SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

COMMUNITY DEVELOPMENT DEPARTMENT

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION

Wetland Program Plan

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List of Acronyms

A&A - Actions & Activities
ADEQ - Arizona Department of Environmental Quality
BIA - Bureau of Indian Affairs
BMP - Best Management Practice
CDD - Community Development Department
CEF - Core Elements Framework
CRD - Cultural Resources Department
CW - Cottonwood Wetland
CWA - Clean Water Act
ECS - Engineering and Construction Services
EDD - Economic Development Division
EPA - U.S. Environmental Protection Agency
EPNR - Environmental Protection & Natural Resources Division
FOM - Field Operations Manual
FY - Fiscal Year
GIS - Geographic Information System
GPS - Global Positioning System
GRD - Granite Reef Dam
HUC - Hydrologic Unit Code
IT - Information Technology
ITCA - Inter Tribal Council of Arizona, Inc.
LUC - Land Use Compliance
M&A - Monitoring & Assessment
MCL - Maximum Contaminant Limits
MRPM - Membership & Real Property Management
NEMO - Nonpoint Education for Municipal Officials
NPS - Nonpoint Source
NPSMWBP - Nonpoint Source Management Watershed Based Plan
PS - Planning Services
PW - Public Works
QA/QC - Quality Assurance and Quality Control
QAPP - Quality Assurance Project Plan
QMP - Quality Management Plan
RM - Range Management
RMP - Range Management Program (same as Range Management)
SDWA - Safe Drinking Water Act
SOP - Standard Operating Procedure

SES - Senior Environmental Specialist
SR - Salt River (reference to surface water sampling location)
SRO - Salt River Ordinance
SRP - Salt River Project
SRPMIC - Salt River Pima-Maricopa Indian Community
T&E – Threatened & Endangered (species)
TAS - Treatment as a State
TBD - To Be Determined
TCP - Traditional Cultural Properties
TERC - Tribal Emergency Response Committee
USGS - U.S. Geological Survey
USFWS - U.S. Fish and Wildlife Service
VR - Verde River (reference to surface water sampling location)
WPP - Wetland Program Plan
WQP - Water Quality Program
WQS - Water Quality Standards
WQX - Water Quality Exchange Network

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Introduction

The Wetland Program Plan is a multiyear strategy document that will be used to create a focused and sustainable Wetland Program.

The Environmental Protection & Natural Resources (EPNR) Division is one of the four (4) divisions that make-up the Community Development Department (CDD). EPNR, Economic Development (EDD), Membership & Real Property Management (MRPM), and Planning Services (PS) comprise the CDD, which is one of the largest departments in the Salt River Pima-Maricopa Indian Community (SRPMIC) government. EPNR is charged with protecting and managing the Community's precious environmental, archeological, and natural resources. EPNR is organized around five (5) programs (**Figure 1.1**).

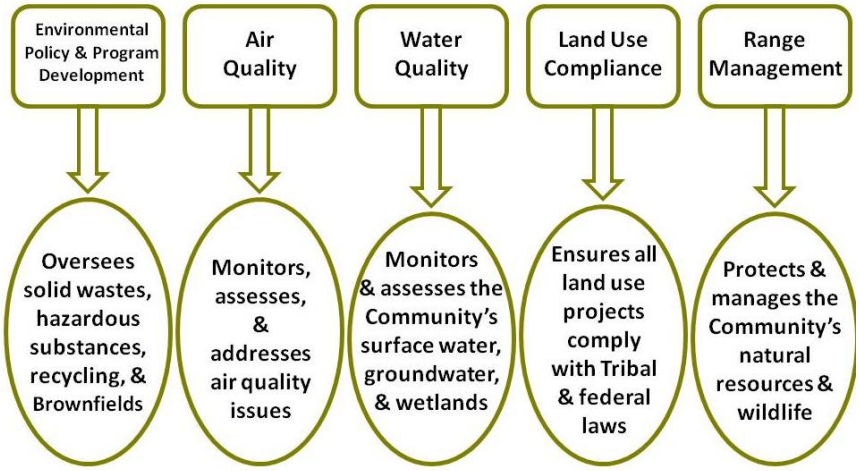

FIGURE 1.1 illustrates EPNR's organization and the Programmatic roles.

Prior to this document (FY10), EPNR organization did not include a program specifically designated for the protection and restoration of wetlands and riparian areas. The Water Quality Program (WQP) has taken a large role in wetlands monitoring, river bank stabilization, and removal of invasive salt cedar (Tamarisk) as part of its Nonpoint Source (NPS) Program. EPNR has also collaborated with the Community's Cultural Resources Department (CRD) in various riparian and wetland

planting events. EPNR's new Wetland Program will continue the wetlands monitoring effort that the WQP has begun and expand on the efforts considerably.

Prior to FY11, the WQP included the following sub-programs: Surface Water, Groundwater, and Nonpoint Source Program. Wetland development and management was a significant part of the Nonpoint Source (NPS) Program to address NPS pollution issues. The 'official' Wetland Program is a new WQP sub-program as of FY11 and is the reason for this document. These sub-programs along with EPNR's Technical Advisor and Policy Analyst will serve as the infrastructure for successfully implementing the Wetland Program. EPNR's Land Use Compliance (LUC) and Range Management (RM) will also provide the needed support for conducting wildlife and plant surveys with appropriate archaeological clearance, as well as for developing new policies, ordinances, or changes to existing language in ordinances and codes. EPNR has the organizational experience to fully support a Wetland Program and ensure its success.

Program Goal & Objectives

The few wetlands and riparian areas remaining in the Community provide three (3) critical functions:

1. Improve the quality of water discharging to the rivers and infiltrating to the groundwater.
2. Provide suitable wildlife habitat and important cultural and traditional vegetative resources.
3. Serve as educational platforms for Community Members, Community Council, and students on the importance of these areas and the need for their restoration and preservation.

The overall goal of this Program is to develop a focused and sustainable program that will establish base-line conditions of as many wetland and riparian areas as possible and develop a systematic approach to preserving, improving, and ultimately increasing the acreage of these areas within the Community.

The following five (5) objectives have been identified to achieve this goal:

1. Prepare and carry out an EPA approved Quality Assurance Project Plan (QAPP) for the monitoring and assessment of the Community's wetlands.
2. Develop partnerships within the SRPMIC and external agencies to strengthen the Wetland Program's presence in the Community.
3. Complete a full inventory of the Community's wetlands and riparian areas, which will establish baseline conditions.
4. Develop action plans for restoring and preserving wetland areas.
5. Increase Community support of the Program (Tribal Council, Members, students, Departments, youth and elder groups, etc).

Purpose of Plan

This Wetland Program Plan (WPP or hereafter "Plan") will serve as a roadmap for creating a focused and sustainable Wetland Program (hereafter "Program"). This Plan is organized into seven (7) chapters. The first chapter, Introduction, describes the basic overview of EPNR, the Wetland Program Goals and Objectives, the Purpose of this Plan, and describes the U.S. Environmental Protection Agency (EPA) Core Elements. This chapter also includes a brief summary of the Wetland Planning Workshops held in preparation of this Plan, as well as descriptions of the time frames used throughout the Plan.

Chapter Two, Existing Conditions, identifies the Community's topography including a discussion of the two perennial rivers located within the Community's boundaries, provides a summary of the existing wetlands and riparian areas including the constructed wetlands within the Community, as well as existing programmatic plans and documents that are applicable to the Program.

Chapters Three through Six, present each of the four (4) Core Elements with its subsequent actions and activities. Schedules are provided for each element's actions and activities.

Finally, Chapter Seven, Program Management, identifies the administrative steps necessary for the successful implementation of a Wetland Program, specific program tasks, with time schedules for milestones and short-term goals and objectives, as well as details for program evaluation, reporting, and public record.

This Plan will serve the following purposes:

1. Provide guidance for building a new Wetland Program.
2. Allow the Program to focus its wetland protection and restoration work.
3. Plan the Program's course towards achieving its goals.
4. Communicate EPNR's intent to the Community and EPA, as well as current and potential partners.
5. Help garner wetland protection and restoration support from the Community.
6. Allow the Community, EPA, and potential partners to understand the Program's objectives and enable them to better assist the Community in achieving its goals.

EPA's Core Elements

In 2008, the U.S. EPA and a State and Tribal workgroup developed the "Core Elements of an Effective State or Tribal Wetland Program Framework" ("Core Elements Framework" or CEF). The Community has elected to develop its WPP using the general structure of the CEF in order to meet the Community's objectives, directives, and needs. The CEF defines and describes four (4) core elements of a comprehensive wetland program. The CEF also provides a list of "actions" and more specific "activities" nested under each action associated with

each core element. This WPP here includes a brief discussion of the EPA program from which the Community will develop its wetland program. **Figure 1.2** presents the four (4) core elements which are basic program functions that form the foundation of wetlands management and protection.

FIGURE 1.2 presents EPA's four core elements with each associated function.

EPA has further identified three (3) important approaches that, when applied, can successfully support the core elements and help build a more successful Wetland Program. This Plan utilizes these three approaches, shown in **Figure 1.3**, in developing the EPNR Wetland Program.

FIGURE 1.3 presents three (3) important approaches to developing a Wetland Program.

Wetland Program Planning

In preparation of starting EPNR's Wetland Program and developing this Plan, EPNR conducted workshops with current and potential partners. This is referred to as the "Planning Period" for this document and is used in several of the time frame tables.

In order to ensure the success of the Wetland Program, this Plan focuses on a short time frame with realistic goals. The "Planning Period" results are provided in this Plan. Future tasks and time tables are limited to FY11 and FY12 – the two years of EPA funding of the Wetland Program Senior Environmental Specialist (SES). It is anticipated that much progress and many changes will occur in the next two years.

Two Wetland Program Workshops were held in preparation of this Plan:

1. WP Workshop I – August 5, 2010 – Included SRPMIC departmental representatives from EPNR WQP, EPNR Management, EPNR Range Management, Cultural Resources Department (CRD), and Engineering & Construction Services(ECS).

2. WP Workshop II – September 22, 2010 – Included representatives from EPNR, Scottsdale Community College, University of Arizona Cooperative Extension, US Army Corps of Engineers, Ft. McDowell Yavapai Nation, US Fish and Wildlife Services, J2 Engineering & Environmental Design LLC (local consultant), and a native nursery in Yuma, Arizona.

Meeting sign-in sheets and notes can be found in **Appendices A and B**.

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Existing Conditions

Understanding the existing conditions and management efforts is necessary to efficiently implement the new Wetland Program.

The Water Quality Program (WQP) currently implements many monitoring and assessment components for its Nonpoint Source Program that are relevant for the new Wetland Program. This chapter provides a thorough discussion of the Community's topography, existing wetlands and riparian areas, as well as existing programmatic plans and documents. It is important to know what EPNR has achieved prior to implementing a Wetland Program and what the new Program will continue. The current and existing documents will assist in ensuring monitoring efforts are stream-lined and future efforts are not duplicated.

The Community's Topography

The SRPMIC is approximately 52,675 acres covering an estimated 80 square miles in central Arizona. **Figure 2.1** shows the vicinity of the Community in reference to Arizona's watersheds. The SRPMIC lies within portions of the Verde River Watershed (U.S. Geological Survey (USGS) Hydrologic Unit Code (HUC) **H150602**) and the Salt River Watershed, (HUC **H150601**). More specifically, the SRPMIC lies within both the Lower Verde River Watershed and Lower Salt River Watershed. The confluence of these two perennial rivers is located within the Community's boundaries.

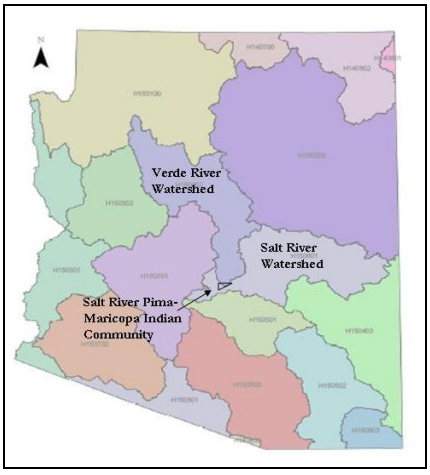


FIGURE 2.1 is a watershed map of Arizona with reference to SRPMIC. (Adapted from Arizona NEMO map of Arizona HUCs - http://www.srnr.arizona.edu/nemo)

Figure 2.2 is an aerial photograph of the Community detailing the topography. The SRPMIC's southeastern boundary contains two of the longest perennial rivers in Arizona - the Salt River and Verde River which drain different watersheds, the Salt River Watershed (HUC – H150601) and the Lower Verde Watershed (HUC – H150602), respectively. Flows from these rivers are collected at the Granite Reef Dam (GRD) which is adjacent to the Community's boundary. The GRD diverts the river flows into canals for transport into the Phoenix area. The Salt River channel downstream of the dam is a dry altered river bed that receives occasional flood-discharge from the GRD, permitted point source discharge from facilities, irrigation runoff from fields, and stormwater runoff from the nearby freeway.

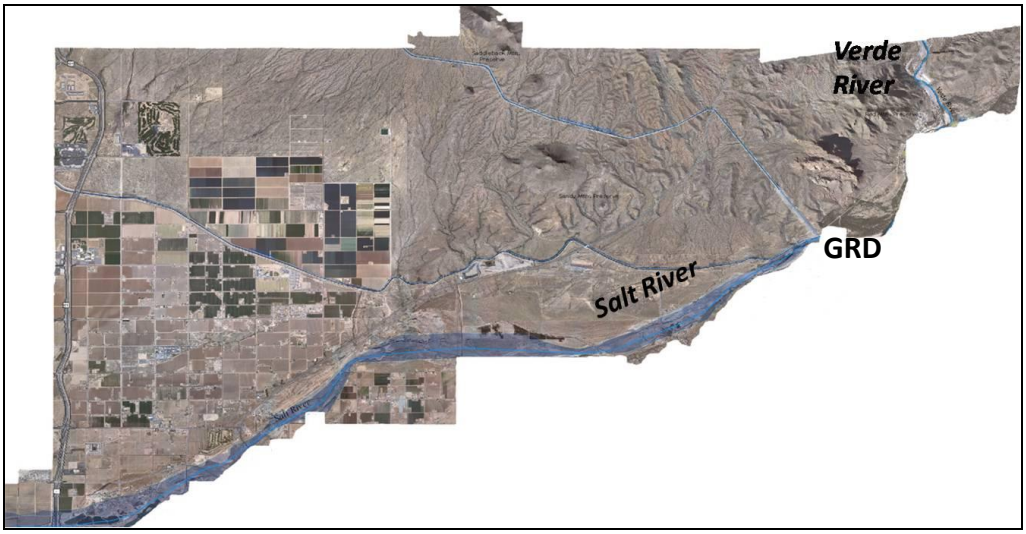


FIGURE 2.2 is an aerial photograph illustrating the topography of the SRPMIC.

The following topographical characteristics will be important for the Program:

1. The dry channel has allowed mining operations (sand and gravel) to support the Community for several decades. The Wetland Program will have to develop relationships with the mining companies for access to wetland areas. The Program will collaborate with the mining companies on wetland restoration and protection efforts.
2. The portions of these rivers located within the Community contain fragile riparian habitat utilized by the Southwest Desert Nesting Bald Eagles during their annual breeding season and support a diverse habitat for native and nonnative aquatic species. The Wetland Program will work with Range Management to enhance and preserve these unique ecosystems. Actions will be supported by the "Salt River Pima-Maricopa Indian Community Sonoran Desert Nesting Bald Eagle Protection Act" approved by the Community Council in 2010.
3. The majority of the Community's land slopes towards and contributes sheet flows to the Verde River and Salt River. Most land uses within the Community are agricultural and residential. Many of the nonpoint source

(NPS) outfalls discharge into the Salt River channel and have the potential to contribute NPS pollutants to the river system. The Wetland Program will collaborate with the WQP NPS Program to enhance existing vegetated outfalls and add new wetlands to treat NPS flows.

The Salt & Verde Rivers

Surface Water Quality Sampling

The Community's surface waters are comprised of the portions of flowing, but regulated, Salt and Verde Rivers upstream of the Granite Reef Dam and the dry, altered Salt River downstream of the dam. Originally, there were three (3) established surface water sampling locations along the Verde and Salt Rivers included in EPNR's Water Quality monitoring program. As of June 2008, a fourth sampling site was included. Additional sites are being considered for an expanded monitoring program. Samples are collected and analyzed generally in the spring and fall. Special summer sampling events occur to test mainly for bacteria during high recreation months. Detailed analysis information can be found in EPNR's *NPS Management Plan* (2008). **Figure 2.3** contains an aerial view of the Community with a magnified section showing the four sampling locations, which are:

1. The Verde River (VR-2) - just downstream of the SRPMIC boundary with Ft. McDowell near Pole 1 (the newest sampling location added in June 2008).
2. The Verde River (VR-1) – downstream of VR-1 at the USGS gauging station.
3. The Salt River (SR-1) - just upstream of its confluence with the Verde River near the Phon D. Sutton Recreational Center.
4. The Salt River (SR-2) - downstream of its confluence with the Verde River near Pole 7.

