Final Report
July 2016
New Mexico Wetlands, From Plan to Action Phase 3
Assistance Agreement No. CD-00F425-01-0 (FY2011)

Outstanding National Resource Waters wetlands at Cruces Basin Wilderness, Santa Fe National Forest, Sandoval County, New Mexico

New Mexico Environment Department
Surface Water Quality Bureau
Wetlands Program

Project Goals and Objectives

The New Mexico Environment Department Surface Water Quality Bureau Wetlands Program (SWQB Wetlands Program), carried out this Project to further 4 objectives under our EPA approved Wetlands Program Plan.

Objective 1: Develop Water Quality Standards for Wetlands. Currently, wetlands are included in the definition of Surface Waters of the State in New Mexico's Water Quality Standards codified in 20.6.4 NMAC. However, site specific criteria are currently not applied to wetlands and unclassified waters are presumed to support designated uses that are not always a best fit for wetlands. This project reviewed narrative standards developed by other States and tribes, assessed the completeness of our own State's wetlands data collections to support wetland standards, and identified data gaps. Meetings were conducted with Surface Water Quality Bureau management with the help of ASWM and EPA staff, to gain support for Wetlands Water Quality Standards development. Projects were developed to fill wetlands data gaps, to further development of wetlands designated uses (wetland functions), and to produce a format for identification of wetlands assessment units. Wetlands Program staff participated in the review of ASWM Standards support materials and presented an ASWM webinar on the state of New Mexico's wetlands standards development early in this Project's execution. Wetlands Program staff also participated in ACWA/EPA project to develop wetlands narrative standards templates, and presented the New Mexico Wetlands Program version of the "Road to Narrative Wetlands Water Quality Standards" in an ACWA/EPA webinar.

Objective 2: Expand and Improve Wetlands Action Plan Program This Project developed 4 additional Wetlands Action Plans (WAPs) for watersheds or regions in New Mexico. WAPs were developed for Upper Burro Cienega Closed Basin Watershed in Grant County, Upper Pecos Watershed in San Miguel County, Upper Gallinas Watershed in San Miguel County, and Moreno Valley Watershed in Colfax County. These plans have proved invaluable to engage stakeholders, expedite restoration, and improve protection of wetlands in their areas of coverage. In addition, stakeholders use the plans for fund raising and grant applications including River Stewards state funding.

Slope Wetlands in the Moreno Valley, Colfax County, New Mexico

Through numerous sources of information and experience, the Wetlands Action Plan Guidance has been updated and improved and there have been suggested ways to improve the utility of WAPs. The Wetlands Action Plan Guidance update fills gaps for use by agencies, addresses data gaps, and includes a recommendation relating to supplementing strategies for implementing watershed based plans (WPBs). The WAP Program involves the integration of wetlands issues into the watershed mission, and promotes a new level of stewardship of wetlands through cooperative approaches. This Project continues progress establishing a self-sustaining mechanism for localized involvement to monitor, manage, protect, and restore wetlands throughout New Mexico. Natural and existing conditions of wetlands are better recognized and understood by watershed groups, who in turn engage in activities to protect and restore wetlands and increase overall wetland area in their watersheds.

Thus far, through numerous avenues including Wetlands Program Development Grants, New Mexico has completed 16 Wetlands Action Plans in New Mexico. Some of these plans can be found at https://www.env.nm.gov/swqb/Wetlands/WAP/index.html, and soon all completed WAPs will be available through the SWQB Wetlands Program website. As part of this Project, The Upper Gallinas, Upper Pecos and Moreno Valley WAPs each incorporated newly developed wetlands mapping products (from CD #00F057-01-0(FY2009)) into their WAPs, providing insight to wetland location, type, and wetland functions. To improve WAP utility, watershed groups such as the Hermit's

