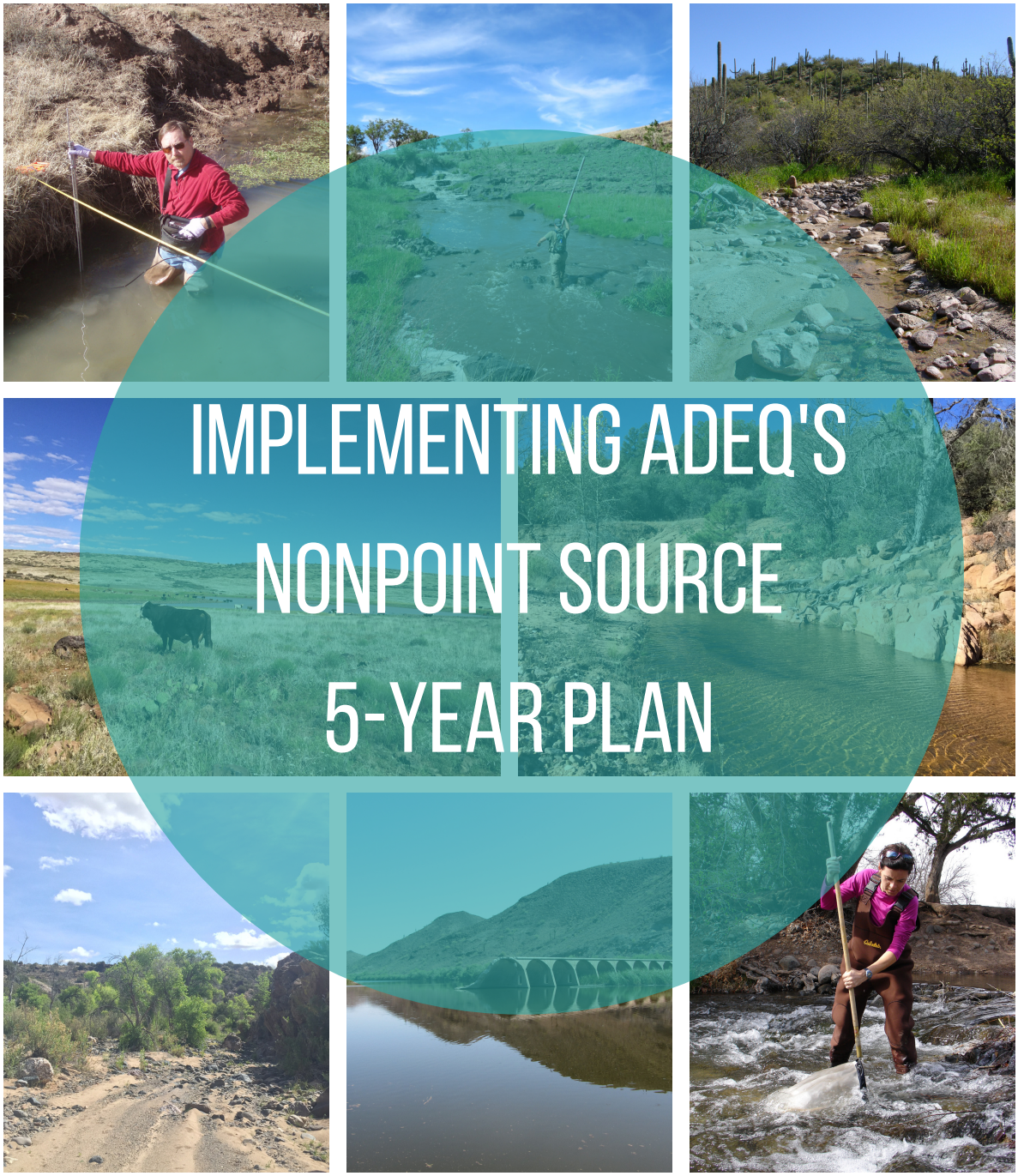

IMPLEMENTING ADEQ'S NONPOINT SOURCE 5-YEAR PLAN

State Fiscal Year 2015 Annual Report

ADEQ
Arizona Department of Environmental Quality

DEVELOPED BY THE ADEQ WATER QUALITY DIVISION // SURFACE WATER SECTION // WATERSHED PROTECTION UNIT

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Implementation of Arizona's Nonpoint Source Management 5-year Plan: State FY15 Annual Report

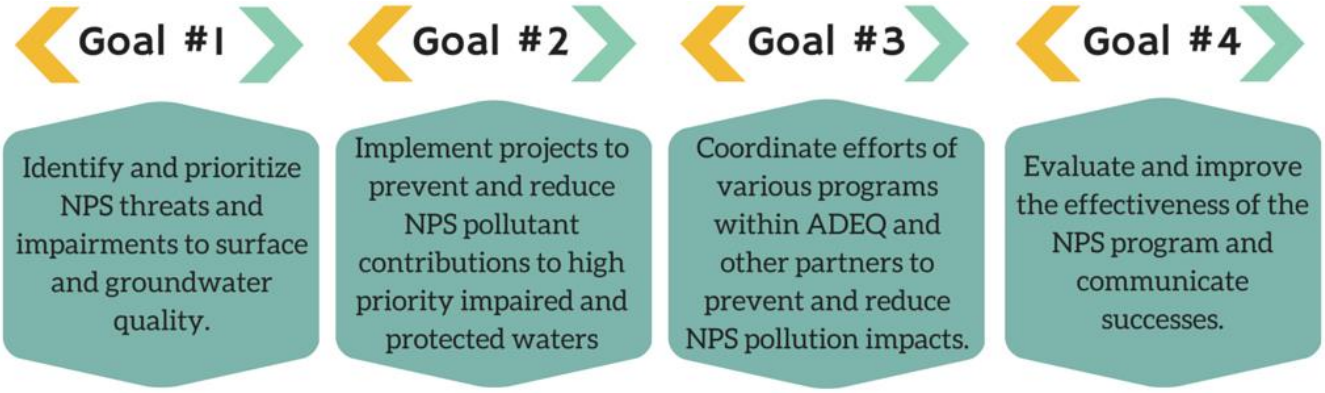
STRATEGIC PLANNING FOR MEETING WATER QUALITY PROTECTION AND RESTORATION GOALS RELATED TO NONPOINT SOURCE POLLUTION.

I. Introduction

The Arizona Nonpoint Source (NPS) Annual Report for state fiscal year 2015 (FY15) summarizes Arizona Department of Environmental Quality (ADEQ) NPS Program activities that occurred between July 1,2014 and June 30, 2015. The state's FY15 Work Plan Output Report, submitted to EPA in July 2015, also documents FY15 NPS-funded activities and should be considered a companion document to this report.

The majority of work performed by ADEQ's NPS Program is funded by Clean Water Act Section 319(h) grant monies, awarded by the U.S. Environmental Protection Agency (EPA). Section 319(h) (11) requires states to report annually on progress in meeting the schedule of milestones contained in their Nonpoint Source Management Plans, and, to the extent that appropriate information is available, report reductions in nonpoint source pollutant loadings and improvements in water quality resulting from program implementation. For more information about Arizona's NPS Program's goals and structure for the FY15-19 reporting period, please refer to the FY15-FY19 5-Year Plan.

The FY15-19 NPS 5-Year Plan has four broad goals, summarized below:



The NPS-funded activities of each fiscal year within the five-year planning horizon must move ADEQ closer toward achieving these goals. The Strategic Plan Update Table (Section III of this document) details FY15 strides towards meeting these goals, and indicates whether they are on track for completion. A similar format will be used to report on annual progress for the remaining 4 years of the current NPS plan.

II. Executive Summary: A Snapshot of Our Progress

To make this report as useful as possible as both an evaluation tool for EPA and a planning tool for ADEQ, each milestone in the Strategic Plan Update Table was evaluated based both on whether it was on track for the *given year* and whether it was on track for the *overall 5-year planning period*. This allows staff to identify when additional resources may be needed to keep a milestone on track over a period of several years, and plan accordingly for the following fiscal year.

Milestone updates provide information via text the status *for the given reporting year*. Milestones are identified as either "not applicable" (no activity was for the reporting year), "not initiated" (activity was planned but did not occur in the reporting year), "in progress" (activity took place in the reporting year and will be completed in a later year, or the task recurs each fiscal year), or "complete" (task is fully completed for the entire 5-year planning horizon).

In addition, status updates are color-coded to denote whether they are on track relative to the *overall 5-year planning period.* Milestones are identified as either on track ( ), off track ( ), or, at risk of falling off track ( ).

The yellow, or "at risk" status update indicates that while the task may currently be on track (or is not yet due to have been initiated), ADEQ is aware of issues that could threaten the ability of the project to stay on track. The particulars will be clarified in the comments below the related milestone task.

