



Arizona's 2006 Nonpoint Source Annual Report



Nonpoint Source Program
July 1, 2005 June 30, 2006



Prepared by the
Arizona Department of Environmental Quality
Hydrologic Support & Assessment Section



Janet Napolitano, Governor
Stephen A. Owens, ADEQ Director





Arizona's FY 06 Nonpoint Source Program Annual Report

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Arizona's FY 06 Nonpoint Source Program Annual Report Introduction

Purpose

This report is an overview of the Arizona Department of Environmental Quality (ADEQ) Nonpoint Source Program activities for fiscal year 2006 (July 1, 2005 - June 30, 2006). The majority of the work performed by ADEQ's Nonpoint Source Program is funded by Clean Water Act Section 319(h) grants, awarded by the U.S. Environmental Protection Agency (EPA). Section 319(h) of the Clean Water Act requires States to report annually on progress in meeting the schedule of milestones contained in their nonpoint source management plans, and report reductions in nonpoint source pollutant loadings and improvements in water quality resulting from program implementation.

Format

The report is divided into seven sections to meet all elements of EPA's annual reporting requirements.

Section I – Measuring Success

Provides a brief summary of progress in meeting approved milestones and the short and long term goals and objectives identified in *Arizona's 5-Year Nonpoint Source Management Plan*. The information is provided in a matrix format to display the status of approved milestones for the current fiscal year. The following information is provided for each milestone:

- a. Applicable project or program
- b. Scheduled project completion date
- c. Percent completed

Satisfies elements #1 and #2 of EPA's annual reporting requirements.

Section II – Federal Support

Provides a discussion of the extent to which Federal agencies partner with the State on environmental activities which support the State in meeting approved milestones.

Satisfies element #3 of EPA's annual reporting requirements.

Section III – Water Quality Improvements and Load Reductions

A summary of the available information on the amount of improvement in water quality (including aquatic habitat quality) and the extent of reductions in nonpoint source loadings achieved as a result of nonpoint source program implementation. Where information is not yet available, surrogate measures of environmental progress (such as environmental indicators) are used and progress is reported in terms of the degree or percentage of completion of the project.

Satisfies elements #4, #5, and #6 of EPA's annual reporting requirements.

Section IV – Program Enhancements

Provides a listing of further actions necessary to achieve the goals of the Clean Water Act, including any recommendations for future state or national programs to control nonpoint source pollution.

Section V – Successful Implementation Projects

Brief case studies of particularly successful nonpoint source control efforts.

Section VI – Public Awareness

Provides information on growth in public awareness of nonpoint source pollution and public involvement in addressing it.

Section VII – Program Highlights

Information on products produced or deliverables met by Arizona's Nonpoint Source Program (e.g., outreach materials or presentations). Web site references are provided.

Sections IV – VII provide supplemental information as a means of assessing progress to date and improving the program in the future. Satisfies EPA's recommendations on supplemental elements #1 - #4.

Program Information

Arizona's Nonpoint Source Program gathers information, monitors and focuses on the following land use activities that can negatively impact surface and ground water within the State:

- ◆ Agriculture
- ◆ Forestry
- ◆ Urban runoff
- ◆ Hydromodification
- ◆ Onsite/septic waste treatment systems
- ◆ Mining
- ◆ Recreation

ADEQ's Nonpoint Source Program operates under the guidance of *Arizona's 5-Year Nonpoint Source Management Plan* (the State Management Plan) which was revised and released in November 2003.

Arizona's Nonpoint Source State Management Program integrates the state's Clean Water Act and Safe Drinking Water Act programs with voluntary incentives. ADEQ uses a combination of tools including surface and ground water monitoring, watershed inventories, watershed characterizations, Total Maximum Daily Load (TMDL) studies, TMDL implementation and source water assessment plans, watershed-based plans, and water quality improvement projects to protect the state's water resources from nonpoint source pollution. Staff works closely with stakeholders to develop community led, watershed-based planning efforts. These local planning efforts assist the department in developing programs and outreach activities appropriate to the specific

area and current issues. Since Arizona has a large amount of publicly owned lands, partnerships with federal, state and tribal land and resource management agencies are key elements in the program's success.

ADEQ was successful in meeting the goals identified in *Arizona's 5-Year Nonpoint Source Management Plan*. Throughout this annual report, ADEQ provides a summary of progress in meeting approved milestones and short- and long-term goals. In addition, the report covers the extent to which Federal agencies are supporting the State, water quality improvements and load reductions, and provides other supplemental information as a means of assessing progress to date and improving the program into the future.



Arizona's FY 06 Nonpoint Source Annual Report Section I – Measuring Success

Arizona's Nonpoint Source Program is a dynamic and adaptive program intended to facilitate and promote statewide efforts to manage nonpoint source pollution. As stated in Arizona's 5-year Nonpoint Source Management Plan, ADEQ continues to focus efforts on restoring waters that have been listed as impaired as well as to protect waters that are attaining their designated uses. To do this, it is critical that ADEQ monitor both:

- 1) the progress being made towards achieving and maintaining water quality standards;
- 2) the implementation of programs and projects to ensure that they are successful.

ADEQ uses several sets of measures to fully determine the success in implementing the Nonpoint Source Program. These include measures that indicate progress towards achieving and maintaining beneficial uses of water, accomplishing long-term goals of the Program (i.e., achieving load reductions, or implementing particular watershed projects), and shorter-term goals and objectives that are designed to achieve the longer-term goals.

Milestones have been placed on long-term goals and short-term objectives which outline the State's implementation strategy for the restoration and protection of beneficial uses impaired due to nonpoint source pollution. The long-term goals listed below are desired end points based on a 10 to 15-year time frame. The short-term objectives or milestones listed below will be implemented and revised as necessary over the next five years such that beneficial uses of the state's waters (to the extent practicable) are fully restored or maintained. Many of the milestones are taken from ADEQ's EPA approved workplan. The tasks and deliverables scheduled as part of the workplan are designed to attain our long-term goal of implementing a dynamic and effective Nonpoint Source Program designed to achieve and maintain beneficial uses of water. The status of these priority program elements are detailed in the following table.

Goal: Support ground and surface water quality monitoring that provides data for assessments, identification of impaired waters, TMDLs, and effectiveness of remediation and protection strategies.

Milestone & Progress Summary	Project or Program	Completion Date	%Complete
<p>Perform surface and ground water quality monitoring throughout the state.</p> <p>Progress Summary – Surface water – Ambient stream and lakes monitoring completed per sampling plans. Focus in FY06 for the streams program was in the Upper Gila River and Santa Cruz basins. The Clean Lakes Program focused on the same basins as the streams program and ongoing TMDL studies.</p> <p>Ground water basin monitoring – Staff shortages limited ground water sampling and report preparation; however, sampling was completed for the Dripping Springs ground water basin and Pinal Active Management Area. Ground water sampling was started for the Agua Fria and Donnelly Wash basins and will be finished in FY 07. Final reports were completed on the Detrital Valley, Meadview, and Lake Mohave groundwater basins.</p>	<p>Surface Water Section</p>	<p>Yearly</p>	<p>100%</p>
<p>Determine water quality improvements and BMP effectiveness through project monitoring and oversight.</p> <p>Progress Summary – Staff continues to provide oversight on 319(h) funded implementation projects and input and track water quality improvements in GRTS. Please refer to GRTS for updated information on BMP effectiveness. 100% of ADEQ's 319 projects are performing effectiveness monitoring, however, only ~15% are performing water quality monitoring. ADEQ needs to continue improving their understanding of the modeling approaches used to estimate load reductions to better provide and determine BMP effectiveness and water quality improvements.</p>	<p>Grant and Outreach Unit</p>	<p>Ongoing</p>	<p>60%</p>

Goal: Support ground and surface water quality monitoring that provides data for assessments, identification of impaired waters, TMDLs, and effectiveness of remediation and protection strategies.

Milestone & Progress Summary	Project or Program	Completion Date	%Complete
<p>Develop narrative implementation procedures and utilize narrative standards, as well as numeric water quality standards, to assess Arizona's waters.</p> <p>Progress Summary – Progress continues on all narrative standard implementation procedures except the narrative toxics standard IP. ADEQ held a kickoff meeting for narrative nutrients for lakes and reservoirs and bottom deposits in late April 2005. Both were well received by the public and were folded into the ongoing Triennial Review of surface water quality standards. Antidegradation procedures received extensive review in fall 2004. Staff has developed an antidegradation rule to incorporate key pieces of procedures for adoption in Triennial Review. The narrative toxic standard has fallen behind schedule and will require a separate stakeholder effort due to complexity of the issues. The toxics implementation procedures will not be included in the 2005/2006 triennial review. ADEQ intends to propose the other three standards in the rulemaking as well as the narrative biocriterion and associated implementation procedures.</p>	Surface Water Section	June 2007	80%
<p>Develop, initiate, and support a Volunteer Monitoring Program.</p> <p>Progress Summary – To the extent possible, ADEQ will continue to provide support to various volunteer monitoring groups across the state. ADEQ has made great strides toward developing a collaborative instructional partnership with GateWay Community College in the past few years. However, current staffing and budget shortages have resulted in delays to the development of a robust Volunteer Monitoring Program.</p>	Surface Water Section	Program developed May 2006 Support Ongoing	75% (as of FY 05) 100%

Goal: Identify and quantify water quality problems in Arizona.			
Milestone	Project or Program	Completion Date	%Complete
<p>Support watershed rotation based monitoring program to provide water quality data on long-term monitoring stations and watershed characterization sites within the 10 surface watersheds.</p> <p>Progress Summary – Completed monitoring in the Upper Gila River and Santa Cruz basins in FY 06.</p>	Surface Water Section	Yearly	100%
<p>Complete Arizona's Integrated 305(b) Water Quality Assessment and 303(d) Listing Report due April 1, 2004, 2006, and 2008.</p> <p>Progress Summary – As a result of both the 2002 and 2004 assessments, staff began stakeholder effort to explore revisions to the Impaired Water Identification rule in June, 2004. Key issues include revisions to the binomial approach and assessment of chronics and bacteria. Changes should result in fewer federal additions to the 303(d) List in 2006.</p> <p>For the 2006 report, staff has also been working on two other major projects: the loading of non-ADEQ data into the surface water database and the creation of Phase 1 of an assessment calculator (AZAC or Arizona Assessment Calculator) that will begin to automate portions of the assessment process and make it more efficient. The 2006 report will be delayed due to these projects, with a draft going out for public review and comment in December 2006. The final should be submitted to EPA by spring of 2007.</p>	Standards and Assessment Unit	<p>April 1, 2004</p> <p>April 1, 2006</p> <p>April 1, 2008</p>	<p>100%</p> <p>90%</p> <p>0%</p>

