

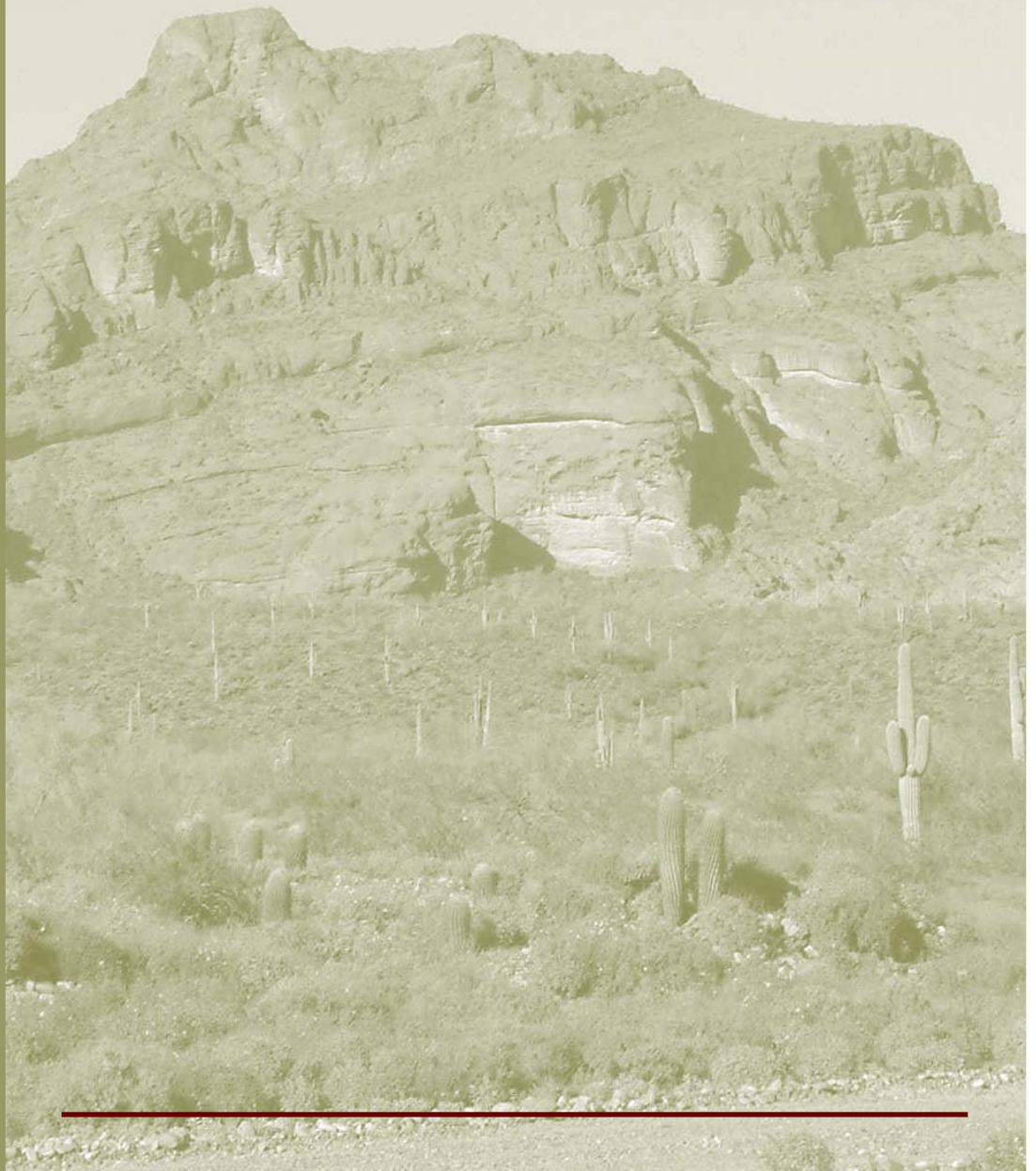
March 2008



Integrated Natural Resources Management Plan

SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

Environmental Protection
& Natural Resources Division



ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION

Integrated Natural Resources Management Plan

March 2008

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Table of Contents

List of Tables.....	iii
List of Figures	iii
List of Acronyms	iv
SRPMIC Environmental Protection & Natural Resources Division.....	1
History.....	1
Environmental Compliance	2
Objectives	2
Organization.....	3
Purpose of Document.....	5
Collaboration.....	6
Environmental Policy & Program Development	7
Grants & Contracts Management Program.....	8
Environmental Policy & Administrative Development.....	9
Pesticide Program	10
Solid Waste Program.....	12
EPPD Program’s Next Steps.....	16
Air Quality Program.....	19
The Clean Air Act.....	20
Ambient Air Quality Monitoring.....	22
Joint Air Toxics Assessment Project	23
Additional Air Toxics Assessments	24
Data Management.....	24
Air Quality Program’s Next Steps.....	25
Land Use Compliance Program	28
National Environmental Policy Act (NEPA) Compliance.....	29
Archaeological Protection	30
Land Use Compliance Activities	33
Land Use Compliance Program’s Next Steps	34
Range Management Program.....	36
Wild Horse Management.....	37
Bison Herd Management.....	39
Wood Harvesting Permit System	40
Proposed Native Plant Ordinance	41
Arizona Bald Eagle Nestwatch Program.....	41