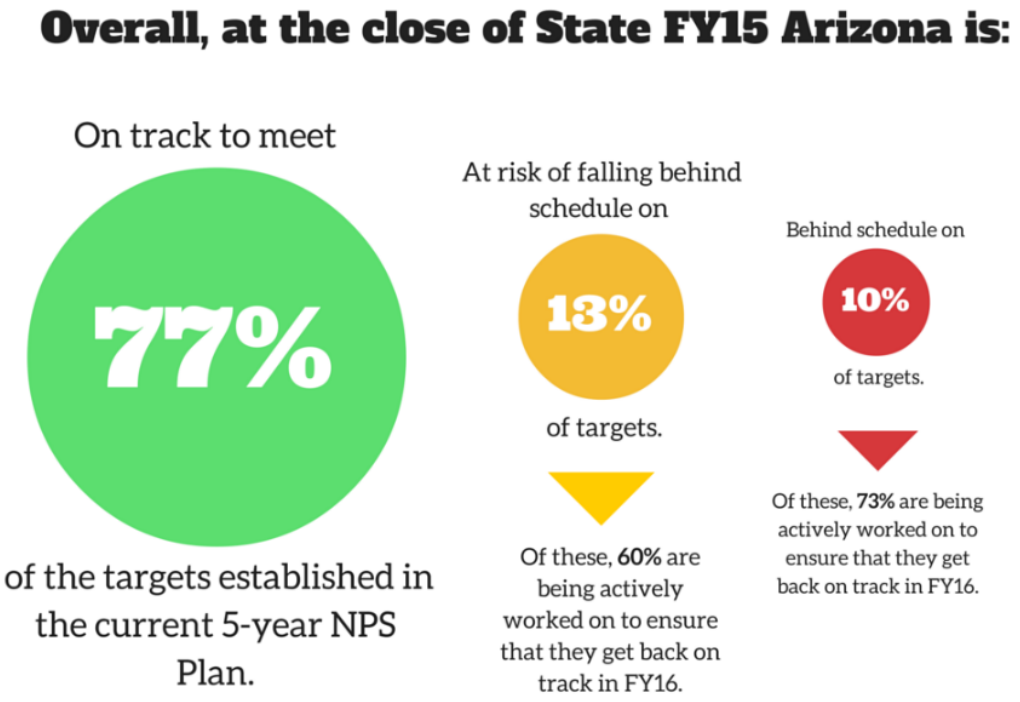


Figure 1: 90% of ADEQ's NPS goals are on track at the close of FY15.

ADEQ was successful in staying on track with 90% of the milestones established in the 5-year plan during state FY15. Of that 90%, 13% were identified as at risk for falling behind schedule in coming years if additional focus and/or resources are not applied. Only 10% of all milestones were considered "off track" at the end of FY15.

Some highlights from FY15 include:

- Integration of TMDLs and watershed planning in the Santa Cruz River, Granite Creek, and San Pedro River watersheds.
- Investigating alternative strategies for improving water quality by engaging new grantees by offering sub-grants through trusted partners such as Arizona Game and Fish Department and the Apache Natural Resources Conservation District.
- Implementing a more robust monitoring strategy
    - Brought on additional staff to focus on evaluating the effectiveness of BMPs and to develop/expand monitoring of intermittent and recreational waters
    - Developed Abbreviated Monitoring Plan (AMP) template for all WQIG projects to clarify effectiveness monitoring expectations for ADEQ and grantees
    - Initiated focused effectiveness monitoring efforts in the San Pedro and LCR watersheds
    - Developed a proposed list of recreational monitoring sites (Appendix A).
- Finalization of biocriteria and bottom deposits implementation plan documents in April 2015. These documents describe the methods for sampling, analysis and interpretation of data associated with our combination narrative/numeric biocriteria and bottom deposits standards. This action clears the way for assessments and listings of biocriteria and bottom deposits in the future when the Impaired Waters Identification Rule (IWIR) is updated, and satisfies the TMDL rule requirement in ARS 49-232F to have implementation procedures adopted prior to listing a waterbody as impaired based on a narrative or biological surface water standard.
- High-level coordination between TMDL and permitting staff on the Middle Gila River selenium and boron TMDLs, resulting in permittees providing feedback to ADEQ earlier in the TMDL development process and being well-informed regarding how their permits would be impacted by the TMDL.
- Volunteers help the Watershed Protection Unit collect data to support TMDLs, watershed planning, and effectiveness monitoring activities (Figure 2). ADEQ trained a total of 89 volunteers over the course of FY15. Having people trained to monitor not only increases our ability to respond to storm events and fill data gaps; it also improves stakeholder engagement, which in turn leads to greater support of planning initiatives and more people interested in implementing projects to improve water quality. It's a win-win!

Figure 2: Volunteer Forrest Sherman participates in an ADEQ/University of Arizona volunteer training event to collect *E. coli* samples on the Santa Cruz River.

- ADEQ completed reports recommending the delisting of 11 impairments in FY15. Delist reports summarize current data and provide justification for delisting the reach/pollutant combination in question in a future water quality assessment. Reports were completed for arsenic and selenium in the East Verde (2); combinations of pH, dissolved cadmium and zinc in two reaches of Mule Gulch (4); boron and selenium in the Gila River (2), and total nitrogen in three reaches of Tonto Creek (3). The Mule Gulch delists were included in the 2012/14 Assessment submitted to EPA during FY15. The remainder will be considered for the 2016 Assessment.

Figure 3: Delist reports were completed for impairments in the East Verde and Gila rivers, Mule Gulch, and Tonto Creek (pictured above)

- ADEQ's Water Quality Division has a goal to improve water quality in 50% of monitored waters over a 5 year period (FY14-18). "Monitored waters" is defined as waters that are included on ADEQ's Master Target List (MTL) (Appendix B). Figure 4 shows the number of MTL waters monitored each month in FY15, the number of those that showed improvement based on ADEQ's Water Quality Index, and the corresponding percent improved for each month. At the end of FY15, ADEQ has documented improvement in 35% of MTL waters, and is well on its way to reaching the 50% goal (Figure 5).

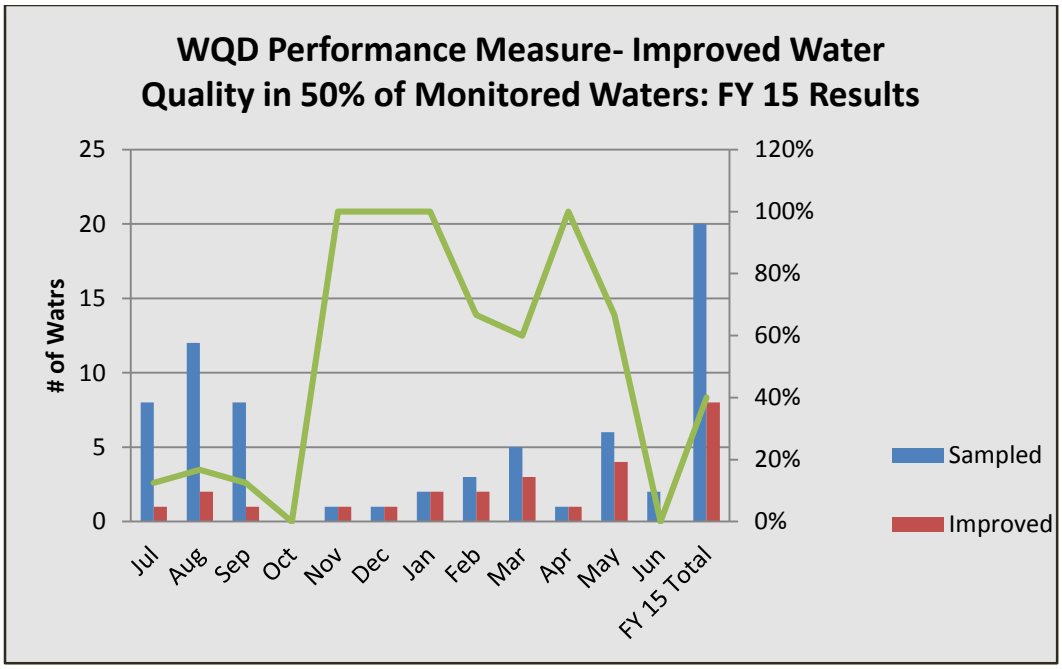


Figure 4: Monthly progress toward meeting the WQD performance measure to improve water quality in 50% of monitored waters.

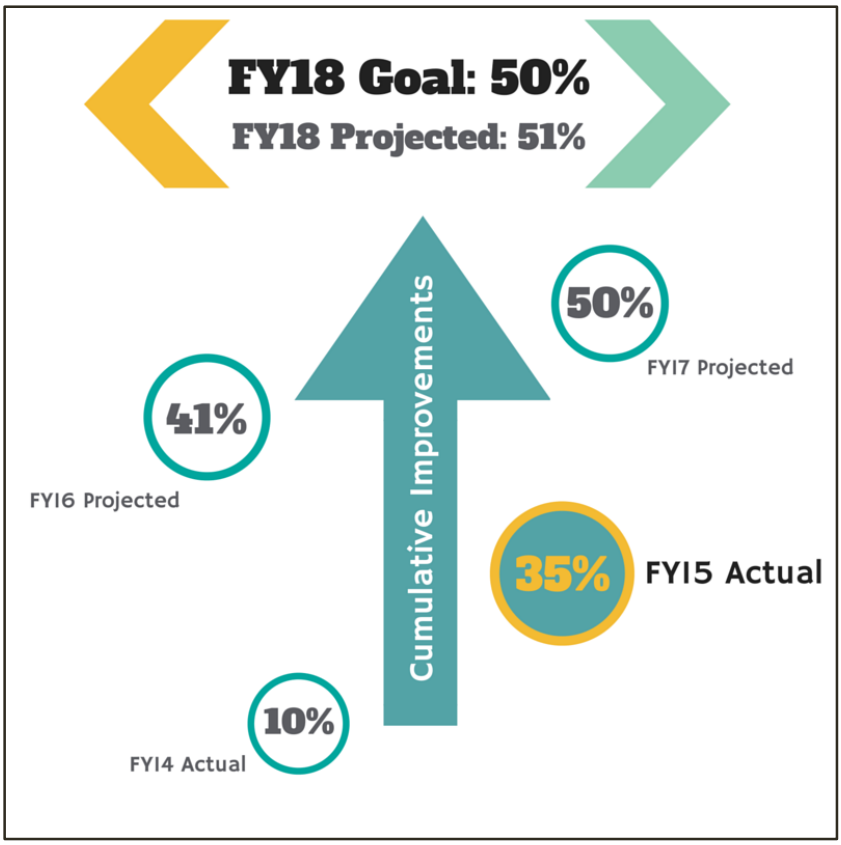


Figure 5: ADEQ is making steady progress toward meeting its 5-year 50% water quality improvement performance measure

III. Strategic Plan Update Table

GOAL #1: IDENTIFY AND PRIORITIZE NPS THREATS AND IMPAIRMENTS TO SURFACE AND GROUNDWATER QUALITY

Objective a: Assess water quality of surface and groundwater.