Peak Watershed Association (Upper Gallinas WAP), collected and included condition assessment information using New Mexico Rapid Assessment Method Montane Riverine 2.0 (NMRAM) CD #00F314-01-0(FY2010)) in their WAP. Assessment information allows the more accurate focus of resources to protect vulnerable wetlands, and to improve and restore wetlands to achieve a net increase in wetlands resources. The Burro Cienega WAP represents a new and novel combination of US Forest Service Watershed Restoration Action Plan (WRAP) and WAP elements for planning watershed and wetland activities. This is very appropriate for the cienega wetland system at Burro Cienega that is sensitive to the runoff patterns (i.e. scouring floods leading to channel incision) from the upper watershed. By highlighting these issues in an early planning document it can serve as a model for other watershed planning documents with significant wetlands within their boundaries and will be a higher Forest Service priority for NEPA and implementation. In addition, a remarkable job in conducting outreach efforts to generate interest, establish a steering committee, and incorporating wetland information into the WAP document was done by each watershed group and their contractors.

Objective 3: Apply Anti-Degradation Policies to Protect ONRW Wetlands. In 2009, 4,930 acres of New Mexico wetlands in USFS wilderness were nominated as Outstanding National Resource Waters (ONRW). This nomination allows the most protective anti-degradation water quality standards to apply to wetlands. SWQB Wetlands Program developed recommendations for improved protective measures and worked with USFS staff in all National Forests in New Mexico with ONRW Wilderness Wetlands to implement and strengthen the use of protective BMPs that protect wetlands from degradation by human activities that commonly occur in wilderness wetlands. These currently authorized activities include rangeland management, dispersed recreation, and wildland fire suppression and rehabilitation. This was accomplished by the development

Matt Schultz collecting data at Gila Wilderness ONRW wetland Site A, East Fork Gila Wet Meadow, Grant County, NM.

of a subproject to identify specific Forest Service BMPs found in management documents written by each Forest Service District in which the activity was located. Due to the number of ONRW wetland sites in wilderness areas, ONRW focus area maps were submitted to each of the five National Forests to concentrate on areas that are easily accessible and coinciding with land use activities that were being reviewed. Conference calls with Carson, Gila and Lincoln National Forests were conducted to determine what activities were occurring in these focus areas and the availability of management documents associated with these activities. E-mail correspondence with Santa Fe and Cibola National Forests was facilitated by Josh Hall, USFS liaison for this project. As a result of these dialogues, USFS provided management documents related to ONRW focus areas. In addition, SWQB and contractor staff visited 9 ONRW wilderness wetland sites, filled in a wetland condition questionnaire developed by SWQB staff at each site, and took notes and photographs. A table of BMPs was compiled for each land use activity. Summaries describing the use of BMPs by each Forest and considerations for improved BMP and BMP implementation were developed for each activity.

To this end, the document "Review of USFS Best Management Practices for Outstanding National Resource Waters Wilderness Wetlands" was developed and reviewed by USFS, and the SWQB Wetlands Program presented the results of this study at the NMED USFS annual meeting in 2015, met with USFS staff involved with grazing and recreation, and

provided comments regarding ONRW wetlands to National Forests in New Mexico involved in Forest Plan Revisions, (Gila, Santa Fe, Carson and Lincoln). Working directly with the National Forests and their staff is strengthening protection measures and ensuring that they are more consistently implemented as well as emphasizing the value and vulnerability of wilderness wetlands.

Objective 4: Continue to promote the use of NMRAM. The SWQB Wetlands Program and its contractor, University of New Mexico Natural Heritage New Mexico, conducted three New Mexico Wetlands Rapid Assessment Method (NMRAM) trainings as part of this Project. These training workshops provided agency personnel, tribal personnel, NGOs and contractors with the skills and information to perform assessments using the NMRAM. Two 2.5-day field and classroom trainings were conducted in the Santa Fe area for 41 participants. In addition, a presentation and one-day training were conducted as part of a EPA-sponsored Southwest Tribal Workshop in Albuquerque, targeting tribes throughout the western US. The overall goal is to train technical personnel in wetlands rapid assessment methods so that data can be collected throughout the State, and to contribute to the NMED Wetlands Program baseline assessment of New Mexico wetlands.

Streambank Stability and Cover Photo on the Santa Fe River used for NMRAM training, 2014.