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

Programmatic Gaps & Needs.....	41
Range Management Program’s Next Steps.....	46
Water Quality Program.....	48
The Clean Water Act.....	49
Salt & Verde Rivers.....	52
Cottonwood Wetland.....	53
Groundwater Program.....	55
Stormwater Program.....	56
Riparian Restoration.....	57
Programmatic Gaps & Needs.....	58
Water Quality Program’s Next Steps.....	60
Special Projects.....	63
Brownfields Assessment & Cleanup.....	63
Va Shly’ay Akimel Ecosystem Restoration Project.....	65
National Environmental Information Exchange Network.....	66
Community Outreach.....	67
Target Audience.....	67
Environmental Stewards.....	67
Outreach Activities.....	68
Outreach Budget.....	70
Outreach Results.....	71
Strategic Plan.....	72
What are the Plan Goals?.....	72
How will EPNR achieve its Goals?.....	73
Program Specific Tasks.....	74
Communication – the Key to Success.....	74
Outlook.....	76
What are the resource limitations?.....	76
What are the resource recommendations?.....	77
Resource Recommendations.....	80
Where is EPNR going?.....	83
Index.....	84

List of Tables

Table 2.1 Summary of Cleaned-Up Illegal Dump Sites	15
Table 2.2 Summary of Structures Demolished.....	15
Table 2.3 EPPD Standard Training Qualifications.....	18
Table 3.1 National Ambient Air Quality Standards.....	21
Table 3.2 AQP Standard Training Qualifications	26
Table 3.3 AQP Program Documents	27
Table 4.1 LUC Standard Training Qualifications	35
Table 4.2 LUC Program Documents.....	35
Table 5.1 RMP Standard Training Qualifications	47
Table 5.2 RMP Program Documents	47
Table 6.1 The CWA Titles & Corresponding Section Numbers.....	49
Table 6.2 Applicable TAS CWA Titles & Section Numbers	50
Table 6.3 Status of Achievement for TAS CWA.....	51
Table 6.4 Summary of Groundwater Monitoring Activities	55
Table 6.5 WQP Standard Training Qualifications	61
Table 6.6 WQP Program Documents	62

List of Figures

Figure 1.1 EPNR Departmental Organization Chart.....	4
Figure 2.1 EPPD Programmatic Organization Chart	17
Figure 3.1 AIRNow.gov Interactive Map	25
Figure 3.2 AQP Programmatic Organization Chart.....	26
Figure 4.1 LUC Programmatic Organization Chart	34
Figure 5.1 RMP Programmatic Organization Chart.....	47
Figure 6.1 Map of Surface Water Sampling Locations.....	52
Figure 6.2 WQP Programmatic Organization Chart.....	61
Figure 10.1 Recommended EPNR Organization Chart	78
Figure 10.2 Recommended EPNR Positional Chart.....	79

List of Acronyms

A&E - architectural and engineering
ADEQ - Arizona Department of Environmental Quality
ASHERA - Asbestos Hazard Emergency Response Act
APTI - Air Pollution Training Institute
AQI - Air Quality Index
AQP - Air Quality Program
AQS - Air Quality System
AQS - Air Quality Sub-system
ARI - Archaeological Research Investigations
ARPA - Archaeological Resources Protection Act
AST - above-ground storage tank
ASU - Arizona State University
BIA - Bureau of Indian Affairs
BMP - Best Management Practice
CAA - Clean Air Act
CARB - California Air Resources Board
CDD - Community Development Department
CE - Categorical Exclusion
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CES - Cultural and Environmental Services
CESM - Certified Environmental Systems Manager
CHMM - Certified Hazardous Materials Manager
CLE - Continuing Legal Education
CPP - Cultural Preservation Program
CRD - Cultural Resources Department
CRMP - Cultural Resources Management Plan
CWA - Clean Water Act
DOAS - Differential Optical Adsorption Spectroscopy
DOC - Department of Corrections
DOE - U.S. Department of Energy
EA - Environmental Assessment
ECS - Engineering and Construction Services
EDD - Economic Development Division

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

EDMS - Electronic Document Management System
EE - Environmental Engineer
EHP - Environmental Health Program
EIS - Environmental Impact Statement
EPA - U.S. Environmental Protection Agency
EPAD - Environmental Policy and Administrative Development
EPNR - Environmental Protection and Natural Resources Division
EPPD - Environmental Policy and Program Development
ES - Environmental Specialist
ESA - Endangered Species Act
ETP - Environmental Technician Program
FAQ - frequently asked questions
FEMA - Federal Emergency Management Agency
FIFRA - Federal Insecticide, Fungicide and Rodenticide Act
FMYN - Fort McDowell Yavapai Nation
FONSI - Finding of No Significant Impact
FRS - Facility Registry System
FWS - U.S. Fish and Wildlife Service
FY - fiscal year
G&C - Grants and Contracts
GAP - General Assistance Program
GCC - Gateway Community College
GIS - Geographical Information System
GRIC - Gila River Indian Community
HAP - Hazardous Air Pollutants
HHS - Health and Human Services Department
HSWA - Hazardous and Solid Waste Amendments
IHS - Indian Health Services
IHWMP - Integrated Hazardous Waste Management Plan
IIIRM - International Institute for Indigenous Resource Management
INRMP - Integrated Natural Resources Management Plan
IPM - Integrated Pest Management
ISWMP - Integrated Solid Waste Management Plan
ITBC - Inter Tribal Bison Cooperative
ITCA - Inter Tribal Council of Arizona, Inc.
ITEP - Institute for Tribal Professionals (Northern Arizona University)
IVRP - Inoperable Vehicle Removal Program
JATAP - Joint Air Toxics Assessment Project