Strategy i: Conduct statewide surface and groundwater monitoring according to ADEQ's monitoring strategy and analyze data to fulfill requirements of the Clean Water Act and state water statutes.

Milestones:

1. Identify potential NPS contributions to surface and groundwater.

a. Submit Integrated 305(b)/303(d) Report and assessment database to EPA.	(FY16, 18)	In Progress
~~b. Integrated Report identifies priority watersheds or waters for restoration and protection to facilitate State strategic planning for achieving water quality goals.~~ *	~~(FY16, 18)~~	~~In Progress~~

Comments

ADEQ submitted the 2012/2014 Integrated Report to EPA March 10, 2015 and worked with Region 9 staff to answer questions and supply additional data to support their review throughout the remainder of FY15. Planning for the 2016 Assessment began in the second half of FY15. External data uploads into the WQDB continued as the program transitioned to the Monitoring and Assessment Unit. A timeline was developed to keep the project on pace to be submitted to EPA by the end of the state FY16.

**Milestone 1.b occurs twice in this document. It will be omitted from this section of future reports and reported on under Goal 1.b.i.*

2. Increase probabilistic monitoring on intermittent streams.

a. Program development.	(FY15, 16)	In Progress
b. Increased monitoring of intermittent streams (25 sites).	(FY17, 18, 19)	In Progress

Comments

a. Pilot testing of flow sensors on known intermittent streams was completed Nov 2014. Randomized network of flow sensors and intermittent stream target population and map development was completed March 2015.
b. Sensors have been bought and deployed for the intermittent stream pilot test. A total of 18 time lapse cameras have been installed to document stream flow events. Tony Olsen with EPA has assisted with random site selection and over 80 sites have been evaluated to get 20 target sites. An additional 20 sites will be selected in the following year to complete the study. 22 intermittent stream sites have already been sampled, making this target ahead of schedule.

3. Increased monitoring on recreational waters.

a. Monitoring plan development.	(FY15)	Complete
b. Begin monitoring of highly recreated waters (both lakes and streams; 10 sites/year).	(Start FY16, con. annually)	In Progress

Comments

a. Developed proposed list of recreational monitoring sites, which includes a total of 30 waters spread throughout the state (see Appendix A).

b. Outreach continues for recreational monitoring. Monitoring & Assessments staff met with all county health departments (both the environmental side and the human health side). Highly recreated areas have been identified throughout Arizona and policies and procedures have been developed to protect human health in these areas. Future work includes working directly with the Forest Service, which is the primary land owner for the sites ADEQ identified as highly recreated.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, Ambient Monitoring Program, contracted entities as identified

Strategy ii: Develop, revise, and implement water quality standards to support water quality assessments and identification of impairments, sources, and key projects.

Milestones:

1. Water quality standards developed or revised in accord with the Triennial Review Process. *	(FY17)	In Progress

Comments

- Antidegradation Implementation Procedures were finalized in the second half of FY15.
- A meeting was held in January 2015 with Dept. of Health Services and AZ Game and Fish to determine the public process when issuing fish consumption advisories.
- Since the triennial review was very early in the rule-making process it was determined that ADEQ would have to request a rules moratorium exemption from the new Governor. A request for an exemption was submitted in February 2015.
- 27 chlorophyll a and periphyton samples were collected in FY15 in support of the development of the narrative nutrient standard for streams during the spring sampling season. Nutrients (TN & TP) were collected at all sites for all quarters. The Lakes Narrative Nutrient Standards have not been finalized. Data analysis and interpretation has continued and will result in a revised Arizona Trophic State Index based on elevation categories. The revised matrix will likely result in lower chlorophyll-a endpoints and be based upon annual mean rather than peak season values. Additional information is still needed from the contractor to complete the matrix revision.

2. Arizona's Impaired Water Identification Rule is revised to incorporate new water quality standards and better reflect EPA's impaired waters listing guidance. *	(FY17)	Not Applicable

Comments

No activity was planned or occurred during FY15.

**Note: These milestones may be delayed due to state agency rules moratorium. See annual work plans for updates.*

Responsible Parties: Ambient Monitoring Program, TMDL & Assessments Program, Standards and Rule Development Program

Objective b: Prioritize resources toward high-priority waters for both restoration and protection activities.

Strategy i: Prioritize impaired waters for restoration activities and resources.

Milestones:

1. High priority (Targeted and/or MTL) watersheds are identified for directing resources such as 319(h) Grant resources, monitoring, education and outreach, and potential legal authorities. (Annually) In Progress

Comments

No changes were made to the Targeted Watersheds for FY15. The Master Target List (MTL) was updated to capture additional waters where improvement activities have taken or are expected to take place, and to separate out individual waterbody/pollutant combinations. The MTL currently stands at 107 individual waterbody/pollutant combinations.

a. Integrated Report identifies priority watersheds or waters for restoration and protection to facilitate State strategic planning for achieving water quality goals. (FY16, FY18) In Progress

Comments

The 2016 Integrated Report is in progress. Surface Water Section staff will coordinate to ensure that the report identifies priority restoration and protection waters/watersheds.

2. As new watersheds are identified, integrated teams including internal and external partners are created for each to identify resources and potential legal and implementation actions. (Annually/as needed) In Progress

Comments

ADEQ identified and opportunity to work with partners in the Rainbow Lake watershed to develop a plan to address nonpoint source pollutant loading. A team was established including Watershed Protection Unit staff, local ADEQ Liaison Byron James, the Town of Pinetop-Lakeside, and the Show Low Creek Watershed Enhancement Partnership. 9 local volunteers were trained to collect water quality samples to further plan development goals.

3. Internal programs develop common goals for addressing point and nonpoint source concerns in priority watersheds.

a. NPS, Stormwater, and Compliance programs identify shared goals and strategies for the Granite Creek watershed. (FY15) Complete*

Comments

The Watershed Protection Unit will continue to solicit and award projects in the Granite Creek watershed to reduce NPS pollution sources. Stormwater staff will be included on technical reviews for any projects located within the MS4 boundaries to determine eligibility. Stormwater and Compliance staff will continue to be used as the primary tools to address point source discharges and permit violations. **Although the milestone date for this task was listed as FY15 and it is administratively considered complete, ADEQ will continue to provide updates as appropriate on a yearly basis.*

b. NPS, Stormwater, and Compliance programs identify shared goals and strategies for the Oak Creek watershed. (FY15) Complete*

Comments

The Watershed Protection Unit will continue to solicit and award projects in the Oak Creek watershed to reduce NPS pollution sources. Stormwater staff will be included on technical reviews for any projects located within the MS4 boundaries to determine eligibility. Stormwater and Compliance staff will continue to be used as the primary tools to address point source discharges and permit violations. **Although the milestone date for this task was listed as FY15 and is it administratively considered complete, ADEQ will continue to provide updates as appropriate on a yearly basis.*

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, Stormwater & General Permits Program, APP Program, Compliance Program, other programs as identified

Strategy ii: Develop criteria to identify and prioritize high quality or threatened waters for protection activities.

Milestones:

1. Develop criteria for identifying high-priority protection waters. (FY15) In Progress

Comments

Criteria development was initiated but not completed during FY15. Draft criteria will undergo internal review and revisions in Q1 of FY16, and will be submitted to EPA for review and comment by the end of Q2.

2. Identify protection planning priorities and approaches. (FY16) In Progress

Comments

Approaches for identifying protection priorities are included in the draft eligibility criteria for protection projects and will be completed in FY16.

3. Develop outreach materials to educate the public about protection-prioritized watersheds. (FY17) Not Applicable

Comments

No activity was planned or occurred during FY15.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, Ambient Monitoring Program, NPS grantees (e.g. University of Arizona), other programs as identified

Objective c: Identify critical pollutant sources and implementation activities needed to meet and/or maintain water quality standards in impaired and protected waters.

Strategy i: Complete in-progress traditional TMDLs to determine sources and load allocations.

Milestones:

1. Granite Creek - low D.O., *E. Coli* (includes Miller, Butte, and Manzanita Creek tribs - *E. coli*); Watson Lake (nutrients) (FY15) In Progress

Comments

Public comment on the Granite TMDL closed 1/29/15. At the writing of this report, responses to comments are being finalized. The TMDL and responses will be submitted to AAR for public notice in Q1 FY16.

2. Queen Creek - copper, lead (FY16) In Progress

Comments

New timelines for the development of the Queen Creek TMDL were established in FY15. The TMDL is scheduled to be completed in FY16.

3. Mule Gulch - copper (FY16) In Progress

Comments

Freeport McMoRan Copper Queen branch verbally agreed to support ADEQ monitoring efforts. A delist report removing pH, Cd, and Zn from the 303(d) List was completed in Q2 FY15. Equipment will be installed in FY16 to restart sampling to determine current conditions and whether a TMDL will still be required.

4. East Verde River - arsenic (FY15) Complete

Comments

It was determined that the arsenic exceedances in the East Verde river can be attributed to natural conditions and sampling of pooled, stagnant water in the original listing dataset. An arsenic delist report was completed in Q3 FY15.

5. Middle Gila - selenium, boron (FY15) In Progress

Comments

ADEQ delayed the public comment period on this TMDL in order to allow for time to provide direct outreach and education to permittees that would be impacted by the TMDL. The public comment period ended 5/29/15, and responses are currently under internal review. The TMDL will be submitted to AAR for public notice in August 2015.

6. Lower Gila - selenium (potential delist), boron (FY15) Complete

Comments

The originally listed reach was split in 2012 based on changes in the hydrologic flow regime. The upper segment is evaluated as attaining for selenium standards, but inconclusive for boron. Further monitoring of the upper segment under representative flow conditions is recommended due to the small size of the TMDL data set in the upper segment. A delist report for both selenium and boron in the upper segment was completed in Q1 FY15.

Responsible Parties: TMDL & Assessments Program

Strategy ii: Develop comprehensive watershed plans that incorporate TMDLs and create clear paths to pollutant reduction and restoration of water quality and watershed health.