The Project trained botanists, hydrologists and other environmental scientists in the use of rapid assessment methods geared to New Mexico's unique southwestern wetlands, to increase the capacity of the SWQB Wetlands Program. Training stakeholders in the New

Mexico Wetlands Rapid Assessment Method (NMRAM) promotes state wide standards in the collection and processing of wetlands assessment data. These trainings ensure a quality baseline in data collection and foster a sense of community and cooperation between UNM, the SWQB Wetlands Program and the participants.

The assessment information that will be gathered or reviewed by the trained participants helps target resources more successfully to restore and protect vulnerable wetlands, to achieve a net increase in wetlands resources. Assessment of wetlands provides insight to appropriate BMPs to maintain, protect and improve wetland condition and to avoid further degradation to wetlands.

In the third driest State water issues are critical, and without accountability and responsibility at the local level including planning, inventory, monitoring, protection and restoration measures, wetlands resources will continue to decline. Watershed groups have been working on restoration measures for water quality without adequate recognition of the important role wetlands play in water quality protection and prevention of water quality impacts. In addition, there is a need to provide wetland water quality standards that can support management decisions regarding CWA Section 401 Certification and dredge and fill permitting programs, assessment reports, restoration activities and watershed plans. There is clearly misunderstanding, under-representation and potentially under-valuation of the important role headwater systems play in supporting downstream water quality, water quantity and interdependent ecosystems. This is especially important in New Mexico where remnant populations of endemic fish and aquatic species are reliant on intact and connected adjacent ecosystems for basic life requirements. ONRW wetlands include those at many of New Mexico's headwaters and serve many critical ecological functions. Some of these include (1) serving as the headwater source of perennial streams, (2) providing habitat for wildlife resources, including rare species, (3) providing for the physical, chemical and biological integrity of adjacent high quality streams and lakes, (4) dissipating and modifying flood energy, and (5) providing sediment retention and erosion control. Providing and ensuring the use of adequate BMPs in ONRW-designated wetlands is critical for the protection of New Mexico's precious water resources.

Project Outcomes

- The SWQB Wetlands Program has made considerable progress toward the development of narrative water quality standards for wetlands as a part of this Project. The first step was getting SWQB staff to recognize the importance and need for wetland standards development, and identifying data gaps in the process. Participating in wetland templates development on the national level helped analyze and guide New Mexico's wetlands standards process. The templates provide a model for the information needed for narrative standards. In order to use

the templates in a meaningful way, New Mexico has developed a series of components or steps that will provide a defensible record for wetlands standards. New Mexico is systematically working on each of these steps currently. After development, the state can then initiate the process of adoption of relevant and defensible wetland standards prior to submitting the final version to EPA for approval.

Steps in Developing Standards for New Mexico Wetlands

- **NWI Mapping and classification update**
- **Identifying wetland functions by wetland type**
- **Hydrogeomorphic classification applied**
- **Measuring the condition of wetlands by wetland type**
- **Identifying stressors that affect wetland condition**
- **Protection of Standard Reference Wetlands**
- **Protection of most threatened wetlands**
- **Development of Mitigation Ratio condition assessment to apply 401 Certification more effectively.**
- **Database development**
- **Identifiers of each wetland – Assessment Units**
- **Using these data to develop a defensible narrative standard by wetlands type.**
- **Plan for outreach to the public regarding the development and uses of wetland standards.**

New Mexico's efforts to develop wetlands water quality standards was included in the 100th edition of Non-Point Source News Notes in October 2016.

- This Project developed four new WAPs. The workplan for this Project required only three. An analysis of the contents of these plans and the many previously developed plans, is providing the foundation for a statewide Wetlands Conservation Plan for New Mexico that will incorporate the recurring and innovative themes, strong and informed partnerships, unique and effective ideas, and sustainable funding and other resources that are a successful product of the Wetlands Action Plan planning process.
- The Wetlands Action Plan Guidance has been updated to be more useful as experience and additional sources of information and data are developed for incorporation into this planning process.
- Three NMRAM Trainings were held. Two workshops trained more than 40 participants, some of which were tribal representatives. In addition, one training

targeted tribal environmental staff at an EPA-sponsored tribal workshop for tribes located throughout the southwest.