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

JEP - joint evaluation process
LUC - Land Use Compliance
 $\mu\text{g}/\text{m}^3$ - microgram per cubic meter
MCESD - Maricopa County Environmental Services Division
MRPM - Membership & Real Property Management
NAAQS - National Ambient Air Quality Standards
NAU - Northern Arizona University
NAGPRA - Native American Graves Protection and Repatriation Act
NEI - National Emissions Inventory
NEIEN - National Environmental Information Exchange Network
NEPA - National Environmental Policy Act
NETI - National Enforcement Training Institute
NHPA - National Historic Preservation Act
NIJC - National Indian Justice Center, Inc.
NOAA - National Oceanic and Atmospheric Administration
NOI - Notice of Intent
NOT - Notice of Termination
NO_x - nitrogen oxides
NPDES - National Pollutant Discharge Elimination System
NPI - National Preservation Institute
NPO - Native Plant Ordinance
NPS - National Park Services
NPS - non-point source
OAQPS - Office of Air Quality Planning and Standards
OSHA - Occupational Safety and Health Administration
PCAQCD - Pinal County Air Quality Control District
PEA - Programmatic Environmental Assessment
PM - particulate matter
PM₁₀ - particulate matter sized with 10 micron diameter or less
PM_{2.5} - particulate matter sized with 2.5 micron diameter or less
PP - Pesticide Program
ppm - parts per million
PS - Planning Services
PW - Public Works Department
QA/QC - quality assurance and quality control
QAPP - Quality Assurance Project Plan
RCRA - Resource Conservation and Recovery Act
RER - Request for Environmental Review

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

RMP - Range Management Program
SA - Staff Archaeologist
SASS - Speciation Air Sampling System
SDWA - Safe Drinking Water Act
SES - Senior Environmental Specialist
SOP - standard operating procedure
SR - Salt River (reference to surface water sampling location)
SRO - Salt River Ordinance
SRPD - Salt River Police Department
SRPMIC - Salt River Pima-Maricopa Indian Community
SS - suspended solids
SWP - Solid Waste Program
SWPPP - Stormwater Pollution Prevention Plan
TAR - Tribal Authority Rule
TAS - Treatment-as-a-State
TDS - total dissolved solids
T&E - threatened and endangered
TEISS - Tribal Emission Inventory Software Solution
TRES - Tribal Environmental Exchange Network
USACE - U.S. Army Corps of Engineers
USDOE - U.S. Department of Energy
USGS - U.S. Geological Survey
UST - underground storage tank
VOC - volatile organic compound
VR - Verde River (reference to surface water sampling location)
WPS - Worker Protection Standards
WQP - Water Quality Program
WQS - water quality standards



SRPMIC Environmental Protection & Natural Resources Division

The Environmental Protection & Natural Resources Division provides the necessary balance between Community development and protecting the Community's health and natural resources.

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.

The Community is in a dynamic period of development (2008), as is much of Maricopa County, Arizona. However, the environmental thread occurring throughout the Community sets SRPMIC apart from much of the regional development. One of the main goals of EPNR during this time of unprecedented Community development is to continue to provide a balance between Community growth and the protection and preservation of the land, ecosystems, wildlife, history, and natural resources of the Community.

History

The SRPMIC environmental program began in the late 1980s and early 1990s with a staff of just a few persons who provided cultural and environmental services to the Community, which was the name of the division, Cultural and Environmental Services (CES). Over the past twenty years, the division has grown into a staff of over

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

twenty (20) people with multiple programs that oversee the protection of the Community's precious natural resources.

Prior to 2005, CES was made up of the current environmental programs in addition to the Cultural Preservation Program (CPP) which included the Community Garden Project, Section 106 Compliance as directed by the National Historic Preservation Act (NHPA), the Native American Graves Protection and Repatriation Act (NAGPRA), and a component of archaeology. In the fall of 2005, CPP separated from CES and the division was renamed the Environmental Protection and Natural Resources (EPNR) Division. CPP is now housed with the other cultural programs under the Cultural Resources Department (CRD). EPNR continues to work closely with the newly-formed CRD and the CPP in both on-the-ground projects and Community outreach programs.

Environmental Compliance

It is the policy of the SRPMIC that the health and welfare of the Community and its members are enhanced by compliance with Community and federal environmental laws in order to:

- ◆ Protect the health and safety of persons residing and working within the SRPMIC.
- ◆ Protect and preserve the environment for future generations.

EPNR is the Community's designee as the primary responsible party for ensuring compliance with all tribal and federal environmental laws. In addition to several tribal ordinances to assist in the protection of the Community's environment, the SRPMIC enforces several federal environmental statutes enacted by the United States Congress including the Clean Air Act as amended, the Clean Water Act, National Environmental Policy Act (NEPA), Solid Waste Disposal Act and the Comprehensive Environmental Response Act. As the Community continues to strive for achieving delegated authority over federal programs, EPNR is constantly developing and expanding its capacity to monitor and enforce environmental compliance.