Milestones:

1. Santa Cruz River watershed plan:

a. Initiate local stakeholder involvement.	(FY14)	Complete
b. Complete data collection phase.	(FY15)	In Progress
c. Complete data analysis phase.	(FY16)	Not Initiated
d. Identify priority projects and complete draft plan.	(FY16)	In Progress
e. Submit final plan to EPA for approval.	(FY17)	Not Initiated

Comments

Volunteer monitoring training was conducted in FY15, and a local lab was set up to provide a central location for sample storage and analysis. Due to a lack of rainfall/tributary flow in the study area, data collection did not begin until Q3 FY15. Volunteers continue to monitor, and the need for additional summer storm data will be re-evaluated in Q2 FY16. While currently on track, continued scarcity of flow events could push this milestone off track in FY16. Staff began drafting the background and methods sections of the plan in FY15. Project identification will be initiated in FY16 and re-establishing the active interest of landowners and managers in the watershed will be a primary focus. The final Clean Water Plan is still on track to be completed by the end of FY17.

2. Identify watershed(s) for future plan development. (FY16) In Progress

Comments

ADEQ will focus on updating and expanding the San Pedro WIP to include additional impaired/contributing reaches, and will perform reach-specific TMDL analysis to better inform implementation decisions in the reaches of the San Pedro River from the Mexico border north to Dragoon Wash. In addition, the Rainbow Lake watershed has been identified for future plan development. Additional watersheds will be considered during FY16.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, OBEP, NPS grantees (e.g. University of Arizona)

Strategy iii: Update existing WIPs; create framework for future updates.

Milestones:

1. Update existing WIPs to include analysis of how individual projects relate to the overall load reductions necessary for standards attainment and indicate projects that have been completed (Granite, Oak, San Fran/Blue, San Pedro). (1/year) In Progress

Comments

ADEQ initiated and completed the data collection phase for the Granite Creek plan update. Project identification and load reduction estimates will be completed in FY16. Preliminary planning was also initiated for the San Pedro plan update, and for the future development of a plan for Rainbow Lake. While the completion of one plan each year may not be realistic when plan updates require additional data collection, ADEQ will continue to work on

completing existing and new plans in shorter timelines without sacrificing local involvement and buy-in.

2. Develop and implement a schedule and process for reviewing and updating watershed plans. (FY15) Not Initiated

Comments

The San Pedro WIP update and expansion was scheduled for FY16.However, a formal schedule has not yet been developed for ongoing plan updates.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees (e.g. University of Arizona)

Strategy iv: Pursue alternative restoration approaches for situations when a full "9 Key Element" plan may not be necessary to address a pollutant source.

Milestones:

1. Complete focused TMDLs/data summaries for work plan-identified watersheds where alternative funding sources are available to address sources of pollution.

   a. Big Bug (FY15) In Progress

   b. Additional projects as identified in annual work plans. (TBD) In Progress

Comments

Two additional samples for the Big Bug data summary (1 impairment) were collected in Q1 ending pre implementation sampling. All water quality data were shared with USFS to aid them in securing funding for implementation of the EE/CA. The data summary draft was submitted for internal review 12/4/14. Finalization of the draft was delayed due to other projects, but will be completed in FY16.

Additional data summaries were completed for Tonto and Christopher Creeks (5 impairments) and for Pinto Creek (4 impairments).

2. Submit list of watersheds to EPA where alternative planning documents (for protection projects and other situations as outlined in the EPA Guidelines) may be used to justify use of NPS funding for project implementation. (FY17) In Progress

   a. Develop alternative planning documents for work plan-identified watersheds. (See Work Plan) Not Applicable

   b. Implement alternative plans as prioritized by annual work plans. (See Work Plan) Not Applicable

Comments

No alternative plan development or implementation tasks were included in the FY15 workplan. However, during FY15 staff initiated the development of an alternative plan template that addressed the required elements outlined in the NPS guidance. At this time, wildfire response is seen as the primary situation in which an alternative plan may be pursued; however, staff will continue to assess other restoration and protection opportunities in the state to develop an alternative planning priority list to EPA during or before FY17.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees (e.g. University of Arizona

GOAL #2: IMPLEMENT PROJECTS TO PREVENT AND REDUCE NPS POLLUTANT CONTRIBUTIONS TO HIGH PRIORITY IMPAIRED AND PROTECTED WATERS.

Objective a: Implement projects to address impairments in Targeted Watersheds.

Strategy i: Implement **Granite Creek** WIP

Milestones:

1. Complete implementation of Whipple Street Detention Basin and Prescott Community Center projects. (FY15) Completed

Comments

Project closed on June 30, 2015. Tasks carried out during this project include public involvement and planning through WIC meetings, general public meetings, and boots-on-the ground BMP installation of two large rain gardens as part of a green infrastructure plan to keep *E. Coli* from reaching Granite Creek. There is ongoing water quality monitoring at select sites of Granite Creek above and below the rain gardens by Prescott Creeks staff.

2. Identify projects to pursue funding. (Annually) In Progress

Comments

Confirmed the eligibility of and awarded a funding agreement to the City of Prescott for the Rodeo Grounds project, identified as a high priority in the initial Granite Creek WIP. The need for additional manure management, green infrastructure, and urban agriculture BMPs in the Miller Creek subwatershed was identified as part of the WIP update. These will be described in greater detail in the final update, scheduled for completion in Q1 FY16.

3. Implement at least one project per grant cycle as funding and competitive project scoring allows. (See NPS Annual Report) In Progress

Comments

The Rodeo Grounds project, identified as a high priority in the Granite Creek WIP, was awarded in FY15 parallel to WQIG Cycle 16.

4. Reduce nutrient loads to Watson Lake by 5% (baseline = TMDL). (FY19) In Progress

Comments

Projects continue to be identified and awarded in the Granite Creek watershed. Effectiveness monitoring will begin in the Granite Creek watershed in FY16 to aid in the determination of whether we are on track to meet this load reduction goal.

5. Set percent reduction goals for *E. coli* loads to Granite Creek. (FY15) In Progress

Comments

Percent load reduction goals for *E. coli* in Granite Creek will be calculate based on and pending EPA approval of the Granite Creek TMDL. The TMDL as anticipated to complete final public notice and be submitted to EPA in Q2 FY16.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees, other programs as identified

Strategy ii: Implement **Oak Creek** WIP

Milestones:

1. Complete Implementation of Midgely Bridge project. (FY15) Completed

Comments

Implementation and final review of the Midgely Bridge project was completed in July 2014.

2. Complete Implementation of Oak Creek Ambassadors project. (FY16) In Progress

Comments

The decision was made to fund the Oak Creek Ambassadors project for one additional year to allow for collection of post-implementation data and to provide time to create a transition plan so that the program can become self-sustaining in the future. The current Ambassadors grant is set to expire in May of 2016.

3. Identify projects to pursue funding. (Annually) In Progress

Comments

ADEQ staff have spoken with stakeholders regarding projects to address high recreation areas in the Spring Creek and Pumphouse Wash subwatersheds. Applications are anticipated in FY16. In addition, the local watershed group established a manure share program to connect livestock owners with those interested in securing manure for use as fertilizer. ADEQ has discussed working with the watershed group to expand this program statewide.

4. Implement at least one project per grant cycle as funding and competitive project scoring allows. (See NPS Annual Report) In Progress

Comments

WQIGs were awarded in the Oak Creek watershed in both Cycle 15 (Settler's Rest) and Cycle 16 (Oak Creek Ambassadors).

5. *E. coli* loads to Oak Creek are reduced by 15% (baseline = TMDL). (FY19) In Progress

Comments

ADEQ is actively supporting implementation projects to reduce bacteria loading in the watershed. Oak Creek has been identified as an effectiveness monitoring focus watershed for FY17, at which point the overall impact of projects to date on bacteria loading will be assessed and documented.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees, other programs as identified

Strategy iii: Implement **San Pedro** WIP

Milestones

1. Begin implementation of San Pedro WIP projects. (FY15) Completed

Comments

WIP project implementation was initiated in the San Pedro in FY15. Future projects funded in this watershed during the current 5-year planning cycle will be reported under Milestone #3 of this strategy.

2. Identify projects to pursue funding. (Annually) In Progress

Comments

Additional phases of the Sands Ranch project as well as additional brush management projects were identified and awarded during FY15.

3. Implement at least one project per grant cycle as funding and competitive project scoring allows. (See NPS Annual Report) In Progress

Comments

Two projects were awarded in the San Pedro watershed in Cycle 15, and an additional two in Cycle 16.

4. Set reduction goals for *E. coli* loads to the San Pedro River. (FY15) Not Initiated

Comments

ADEQ has determined that more reach-specific TMDL values should be calculated to better quantify the load reduction needs from the various tributary and main stem reaches in the upper watershed. The San Pedro WIP update, which will initiate in FY16, will include TMDL calculations.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NRCS, NPS grantees, other programs as identified

Strategy iv: Implement **San Francisco/Blue River** WIP

Milestones:

1. Complete implementation of Clifton Restroom project. (FY15) In Progress

Comments

Changes in staff and management at the grantee level resulted in delays on this project. The timeline has been revisited and extended to 12/31/15. The project is on track for completion by this date.

2. Complete implementation of San Francisco River Restroom ~~and Menges Ranch projects.~~ (FY16) In Progress

Comments

The San Francisco River Restroom project is scheduled to be completed 12/31/15, however, they are behind schedule as of the writing of this report.

WQIG staff are working closely with the grantee to help get the project back on track. The Menges Ranch project was discontinued at the request of the grantee prior to implementation.

3.	Identify projects to pursue funding.	(Annually)	In Progress

Comments

ADEQ and Gila Watershed Partnership (GWP) staff discussed the potential use of WQIG funding to support septic tank decommissioning near Luna Lake to help address *E. coli* loading. The project proposal was brought before the Rural Water Infrastructure Committee (RWIC) for funding consideration by all RWIC partners, including ADEQ. The GWP will formally present the proposal to the committee in early FY16.