Goal: Identify and quantify water quality problems in Arizona.			
Milestone	Project or Program	Completion Date	%Complete
<p>Complete 205(j) Report in 2005 and 2007.</p> <p>Progress Summary – <i>Arizona's Integrated 305(b) Assessment and 303(d) Listing Report</i> submitted to EPA in September 2004 provided a current assessment of water quality in Arizona; therefore, the Arizona Department of Environmental Quality did not prepare a 2005 205(j) report. The 2006 integrated assessment and listing report will include an assessment of all readily available data collected between January 1, 2000 and December 31, 2005. As it will be completed in early 2007, it will provide water quality status information for 2007.</p>	Standards and Assessment Unit	<p>April 1, 2005</p> <p>April 1, 2007</p>	<p>N/A (see summary)</p> <p>N/A (see summary)</p>
<p>Complete watershed characterizations for at least three watersheds in Arizona (Bill Williams, Upper Gila, and Verde) by January 2004.</p> <p>Progress Summary – As documented in the FY 04 Annual Report, watershed characterizations have been completed and are online for the Bill Williams, Upper Gila, and Verde River Watersheds. Modeling of watershed response to land use change has been included within the Watershed Characterization & Classification Reports, now referred to as Watershed-based Plans, for each of the three watersheds. Sub-watershed areas have been ranked based on susceptibility to nonpoint source pollutant contribution to water quality degradation, and stakeholders have been identified for these priority sub-watersheds. View on-line at www.arizonanemo.org.</p> <p>Further watershed-based plans are currently being developed for the Agua Fria sub-watershed, a portion of San Pedro Watershed, and the Little Colorado Watershed.</p> <p>In addition, watershed plans for the Salt, Santa Cruz, and Middle Gila should be completed in 2007.</p>	Surface Water Section & Grants and Outreach Unit	October 2004	<p>100%</p> <p>10%</p> <p>10%</p>

Goal: Develop TMDLs for 303(d) listed waterbodies.			
Milestone & Progress Summary	Project or Program	Completion Date	%Complete
<p>Develop TMDLs.</p> <p>Progress Summary – Alamo Lake mercury TMDL was submitted to USEPA for approval in June 2006. Turkey Creek TMDL (copper and lead) is complete and was submitted in September 2006. Staff turnover has resulted in a delay in the Lake Mary regional mercury TMDL. Modeling is complete and the report should be submitted to EPA by January 2007 for approval. The Pinto Creek site specific standard modeling for dissolved copper has been completed and has been included in the triennial review package. Projects initiated include Parker Canyon Lake (mercury), Queen Creek (copper), San Pedro River (copper and E. coli), Gila River (sediment, selenium, copper), and Cave Creek (selenium).</p>	TMDL Unit	Yearly	85%
<p>Hold public meetings to involve local and affected stakeholders.</p> <p>Progress Summary – Stakeholder meetings were held throughout the year for Alamo Lake and Lake Mary mercury TMDLs. All meetings were a great success with good public turnout and positive feedback.</p>	TMDL Unit	Yearly	100%
<p>Receive and evaluate comments.</p> <p>Progress Summary – Received and addressed comments for the Alamo Lake and Turkey Creek TMDLs.</p>	TMDL Unit	Yearly	100%

Goal: Develop and Implement Water Quality Improvement Plans			
Milestone & Progress Summary	Project or Program	Completion Date	%Complete
<p>Write TMDL implementation plans.</p> <p>Progress Summary – Watershed coordinator position was moved to the TMDL unit and filled in early 2006. Turkey Creek TIP is included with the TMDL report. The Tonto Creek TIP is in final draft awaiting coordination with the AZPDES program. Lakeside Lake draft TIP is awaiting the City of Tucson’s management plan to be submitted to ADEQ for review. Pinto Creek, Alum Gulch, French Gulch TIPs are in the draft stages of development.</p>	TMDL Unit	Yearly	85%
<p>Write and develop Watershed-based Plans (WBP) for all ten Arizona watersheds.</p> <p>Progress Summary – Through NEMO, three large scale WBP were completed in FY06: Bill Williams, Verde and Upper Gila Watersheds.</p> <p>NEMO continues to make progress with Little Colorado River Watershed Coordinating Council to develop a large-scale watershed-based plan for the Little Colorado River Watershed. In addition, NEMO is working with other watershed partnerships across the state to develop watershed-based plans; the Upper Agua Fria, Middle San Pedro and Lower San Pedro.</p> <p>ADEQ is working with watershed partnerships around the state to develop WBP or add additional information to current plans to incorporate the 9-elements. The TMDL watershed coordinator has worked with the NEMO program in reviewing the Upper Aqua Fria WBP.</p>	Grant and Outreach Unit	Ongoing	100% 55% 20%

Goal: Develop and Implement Water Quality Improvement Plans			
Milestone & Progress Summary	Project or Program	Completion Date	%Complete
<p>Hold public meetings with stakeholders.</p> <p>Progress Summary – During each TMDL public meeting, implementation plans are discussed. The TMDL watershed coordinator attends approximately 4 watershed meetings a month relaying information about TMDLs, TIPs and grant funding.</p>	TMDL Unit	Yearly	100%
<p>Receive and evaluate comments.</p> <p>Progress Summary – Coordination efforts have been under way with the AGFD and ADEQ AZPDES regarding the Tonto Creek Nitrogen TIP. Informal comments have been received and evaluated. All other implementation plans are in draft form and have not gone out for public review and comment to date.</p>	TMDL Unit	Ongoing	100%

Goal: Focus Section 319 incremental grant funds and non-federal matching resources on priority watersheds with impaired waters.			
Milestone	Project or Program	Completion Date	%Complete
<p>Coordinate and conduct annual meetings to set internal goals for priority funding.</p> <p>Progress Summary – The Unit met continuously throughout the year to coordinate and set internal goals. It was determined again during FY 06 that the following types of projects will score higher (i.e. priority funding): projects which include activities identified in a WBP or TMDL implementation plan; projects proposed to improve impaired or non-attaining waters; or projects proposed with estimated load reductions (projected quantitative measures of success). The Unit has also been in close contact with the EPA Project Officer to obtain feedback and recommendations on goals.</p>	Grant and Outreach Unit	Yearly	100%

Goal: Focus Section 319 incremental grant funds and non-federal matching resources on priority watersheds with impaired waters.

Milestone	Project or Program	Completion Date	%Complete
<p>Conduct statewide grant workshops annually.</p> <p>Progress Summary – Attendance was up approximately 58% from FY 05 workshop attendance. Five grant workshops were held around the state from June through August in preparation for the 2006 Grant Cycle (Cycle 8). Seventy-two people attended in 2006. The Grants team created and implemented interactive approaches to the Cycle 8 grant workshops and attendees enjoyed the active role they played while learning.</p>	Grant and Outreach Unit	Yearly	100%
<p>Award Section 319(h) grant money each year to implement water quality improvement projects on impaired waterbodies.</p> <p>Progress Summary – ADEQ received 21 grant applications, two of which were ineligible and awarded thirteen projects in January, 2006. Six out of thirteen projects (46%) will improve impaired waters. Nine out of thirteen projects have either a WPB or TMDL associated with it, thus meeting priority goals. The program has seen an increase in priority projects submitted yearly. Attachment #1 lists the projects awarded in FY 06.</p>	Grant and Outreach Unit	Yearly	100%

Goal: Effectively and efficiently use financial resources and leverage funds with other programs to target nonpoint source pollution priority issues and areas.			
Milestone	Project or Program	Completion Date	%Complete
<p>Use the Grants Reporting Tracking System (GRTS) to track grant funding and effectiveness.</p> <p>Progress Summary – All projects awarded in FY 06 were added to the GRTS tracking system in order to track funding. ADEQ continues to learn more about entering data for project effectiveness and will increase their efforts in FY 07. ADEQ met EPA's deadline to submit load reduction data in FY 06.</p>	Grant and Outreach Unit	Ongoing	90%
<p>Coordinate with other funding programs (i.e. Arizona Water Protection Fund, Water Infrastructure Finance Authority, Environmental Quality Incentives Program) to leverage money to target nonpoint source pollution management in priority areas.</p> <p>Progress Summary – ADEQ continues to leverage money to target nonpoint source pollution management in priority areas with partnerships, funding sources, or in-kind services (i.e., U.S. Forest Service, National Fish and Wildlife Foundation, NRCS EQIP funds, Arizona Water Protection Fund, Heritage Fund, Water Infrastructure Finance Authority of Arizona, Arizona Department of Transportation, U.S. Fish and Wildlife Partners Grant, State Parks, State Land Trust, County, and other local groups).</p>	Grant and Outreach Unit	Ongoing	100%

Goal: Work with and provide technical support to Arizona watershed partnerships.			
Milestone	Project or Program	Completion Date	%Complete
<p>Actively involve the community, including watershed partnerships, with the development of watershed-based plans and TMDL implementation plans.</p> <p>Progress Summary – Through TMDL stakeholder meetings and watershed partnerships, ADEQ continuous to work with the communities in the state to develop watershed-based plans and TMDL implementation plans.</p>	TMDL Unit and the Grant and Outreach Unit	Ongoing	100%
<p>Provide support to community watershed partnerships.</p> <p>Progress Summary – Whenever a partnership needs ADEQ’s technical assistance or support, we make it a top priority to meet their needs. During the year staff attended numerous meetings to discuss watershed-based plans, impaired waters, TMDL studies, implementation plans, and the grant program. ADEQ’s strong partnership with University of Arizona’s Master Watershed Steward and NEMO programs has enabled the department to assist many more watershed groups. The coordinators of these programs have bolstered the grants program and watershed partnerships statewide by providing education, maps, technical assistance, review and comment.</p>	TMDL Unit and the Grant and Outreach Unit	Ongoing	100%
<p>Assist with the development and implementation of the Master Watershed Stewardship Program.</p> <p>Progress Summary – The Master Watershed Stewardship Program is up and running. See <i>Section VI - Public Awareness</i>, for more detailed information on the program.</p>	Grant and Outreach Unit and TMDL Unit	Ongoing	100%