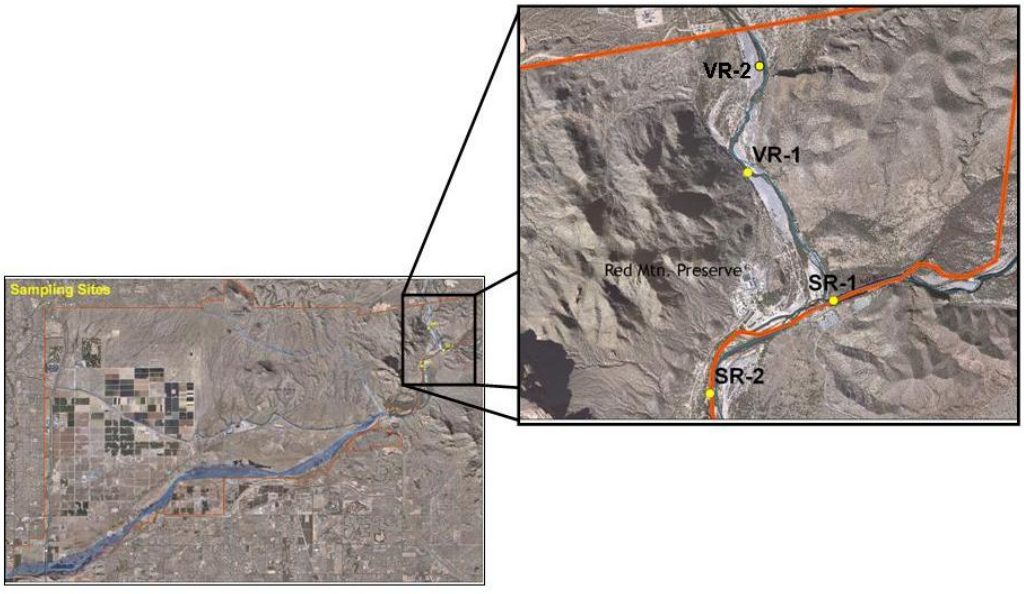


FIGURE 2.3 shows the four surface water sampling locations along the rivers with reference to the Community boundaries.

Verde & Salt River NPS Project (2001 - 2004)

The first project in the river area, initiated in the Water Quality Program's early years, targeted an area near the confluence of the two rivers on the west bank of the Verde River, near the Verde Water Treatment Plant. The project's main goal was to improve water quality in the Verde River. The objectives supporting that goal included:

1. Installation of fencing to prevent cattle from grazing in newly planted areas and to limit the cattle's access to highly eroded river banks.
2. Planting of native trees to enhance endangered species habitat and to stabilize the soils.

The project included three fenced areas; one in the riparian area, the second in the transition area from riparian to upland, and the third was closest to the treatment plant, in upland habitat. A mixture of 158 cottonwood and willow trees was planted in 2001 and 2002. A survey in 2003 revealed that 47 trees survived, mostly willows. The floods of 2005 completely washed away the two sites closest to the river, but remnants of the upland site survived. In 2004, monies remaining in this grant were used to remove tamarisk at the newly-established Cottonwood Wetland.

Red Mountain Project (2004)

The Red Mountain Project was the second project carried out along the river corridors. Its original objectives were to conduct habitat analysis, to map endangered species, and to develop a Management Plan to control grazing and wood harvesting along the preserve areas. Partnerships with Arizona Game and Fish and the US Fish and Wildlife Service (USFWS) were established during the execution of this grant. A draft Native Plant Ordinance and Wood Harvesting Permits resulted from efforts related to this project. In 2005, monies remaining in this grant were used to implement the Cottonwood Wetland improvements.

Verde River Bank Stabilization Project (2008 - 2009)

The third project in the preserve/river area was a 319-Competitive Grant project that addressed the NPS issue of sediment loading to the Verde River. It was initiated to stabilize the eroded banks of the Verde River near "Pole 2", a popular recreational area for Community Members. In addition to stabilizing soils, other objectives included reducing sediment loading along a 6-mile stretch of river, improving aesthetics, and establishing culturally-significant plants. This project was completed in 2009. It is anticipated that monitoring will begin in 2011. This project is called-out in the map shown in **Figure 2.4** on the following page.

Tamarisk Removal along the Verde River (2008-2009)

The fourth project, the Lower Verde Tamarisk Removal Project, utilized funding from the Bureau of Indian Affairs (BIA) to remove invasive and noxious salt cedar trees and shrubs at a specific site along the Verde River corridor. Treatment focused on cutting and herbicidal stump-treating the salt cedar. Several acres of dense salt cedar along the river bank were removed and monitored for regrowth.

Existing Wetlands & Riparian Areas

The Community currently has two constructed wetlands (locations highlighted in **Figure 2.4**) that were Clean Water Act (CWA) Section 319(h)-NPS Competitive Grant Projects to address NPS flows to the Salt River channel:

1. The Cottonwood Wetland (constructed in 2003)
2. The Lehi Wetland (constructed in 2008)

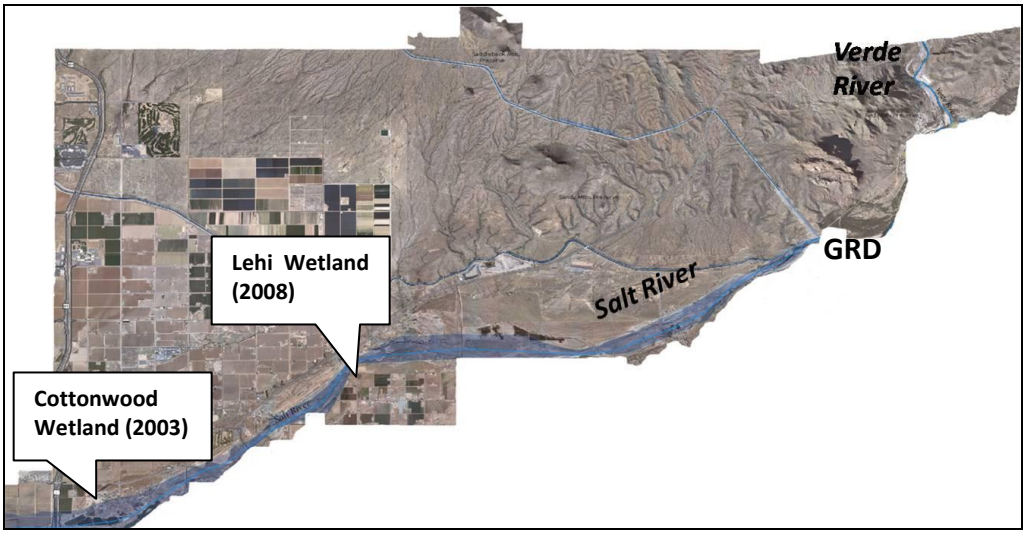


FIGURE 2.4 highlights three major NPS projects pertinent to the Wetland Program.

In addition to these two constructed wetlands, there are numerous riparian areas throughout the Community that will be investigated as part of the Wetland Program Monitoring and Assessment Strategy. Most wetland and riparian areas are found along the Verde and Salt Rivers, including several agricultural tailwater outfalls to the dry Salt River channel. But the riparian areas are not limited to these perimeter areas. Most of the agricultural tailwater streams run through the Community in unlined channels. Over time, many of these channels have become areas of mature cottonwood stands that provide oases of unique wildlife habitat throughout the Community. These agricultural areas will be included in the mapping of all wetland and riparian areas within the Community.

The Cottonwood Wetland

The Community's first constructed NPS treatment wetland, the Cottonwood Wetland, is located in the southwestern corner of the SRPMIC at an agricultural tailwater outfall to the Salt River. This wetland was constructed in 2003 to reduce NPS pollution to the Salt River. Prior to construction, this outfall was a dense thicket of salt cedar that was used as an illegal dumpsite for construction material (mostly cement) and household garbage (large appliances, furniture, tires, etc). Historic uses of this area may have included such things as land cultivation, mining, or grazing. As constructed, the wetland was about 80 feet wide by 200 feet long. Over time, the wetland has become larger; approximately 150 feet by 300 feet.

The wetland construction included removing some surface debris, removing an invasive salt cedar thicket, widening and stabilizing the outfall channel, and enhancing the ecosystem with native trees and riparian vegetation. One non-native floating aquatic, primrose, which was originally planted due to its fast growing nature, has become an invasive nuisance since construction that needs to be removed from the wetland or thoroughly decreased to a more manageable population. Since 2003, several monitoring and maintenance activities have taken place to enhance the Cottonwood Wetland. **Figure 2.5** summarizes these activities.

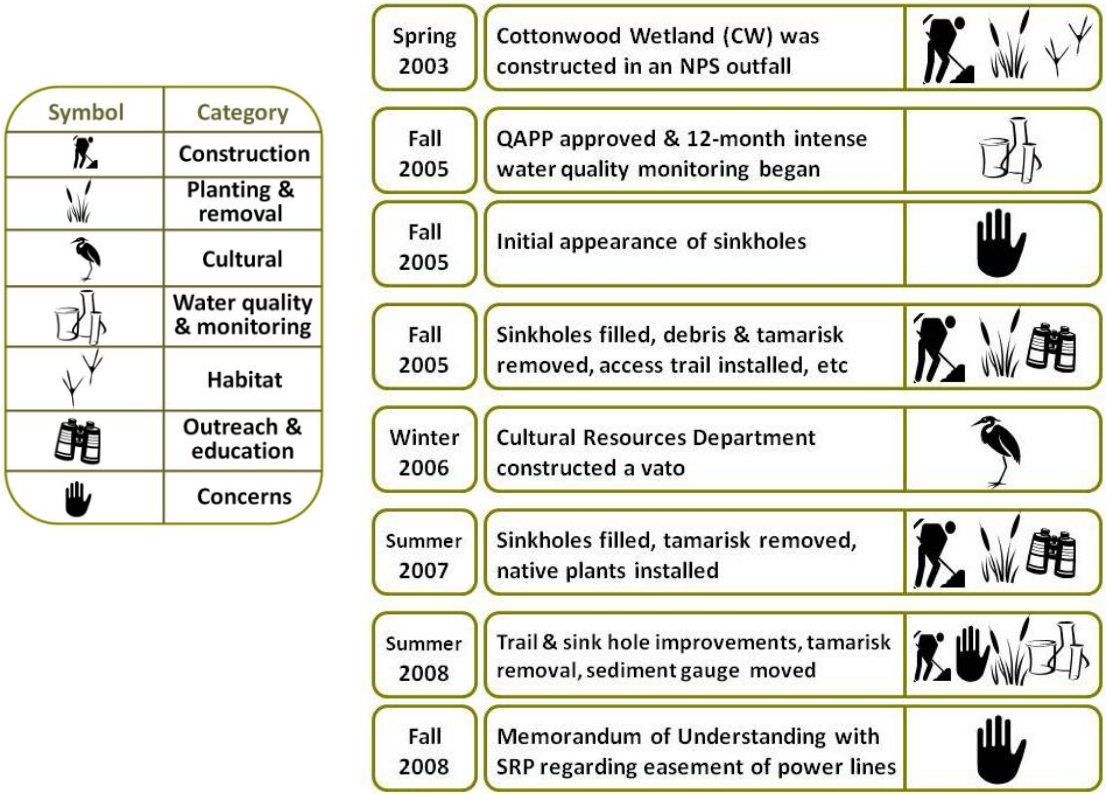


FIGURE 2.5 summarizes activities at the Cottonwood Wetland.

Current (FY11) on-going activities at the Cottonwood Wetland include:

1. Monthly monitoring for pH, temperature, dissolved oxygen, electrical conductivity, turbidity, and flow at three sampling locations.
2. Biannual water quality analysis for bacteria, inorganics, total metals, dissolved metals, nutrients, and other constituents at the three sampling locations in the fall (October - December) and spring (February - April).
3. Outreach/educational tours are conducted throughout the year upon request.
4. Regular maintenance to keep trails and access clear to ensure visitor safety.
5. Monitoring of plant health and wildlife habitat.
6. Monitoring and removing invasive plant species.
7. Neighboring landowner relationship development.

Planned activities for the Cottonwood Wetland include:

1. Revising the Cottonwood Wetland QAPP for EPA approval of using autosamplers at the site where two (2) sondes were deployed in 2010.
2. Enhancing visitor experience with narrative trail signs.
3. Incorporating more cultural components in the wetland area.
4. Conducting habitat inventory and bird/animal surveys.
5. Introducing some wildlife and native plant species if possible.
6. Neighboring landowner relationship development and communication.

The Wetland Program SES will oversee all activities at the Cottonwood Wetland including water quality monitoring and maintenance. The WQP will assist the WP SES during the first six months of transition as well as provide technical guidance through FY12. **Figure 2.6** is an aerial photograph of the Cottonwood Wetland which highlights many of the activities that have occurred at the wetland.

FIGURE 2.6 shows the Cottonwood Wetland sampling and monitoring locations as well as some pertinent wetland components.

The Oak Street Wetland

In 2007, the Community began work on the second NPS treatment wetland, located in the Lehi District of the Community. A review of EPNR's *EPA 319 Grant NPS*

Discharge BMP Recommendations (2003) and site visits to the agricultural tailwater outfall at the west-end of Oak Street indicated excessive erosion over the four-year period. The channel had scoured the 5ft wide by 5 ft deep channel to over 10 ft wide and up to 15 ft deep.

A constructed wetland was designed for the outfall located in the area erroneously classified as Tribal land. When construction permits were applied for at ECS, it was found that the parcel was allotted, not Tribal land. Over one hundred owners were listed, making the possibility of gaining permission to construct the wetland in a timely manner on this parcel unachievable. Therefore, in 2007, the pursuit of the construction of the Oak Street Wetland ceased and the design plans will remain usable in the case that future Tribal funding and effort allow for this wetland to be built. As an alternative, a new location was selected for the Lehi Wetland at Thomas and Horne Roads.

The Lehi Wetland

The Lehi Wetland is near the intersection of Thomas Road and Horne Road on the eastern edge of the Salt River floodplain (**Figure 2.4**). It was funded by CWA Section 319(h) Competitive Grants and constructed in the fall of 2008. It is a three-basin wetland design, with an island constructed in the center of the largest middle basin. This wetland is roughly 425 feet long and 100 feet wide at its widest point, the middle basin.

The objectives for the Lehi Wetland include:

1. Improve water quality of the NPS flows by intercepting the water in a treatment wetland before discharging into the Salt River.
2. Increase awareness of NPS pollution prevention and wetlands.
3. Serve as a model for potential future wetland sites.
4. Provide an opportunity to grow and harvest culturally-significant plants.
5. Provide an area for Community members to enjoy.

Due to funding constraints, planting for the Lehi Wetland has taken place in stages after construction was completed. The wetland slopes were originally seeded during initial construction due to the highly erodible soil type near the river. Several planting events have occurred since construction that have relied on volunteers and harvested cottonwood and willow poles as well as donated material.

As of FY10, approval of the Lehi Wetland QAPP is pending and an official monitoring program has yet to be implemented. The wetland will be monitored in a manner similar to the Cottonwood Wetland in its inception, with weekly monitoring of in-situ parameters and quarterly sampling for laboratory analysis of the same constituents. Meanwhile, plant augmentation and maintenance are ongoing. **Figure 2.7** summarizes these planting events and other activities that have occurred at the Lehi Wetland.

Symbol	Category
	Construction
	Planting & removal
	Cultural
	Water quality & monitoring
	Habitat
	Outreach & education
	Concerns

Summer 2008	Burrowing Owls found during survey and relocated with USFWS permit	
Fall 2008	Lehi Wetland is constructed & slopes are seeded	
Spring 2009	QAPP submitted to EPA & plants installed during Earth Day Event	
February 2010	EPNR & CRD plant cottonwood & willow poles harvested from the rivers	
April 2010	Plants installed & vato is constructed during Earth Day Event	

FIGURE 2.7 summarizes the planting and construction activities at the Lehi Wetland.

Planned activities for the Lehi Wetland include:

1. Enhancing visitor experience with narrative trail signs and additional seating.
2. Incorporating more cultural components in the wetland area.
3. Developing interactive displays for visitors.
4. Creating opportunities for visitors and regular volunteer activities.

The Wetland Program SES will oversee all activities at the Lehi Wetland including water quality monitoring and maintenance. The WQP will assist the WP SES during the first six months of transition as well as provide technical guidance through FY12. **Figure 2.8** is an aerial photograph of the Lehi Wetland which highlights many of the activities that have occurred since 2008.

FIGURE 2.8 shows the Lehi Wetland sampling and monitoring locations as well as some planting installations.

NPS Outfall Investigation

In September 2003, EPNR conducted a thorough investigation of five (5) irrigation and stormwater outfalls to the dry Salt River bed. Field investigations consisted of locating (GPS coordinates) and characterizing each outfall based on the presence and character of vegetation, visual assessment of soils in the immediate area, and presence and aerial extent of surface water at each NPS outfall. The assessment resulted in best management practice (BMP) recommendations for the five sites which included structural, vegetative, educational, and maintenance practices. The assessment recommended each site be revisited in five (5) years to determine if enough water is discharged to those five locations to sustain the vegetative community present and if additional BMPs are necessary. This assessment was conducted again in July 2009.

Results from this reassessment and comparison of outfalls found one outfall of particular interest for the Wetland Program. The outfall located at the east-end of McDowell Road at the Salt River has transformed from a barren flooded ditch to a thriving riparian habitat. The photographs shown in **Figures 2.9** and **2.10** capture this transformation. This is the type of riparian area that the Wetland Program will strive to protect, preserve, and enhance. The complete wetland and riparian area inventory will enable the Program to locate and find other similar areas throughout the Community.

FIGURE 2.9 View 1 of McDowell Outfall in September 2003 (left) & July 2009 (right).