Objectives

EPNR carries out the following tasks in order to achieve a balance between growth and the environment:

- ◆ Administers environmental regulatory programs.
- ◆ Addresses environmental issues.
- ◆ Monitors growth and development to reduce the impact to the Community's natural resources.

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

- ◆ Performs research, site inspections, and monitoring activities throughout the Community.
- ◆ Manages and analyzes data, interprets consultative work, writes technical reports and enforces environmental policies.
- ◆ Provides environmental outreach and education to increase awareness about environmental issues that impact the Community.
- ◆ Participates in regional and national conferences to bring the latest technology to the Community and share EPNR's expertise with the scientific community.
- ◆ Provides presentations to the Community Council, schools, and the general public in an effort to strengthen the bond between the people of the Community and their land.

Organization

EPNR is organized around the following five (5) programs, each of which is responsible for overseeing specific environmental and natural resource areas:

1. **Air Quality** – Monitors, assesses, and addresses air quality issues.
2. **Environmental Policy and Program Development** – oversees the following sub-programs:
 1. Grants and Contracts Management Program
 2. Environmental Policy and Administrative Development
 3. Pesticide Program
 4. Solid Waste Program
3. **Land Use Compliance** – Ensures all projects comply with the National Environmental Policy Act, the National Historic Preservation Act, and Salt River Antiquities Ordinance.
4. **Range Management** – Protects and manages the Community's wild horse population and oversees the bison herd in Clarkdale, Arizona.
5. **Water Quality** – Monitors, assesses, and reports on the quality of the Community's surface water and groundwater.

EPNR also oversees the following special projects:

- ◆ Brownsfields Assessment and Cleanup – Cypress Landfill and Feedlot Site
- ◆ Va Shly'ay Akimel Ecosystem Restoration Project
- ◆ National Environmental Information Exchange Network (NEIEN)
- ◆ Arizona Bald Eagle Nestwatch Program

ENVIRONMENTAL PROTECTION &
 NATURAL RESOURCES DIVISION
 INTEGRATED NATURAL RESOURCES
 MANAGEMENT PLAN

The following diagram, **Figure 1.1**, illustrates how EPNR is currently organized. EPNR is directed by a Division Manager and two (2) supporting supervisors. These individuals oversee the five (5) EPNR Programs. The organizational diagram also indicates which positions are tribally funded and which are grant funded.

