs to conduct recycling at club meetings and around their school campuses.

ADEQ also began a program to clean up contamination from leaking underground storage tanks on school property throughout the state and that program won a 2008 Environmental Achievement Award from Region 9 of the U.S. Environmental Protection Agency. Since inception of the program, which also ensures that the USTs are properly maintained, compliance rates at the schools with active USTs have improved significantly and no new leaks have been discovered.

In another initiative to protect the environment, work has been completed on a project funded by ADEQ to install emissions-control devices on a number of diesel powered vehicles and other machines operating in South Phoenix. ADEQ provided the City of Phoenix with a \$208,000 grant last year to buy and install 53 diesel oxidation catalysts and 11 diesel particulate filters on 64 vehicles and other pieces of equipment owned and operated by the City. The retrofitted vehicles included 39 trash trucks, 23 street sweepers, an excavator and a loader. This project will help protect children and families in South Phoenix from harmful diesel pollution that otherwise would be emitted by these vehicles. Diesel exhaust is especially harmful to children and is a principle trigger for asthma attacks and other respiratory problems affecting some South Phoenix residents because of the volume of diesel truck traffic and industrial activity in the area.

As part of a series of agreements between ADEQ and Asarco, as part of Asarco's bankruptcy settlement, ADEQ reached an agreement to have Asarco fund an investigation and clean up a contaminated former mining site south of Tucson. Mining operations were conducted periodically at the site during the late 1890s and early 1900s. The agreement will help ensure that contamination from the old Helvetia mining site will be cleaned up at last. Under the bankruptcy agreement, Asarco will pay up to \$880,000 into a special fund to pay for the cleanup, which will be performed by contractors hired and supervised by ADEQ. Under direction from ADEQ, a complete remedial investigation of the site and nearby areas will be conducted to identify the extent of contamination. Waste piles at the site show evidence of acid mine drainage and erosion. Based on the results of the remedial investigation, the cleanup may include covering, or capping, the waste piles and planting vegetation to control erosion.

ADEQ continued to diligently enforce the regulations that protect human health and the environment in Arizona. For example, ADEQ and the Arizona Attorney General reached a settlement with Honeywell International for numerous violations at 14 Honeywell facilities throughout Arizona, requiring Honeywell to pay a \$5 million penalty and a \$1 million Supplemental Environmental Project. ADEQ and the Attorney General also filed a lawsuit against Far West Water & Sewer Company and H & S Developers, seeking penalties of up to \$25,000 per day for numerous, long-standing and repeated water and air quality violations in Yuma County.

More detailed information about our department's programs may be found on the agency's Web site at: www.azdeq.gov.

Stephen A. Owens
Director

ADEQ at a Glance...

The Arizona Legislature established ADEQ as the state's environmental regulatory agency under the Environmental Quality Act of 1986. Its mission is to protect and enhance public health and the environment in Arizona. The department achieves this mission by administering our state's environmental laws and delegated federal programs to prevent pollution of our air, water and land, and to clean up such pollution when it occurs.

During FY 2008 ADEQ had an average of 685 employees. The department's organizational structure is composed of four programmatic divisions that fulfill our environmental protection mission in the areas of air quality, water quality, waste programs and tank programs. Those divisions are supported by the director's office and an administrative services division.

Our agency's core functions are vital to public health and safety. The core functions align with the agency mission, strategic plan and performance objectives, which are summarized below.

Pollution Control

Permitting – ADEQ issues permits, approvals and certifications to ensure that facilities are constructed and operated in accordance with the law and that any discharges to the air, water and soil are within healthful standards established by law.

Planning – ADEQ's planning specialists develop management practices and increasingly stringent control strategies in areas where health-based environmental standards are threatened or violated. Arizona's air quality management areas and watershed planning efforts are examples of this activity.

Pollution Prevention – As an alternative to regulatory enforcement, ADEQ offers guidance, assistance and financial incentives to encourage businesses to minimize waste and resulting pollution.

Environmental Clean Up

Remediation – ADEQ investigates and oversees the removal and cleanup of contaminated soil and groundwater to protect public health and the environment.

Emergency Response – ADEQ provides technical support and assistance to emergency response agencies to help them minimize the impacts to public health and the environment in the areas of air quality, water quality and hazardous waste.

Voluntary Remediation Program - Through ADEQ's Voluntary Remediation Program (VRP), property owners, prospective purchasers and other interested parties investigate or clean up contaminated sites in cooperation with ADEQ. VRP results in a streamlined process for program participants who work with a single point of contact at ADEQ to address applicable cross-program remediation efforts. ADEQ reviews these voluntary remedial actions and provides a closure document for successful site remediation that is accepted by all relevant ADEQ programs.