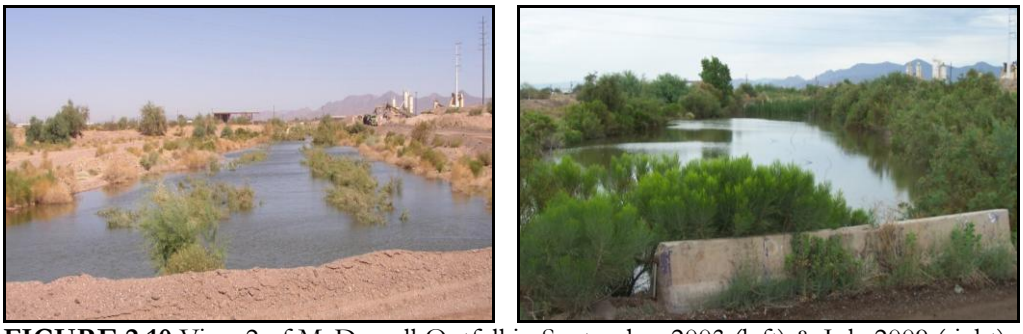


FIGURE 2.10 View 2 of McDowell Outfall in September 2003 (left) & July 2009 (right).

Existing Plans & Documents

EPNR and the WQP have developed many planning and guidance documents that will be beneficial to the Wetland Program. **Table 2.1** lists many of these documents. This Plan is included in the table and it is anticipated that the Wetland Program Quality Assurance Project Plan (QAPP) will be the newest document to be added to the list in FY11.

TABLE 2.1 Pertinent EPNR Documents

Title	*EPA-Approved*	*Year Published*
Wetland Program Plan (this document)	No	2010
(Revised) QAPP for Surface Water including macroinvertibrate sampling	No	2009
QAPP for the Lehi Wetland	No	2009
Long-Term Monitoring and Adaptive Management Plan for the Lehi Wetland	No	2009
(Revised) Nonpoint Source Management Plan of the SRPMIC	No	2008
(Revised) Nonpoint Source Management Watershed-Based Plan	No	2008
Surface Water Quality Standards	Yes	2007
Aquifer Water Quality Standards	Yes	2007
Long-Term Monitoring and Adaptive Management Plan for 319-h Nonpoint Source Demonstration Wetland	Yes	2007
BMP Manual - Stormwater Management Program	Yes	2007
Inspection, Compliance, and Enforcement Standard Operating Procedures	Yes	2007
(Revised) Quality Assurance Project Plan for Surface Water and Groundwater Monitoring	No	2007
Native Plant Nursery Feasibility Study	Yes	2006
QAPP for 319-h Nonpoint Source Demonstration Wetland	Yes	2005
EPA 319 Grant NPS Discharge BMP Recommendations	Yes	2003
(Original) QAPP for Surface Water and Groundwater Monitoring	Yes	2002
Procedures Manual for Sampling Surface Water	Yes	2000
Procedures Manual for Sampling Groundwater	Yes	2000
(Revised) Standard Operating Procedures (Groundwater)	No	2010
(Revised) Standard Operating Procedures (Surface Water)	No	2010
Standard Operating Procedures (Wetlands)	No	2010
(Original) Non-point Source Management Program of the SRPMIC	Yes	2000

3

Monitoring & Assessment Strategy

The goal of this element is to document and track changes in wetland acreage and condition.

Under EPA's guidance, each core element's actions and activities (A&A) are grouped under three (3) distinct sets; 1) Goals, 2) Strategy Development and 3) Strategy Refinement. This chapter systematically addresses the A&A sets for Monitoring and Assessment (M&A). While the EPA CEF is comprehensive and provides an array of A&A that tribes can choose from, this Plan includes all Actions for consideration within the planning period. The Plan lists only the activities that are applicable for achieving EPNR's goals, and are suited to the Community's resources. Revised plans (after this planning period) will likely contain revised activities that advance the Wetland Program towards future goals.

Monitoring & Assessment Goals

Table 3.1 on the following page lists all the actions and activities for setting goals for the Monitoring and Assessment Strategy. During the Wetland Workshop I, EPNR collaborated with Engineering and Construction Services (ECS) and Cultural Resources Department (CRD) on the following actions:

- Identify program decisions and long-term environmental outcomes that will benefit from a wetlands M&A program.
- Define wetlands monitoring objectives & strategies.

The following actions will be addressed and included in the Wetland Program's Quality Assurance Project Plan (QAPP) during FY11:

- Develop monitoring design, or an approach and rationale for site selection that best serves monitoring objectives.
- Select a core set of indicators to represent wetland conditions or a suite of functions.

TABLE 3.1 Monitoring & Assessment Strategy Goals Actions and Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Identify program decisions & long-term environmental outcomes that will benefit from a wetlands M&A program (M&A, Obj. 1, Action a)	• Document long-term environmental goals • Identify programs that will use monitoring data • Collaborate with WQP • Identify how wetland data can be used to implement watershed planning	X X X X			
b. Define wetlands monitoring objectives & strategies (M&A, Obj. 1, Action b)	• Coordinate with most relevant partners • Examine other sources for monitoring information • Identify monitoring objectives • Define data needs & uses • Coordinate with WQP monitoring • Examine how to integrate wetlands monitoring strategy into existing water quality monitoring efforts as feasible • Document wetland monitoring strategy	X X X X X X X			
c. Develop monitoring design, or an approach & rationale for site selection that best serves monitoring objectives (M&A, Obj. 1, Action c)	• Determine the appropriate classification scheme in order to group the type, class, and size of wetlands • Develop & describe site selection process • List universe of wetland resources from which sites could be selected if available • Determine which data are already available		X X X X		
d. Select a core set of indicators to represent wetland condition or a suite of functions (M&A, Obj. 1, Action d)	• Identify indicators that are relevant for established monitoring objectives • Confirm indicators are scientifically defensible • Develop/select field method(s) • Add supplemental indicators if needs dictate & as resources allow		X X X X		

Document Long-Term Environmental Goals

The following are the long-term goals of the Wetland Program:

1. Increased education and awareness of the importance of wetlands in the Community.
2. Increased support of wetlands preservation and protection – Community Council to teachers, students, and Community Members.
3. Increased monitoring and assessment of the wetland/riparian areas throughout the Community.
4. Preservation of existing wetland habitat within areas of potential development.
5. Increased quantity and improved quality of wetlands in the Community.
6. Increased coordination for managing and controlling vectors (in particular mosquitoes in order to control West Nile Virus) and invasive vegetation (especially salt cedar).
7. Improved water quality throughout the Community.
8. Increased wildlife habitat including nesting sites for avian populations like the Southwest Willow Flycatcher and Bald Eagle.
9. Increased populations of indigenous plants and animal species through reintroduction (such as willows, frogs, turtles, etc).
10. Increased interest and interaction at the wetland by Community members.

Identify Programs that Will Use Monitoring Data

The following programs, partners, and SRPMIC departments were identified as having the potential to use the monitoring data:

1. Other Programs within EPNR would be anticipated to use the data:
    a. Water Quality Program
    b. Range Management (RM)
    c. Land Use Compliance (LUC)
    d. Waste Management Program (WMP) for illegal dumping
2. SRPMIC Cultural Resources Department (CRD)
    a. Planting traditional and indigenous plants
    b. Coordinate with harvesting of culturally significant plants
3. SRPMIC Engineering and Construction Services (ECS)
    a. Irrigation practices
    b. Canal clearing and water releases (maintenance issues)
4. SRPMIC Planning Services and Economic Development – future development and appropriate plant lists
5. Environmental Protection Agency (EPA)

Collaborate with EPNR's Water Quality Program

The Wetland Program (WP) will essentially be a sub-program to the Water Quality Program (WQP) for at least the first two years (FY11-FY12). During that time, extensive collaboration and coordination will occur between the WQP and the WP. Some examples include:

1. The WQP has already conducted Level 1 Assessments (landscape assessments) and Level 2 Assessments (rapid assessments) as part of its nonpoint source (NPS) pollution program at several NPS outfalls to the river channels. The Wetland Program will collaborate with the WQP and RM to carry out Level 3 Assessments (intensive site assessments) which will be detailed in the QAPP. This will allow EPNR to establish baseline conditions of wetlands throughout the Community, assess the water quality improvements and habitat value of each, and rank the areas for preservation and restoration. The three EPNR programs will work together to achieve this assessment.
2. The WQP and the WP will work together on surface water quality sampling during the first two years.
3. The WP will maintain the two NPS wetlands, the Cottonwood Wetland and the Lehi Wetland, with planting, harvesting, and general maintenance activities including water quality monitoring with technical guidance provided by the WQP.

Identify How Wetland Data Can Be Used to Implement Watershed Planning

Currently, the Water Quality Program has a *Nonpoint Source Management Watershed-Based Plan* (NPS MWBP – 2008). The wetland data will be in direct support of the following Management Objectives as stated in the NPS MWBP:

1. Under Habitat Restoration – Determine opportunities and methods to map, determine the aerial extent of, and monitor wetlands, riparian areas, and native vegetation along the Verde and Salt Rivers.
2. Under Habitat Restoration – Determine opportunities and methods to investigate salt cedar thickets that should be removed and planted with native vegetation along the Verde and Salt River systems.

Coordinate with Most Relevant Partners

The Wetland Program Workshop established the lines of communication between the most relevant SRPMIC partners and external agencies which include:

1. SRPMIC Cultural Resources Department (CRD)
2. SRPMIC Engineering and Construction Services (ECS)
3. SRPMIC Public Works (PW)
4. SRPMIC CDD Divisions
5. Environmental Protection Agency (EPA)

Examine Other Sources for Monitoring Information

The following list of partners and monitoring information have been identified:

1. ECS
    a. Annual aerial photos
    b. Annual irrigation usage rates
    c. Irrigation drainage maps
    d. SRP flood release coordination

2. CRD – SRPMIC has not adopted Traditional Cultural Properties (TCP) inventorying but could be interested in pursuing this opportunity under which wetlands would be inventoried.
3. US Geological Survey – has two river gauges along the Verde River.
4. Arizona Game & Fish – Nest Watch Program – monitors the bald eagles.
5. US Fish & Wildlife Service – notifies Community if sighting of significant species are reported in nearby areas.
6. Maricopa County Vector Control – conduct mosquito counts in Salt River area (generally May through October).
7. Arizona Department of Environmental Quality (ADEQ) – has biomonitoring/biocriteria stations upstream of the SRPMIC along the Salt River.

Identify Monitoring Objectives

The following monitoring objectives were identified:

1. Identify **where** the Community's wetlands/riparian areas are located.
    a. Areas will be mapped to include location and approximate size of each.
    b. Both qualitative and quantitative information on the Community's current wetland areas will be recorded.
    c. The Wetland Program will collaborate with the commercial leasing process to gain access to areas showing significant wetland conditions in land leased by the sand & gravel operations.
    d. Areas may need to be surveyed by boat along both rivers that capture riparian areas/wetlands and needs for restoration, improvement, enhancement, protection, etc.
2. Determine **what types** of wetlands exist in the Community. Types can be determined by documenting:
    a. Vegetation – making note of the presence of traditional-use plants and notifying CRD as well as coordinating the harvest of such plants.
    b. Water frequency/presence.
    c. Animal/species presence and habitat.
3. Determine **what type of action** may be required at each wetland area. Based on the findings from Objective 1 and 2, the types of actions required may include:
    a. Restoration/enhancement.
    b. Protection/preservation.
    c. Short- and/or long-term monitoring to determine future action.

Define Data Needs and Uses

The following list includes the various data needed and possible uses that the Wetland Workshop generated:

1. Mapping the location of these areas - will be useful for planning and development of the Community and designating protected areas during future land use designations.

2. Water quality – of the wetland will be used by the WQP to determine if any improvement measures are needed to treat particular areas or contaminants.
3. Plant/animal species – will be used to assist Range Management in establishing baseline conditions for future enhancement/reintroduction efforts as well as assist in the monitoring of threatened and endangered (T&E) species.
4. Vegetation – will be important in indicating wetland changes over time as well as noting traditional-use plants and invasives (see note 5 below).
5. Invasive plants – will be noted and used to look for areas that may need salt cedar or other invasive species control.
6. Mosquito breeding conditions – will be used to determine if vector control (mosquito dunks or fogging) is necessary in any areas.
7. Access to areas will be noted – and useful when developing sites for recreational/educational uses as well as for protecting other areas.
8. Presence of dump sites and other wastes – will be recorded and Waste Management will be notified to determine clean-up actions.

Coordinate with Water Quality Program Monitoring

The Wetland Program will coordinate with the WQP by:

1. Notifying and collaborating whenever possible with the WQP on all field effort having to do with water quality and invasive species.
2. Following the protocols and standard procedures found in the WQP's *Quality Assurance Project Plan for Surface Water and Groundwater Monitoring* (2007).
3. Following the protocols and standard procedures found in the WQP's *Surface Water Quality Standards* (2007).
4. Using the WQP's *Long-Term Monitoring and Adaptive Management Plan for 319-h Nonpoint Source Demonstration Wetland* (2007) as guidelines for long-term monitoring of the Community's wetlands.
5. Identifying which Wetland Program efforts are in line with the current and all future revisions of the WQP's *Nonpoint Source Management Watershed-Based Plan (2008)* and informing the WQP of such efforts.
6. Identifying which Wetland Program efforts are in line with the current and all future revisions of the WQP's *Nonpoint Source Management Plan* (2008) and informing the WQP of such efforts.
7. For reference sake, **Table 3.2** (on the following page) includes a summary of the current (as of FY11) WQP Monitoring Schedule.

TABLE 3.2 Summary of WQP Monitoring Schedule

Category	*Frequency*	*When*	*Analysis*
Salt & Verde Rivers	Bi-annually	Fall (Oct. – Dec.) Spring (Feb. – Apr.)	Full laboratory
Salt & Verde Rivers	Monthly	Summer Only (May, June, July, Aug., & Sept.)	*E.* coli & nitrogen
Cottonwood Wetland	Monthly Monitoring	Year round	In-situ only
Cottonwood Wetland	Biannually	Fall (Oct. – Dec.) Spring or Summer	Full laboratory
Irrigation System	**Every 5 years**	August	E. coli & nitrogen
Groundwater	Annually	August	Full laboratory
Lehi Wetland	Weekly Monitoring	Year round	In-situ only
Lehi Wetland	Quarterly	Year round	Full laboratory

Examine How to Integrate Wetlands Monitoring Strategy into Existing Water Quality Monitoring Efforts as Feasible

The Wetland Program will work closely with the WQP the first two years to develop an efficient integrated monitoring protocol. Some specific efforts that the Wetland Program needs to consider to meet this activity include:

1. Collaborate with the WQP on developing the water quality monitoring schedule during the planning phase of the Wetland Program Quality Assurance Project Plan (QAPP). (The WQP has established a set quarterly sampling schedule and special monthly summer sampling events that may benefit the Wetland Program to piggy-back some water quality sampling during such times and staggering other events so as not to over schedule field personnel).
2. Ensure that water quality sampling and coordination with the WQP is included and documented in the QAPP.
3. Continually update the WQP on Wetland Program status and activities so as to ensure efforts are not duplicated and information is shared. Communication is critical for the success of the Wetland Program.

Document Wetland Monitoring Strategy

General steps were developed to capture the overview of the monitoring strategy. More detailed information and specifics will be included in the Wetland Program QAPP planned for development in FY11. These outlined steps include:

1. **Step 1** – develop an EPA approved Quality Assurance Program Plan (QAPP) that details all of the following steps.

2. **Step 2** – conduct a thorough wetland/riparian area mapping of the Community.
    a. Use aerial photos and maps to develop a list of potential areas.
    b. Ground truth all suspected wetland/riparian areas.
    c. For all areas document:
        i. Areal extent
        ii. Obtain four waypoint photographs (at a minimum) of the site with GPS locations recorded, so can be reproduced.
        iii. Record vegetation type (xeric, meso-xeric, riparian, etc), quantity estimates (if possible), and height and/or width of certain predominant species.
        iv. Record presence of water or indication of water frequency (erosive conditions, moist soils, standing water, etc).
        v. In-situ water parameters when water is present (pH, temp. conductivity, dissolved oxygen, etc).
        vi. Rate vulnerability/need for action.
3. **Step 3** – develop electronic map and data base from Step 2 data.
4. **Step 4** – evaluate data from Step 2 for:
    a. Further monitoring – water quality, invasive species, mosquito control, etc.
    b. Develop list of Actions Required & "Hot Spots".
5. **Step 5** – Refine Strategy and continue to monitor and record information.

Monitoring & Assessment Strategy Development

Table 3.3 on the following page lists all the actions and activities for developing the Monitoring and Assessment Strategy. This Plan mainly addresses the goals and objectives of the M&A Strategy. The details and development of the M&A Strategy will be included in the QAPP in FY11. Essentially the QAPP will address the following actions:

a. Ensure the scientific validity of monitoring and laboratory activities.
b. Monitor wetland resources by the development of the monitoring tools and specific wetland studies as specified in the QAPP.
c. Establish reference conditions.
d. Track monitoring data in a system that is accessible, updates on a timely basis, and integrated with other water quality data.

The last action regarding decision-making will occur in FY12 and FY13:

e. Analyze monitoring data to evaluate wetlands extent & condition/function or to inform decision-making.