Goal: Provide statewide nonpoint source pollution education and outreach.			
Milestone	Project or Program	Completion Date	%Complete
<p>Plan, develop and implement a strategy to conduct education/outreach efforts to increase public awareness of nonpoint source pollution impacts to surface and ground water resources.</p> <p>Progress Summary – The Education & Outreach Program Plan is being implemented statewide. Several times throughout the year, the Grant and Outreach Unit have participated in education/outreach efforts to increase the public's awareness of nonpoint source pollution impacts to surface and groundwater resources. Examples include, Envirothon, Verde River Days, World Water Monitoring Day, and the Tres Rios Nature Festival. Staff has also visited with schools throughout the year and made presentations about water quality and nonpoint source pollution impacts. See <i>Section VI - Public Awareness</i>, for more information.</p>	Grant and Outreach Unit	Plan Completion September 2003 Strategy Implemented Ongoing	100% 100%
<p>Update web site information to reflect current activities.</p> <p>Progress Summary – All web site information is up to date and reflects the current activities for the WQD. Please visit ADEQ's Water Quality Division's homepage at www.azdeq.gov/environ/water/index.html for information on watershed management, monitoring, and assessment (click topic on left hand panel). With this web site information readily available, ADEQ encourages groups to utilize and incorporate the recommended EPA's Nine Key Elements into WBP. The incentive is that funding opportunities are enhanced as projects and management measures identified within these plans receive priority funding through ADEQ's Water Quality Improvement Grant Program.</p>	Surface Water Section	July 2004	100%

Goal: Develop, implement, and evaluate nonpoint source pollution management measures and other pollution prevention strategies to minimize degradation and protect surface water and groundwater quality.

Milestone	Project or Program	Completion Date	%Complete
<p>Develop BMP guidance documents for nonpoint source pollution categories, including sediment, mining, and nutrients.</p> <p>Progress Summary – Through ADEQ’s partnership with NEMO, we have developed BMP guidance documents for managing sediment, metals, nutrients, and selenium. A great deal of progress has been made during FY 06. BMP documents for soil erosion and urban runoff/stormwater were developed. Irrigation practices (agriculture), livestock grazing, riparian areas, onsite septic systems, mining and abandoned mine land, forestry, and recreation BMP documents have also been developed. Included on the NEMO web site are case studies or examples of successful mitigation projects and links to other BMP materials, both of which are highly beneficial to the public and water resource managers (see <i>Section VII - Program Highlights</i>, for more detail). The NEMO web site, www.arizonanemo.org, provided regular updates.</p>	Grant and Outreach Unit	October 2008	90%

Goal: Develop, implement, and evaluate nonpoint source pollution management measures and other pollution prevention strategies to minimize degradation and protect surface water and groundwater quality.

Milestone	Project or Program	Completion Date	%Complete
<p>Research and identify ways to quantify load reductions as required in EPA's 2003 Nonpoint Source Program Guidance.</p> <p>Progress Summary – ADEQ continues to research and identify ways to quantify load reductions. On NEMO's web site under "Links to Other BMP Information" there is information for the calculation of load reductions. Water resource professionals and the public can view and download (for example) the Michigan Department of Environmental Quality's 1999 manual on calculating and documenting pollutant reductions.</p> <p>In addition, during FY06 grant cycle, ADEQ again requested that applicants provide an estimated load reduction for reporting in GRTS. Priority was given to projects in which useable load reduction estimates (quantitative measure of success) were provided for nitrogen, phosphorus, and sediment. We are hopeful that the number of grant applications with useable load reduction data will continue to increase. ADEQ focuses on the importance of load reduction documentation to support the success of our grant program.</p> <p>One staff member attended the annual GRTS meeting in Boston which provided important information and updates to the Region 5 Model (Michigan DEQ) and STEPL models. These are just two examples of models that can be used to calculate nitrogen, phosphorus, or sediment load reductions for input into GRTS. The new Oracle-based GRTS program was also previewed at this annual meeting.</p>	<p>Grant and Outreach Unit</p>	<p>June 2006</p>	<p>75%</p>

Goal: Develop, implement, and evaluate nonpoint source pollution management measures and other pollution prevention strategies to minimize degradation and protect surface water and groundwater quality.			
Milestone	Project or Program	Completion Date	%Complete
<p>Document BMP effectiveness from water quality improvement projects in GRTS and guidance documents.</p> <p>Progress Summary – Staff continues to provide oversight on 319(h) funded implementation projects and input and track water quality improvements and BMP effectiveness in GRTS. Please refer to GRTS for updated information on BMP effectiveness.</p>	Grant and Outreach Unit	Ongoing	80%

Goal: Maintain / expand partnerships & cooperative opportunities with stakeholders, other agencies, organizations, and citizens.			
Milestone	Project or Program	Completion Date	%Complete
<p>Coordinate with federal land management agencies on water quality and watershed improvements as needed.</p> <p>Progress Summary – Staff continues to work with various federal land managers to address nonpoint source pollutant impacts to water quality. Coordination with state and federal land managers was obtained through various watershed partnerships and collaboration on water quality improvement projects. In the coming year, ADEQ plans to strengthen the coordination with federal land management agencies by providing technical assistance.</p>	TMDL Unit and the Grant and Outreach Unit	Ongoing	60%

Goal: Maintain / expand partnerships & cooperative opportunities with stakeholders, other agencies, organizations, and citizens.			
Milestone	Project or Program	Completion Date	%Complete
<p>Oversee and update as needed, all Memorandum of Understandings (MOUs) so that state, federal, tribes, and local resource management agencies have identified responsibilities in carrying out portions of Arizona's Nonpoint Source State Management Plan.</p> <p>Progress Summary – MOUs are updated as needed. The current MOUs are working well in carrying out portions of Arizona's Nonpoint Source Management Plan. Interagency coordination is a continual struggle but NEMO, Master Watershed Stewards attending watershed partnership meetings, and holding public meetings improves our ability to coordinate and plan.</p>	TMDL Unit and the Grant and Outreach Unit	When needed	100%
<p>Coordinate meetings and updates with other state, federal, tribal, and local partners in the state (i.e., Arizona Department of Water Resources, Arizona Game and Fish Department, Bureau of Reclamation).</p> <p>Progress Summary – Staff continues to work with various watershed partnerships and state and federal land managers to address nonpoint source pollutant impacts to water quality. Coordination with state and federal land managers was accomplished through a variety of organizations and annual meetings: various statewide watershed partnerships, U.S. Forest Service, and various other meetings (i.e., TMDL meetings) with federal, state, and local partners.</p>	TMDL Unit and the Grant and Outreach Unit	Yearly	90%

Goal: Maintain / expand partnerships & cooperative opportunities with stakeholders, other agencies, organizations, and citizens.			
Milestone	Project or Program	Completion Date	%Complete
<p>Provide leadership, technical assistance, expertise and support to outside planning and governmental entities to support watershed planning and 208 regional water quality management planning.</p> <p>Progress Summary – Leadership, technical assistance, expertise, and support were provided throughout the year to planners and governmental entities in support of a watershed approach. During the year, staff continued to update the 208 application form that requires the applicant or permit writer to provide pertinent information to the program to make the consistency review process more efficient. In addition, we have implemented an expedited review process which has helped cut down on backlog and turn-around for reviews. The new application form includes a section that considers water quality assessment findings and established TMDLs into the 208 conformance determination process. ADEQ is in the process of hiring an intern to continue the GIS covers (and associated databases) project of mapping service/planning areas and locations of all WWTPs within the state (previous project manager left ADEQ for full-time employment with ASLD). This new tool has been helpful when reviewing permit applications and amendments to determine the other facilities in the area.</p>	Surface Water Section: Permits Unit	Yearly	100% 45%

Goal: Complete Nonpoint Source Annual Report			
Milestone	Project or Program	Completion Date	%Complete
<p>Write and develop a Nonpoint Source Annual Report summarizing the goals and accomplishments yearly.</p> <p>Progress Summary – This Nonpoint Source Annual Report was developed to summarize the goals and accomplishments of the Nonpoint Source Program from July 1, 2005 – June 30, 2006 (FY 06).</p>	Grant and Outreach Unit	September 30 each year	100%
<p>Use annual reports to gauge progress on five year Plan.</p> <p>Progress Summary – The Nonpoint Source Annual Report provides the status of accomplishing both the short-term and long-term milestones identified in the Nonpoint Source Management Plan. The tasks and deliverables scheduled as part of the work plan are designed to attain our long-term goal of implementing a dynamic and effective Nonpoint Source Program designed to achieve and maintain beneficial uses of water.</p>	Surface Water Section and Grants and Outreach Unit	Yearly	100%

Goal: Review and assess the goals and objectives of the Nonpoint Source Management Plan and revise the Plan as appropriate			
Milestone	Project or Program	Completion Date	%Complete
<p>Amend Nonpoint Source Management Plan as necessary.</p> <p>Progress Summary – The Nonpoint Source Management Plan will be amended as necessary. The Unit has been in constant contact with the EPA Project Officer to obtain feedback and recommendations on goals for the upcoming year. No changes to the plan are needed at this time.</p>	Surface Water Section and Grants and Outreach Unit	Ongoing	100%



Arizona's FY 06 Nonpoint Source Annual Report Section II – Federal Support

ADEQ continues to work with state and federal land managers to address nonpoint source pollution impacts on water quality. Many activities throughout the year demonstrate ADEQ's commitment to working with federal and state land managers to improve water quality in the State.