4.	Implement at least one project per grant cycle as funding and competitive project scoring allows.	(See NPS Annual Report)	Not Initiated

Comments

No new project applications were submitted for the San Francisco/Blue watershed during FY15.

5.	*E. coli* loads to the San Francisco/Blue are reduced by 10% (baseline = 2010 IR data).	(FY19)	In Progress

Comments

ADEQ staff conducted pre-implementation monitoring for two restroom projects in the San Francisco/Blue watershed during FY15. Post-implementation data will be collected in FY16 to determine progress toward meeting the 10% reduction goal. Staff will continue to pursue additional projects in this watershed.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees, other programs as identified

Strategy v: Implement projects in the **Little Colorado River** Headwaters Watershed

Milestones:

1.	Using existing Upper Little Colorado River watershed plan, Natural Channel Design planning document and ADEQ project evaluations as prioritization tools, implement at least one project per grant cycle as funding and competitive project scoring allows.	(See NPS Annual Report)	In Progress

Comments

The Apache NRCD was awarded a grant in Cycle 15 to implement multiple projects throughout the LCR headwaters watershed to address erosion and sedimentation. Working the Natural Channel Design, the NRCD was able to identify enough projects and willing project partners to lead to the development of a follow-up LCR-focused WQIG cycle to be released by ADEQ in Q1 of FY16.

NPS staff also coordinated with Compliance staff to recommend a high-impact Supplemental Environmental Project (SEP) to mitigate an APP permit violation that occurred in the LCR Headwaters watershed. As a result, a road crossing at the base of Coyote Creek that was a significant source of sediment to the LCR was repaired during FY15. NPS staff will work with Compliance and the involved parties to calculate resulting load reductions during FY16.

2.	Sediment loading into LCR from the Coyote Creek subwatershed is reduced by 21% (baseline = 2010 IR data).	(FY19)	In Progress

Comments

Effectiveness monitoring for the LCR Headwaters watershed began in spring 2015, and implementation activities are ongoing. Pre-implementation load reduction estimates for Cycle 15 projects in the LCR watershed indicate the potential to reduce as much as 20% of the annual sediment loading from Coyote Creek.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NRCS, NPS grantees, other programs as identified

Strategy vi: Implement **Santa Cruz River** WIP

Milestones:

1.	Release funding opportunity upon completion of watershed plan.	(FY18)	Not Applicable

Comments

The development of the Santa Cruz River Clean Water plan is underway. ADEQ is on track to release a funding opportunity for this watershed in FY18.

2.	Implement at least one project in support of the Santa Cruz watershed plan.*	(FY19)	Not Applicable

Comments

The development of the Santa Cruz River Clean Water plan is underway. ADEQ is on track to begin implementing plan-supported projects in this watershed by FY19.

**Note: Implementation in this watershed may begin prior to plan completion as "straight to implementation" projects are identified.*

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, OBEP, NPS grantees, other programs as identified

Strategy vii: Implement portions of the Boulder Creek TMDL Implementation Plan pertaining to the lower tailings pile at the former Hillside Mine site.

Milestones

1.	MOU between ADEQ, ASLD, and ADOA/State Risk detailing long-term commitments to the Hillside project is finalized.	(FY15)	Completed

Comments

ISA was completed at the beginning of FY15. ADEQ is in discussions with ADOA/State Risk to revise the scope of work to remove State Risk's self-imposed cap of $400,000 in cash match. State Risk has committed to ensuring that the cash match needs of the project are met, even in excess of $400,000.

2. Implementation planning for project is completed and agreed upon by all involved parties. (FY15) In Progress

Comments

Planning for the implementation phase of the Hillside Mine project was ongoing through FY15. Initial technical surveys and reconnaissance of potential road routes was conducted, with two new potential road routes identified. As of the close of FY15, all project partners were in the process of determining which road route to proceed with. Planning for this project should be finalized mid-FY16.

3. Project implementation complete. (FY16) Not Initiated

Comments

Current project scheduling anticipates implementation to be completed in FY17.

4. Total zinc loads to Boulder Creek are reduced by 25%. (FY18) Not Initiated

Comments

Historic data averaged 1574 ug/L dissolved Zn. Post-upper tailings pile remediation data equaled 1061 ug/L, which appears to be a 33% reduction. However, this is based on only one post-implementation sample. Further data is needed to determine load reductions.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, ASLD, ADOA/State Risk, other partners as identified

Strategy viii: Implement projects in the Tonto/Christopher Creek watershed

Milestones

1. Implement at least one project per grant cycle as funding and competitive project scoring allows. (See NPS Annual Report) Not Initiated

Comments

Tonto Creek was not identified as a targeted watershed for FY15 funding cycles due to the lack of a developed implementation plan.

2. Document progress toward achieving required NPS load reductions to meet water quality standards. (FY15) In Progress

Comments

A delist report for Tonto Creek/nitrogen was drafted in FY15 and will be finalized in FY16.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, USFS, NPS Grantees, other partners as identified

Objective b: Ensure that WQIG funding is invested in the projects that are most likely to provide long-term load reductions to achieve watershed-wide improvements.

Strategy i: Require that implementation grant proposals demonstrate:

- Connection to an approved watershed-based plan
- The estimated pollutant load reductions and how they relate to the reductions needed to meet water quality standards (if established in an approved plan)
- That the applicant has sufficient resources, technical skills, and commitments to implement the project and provide for long-term maintenance
- How education and outreach components will encourage water quality improvements, behavior changes, and citizen involvement
- How project success will be measured in both the short and long term

Milestones

1. Revise grant materials to account for NPS guideline changes. (FY15; as needed) Completed/ In Progress

Comments

Grant materials (manual, request for applications, and presentations) were updated to clarify application questions and eligibility requirements during FY15.

2. Conduct training on monitoring plan development. (FY15, 16) In Progress

Comments

Developed Abbreviated Monitoring Plan (AMP) template for grantees and worked with individual grantees to complete AMPs for all current and newly awarded projects.

3. Provide technical assistance to applicants for the development and implementation of projects. (Annually) In Progress

Comments

Staff provided ongoing technical assistance for current and potential WQIG projects in the form of BMP selection and design recommendations, training on visual and analytical monitoring, budget and report assistance, and addressing general technical questions as they arose.

4. Plan, market, and oversee WQIG funding opportunities. (Annually) In Progress

Comments

WQIG cycles 15 and 16 were completed during FY15.

Responsible Parties: Grants & Outreach Unit, NPS grantees (e.g. University of Arizona), TMDL & Assessments Program

Strategy ii: Oversee WQIG projects and contracts to ensure that deliverables and timelines are met, and that anticipated outcomes are achieved.

Milestones

1. Review projects at least quarterly to ensure that timelines and deliverables are on track. Work with grantees and subgrantees as necessary to resolve issues as they arise and schedule site visits. (Annually) In Progress

Comments

Project management staff worked on a total of 26 WQIG projects during FY15. Projects success was reviewed at least quarterly for all projects. Site visits were conducted for all on-the-ground projects. Projects initially awarded during FY15 are listed in Appendix C.

2. Review, approve, and process reimbursement requests. (Annually) In Progress

Comments

Staff reviewed reports and reimbursement requests for 26 projects over the course of FY15, totaling $861,206.81 in WQIG funds.

3. Conduct project close-out site visits to ensure that all work was completed and long-term management plans are in place. (Annually) In Progress

Comments

All on-the-ground WQIG projects that closed in FY15 received close-out site visits to confirm satisfactory project completion.

Responsible Parties: Grants & Outreach Unit

Objective c: Implement projects to protect healthy surface and groundwater resources

Strategy i: Utilize prioritization scheme identified in Strategy 1.b.ii to rank waters for protection projects and implement protection projects.

Milestones:

1. Release funding opportunity for protection projects. (FY17) In Progress

Comments

ADEQ began drafting protection funding criteria in FY15. A final draft is expected to be shared with EPA for review and comment in Q2 FY16. A protection funding opportunity will be made available pending EPA approval.

2. Receive and award applications for protection projects. (FY17) Not Applicable

Comments

No activity on this task was planned or completed for FY15.

3. No water bodies or reaches in protection-prioritized waters are moved to the 303(d) list for the 2018 assessment. (FY18) Not Applicable

Comments

No activity on this task was planned or completed for FY15.

Responsible Parties: Grants & Outreach Program, other programs as identified for technical support purposes

GOAL #3: COORDINATE EFFORTS OF VARIOUS PROGRAMS WITHIN ADEQ WITH OTHER AGENCIES AND PARTNERS TO PREVENT AND REDUCE NPS POLLUTION IMPACTS TO SURFACE AND GROUNDWATER.

Objective a: Utilize legal authorities to reduce NPS contributions to surface and groundwater.

Strategy i: Coordinate with internal Groundwater, Compliance, Source Water Protection and 401 programs and with delegated county authorities to ensure that permit reviews and inspections take potential nonpoint source contributions to surface water impairments into account, and to identify potential nonpoint source threats to drinking water sources.

Milestones:

1. Update Groundwater, Compliance, Source Water Protection, and 401 Certification programs and delegated authorities on changes to NPS targeted watersheds. (Annually/as needed) In Progress

Comments

There were no changes to the NPS targeted watersheds during FY15. However, the Groundwater/Permits, Compliance, Source Water Protection and 401 cert programs stayed coordinated with the overall NPS program in the following ways:

- Groundwater/Permits:
  - Active participation in the Middle Gila TMDL process, including permit limit calculations, stakeholder outreach, and document reviews.
  - Technical review of WQIG applications
- Compliance:
  - Tracking progress of Supplementary Environmental Projects (SEP) in the LCR targeted watershed (Coyote Creek)
  - Working with private middle pile owner at the Hillside Mine site in the Boulder Creek targeted watershed.
- Source Water:
  - Joint participation with the Watershed Protection Unit in ACWA/Groundwater Protection Council webinar series

2. Evaluate potential for agricultural use pesticide active ingredients to reach/impact groundwater. (Annually) In Progress

Comments

Reviewed and approved 15 biopesticide waivers, 14 active ingredients not on the Groundwater Protection List (GWPL), and 8 active ingredients placed on the GWPL. Presented an update on the state of the program to the Western Plant Health Association (WPHA) on April 30, 2015.