TABLE 3.3 Monitoring & Assessment Strategy Development Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Ensure the scientific validity of monitoring & laboratory activities (M&A, Obj. 2, Action a)	• Develop & draft peer review Quality Management Plan (QMP) • Develop & draft peer review Quality Assurance Project Plan (QAPP) • Develop & draft peer review Field Operations Manual (FOM) • Select, prioritize, and peer review candidate assessment indicators		**X** **X** **X** **X**		
b. Monitor wetland resources by the development of the monitoring tools & specific wetland studies as specified in strategy (M&A, Obj. 2, Action b)	• Identify & train staff to monitor for each indicator • Verify monitoring strategy by conducting sufficient number of pilot monitoring projects • Develop a schedule for monitoring wetland resources • Develop a method to track sites that are monitored		**X** **X** **X** **X**		
c. Establish reference condition (M&A, Obj. 2, Action c)	• Define reference condition • Define reference standard condition • Determine process for measuring reference standard condition • Select reference sites using a systematic approach		**X** **X** **X** **X**		
d. Track monitoring data in a system that is accessible, updates on a timely basis, and integrated with other water quality data (M&A, Obj. 2, Action d)	• Design a data management system that supports program objectives • Refine a data system so that it can be used for analysis • Make data system compatible with & regularly update Water Quality Standards • Integrate with other water quality databases • Georeference data as it is gathered for reporting • Identify sites to sample repeatedly for a trend network		**X** **X** **X** **X** **X** **X**		

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
e. Analyze monitoring data to evaluate wetlands extent & condition/function or to inform decision-making (M&A, Obj. 2, Action e)	• Document data analysis & assessment procedures • Develop assessment method to determine condition thresholds relative to reference standard condition • Determine baseline wetland condition • Analyze changes in wetland extent or condition relative to reference conditions • Analyze changes in wetland extent or condition in response to climate change			X X X X	 X X

Monitoring & Assessment Strategy Refinement

Table 3.4 lists all the actions and activities for refining the M&A Strategy over time. The only M&A Strategy Refinement activity carried out in this planning period was to develop a schedule to evaluate the monitoring program under Action a) "Evaluate monitoring program to determine how well it's meeting objectives."

TABLE 3.4 Monitoring & Assessment Strategy Refinement Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Evaluate monitoring program to determine how well it's meeting objectives (M&A, Obj. 3, Action a)	• Develop schedule to evaluate monitoring program • Ensure the assessment method is providing the necessary information • Review other wetlands program elements (e.g., restoration, regulation, water quality standards) • Modify other aspects of wetlands program as needed based on review of monitoring data	X	X X X X	 X X X	
b. Evaluate the environmental consequences of federal or Community actions (M&A, Obj. 3, Action b)	• Inform tribal government wetland permit decisions • Inform 401 certification decisions on federal actions • Modify permitting or 401 certification practiced as needed based on assessment information				X X X

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
c. Improve the site-specific management of wetland resources (M&A, Obj. 3, Action c)	• Incorporate monitoring & analysis into restoration techniques • Develop & establish methods to establish ecologically-meaningful benchmarks for gauging restoration success • Develop & establish methods to evaluate the performance of compensatory mitigation sites • Develop and establish methods to evaluate the ecosystem services provided by individual wetlands				**X** **X** **X** **X**
d. Develop geographic wetland protection, restoration, & mgt. plans (M&A, Obj. 3, Action d)	• Identify & prioritize management areas • Incorporate wetland into a comprehensive Watershed Plan that serves water quality management needs & addresses all waters • Evaluate progress toward meeting wetland objectives identified in other projects/programs • Inform broader watershed activities		**X** **X** **X** **X**		

Develop Schedule to Evaluate Monitoring Program

The only M&A Strategy Refinement activity carried out in this planning period was to develop a schedule to evaluate the monitoring program. Since this is a new program with a limited funding period of two years, a rigorous evaluation schedule will help keep the Wetland Program on track. It will be important that the Wetland Program provides Program status updates to the CRD representatives, ECS representatives, EPNR Management, and WQP staff on the 6-month intervals detailed below:

1. **Program Start Date – January 2011** (conservative start date)
2. **July 2011 – six-month check point** – report status update on:
    a. QAPP should be drafted and submitted for approval.
    b. Allow 3 months for EPA review and approval process.
3. **December 2011 – 12-month check point** – report status update on:
    a. Scheduled 6 months of M&A is anticipated to be from November 2011 to April 2012.
    b. Is M&A on target?
    c. Does the Wetland Program have two months of activity?
4. **June 2012 – 18-month check** – report status update on:
    a. The M&A should be complete.
    b. Results have been tabulated and are being shared for evaluation.
    c. Workshop participants should have been receiving regular updates on Wetland Program activities and have results.
5. **September 2012 – Project Period ends** – report status update on:
    a. EPA funding ends.

b. Program is a success.
c. SRPMIC continues to fund program or federal dollars secured to support program.

4

Regulatory Activities, Education & Outreach

The goal of this element is to minimize wetland losses by setting guidelines for mitigation.

The majority of actions and activities associated with this element will take place after FY12. Since this Program is just beginning, it will need FY11 and FY12 to inventory, map, and categorize the Community's wetlands as well as to gain support of the Program and the importance of wetlands in the Community. Once these two objectives are met, the Wetland Program will be able to better address the complexities of impacting regulatory activities in the SRPMIC.

Existing Authorities & Programs

This section is a brief summary of the Tribal and federal regulations that may be applicable to the Wetland Program. EPNR follows guidance set forth by these federal laws and regulations while adhering to the applicable SRPMIC Salt River Ordinances (SRO). The SRPMIC relies on many federal programs for financial and technical support in order to achieve its environmental goals and administer and operate EPNR programs and projects.

The Clean Water Act

In 1972, Congress passed the Clean Water Act (CWA) as an amendment to the Federal Water Pollution Control Act. The CWA provides a comprehensive national framework for water pollution control and water quality management. The goal of the CWA is to restore and maintain the integrity of the nation's waters and to provide water quality sufficient for "the protection and propagation of fish, shellfish, and wildlife, and provision of recreation in and on the water." Provisions within the CWA allow tribes to receive grants to carry out water quality management planning activities. The four (4) following CWA Sections may be relevant to the Wetland Program:

1. **Section 104(b)(3), under Research, Investigations, Trainings, and Information,** makes grants to agencies for establishing programs that prevent, reduce, and eliminate pollution.

2. **Section 303, Water Quality Standards and Implementation Plans,** requires that EPA review and approve water quality standards to assure the standards are consistent with the requirements of the CWA.
3. **Section 319, Nonpoint Source Management Program,** states, territories and tribes receive grant money that supports a wide variety of activities to assess the success of specific nonpoint source implementation projects.
4. **Section 401, Certification**, requires that any applicant apply for a federal license or permit for the conduct of any activity which results in a discharge into navigable waters of the U.S. Section 401 provides EPA with authority to assure that federally permitted or licensed activities which can result in NPS pollution do not violate the Community's Water Quality Standards.
5. **Section 404, Permits for Dredged or Fill Material,** establishes a permit program for the discharge of dredged or fill material into the waters of the U.S. The Army Corps of Engineers administers this program. Discharge of dredged or fill material are frequently associated with activities occurring in or adjacent to streams and wetlands.

Safe Drinking Water Act

The objective of the Safe Drinking Water Act (SDWA) is to protect public health by establishing safe limits (Maximum Contaminant Limits - MCLs) based upon the quality of water at the tap for contaminants that may have adverse effects on human health. The SDWA also provides for pollution prevention of both surface and ground sources of drinking water.

SRPMIC Water Quality Ordinances

In **SRO-94-88, Groundwater Management, SRO-180-95, Environmental Ordinance** (which provides for water quality)**, and SRO-199-95, Surface Water Management,** the SRPMIC declares to eliminate all harmful discharges of pollutants into the surface and ground waters. These ordinances allow for assessment of a civil penalty, clean up and abatement, court action and injunctions.

In **SRO-185-95, Floodplain and Drainage,** the SRPMIC declares no impact on water rights, surface water, ground water, or water quality would result from any construction or earth-moving activity alternative. Drainage control is governed by and requires a detailed and certified design report written by the project contractors.

Further, SRO-185-95 states that impacts to the floodplains affected by the proposed actions are to be evaluated in accordance with the ordinance. There are no wetlands within the areas zoned for Commercial Use, however, where impacts to wetlands are expected, these effects will be evaluated on a case-by-case basis.

SRPMIC Range Ordinance

In **SRO-42-76, Restricting Roaming Animals, and SRO-187-95, Wild and Free Roaming Horses and Burros,** the SRPMIC proposes management and structural practices for livestock management in order to protect the open space range area from livestock operations. The ordinance establishes penalties for violations.

Regulatory Goals

Table 4.1 lists all the actions and activities for setting goals for the Regulatory element. The Regulatory Goal activities are all planned for FY13. However, the Wetland Program will focus on the following tasks during FY11-FY12 in preparation of addressing Regulatory Issues in FY13:

1. Collaborate with EPNR's Policy Analyst and CDD/EDD to ensure language is set forth in future commercial and mining leases allowing for access to wetlands and possible mitigation efforts if needed.
2. Develop relationships with the commercial and mining groups and collaborate on developing mitigation guidelines that these operations can carry out as they begin to close operations and move to other areas. Communication and education are critical to develop this type of support. If successful, the commercial and mining operations could be very beneficial partners in the restoration of riparian areas within the Community.

TABLE 4.1 Regulatory Goals Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Provide clear & comprehensive jurisdictional coverage of aquatic resources (Regulation, Obj. 1, Action a)	• Develop & adopt definition of waters of the tribe at least as inclusive as Clean Water Act (CWA) • Develop delineation process that will delineate wetlands in a manner that is at least equivalent with the federal program • Develop & adopt procedure to extend tribal government jurisdiction to aquatic resources that are not "waters of the US" • Base all water related regulatory programs within a jurisdiction on the same definition of waters of the "State"				**X** **X** **X** **X**
b. Clearly identify a comprehensive scope of activities to be regulated (Regulation, Obj. 1, Action b)	• Develop & adopt clear definition of regulated activities that is as extensive CWA • Coordinate with other CWA or tribal government aquatic regulatory programs to cover all impact types and methods				**X** **X**
c. Provide clear guidance to public on how to identify jurisdictional waters & activities (Regulation, Obj. 1, Action c)	• Develop clear, publicly accessible guidance and/or training on how to identify wetlands, streams, & other waters • Develop clear, publicly accessible guidance on what activities in waters of the "State" require what authorizations				**X** **X**

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
d. Evaluation (Regulation, Obj. 1, Action d)	• Periodic review of tribal government program to ensure all potentially regulated activities are addressed, and take appropriate programmatic action				**X**

Regulatory Strategy Development

Table 4.2 lists all the actions and activities for the Regulatory Strategy Development. All activities will take place in FY13.

TABLE 4.2 Regulatory Strategy Development Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Adopt regulations or rules to implement tribal government and/or federal water quality standards (Regulation, Obj. 2, Action a)	• Develop & adopt guidance to implement statutes as appropriate • Develop & adopt regulations that identify agency goals & responsibilities for all water quality statutes				**X** **X**
b. Develop procedures to operate according to a clear & effective set of criteria for reviewing & responding to applications (Regulation, Obj. 2, Action b)	• Develop & adopt publicly accessible criteria for applying for & agency review of applications • Establish reasonable timelines for initially responding to applications in regulatory guidelines • Establish reasonable timelines for providing final responses to applications in regulatory guidelines • Develop internal procedures for responding to federal actions on permits				**X** **X** **X** **X**
c. Actively review proposed impacts to waters of the "State" (Regulation, Obj. 2, Action c)	• Develop standard practices or general authorizations for like projects impacting similar aquatic resources				**X**

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
d. Determine & adopt comprehensive project review criteria (Regulation, Obj. 2, Action d)	• Adapt & adopt 404(b)(1) Guidelines or comparable review criteria for assessing & minimizing impacts • Develop & adopt more stringent review criteria than the 404(b)(1) Guidelines				X X
e. Coordinate to reduce duplicative efforts by the programs & the regulated public (Regulation, Obj. 2, Action e)	• Develop clear guidelines for roles, responsibilities, & procedures for review of permits for activities that require approval from more than one tribal government agencies				X
f. Require effective mitigation for authorized impacts (Regulation, Obj. 2, Action f)	• Develop & establish minimum requirements & review criteria for mitigation proposals				X
g. Track/Evaluate (Regulation, Obj. 2, Action g)	• Development & adoption of tribal rules/ordinances to protect wetlands • Develop program tracking system to measure a number of 401 applicants, certifications, permits, etc.				X X

Regulatory Strategy Refinement

Table 4.3 lists all the actions and activities for the Regulatory Strategy Refinement. Most activities will take place in FY13. However, the Wetland Program will work diligently during FY11-FY12 on the following action to gain support of wetlands and the Wetland Program:

d. Perform public education and outreach about wetland protection, regulated waters and activities, and authorization process.

TABLE 4.3 Regulatory Strategy Refinement Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Enforce aquatic resource protections (Regulation, Obj. 3, Action a)	• Develop enforcement & compliance mechanisms to monitor compliance & deter violations • Set timeframe for compliance				X X

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
b. Ensure impact assessments & mitigation crediting lead to replacement of aquatic resources with similar structural, functional or condition attributes (Regulation, Obj. 3, Action b)	• Develop & adopt functional or condition assessment methodologies • Develop & establish performance standards & success criteria for mitigation • Develop methods to evaluate mitigation against reference & pre-impact sites regularly; revise performance standards, review criteria, and/or functional/condition assessment methods accordingly • Develop & improve a process to coordinate regulatory programs with other entities conducting restoration				**X** **X** **X** **X**
c. Incorporate the watershed approach into the regulatory decision-making process (Regulation, Obj. 3, Action c)	• Develop & establish methods for determining cumulative impacts to aquatic resources within a watershed				**X**
d. Perform public education & outreach about wetland protection, regulated waters and activities, & authorization process (Regulation, Obj. 3, Action d)	• Make education/outreach documents or activities available on important programmatic topics. • Make program information available through readily accessible outlets (hotlines, websites, brochures, etc.)	**X** **X**	**X** **X**	**X** **X**	**X** **X**
e. Develop process to measure Environmental Results (Regulation, Obj. 3, Action e)	• Develop a process to track a number of items such as permitted sites, non-compliant sites, mitigation sites, etc.				**X**

Make Education/Outreach Documents or Activities Available on Important Programmatic Topics

EPNR places great importance on Community outreach and education to increase the Community's awareness on environmental protection and stewardship as it relates to the Community's long standing commitment to revitalizing historically vital sites. The Wetland Program will pursue opportunities for public education, volunteerism, outreach about wetland protection, and regulated waters and activities, and set the foundation for future regulatory efforts and authorization processes. The WQP and the Wetland Program will develop an

outreach booklet using the artwork from the Community's art students. **Figures 4.1 and 4.2** show the series of outreach booklets that the Wetland Program's outreach booklet (*Restoring the Community's Wetlands)* will be part of.

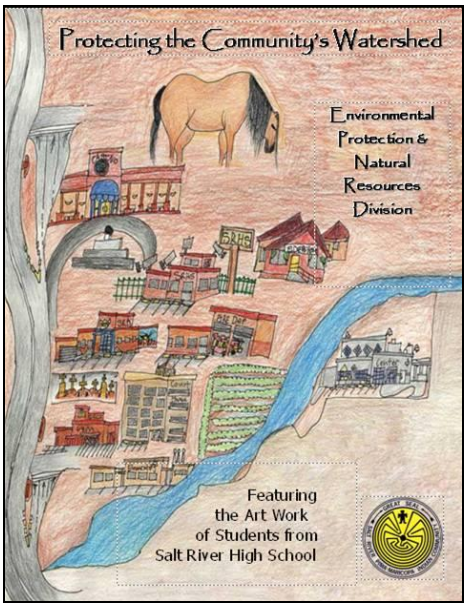


FIGURE 4.1 *Protecting the Community's Watershed* (2008)

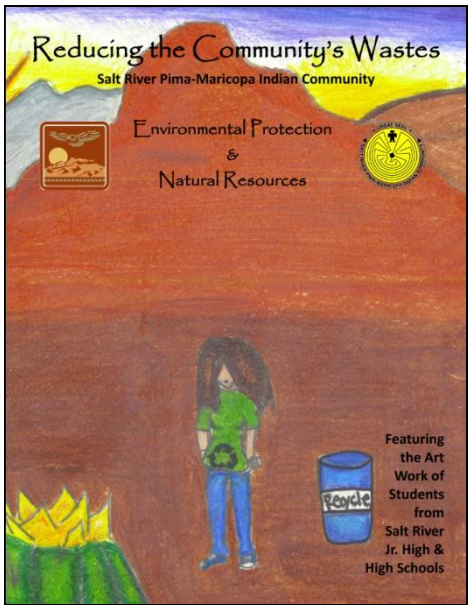


FIGURE 4.2 *Reducing the Community's Wastes* (2010)

Additionally, the Wetland Program will coordinate with the Cultural Resources Department to incorporate important cultural concepts and information that relates to wetland and habitat protection. This coordination will increase the validity and importance of restoring and protecting wetland areas throughout the Community.

Make Program Information Available Through Readily Accessible Outlets

The Wetland Program will continue EPNR's proactive means of making the Community and its visitors aware of the environmental issues the Community faces as well as the possible solutions EPNR develops. There are a number of activities, publications, and meetings that the Wetland Program will participate in to update the Community on the Wetland Program. The following is a list of some of those activities:

1. Develop a Wetland Program tri-fold brochure and update regularly.
2. Develop a handout map of the Community with accessible wetlands, trails, and other important program information for Community members and distribute as appropriate.
3. Publish regular articles in the Au-Authm Action News, the Community Newspaper, to inform the Community on the Wetland Program.
4. Make all information available on EPNR's website.

5. Attend and present at Community Council and District Meetings.
6. Attend and present at Salt River career fairs.
7. Provide presentations at the Salt River schools as available.
8. Provide tours of significant wetland areas to Community Council, members, visiting dignitaries, Salt River schools, EPA representatives, and SRPMIC employees.
9. Attend and present at local and national conferences.
10. Coordinate and present at annual SRPMIC Earth Day and Fall Overhaul volunteer events.
11. Provide field presentations along rivers to Community Council, Members, SRPMIC employees, school officials, students, and visitors.
12. Schedule and host a workshop(s) for Arizona Tribes and associated partners regarding Wetland Program Activities for summer 2011 and/or spring 2012, as appropriate and approved by Council.
13. Post signage along both river systems notifying recreational users of the SRPMIC laws and unique habitat that is present.
14. Post additional signage along both river systems encouraging proper waste disposal.