- This Project also supported the training of SWQB staff through attendance and presentations at EPA Wetlands Tribal Workshop in Albuquerque, New Mexico on November 5-7, 2013, the National Aquatic Resource Survey 2014 EPA Wetlands Workshop in Denver, Colorado, one Applied Fluvial Morphology Course in 2015 in Prescott, Arizona.

Original Timeframe

The SWQB Wetlands Program was awarded federal assistance for this project on October 6, 2011, and was to be completed by December of 2014. The grant award was amended for a no cost extension to December 2015. The extra year was used to complete the Gallinas Wetlands Action Plan, continue work on ONRW BMPs and the WAP Guidance. The timeline for the grant award was again extended to July 2016. This was to complete the Moreno Valley Wetlands Action Plan to conclude work with the USFS to include BMP measures in Forest Plan Revisions. The stated goals and objectives of the project remained the same, as well as the key project Tasks.

Partners Involved

Successful partnerships were forged with our principal partners including:

Carson National Forest
Santa Fe National Forest
Gila National Forest
Lincoln National Forest
Cibola National Forest
Association of State Wetland Managers
Montana Wetlands Program
EPA Region 6 Wetlands and Water Quality Protection Division
UNM Natural Heritage New Mexico

Watershed Groups. Note that these watershed groups represent a steering committee to help develop the WAP, and also other numerous agency and private stakeholders in the watershed. These partnerships are described in each WAP:

Hermit's Peak Watershed Alliance
Cimarron Valley Watershed Group
Upper Pecos Watershed Association
Upper Burro Cienega Watershed Association

Outreach and technical assistance were conducted for the following groups to promote the WAP process.

- San Juan Watershed Group
- Embudo Watershed Group
- Gilita watershed and Snow Lake in southwestern NM with the Gila National Forest and Trout Unlimited.
- Santa Fe County Commission

Additional partners who contributed to this project:

Josh Hall, USFS Liaison to NMED helped review and coordinate opportunities to meet with USFS staff to promote Best Management Practices (BMPs) in USFS ONRW wilderness wetlands.

Jeanne Christi (ASWM) visited and presented to NMED SWQB staff, and presented at the Wetlands Roundtable, to help promote narrative water quality standards for wetlands in New Mexico.

Elizabeth Milford and Este Muldavin (UNM Nat Her) were presenters for NMRAM workshops.

Funding

The original project amount was **$192,295.00 federal** and **$82,540.00 match**. The final **federal amount spent** was **$139,638.36** and the final non-federal match amount was **$106,018.16** which was **$23,478.16 overmatched**. See semi-annual reports for details.

Project Highlights and Chronology

- SWQB Wetlands Program was awarded federal assistance by EPA on October 6, 2011.
- The SWQB Wetlands Program was informed by NMED Financial Staff of the award on December 21, 2011, and project work commenced.
- Maryann McGraw (Wetlands Program Coordinator) and Michelle Barnes (Wetlands Program Project Officer) were the Project Officers for this project.
- In December 2011, the SWQB Wetlands Program was selected by the Association of State Wetland Managers (ASWM) for assistance in the development of wetlands water quality standards.
- Maryann McGraw made a presentation to the Upper Pecos Watershed Association (UPWA) about development of a WAP on February 17, 2012.