3. Publish the annual Groundwater Protection List (GWPL). (Annually) In Progress

Comments

The GWPL was published 12/20/14.

2. Conduct inspections of biosolids facilities to ensure that disposal and/or surface applications are not impacting surface/groundwater quality. (Annually) In Progress

Comments

13 biosolids facilities were inspected in FY15:

- Wastewater treatment plants that land apply or surface dispose biosolids: 5
- Large commercial applicators: 5
- Small commercial applicators: 3

Responsible Parties: APP Program, Groundwater Program, Source Water Protection Program, 401 Certification Program, Community Liaisons/other agency outreach staff

Strategy ii: Coordinate with state and federal partners to ensure that grazing permits and resource management plans, specifically in targeted watersheds, appropriately consider water quality concerns.

Milestones:

1. ADEQ is included in the development and review of Coordinated Resource Management Plans in priority watersheds. (FY16) In Progress

Comments

ADEQ participated in CRM meetings during FY15 but did not make measurable progress toward this goal.

Responsible Parties: Grants & Outreach Program, CRM Partners (including NRCS and ASLD), TMDL & Assessments Program

Objective b: Encourage public involvement in locally-driven efforts to improve and protect water quality.

Strategy i: Provide technical assistance, education, and training to empower watershed partners to develop and implement projects supported by watershed plans

Milestones:

1. Provide education and training opportunities on water quality topics of concern to watershed partners. (As requested) In Progress

Comments

Staff participated heavily with stakeholders in the Rainbow Lake, Granite Creek, Oak Creek, and San Pedro and Santa Cruz watersheds in FY15. A total of 89 volunteers were trained across the state to collect data in support of watershed planning projects. Staff also participated in outreach events and delivered presentations for the Woodruff Domestic Water Improvement District, Earth Day at Phoenix College, the Arizona Riparian Council, NAU, Coconino NRCD Forum, the Little Colorado River Winter Watershed Conference, and multiple landowners and managers in the San Pedro and Little Colorado River targeted watersheds.

2. Conduct workshops in watersheds with completed watershed plans to encourage the implementation of high-priority projects. (Annually) In Progress

Comments

Grant workshops were held in Clifton (San Francisco watershed), Sedona (Oak Creek watershed), and Tombstone (San Pedro watershed) during FY15. The remaining targeted watershed stakeholders were reached via a web-based workshop.

3. WQIG FAQ, alternative/match funding resources, and interactive map with links to project information are added to website to make program information readily accessible to the public. (FY15) In Progress

Comment

ADEQ's Communications office is currently planning and implementing major changes to the overall format and content of the agency website. An FAQ has been drafted and will be shared on the new version of the website in FY16.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees (e.g. University of Arizona), Community Liaisons/other agency outreach staff, Communications Office, Data Management Program

Strategy ii: Develop outreach strategies that identify direct benefits of project implementation beyond water quality improvements to stakeholders.

Milestones:

1. Coordinate with NRCS to produce outreach materials that highlight soil conservation, range health, and other potential secondary benefits of WQIG project implementation. (FY15, 16) Not Initiated

Comment

No activity occurred during FY15. This project will be initiated in FY16.

2. Applications for WQIG funding are received from all eligible targeted watersheds. (Annually) In Progress

Comment

No applications were received from the San Francisco River watershed for Cycle 16.

3. Applications for project leveraging Farm Bill funding to improve water quality are received from all NWQI watersheds. (Annually) In Progress

Comment

Applications were received from the Coyote Creek and Road Tank NWQI watersheds during FY15. No applications were received from Greenbrush Draw or Spring Creek. ADEQ will work with local NRCS and NRCD staff to increase outreach to stakeholders in these areas.

Responsible Parties: Grants & Outreach Program, NRCS

Strategy iii: Train volunteer monitoring groups to collect credible data that can be used in ADEQ water quality assessments.

Milestones:

1. Partner with U of A to implement a startup volunteer monitoring support program. (FY15, 16) In Progress

Comment

ADEQ and U of A worked together to establish training protocols and field forms during FY15 which were put to use in the Santa Cruz, Oak Creek, Rainbow Lake, San Francisco/Blue, and Granite Creek watersheds.

2. Develop training protocols that can be used throughout the state for volunteer monitoring groups. (FY15) In Progress

Comment

U of A and ADEQ staff worked together to create field forms that can be easily adapted for volunteer groups around the state. Updated volunteer registration forms were obtained from ADOA and all volunteers are required to fill them out and submit them to ADEQ prior to participating in sampling activities. ADEQ will continue to add to and update volunteer training materials as the program develops, and seeks to create more clearly defined standard work for new volunteer groups during FY16.

3. Hire internal staff to support and oversee volunteer monitoring. * (FY 17) Not Applicable

Comment

Hiring of a Volunteer Monitoring Coordinator remains a FY17 goal at this time. In the meantime, internal staff are working with U of A to train volunteers in targeted watersheds.

4. Targeted Watersheds have at least one active volunteer monitoring entity, where feasible. † (FY 17) In Progress

Comment

There are active volunteer monitoring activities occurring in the Oak Creek, Granite Creek, and San Francisco/Blue River targeted watersheds, as well as in the Rainbow Lake watershed. Volunteers in the San Pedro will be trained during FY16 as part of the development of the San Pedro Clean Water Plan. Timeline planning for trainings in the Tonto and Upper LCR watersheds will occur in FY16.

5. Credible external data from priority watersheds is incorporated into the surface water quality database for use in future assessment reports. (Annually) In Progress

Comment

Data was collected by stakeholders in the Granite Creek and Oak Creek watersheds during FY15 for inclusion in ADEQ's water quality database.

**Note: Completion of this milestone is dependent on the availability of funding in future fiscal years.*

†Note: Factors that impact the practicality of volunteer monitoring may include type of monitoring required to track improvements and the proximity of local stakeholders to the project/monitoring sites.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees (e.g. University of Arizona), Community Liaisons/other agency outreach staff

Objective c: Encourage and work with land and resource management agencies, tribal authorities, bordering states and Mexico to identify and mitigate nonpoint source pollution impacts in Arizona.

Strategy i: Continue to strengthen relationships with other agencies, tribes, bordering states, and Mexico to encourage development of effective water quality improvement projects and avoid project practices that would contribute to impairment of surface or groundwater quality or degradation of protected watersheds.

Milestones:

1. Work with NRCS to develop and implement monitoring strategies for existing and new NWQI projects. (Annually) In Progress

Comments

Watershed Protection Unit staff worked with local and state-level NRCS staff to secure information about NWQI project activities and locations for a total of 5 NWQI projects during FY15. Effectiveness monitoring of NWQI projects was included in the development of sampling plans for both the Upper LCR and San Pedro watersheds.

2. Memoranda of Understanding with agencies and tribes updated to better support this 5-year strategic plan. This list reflects planned MOU activities as of July 2014 and may be updated in the future.

a. Update USFS MOU to reflect new NPS program strategies and leverage partnership opportunities. (FY15) Completed

Comments

The USFS MOU update was finalized in October 2014. Existing goals outlined in the MOU were determined broad enough to cover NPS planning goals, and both parties agreed that specific annual goals were better suited to being determined at the annual MOU meetings.

b. Develop MOU with AZG&F to facilitate increased fish tissue and recreation area monitoring. (FY16) Completed

Comments

ADEQ and AZG&F staff met to discuss how to best coordinate monitoring activities in 2015. Both agencies determined that in lieu of a formal MOU, a coordination meeting would be held annually with informal contact throughout the year.

c. Coordinate with ASLD to develop an MOU that facilitates the use of NPS funds to implement projects on State Lands. (FY19) Not Applicable

Comments

No activity on this task was planned or completed for FY15.

3. ADEQ participation in coordinate resource planning efforts of federal and state agencies (e.g. planning, federal action reviews). (Annually) In Progress

Comments

The Water Quality Division participated in 46 environmental reviews during FY15.

4. Participation in meetings with binational stakeholders regarding issues and remedies to water quality impairments in shared watersheds across the US/Mexico border including the targeted Santa Cruz and San Pedro watersheds. (Annually) In Progress

Comments

Staff continued working on border issues in the Santa Cruz and San Pedro watersheds. Specific activities are described in detail in the FY15 4th Quarter Output Report, submitted to EPA on 8/17/15, under Task 1.5.5 (pg 78).

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, OBEP, NRCS, USFS, AZG&F, ASLD, WQD Director's Office, APP Program, Community Liaisons/other agency outreach staff, Administrative Counsel

GOAL #4: EVALUATE AND IMPROVE THE EFFECTIVENESS OF THE NPS PROGRAM AND COMMUNICATE SUCCESSES.

Objective a: Evaluate WQIGs and TMDL implementation activities to determine effectiveness toward achieving water quality standards.

Strategy i: Conduct effectiveness monitoring and BMP evaluations in watersheds prioritized on ADEQ's Master Target List (MTL), including NWQI waters.

Milestones:

1. MTL monitoring and evaluation priorities identified for each fiscal year. (See Work Plan) In Progress

Comments

FY15 MTL monitoring and evaluation focuses on Boulder Creek, LCR Headwaters, Turkey Creek, Tonto Creek, Christopher Creek, Pinto Creek (and tributaries), the San Pedro River, and Miller Creek.

2. Site visits, evaluations, monitoring and/or modeling conducted for projects in work plan identified MTL waters. (Annually) In Progress

Comments

Sampling was conducted in all of the FY15 prioritized MTL waters over the course of the fiscal year. Project site visits and/or BMP evaluations were conducted in all but Turkey, Tonto, and Christopher creeks, where there are no active projects.