5

Voluntary Restoration, Protection, & Partnerships

The goal of this element is to increase wetland acreage and quality.

The focus on this element for this planning period is the development of partnerships, both within the SRPMIC and with external agencies, and establishing restoration goals. The remaining activities will take place in FY11 and FY12 and FY13. The effort that the Wetland Program does in these next two years will set the foundation for successful collaboration in the future. The development of partnerships and lines of communication are important factors for future success.

Restoration & Protection Goals

Table 5.1 on the following page lists all the actions and activities for setting goals for the Restoration and Protection element. EPNR hosted two workshops to prepare this Plan. As a result of these workshops, EPNR and its partners addressed the following Restoration and Protection Goal action:

a. Establish goals that are consistent or compatible across relevant agencies.

These remaining actions will be addressed in the QAPP in FY11 and in FY12:

b. Consider watershed planning, wildlife habitat, and other objectives when developing your selection process restoration/ protection sites.
c. Provide clear guidance on appropriate restoration and management techniques, and success measures through the development of documents such as Operations & Maintenance and Best Management Practices manuals.

TABLE 5.1 Restoration & Protection Goals Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Establish goals that are consistent or compatible across relevant agencies (VR & P, Obj. 1, Action a)	• Coordinate with relevant agencies that outline restoration/protection goals & strategies & timeframes	X	X	X	X
	• Develop multi-agency body to coordinate restoration/protection efforts	X	X	X	X
	• Gather information on wetland location, class & condition/functions by carrying out specific wetland surveys & studies	X	X	X	X
	• Set restoration goals based on agency objectives & available information	X	X	X	X
b. Consider watershed planning, wildlife habitat, & other objectives when developing your selection process restoration/ protection sites (VR & P, Obj. 1, Action b)	• Identify rare, vulnerable, or important wetlands by carrying out specific wetland surveys & studies & prioritize for restoration/protection		X		
	• Apply tools (GIS, mapping, field inspection, etc.) to develop methodology to identify & prioritize restorable wetlands		X		
	• Develop tools to integrate restoration/protection efforts on a watershed or landscape scale		X		
	• Share restoration/protection efforts on a watershed or landscape scale			X	
	• Share priorities with other organizations involved in wetland protection & restoration			X	
	• Share priorities with other water quality protection programs			X	
c. Provide clear guidance on appropriate restoration & management techniques & success measures (VR & P, Obj. 1, Action c)	• Develop restoration & management guidance specific to wetland types & locations				X
	• Develop & establish measures of restoration success				X
	• Develop & establish performance standards based on reference wetland site in a relatively undisturbed condition				X
	• Through guidance, encourage restoration outcomes that recreate natural self-sustaining systems & reduce the need for ongoing management				X
	• Develop a process to verify restoration techniques with site visits & adapt as necessary				X
	• Train restoration partners to use guidance techniques				X

Coordinate with Relevant Agencies that Outline Restoration/Protection Goals and Strategies and Timeframes

During the two Wetland Program Planning Workshops, EPNR coordinated with several internal SRPMIC partners and external agencies to ensure the programmatic goals are consistent with Community development and external agency goals. The Wetland Program will continue to coordinate with these partners as well as new partners as opportunities arise. **Table 5.2** summarizes the list of partners with its anticipated role in the Wetland Program.

TABLE 5.2 Summary of Program Partners & Anticipated Roles

Partners	***Anticipated Roles***
EPNR Water Quality Program	Collaborate on water quality issues.
EPNR Range Management	Collaborate on plants and animal species surveys.
SRPMIC Engineering & Construction Services	Provide guidance and information on irrigation practices and maintenance as well as providing field equipment as needed.
SRPMIC Public Works Department	Provide assistance with waste management, groundwater information, equipment operators and manpower, and other areas.
SRPMIC Cultural Resources Department	Collaborate on planting and harvesting of culturally significant plants as well as plant surveys.
U.S. Army Corps of Engineers	Continued collaboration on the design of the Va Shly'ay Akimel Restoration Project, an ecosystem restoration project along the Salt River.
The City of Mesa	Continued collaboration on the design of the ecosystem restoration project along the Salt River as directed by Council.
Arizona Game and Fish	Continue collaboration on the NestWatch program which monitors the Southwest Desert Nesting Bald Eagles during their annual breeding season and pursue opportunities to increase habitat restoration.
US Fish & Wildlife Service	Pursue opportunities to conduct plant and wildlife surveys.
Scottsdale Community College, Center for Native & Urban Wildlife	Pursue opportunities to conduct plant and wildlife surveys.
Arizona State University**,** Central Arizona Chapter for the Society of Conservation Biology	Pursue opportunities to conduct plant and wildlife surveys.
Arizona Department of Environmental Quality (ADEQ)	Provides state wetland monitoring and assessment activities and upstream information for the Salt and Verde Rivers as well as biocriteria monitoring.
Inter Tribal Council of Arizona, Inc. (ITCA)	Provide opportunity to present program and project findings and results to other Indian Nations.
Ft. McDowell Yavapai Nation (upstream neighbor along the Verde River)	Continue collaboration of monitoring and assessment activities along the Verde River.

Partners	*Anticipated Roles*
U.S. Geological Survey (USGS)	Operates stream gauges on the Verde River, one of which the WQP uses to verify its flow measurements.
Maricopa County Vector Control	Conducts mosquito trap, counts, and virus screens within the Community boundary at the Salt River at the 101-202 highway connection.

Develop Multi-Agency Body to Coordinate Restoration/Protection Efforts

The planning process identified an SRPMIC group to coordinate restoration and protection efforts on the Community. That group includes:

1. EPNR Programs
2. CDD/EPNR Management
3. SRPMIC ECS
4. SRPMIC CRD
5. Other SRPMIC entities as identified

The Wetland Program will continue to add members to the group as identified throughout FY11 and FY12. An official Committee may be formed once sites begin to be selected and targeted for restoration and protection.

Gather Information on Wetland Location, Class & Condition/Functions by Carrying out Specific Wetland Surveys & Studies

The focus on the project period (years 1-2) will focus on extensive watershed planning, wildlife habitat, selecting restoration and protection sites, and developing management techniques. The planning efforts will expand on the current invasive species efforts (specifically salt cedar removal) and vector control (for mosquitoes to reduce West Nile Virus). All of these methods and activities will be included in the QAPP during FY11.

Set Restoration Goals based on Agency Objectives & Available Information

These goals will be developed continually as sites and wetland conditions are identified. It is anticipated that the restoration goals will be similar to a sub-set of the FY13 environmental goals identified in the monitoring and assessment goals section:

1. Preservation of existing wetland habitat within areas of potential development.
2. Increased quantity and improved quality of wetlands in the Community.
3. Increased coordination for managing and controlling vectors (in particular mosquitoes in order to control West Nile Virus) and invasive vegetation (especially salt cedar).
4. Improved water quality throughout the Community.
5. Increased wildlife habitat including nesting sites for avian populations like the Southwest Willow Flycatcher and Bald Eagle.
6. Increased populations of indigenous plants and animal species through reintroduction (such as willows, frogs, turtles, etc).

Restoration & Protection Strategy Development

Table 5.3 on the following page lists all the actions and activities for developing the Restoration and Protection element. All activities will be addressed in FY11, FY12 and FY13 .

TABLE 5.3 Restoration & Protection Strategy Development Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Increase wetland acreage through restoration (re-establishment) (VR & P, Obj. 3, Action a)	• Develop restoration & management plans for re-established wetlands consistent with restoration guidance • Develop a system to track acres of wetlands re-established, restoration sites using techniques that comply with guidance, and level of function/condition based on indicators • Provide technical assistance to re-establishment projects as needed				**X** **X** **X**
b. Improve natural wetland conditions & functions through restoration (rehabilitation) (VR & P, Obj. 3, Action b)	• Develop restoration & management plans for rehabilitated wetlands consistent with restoration guidance • Develop a system to track acres of wetlands rehabilitated, improvement on function/condition indicators, and net change in water quality, flood control, or habitat • Provide technical assistance to restoration projects as needed				**X** **X** **X**
c. Establish partnerships to leverage more restoration (VR & P, Obj. 3, Action c)	• Share restoration & protection priorities with partners • Develop restoration & management plans for restored wetland consistent with restoration guidance • Develop a system to track number of restoration agreements, acres of wetlands & priority wetlands restored through partnerships. • Provide technical assistance to partners as needed		**X**	**X**	**X** **X** **X** **X**
d. Establish partnerships to leverage additional protection (VR & P, Obj. 2, Action a)	• Share protection priorities with partners • Develop management plans for protected wetlands • Develop a system to track outcomes		**X**	**X**	**X** **X** **X**

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
e. Establish & institutionalize long-term protection, using mechanisms such as incentives, purchase of land title or easements to protect wetlands (VR & P, Obj. 2, Action b)	• Develop management plans for protected wetlands • Develop a system to track outcomes such as acres of wetlands & vulnerable wetlands protected				**X** **X**

Restoration & Protection Strategy Refinement

Table 5.4 lists all the actions and activities for refining the Restoration and Protection element. All activities will be addressed in FY13.

TABLE 5.4 Restoration & Protection Strategy Refinement Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Develop & evaluate restoration/ protection projects (VR & P, Obj. 4, Action a)	• Develop & populate accessible tracking database for restoration/ protection sites • Administer & update tracking database regularly considering % of total acres & by watershed				**X** **X**

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
b. Monitor restoration/ protection sites to ensure that they are implemented & managed correctly & linked to relevant watershed planning efforts (VR & P, Obj. 4, Action b)	• Monitor effectiveness of all or a sample of sites representative of wetland class, type, & size using adopted indicators & methods • Develop a system to track acres or numbers of restored/ protected wetlands that are comprehensively monitored for ≥ 3 years • Develop, select, or refine a subset of indicators to monitor effectiveness of all restoration & protection sites • Monitor effectiveness of restoration/ protection sites through wetland surveys or studies using core indicators • Develop a system to track acres or % of restored/protected wetlands monitored for ≥ 3 years using core indicators and acres or % meeting established performance goals based on function/ condition indicators • Share wetland restoration/protection efforts to relevant entities				**X** **X** **X** **X** **X**
c. Develop a process to modify restoration/ protection techniques as needed (VR & P, Obj. 4, Action c)	• Develop process to review restoration & protection methods & modify as needed • Develop process to review restoration & protection sites as needed and plan for follow-up site maintenance, restoration, and protection activities				**X** **X**

6

Water Quality Standards

The goal of this element is to establish standards protective of wetland resources

The water quality standards (WQS) of the Wetland Program (WP) will be established to protect the wetland resources in the Community. Current wetland resources in the Community are constructed wetlands receiving stormwater and tail waters from irrigation. These constructed wetlands perform water quality improvement functions prior to discharge into existing stream, river and lake environments. They also provide recreation, environmental education and cultural resources preservation opportunities for Community members. In the future the Community may construct and operate wastewater treatment facilities in which case treatment wetlands may be used to polish the treated effluent prior to discharge or beneficial reuse. Natural wetlands with the characteristic hydrology, soils and plant species have yet to be identified on the Community lands. The goal is to adopt water quality standards that are protective of natural wetlands and that allow for the continued use of constructed and treatment wetlands for water quality improvement and other purposes while protecting public and environmental health.

The existing constructed wetlands within the Community receive non-point sources (NPS) and the discharge water quality standards would be those associated with NPS stormwater regulations. In the future, if treatment wetlands are used for effluent polishing the WQS for discharges associated with reclaimed water or wastewater reuse would apply to the discharge water. Whereas, the WQS for discharges into ephemeral washes or the Salt River would be governed by surface water standards. (The Community has previously submitted its WQS for surface waters to the EPA for approval.) Should the discharge of municipal or industrial wastewater into naturally occurring wetlands become an issue then a section addressing any wetland specific water quality parameters will be added to the WQS for surface water.

The Community intends to fulfill Objective 1 which is to develop and adopt appropriate definition of a wetland and to ensure that such definitions are

included in the WQS. This objective will be accomplished within Fiscal Year (FY) 2012.

Also during FY2012, the Community expects to develop definitions of various types of wetlands, their designated uses, and WQS specific to wetland type and use. These actions and activities are reflected in the EPA-recommended Objective 2 of the WQS of a WPP. Types of wetlands could include such classifiers as spring-fed, riverine, wastewater treatment, degraded, or stormwater. Their designated uses could include items such as recreation, wildlife habitat, agriculture, stormwater detention, or flood detention. If appropriate, reference conditions for natural wetlands will be determined. Based on the type and designated uses of the wetlands, a WQS will be developed that may include both qualitative and quantitative criteria as appropriate. These WQS may be dictated by federal regulations governing the source of hydrology or subsequent discharge waters.

The EPA recommends in Objective 3 for WQS that the Community develop and evaluate the process to use WQS as a basis for regulatory decisions including restoration, disturbance, protection, and compensatory mitigation projects. The Community plans to address this objective at least on a departmental level. It expects to develop a policy that utilizes the then-present data on wetlands within its permitting processes and greater WP. These activities are likely to occur within FY2013.

Water Quality Standards Goals

Table 6.1 lists all the actions and activities for setting goals of the Water Quality Standards element. The Wetland Program will address these activities throughout FY11, FY12, and FY13. The Wetland Program will work closely with the Policy Analyst to ensure that the Community's codes and ordinances include and adopt appropriate definitions for various types of wetlands. The Community's Water Quality Standards (WQS) can be investigated to determine if the Community's wetlands would require separate WQS. FY11 and FY12 will focus on the goal setting of this element with the anticipated pursuit of developing and refining the strategy in FY13 and beyond the time period of this project. The SRPMIC needs to develop a comprehensive Wetland Program that will get the critical guidance documents drafted and approved by EPA and the Community Council in order to protect and preserve the Community's valuable habitats. These documents may include separate WQS for wetlands, QAPP, and TAS approval.

TABLE 6.1 Water Quality Standards Goals Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Develop & adopt an appropriate definition of wetlands (WQS, Obj. 1, Action a)	• Include wetland in Community government legal definition of waters • Ensure legal definition of waters is at least as inclusive as the CWA definition • Remove any regulatory language excluding defined wetlands from water quality standards		X X X	X X X	X X X
b. Ensure the appropriate wetlands definition is included in WQS (WQS, Obj. 1, Action b)	• Include appropriate definition of wetland in Community government policy or regulations authorizing water quality standards program		X	X	X

Water Quality Standards Strategy Development

Most of the activities associated with developing the WQS Strategy will start in FY11 with the development of the QAPP and continue through FY12 and FY13. The actions and activities associated with developing the WQS Strategy are listed in **Table 6.2** on the following page. It will be important for the Wetland Program to conduct the following activities in FY11:

1. Define wetland types and classes.
2. Establish reference conditions for defined wetland types in terms of functional and condition performance as well as other physical measurements.
3. Define designated uses for different wetland types (e.g., recreation, wildlife habitat).
4. Locate where designated uses apply.

TABLE 6.2 Water Quality Standards Strategy Development Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Gather & analyze monitoring data & other information that will become basis of water quality standards (WQS, Obj. 2, Action a)	• Define wetland types/classes • Establish reference conditions for defined wetland types in terms of functional/condition performance & other physical measurements		X X	X X	

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
b. Establish & adopt appropriate wetland-specific designated uses to be achieved & protected (WQS, Obj. 2, Action b)	• Define designated uses for different wetland types (e.g., recreation, wildlife habitat) • Locate where designated uses apply		**X** **X**	**X** **X**	
c. Establish & adopt narrative criteria that qualitatively describe the condition or suite of functions that must be achieved to support a designated use (WQS, Obj. 2, Action c)	• Develop & establish narrative physical criteria (e.g., fill material not present: no hydrologic alterations) • Develop & establish narrative biologic criteria (e.g., species compositions, population dynamics, structure) • Develop technical documents to support the narrative criteria with numerical data and descriptions of the types of narrative & numerical data that will be used in determining attainment of the standard			**X** **X** **X**	
d. Develop & adopt numeric criteria representing wetland specific values for chemical, physical, ad biological parameters (WQS, Obj. 2, Action d)	• Develop & establish numeric criteria for biological attributes based in wetland type & location (e.g., plant or macroinvertebrate indices, algae) • Develop & establish numeric criteria for chemical constituents based on wetland type and location (e.g., nutrients) • Develop & establish numeric criteria for physical parameters based on wetland type and location (e.g., buffer characterizations, micro habitats)			**X** **X** **X**	
e. Better define tribal antidegradation policies (WQS, Obj. 2, Action e)	• Develop & include wetlands in antidegradation policies • Develop & include restoration potential of wetlands in antidegradation policies • Develop measures to ensure antidegradation is being applied successfully in a manner specific to wetlands				**X** **X** **X**

Water Quality Standards Strategy Refinement

All of the activities associated with refining the WQS Strategy will occur in FY13. The actions and activities associated with refining the WQS Strategy are listed in **Table 6.3**.