Arizona achieves federal support through partnerships and stakeholder efforts implemented through a variety of formal and informal agreements, cooperative projects, sharing and combining of funds, and meetings to share information and ideas. Through these partnerships, Arizona is able to work with federal agencies to incorporate other appropriate water quality controls and further the goals of the Nonpoint Source Program. Another way ADEQ works and partners with Federal agencies is through community-led watershed groups. ADEQ's web site provides a list of Arizona Watershed Partnerships (www.azdeq.gov/envIRON/water/watershed/partnerships.html). Within these watershed partnership structures, ADEQ and its federal partners are able to more easily identify, assess, and help implement voluntary efforts to control nonpoint source pollution.

Clean Colorado River Alliance

In February 2004, the Clean Colorado River Alliance was named by Governor Janet Napolitano to develop recommendations to deal with existing water quality problems to ensure Colorado River water quality addresses the needs of Arizona, now and in the future. The Alliance is charged with developing an action plan to deal with pollution affecting the Colorado River. To that end, ADEQ is partnering with the U.S. Fish and Wildlife Service, Bureau of Reclamation, Bureau of Land Management, and the Department of Defense. In addition, the U.S. Department of Agriculture, U.S. Geological Survey, EPA and the Forest Service were contacted to assist the Alliance in identifying water quality concerns for the Colorado River. A successful regional approach, addressing water quality issues in the Colorado River Watershed, requires strong federal and state partnerships.

319 Projects Leveraged with Federal Funds

Two projects awarded during the grant Cycle 8 (January 2006) were leveraged with federal money and/or federal support. The *Red Rock Watershed Project Phase I and Phase II*, administered by the Coronado Resource Conservation and Development Area (RC&D), is partnering with the U.S. Department of Agriculture Forest Service (Forest Service) and is utilizing USDA/NRCS Environmental Quality Incentive Program (EQIP) funds to implement their project. The project is titled *A Watershed Approach to Improving Water Quality in Red Rock Canyon - Phase 2 (8-012)*. The Canelo Hills

Coalition is a group of ranches in Santa Cruz County that are working together to improve water quality in Red Rock Canyon, a tributary to Sonoita Creek and the Upper Santa Cruz Watershed. The Canelo Hills Coalition is working with the Coronado Resource Conservation & Development Area, Inc. on this project to address sediment delivery by improving watershed health through the implementation of best management practices that facilitate a rest-rotation grazing system to maximize vegetation on the watershed.

The Upper Eagle Creek Watershed Association was awarded a grant for work on a project titled the *Upper Eagle Creek Watershed Restoration Project (8-007)*. The goal is to alleviate nonpoint source pollution by excluding cattle from Eagle Creek and other riparian areas through fencing, providing alternative water sources for livestock, and applying intensive grazing management techniques, including rotational grazing on various allotments within the watershed.

Significant Meetings

TMDL Informational Meetings

Forest Service staff from the various National Forests, AGFD, and the Bureau of Land Management have provided background information, site access, maps, assistance with site selection, water quality data, comments on draft reports, etc. for numerous TMDL projects, including Oak Creek (Slide Rock), Turkey Creek, Lake Mary watershed, Alamo Lake, and the Bill Williams watershed.

NRCS/USEPA/ADEQ/ADA Meeting

On March 21, 2006, NRCS, USEPA, ADEQ, and the Arizona Department of Agriculture (ADA) held the annual agriculture and environment coordination meeting. David McKay, NRCS Regional Conservationist presented information on changes within NRCS – staffing, restructuring of the State Technical Committee and introduced a new high priority project, Rapid Watershed Assessments (see below). Discussion regarding ways to better align priorities among the agencies. EPA and ADEQ discussed their top priority watersheds. EPA: Hassayampa, Santa Cruz and San Pedro; ADEQ: Boulder Creek, Turkey Creek, Pinto Creek and Alum Gulch. Discussion focused on how NRCS can better factor these priority watersheds into its decision making process and ways to leverage monies. EPA spoke about outreach efforts and the 2nd Circuit Court's decision regarding concentrated animal feeding operations (CAFO) and nutrient management plans. ADA is developing CNMPs for eight facilities. Many of the 155 known CAFOs have opted out of the NPDES program on the basis of no discharge. Biosolids will be the next area of emphasis for ADEQ, EPA and ADA. Next meeting planned for September in San Francisco.

Rapid Watershed Assessment

The NRCS held a kickoff meeting for the Rapid Watershed Assessment (RWA) project on June 30, 2006. The AZ NRCS was awarded \$100,000 to perform these RWAs for seven identified high priority watersheds in the state. The objective of the RWA is to characterize current resource conditions and concerns in 8-digit watershed using existing and needed, new information. Once developed, the information will be used to

explore opportunities to expand coordinated resource management among state, local and federal agencies. Success depends largely on partner agencies providing existing information to NRCS. ADEQ is supportive of the effort and hopes these assessments may serve as an initial effort for a more extensive watershed-based plan for priority watersheds. If the phase one project is successful, ADEQ expressed the desire for the partnering agencies to be more involved in the selection of the next round of priority watersheds.

TMDLs and TMDL Implementation

Boulder Creek

The Bureau of Land Management (BLM) has \$500,000 set aside from the Department of Interior's Central Hazardous Materials fund to cleanup the upper tailings pile at the Hillside Mine. BLM's commitment to clean up their portion of Hillside Mine site is a key component to an integrated cleanup effort for improving water quality in Boulder Creek. ADEQ continues to work with the Arizona State Land Department and a private entity (KFX, Inc.) to develop the plans to cleanup the other two tailings piles along the stream. The Arizona State Land Department and KFX have committed to apply for 319(h) funding during the 2006 grant cycle. Risk Management has committed \$400,000 to the ASLD effort.

Turkey Creek

The Forest Service has taken the lead in implementing the cleanup under the Turkey Creek TMDL. The Forest Service has secured funding for the projects and expects to be actively working on the project in fall 2006 to close the French Lily Mine and mine shafts and to develop borrow pits. FY07, the Golden Turkey and Golden Belt tailings piles will be pulled out of the floodplain and secured.

Lake Mary Region

Forest Service personnel have been involved in the development of mercury TMDLs in the Lake Mary region. The lakes lie within both the Coconino and Apache-Sitgreaves National Forests. ADEQ sampling efforts have benefited greatly by the support and input provided by the Forest Service. Mercury TMDLs for five lakes will be completed in fall 2006. Forest Service comments will be sought and incorporated into the final TMDL report.

Alamo Lake

The Alamo Lake Mercury TMDL employed a watershed scale approach. The lake's watershed encompasses approximately 5,000 square miles. Efforts have been coordinated through various federal agencies including BLM, Army Corp of Engineers, Bureau of Reclamation, Fish and Wildlife, and the U.S. Geological Survey. Federal agencies have supplied lake management practices and data, stream discharge data, technical support and general information that could not have been discovered without their input. Their comments will be sought and incorporated into the final TMDL report completed in June 2006.

Parker Canyon Lake

The Parker Canyon Lake Mercury TMDL was initiated in FY06. Both lake and tributary sampling has started. Further work will include fish tissue collection, sediment coring of the lake, soil collection from the watershed, and bioaccumulation studies. Coordination efforts with the AGFD, National Forest, and Northern Arizona University are ongoing.

Queen Creek

Sampling along Queen Creek has occurred throughout the year and automated monitoring equipment has been deployed. Several mining companies have an interest in the TMDL as does the Forest Service and concerned stakeholders.

San Pedro River

Several sampling events have taken place along the San Pedro River. The headwaters of the San Pedro are in Mexico and the international scope of the project may be a complicating factor. Coordination has occurred with the ADEQ Border Program and the Bureau of Land Management.

Cave Creek

Sample results collected quarterly throughout FY06 indicate that selenium may not be impairing the stream. Continued efforts over the next two years will attempt to confirm this.

Gila River

Several TMDLs in the Upper Gila River watershed were initiated in FY06. The large number of agriculture return flows and the interstate nature of the Gila River are complicating factors.

Atmospheric Deposition of Mercury

EPA has supported ADEQ efforts to characterize the rate of atmospheric mercury deposition within the state. Atmospheric deposition, wet or dry, is a major source of mercury contamination throughout the country. While various efforts have been completed to characterize this problem on a national scale, little data exists specific to Arizona. ADEQ recognizes the lack of atmospheric deposition data poses a serious problem to TMDL development. EPA has provided technical assistance and equipment to help solve this problem. ADEQ was allowed to use a mobile Tekran Mercury Vapor Analyzer for two and half months in early 2006 as a first step in characterizing deposition rates in Arizona. The Tekran was deployed at three locations across the state for a period of approximately three weeks at a time (Alamo Lake, Parker Canyon Lake and Lake Pleasant). The ADEQ Air Quality Division is working on developing depositional rates for the three sites using the data collected.

EPA has also provided technical and some financial assistance for the development of a Mercury Deposition Network (MDN) station in Arizona. There are currently 85 MDN sites across the nation collecting wet deposition data. In April 2006 the first MDN station in Arizona went into operation near Sycamore Canyon, west of Flagstaff.

Water Quality Monitoring

The Fixed Station Network (FSN) monitoring program is a statewide data collection program. The primary purpose of the FSN is to characterize baseline water quality of perennial, wadeable streams at a network of long-term sampling sites and to provide data to determine long-term water quality trends. In the past, FSN sampling sites were sampled quarterly each year. The FSN Monitoring Program was designed with longer monitoring time frames (20+ years) and lower site densities per watershed than the basin monitoring program. Changes in monitoring program design, monitoring objectives, data collection protocols and procedures, and analytical methods over time have made it difficult to produce comparable data over the long-term that can be used for trend analysis. For this reason, ADEQ has decided to reduce its focus on the ADEQ FSN Monitoring Program. ADEQ will continue to use select FSN sampling sites, but will focus state monitoring program resources on a more comprehensive implementation of its rotating basin monitoring approach as outlined below.

ADEQ will continue to work with the United States Geological Survey (USGS), under a long-standing cooperative agreement, to determine long term water quality trends on Arizona's larger rivers. For fiscal year 2006, the USGS monitored 11 sites throughout the state for ADEQ.