3. 10% of MTL waters monitored on an annual basis show improvements to water quality (50% of all monitored waters over 5-year time frame). (Annually) In Progress

Comments

As of the close of FY15, **35%** of the water bodies monitored for the MTL have shown improvement based on Water Quality Index calculations.

4. Coordinate with NRCS to develop a monitoring plan for ADEQ assistance in NWQI watersheds. (FY15) Completed

Comments

Sampling and analysis plans have been completed for the LCR Headwaters and San Pedro River watersheds. These include monitoring both CWQ 319 and NWQI funded projects. These plans may be updated in the future as additional projects from both funding sources are awarded.

5. Coordinate with NRCS to conduct effectiveness monitoring in the Coyote Creek watershed and other NWQI watersheds as identified in state FY work plans. (Annually) In Progress

Comments

Watershed Protection Unit staff met with local NRCS staff in the San Pedro and LCR watersheds throughout FY15 to discuss past, current, and potential future NPS and NWQI projects. NRCS staff, particularly in the field offices, have been invaluable as a resource for making connections with agricultural stakeholders.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, other programs/monitoring staff as identified

Strategy ii: Increase staff capacity to recommend, design, and evaluate the effectiveness of BMPs.

Milestones:

1. Provide BMP training to staff. (Annually) In Progress

Comments

Staff participated in the following trainings in FY15 to improve capacity to recommend, design, and evaluate the effectiveness of BMPs:

- Tips to Engage Non-landowner Operators in Conservation (webinar, September 2014)
- Explaining Stream Behavior to the Public (webinar, October 2014)
- Road Drainage and Water Harvesting Workshop (January 2015)
- Arroyo Restoration and Stabilization Workshop (January 2015)
- The Bio-geo-socio-chemistry of Riparian Zones (webinar, February 2015)
- Geomorphic Processes and Restoration of Natural Channels in the Arid Southwest (March 2015)
- SWAT Modeling Training (March 2015)

2. Hire staff with expertise in BMP design and evaluation. (FY15) Completed

Comments

The Watershed Protection Unit hired a BMP Effectiveness Coordinator, Ron Tiller, in October of 2014.

3. Develop updated BMP guidance for WQIG applicants based on effectiveness monitoring. (FY19) Not Applicable

Comments

No activity was planned or occurred on this task in FY15.

Responsible Parties: Grants & Outreach Program, TMDL & Assessments Program, NPS grantees, other contractors as identified

Objective b: Document and communicate program successes and lessons learned.

Strategy i: Report to EPA and the public on NPS program success

Milestones:

1. Report annually on NPS 5-year Plan progress. (Annually) In Progress

Comments

The FY14 Nonpoint Source Annual Report was submitted to EPA in November 2014.

2. Report on state fiscal year work plan progress. (Semi-annually) In Progress

Comments

The FY14 Final Output Report was submitted to EPA in August 2014. The FY15 Midyear Workplan Report was submitted in February 2015. The FY15 4th Quarter Final Output Report has been submitted to EPA as of the writing of this document (August 2015) and is a deliverable of the FY16 workplan.

3. Develop success stories to document de-listings (WQ-10) as well as documentation of interim progress toward restoration (SP-12) in accordance with EPA requirements. (Minimum 2 stories and/or documentations of progress per year). In addition, progress summaries for non WQ-10 or SP-12 watersheds may be identified on an annual basis. (See Work Plan) In Progress

Comments

1. The draft Pinto SP-12 was submitted to EPA for comment in April 2015. Comments were returned to ADEQ in mid-June 2015. Staff will finish revisions to the Pinto SP-12 and resubmit to EPA in early FY16.
2. Effectiveness monitoring data was evaluated for Tonto Creek, resulting in a documentation of progress made toward meeting water quality standards in the form of the Tonto Creek Delist Report. This report recommends that Reaches 013A and 013B of Tonto Creek be delisted for Total Nitrogen based on post-implementation project data collection. The report will be finalized in FY16.

4. Report to EPA on effectiveness of NWQI implementation activities. (Annually/as requ. by EPA) Not applicable

Comments

No NWQI effectiveness reporting was due during FY15.

5. Report mandated elements for all projects in GRTS, including load reduction estimates as applicable. (Annually) In Progress

Comments

GRTS load allocations and mandated elements were updated prior to the February 2015 deadline.

Responsible Parties: Grants & Outreach Unit Program, TMDL & Assessments Program, NRCS, other programs as identified

Objective c: Update NPS Plan as needed

Strategy i: Update plan as needed to reflect shifting priorities as they occur over the current planning horizon and to re-frame goals for the next 5-year planning horizon.

Milestones:

1. NPS Plan is evaluated for update needs. (Annually) In Progress

Comments

The NPS plan underwent a minor revision in December 2014 to correct information in Table 2. EPA was notified at the time of the correction and the revised version was placed on the ADEQ website.

2. Updates, if required, are submitted to EPA and a review and approval schedule is established. (As needed) Not applicable

Comments

No major updates to the plan occurred during FY15.

3. Initial FY20-25 5-year NPS Plan draft plan submitted to EPA. (FY18) Not applicable

Comments

No activity was planned or occurred during FY15.

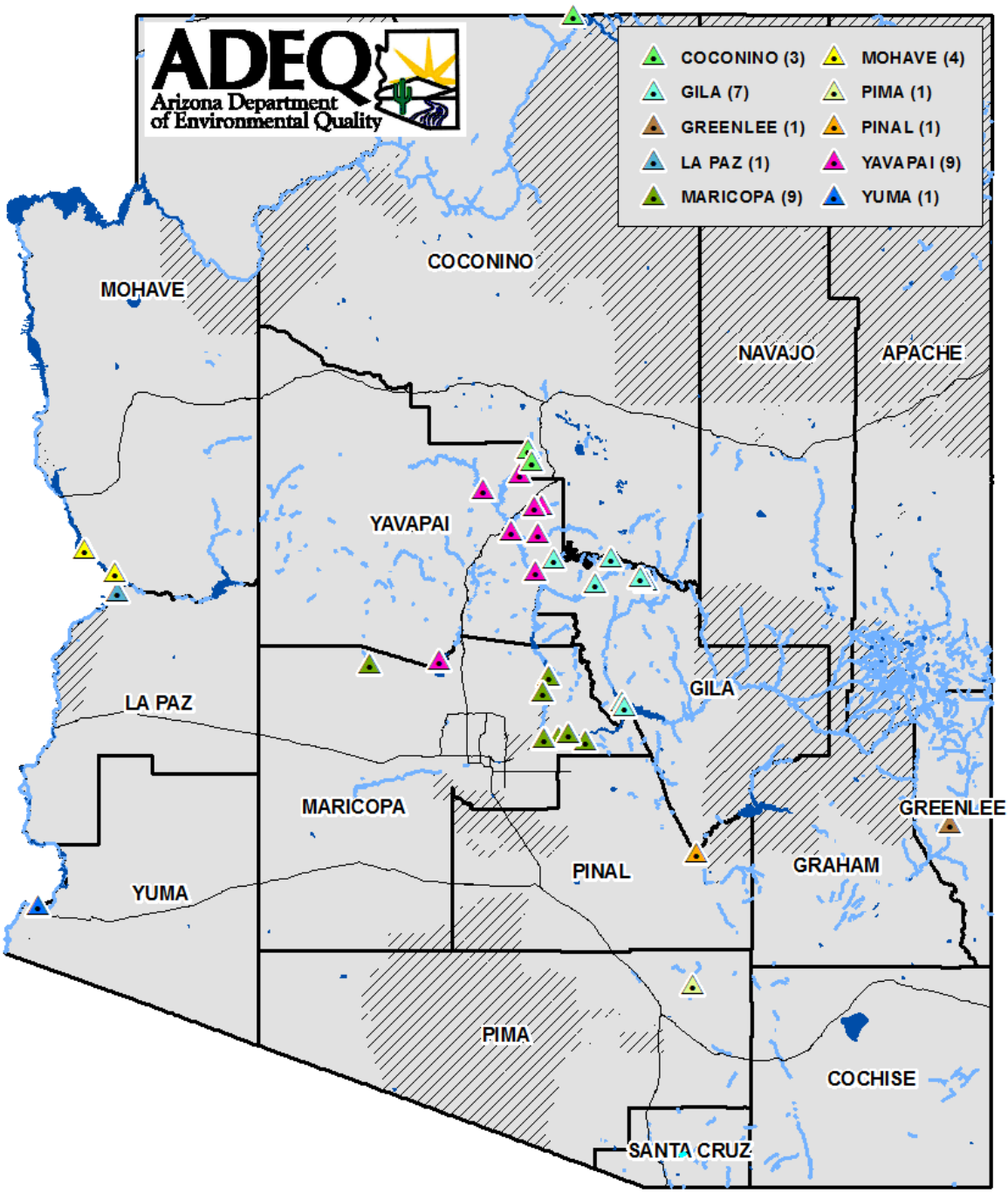
4. FY20-25 5-year NPS Plan approved by EPA. (FY19) Not applicable

Comments

No activity was planned or occurred during FY15.

Responsible Parties: Grants & Outreach Program, other programs as identified, EPA Region 9

Appendix A: Recreation Monitoring Site Map



Appendix B: Master Target List

The Master Target List consists of 107 waterbody/pollutant combinations. Listings marked with ~~strikethrough text~~ have been delisted as of 12/1/15.