TABLE 6.3 Water Quality Standards Strategy Refinement Actions & Activities

Action	*Activity*	*Period of Activity*			
		Planning Period (WPP)	*FY11*	*FY12*	*FY13*
a. Develop & evaluate the process to use water quality standards as basis for regulatory decisions (WQS, Obj. 3, Action a)	• Develop a system to track wetland impacts avoided or mitigated based on WQS via permitting actions				**X**
b. Develop & evaluate the water quality standards as basis for evaluating restoration/ protection projects & mitigation/ compensation projects (WQS, Obj. 3, Action b)	• Use water quality standards in the development or refinement of restoration guidelines • Develop a system to track restoration/ protection projects that are monitored for compliance with water quality standards • Track restoration/ protection sites that meet water quality standards • Identify remedial measures for sites that do not meet wetland WQS				**X** **X** **X** **X**
c. Incorporate water quality standards into monitoring & assessment program (WQS, Obj. 3, Action c)	• Update monitoring strategy & methods based on water quality standards • Develop a system to track acres monitored for compliance with water quality standards				**X** **X**

7

Program Management

The efficient management of the Wetland Program and Program integration will be keys to its success.

The previous chapters have presented and established the goals and objectives of EPNR's Wetland Program. The planning process has been beneficial in identifying partnerships and common goals. Additionally, the historic efforts of EPNR and others have been documented to assist the Wetland Program with moving efforts forward with minimal research required into past conditions. This chapter, dedicated to Program Management, will combine all that has been detailed thus far into a task implementation schedule that will allow the Wetland Program SES to achieve the Programs goals and objectives.

Administration

The SES will carry out the following administrative tasks (and others as appropriate) in order to ensure the Wetland Program meets all funding, program, and project requirements:

1. Manage Wetland Program funds, grants, and contracts.
2. Ensure all EPA-funded projects meet EPA guidelines.
3. Implement and update the Wetland Program Plan as needed.
4. Develop schedules for Wetland Program and project implementation.
5. Prepare Quality Assurance Project Plans (QAPPs) and Standard Operating Procedures (SOPs) in accordance with EPA requirements when new projects and programs commence.
6. Draft and review SOPs for monitoring and assessment.
7. Train new personnel on the Wetland Program.
8. Ensure that the Community's Water Quality Standards (WQS) for Surface Water are applicable to the Community's wetlands or else have revised Wetland Standards approved by SRPMIC Council and EPA when appropriate.
9. Manage data with electronically compatible formats (STORET, WQX).
10. Prepare regular reports for the Community, EPA, and others, including annual Water Quality Assessment Reports.

11. Compile analytical results and assist with comparison and evaluation of data.
12. Report on trends seen in water quality data.
13. Prepare grant application requests for additional funding from EPA and other funding programs.
14. Coordinate and foster relationships with many SRPMIC departments, enterprises, and external agencies.
15. Create volunteer activities for grassroots Community groups as requested.

Program Tasks

A number of program tasks have been identified throughout this Plan. The following list summarizes the Wetland Program tasks which are not limited to this list.

1. Maintain Cottonwood and Lehi Wetlands, such as:
    - Water quality monitoring.
    - Plant health and wildlife habitat.
    - Trail and plant maintenance.
    - Supplemental water when needed.
    - Invasive plant management.
    - Enhancing visitor experience.
    - Adding more cultural components.
    - Conduct habitat inventory and bird/animal surveys.
    - Reintroduce native, indigenous species if possible.
    - Coordinate cultural usage of vegetation for traditional arts and ceremonies.
2. Work closely with ECS to obtain valuable irrigation practices information that will be needed prior to developing the QAPP:
    - Aerial maps of canals and tail water drainage system.
    - Historical aerial photographs if available to capture changes over time.
    - Canal maintenance schedules; cleaning, water releases, dry-ups, etc.
    - Annual irrigation usage rates with the mapping plan so the Wetland Program will know how much agricultural water is distributed to various areas.
3. Coordinate water quality sampling with the WQP.
4. Develop a field investigation form to be used during the inventory process of wetland and riparian areas and include in QAPP.
5. Complete an EPA-approved M&A QAPP.
6. Complete full inventory of Community's wetlands and riparian areas including water quality monitoring, thus establishing 2012 Baseline Conditions.
7. Develop action plans for restoring and preserving wetland areas.
8. Identify areas within SRPMIC to implement projects and outfall investigations.

9. Identify new sites for wetland development and pursue all necessary funding and approvals.
10. Investigate options to include wetland principles into development; commercial, residential, or restoration.
11. Assist with updating assessments and evaluating SRPMIC water bodies.
12. Revisit Native Plant Nursery Feasibility Study (2006) and pursue opportunities presented in the Study.
13. Continue EPNR's efforts on invasive plant species control to ensure no new stands of invasive species are established and include invasive species in its survey of wetlands and riparian habitat. The QAPP developed for this project will address invasive species and provide the appropriate responses should invasive species problems occur.
14. Work with EPNR's Range Management to develop critical areas of invasive species along with a *Long-Term Invasive Species Eradication Plan* for the Community.
15. Coordinate with SRPMIC TERC to monitor and share collected data.
16. Develop relationship with the mining companies for access to wetland areas.
17. Coordinate with CDD/Planning Services on designating protected areas.
18. Develop working relationship with Public Works to address any illegal dump sites identified during the inventory process.
19. Report findings to a distribution list on the 6-month review intervals.
20. Perform public education and outreach including wetland tours and presentations about wetland protection and other pertinent information to gain support of Program and the protection of the Community's wetlands.
21. Develop outreach material which could include:
    - Tri-fold brochure.
    - Outreach booklet.
    - Handout map highlighting the Community's accessible wetlands, trails, and other important information.
    - Publish articles in the Au-Authm Action News.

Program Evaluation

The Wetland Program will be evaluated annually as it develops its annual workplans. During each evaluation period the Wetland Program will determine if each current year's goals and objectives are met, what constraints and roadblocks it has faced, and what obstacles could be expected the following year as it pursues the programmatic goals. The Program SES reports these issues and challenges to the EPNR Manager throughout the year. The Manager makes determination on those issues and works with the Program SES to develop solutions to the challenges and possibly reschedule workplans and funding.

In order to stay current and up-to-date on technologies and Community development, the Plan will be reviewed, evaluated, and revised every three (3) to four (4) years. The

next scheduled update is planned for 2013. This Plan provides Wetland Program goals, objectives, schedules, and milestones for 2011 through 2013.

Tracking Outputs & Outcomes

Since all of the anticipated outputs are documents, the tracking of these outputs will be based on drafts, revisions, and completion of documents. The tracking of the outcomes or long-term environmental goals (listed on **page 19**), however, are not as obvious and will require some trial and error to develop an effective tracking method. Surveys and assessments will be used to track the achievements of increasing monitoring and assessment, preserving existing habitat, and increasing the quantity of wetlands. Water quality data and plant and wildlife surveys will be used to track the success of increasing the quality of wetlands. Tracking the number of Community meetings, outreach material handed out, wetland tours, and presentations will provide a methodology for tracking the increased awareness on wetlands throughout the Community. The passing of regulatory and wetland protection ordinances will be the ultimate method of tracking the success of the support of this program.

Quality Assurance/Quality Control

A Quality Assurance Program Plan (QAPP) will be developed for this project that will contain specific and applicable Quality Assurance/Quality Control (QAQC) steps that will be followed and adhered to when conducting the monitoring and assessment activities, data collection, laboratory effort, and reporting.

Program Outputs, Milestones, & Schedules

Outputs

Table 7.1 lists the outputs or deliverables for the Wetland Program during FY11 and FY12.

TABLE 7.1 Wetland Program Outputs

Outputs (Deliverables/Products)	***Year Completed***
Revised Wetland Program Plan (if needing update)	FY 11
Management Plan	FY11
Quality Assurance Project Plan	FY11
Field Operations Manual	FY11
Outreach Booklet	FY11
Report of Assessment Results and Community Baseline Wetland/Riparian Area Map	FY12

Milestones

Table 7.2 lists some of the Wetland Program milestones that are also shown in the time schedule in **Table 7.3**.

TABLE 7.2 Wetland Program Milestones

Time Frame	***Milestone***
Project onset	SES works with WQP, Range Management, Cultural Resources, and others to establish all Community goals and objectives towards the protection and restoration of its wetlands.
Year 1 FY11	SES works with contractors to develop final guidance documents and outreach material (outputs).
Year 1 FY11	SES coordinates with external partners to determine roles and opportunities.
Year 2 FY12	SES conducts the monitoring and assessment presented in the WPP and QAPP.
Year 2 FY12	SES works with the SRPMIC Information Technology Department (IT) to develop tools to present findings and program details to the public.
Year 2 FY12	SES presents findings, challenges, successes, and program details at conferences, meetings, etc.
Year 2 FY12	SES revises and updates the WPP with realistic long-term goals based on the success and challenges from Years 1 and 2.

TABLE 7.3 Wetland Program Milestones Schedule

	2010			2011 (Year 1)												2012 (Year 2)								
Task	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**
SES Selection & Hiring Process																								
SRPMIC Collaboration																								
Develop Documents (QAPP, etc)																								
EPA Review & Approval (QAPP)																								
Monitoring & Assessment																								
Draft Findings & Results																								
Present Results& Findings																								
Update Wetland Program Plan																								
Outreach & Education																								
External Agency Collaboration																								

All guidance documents are anticipated to be completed and approved by winter 2011 so that a full six months of monitoring and assessment activities can be conducted in order for the results to be determined and presented within the two-year project period. The project period ends Oct. 31, 2012 and the long-term

Wetland Program continues. **Table 7.4** is a summarized list and schedule of short-term goals and objectives that will ensure that the Wetland Program succeeds.

TABLE 7.4 Short-Term Wetland Program Schedule

Goal/*Objectives*	FY11	FY12	FY13
1. Take Over the Management of the NPS Wetlands			
Carry out (with guidance from the WQP NPS Program) the day-to-day management activities and routine maintenance of the Cottonwood & Lehi Wetlands.	X		
Carry out (without guidance from the WQP NPS Program) the day-to-day management activities and routine maintenance of the Cottonwood & Lehi Wetlands.	X	X	X
Coordinate necessary supplemental water deliveries to the NPS wetlands.	X	X	X
Maintain plant health, trail conditions, and wetland access.	X	X	X
2. Conduct Wetland & Riparian Area Inventory & Mapping			
Using aerial photographs of the Community and irrigation routes and usage rates, develop targeted sites for inventory (include in QAPP).	X		
Develop Field Data Sheet for inventorying wetlands/riparian areas.	X		
Develop Quality Management Plan & Field Operations Manual.	X		
Develop Monitoring & Assessment QAPP.	X		
Conduct Monitoring & Assessment per EPA-approved QAPP.		X	
Map and inventory wetlands/riparian areas per findings from M&A phase.		X	X
Develop Action Plans for restoration, protection, or enhancement of prioritized wetlands and riparian areas.			X
3. Investigate Opportunities for a Native Plant Nursery			
Review Native Plant Nursery Feasibility Study.	X		
Investigate opportunities and resources to implement the start-up of a Native Plant Nursery.	X		
Seek sources to fund a Native Plant Nursery.	X	X	X
Start-up Native Plant Nursery when funding and resources are available.			X
4. Serve in an Official Capacity for Nuisance Conditions			
Work with EPNR's Range Management Program to develop critical areas of invasive species along with a "Long-Term Invasive Species Eradication Plan" for the Community.	X	X	
Pursue contact with Maricopa County Vector Control and develop mosquito count database and information sharing process.	X		

Goal / *Objectives*	FY11	FY12	FY13
Develop working relationship with Waste management to address any illegal dump sites identified during the inventory process.	X		
5. Serve in an Official Capacity with SRPMIC Departments and Enterprises			
Collaborate with EPNR's Policy Analyst and EDD to ensure language is set forth in future commercial leases allowing for access to wetlands and possible mitigation efforts if needed.		X	X
Develop relationship with the commercial entities for access to wetland areas.	X	X	X
Coordinate with CDD PS and EDD on designating protected areas.		X	
Perform public education and outreach about wetland protection, and benefits and opportunities to support the Community's wetlands.	X	X	X

Reporting & Public Record

With the support of SRPMIC IT assistance, EPNR has developed a visitor-friendly website that allows visitors to download electronic files. The Wetland Program will utilize this technology to make electronic files of the project methods, results, or products available for download via the website so that others can learn from EPNR's Wetland Program. EPNR is actively involved with other tribes and tribal environmental organizations and will ensure its Wetland Program will coordinate and collaborate with ITCA, NAU/ITEP and other tribes. Additionally, data gathered through the Wetland Project will be shared through the Water Quality Exchange Network and other Community newsletters, articles in the Community news paper, and other forms of public information exchange. EPNR's Wetland Program will also participate in EPA trainings, workshops, and conferences and share the lessons learned to the many participants.

8

Conclusions

This Plan directs the development and implementation of a Wetland Program designed to protect, restore, and enhance the quantity and quality of wetlands in the Salt River Pima-Maricopa Indian Community.

The Community is committed to protecting the Community's natural resources which includes its unique wetlands and riparian areas. This plan identifies the appropriate actions and activities for the Wetland Program SES to take in order to develop a focused and sustainable program that will establish base-line conditions of as many wetland and riparian areas as possible and develop a systematic approach to preserving, improving, and ultimately increasing the acreage of these areas within the Community.

The Wetland Program's goals, objectives, and activities are in direct support of many of the Community Council's Vision, Core Values, and Mission Statement, such as:

- Protecting the lands and the people.
- Preservation and sustainability of the land and environmental balance.
- Embracing sovereignty as inherent right.
- A spiritually, mentally, emotionally and physically healthy life-style.
- A dedication to education.
- Promoting well-planned economic growth to ensure financial security.

The Wetland Program is in direct support and links to EPA's Strategic Plan (Sub-Objective 4.3.1) to increase wetlands through working with partners to achieve a net increase of wetland acreage. All of the output documents will provide the Wetland Program the tools to monitor, assess, and address concerns in the Community's wetlands. The ultimate objective (outcome) of the EPNR Wetland Program is the same as EPA's – to increase the total acreage of wetlands within the Community.

Maintaining and restoring the valuable wetland and riparian areas throughout the SRPMIC will provide environmental and cultural benefits to the Community, as well as enhance the wildlife that depends on these habitats and ecosystems.

9

References

SRPMIC (20008) *Nonpoint Source Management Plan* - Prepared by the Environmental Protection & Natural Resources Division

SRPMIC (20008) *Nonpoint Source Management Watershed-Based Plan* - Prepared by the Environmental Protection & Natural Resources Division

SRPMIC (2008) *Integrated Natural Resources Management Plan* - Prepared by the Environmental Protection & Natural Resources Division

SRPMIC (2007) *Quality Assurance Project Plan for Surface Water and Groundwater Sampling* - Prepared by the Environmental Protection & Natural Resources Division

SRPMIC (2007) *Surface Water Quality Standards* - Prepared by the Environmental Protection & Natural Resources Division

SRPMIC (2007) *Long-Term Monitoring and Adaptive Management Plan for 319-h Nonpoint Source Demonstration Wetland* - Prepared by the Environmental Protection & Natural Resources Division

SRPMIC (2005) *Quality Assurance Project Plan for 319-h Nonpoint Source Demonstration Wetland* - Prepared by the Cultural and Environmental Services

SRPMIC (2003) *EPA 319 Grant Nonpoint Source Discharge BMP Recommendations* - Prepared by the Cultural and Environmental Services

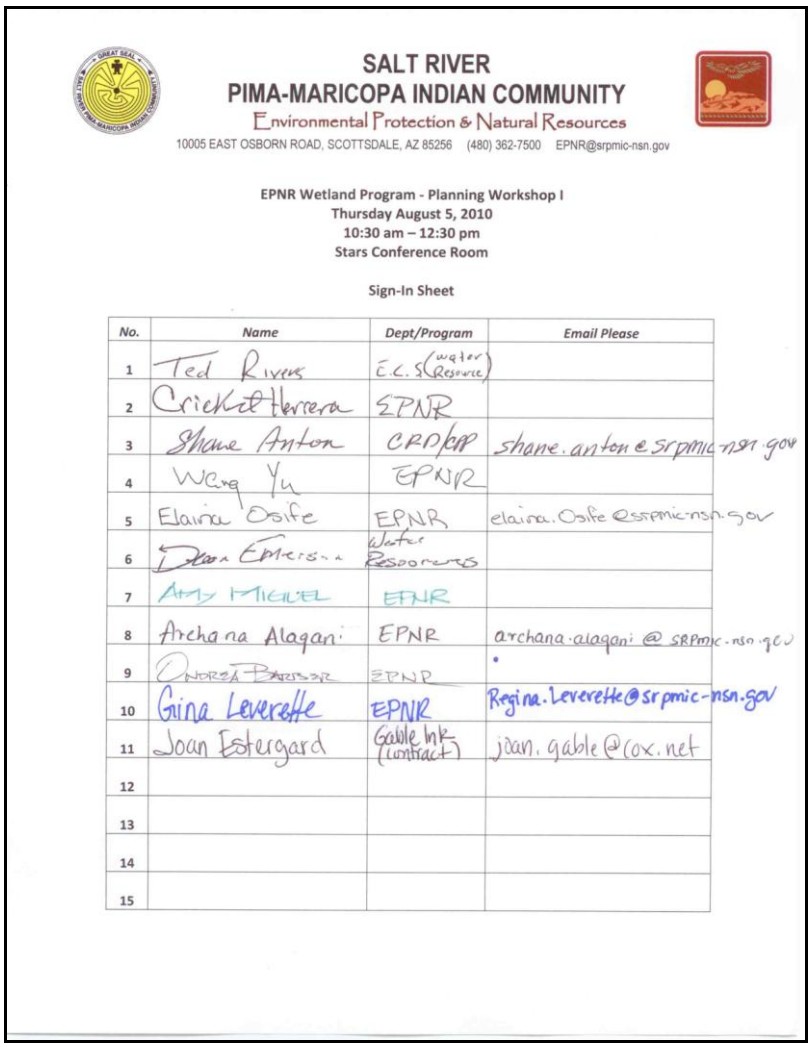
Appendices

Appendix A– Workshop 1 Sign-In Sheet & Meeting Minutes

Appendix B – Workshop 2 Sign-In Sheet & Meeting Minutes

A

Workshop 1
Sign-In Sheet &
Meeting Minutes



SALT RIVER
PIMA-MARICOPA INDIAN COMMUNITY
Environmental Protection & Natural Resources
10005 EAST OSBORN ROAD, SCOTTSDALE, AZ 85256 (480) 362-7500 EPNR@srpmic-nsn.gov