ADEQ has identified 10 major river basins in Arizona as part of the basin monitoring program. Water quality monitoring is conducted at sampling sites located in 2 major basins each water year. All 10 basins are monitored over a five-year cycle. The following table provides the monitoring schedule for the next 10 years:

Basins	Fiscal Years
Little Colorado River, Lower Gila River	FY 07 & FY 13
Salt River - Middle Gila	FY 08 & FY 14
Verde River - Bill Williams River	FY 09 & FY 15
Upper Colorado River - Grand Canyon, San Pedro River	FY 10 & FY 16
Upper Gila River, Santa Cruz River	FY 12 & FY 17

Memorandums of Understanding

ADEQ has entered into a number of Memorandums of Understanding (MOUs) with federal, state and tribal partners in the State to respond to mutual water quality objectives. MOUs help identify responsibilities and activities to be performed by each agency and foster a collaborative effort in meeting natural resource and public health goals to sustain healthy conditions in Arizona's watersheds. ADEQ meets with these partners as needed.

Currently ADEQ has established MOUs with the following entities:

Federal: U.S. Forest Service, Bureau of Land Management, Verde NRCD, and Coordinated Resource Management;

Tribal: Navajo Nation and Hualapai Tribe; State: Game and Fish Department.



Arizona's FY 06 Nonpoint Source Annual Report Section III - Water Quality Improvement and Load Reductions

As Arizona continues to focus efforts on restoring and protecting waters, it is critical that ADEQ monitor both:

- 1) the progress being made towards achieving and maintaining water quality standards;
- 2) the implementation of programs and projects to assure that they are successful.

ADEQ uses several sets of measures to fully determine the success in implementing the Nonpoint Source Program. These include measures that indicate progress towards achieving and maintaining beneficial uses of water; towards other long-term goals of the Program (i.e. achieving load reductions, or implementing particular watershed projects); and towards shorter-term goals and objectives that are designed to lead to the achievement of longer-term goals.

ADEQ uses several approaches, such as ambient water quality monitoring, biological and physical assessment, implementation monitoring, model projections, and photographic evidence to measure ADEQ's effectiveness in restoring and protecting water quality. These environmental indicators help ADEQ to address the public's concerns about water quality in Arizona and what progress ADEQ is making toward its water quality goals.

Water quality monitoring is also an essential tool to enable ADEQ to identify nonpoint source pollution problems, develop effective watershed-based plans, evaluate the effectiveness of actions taken, and meet Section 319 reporting requirements. Monitoring strategies are designed to focus on whether load reductions are being achieved over time and substantial progress is being made towards attaining and maintaining water quality standards. Arizona's surface water quality standards establish the benchmarks for ambient water quality to be achieved for Arizona's streams and lakes.

Water Quality Improvement

Ambient water quality and biological and physical assessment data are compiled in *Arizona's Integrated 305(b) Assessment and 303(d) Listing Report* to measure the status of water quality in Arizona. ADEQ uses the Integrated Report for overall program status and trends and to compare the quality of Arizona's surface waters to water quality standards. This report assesses all surface waters where monitoring has been conducted, reports on the quality of ground water, lists any impaired surface waters, and prioritizes these waters for TMDL development. This water quality assessment report is another means by which ADEQ can determine the effectiveness of management measures implemented to control nonpoint source pollution.

Note that there are many factors that might affect results. For example, completion of a TMDL on a waterbody usually allows ADEQ to remove that waterbody from the 303(d) List (Category 5) to Category 4 or the “not attaining” list. Also, further monitoring during the course of the TMDL study may reveal impairment based on additional parameters. The waterbody must then remain on the 303(d) List for the new parameters, giving the appearance that no progress has been made, when in fact some water quality problems have been addressed. These types of variables often skew the results of effectiveness measures and make it difficult to measure water quality improvement by comparing assessments from one year to the next.

TMDLs

The Total Maximum Daily Load (TMDL) Program is designed to help an impaired stream or lake meet its water quality standards and support its designated uses, such as protection of aquatic life, drinking water, and fish consumption. Section 303(d) of the Clean Water Act established authority for the TMDL Program and guides states on how to develop these plans for waters that do not meet water quality standards. ADEQ submitted the Alamo Lake Mercury TMDL to USEPA for approval in June 2006.

Watershed-based Plans and TMDL Implementation Plans

Water quality improvement plans are vital components to ensure Arizona’s lakes, rivers, and streams achieve applicable water quality standards. ADEQ is available to provide technical assistance to watershed partnerships and other stakeholder groups in the development of watershed-based plans or other water resource management documents. For each TMDL, the department is required to establish a TMDL implementation plan that explains how the allocations and any reductions in existing pollutant loadings will be achieved (Arizona Revised Statute §49-234.G).

Watershed-based plans are holistic documents that are developed and implemented to protect and restore a watershed. These plans provide a careful analysis of the sources of water quality problems, their relative contributions to the problems, and alternatives to solve those problems. Furthermore, watershed-based plans deliver proactive measures to protect waterbodies. In watersheds where a TMDL has been developed and approved or is in process of being developed, watershed-based plans should be designed to achieve the load reductions called for in the TMDL.

Several watershed partnerships in Arizona have watershed or water management plans already in place. Of those, many contain some (or all) of EPA’s nine required elements. The nine key elements or components of a watershed-based plan are:

- Element 1: Causes and Sources,
- Element 2: Expected Load Reductions
- Element 3: Management Measures
- Element 4: Technical and Financial Assistance
- Element 5: Information/education Component
- Element 6: Schedule
- Element 7: Measurable Milestones
- Element 8: Evaluation of Progress
- Element 9: Effectiveness Monitoring

ADEQ encourages partnerships to incorporate, by reference, any voluminous material that exists in other documents as this information may assist in completing watershed-based plans. Utilizing the existing documentation also avoids duplication of any existing processes or documents that already provide the needed information.

Developing implementation plans is an integral piece of the TMDL process. The achievement of water quality standards in most surface waters will occur due to voluntary efforts such as voluntary cleanup actions, voluntary implementation of best management practices, volunteer monitoring, and education. Stakeholders are encouraged to participate throughout the process and identify actions that they will take to ensure that this plan is implemented.

Watershed Partnerships and Other Active Stakeholder Groups

Watershed partnerships and other active stakeholder groups contribute to the progress of the Nonpoint Source Program. ADEQ's web site provides a list of Arizona Watershed Partnerships (www.azdeq.gov/environ/water/watershed/partnerships.html). Staff from both the Grant and TMDL Units attend.

Water Quality Improvement Projects

Grant funds available through Section 319 of the Water Quality Act are a critical element to improving and protecting water quality in watersheds throughout the state. During the last grant cycle, ADEQ received 21 grant applications, two which were determined to be ineligible. Of the thirteen projects awarded in January 2006, six will address water quality improvements in impaired waters. Three of these six projects are located in areas that have a completed TMDL. Four of the thirteen projects are implementing BMPs detailed in WBPs. A total of ten out of the thirteen projects awarded were considered priority projects in that they addressed issues in waters that are impaired, waters that have either a completed TMDL or WBP, or any combination of those characteristics. Each year brings an increase in applications that address priority projects. Attachment #1 lists the projects awarded in FY 06.

The following are priority projects from Cycle 8 that implement BMPs that are addressed in either a TMDL or a WBP.

Projects in Impaired Waters:

With TMDLs:

8-003 - Boy Scouts of America Grand Canyon Chapter
R-Bar-C Boy Scout Sewer Facilities Upgrade

The Grand Canyon Council of the Boy Scouts of America proposes to upgrade septic treatment and disposal facilities to alleviate possible water contamination in the adjacent Christopher Creek. The sanitary facilities to be upgraded include existing septic tank systems, existing pit toilets at camp sites, and an existing evapotranspiration bed that appears to be contributing to the current contamination documented within this reach of Christopher Creek.

8-004 - Franciscan Friars of California, Inc
Former Gibson Mine TMDL Reduction to Mineral Creek

The Franciscan Friars of California, Inc. goal is to design, construct, and implement a manmade wetland to reduce copper loading to Mineral Creek. The constructed wetland will be located on a tributary within the property boundary. This wetland will be capable of reducing other nonpoint source pollution sources such as beryllium, zinc, and turbidity.

8-005 - Gila County Division of Health And Community Services
Gila County Ground and Surface Water Improvement Project - Phase II

The Gila County Division of Health and Community Services aims to protect and preserve the groundwater in Gila County by replacing, repairing, and upgrading current wastewater systems, illegal cesspools, pit privy, and structurally unsound/failing septic systems. By implementing these practices, the protection of ground and surface water quality will be achieved.

Without TMDLs:

8-001 - Community Watershed Alliance
CWA Manzanita Erosion Control Project

The CWA's goal of this project is to implement best management practices that will curb erosion occurring upland in the Middle San Pedro sub-watershed which ultimately reaches the San Pedro River. The project proposes to install rip rap stabilization structures, replace an undersized culvert, and insert gully plugs to reduce head cutting. Vegetation reseeding will be encouraged where warranted by available water sources and soil types.

8-006 - Gila Watershed Partnership
Gila River Clean up Project

The Gila Watershed Partnership will address an illegal dumpsite along and in the Gila River. This project will clean up an estimated 6000 tons of garbage. The debris and garbage contain hazardous waste as well as oil and grease. There is runoff into the Gila River during and after rainfall events. There is a watershed-based plan for the Upper Gila Watershed.

8-008 - Gila Watershed Partnership
Kaler Ranch Erosion Control Project Phase II

The Gila Watershed Partnership's goal for this project is to preserve, protect and improve water quality by reducing sediment discharge and excess organic input to the San Francisco River. Best management practices will include extending and improving road drainage culverts, adding sediment collection boxes and ditches, and a sediment retaining wall. This project also references a completed WBP.

Projects in Non-impaired Waters That Have a Completed WBP:

8-007- Upper Eagle Creek Watershed Association *Upper Eagle Creek Watershed Restoration Project*

The Upper Eagle Creek Watershed Association's project goal is to alleviate nonpoint source pollution by excluding cattle from Eagle Creek and other riparian areas through fencing, providing alternative water sources for livestock, and applying intensive grazing management techniques, including rotational grazing on various allotments within the watershed.