- Meetings with Josh Hall, USFS Liaison to NMED have been initiated to review Best Management Practices (BMPs) in USFS ONRW wilderness wetlands.
- In February 2012, Jeanne Christi, Director of ASWM visited the Wetlands Program and during that time a meeting was planned that included SWQB Management, EPA Region 6 Richard Prather, SWQB Section 401 staff and Jeanne Christi (ASWM) to discuss the development of wetland standards for New Mexico. This meeting was combined with a review of the Wetlands Assessment and Monitoring Strategy and how monitoring can help inform wetlands water quality standards.
- A draft list of action items was developed to continue wetlands standards development in March 2012.
- Maryann McGraw presented New Mexico wetlands water quality standards in an ASWM webinar in March, and Michelle Barnes presented in April, 2012 as a follow up of the SWQB standards meeting with ASWM and EPA and to provide technical transfer to other states and tribes.
- Southwest Native Ecosystems was awarded a contract to develop a Wetlands Action Plan for Burro Cienega Watershed on May 11, 2012. A water quality sampling station was established at Burro Cienega wetlands. Matt Schultz of the SWQB Silver City Office provided technical assistance to the watershed group.
- The Upper Pecos Watershed Group was awarded a contract to develop their Wetlands Action Plan on August 12, 2012. Michelle Barnes and Neal Schaeffer provided technical assistance to the watershed group.
- A "Final Report for ASWM Pilot State Study – New Mexico" on Standards Development in New Mexico was completed and submitted to ASWM on September 6, 2012. The report was also forwarded to EPA.
- Shelly Barnes and Kristine Pintado (SWQB Standards Coordinator) participated in an EPA-sponsored webinar on State's wetlands standards on November 20, 2012.
- The WAP Guidance has been updated to incorporate GIS layers in the process, and use of the New Mexico Rapid Assessment Method (NMRAM).
- The State's definition of wetlands, riparian and buffer have been updated and included in the New Mexico Wetlands Program Plan and in the WAP Guidance.
- Shelly Barnes hosted a WAP booth at the San Juan Watershed Forum, October 16-18, 2012, in Farmington, NM for more than 100 attendees.

Shelly Barnes, Wetlands Program Project Officer, at the San Juan Watershed Forum, Farmington, San Juan County, 2013.

- An IGA with UNM Natural Heritage to conduct NMRAM trainings was completed on January 10, 2013.
- The WAP for Burro Cienega Watershed was completed on January 31, 2013.

Burro Cienega, 2013

- Maryann McGraw and Shelly Barnes presented the WAP process to Rio Sapello and Upper Gallinas watershed associations in January and February 2013.
- The New Mexico Wetlands Program Plan was updated and approved by EPA in March 2013. The Section on "Program Development Activities for Water Quality Standards for Wetlands Core Element" was updated to help guide future tasks.
- Maryann McGraw presented "New Mexico Wetlands Rapid Assessment, From Data Collection to Decision-Making Tool" at the ASWM meeting in Shepherdstown, WV in March, 2013 under another grant. Part of the discussion during the presentation was development of a wetland profile that would inform standards development, wetland functions as designated uses and total maximum levels of stress (TMLS).
- Maryann McGraw contacted the Embudo Watershed Group for potential interest in developing and WAP.
- A Purchase Order for the Hermit's Peak Watershed Alliance to develop a Wetlands Action Plan for the Upper Gallinas watershed was completed on April 29, 2013. Karen Menetrey provided technical assistance to the watershed group.

Riverine wetlands along the Upper Pecos River.

- Matt Schultz provides outreach to the Gilita watershed and Snow Lake in southwestern NM with the Gila National Forest and Trout Unlimited to develop a WAP.

Gillita Creek above Snow Lake is in need of extensive restoration and was a good candidate for a WAP development.

- The Upper Pecos Watershed WAP was completed in June 2013. Wetland mapping was ground-truthed and incorporated into the Upper Pecos Watershed WAP.

Slope Wetlands in the Upper Pecos Watershed

- The Upper Pecos Watershed WAP was completed in June 2013.
- The first NMRAM training under this project was conducted June 12-14, 2013 in Santa Fe.
- NWI Regional Wetlands Coordinator, Jim Dick provided wetland mapping data for the Upper Gallinas Watershed WAP, July 2013.
- Karen Menetrey attended a Cimarron Watershed Alliance (CWA) board meeting on October 23, 2013 to introduce the Wetlands Action Plan concept.
- The grant award was amended for a no cost extension to December 2015. The extra year was used to complete the Gallinas Wetlands Action Plan, continue work on ONRW BMPs and the WAP Guidance.
- Maryann McGraw presented at the Southwest Wetlands Tribal Workshop in Albuquerque, November 5-7, 2013 and part of the discussion during the presentation was about the development of water quality standards for wetlands.
- A second NMRAM training was conducted by UNM Nat Her for the Southwest Tribal Wetlands Workshop held in Albuquerque November 5-7, 2013.