Compliance Management

Compliance Assistance – ADEQ offers a variety of informational resources to help businesses understand and comply with environmental regulatory requirements and promote positive environmental practices.

Inspections – ADEQ inspects facilities on a regular basis and in response to citizen complaints to ensure compliance with environmental laws.

Enforcement – ADEQ ensures compliance with environmental laws by pursuing informal enforcement through notices of opportunity to correct or notices of violation and formal enforcement through administrative orders and judicial enforcement actions in conjunction with the Arizona Attorney General's Office.

Monitoring and Assessment

Monitoring – ADEQ's monitoring personnel collect air, water and soil samples for laboratory analyses to determine the presence or absence of contaminants.

Assessment – ADEQ's assessment staff interpret the data that result from field research to draw conclusions about environmental indicators and trends and form the basis for future planning and policy decisions.

Public Outreach

Education and Outreach – ADEQ offers a variety of seminars, workshops, presentations and publishes information via newsletter and the Internet to inform the public about department programs and activities. ADEQ also supports numerous advisory and stakeholder groups and conducts public hearings and meetings in support of our regulatory and public policy functions.

Financial Assistance – ADEQ offers financial assistance for leaking underground storage tank cleanup costs and provides grants to local governments for air quality and water quality programs. Other ADEQ programs also make funding available to eligible applicants for recycling, water quality and pollution prevention projects and activities.

Public Policy

Policy Development – ADEQ works with state and national organizations and stakeholders to shape and influence environmental policy at the state and federal levels. Policies are developed to explain how we interpret statutes and rules to ensure consistent, equitable decisions and to inform the public about how we do business.

Rule Development – ADEQ writes rules, based on science and public policy, to implement the broad statutory language contained in legislation.

FY 2008 Accomplishments...

Pollution Control – Permitting

Air Quality Permit for New Ethanol Plant

On May 5, 2008, ADEQ issued a permit to Agrinext Ethanol LLC for the construction and operation of a fuel-grade ethanol production facility near Tacna, Ariz. This facility is the first ethanol plant permitted by the Department and will produce 65 million gallons per year of un-denatured ethanol. The permit requires the facility to install and operate extensive air pollution controls such as scrubbers and baghouses to control particulate matter emissions. The coal-fired boilers will have a selective non-catalytic reduction system and wet scrubber to control nitrogen oxide emissions. The cooling towers will be equipped with drift eliminators to reduce particulate matter, and a flare will be used to minimize volatile organic compound emissions in the loading of ethanol to rail cars or tanker trucks. The permit also requires extensive testing on an annual basis and the installation of a continuous opacity monitor to ensure that the facility operates in accordance with emission limitations.

Record-Breaking Year for Efficiency Improvements in Issuing Water Quality Permits and Plan Review Approvals

The engineering review program achieved significant improvements in efficiency in the review of construction related approvals issued in FY08 over FY07, including a 24 percent improvement in review times. While there was a drop of 38 percent in the total number of Approvals to Construct and Construction Authorizations (880 in FY07 versus 547 in FY08) for a variety of reasons, there was a steady number of Approvals of Construction and Discharge Authorizations (1,023 in FY07 versus 1,053 in FY08). The efficiency improvements were because of improvements in processes and staff training. In FY08, the engineering review program gained three registered professional engineers, two engineers-in-training, and a certified floodplain manager, which all helped shorten review times. The program also retained all its engineers during the period, a first in the past four years.

Pollution Control – Pollution Prevention

Wastewater and Drinking Water Facilities

The unprecedented growth throughout Arizona resulted in yet another year of record numbers of applications to permit wastewater treatment facilities and drinking water facilities and to conduct plan reviews for installation of these systems and related appurtenances. Despite decreases in staff, ADEQ issued 64 individual Aquifer Protection Permits or permit amendments – many for new or expanded sewage treatment facilities.

The division also issued 32 Type 2 and two Type 3 general permits and 68 permits for reuse of reclaimed water. Nearly 3,700 drywells were registered.

Despite the slowdown in the housing market midyear, FY07 also saw dramatic increases in construction-related approvals issued over the previous record-setting year. In engineering review, 1,400 certificates of approvals to construct and certifications of completion were issued for drinking water facilities, a 12 percent increase from last year. There were 524 construction authorizations (CA) and 467 discharge authorizations (DA) approved for Type 4 general permits, which include sewage collection systems and on-site wastewater treatment systems. These were increases of 85 percent and 250 percent, respectively, over the number of CAs and DAs approved in FY06. Also, more than 400 new subdivisions were approved, a 240 percent increase over the approvals from last year.