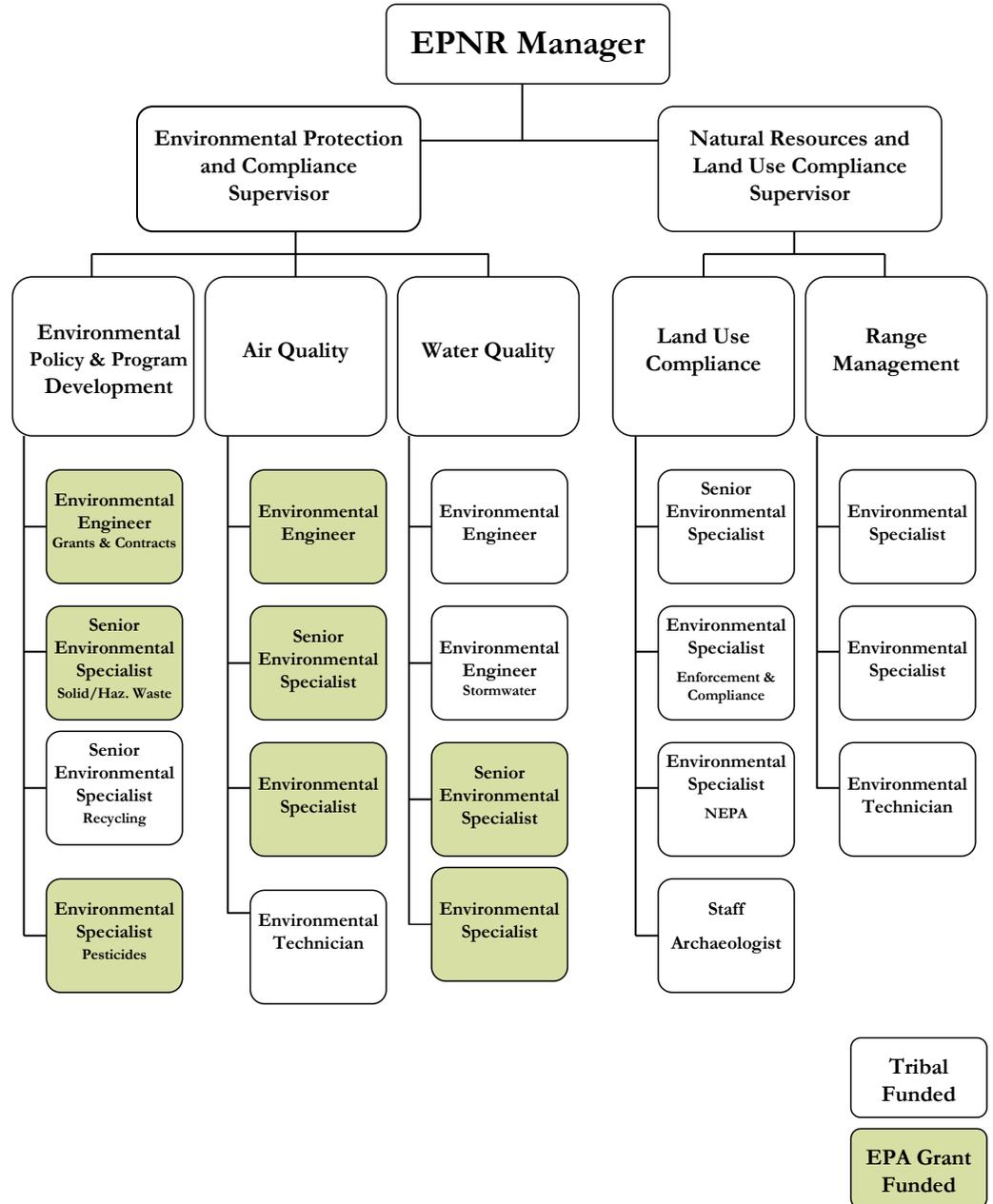


FIGURE 1.1 illustrates EPNR’s current (as of FY2008) departmental organization.

Purpose of Document

This Integrated Natural Resources Management Plan (INRMP) was developed in order to:

- ◆ Capture each EPNR Program's objectives, projects, implementation plans, as well as day-to-day tasks.
- ◆ Illustrate how the EPNR Programs are connected to each other and present a holistic view of EPNR activities.
- ◆ Serve as a guide for EPNR resource allocation (both funding and personnel).
- ◆ Help target efforts for outside funding and multi-agency collaboration.
- ◆ Illustrate the strengths and weaknesses of EPNR and its Programs.
- ◆ Exemplify the extensive collaboration EPNR has with other SRPMIC departments, other agencies (local and national), as well as internally within EPNR Programs.
- ◆ Demonstrate EPNR's accomplishments over the past ten years.
- ◆ Provide a road map for where EPNR will go in the next five years and how it will get there.

The next five (5) chapters of the INRMP are dedicated to each of the five (5) EPNR programs. Each chapter contains background information, regulations, and scientific reasoning, when appropriate, for the corresponding program. Each chapter describes the various sub-programs (if applicable), programmatic activities, standard qualifications, and next steps for each program.

All EPNR staff conducts environmental inspections and investigations. EPNR's goal is to encourage staff capacity-building by obtaining certifications including Federal Inspector Credentials as well as participating in pertinent training, workshops, educational courses, and available technological seminars. Each of the following program chapters contain a section that lists standard qualifications relevant to the program and staff position. The qualifications may not be mandatory at the on-set of the position, but through EPNR's proposed Career Development Plan each position will obtain the proper qualifications over time.

The last four (4) chapters of the INRMP describe EPNR's Special Projects, Community Outreach, Strategic Plan, and EPNR's Outlook over the next five (5) years.

Collaboration



The icon to the left, the two people holding puzzle pieces, is used throughout this document to highlight EPNR's collaborative effort. Collaboration is the key to success for any environmental protection group, as the environment is comprised of several elements; land, air, water, people, wildlife, vegetation, and regulations. Numerous opportunities exist which require EPNR to collaborate with other SRPMIC departments and divisions, such as Public Works, Engineering and Construction Services, and Planning Services.

There are internal EPNR projects that require the collaboration of multiple programs working together to ensure project success, such as the Water Quality Program working with Range Management to develop water quality protection activities along the Verde River.

Some projects involve multi-agency collaboration where EPNR participates on behalf of SRPMIC to protect the health and welfare of the Community as a whole. One example of a multi-agency collaboration is the Joint Air Toxics Assessment Project (JATAP) of the greater Phoenix metropolitan area. In that project, the EPNR Air Quality Program works with the U.S. Environmental Protection Agency (EPA), Arizona Department of Environmental Quality (ADEQ), Gila River Indian Community (GRIC), as well as others, to monitor air quality throughout the metropolitan area. SRPMIC understands that air pollution knows no geographical boundaries; therefore collaboration on this regional project can help to protect the health of the Community.

Over the last ten years, EPNR has made significant strides for the protection and preservation of the land, ecosystems, wildlife, history, and natural resources of the Community.



Environmental Policy & Program Development

Environmental Policy & Program Development develops the environmental protection policies and ordinances for enforcement while simultaneously managing the numerous grants and contracts that support each program.

The Environmental Policy & Program Development (EPPD) Program was formerly known as the General Assistance Program (GAP). In 1992, Congress passed the Indian Environmental General Assistance Program Act which authorizes EPA to provide GAP grants to federally-recognized tribes. The goal of GAP is to assist tribes in developing the capacity to manage their own environmental protection programs, and to develop and implement solid and hazardous waste programs in accordance with individual tribal needs and applicable federal laws and regulations.

Over the past several years, GAP funding has served as the foundation for the development of the Community's environmental program infrastructure. These GAP funds have been supplemented by a strong financial commitment from the Community that has allowed EPNR to leverage its resources to enhance the development of environmental programs and promote staff capacity to manage complex environmental initiatives.