- In December 2013, NMED received a list of recommendations from EPA Region 6 for developing wetlands water quality standards as part of a larger letter addressing the state's water quality standards.
- Maryann McGraw provided a response to EPA on January 23, 2014, with the steps that the Wetlands Program is taking to develop wetlands water quality standards.
- An IGA amendment was approved January 31, 2014, for UNM to conduct the third NMRAM training.
- In February 2014, The WPC participated in a survey conducted by the Association of State Wetlands Managers that updated states' responses to "State Definitions, Jurisdiction and Mitigation Requirements in State Programs for Ephemeral, Intermittent and Perennial Streams in the United States." The information in this report will be used and included in the references supporting standards development.
- A list of wetland functions for wetland types has been developed and is being applied to mapped wetlands as well as performance levels, as part of ongoing mapping projects in the north-central part of New Mexico.
- A Contract was completed on February 25, 2014 to review current USFS BMPs on the National and Regional levels; coordinate with each individual Forest District managing the Wilderness Areas to provide other relevant management plans; and conduct site visits in each wilderness area to assess the condition of the wetland and the BMP implementation.
- The Wetlands Program produced a "Technical Guide #1 Wetland Functions" under a past WPDG project and reference to that information is now included in the WAP guidance update.
- The Upper Gallinas Watershed WAP is the first completed WAP in New Mexico that utilizes both the updated National Wetlands Inventory (NWI) and NWI Plus that was produced under another WPDG grant awarded to NM, as well as wetlands data collected using the NMRAM for Montane Riverine Wetlands.
- A PQAPP was approved by EPA for the ONRW wetlands BMPs GIS Analysis and field site assessment on April 1, 2014.
- Susan Arfman from PSTB conducted the GIS analysis to develop maps for the ONRW BMP study.

Wetlands in the Upper Gallinas Watershed – Note straightened Gallinas in the upper end of the photo and meandering Gallinas in the lower end which is where the best scores for NMRAM were obtained. This information is included in the WAP.

- The final NMRAM training took place from June 4-6, 2014 in Santa Fe.
- A rapid assessment check sheet was designed by Shelly Barnes and others to collect data from ONRW Wetlands site visits.
- During the summer of 2014, field data was collected by SWQB staff and the contractor from 9 ONRW wetland sites on USFS lands and a spreadsheet of the data was compiled for the BMP evaluation.

Severe erosion (headcut) at La Vega ONRW slope wetlands data collection site in the Pecos Wilderness.

- The WPC attended the National Aquatic Resource Survey 2014 EPA Wetlands Workshop and R Statistical Software Training in Denver Colorado, October 28 through October 31, 2014.
- The document, "Review of USFS Best Management Practices for Outstanding National Resource Waters Wilderness Wetlands" was completed by Keystone Restoration Ecology, and submitted to USFS through Josh Hall (liaison) for their review and comment.
- The Upper Gallinas Watershed Wetlands Action Plan was completed on April 14, 2015.
- A Contract for the Moreno Valley Wetlands Action Plan was completed with the Cimarron Watershed Alliance on July 30, 2015. Karen Menetrey and Emile Sawyer are providing technical assistance to the Cimarron Watershed Alliance.
- In 2015, Maryann McGraw participated in conference calls with ACUA, ASWM, and other states and EPA representatives to develop wetlands WQS templates for states to use to develop narrative standards. The final wrap up webinar was September 8, 2015.
- Maryann McGraw met with SQUID database development contractors and SWQB TMDL Team staff to determine how to delineate and name wetlands assessment units.