8-013 - Prescott Creeks Preservation Association *Granite Creek Watershed - Water Quality Improvement and Monitoring Program*

The Prescott Creeks Preservation Association's goals of this project are to implemented four project components; 1) redesign and construct a stormwater runoff basin, 2) apply stenciling to storm drains informing the public of the consequences of dumping waste down the drain, 3) develop BMPs for ranchers/community along a riparian area, and 4) monitor for metals and bacteria to assess water quality improvement.

8-002 - The Nature Conservancy *Hart Prairie Sediment Control Project*

The Nature Conservancy's (TNC) goal for this project is to improve and protect the Bebb Willow wetland community through the installation of French drains, water bars, and elevated road ways within the Hart Prairie Preserve. Through these best management practices, TNC hopes to restore the hydrologic flows in the Upper Verde Watershed as well as reduce sediment loading to the Bebb Willow community, decrease flood velocity, and increase recharge to the aquifer.

319 Project Monitoring

Each project funded by the Water Quality Improvement Grant Program to implement an on-the-ground water quality improvement project must describe how to evaluate the effectiveness of the implementation efforts over time. Monitoring can include photographic points, vegetative transects, and/or actual water quality monitoring. Information on reductions in nonpoint source pollutant loads are tracked and reported in EPA's Grants Reporting and Tracking System (GRTS). Please refer to the GRTS database for more detailed information. See *Section V - Successful Implementation Projects*, for examples of actual load reductions attributed to successful project implementation. ADEQ will be updating the GRTS database to include load reduction numbers as information becomes available. More detailed information will then be provided through the Grants Reporting and Tracking System.

Measuring Water Quality Improvements

Implementation monitoring is used to determine whether water quality improvement activities (319 projects and others) are carried out as planned and how effective the activities have been. ADEQ's TMDL Unit conducted effectiveness monitoring on Oak Creek and Nutrioso Creek in FY06.

- Oak Creek still has periodic exceedances of the *E.coli* standard at Slide Rock State Park and other sites along the creek. ADEQ's approach is to write a Phase II TMDL with effectiveness wrapped into it since the standard has changed since the Phase I TMDL was completed and exceedances still occur. ADEQ will compare the new data to the old standard as this may show less exceedances due to the best management practices being implemented through 319 funding.
- An Effectiveness Report is being written for Nutrioso Creek and should be complete by December 2006. ADEQ is recommending delisting the upper reach of Nutrioso Creek as part of the 2006 assessment.
- Hassayampa River (specifically the Cash Mine and McCleure Mine) unnamed tributaries were remediated by EPA in 2004) – no further data was collected in FY06.

Several projects will require effectiveness monitoring in FY07 as the U.S. Forest Service begins remediation efforts along Turkey Creek and Alum Gulch. Effectiveness monitoring will also take place along Pinto Creek once remediation work is completed at Gibson Mine. Other possible areas of interest include tributaries of Lynx Creek where EPA is conducting additional remediation projects on abandoned mines. ADEQ hopes the EPA will work closer with ADEQ on these projects in the future in an effort to capitalize on available funding and FTEs.

Load Reductions

ADEQ understands the importance of quantifying load reductions on a watershed, waterbody, and project level. However, quantifiable proof of nonpoint source load reduction estimates are difficult to obtain. Per Arizona statute, ADEQ will review the status of each navigable water where a TMDL study has been performed, at least once every five years to determine if compliance with applicable surface water quality standards has been achieved.

Therefore, ADEQ is required to revisit each waterbody where a TMDL study has been conducted to perform further monitoring and determine whether or not the waterbody has improved. Currently, ADEQ is assessing data from the effectiveness monitoring projects on Oak Creek, Nutrioso Creek, and Hassayampa River. To date, load reductions achieved on a watershed or waterbody scale have not been calculated. As stated above, ADEQ will provide results on the effectiveness monitoring and reductions in nonpoint source pollutant loading in impaired waters and priority watersheds in future reports.

At a project level, ADEQ is required to enter estimated load reductions for all 319 funded projects in EPA's Grant Reporting and Tracking System (GRTS) database. There are many challenges to this requirement as nonpoint source load reductions are difficult to quantify, recognizing the natural variability and the difficulty in precisely

predicting the performance of management measures or BMPs over time. Model projections are used for measuring load reductions in water quality improvement grant projects. Using nonpoint source load reduction models is a continuous struggle as there are many different modeling programs and it is necessary to know what model will provide the correct end result. Another challenge is the level of technical expertise (i.e., hydrology, pollutant loading processes, limitations of environmental data) needed to run a model and if the grantee or an ADEQ project manager has the particular expertise needed to provide estimates on load reduction. Nonetheless, information and load reduction data is uploaded as it is received either from grantees or project managers.

More and more projects on GRTS have load reduction information. Obtaining more load reduction data continues to be one of the main focuses again in FY 06. Refer to GRTS for more detailed information on load reductions.



Arizona's FY 06 Nonpoint Source Annual Report Section IV – Program Enhancements

Calculating Load Reductions

ADEQ will continue to be pro-active in securing load reduction estimate information from grantees. Projects proposed with useable estimated load reductions will rank higher than projects that do not have projected quantitative measures of success. If estimated load reductions are unknown, ADEQ encourages monitoring either by the grantee or ADEQ so that data can be used to quantify success for GRTS reporting. Evaluating and assessing BMP effectiveness and obtaining more load reduction data remains a top priority.

Volunteer Monitoring

Staffing shortages and budget constraints continued to temper the goal for a Volunteer Monitoring Program. To the extent that ADEQ can participate in volunteer monitoring, training will be done in accordance with curriculum developed by ADEQ, the Master Watershed Steward program, and GateWay Community College or other similar training courses. The goal of the ADEQ Volunteer Monitoring Program is to train and encourage the volunteer groups to collect water quality data that is credible and defensible and can be used by ADEQ for research, screening or assessment purposes. In order to use the data for these purposes, ADEQ must also ensure that the volunteer groups can produce Quality Assurance Project Plans (QAPP) and Sampling and Analysis Plans (SAP) for their sampling projects. ADEQ must also focus on keeping the QAPPs and SAPs current to reflect any changes in monitoring objectives. ADEQ strongly supports the concept of properly trained volunteer monitors and will continue working towards this goal as staffing and resources allow.

Grant Agreement

ADEQ and the Forest Service will continue to work on the terms and conditions of the Grant Agreement in hopes that the Forest Service will be able to enter into an agreement with ADEQ to manage nonpoint source pollution and improve water quality in Arizona. With approximately 15% of the land in Arizona managed by the Forest Service, ADEQ is committed to developing a Grant Agreement which will work for the Forest Service.

CPP

In FY 06, ADEQ continued with its update of the 1993 Arizona Continuing Planning Process (CPP) per Section 309(e) of the Clean Water Act. Arizona's CPP is an important tool that addresses how Arizona will accomplish federal, state and local water quality management planning objectives. The CPP for water quality management is a compendium of procedures for planning and implementing water quality management programs in Arizona. It is a guidance document for matters of process related to the protection of the physical, chemical and biological integrity of the waters of the state. The CPP addresses procedural guidelines and provides a framework for most state-

mandated water quality management programs designed to achieve and maintain beneficial uses of water. This document is intended to be used as a reference tool by all persons interested in water quality management in the state of Arizona.



Arizona's FY 06 Nonpoint Source Annual Report Section V - Successful Implementation Projects

Success Summary

The EC Bar Ranch Turbidity Reduction Project, Phase IV (#6-004) was awarded \$182,250.00 in January 2004 and was completed in September 2005. This project had the primary goal to preserve, protect, and enhance water quality in 7 miles of Nutrioso Creek (3 privately owned, 4 on the USFS Apache Sitgreaves national forest) by minimizing impacts of turbidity pollution discharged to surface and groundwater from nonpoint sources. These seven miles of creek were identified in the ADEQ Nutrioso Creek TMDL for Turbidity. Methods to reduce turbidity implemented in this project include the planting of willows along the creek banks, installation of erosion protection along the banks and in the channel, the installation of a sliding weir to allow flows or diversions. To encourage the growth of riparian vegetation, groundwater wells and sprinklers were installed, and non-native invasive species were eradicated. Success of plantings, development of floodplains, re-establishment of vegetative cover, and bank stabilization were all monitored throughout the course of the project, and public education and outreach was accomplished via an extensive website (www.ecbarranch.com) and organized public field trips at the project site.

The Campomocho-Sacaton Stormwater Runoff Control Phase II is a continuation of an ADEQ 319 project in southern Arizona near the City of Willcox. The project works to mitigate erosion, gully, and consequently sedimentation of soils in the upper areas of the Campomocho-Sacaton sub watershed; within the Willcox Playa watershed. Sedimentation from the upper elevation comes to a rest on low lying agricultural land and city streets causing damage to domestic and irrigation wells, septic systems and possibly water contamination. The Coronado Resource Conservation & Development Area, Inc. is the authorized agent managing the project. In order to mitigate these problems, continued applications of best management practices (BMPs) are underway. BMPs include sediment retention structures in the upland to catch the sediment and restore gully erosion. In lower elevations, a BMP called ripping and seeding was employed. This method is used to create lower barriers in the ground to slow sheet flow, improve water infiltration, and create an environment for native vegetation to flourish. Partnerships working on this water quality improvement project include Cochise County, El Paso Natural Gas, Arizona State Land Department and the Natural Resource Conservation Service.



Arizona's FY 06 Nonpoint Source Annual Report Section VI - Public Awareness

The Grants and Outreach Unit conducts education/outreach efforts to increase the public's awareness of nonpoint source pollution impacts to surface and groundwater resources. Below are descriptions of the events that the Water Quality Division has participated in throughout the year.

Water Expo at State Capital

The University of Arizona's Water Sustainability Program, with support from Central Arizona Project (CAP) and Salt River Project (SRP) coordinates a Water Expo to inform and educate Arizona state legislators about the current efforts towards water sustainability in Arizona. ADEQ was invited to be a part of this opportunity to share the Department's current efforts. The Grant and Outreach Unit put on an educational display at this event for the legislators and the Governor.