New Hazardous Waste Inspectors at Border

In July 2007, ADEQ launched an effort to inspect shipments of hazardous waste coming from Mexico into Arizona at Arizona's three ports of entry in Nogales, San Luis and Douglas, the state's busiest crossings from Mexico. The budget signed by Gov. Napolitano provided funding for ADEQ to hire three full-time hazardous waste inspectors to review waste shipments coming into Arizona from Mexico to ensure they are being transported safely in accordance with all requirements of state and federal law.

UST School Assistance Initiative

ADEQ created the Underground Storage Tank School Initiative in August 2007 to assist Arizona schools with preventing UST releases and cleaning up existing releases. This initiative is part of ADEQ's Children's Environmental Health Project. This assistance expedited cleanup of UST releases at school sites before the State Assurance Fund expires in 2010. As of August 2008, ADEQ staff met with all 47 schools (in eight counties) with operating USTs and provided computer-generated training to assist the schools with the proper operation and maintenance of their UST systems.

ADEQ also met with all 18 schools with UST releases to provide corrective action assistance. As of August 2008, 10 school property sites (56 percent) have obtained leaking UST case closure, five (28 percent) have active remediation in process or completed, two (11 percent) are being considered for the State Lead Program; and one (5 percent) is in site assessment. On April 14, 2008, ADEQ was awarded the "Environmental Award for Outstanding Achievement" from EPA Region 9 for the School Assistance Initiative.

Preventing Illegal Dumping Throughout Arizona

ADEQ began an Illegal Dumping Prevention Program in 2006. Since then, the program has supported many projects around the state which are aimed at preventing illegal dumping and addressing its causes. ADEQ has worked with local officials to prevent illegal dumping, clean up illegal dump sites, take enforcement action against illegal dumpers, and help inform the public about the problem.

In September 2008, ADEQ provided \$2,500 to the City of Globe and San Carlos Apache Tribe officials to help clean up illegal tire dumping on the San Carlos Apache reservation in east-central Arizona. About 10,000 waste tires were removed from the reservation and hauled to a recycling facility for proper disposal.

On March 7, 2008, ADEQ led a forum on illegal dumping prevention in Yuma. Dozens of citizens and public officials from throughout the state exchanged ideas and techniques on how to prevent illegal dumping. ADEQ will continue to support local and private illegal dumping prevention efforts throughout Arizona.

Three New Vehicle Emission Inspection Locations

Bringing together a new vehicle emissions inspection contract is a major accomplishment. This large and complex project includes hundreds of hours of preparation, bidding, review, award and implementation. After receipt of competitive bids, ADEQ awarded the contract, which will run from January 2009 through July 2014; to Gordon-Darby Arizona Testing, Inc. Terms of the agreement include construction of three new inspection facilities in North Phoenix, Apache Junction and Goodyear. Express testing of on-board diagnostic-equipped vehicles will result in shorter wait times. Greater emphasis on technology for security, data access and process monitoring are included in the contract along with improved customer access to station, vehicle and repair information.

Low Emission School Buses

Nine school districts in Maricopa and Pima counties were awarded \$1,498,268 in grants by ADEQ to improve air quality and reduce children's exposure to harmful diesel emissions from school buses. The grants will enable the districts to obtain less-polluting school buses and new pollution control equipment for their current fleets. The school districts receiving the grants are participating in ADEQ's voluntary School Bus Idling Program, under which school districts reduce diesel emissions by limiting bus idling near schools. A total of 158 school districts around the state in each of Arizona's 15 counties participate in the School Bus Idling Program.

The districts were eligible for grants of up to \$35,000 toward the purchase of a new compressed natural gas-powered school bus; up to \$15,000 toward the purchase of a new school bus equipped to run on ultra-low sulfur diesel fuel and equipped with a diesel particulate filter; and up to \$8,000 to retrofit used school buses with diesel particulate filters to enable them to run on ultra-low sulfur diesel fuel.

Reducing Diesel Emissions in Nogales Area

In August, ADEQ launched a new initiative to reduce diesel emissions in the Nogales area on the Arizona-Mexico border. The \$100,000 project, funded by the EPA, will equip about 30 diesel trucks that cross the border several times a day with devices to reduce particulate matter air pollution from diesel emissions by 20 to 30 percent. The devices will be installed free of charge to the owner. ADEQ is seeking to retrofit trucks which are expected to be on the highways for the next several years, and is strongly encouraging fleet owners to participate in this important effort.