- An amendment to extend the end date of this project to July 30, 2016 was approved by EPA on October 6, 2015.
- Emile Sawyer attended Santa Fe County commission meetings in October, November and September 2015 to promote the Santa Fe County WAP.
- Recommended by the USFS regarding the ONRW BMP report was to provide an abbreviated (Executive Summary) version for Forest Review. Maryann McGraw developed abbreviated versions for the Carson, Santa Fe and Gila National Forests as comments for their Forest Plan revisions.
- Maryann McGraw presented the ONRW BMP study in a powerpoint presentation at the 2015 Annual USFS/NMED Meeting on November 17, 2015, where representatives from each NM Forest were present. Follow-up included FS staff attending a smaller meeting at NMED representing recreation and grazing.
- The Cimarron Watershed Alliance completed the Moreno Valley Wetlands Action Plan on July 30, 2016.
- Maryann McGraw presented "Steps in the Development of Wetlands Standards – New Mexico" in an ACWA/ASWM webinar on July 26, 2016.
- An article about water quality standards for wetlands which includes a quote from the Maryann McGraw was published in the 100th anniversary edition of EPA News Notes. The transfer of the Wetlands WQS process to date has been accomplished on a national level with the help of EPA staff.
- The WAP Guidance has been updated and the final draft is being circulated to SWQB staff for final review.

List of Major Deliverables (on file at NMED)

"Headwaters Burro Cienega Watershed Watershed Restoration Action Plan and Wetlands Action Plan" (2013)
"Upper Pecos Watershed Wetlands Action Plan" (2014)
"Wetland Action Plan: Upper Gallinas Watershed, Las Vegas, New Mexico" (2015)
"Moreno Valley Wetlands Action Plan" (2016)

"Wetland Resources-Cultural, Historical and Environmental Significance" opening powerpoint presentation at EPA Wetlands Tribal Workshop in Albuquerque, New Mexico on November 5-7, 2013.
"Steps in the Development of Wetlands Standards – New Mexico" powerpoint presentation (2016) for ACWA/ASWM Webinar.
"New Mexico Wetlands and Riparian Areas, From Plan to Action - Wetlands Action Plan Guidance for New Mexico" (2016)
Semi-Annual Reports to EPA

Notes from meeting with Jeanne Christi, Director of ASWM, SWQB Management, EPA Region 6 Richard Prather, SWQB Section 401 staff and Jeanne Christi (ASWM) to discuss the development of wetland standards for New Mexico.
A draft list of action items to continue wetlands standards development, March 2012.
New Mexico wetlands water quality standards presentations, an ASWM webinar in by Maryann McGraw in March, 2012, and Michelle Barnes presented in April, 2012 as a follow up of the SWQB standards meeting with ASWM and EPA and to provide technical transfer to other states and tribes.
Agenda and notes: National Aquatic Resource Survey 2014 EPA Wetlands Workshop, October 28-30, 2014, and R Statistical Software Training October 31, 2014 in Denver, Colorado.
"Best Management Practices and Outstanding National Resource Waters on USFS Wilderness Lands" Powerpoint Presentation for USFS/SWQB 2015 Annual Mtg.
ONRW Wilderness Wetlands questionnaires, photos and notes for 9 sites.
Comment Letter – SFNF Plan Revision
Comment Letter – Carson NF Plan Revision
Comment Letter – Gila NF Plan Revision
Comment Letter – Lincoln NF Plan Revision
"Review Of USFS Best Management Practices For Outstanding National Resource Waters Wilderness Wetlands" (2015)
ONRW Wilderness Wetlands data spreadsheet
Contracts and reimbursements
NMRAM Training presentations and sign-in sheets
ONRW BMPs Project QAPP and approval letter from EPA
"Strengthening Water Quality Standards for Wetlands" Powerpoint Presentation for ASWM (2013)
Documentation of project match
Final Report

Lessons Learned

The Wetlands Action Plan Guidance was updated with lessons learned and the incorporation of new data sources that was critically missing from the development of previous WAPs. The Wetlands Action Plan process invigorates watershed groups to do more work in the watershed. The focus on the wetlands portion of the watershed as part of the planning process is invaluable in terms of stakeholder buy-in, future planning, using a more holistic approach to improving water quality, seeking new funding opportunities, and creating a forum about wetland activities and opportunities.

This project continues to promote wetland protection throughout the state.

What Made the Project Successful

SWQB Wetlands Program has made systematic and significant progress towards wetlands narrative standards development. The SWQB Wetlands Program has included SWQB staff and management to continue progress as a partnership within SWQB.

The project trained more practitioners in NMRAM including tribal environmental staff. This effort will increase the collection of wetlands data available for New Mexico wetlands. Also, feedback from trainees will improve the NMRAM.