EPPD is charged with developing the multitude of environmental protection policies and ordinances. The EPPD is comprised of four individual programs, most of which are federally funded and in the capacity-building stages. These programs include:

1. Grants and Contracts Management Program
2. Environmental Policy and Administrative Development
3. Pesticide Program
4. Solid Waste Program

Grants & Contracts Management Program

The Grants and Contracts Management Program (G&C) was officially created in 2006 out of the need to ensure that contractual and project requirements are fulfilled, and that managers and supervisors are aware of such requirements.

The G&C manages each federal grant obtained by EPNR to ensure compliance with all federal and Community regulations. G&C ensures that each grant is developed properly, is executed in adherence to policies and guidelines, and remains a positive asset to EPNR and the Community.

The effective management of all contracts is important to guarantee a fair and ethical process from start to finish for all parties. G&C improves program reporting, advances the accountability of the programs to the funding agencies and to the Community, and provides solid documentation through the tracking of products and deliverables. G&C provides a comprehensive internal structure to effectively maintain oversight of grants, organize contract management, and monitor all grant program budgets.

Grants and Contracts Coordination

Maintaining the organization of all EPNR grants and contracts in one central system requires a multitude of tasks:

1. Ensuring all reports are submitted on time and in the required format.
2. Streamlining and improving the reporting process for improved efficiency of monitoring and reporting, in-turn improving EPNR staff efficiency.
3. Filing system reports.
4. Coordinating with the Community Finance Department and other departments to complete the required processes to implement and expand funds in compliance with grants.
5. Developing schedules for project implementation.
6. Drafting and reviewing Standard Operating Procedures (SOPs) for compliance with grants and project objectives.
7. Processing financial tracking forms.
8. Reviewing and tracking both grant and contract proposals.
9. Tracking grant logs and In-Kind contribution forms.
10. Providing continual updates and communication to the Community Council and other departments, EPNR management and staff, EPA and other funding and regulatory agencies, as well as contractors and Community legal staff.



Grants and Contracts Priorities

In addition to carrying out the numerous day-to-day tasks listed in the previous section, the G&C Program continually strives for developing operational improvements and adheres to its main priorities:

1. Continuing the development of appropriate enforceable provisions.
2. Seeking new grant funding opportunities that supplement current budgets constrained by the growing demands of the Community and that compliment and support the Community's growth into the future.
3. Adhering to changes in grant administration with appropriate management, reporting, and implementation of programs to ensure compliance and timely fulfillment of all grant requirements.
4. Developing, enhancing, and implementing a well-coordinated educational outreach component that promotes environmental stewardship throughout the Community.

Environmental Policy & Administrative Development



The continual and rapid Community development along with the complexities of an evolving tribal government structure, compounded by the demands for compliance and regulatory accountability, require continual review and modifications of EPNR's responsibilities. The Environmental Policy and Administrative Development (EPAD) Program, in concert with EPNR management, serves this function. Through continual collaboration with other divisions in the CDD and other tribal departments, EPAD attempts to keep up-to-date on the issues and challenges of the rapid development within the Community. EPAD and EPNR management review the current EPNR operations and Community Ordinances to ensure the protection of the Community's environment and natural resources.

Staff Capacity-Building Efforts

The EPAD works closely with EPNR management to ensure that the EPNR staff is current with the environmental protection initiatives. To accomplish this, emphasis is placed on staff and program accountability. EPNR management monitors this through weekly and quarterly reporting, staff meetings, and one-on-one meetings. Through the series of these activities, every EPNR staff member is kept current on their scope of duties and responsibilities, even while these may be ever-changing for some positions.



EPAD overlaps with G&C in several areas as most grants have many lengthy and detailed reporting requirements, which result in directly developing EPNR responsibilities. EPAD with EPNR management coordinates a joint evaluation process (JEP) of the Community and EPA. The JEP is comprised of EPNR staff completion of Quarterly and Annual Summary reports that identify not only progress, but challenges encountered or even anticipated. These reports can result in improved

work plans, enhanced communication and reallocations of resources. It is one of the many checks-and-balance systems EPNR utilizes.

Programmatic Capacity-Building Efforts

As the Community continues to strive for achieving delegated authority over federal programs, EPAD is tasked with developing the framework and foundation of environmental enforcement that includes the following:

- ◆ Strategically addressing environmental protection initiatives.
- ◆ Commencing and executing a strategy for the development of regulatory implementation plans with applicable tribal ordinances and enforceable provisions.
- ◆ Ensuring that the enforcement of tribal environmental ordinances are consistent with the intent of the regulations and are effective for enforcement in tribal and federal jurisdictions.
- ◆ Coordinating comprehensive evaluation and public review of the EPAD drafted enforcement protocols and implementation policies with Tribal Council, tribal department and Community members.
- ◆ Developing a compliance assistance program to facilitate industry compliance with all applicable regulatory requirements.

Pesticide Program

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) was first passed in 1947, giving the U.S. Department of Agriculture responsibility for regulating pesticides. FIFRA underwent major revisions in 1972 and transferred responsibility of pesticide regulation to the EPA. At that same time (1972), emphasis was shifted to protect the environment and public health. Today, FIFRA is a law that regulates pesticide registration and usage to protect applicators, consumers, and the environment.