Environmental Clean Up – Remediation

Route 66 Initiative

U.S. Route 66 was a paved highway which connected Chicago to Los Angeles from 1938 to 1970. Due to the popularity of the highway, a lot of gas stations were needed to fuel vehicles along the way, and many of the Underground Storage Tank systems leaked into the soil and groundwater. To assist the communities along the former Route 66 in Arizona, ADEQ launched the Route 66 Initiative in 2004. The goal of the initiative is to identify and remove abandoned USTs and to expedite the clean up of UST releases. The initiative is aimed at increasing communication and coordination between ADEQ, UST owners/operators, property owners and local officials.

The benefits of the initiative are the reduction in risk to human health and the environment from the UST releases, revitalization of cities and towns, and the increase in property values. Along the Arizona section of Route 66, there are approximately 350 sites with reported leaking USTs or piping. About 75 percent of these sites already have been remediated. The remaining 25 percent require additional corrective actions, which may include further investigation or cleanup.

Route 66 Asbestos Initiative

In October 2007, as a result of recent problems in Winslow, Holbrook, and other rural communities around Arizona, ADEQ launched the Route 66 Asbestos Initiative to help communities along old Route 66 in Northern Arizona deal with asbestos problems. Asbestos is made up of microscopic bundles of fibers that may become airborne when

damaged or disturbed. Exposure to airborne friable asbestos may result in potential health risks, and continued exposure can result in serious lung disease, including asbestosis, lung cancer or mesothelioma. ADEQ provided technical assistance and asbestos education in rural communities throughout Arizona. ADEQ officials also are meeting with local officials to provide education about the program, focusing on understanding and implementing the asbestos notification, work practice, and disposal requirements. They also provided free asbestos awareness seminars in Holbrook, Clarkdale and Kingman. In the coming fiscal year, ADEQ is looking to work closely with other rural communities in Northern Arizona and across the remainder of the state to help resolve asbestos matters.

State Assurance Fund Reimbursements

The State Assurance Fund was established by the Arizona Legislature in 1990 to assist eligible UST owners, operators and volunteers in meeting the potentially high costs of investigating and cleaning up UST releases. It is funded by a one cent a gallon fee on petroleum. In 2004, the Arizona Legislature eliminated SAF eligibility for new UST releases reported after June 30, 2006, and ends the program on June 30, 2010.

In FY08, ADEQ processed 1,032 applications and reimbursed \$15,761,354 to UST owners/operators and volunteers for investigating and cleaning up their contaminated sites.

County and Municipal Tank Closure Program

The County and Municipal Tank Closure Program (MTCP) was initiated by the Arizona Legislature in 2001. It is a state-funded program to assist residents, businesses and government entities in unincorporated areas of counties or incorporated cities and towns with populations of fewer than 15,000 people with the removal of abandoned USTs and cleanup of associated contamination. The MTCP promotes community redevelopment by removing abandoned USTs. Many qualified cities and towns throughout Arizona have partnered with local property owners to identify and remove USTs through this program. ADEQ administers the program, conducts the tank removal and any required contaminant cleanup, and reimburses the county, city or town for MTCP application costs. As of July 10, 2008, ADEQ has received a total of 92 applications from 33 cities, towns and counties, and has removed more than 162 orphaned USTs from 84 sites.

ADEQ Stadium and Arena Recycling Programs

On Feb. 3, 2008, ADEQ joined forces with the National Football League and the Arizona Super Bowl Host Committee to make Super Bowl XLII in Glendale the greenest ever. The partnership was the first of its kind between the NFL, a Super Bowl Host Committee and a state environmental protection agency.

Recycling waste receptacles were provided at various Host Committee activities, including the 100-Day Countdown to Kickoff event in Glendale's Westgate City Center. ADEQ also provided information about recycling and other environmental issues at the events and provided environmentally focused materials for the estimated 10,000 volunteer workers and at the Super Bowl Media Center in downtown Phoenix.

As part of this joint effort, the NFL used recyclable materials at the game and for construction of event structures and venues and also recycled leftover material from Super Bowl events such as lumber, bricks and decorative fabric. Recycled materials were donated to Valley charities. The NFL also used a number of alternative fueled vehicles and low-emissions vehicles.