	Name	Impairment	Description
1	Colorado River	Selenium	Lake Powell- Paria River
2	Boulder Creek	Arsenic	Wilder Creek - Butte Creek
3	Boulder Creek	Copper	Wilder Creek - Butte Creek
4	Boulder Creek	Zinc	Wilder Creek - Butte Creek
5	Boulder Creek	Beryllium	Wilder Creek - Butte Creek
6	Boulder Creek	Manganese	Wilder Creek - Butte Creek
7	Boulder Creek	low pH	Wilder Creek - Butte Creek
8	Coyote Creek		New Mexico Border - LCR
9	Little Colorado River	Turbidity	Nutrioso Creek - Carnero Creek
10	Little Colorado River	Turbidity	Water Canyon - Nutrioso Creek
11	Little Colorado River	Turbidity	West Fork LCR - Water Canyon
12	Little Colorado River	Turbidity	Coyote Creek - Lyman Lake
13	Rainbow Lake	Low DO	
14	Rainbow Lake	high pH	
15	Rainbow Lake	Nutrients	
16	Big Bug Creek	Suspected Metals	Eugene Gulch- Agua Fria River
17	~~Painted Rock Barrow Pit~~	~~Pesticides~~	-
18	~~Painted Rock Reservoir~~	~~Pesticides~~	-
19	~~Gila River~~	~~Pesticides~~	~~Gillespie Dam - Rainbow Wash~~
20	~~Gila River~~	~~Pesticides~~	~~Sand Tank - Painted Rock Reservoir~~
21	~~Gila River~~	~~Pesticides~~	~~Rainbow Wash - Sand Tank~~
22	~~Gila River~~	~~Pesticides~~	~~Salt River - Agua Fria River~~
23	~~Gila River~~	~~Pesticides~~	~~Agua Fria River - Waterman Wash~~
24	~~Gila River~~	~~Pesticides~~	~~Centennial Wash - Gillespie Dam~~
25	Gila River	Selenium	Centennial Wash - Gillespie Dam
26	Gila River	Boron	Centennial Wash - Gillespie Dam
27	~~Gila River~~	~~Pesticides~~	~~Hassaympa River - Centennial Wash~~
28	~~Gila River~~	~~Pesticides~~	~~Waterman Wash - Hassayampa River~~
29	~~Hassayampa River~~	~~Pesticides~~	~~Buckeye Canal - Gila River~~
30	~~Salt River~~	~~Pesticides~~	~~23rd Ave WWTP - Gila River~~
31	Turkey Creek	Copper	Tributary 341928/1122128 - Poland Creek
32	Turkey Creek	Lead	Tributary 341928/1122128 - Poland Creek
33	Alum Gulch	Cadmium	Headwaters - 312820 / 1104351
34	Alum Gulch	Copper	Headwaters - 312820 / 1104351
35	Alum Gulch	Low pH	Headwaters - 312820 / 1104351

36	Alum Gulch	Zinc	Headwaters - 312820 / 1104351
37	Alum Gulch	Cadmium	312917/1104425 - Sonoita Creek
38	Alum Gulch	Copper	312917/1104425 - Sonoita Creek
39	Alum Gulch	Low pH	312917/1104425 - Sonoita Creek
40	Alum Gulch	Zinc	312917/1104425 - Sonoita Creek
41	Alum Gulch	Cadmium	312820/1104351 - 312917/1104425
42	Alum Gulch	Copper	312820/1104351 - 312917/1104425
43	Alum Gulch	Low pH	312820/1104351 - 312917/1104425
44	Alum Gulch	Zinc	312820/1104351 - 312917/1104425
45	Humboldt Canyon	Cadmium	Headwaters - Alum Gulch
46	Humboldt Canyon	Copper	Headwaters - Alum Gulch
47	Humboldt Canyon	Low pH	Headwaters - Alum Gulch
48	Humboldt Canyon	Zinc	Headwaters - Alum Gulch
49	Pena Blanca Lake	Mercury	
50	Potrero Creek	Chlorine	Interstate 19 - Santa Cruz River
51	Potrero Creek	Low dissolved oxygen	Interstate 19 - Santa Cruz River
52	Potrero Creek	*E. coli*	Interstate 19 - Santa Cruz River
53	Santa Cruz River	Ammonia	Roger Road WWTP outfall - Intermittent Reach
54	Santa Cruz River	Copper (dissolved)	HUC 15050303 Boundary - Baum
55	Santa Cruz River	Ammonia	Josephine Canyon - Tubac Bridge
56	Santa Cruz River	*E. coli*	Josephine Canyon - Tubac Bridge
57	Santa Cruz River	Ammonia	Canada del Oro - HUC 15050303
58	Santa Cruz River	Chlorine	Nogales WWTP - Josephine Canyon
59	Santa Cruz River	Ammonia	Nogales WWTP - Josephine Canyon
60	Santa Cruz River	*E. coli*	Nogales WWTP - Josephine Canyon
61	Mule Gulch	Copper (dissolved)	Lavender Pit - Bisbee WWTP discharge
62	Mule Gulch	low pH	Lavender Pit - Bisbee WWTP discharge
63	Mule Gulch	Copper (dissolved)	Headwaters - Lavender Pit
64	Mule Gulch	Copper (dissolved)	Bisbee WWTP Discharge - Highway 80 bridge
65	Mule Gulch	Cadmium (dissolved)	Bisbee WWTP Discharge - Highway 80 bridge
66	Mule Gulch	Zinc (dissolved)	Bisbee WWTP Discharge - Highway 80 bridge
67	Mule Gulch	Low pH	Bisbee WWTP Discharge - Highway 80 bridge
68	Brewery Gulch	Copper (dissolved)	Headwaters to Mule Gulch
69	San Pedro River	*E. coli*	Babocomari River - Dragoon Wash
70	Christopher Creek	Phosphorus	Headwaters - Tonto Creek
71	Christopher Creek	*E. coli*	Headwaters - Tonto Creek
72	Christopher Creek	Nitrogen	Headwaters - Tonto Creek
73	Five Point Mountain Tributary	Copper (dissolved)	Headwaters To Pinto Creek
74	Gibson Mine Tributary	Copper (dissolved)	Headwaters To Pinto Creek
75	Pinto Creek	Copper (dissolved)	West Fork Pinto Creek - Roosevelt Lake
76	Pinto Creek	Copper (dissolved)	Headwaters - Tributary at 331927/1105456
77	Pinto Creek	Copper (dissolved)	Trib at 331927/1105456 - West Fork Pinto Creek
78	Tonto Creek	Low dissolved oxygen	Headwaters - Tributary at 34180/1110414
79	Tonto Creek	Nutrients	Headwaters - Tributary at 34180/1110414

80	Tonto Creek	*E. coli*	Headwaters - Tributary at 34180/1110414
81	Tonto Creek	Nutrients	Tributary at 341810/1110414 - Haigler Creek
82	Tonto Creek	*E. coli*	Tributary at 341810/1110414 - Haigler Creek
83	Blue River	*E. coli*	Strayhorse Creek - San Francisco River
84	Gila River	*E. coli*	Skully Creek - San Francisco River
85	Gila River	*E. coli*	Apache Creek - Skully Creek
86	Gila River	*E. coli*	New Mexico border - Bitter Creek
87	Gila River	SSC	New Mexico border - Bitter Creek
88	Gila River	*E. coli*	Bonita Creek - Yuma Wash
89	Gila River	SSC	Bonita Creek - Yuma Wash
90	Gila River	Lead (total)	Bonita Creek - Yuma Wash
91	San Francisco River	*E. coli*	Limestone Gulch - Gila River
92	San Francisco River	*E. coli*	Blue River - Limestone Gulch
93	East Verde	Boron	American Gulch- Verde River
94	Granite Creek	Low dissolved oxygen and *E. coli*	Headwaters - YPIT boundary
95	Granite Creek	*E. coli*	YPIT to Watson Lake
96	Miller Creek	*E. coli*	Headwaters to Granite Creek
97	Butte Creek	*E. coli*	Headwaters to Miller Creek
98	Manzanita Creek	*E. coli*	Headwaters to Granite Creek
99	Oak Creek	*E. coli*	West Fork Oak Creek - Trib at 345709/1114513
100	Oak Creek	*E. coli*	Headwaters - W. Fork Oak Creek
101	Oak Creek	*E. coli*	Slide Rock SP - Dry Creek
102	Oak Creek	*E. coli*	Trib at 345709/1114513 - Slide Rock SP
103	Oak Creek	*E. coli*	Dry Creek - Spring Creek
104	Spring Creek	*E. coli*	Coffee Creek - Oak Creek
105	Watson Lake	Nitrogen	
106	Watson Lake	Low dissolved oxygen	
107	Watson Lake	High pH	

Appendix C: WQIG Projects Awarded in FY15

Watershed	WQIG#	Project Title	Grantee	NPS Funded Amount	Project Start Date
San Pedro	15-001	Sands Ranch Brush Eradication Plan	LS Cattle Company, LLC	$86,163.24	11/1/2014
San Pedro	15-002	Three Brothers Ranch	Lazy T & P Cattle Company	$50,800.00	11/21/2014
Oak Creek	15-004	OCWC Settlers Rest Stormwater Pilot Project	Oak Creek Watershed Council	$120,040.00	10/27/2014
Little Colorado	15-005	Upper Little Colorado River-Water Quality Improvement Project	Apache Natural Resource Conservation District (ANRCD)	$300,000.00	11/1/2014
San Pedro	16-001	Curtis Ranch Brush Eradication Plan	Curtis Ranch L.L.C.	$37,740.00	5/1/2015
San Pedro	16-002	Sands Ranch Headquarters Brush Eradication and Water Development	LS Cattle Company, LLC	$98,109.66	6/15/2015
Oak Creek	16-003	OCWC Recreation Education & Awareness Project	Oak Creek Watershed Council	$275,000.00	6/5/2015
Granite Creek	EV15-0004	The Prescott Rodeo Grounds Runoff and Sediment Control Project	City of Prescott Field and Facilities Services Department	$90,000.00	6/23/2015
Multiple	EV15-0005	ADEQ/AZGFD Watershed Restoration and Protection Funding Partnership	Arizona Game and Fish Department	$412,000.00	6/25/2015

TOTAL Awarded in FY15: $1,469,852.90