FIFRA consists of the following set of regulations:

1. All pesticides must be registered after a required period of data collection to determine effectiveness for its intended use, appropriate dosage, and possible hazards. After a pesticide is registered, a label is created to instruct the final user on the proper usage of the material, and it is unlawful to use any pesticide not in accordance with the label. Basically, the label is the law.
2. Only a few pesticides are available to the general public, and can be used by anyone who will follow the directions. Most pesticides are too hazardous for general use. These are termed restricted-use pesticides and are allowed by certified applicators only. FIFRA established a system of examination and certification both at the private level and at the commercial level for

applicators that wish to purchase and use restricted-use pesticides. FIFRA also monitors the distribution of restricted-use pesticides.

3. After a pesticide is registered with the EPA, states can also require registration. Currently, the State of Arizona requires registration with the Arizona Department of Agriculture.

In 1986, the SRPMIC Pesticide Program (PP) was developed to enforce the SRPMIC Pesticide Ordinance that addresses pesticide use and worker protection. The PP performs inspections as part of the regulatory requirements of the tribally-adopted Pesticide Ordinance, Salt River Ordinance (SRO)-60-79, and FIFRA. The original Pesticide Ordinance addressed monitoring pesticide application throughout the Community. In 2006, the Pesticide Ordinance was updated to include structural and pre-treatment applications, such as preventative measures for termite control. The updated Pesticide Ordinance is pending approval and adoption by Council. The PP has developed an Integrated Pest Management (IPM) Plan that expands pest control beyond chemical application to proactive management activities.

The PP is responsible for a number of inspections, pest control activities, as well as additional outreach tasks. The following tasks illustrate the extent of activity the Pesticide Program performs.

Agricultural Inspections

The PP conducts inspections at the farming enterprises throughout the year and is responsible for ensuring that all agricultural applications of pesticides are performed according to the label specifications or according to the law ¹. In general, the farming enterprises in the Community have multiple growing seasons each year, resulting in year-round applications of insecticides, fungicides, and herbicides. The PP ensures all activity is performed by a certified, licensed applicator and occurs within the law.

In addition to pesticide application, the PP inspects all steps of pesticide handling and ensures that all material is properly stored, handled, and disposed of, including the pesticide container, according to label recommendations. There are also cleaning procedures for chemical equipment and persons contaminated by the pesticides, as well as proper housekeeping of maintenance yards. The PP ensures that these procedures are carried out and that all workers are aware of such procedures.

Worker Protection

In addition to pesticide application concerns, the PP is charged with ensuring all agricultural operations are in compliance with the federal Worker Protection Standards (WPS). In August 1992, the EPA revised the WPS for Agricultural Pesticides which is designed to protect employees on farms, forests, nurseries, and greenhouses from occupational exposures to agricultural pesticides. The WPS offers protection to both

¹ By the enactment of FIFRA, the specified pesticide dosage and usage listed on the label become law.

the agricultural workers (people involved in the production of agricultural plants) and the pesticide handlers (people who mix, load, or apply pesticides). The WPS contains requirements for:

- ◆ pesticide safety training
- ◆ notification of pesticide applications
- ◆ use of personal protective equipment
- ◆ restricted entry intervals following pesticide application
- ◆ decontamination supplies
- ◆ emergency medical assistance

The Community's farming enterprises employ approximately 60 full-time field personnel and up to 800 seasonal workers. The PP conducts inspections and provides guidance on workers safety and protection in both English and Spanish.

Pre-treatment and Structural Inspections

As Community development increases, the need for new structural pre-treatment for the prevention of termites increases. The pre-treatment occurs during the construction process, often in concert with the laying of the foundation. Additionally, some residences and other commercial structures opt for structural treatment for pest control. The PP is responsible for monitoring all pesticide applications and, again, ensures all activity is performed by a certified, licensed applicator according to label instructions.

Other Community Concerns

The PP provides additional services to the Community, such as:

- ◆ Implements the Integrated Pest Management Plan (IPM).
- ◆ Responds to Community pest control concerns.
- ◆ Conducts pesticide safety outreach and awareness, such as the "Read the Label First" program.
- ◆ Participates in mock inspections for the training of other tribal pesticide programs.
- ◆ Implements pest control activities such as installing bird exclusion devices in areas to prevent pigeon wastes and disease-spreading conditions.

Solid Waste Program

The EPNR Solid Waste Program (SWP) compliments the Public Works Department (PW) Waste Program by providing the waste removal services that PW does not provide. These services include the removal of hazardous materials and household hazardous wastes, the clean-up of illegal dump sites, and the removal of inoperable vehicles and waste tires, free of charge.

In accordance with the draft Community Waste Ordinance, PW is responsible for the collection and haulage of solid waste from commercial enterprises and residential areas within the Community. PW collaborates with the landfill to ensure final and proper disposal of that solid waste. EPNR's SWP monitors the regulatory compliance activities of the Community's active landfills and administers Title V Permit compliance requirements for the Community's closed landfills.

The draft Community Waste Ordinance currently does not provide guidance on the disposal of hazardous material which results in the need for additional waste programs. EPNR is striving to fulfill that need through the development of the Solid Waste Program and Integrated Waste Management Plans, which are not only important components for EPNR but for the Community.

Hazardous Waste Guidance

The Resource Conservation and Recovery Act (RCRA) of 1976 gave the EPA the authority to control hazardous waste from "cradle-to-grave" which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous wastes. In 1984, the Hazardous and Solid Waste Amendments (HSWA) were added to RCRA that required phasing out land disposal of hazardous waste. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. RCRA focuses only on active and future facilities and does not address abandoned or historical sites which are considered Brownfields (see Special Projects page 63, CERCLA).