Information about ADEQ's programs was featured in the Host Committee's media guide, event guide and visitors' guide. Environmental education messages were promoted in various radio, TV and newspaper ads, and the Host Committee provided weekly environmental tips on its website.

Compliance Management – Compliance Assistance

Metal Coating Industry Hazardous Waste Inspection Initiative

ADEQ implemented an initiative focusing on promoting proper hazardous waste management within the metal coating industry. The goals of the initiative are to identify facilities that are out of compliance with the regulations, promote compliance through education of industry members, ensure timely remediation of environmental impacts, and prevent contamination. During the first phase of the initiative, chrome-plating operations were targeted, leading to the discovery of hundreds of violations, multiple-site assessments where remedial actions may be required, and referrals to the Office of the Attorney General for the most serious violations. About half of chrome-plating operations have some level of soil contamination requiring remedial activities.

ADEQ will continue the initiative, focusing on completing metal-plating operation inspections, and then moving on to metal-coating operations where inspection history suggests a high probability of noncompliance.

Small Communities Assistance Program Expands

Since 2005, ADEQ has been providing compliance assistance to small communities throughout the state. In FY08 the Small Communities Compliance Assistance Program welcomed five new members: The City of Safford and Town of Pima in Graham County; the City of Willcox in Cochise County; the Town of Springerville in Apache County; and the first member in northern Arizona, the City of Winslow in Navajo County. Member communities agree to disclose known environmental violations, request compliance assistance before enforcement actions begin, participate in compliance evaluation to

identify violations and to promptly correct known violations. In so doing, member communities are eligible for up to a 100 percent penalty reduction if they have future environmental violations.

Compliance Management – Inspections and Enforcement

\$12 Million Water Quality Settlement Largest in State History

In December 2007, the State of Arizona settled a 2005 lawsuit filed against George Johnson; Johnson International, Inc.; 3F Contracting, Inc.; Preston Well Drilling and other defendants for violations of numerous state laws, including violations of Arizona's Clean Water Act program. The defendants agreed that the State would be paid \$12,111,500 to resolve all claims in the case. The violations of the Clean Water Act included clearing an estimated 2,000 acres of private land in the Santa Cruz River Valley and nearly 270 acres of State Trust Land near the Ironwood National Monument without obtaining the necessary permits, and discharging pollutants into the Little Colorado River, the South Fork of the Little Colorado River and tributaries of the Santa Cruz River. The Attorney General's office filed suit on behalf of ADEQ, State Land Department, Department of Agriculture, the State Museum, and the Game and Fish Department.

Asarco Agrees to Clean Up Contamination in Hayden and Winkelman

In June 2007, EPA announced that it wanted to place the Asarco Hayden plant site on the National Priorities List (NPL). Gov. Janet Napolitano asked EPA to defer the listing, pending outcome of discussions among ADEQ, EPA and Asarco to have Asarco clean up the site rather than have it listed on the NPL. An agreement was approved on June 19, 2008. Asarco has agreed to clean up contamination from the company's mining activities in Hayden and Winkelman and will spend \$13.5 million to clean up contaminated soils from residential areas in the towns with high levels of arsenic, copper or lead. Asarco also will reimburse ADEQ and EPA for oversight costs.

Asarco also will complete a full remedial investigation of residential and public areas in Hayden and Winkelman and of Asarco operations to identify releases of hazardous substances and remove them. The company also must prepare a community relations plan under direction of ADEQ and EPA and use a qualified community group to hire independent technical advisors to analyze Asarco's work.

This arrangement likely will result in quicker and more efficient site cleanup than would have occurred were the site placed on the NPL.

Monitoring and Assessment

Redesignation to Attainment Status for Sulfur Dioxide

In response to ADEQ's submittal of a Maintenance Plan and Redesignation Request, EPA redesignated the San Manuel sulfur dioxide area to attainment status effective March 18, 2008, in a Federal Register notice (73 FR 3396) published Jan. 18, 2008. This is the fifth of six sulfur dioxide nonattainment areas in Arizona to be redesignated to attainment status.

Public Outreach – Education and Outreach

ADEQ Awards \$1.4 Million in Water Quality Improvement Grants

In 2008, ADEQ awarded \$1.4 million in federal grants to address nonpoint source water pollution throughout the state of Arizona. Eighteen grants were awarded as part of ADEQ's Water Quality Improvement Grant Program. Nine were awarded for improvement projects to address issues such as erosion and sediment control, stormwater runoff, grazing, faulty septic systems, and stream course restoration.