Tres Rios Nature Festival

This Festival was an opportunity for the public to celebrate and learn about wildlife, river ecology, water resources, history, and heritage of the Gila, Salt and Agua Fria Rivers. Through the use of models, posters, and hands-on opportunities, ADEQ's display booth and staff have educated over 10,000 people since 2003.

Master Watershed Stewards Water Quality Demo

ADEQ, along with the Master Watershed Steward Program, GateWay Community College, and the University's Cooperative Extension put on a water quality demo at Papago Park for the students attending the Master Watershed Steward course. ADEQ staff coordinated all of the demo stations and provided technical knowledge and principles to the students on water quality sampling.

Statewide Meeting - Master Watershed Steward Program

ADEQ participated in the Master Watershed Steward Program's state wide meeting. This meeting consisted of sharing feedback about the Master Watershed Steward Program. Attendees also learned about pedagogy, presentation, and program delivery. ADEQ staff provided grant, assessments, and monitoring information to the group.

Envirothon

Envirothon is a natural resources competition for high school students. Teams of five students work to answer natural resource questions and develop solutions to environmental problems. Envirothon integrates five areas of study: forestry, aquatics, wildlife, soils, and an environmental issue that changes each year. With Section 319 funding, ADEQ has been able to support the Arizona Envirothon since its establishment

in 1998. Arizona's high school students are the hope for the future and Envirothon provides a great learning experience that can strengthen the foundation for environmental stewardship.

Water Quality Improvement Grant Program Outreach

The Grant and Outreach Unit provides program oversight for the Water Quality Improvement Grant Program. This includes ensuring compliance with state and federal law, guidance and policy. Staff is responsible for holding workshops for the public which describe the grant program and how to apply. Once the applications are received, staff is responsible for processing of the grant applications including receipt, evaluation, and award. After the grants are awarded, staff must negotiate and execute grant agreements and maintain contractual and programmatic files.

Water Quality Improvement Grant Workshops – July 2005 - June 2006

Three grant workshops were held around the state in July and August of 2005 in preparation with 72 people in attendance for the 2006 Grant Cycle (Cycle 8). The Grant and Outreach team implemented a few new interactive approaches to the Cycle 8 grant workshops and attendees seemed to really enjoy the more active role they played while learning. During the workshops, staff covered many aspects of nonpoint source pollution, including: causes and sources of pollution, TMDL studies, watershed-based plan guidance, and recommended management measures to manage nonpoint source pollution.

2006 Project WET (Water Education for Teachers) Water Festival

This fiscal year the Arizona Make a Splash with Project WET Water Festivals delivered locally focused water education to 5,068 students, as well as their 201 teachers throughout the state during the 2005-2006 festival year. The Water Festival is an opportunity for 4th graders to learn about Arizona's water resources by participating in fun, interactive activities. Interactive activities are developed to enhance critical thinking and build an understanding and awareness of local water resources; the concept of a watershed; groundwater/aquifers; the water cycle; and the importance of water in our lives. The Water Festival is correlated to the Arizona Academic Standards. Arizona Water Festivals strive to increase teacher, volunteer, and student understanding of vital water concepts. In addition, community recognition of the value of this educational model has brought more partners, sponsors, and funding to Arizona Water Festivals.

Verde River Days

A group of Cottonwood residents first organized Verde River Day in 1988 to promote awareness of the Verde River's distinctive riparian habitat where 85% of all wildlife in the area looks for sustenance. Verde River Days is an annual environmental and ecological awareness event that is held at the Dead Horse Ranch State Park in Cottonwood, Arizona. This event promotes preservation and care of the environment by showcasing informative exhibits on the Verde's riparian environment and current recycling efforts. Some of the day's events include environmental exhibits, hands-on-activities and live entertainment. The celebration brings together 40-plus nature-based exhibits, a menagerie of live animals, non-stop activities from organized canoe rides and sand castle building to geology tours, as well as local food vendors from 9 a.m. to 4

p.m. Guests of all ages are welcome to fish in the lagoon that is loaded with hundreds of pounds of catfish. No fishing license is needed during the scheduled clinic hours. Poles, bait, and tackle are provided for all ages. Visitors may also experience nature's history through guided tours, nature walks, and short hikes. Entry is free to the public. ADEQ has been an active participant in this annual event for many years. This is an opportunity for valuable information on our Agency's programs and services to be provided to the community.

University of Arizona - Master Watershed Steward and NEMO Programs

With the help of the University of Arizona through the Master Watershed Steward and NEMO programs, ADEQ has been able to provide technical assistance on water resource management and assist many more watershed groups. The coordinators for both of these programs have been a huge help to us and the watershed partnerships statewide. They've provided education, maps, technical assistance, review and comment, etc. Their advocacy has benefited ADEQ tremendously.

World Water Monitoring Day

October 18th represents World Water Monitoring Day, a worldwide opportunity to positively impact the health of rivers, lakes, estuaries and other waterbodies. ADEQ partnered with the NRCS, GateWay Community College, U of A Cooperative Extension, and Master Watershed Stewards to put on a water quality demonstration event that educated 90 sixth grade students. The WQD provided water quality demonstrations that explained the importance of water temperature, pH, dissolved oxygen, turbidity, and aquatic life.



Arizona's FY 06 Nonpoint Source Annual Report Section VII – Program Highlights

Clean Colorado River Alliance

In 2005, Governor Janet Napolitano established the Clean Colorado River Alliance to develop recommendations to deal with existing water quality problems to ensure Colorado River water quality addresses the needs of Arizona, now and in the future. The Alliance was charged with developing an action plan to deal with pollution affecting the Colorado River. The final report was presented to the Governor in December 2005. To date, ADEQ has received no funding or FTEs to implement the recommendations in the report. The WQD will incorporate activities related to the Alliance recommendations into its annual workplan as appropriate for the specific regulatory program. Information on the Alliance and their progress can be located at <http://www.azdeq.gov/environ/water/ccra.html>.

Impaired Water Identification Rule

No progress has been made on the Impaired Waters Identification rule during FY06 pending EPA's final guidance on preparing the integrated report as it relates to the contested issues. EPA's guidance was issued in late 2005 and appears to support ADEQ's approach to assessing chronic impairment. Staff has submitted the rule package for management review. Once approved by management, a new draft will be released for review and stakeholder meetings will be scheduled.

208 Consistency Review Form

In FY 06 208 Program staff improved the application form (Attachment #2) that requires applicants or the ADEQ permit writer to provide pertinent information to the program to make the consistency decision. The improvements require the applicant and 208 staff to consider proposed projects from a more watershed based approach. Section 208 conformance determinations are made after considering water quality assessment and TMDL findings. ADEQ has developed a hierarchy of reviews and process based on the hierarchy: no review needed, expedited review or a full review. This change has resulted in a more efficient consistency review process by reducing the time spent on each review and a reduction in review backlogs.

Service/Planning Area GIS Covers

In September 2004, ADEQ hired of an intern to develop GIS covers (and associated databases) of service/planning areas and locations of all waste water treatment plants within the state. This new tool has been helpful when reviewing permit applications for 208 consistency and amendments to determine the other facilities in the area. This intern left in early 2006 for full-time employment with the ASLD, ADEQ is seeking another intern from ASU to continue the project.

2004 Integrated 305(b) Assessment and 303(d) Listing Report

The 305(b) Water Quality Assessment Report describes the status of surface and ground water resources in Arizona in relation to state water quality standards. The report is so named because it fulfills requirements of Section 305(b) of the federal Clean Water Act. Accompanying the report is a list of Arizona's impaired waters, as required by Section 303(d) of the Clean Water Act. Together the report is called the Integrated Report of Water Quality.

The Standards and Assessment Unit has begun preliminary work on the 2006 Report, due to EPA on April 1, 2006.

Web Site Update

ADEQ continues to update the web site with appropriate changes as need. (www.azdeq.gov/environ/water/watershed/index.html).

Water Quality Improvement Grant Manual

FY 06-07 is the last grant cycle that will utilize the 2004 – 2007 Water Quality Improvement Grant Manual. ADEQ continues to update the online application/instructions that is found in Chapter Four of the grant manual. These updates help clarify unclear or misunderstood questions/instructions. The interactive electronic application form continues to make the application process easier and more efficient. Collecting accurate information is necessary since awarded projects must be entered into the Grant Reporting and Tracking System (GRTS). The Water Quality Improvement Grant program continues to give priority to projects that improve impaired (and not attaining) surface waters and projects that provide estimated pollutant load reductions.

NEMO

The Arizona Cooperative Extension at the University of Arizona and ADEQ began the NEMO program in the fall of 2002. Since then, the contract has been extended through 2008. The NEMO program provides education for land-use decision makers on watershed-based planning and management practice for restoring, maintaining and protecting watersheds, water quality and water sustainability. In addition, NEMO was contracted to author watershed-based plans for the Bill Williams, Verde, Upper Gila, San Pedro, Agua Fria, and Little Colorado. NEMO has expanded their service and is working with other active watershed groups to assist them in the development of watershed-based plans. NEMO has identified stakeholders and met watershed education needs with community-based programs presentations, and publications. Watershed partnerships have obtained CWA 319 grant funds to implement watershed restoration projects. NEMO staff regularly attends watershed partnership meetings throughout the state to provide technical assistance and support.

Graham

8-006 Gila Watershed Partnership \$110,500
Gila River Clean up Project

The Gila Watershed Partnership will address an illegal dumpsite along and in the Gila River. This project will clean up an estimated 6000 tons of garbage. The debris and garbage contain hazardous waste as well as oil and grease. There is runoff into the Gila River during and after rainfall events.

Greenlee

8-007 Upper Eagle Creek Watershed Association \$360,930
Upper Eagle Creek Watershed Restoration Project

The Upper Eagle Creek Watershed Association's project goal is to alleviate nonpoint source pollution by excluding cattle from Eagle Creek and other riparian areas through fencing, providing alternative water sources for livestock, and applying intensive grazing management techniques, including rotational grazing on various allotments within the watershed.