EPNR Wetland Program - Planning Workshop I
Thursday August 5, 2010
10:30 am – 12:30 pm
Stars Conference Room

Sign-In Sheet

No.	Name	Dept/Program	Email Please
1	Ted Rivers	E.C.S (water Resource)	
2	Cricket Herrera	EPNR	
3	Shane Anton	CRD/EPP	shane.anton@srpmic-nsn.gov
4	Wang Yu	EPNR	
5	Elaina Osife	EPNR	elaina.Osife@srpmic-nsn.gov
6	Diana Emerson	Water Resources	
7	Amy Miguel	EPNR	
8	Archana Alagani	EPNR	archana.alagani@SRPmic-nsn.gov
9	Andrea Barber	EPNR	
10	Gina Leverette	EPNR	Regina.Leverette@srpmic-nsn.gov
11	Joan Estergard	Gable Ink (contract)	joan.gable@cox.net
12			
13			
14			
15			

Wetland Program Planning Workshop 1 – August 5, 2010
Workshop Meeting Minutes

Attendees:

1. Gina Leverette - EPNR WQP
2. Ondrea Barber - EPNR Management
3. Shane Anton - CRD Management
4. Dean Emerson - ECS Water Resources
5. Ted Rivers - ECS Water Resources
6. Wang Yu - EPNR Technical Advisor
7. Cricket Herrera - EPNR RMP
8. Elaina Osife – EPNR WQP
9. Amy Miguel – EPNR WQP
10. Archana Alagani – EPNR WQP
11. Joan Estergard – Gable Ink (contractor)

Sign-In Sheet, Agenda, and handouts provided

Agenda:

Welcome & Kick-Off - Gina Leverette, EPNR WQP
Introductions - all attendees
Workshop Sessions

1. **Information Session** (facilitated by Gina Leverette - provides "big picture" of the WP & WPP)
2. **Planning Session** (facilitated by Joan Estergard - step back & work on the details that need addressing today)

Lunch Break (lunch provided)

3. **Concluding Session** (provides results from today & where we are going)

1. Gina Leverette (EPNR WQP) –opened the meeting with introductions and a brief description of the Wetland Program
2. Ms. Leverette turned meeting over to Shane Anton of Cultural Resources Department (CRD) to provide a brief overview of CRD activities that might pertain to a Wetland Program.
3. Shane Anton (CRD):
   a. CRD has a Traditional Gardens Program with two experts in the area of indigenous plants, Jacob Butler and Stetson Mendoza. Important for traditional uses.
   b. Jacob Butler could not attend meeting, but asked Shane to mention that Jacob & Stetson could help with plant identification, landscape, planting, future greenhouse/nursery, and other areas for traditional use plants – to the best of their availability. Keeping in mind that they are a two-person staff with limited availability.

c. Gina Leverette (EPNR WQP) explained that the greenhouse/nursery Mr. Anton referenced was in regard to a Native Plant Nursery Feasibility Study that EPNR conducted in 2006 that could be a potential collaborative effort between EPNR and CRD.
d. Elaina Osife (EPNR WQP) inquired if the nursery would be in the Lehi or Salt River District.
e. Gina Leverette (EPNR WQP) responded that nursery is in the conceptual/planning stage and has not received that level of detail as of now.

4. Next, Dean Emerson provided a brief overview of Engineering & Construction Services (ECS) irrigation practices/activities that might pertain to a Wetland Program:
   a. ECS Water Resources (Irrigation) makes sure that the farmers/homeowners/other land users get the water they need in a timely manner (always receive requests for water).
   b. They are beginning to concentrate on the Wetland Program and see how they can deliver water to different areas throughout the Community.
   c. April to October is their current operating schedule (Cotton Season). However, there are no set schedules for farmers (mostly due to changing weather conditions).
   d. They "move" water around the Community – due to construction and/or fields that aren't planted or needing water – so continually rerouting water.
   e. Proportion out & measure water that fulfills the order placed throughout the days and weeks on 24-hour increments.
   f. Ted Rivers (ECS) added that most of the water that ends at the wetlands is the agricultural run-off or tailwaters.
   g. Mr. Emerson further clarified the water schedule by adding that alfalfa fields are year-round and that water orders can be fulfilled year-round. ECS can order water from SRP during off-season times.
   h. Gina Leverette (EPNR WQP) mentioned that ECS will be a valuable asset to the Wetland Program as ECS know how much water goes to each outfall. The WP and WQP will pro-actively coordinate with ECS during planning stages of future wetlands.
   i. Mr. Emerson added that ECS does drive-by checks of reservoirs (farmers & sand/gravel) and wetlands to physically see who needs water.
   j. Ms. Leverette mentioned that Mr. Emerson took her on a field visit in July 2010 to see the irrigation system, ditches, and release areas.
   k. **ACTION ITEM** – Ms. Leverette to schedule a future (FALL 2010) site visit of irrigation practices with ECS and EPNR WQP (including new Wetland Program SES) and field trip.

5. Gina Leverette presented overview slideshow of WQP NPS wetlands:
    a. The NPS Wetlands began with an EPA 319 Clean Water Act Grant for a demonstration wetland project and additionally five (5) NPS outfalls were investigated for best management practices.
    b. Nonpoint source pollution (NPS) is pollution that cannot be originated to any particular source (cannot point to a source) whereas, point source pollution can be tracked to a known source (such as a discharge pipe).
    c. The site selected for the demonstration wetland was an agricultural tailwater outfall to the Salt River channel that was a concrete and cement dumping ground overgrown with tamarisk (salt cedar).
6. Slides were presented to show:
    a. The original layout from 2003 highlighting the three source channels.
    b. The changes over time (2010 – more braiding and spreading out of the water)
    c. The 2005 Wetland Reconfiguration - filled-in sink holes, removed debris and added trail, outdoor classroom, and monitoring access.
    d. Before and after photographs of the 2005 reconfiguration.
    e. The 2007 Expansion Project – expanded project site by ½ acre by removing salt cedar from the north side of wetland and along the northeastern channel – removed invasives and replanted with willows (mostly pole plants).
7. Next, the Lehi Wetland (located off Thomas Road next to the cemetery) was designed in 2007.
8. Slides showed:
    a. 2008 construction with stabilization mats and only the first half of the wetland was hydroseeded with native plant seeds.
    b. 2010 photos showed how the seeds were wind/water/wildlife dispersed to the second half of the wetland (although not as dense as the hydroseeded portion)
    c. Earth Day 2009 & 2010 plants were planted at the Lehi Wetland (~110 plants in 2010)
    d. February 2010 – 40 poles were planted with about 80% survival rate.
9. Concluded with an overview of 2009 outfall investigation that highlighted:
    a. The badly eroded “Oak Street Outfall” which was visited by President Enos in 2009.
    b. The needs to maintain, protect, and restore these wetlands that have volunteered in outfalls like at the end of McDowell Road.
    c. Opened floor for questions/discussion:
10. Shane Anton inquired if the plan was to create more wetlands.
11. Ms. Leverette explained that while the “Plan” will include the creation of future wetlands, the actual planning document (Wetland Program Plan – WPP) will include multi-level planning components.

12. Ondrea Barber (EPNR) added:
    a. EPNR wants to understand and show all types of benefits, not just environmental. Some examples she highlighted included:
        i. Increase the number of traditionally significant plants for the Community Members to use.
        ii. Prevent erosion.
        iii. During the Lehi Wetland phase, the Oak Street outfall was the first choice due to its critically degraded state. Initially, one map showed it as Tribal Land. Then during the permitting phase, while working with ECS, Survey, and internal GIS, it was discovered to be allotted land. This example set some selection criteria for future wetland efforts, which is a benefit - just not an environmental benefit.
    b. EPNR wants input from other entities within Community and external partners as well.
13. Ms. Leverette briefly described the Wetland Program Grant and the new Senior Environmental Specialist (SES) coming on to head the Wetland Program. The grant is only for a 2-year period, so need to have a firm guidance document in place for the person to follow.
14. Ms. Osife (EPNR) inquired if SES is already hired.
15. Ms. Barber answered EPNR will be advertising for the position soon, with the earliest start date to be October 1, 2010.
16. Joan Estergard (Gable Ink) added that today's intention is to brainstorm with the group and ensure that EPNR's goals meet the other program (ECS, CRD) goals. While Mr. Anton informed the group on what CRD can do for EPNR, it is important to learn what EPNR can do for CRD or ECS. Ms. Estergard also added that the WPP was not necessarily an EPA "requirement" but it is an important planning document that EPA will use as criteria for future funding.
17. Ms. Leverette added that the past wetlands have had CRD collaboration but have always been viewed as "EPNR wetlands". Ms. Leverette believes a joint collaboration and joint ownership of a future wetland at the on-set would provide the Community with a valuable cultural, environmental and educational asset.
18. Mr. Anton mentioned that CRD would like to see the reintroduction of native mesquite trees, devil's claw and willow – plants used for basket making. Some plants are diseased now too. Even saguaros are lacking from the Community landscape for gathering fruit. Also – many of the few remaining plants are very difficult to access by the elders who use these materials.
19. Ms. Barber added that the Lehi Wetland has upland area that is planted with cactus and desert plants that could be used for the more drought tolerant species that Mr. Anton mentioned. This is an example of the

areas not just being typical riparian areas but with the upland species as well.

20. Ms. Leverette also provided another example of how difficult it would be for elders to access the traditional plants: while harvesting poles from the river area in February 2010 for the Lehi Wetland, the group uncovered roots that elders use to make teas. The roots were collected for the elders, but it is difficult to imagine the elders accessing these roots on their own.
21. Ms. Leverette reiterated how these wetlands can highlight not only the water quality improvement aspects and environmental habitat they provide, but also highlight cultural and educational components.
22. Ms. Estergard inquired if the Lehi Wetland could now be an opportunity for CRD to plant some species of significance since the Lehi Wetland is still a bit of a blank canvas.
23. Mr. Anton replied that it would be a matter of water availability.
24. Both Gina Leverette and Dean Emerson agreed that ECS can send as much water to the wetland as CRD would need.
25. Ms. Osife mentioned that many elders in Lehi ask about the availability of willow.
26. Mr. Anton will ask Jacob Butler about how fast willow propagates.
27. **ACTION ITEM** – Ms. Leverette to follow-up with Jacob Butler on the propagation time for willow and other traditional plants.
28. Mr. Emerson mentioned that the majority of the time when ECS cleans arrow weed from the irrigation channels, they ask Community Members if they can use it. Prior to that, ECS used to get criticism because Members thought ECS was destroying the plants.
29. Mr. Anton added that an educational component to the Community is needed, because arrow weed comes right back and that it is just cut and not necessarily destroyed.
30. Ms. Barber added that some of the cleaned out material is composted at the gardens compost site. The Green Waste area at the Salt River Landfill will not take wet material or material containing mix of rocks. EPNR Solid Waste Program is trying to get funding to expand the current composting efforts and use ECS's chipper, etc – to leverage Community resources.
31. Ms. Barber pointed out how today's workshop provides a benefit by just bringing everyone in the same room and helps to open the line of communication.
32. Wang Yu (EPNR) mentioned developing plant lists and conducting surveys.
33. Mr. Anton added that Housing and businesses often makes various planting requests for information and different planting plans. Interested in looking for grant money to help with this.
34. Ms. Barber mentioned that EPNR would like to collaborate with CRD on conducting plant surveys and developing formal plant lists. These lists could be incorporated with the Planning Division and even to a level of

making it a requirement to use only plants from a Community Nursery – if said nursery were to actually become a reality.

35. Gina Leverette concluded the Information Session by going over:
    a. EPA Core Elements
    b. The WPP "Periods of Activity"
    c. Showed in detail the first Action and Activities
    d. Asked for further input from the group via email.
36. Joan Estergard (Gable Ink) began the Planning Session (pages 12 – 17 of Workshop Handout) by asking workshop attendees to provide input and actively participate in the Wetland Program planning phase today. Ms. Estergard went over the concepts and ideas that EPNR (WQP) had previously developed and asked participants to help fill in the gaps and missing links to other programs.
37. Action 1 Activity a – Long-term environmental goals:
    a. Cricket Herrera (EPNR) added one goal of increased wildlife habitat, such as increased nesting sites for avian population (not just eagles – but also willow fly catcher).
    b. Mr. Anton reflected that decades ago after rains there were always numerous frogs and toads throughout the Community. He additionally noted that there is a lack of several species; caterpillars, locust (as well as trees in general), horny toads, quail, roadrunners, coyote, etc – several species that are culturally significant.
    c. Ms. Leverette mentioned that she has seen frogs and turtles at the Cottonwood Wetland.
    d. Ms. Barber added that a desert tortoise was spotted at the Cottonwood Wetland a few years ago also.
    e. The loss of these species is likely due to the development throughout the Community and neighboring cities, as well as the loss of habitat along the rivers.
    f. The group discussed the possibility of reintroducing these species into the wetlands in the future – once the proper habitat has been established to support these populations.
    g. **ACTION ITEM** – Ms. Leverette to host a second WPP meeting with external partners – like representatives from the Center for Native and Urban Wildlife at the Scottsdale Community College – where this idea of wildlife reintroduction could be discussed.
    h. Ms. Estergard asked for input from CRD on goals such as 'increased willow population or other traditional plants".
38. Action 1 Activity b – identify programs that will use monitoring data in addition to ECS & CRD:
    a. Ms. Leverette added EPA will use the data.
    b. Ms. Barber said to include Planning Services – could use plant lists if developed.

39. Action 1 Activity d – identify how data van be used in watershed planning:
    a. Ted Rivers added that ECS has map of irrigation drainage system.
    b. **ACTION ITEM** – Ms. Leverette to follow up with Mr. Rivers for a copy of a map of drainage outfalls.
    c. Ms. Estergard added that the 2003 & 2009 outfall investigations were limited to windshield access and the need to look at inaccessible areas will be important for the Wetland Program.
40. Action 2 Activity a – coordinate with relevant partners:
    a. Ted Rivers agreed to be official ECS contact.
    b. Shane Anton volunteered Jacob Butler as the official CRD contact.
    c. Ms. Barber added that Planning, Economic Development, and Zoning should be included for proposed development.
    d. **ACTION ITEM** – Ms. Leverette to set up a small meeting with Planning and Economic Development.
41. Action 2 Activity b – other sources of monitoring data:
    a. Mr. Rivers said that ECS has annual aerial photos and irrigation usage rates. They do coordinate with SRP on flood releases but these don't really impact the Community or the irrigation laterals.
    b. Mr. Anton mentioned that other tribes inventory TCPs – Traditional Cultural Properties used for inventorying gathering sites, etc and that such wetlands could be included in a TCP inventory but that the SRPMIC has not adapted such an inventory yet.
    c. Ms. Barber mentioned that Fish & Wildlife Service contacts the Community if sightings of significant species occur near the SRPMIC – one example was some kayakers on the Salt River thought they heard the Southwestern Willow Flycatcher and alerted the Community.
    d. Ms. Barber also added that no external agencies are authorized to do species surveys on the SRPMIC.
    e. Mr. Herrera added that a big horn sheep release a few years ago had tracked and lost a sheep in the SRPMIC.
    f. Ms. Barber mentioned that Maricopa County Vector Control does do mosquito traps and counts in the SRPMIC in the Salt River along the 101-202 confluence. This data is generally collected May – October and provided to the Community and EPNR.
    g. Mr. Yu mentioned that Arizona Department of Environmental Quality (ADEQ) has a biomonitoring/biocriteria station upstream of the SRPMIC along the Salt River (contact name at ADEQ – Patty Spindler).
    h. Mr. Rivers added that SRP does perform annual dry-ups of the canal system. During this time, the canals are dry for about a month (January for SRPMIC & November for south Mesa side) and ECS has a pump that they use to pump groundwater when need to supply irrigation water to the Community. Mr. Rivers has additional information on this if needed.

42. Action 2 Activity c – identify monitoring objectives:
    a. Regarding the concern for access to wetlands in the sand and gravel mining areas, Ms. Barber said EPNR can work through the leasing process to gain access to areas showing significant wetland conditions (from aerial maps). Ms. Barber wants to go a step further and build some specific language into the master (mining) lease for future access.
    b. **ACTION ITEM** – Ms. Leverette to follow up with Tudor Montague (EPNR Policy) regarding lease language and invite to Planning Meeting (ACTION ITEM 40d.).
    c. During the discussion of monitoring wetland vegetation type, Mr. Anton mentioned how gathering basket-making material is labor-intensive and that preparations need to be done at the river, in addition most often the quality of material is poor (because not much to select from) and that there is current only one active basket-maker in the Community. Many challenges face the cultural traditions. The Wetland Program may help with some of these challenges.
    d. Ted Rivers added that the irrigation channels and laterals are checked and inspected annually, as well as cleaned-out annually (wintertime).
43. Action 3 Activity a – develop schedule to evaluate monitoring program:
    a. Summer 2011 – schedule meeting and site tour for large group (ECS, CRD, and EPNR).
44. Action 4 Activity a – make education/outreach documents available:
    a. Ms. Estergard added that the planned outreach booklet (*Protecting the Community's Wetlands*) could include information on arrow weed (Items 27, 28, & 29), and other indigenous plants that is pertinent to the Community (such as ECS clearing out arrow weed) and traditional uses.
    b. Ms. Estergard updated the group on Ms. Leverette's desire to install interactive signs at the wetlands.
    c. Ms. Leverette added the idea of making a downloadable "passport" available on the EPNR website that when filled in, the participants can turn in for a prize, as well as including an on-line survey for Community Members to fill out regarding types of native plants they would like to see planted in the wetlands.