The Wetlands Action Plan Program continues to engage watershed groups and stakeholders throughout the state. As more and more WAPs are developed, protection and restoration of wetlands becomes a certainty.

The SWQB Wetlands Program was able to engage the USFS to become more aware of ONRW anti-degradation responsibilities. The SWQB Wetlands Program became more informed about what BMPs are available to protect ONRW wetlands and how to implement them more effectively. This effort has fostered a stronger partnership between NMED and USFS to protect ONRW wetlands.

What Made the Project Not So Successful

The project was delayed because it took more time than anticipated to complete contracts for the Wetland Action Plans, and for coordination with USFS on ONRW Wetlands Recommendations. Because of these delays, not all the federal funding was able to be spent by the project end date. However, the outcomes of the WAPs and the ONRW project were very successful and all Project tasks were completed.

Technical Transfer

The information developed during the project period was provided to stakeholders on the local, state, regional and national levels:

Four New Mexico wetlands water quality standards presentations were given in National Webinars during the project period. Water Quality Standards were also discussed at the ASWM State and Tribal Coordination Meeting. New Mexico's efforts to develop wetlands water quality standards was included in the 100th edition of Non-Point Source News Notes in October 2016.

Three NMRAM trainings were conducted locally, one at a regional tribal conference.

The ONRW BMP study was presented at the USFS/NMED Annual Meeting.

This Final Report and the Wetlands Action Plans can be accessed at http://www.nmenv.state.nm.us/swqb/Wetlands/ .

This project will also be included in the NPS Annual report to EPA and the NMED Clearing the Waters newsletter.

EPA Feedback Loop

What would you suggest that EPA do to improve the process in regard to this project?

EPA was very supportive in all aspects of this project during the project period, especially allowing grant period extensions to complete high quality and meaningful work, and helping to engage the SWQB Management to support wetland standards development.

EPA provided an important forum for technical transfer to tribes during the Southwest Wetlands Tribal Workshop in Albuquerque, November 5-7, 2013. The SWQB Wetlands Program appreciated the invitation to make presentations and trainings, and to disseminate materials at this venue as it is important to engage the many New Mexico tribes in wetland protection and restoration.

Through the development of narrative wetland standards templates, critical technical information and support for wetlands standards development was shared on a national level. Ultimately, it is EPA who approves the final versions of a State's standards and participation and feedback on the process is critical for State's to make progress on groundbreaking and innovative initiatives.

These types of projects that foster State's Progress in Wetlands Program Development on multiple Core Elements should continue to be wholeheartedly supported by EPA Region 6.

Future Activity Recommendations

Progress towards Wetlands Standards development will continue in New Mexico. The next step is to evaluate one subclass of wetlands as a demonstration of a specific, targeted wetland narrative standard. The development of this standard using mapped wetlands and their associated functions, and wetland condition assessment and stressor information, can help determine the appropriate level of protection needed for wetland subclasses or if

a more general holistic wetlands water quality standard would be more protective statewide. Another step is to sort out the identification and naming of wetland assessment units. SWQB Wetlands Program proposes to do this as a level 1 remote sensing project using the mapping products that we have completed.

SWQB Wetlands Program will continue to develop and improve the Wetlands Action Plan (WAP) Program. Wetlands Action Plans will prioritize watersheds that have Watershed Based Plans. The Wetlands Action Plan Guidance will continue to be updated and improved as experience and more information becomes available, including from other states' wetland conservation initiatives. An analysis of the contents of these plans and the many previously developed plans, is providing the foundation for a statewide Wetlands Conservation Plan for New Mexico that will incorporate the recurring and innovative themes, strong and informed partnerships, unique and effective ideas, and sustainable funding and other resources that are a successful product of the Wetlands Action Plan planning process.

As more modules and subclasses of wetlands are included in NMRAM development (through other WPDGs), additional NMRAM trainings, and an "All Hands" data collection effort statewide will be conducted to increase wetlands condition data available, and start to collect trends data in New Mexico.

The SWQB Wetlands Program will continue to work with the USFS in implementing BMPs for ONRW wetlands.