Nine education grants were awarded and are aimed at educating the public about nonpoint source pollution impacts to Arizona's surface and groundwater. Nonpoint source pollution is caused by pollutants that are carried into lakes, streams and groundwater resources through overland runoff and is considered one of the most significant threats to water quality nationwide. The funded projects are described below:

- The Yavapai County Flood Control District received \$369,271 for a project at Pioneer Park in Prescott to protect the site's major unnamed watercourse, which flows into Granite Creek and ultimately into the Verde River in the Upper Verde Watershed.
- A \$260,000 grant was used to install a new wastewater treatment system at the Tonto Rim Christian Camp to replace existing failed septic system drainage fields installed at the camp in the 1970s and 1980s. The new advanced sewage treatment system will reduce nitrogen content in the wastewater and use drip irrigation disposal methods that will reduce contamination in Tonto Creek.
- The City of Phoenix was awarded \$251,400 for a pilot project to protect Arizona waterways from stormwater runoff and reduce the "urban heat island" effect. The city in part used the funds to build a new 35,000-square-foot parking lot at the Southwest Family Services Center at 52nd Avenue and Lower Buckeye Road to study whether pervious concrete helps to reduce water pollution.

- A \$250,000 grant was awarded to the White Mountain Apache Tribe to reverse damage done to watersheds by the 2002 Rodeo-Chediski fire, the largest wildfire in Arizona history. Flooding because of erosion caused by the fire is still occurring in the community of Cibecue and throughout the western part of the reservation, and is damaging homes, roads and land throughout the region.
- A \$176,150 grant to the University of Arizona's Master Watershed Steward Program (MWSP) is helping enhance watershed education statewide. MWSP was created to educate and train Arizona residents to serve as volunteers in protecting, restoring, monitoring and conserving watersheds.
- A \$168,442 grant to Audubon Arizona is supporting the Nina Mason Pulliam Rio Salado Audubon Center and helping to improve water quality in Phoenix through public education. During the two-year grant period, about 7,000 people are expected to participate in the program.
- A \$136,900 grant to Noland Ranch, northeast of Safford in Graham County, is improving water quality in the Bonita Creek and Gila Box Riparian National Conservation Area. The funds are rebuilding a 7.4-mile fence, which will prevent about 200 cattle from disturbing the soil in the Gila River and Bonita Creek areas.
- A \$103,240 grant is improving water quality in Tucson through public education. The grant is being awarded to the Watershed Management Group, a Tucson-based non-profit organization that encourages water conservation. The program will help prevent urban stormwater pollution through outreach efforts to local residents.
- A \$92,294 grant was awarded to a group of Greenlee County ranchers who have been working to restore Eagle Creek Watershed. The Coronado Resource Conservation and Development Council will use the funding to prevent erosion on 161,172 acres of grazing land located within the Eagle Creek Watershed.
- The Prescott Creeks Preservation Association, a local nonprofit group, received \$67,875 for educational efforts to cut pollution to Granite Creek and Watson Lake. The association will use the funds to train volunteers on best-management practices to reduce pollution and build an interactive model of how watersheds drain.
- A \$53,490 grant was used to launch a Trailhead Ambassador program for high school students in Oak Creek Canyon near Sedona. The grant is being used to train students to educate visitors to the popular canyon about the various environmental problems caused by human and pet activity in the fragile ecosystem and to prevent them.
- The Gila Watershed Partnership of Safford received a \$35,550 education grant to help improve water quality in the 7,354-square-mile-watershed of the Upper Gila River and enhance the Master Watershed Steward Program.

- A \$35,000 grant to the Hualapai Tribe in Mohave County is helping reduce soil erosion and protect Diamond Creek, which flows into the Colorado River on the tribe's northwestern Arizona reservation.
- A \$32,289 grant to Mingus Springs Camp & Outdoor Learning Center in Yavapai County will help protect the headwaters of Ash Creek on the Upper Agua Fria watershed from water pollution by controlling erosion with sediment traps and retaining walls.
- A \$13,000 grant to Coronado National Forest to protect the border area's watershed will reduce sediment loading in the Santa Cruz River by emphasizing better grazing management by building a 1-mile fence in a strategic gap in Sycamore and Providencia canyons.
- A \$12,880 grant to the Gila Valley Natural Resource Conservation District (NRCD) in Graham County is helping plant vegetative buffer strips to reduce soil erosion and nutrient and pesticide discharge into the Gila River.
- An \$8,050 grant was awarded to the Gila Watershed Partnership to fund a water quality improvement education project for Native American youth in the Coronado National Forest in Graham County.
- The City of Peoria received a \$5,000 grant to teach an estimated 2,000 students in kindergarten through eighth grades about how to prevent stormwater pollution in their neighborhoods.