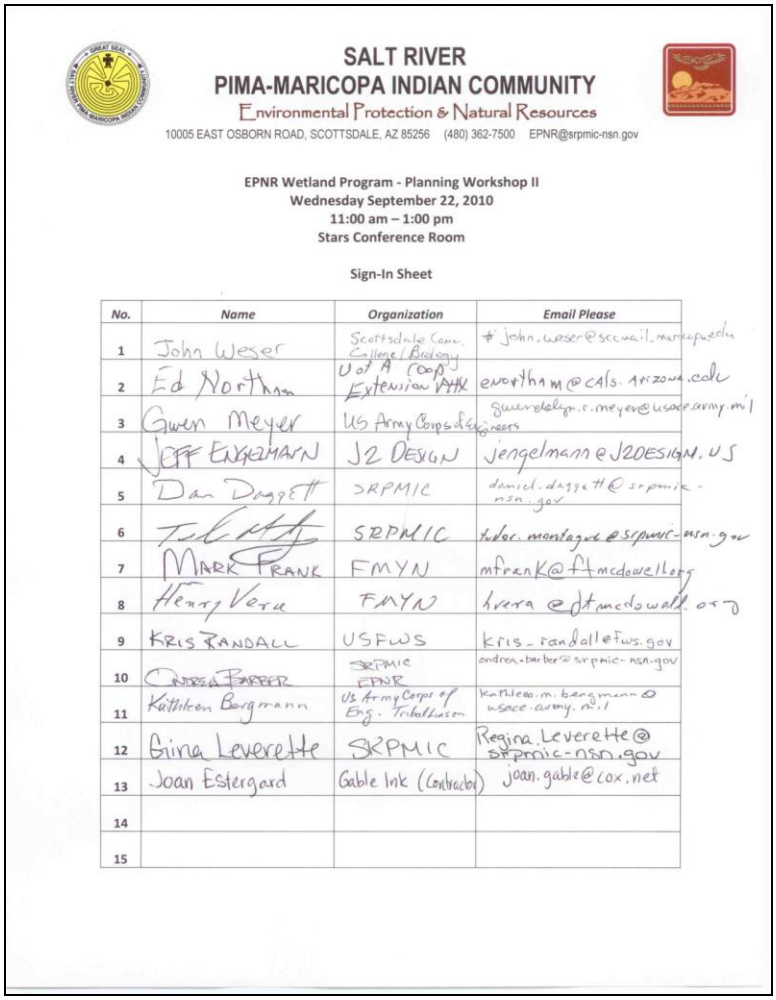
Summary of Action Items:

1. Ms. Leverette to schedule a future (FALL 2010) site visit of irrigation practices with ECS and EPNR WQP (including new Wetland Program SES) and field trip.
2. Ms. Leverette to follow-up with Jacob Butler on the propagation time for willow and other traditional plants.

3. Ms. Leverette to host a second WPP meeting with external partners – like representatives from the Center for Native and Urban Wildlife at the Scottsdale Community College – where this idea of wildlife reintroduction could be discussed.
4. Ms. Leverette to follow up with Mr. Rivers for a copy of a map of drainage outfalls.
5. Ms. Leverette to set up a small meeting with Planning and Economic Development.
6. Ms. Leverette to follow up with Tudor Montague (EPNR Policy) regarding lease language and invite to Planning Meeting (ACTION ITEM 5 above).

B

Workshop 2
Sign-In Sheet &
Meeting Minutes



SALT RIVER
PIMA-MARICOPA INDIAN COMMUNITY
Environmental Protection & Natural Resources
10005 EAST OSBORN ROAD, SCOTTSDALE, AZ 85256 (480) 362-7500 EPNR@srpmic-nsn.gov

EPNR Wetland Program - Planning Workshop II
Wednesday September 22, 2010
11:00 am – 1:00 pm
Stars Conference Room

Sign-In Sheet

No.	Name	Organization	Email Please
1	John Weser	Scottsdale Comm. College / Biology	# john.weser@sccmail.maricopa.edu
2	Ed Northam	U of A Coop Extension PHX	enorthm@cals.arizona.edu
3	Gwen Meyer	US Army Corps of Engineers	gwen.e.meyer@usace.army.mil
4	Jeff Engelmann	J2 Design	jengelmann@J2DESIGN.US
5	Dan Daggett	SRPMIC	daniel.daggett@srpmic-nsn.gov
6	Tudor Montague	SRPMIC	tudor.montague@srpmic-nsn.gov
7	Mark Frank	FMYN	mfrank@ftmcdowell.org
8	Henry Vera	FMYN	hvera@ftmcdowell.org
9	Kris Randall	USFWS	kris_randall@fws.gov
10	Andrea Barber	SRPMIC EPNR	andrea.barber@srpmic-nsn.gov
11	Kathleen Bergmann	US Army Corps of Eng. Tribal Liaison	kathleen.m.bergmann@usace.army.mil
12	Gina Leverette	SRPMIC	Regina.Leverette@srpmic-nsn.gov
13	Joan Estergard	Gable Ink (Contractor)	joan.gable@cox.net
14			
15			

Wetland Program Planning Workshop 2 – September 22, 2010
Workshop Meeting Minutes

Attendees:

1. Gina Leverette - EPNR WQP (Managing Water Quality Program)
2. Ondrea Barber - EPNR Management
3. Dan Daggett - EPNR Management
4. Tudor Montague – EPNR Policy Analyst
5. John Wesser – Scottsdale Community College (Prof. of Biology at SCC & Invertebrate Zool. at ASU)
6. Ed Northam – University of Arizona Coop Extension (Program Coordinator on invasive plants and weeds)
7. Gwen Meyer – US Army Corps of Engineers (Project Manager)
8. Mark Frank – Ft. McDowell Yavapai Nation (Acting Environmental Manager)
9. Henry Vera – Ft. McDowell Yavapai Nation (Water Quality Specialist)
10. Kris Randall – US Fish & Wildlife Services (Partners for Wildlife Program)
11. Kathleen Bergmann – US Corps of Engineers (District Tribal Liaison & Senior Planner)
12. Jeff Engelmann – J2 Design Consulting Firm (Landscape Architect)
13. Will White – Native Nursery Yuma, Arizona (Owner)
14. Joan Estergard – Gable Ink (contractor assisting EPNR)

Sign-In Sheet, Agenda, and handouts provided

Agenda:

Welcome & Kick-Off - Gina Leverette, EPNR WQP
Introduction & Icebreaker - all attendees
Workshop Discussions

1. **Background Information** (Gina Leverette provided overview on SRPMIC's wetland efforts along with slide show of Cottonwood & Lehi Wetlands)

Lunch Break (lunch provided)

2. **Discussion Session** (facilitated by Gina Leverette – touched on collaborative opportunities with attendees)
3. **Wrap Up**

1. G. Leverette (EPNR WQP) –opened the meeting detailing the purpose of the meeting:

a. Spring 2010 SRPMIC awarded EPA Wetland Program Development Grant
b. In FY11 EPNR hiring a new wetland coordinator – working knowledge of wetlands, plants, habitat, animals, etc.
c. Intend to learn what participating organizations are interested in and if collaborative opportunities are available.

2. G. Leverette (EPNR WQP) – moved on to introductions and Icebreaker activity for all attends to participate in.
3. G. Leverette (EPNR WQP) –provided slide show and description of the Wetland Program to include:
    a. Highlight of wetlands on the Community with map showing locations.
    b. 2003 – Construction of the Cottonwood Wetland.
        Showed photos during construction and shortly after including pole plantings.
        Original layout and project limits.
    c. 2005 – Improvements at the Cottonwood Wetland.
        Safety, visitor, and monitoring access, sinkhole issues, trail & vegetation management.
        Removal of debris, concrete waste, waste appliances, etc.
        Showed before & after photos as well as outdoor classroom.
    d. 2007 – Expansion of the Cottonwood Wetland.
        Cleared out ½ acre of salt cedar and revegetated with natives – cottonwoods and willows. Trees doing very well – keeping salt cedar from regrowing.
    e. 2008 – Construction of the Lehi Wetland.
        Only hydroseeded the first half of the wetland due to lack of water and flow.
        Used as an experimental planting opportunity.
        Poles planted in Feb. 2010 showing an 80% survival rate.
        Outreach priority – so used as opportunity for planting with Junior High Students, and Earth Day events.
    f. Wrapped up with photos of site signs, wildlife, burrowing owls, plants, etc.
    g. Questions:
        i. K. Randall – water source? EPNR – mainly agricultural tail water.
        ii. E. Northam – Any from mining pits? EPNR – minimal at Cottonwood Wetland.
        iii. M. Frank – why did you construct wetland? EPNR – nonpoint source pollution treatment demonstration wetland.
        iv. G. Meyer – Survivability of original planting list? EPNR – Poor record keeping yields no survivability info from 2003, but taking that lesson learned to the Lehi Wetland and taking appropriate records for survivability studies.

v. Discussed sinkhole issue in detail.
vi. J. Engelmann – how has the control of salt cedar been? EPNR – the natives have kept salt cedar from regrowing in any of the removal areas.

4. Break for lunch and return with discussion questions.
5. "What types of grant funding, if any, does your organization utilize?"
    a. G. Leverette – EPNR utilizes mainly 90% EPA funding, recently acquired funding from NRCS for tamarisk removal.
    b. K. Randall – US Fish & Wildlife Services **is** a funding source.
    c. W. White – Dept. of Defense
    d. E. Northam – "Pulling Together Initiative Program" from US Fish & Wildlife Services.
    e. J. Wesser – Volunteer resources like Scottsdale Community College. Undergrads at colleges and universities can structure dissertations or sabbaticals around ecological projects and surveys for EPNR. The President of the SCC is very interested in more collaboration with the SRPMIC. Center for Native & Urban Wildlife could provide help for surveys and develop long-term study opportunities.
    f. W. White – Sierra Club provides grants for preservation efforts. SRP & similar companies have funds set aside ("impact funds") that identify impacts a project might have on the environment and share the same interests. A lot of research capital available for such projects.
    g. G. Meyer – Audubon Center at Rio Salado and Central Avenue would be a source of information and opportunities on available resources.
    h. E. Northam – Arizona Dept. of Forestry has Forestry Health Grants and the SRPMIC may qualify as a "Riparian Woodland" for potential areas along the Salt and Verde Rivers.
    i. Noted that federal funding is a lengthy process and should be sought if time is not urgent.
6. "Have you or your organization participated in any wetland construction? If so, was it mainly for habitat restoration? Water quality improvements? Other?"
    a. J. Engelmann – Rio Salado in Phoenix Design Phase and Construction Supervision - a habitat restoration project that

tapped into volunteer resources and had community planting events such as the "Thousand Tree Forest" which took place over one weekend. Hundreds of volunteers planted cottonwood and willow poles in a concentrated area. A general contractor was on site for major earth work and grading.

b. J. Engelmann – One lesson learned at the Rio Salado was the invasiveness of cattails. There is no need to plant them, the seed source is likely in the river and area soils and are easily wind dispersed into the area. It is important to include deep zones (> 4 ft) in wetlands where cattails cannot establish thus allowing open water areas.
c. J. Estergard – Inquired if any wetlands in Rio Salado are proving water quality treatment?
d. J. Engelmann – Replied that much of Rio Salado is fed with groundwater and that there was some local groundwater contaminant (pollutant not recalled) that was being treated in one wetland that EPA was monitoring.
e. K. Randall – US Fish and Wildlife Service is working on a major geomorphology and re-vegetation riparian restoration project on private land along the Gila River. Due to the quality of habitat they had to survey for SW willow fly catcher and make sure construction was not occurring during a time when the birds could be present or nesting.
f. K. Randall - US Fish and Wildlife Service worked on a golf course in Kingman, Arizona that had razor back suckers in its ponds. So it was an interesting opportunity to inform golfers about Arizona's endangered native fish.
g. J. Engelmann – Regarding lessons learned, obtaining proper plant material for this large scale restoration projects is always a challenge, even finding enough poles for planting is difficult.
h. K. Randall – Added that maintaining the genetic material of the area is important for these restoration projects.
i. T. Montague – The SRPMIC has coordinated with Gila River Crossing, the native plant nursery on the Gila River Indian Community.
j. G. Leverette – EPNR conducted a Native Plant Nursery Feasibility Study a few ago.

k. J. Estergard – The new Wetland Program SES will be tasked to look into opportunities for the Community to start up its own native plant nursery as an enterprise or as a member-owned business.
l. G. Meyer – Wondered about that opportunity during Va Shly'Ay Akimel meetings.
m. J. Estergard – Added that as an outcome to a previous Wetland Program meeting with the Cultural Resources Department, it was mentioned how the loss of important indigenous plants, like mesquite and willow, is a concern for the Community.
n. G. Leverette –EPNR wants to utilize the Lehi Wetland as an opportunity to grow cultural traditional-use plants.
o. J. Wesser – SCC has been asked in the past to grow and supply American bulrush for the Forest Services for reintroduced wetland areas. Collected mesquite seeds from the McDowell Mountains, grew in tall pots, and replanted with a 60-70% survival rate. SCC has been contacted by Tres Rios regarding growing species for the Tres Rios restoration project. A native plant nursery in Apache Junction is one of the main suppliers in the area.
p. G. Meyer – NRCS has a Plants Material Center in Tucson.
q. W. White – Encourages a native seed search and tapping into the Community's Elders to learn what types of plants used to be present throughout the Community and what has changed.
r. T. Montague – Several years ago, a group from San Carlos were putting together a book on traditional use plants and could not find any screw bean mesquite on their reservation so came to the SRPMIC to look for them. EPNR and Cultural Resources Department surveyed the Community and could only find a small stand out by the Verde River. Many recalled that they used to be more populated 20-30 years ago.
s. W. White – If screw bean and honey mesquite are too close to each other, they cross pollinate and no longer have the true genetic screw bean plant. Old seeds are still in soil, just need to be recovered.

t. E. Northam – Nurseries have complicated the matter by introducing South American species (velvet mesquite, etc) which have made their way into natural systems by the rivers.
u. J. Wesser – SCC has begun a "Native Plants for Native Wildlife" initiative with a demonstration garden for this on the SCC campus. Genetic stock is important.

7. "Are you aware of any plant and animal species threatened by the loss of wetland habitat in the state of Arizona?"
    a. G. Leverette – Besides the SW willow fly catcher.
    b. J. Wesser – Native fish are very threatened by non-native and exotic fish. Even using non-native mosquito fish in swimming pools to control mosquitoes, when people are done with the fish they generally release them in nearby streams and rivers where they out-compete the native species. Bullfrogs are a big concern by destroying native frogs, fish and other small native animals. Crayfish have become problems in streams and ponds in the area, especially Indian Bend Wash water features. Game and Fish have sought out to eradicate the bull frogs in specific areas and have had success. The only known method to eradicate is to kill and remove them.
8. "Which of the four EPA Care Elements of an Effective State or Tribal Wetland Program Framework is most important to your organization? Monitoring & Assessment? Regulatory Activities? Protection & Restoration? Or Water Quality Standards?"
    a. W. White – For his native plant nursery, it is Protection & Restoration.
    b. K. Randall – For US Fish & Wildlife Services, it is Protection & Restoration.
    c. G. Meyer – For the US Army Corps of Engineers, it is M&A, Regulatory Activities, as well as Protection & Restoration, with Water Quality Standards as an outcome.
    d. E. Northam – For the U of A, all three non-regulatory elements.
    e. M. Frank – For Ft. McDowell, it is Water Quality Standards.
9. "Do you or your organization conduct wetland outreach to the public or entities that you regulate? How?"
    a. E. Northam – Provides workshops, lectures, field trips, one-on-one consults regarding non-native plants and their effects on

wetlands. "Extension" part of the university is to take the university to the community.

b. E. Northam – Recommended developing a list of historical plants, what was here and is no longer present, talk to the Elders, this would be a good opportunity for grant funding potential to restore these lost plants.
c. G. Leverette – EPNR has begun to develop a comprehensive list of what is here now with plant pressings and list.
d. J. Wesser – Effort to change outreach and address the youth using their "modern gadgets" and websites to use the children's technology to teach them.
e. J. Estergard – This semester EPNR will be working with the Salt River High School art teacher to develop a new outreach booklet, *Protecting the Community's Wetlands*, that will include traditional use plants and other pertinent information mentioned in today's workshop.

10. "Would you or your organization have any interest in collaborating on any projects with SRPMIC? Active collaboration? Guidance/input-based collaboration?"
    a. K. Randall – US Fish & Wildlife Service's "Partners for Wildlife" would be happy to work on projects if EPNR has an idea and would like to collaborate with USF&W.
    b. E. Northam – Is grant funded, but would be interested in assisting on non-native plant issues.
    c. J. Engelmann – J2 would be willing to assist on technical aspects. Also, added that the Maricopa Flood Control District keeps a list of registered or certified nurseries that use the tall pot method for growing trees. Contact is Dianne Stewart.
    d. K. Bergmann – US Army Corps of Engineers could provide some planning assistance and federal funding for project under $5M, (requiring a 35% local match)for aquatic ecosystem restoration. Although the federal process takes time for approval, this would be a possibility for long-term projects (such as restoring habitat along the Verde River). If the SRPMIC is interested in hearing about options for federal process, the Community should contact Ms. Bergmann for further discussion.