8-008 Gila Watershed Partnership \$169,800
Kaler Ranch Erosion Control Project Phase II

The Gila Watershed Partnership's goal for this project is to preserve, protect and improve water quality by reducing sediment discharge and excess organic input to the San Francisco River. Best management practices will include extending and improving road drainage culverts, adding sediment collection boxes and ditches, and a sediment retaining wall.

Mohave

8-009 Hualapai Tribe \$50,000
Bank Stabilization at Spencer Beach-Protection of Composting Restroom

The Hualapai Tribe and the engineering firm, Natural Channel Design, propose to stabilize the banks surrounding the composting restroom at Spencer Beach in the Grand Canyon along the Colorado River. Currently, the restrooms are being threatened by erosion. Through this project an engineering design will be developed and implemented to prevent future loss of the restroom and subsequent contamination of the Colorado River.

8-010 Hualapai Tribe \$52,160
Composting Restroom for the Hualapai Helipad Tourist Destination

The Hualapai Tribe's goal of this project is to construct a composting restroom next to the helipad landing area located next to the Colorado River in the Grand Canyon. Currently, there are no restrooms in the vicinity for tourist to use before leaving on Grand Canyon river boat tours. As a consequence, human waste is being deposited along the vegetation which eventually makes it the river.

Santa Cruz

8-011 Coronado Resource Conservation & Development Area, Inc. \$18,470
Erosion Control in the Babacomari/Upper San Pedro Watershed

The goal of the E Lazy H Ranch and the University of Arizona Cooperative Extension is to stabilize two gullies in Lyle Canyon that are contributing sediment to the Babacomari River. Best management practices will be implemented to stabilize the slopes of these gullies as well as introduce erosion control mats, waddles, and revegetation practices.

8-012 Coronado Resource Conservation & Development Area, Inc. \$52,500
A Watershed Approach to Improving Water Quality in Red Rock Canyon – Phase 2

The Canelo Hills Coalition is a group of ranches in Santa Cruz County that are working together to improve water quality in Red Rock Canyon, a tributary to Sonoita Creek and the Upper Santa Cruz Watershed. The Canelo Hills Coalition is working with the Coronado Resource Conservation & Development Area, Inc. on this project to address sediment delivery by improving watershed health through the implementation of best management practices that facilitate a rest-rotation grazing system to maximize vegetation on the watershed.

Yavapai

8-013 Prescott Creeks Preservation Association \$ 217,982
Granite Creek Watershed – Water Quality Improvement and Monitoring Program

The Prescott Creeks Preservation Association's goals of this project are to implemented four project components; 1) redesign and construct a stormwater runoff basin, 2) apply stenciling to storm drains informing the public of the consequences of dumping waste down the drain, 3) develop BMP for ranchers/community along a riparian area, and 4) monitor for metals and bacteria to assess water quality improvement.

208 Consistency Review Form



This facility review is based on information obtained from the applicant, permit writer, the associated Water Quality Management Plan (WQMP) and amendments, and other related documents as cited.

Permit Writer or Applicant – Please Complete Sections 1-14

Facility Information	Explanation (Provide a brief description)
1. Facility name	
2. Permit category - (a, b, or c) a. AZPDES (describe discharge) b. Individual APP (describe facility) c. General permit (describe type)	
3. Facility location (<i>watershed, county, Lat/Long or Township, Range & Section</i>)	
4. Type of permit - (a, b, c, or d) a. New WWT facility b. AZPDES renewal c. Modification to an existing facility d. On-site subdivision	
5. Attach a descriptive map <u>Include a, b, c, & d</u> a. Facility/site location b. Discharge location(s) c. Adjacent urban areas (<i>the nearest urban area may be miles away</i>) d. Nearest surface water(s)	
6. Annual average daily flow <i>Note: If renewal with no changes in discharge location, technology, treatment and disposal methods, and capacity - STOP HERE</i>	
7. Change in annual average daily flow – (a, or b)? a. No change b. Increase (explain)	
8. Treatment method (explain)	
9. Change in treatment method – (a, b, or c)? a. No change b. Improvement to technology c. Septics/alternative systems (attach ADEQ Forms 113 and 115)	

10. Effluent disposal method(s) <i>If discharge is to a surface water or lake, provide name of surface water.</i>	
11. Change in effluent disposal method (a, b, c, or d)? a. No change b. Change in location (explain) c. Change in method (explain) d. Additional locations (explain)	
12. Sludge handling – <i>describe how sludge will be handled</i>	
13. Entity type a. Municipality/public utility b. Private utility c. Semi public (<i>sanitary district</i>) d. Other (<i>individual homeowner or homeowners association</i>)	
14. Service area (if known) <i>Attach map & legal description</i> a. New service area for CC &N b. Expansion of existing service area c. Increase # of lots in subdivision	

For ADEQ 208 Review Staff Only –

Facility Information	Explanation (Reference the page # and COG WQMP)
1. DPA	
2. Permit number	
3. Service area <i>Attach map & legal description</i> a. New service area for CC &N b. Expansion of existing service area c. Increase # of lots in subdivision	
4. Planning area <i>Attach map & legal description</i> a. New b. Expansion of planning area	
5. Designated Management Agency a. Facility is a DMA b. Distance to nearest DMA c. Ordinance requiring hookup	

Does the facility meet any of the following conditions?

Special Conditions	Explanation
6. Discharge to a unique water?	
7. Discharge to an impaired/not attaining water?	
8. Pollutant load allocations specified in a TMDL?	
9. Located in a nitrogen management area?	
10. Change in ownership? <i>(Pima County only)</i>	
11. Other <i>(compliance issues, site specific standards, etc.)</i>	

Based on Section 208 of the Federal Water Pollution Control Act, Arizona Administrative Code R18-9-108(B)(10), and/or the Certified Area WQMP, this application for permit is determined to be:

Determination By:

Date:

Consistent	Not Inconsistent	Inconsistent	208 Coordinator	Unit Manager	Section Manager

If determination is "inconsistent," an amendment to the Water Quality Management (208) Plan must be processed and submitted for approval by ADEQ.

If determination is "Not inconsistent," this means the project was not identified in the current 208 Water Quality Management Plan, but is consistent with regional water quality management goals.



Water Quality Improvement Grant Program Request for Grant Applications EV05-0128

The 2005 Grant Cycle is underway. The Arizona Department of Environmental Quality (ADEQ) is requesting applications for projects that implement on-the-ground water quality improvements to manage nonpoint source pollution in Arizona.

The Money



Approximately \$1.5 million is available for multiple awards. The funds are provided by section 319(h) of the Clean Water Act, administered by the United States Environmental Protection Agency.

The Requirements

For a grant application to be considered eligible for evaluation, it must accomplish all of the following.

- ◆ **Improve**, protect or maintain water quality in a water body in the state of Arizona by addressing a nonpoint source of pollution.
- ◆ **Demonstrate** acceptable water quality management principles, sound design and appropriate procedures.
- ◆ **Yield benefits** at a level commensurate with project costs for the benefit of the state.
- ◆ **Have an on-the-ground implementation component** within the state of Arizona.
- ◆ **Provide for at least 40 percent** of the project costs as non-federal match.
- ◆ **Support** the ADEQ, Water Quality Division Mission (www.azdeq.gov/environ/water/index.html).
- ◆ **Be eligible** under applicable state and federal regulations, and comply with the application process described in the *2004-2007 Water Quality Improvement Grant Manual*.

All Waters in Arizona Are Clean and Safe



The Evaluation



Eligible applications will be evaluated based on the following criteria.

1. Scope of Work
 - ◆ Water Quality Problem
 - ◆ Action Plan
 - ◆ Expected Outcomes
 - ◆ Project Evaluation
 - ◆ Public Education, Outreach, and Partnerships
 - ◆ Key Personnel
 - ◆ Location & Site Plan
2. Project Milestones
3. Water Quality Improvement Plan(s)
4. Budget
5. Compliance with the grant application process

Note - applicant interviews and site visits may be requested.

The Deadline

The deadline to submit grant applications for this grant cycle is **3 p.m., October 5, 2005**.

The Awards

We expect to make award announcements in January 2006.

Tips:

- ◆ **Program Goal** - Increase the number of awarded projects funded for improving water quality on impaired waters from 35% in 2004 to 50% in 2006.
- ◆ **Results Matter** - The ideal project is one that can verify or demonstrate water quality improvements.

The Application

The 2004-2007 *Water Quality Improvement Grant Manual* details the grant program and includes the application forms. Note that minor revisions have been made to the grant application instructions and forms. Both the complete grant manual and revised grant application can be downloaded from ADEQ's Water Quality Improvement Grant Program web site.

azdeq.gov/environ/water/watershed/fin.html

If you wish to have a hard copy of the grant manual sent to you, please call Danese Cameron at (602) 771-4569 or, toll free, (800) 234-5677, Ext. 771-4569.

2005 Water Quality Improvement Grant Workshop Schedule

Location	Date / Time	Place	Address
Phoenix	June 22nd at 1:30 p.m.	Arizona Department of Environmental Quality, Conference Room 5100B	1110 W. Washington St.
Show Low	June 29th at 2 p.m.	City Hall Council Chambers	200 W. Cooley
Tucson	July 13th at 1:30 p.m.	Tucson-Pima Public Library Meeting Room Lower Level 1	101 N. Stone Ave.
Sedona	July 27th at 1:30 p.m.	Red Rock State Park Visitors Center	4050 Red Rock Loop Rd.
Safford	August 10th at 10 a.m.	Graham County General Services Building	921 Thatcher Blvd.



Please RSVP. If we do not have at least five people signed up to attend, the workshop will be cancelled. We can only notify and reschedule a meeting with those who have contacted us.

RSVP to Jean Ann Rodine, Grant Coordinator, at (602) 771-4635, (800) 234-5677, Ext. 771-4635, or jr4@azdeq.gov

ADEQ is committed to complying with the Americans with Disabilities Act. If any individual with a disability needs any type of accommodation, please contact ADEQ at least 72 hours before the workshop.