Brownfields Grants

A Brownfields site is an abandoned or underused property that suffers from known or perceived environmental contamination. Brownfields grants totaling \$342,963 were awarded this year to communities throughout the state. Some of the funded projects are described below.

- \$50,000 was awarded to the City of St. Johns in Apache County for an assessment of a former uncontrolled construction dump site where St. Johns plans to expand its public cemetery. Another grant of \$50,000 was awarded to St. Johns for an assessment of a former gas station and car dealership site where the city wants to build its new City Hall.
- \$38,963 was awarded to the City of Flagstaff to complete the environmental assessment of a warehouse, power plant, railroad spur line and storage yard, and a wood preservation vat on the Rio de Flag site in downtown Flagstaff. This grant supplemented a \$50,000 Brownfields grant awarded to Flagstaff in 2007 for the first phase of the environmental assessment on the site.

- \$50,000 was awarded to the City of Globe in Gila County for an environmental assessment of the 17-acre Mountain View Mobile Home Estates Subdivision, where the city wants to develop a mixed-use industrial park. The environmental assessment will help the city determine what actions might be needed to make this former federal Superfund site suitable for commercial use.
- \$50,000 was awarded to the City of Surprise in Maricopa County for an environmental assessment of an abandoned farm maintenance yard that the city now owns to help the City identify and ensure that contaminants of concern are not in the groundwater recharge area.
- \$50,000 was awarded to the City of Willcox for an environmental assessment of the 960-acre Cochise County Airport, which the city is considering purchasing.
- \$4,000 was awarded to the City of Show Low for an environmental assessment of a former transportation business garage and bulk fuel storage facility where the city hopes to build a new library.

Recycling Grants

ADEQ funds recycling efforts within communities throughout Arizona. These grants support the development of community programs to divert recyclable waste from landfills. Benefits include longer lasting landfills and reduced need for energy and materials that would otherwise be used to manufacture new materials.

During 2008, ADEQ awarded \$1,185,510.40 to communities and organizations throughout the state:

- Bullhead City received \$25,000 for the Bullhead City Drop-off Recycling Program and \$2,500 for the Bullhead City Recycling Education Program.
- The City of Litchfield Park received \$45,375 for the “City of Litchfield Park Waste Reduction Through Community Education Program.”
- The City of Peoria received \$61,728 for the Peoria Multi-Family Recycling Program, \$200,000 for the Peoria Curbside Recycling Program, and \$60,000 for the Peoria Curbside Recycling Educational Program.
- The City of Phoenix Public Works Department received \$67,752.50 for recycling in the Phoenix Mountain Preserves, and \$141,000 for City of Phoenix Public Venue and Special Event Recycling.
- The City of Tucson Environmental Services received \$78,000 for household hazardous waste and computer equipment one-day and continuous collection events.

- The Town of Quartzsite received \$10,000 to reduce solid waste going to the La Paz County Landfill.
- The City of Winslow received \$69,626 for “Develop Recycling, Our Planned System (D.R.O.P.S.),” and \$19,000 for “Winslow WRITE.”
- Cochise County received \$60,000 for a Cochise County recycling feasibility study.
- The Arizona State University Office of Research and Sponsored Projects received \$98,999 for construction debris recycling for the production of cellulosic ethanol.
- Mesa Community College received \$46,020 for the Mesa Community College Recycling Program.
- The Graham County Rehabilitation Center received \$22,200 for recycling education in Graham County, and \$79,309.92 for a recycling center in Graham County.
- The Gila Watershed Partnership of Arizona received \$99,000 for the Graham County Abandoned Vehicle Removal Program.

ADEQ awarded 22 grants totaling \$11,000 to Little League baseball programs in 10 Arizona counties as part of the agency’s Little League Recycling and Litter Control Project. The grants provide money for banners promoting recycling displayed at baseball fields and for recycling containers to be placed at the fields. ADEQ’s Little League Recycling and Litter Control Project is now in its fifth year, with grants awarded to Little League programs throughout the state for recycling and litter clean up.

ADEQ also awarded scholarships of \$1,000 each under the department's Recycling Scholarship Program to eight Arizona high school seniors. Each student will receive a \$1,000 scholarship to be used for expenses at a college or university in Arizona. The scholarship recipients were selected by ADEQ based on proposals they submitted to ADEQ outlining a waste reduction or recycling project in their school or community.

Flagstaff Public Meeting to Discuss Fish and Mercury Issues in Area Lakes

ADEQ conducted a June 6 public meeting in Flagstaff to discuss the proposed removal of fish contaminated by mercury from Upper and Lower Lake Mary and three other Flagstaff-area lakes. The hearing is part of a Total Maximum Daily Load under the Clean Water Act analysis to determine the maximum amount of a pollutant that a water body can assimilate and still meet surface water quality standards.

Public Policy - Rule Development

Arizona Statute to Implement the U.S. Energy Policy Act

The federal Energy Policy Act of 2005 created new petroleum release prevention requirements for UST systems. The Act requires inspection of each UST facility at least once every three years; secondary containment of new and replaced UST systems; delivery prohibition at facilities with significant UST violations; and operator training. The Act promotes and ensures compliance with needed release prevention and release detection requirements and reduces the potential for new releases which contaminate drinking water.

Complying with the Act necessitated changes to Arizona's UST regulations to implement the new petroleum release prevention requirements. ADEQ pursued legislation in 2008 to comply with the new requirements. On May 20, 2008, House Bill 2425 was signed by Gov. Janet Napolitano and filed with the Secretary of State. The new regulations went into effect on September 26, 2008.

Major Drinking Water Rule Update Accomplished by Incorporating Federal Rules by Reference

Arizona was granted drinking water primacy in 1978 and since that time has maintained primacy by periodically revising its drinking water rules to ensure they are as stringent as the EPA's National Primary Drinking Water Regulations (NPDWRs). In FY08, ADEQ completed a multiyear, major rulemaking that incorporates EPA's NPDWRs by reference. Utilizing incorporation by reference was a major change for the Department's drinking water program. Procedurally, incorporating the national drinking water standards by reference will simplify both future rule updates and primacy reviews of Arizona's rules by EPA. Substantively, the rulemaking updates Arizona's drinking water rules by adding a number of new rules that EPA has adopted since the last time ADEQ amended its drinking water rules. Several of the new rules incorporated include the new arsenic rule, new radionuclides and groundwater rules, the Long Term 1/Long Term 2 enhanced surface water treatment rule, and the Stage 2 disinfectants and disinfection byproducts rule.

No Further Action & Monitored Natural Attenuation Rules

On December 4, 2007, the Governor's Regulatory Review Council approved ADEQ's No Further Action & Monitored Natural Attenuation (NFA & MNA) rules; which became effective on Feb. 2, 2008. The new rules involve the implementation of the MNA Program and a new process for groundwater leaking UST (LUST) case closures. On July 1, 2010, eligibility for reimbursement by the State Assurance Fund ends. However, to assist SAF eligible LUST sites where groundwater contamination is naturally attenuating but in exceedance of the aquifer water quality standards (AWQS), the MNA Program was

created. If the LUST site meets the requirements of the MNA Program, ADEQ will assume the responsibility and total cost of monitoring the natural attenuation until the LUST site is ready for LUST case closure.

Regulatory Review Council Approves Clean-Car Rules to Cut Greenhouse Gas Emissions

In May, the Governor's Regulatory Review Council (GRRC) voted 5-2 to approve ADEQ's proposed rules to cut greenhouse gas emissions (GHG) from automobiles and other passenger vehicles. Vehicles produce roughly 40 percent of all GHG emissions in Arizona, and the state has the fastest rate of growth of GHG emissions in the country. Between 1990 and 2005 Arizona's GHG emissions grew by nearly 56 percent, about two-and-a-half times the national average. The new Clean Car rules will reduce GHG emissions from passenger cars and light trucks by 37 percent by 2016. The rules were developed pursuant to an Executive Order on climate change issued in September 2006 by Gov. Janet Napolitano. The Arizona Climate Change Advisory Group (CCAG) had unanimously recommended that Arizona adopt the Clean Car standards to reduce Arizona GHG emissions. The rules will apply to vehicles beginning with the 2012 model year but they can't go into effect until EPA grants approval for them. EPA has refused to approve the rules so far, and 15 states, including Arizona, have sued EPA over its refusal.

Conclusion...

Despite challenges presented by budget limitations and reduced staffing levels, ADEQ continued to make progress in FY08 in protecting Arizona's environment and the health and safety of the people of this state. Through innovative efforts like the emissions-control initiative in south Phoenix, the school UST cleanup program, innovative permitting and cleanup efforts, and strict enforcement, ADEQ is committed to ensuring clean air, clean water and a healthy environment for all Arizonans.