EPNR uses EPA's guidance and GAP funds for developing its Hazardous Waste Program. EPNR's SWP staff seeks the following certifications needed to handle, manage, and consult on matters relating to hazardous materials:

- ◆ Certified Hazardous Materials Manager (CHMM)
- ◆ Certified Environmental Systems Manager (CESM)
- ◆ Asbestos Hazard Emergency Response Act (AHERA) Building Inspector
- ◆ Certified Landfill Bioreactor Manager

The SWP will be developing two critical management plans in 2008 that will strategically address the solid and hazardous waste programs which will include an Emergency Response Plan to respond to hazardous waste clean-up. These plans are:

1. Integrated Solid Waste Management Plan (ISWMP)
2. Integrated Hazardous Waste Management Plan (IHWMP)

² Title V operating permits are federal operating permits issued to sources, called "major sources" which emit or have the potential to emit certain air pollutants.

In addition to managing the collection and removal of household hazardous wastes, the SWP has three distinct programs that comprise the current solid and hazardous waste efforts:

1. Fuel Tanks Inspection Program
2. Community Clean-Up Program
3. Inoperable Vehicle Removal Program

The SWP is further developing a recycling program that will increase recycling efforts Community-wide and in collaboration with the Recycling Center at the Salt River Landfill.

Fuel Storage Tank Inspections

There are several above-ground and underground storage tanks³ (AST and UST) throughout the Community that currently fall under EPA jurisdictional monitoring. Under the current monitoring protocol, EPA conducts tank inspections every three (3) years, at which time EPNR staff accompanies the EPA Inspectors. In order to attain delegated authority over federal programs, EPNR must develop a program and obtain the proper certification for UST oversight to include Geographical Information System (GIS) mapping, inspections, enforcement, and mitigation plans.

Community Clean-Up Program

There are three (3) on-going Community Clean-Up tasks that are important for protecting the human health of the Community and reducing the risks associated with waste.

1. Clean-up of illegal dump sites.
2. Demolition and removal of structures of concern.
3. Beautification projects.

There are several illegal dump sites, solid waste problems, impaired environmental conditions and associated impacts within the Community that continue to be identified, GIS mapped, and prioritized for clean-up. EPNR has already coordinated the successful clean-up of seven (7) locations for a total removal of approximately 1,800 tons of material, which was either recycled or properly disposed of. **Table 2.1** lists the seven clean-up locations along with the type and quantity of material removed.

³ Above-ground and underground storage tanks are generally affiliated with gasoline or fueling stations.

Table 2.1 Summary of Cleaned-Up Illegal Dump Sites

Site No.	Site Location	Description of Material	Tons Removed
1	Loop 202 , East of Hayden Road	Concrete, wood, tires	338
2	Dobson Road, North of AZ Canal	Wood, concrete, organic debris	48
3	Indian School Rd., So. of AZ Canal	Tires, autos, appliances	38
4	So. of Beeline, NE of AZ Canal	Appliances, organic & household debris	109
5	E. Thomas Rd., Loop 101	Construction & demolition debris	448
6	W. Thomas Rd., Loop 101	Concrete, wood, fill (dirt)	227
7	Southeast Corner of Pavilions	Wood pallets, organic debris, fill (dirt)	589
Total			1,797



EPNR has recently partnered with SRPMIC Housing, Salt River Landfill, Engineering and Construction Services (ECS), and other Community groups on the coordinated demolition and removal of structures of concern. SRPMIC Administration identified three (3) structures of concern. EPNR Land Use Compliance (LUC) conducted Environmental Inspections of the sites and SWP, along with the partnering team, consulted with an environmental contractor who conducted the clean-ups which included asbestos and lead abatement and hazardous material clean-up. **Table 2.2** summarizes the three structures that were successfully demolished and sites cleared.

Table 2.2 Summary of Structures Demolished

Structure	Location	Cost
Former Fruit Stand	No. of McDowell Rd., East of Alma School Rd.	\$4,864
Former Native Hands	No. of McDowell Rd., West of Loop 101	\$27,211
Former Dud’s Lawnmower Shop	East of Alma School Rd., So. of McDowell Rd.	\$12,909
Total		\$44,984

EPNR continues to investigate opportunities for beautification projects in neighborhoods. Such projects not only improve the aesthetics of the neighborhoods, but improve residents’ health, both physical and mental, increase environmental awareness, and illustrate what the tribal government is accomplishing for the Community.

Inoperable Vehicle Removal Program



The Solid Waste Program has developed a voluntary Inoperable Vehicle Removal Program (IVRP). Through the IVRP, Community Members can call in a request for removal of an inoperable vehicle. After verifying vehicle ownership, the EPNR Solid Waste Manager coordinates with a contractor the removal and proper disposal of the vehicle free of charge to the Community Member. The final disposal includes recycling many vehicle components.

Proper vehicle disposal can often be a financial burden to the vehicle owner and many Community Members, unaware of this opportunity SRPMIC provides, do not address

inoperable vehicles on their property. These vehicles can lead to other environmental, health, or safety concerns; such as, contaminating soil and water from oil or refrigerant dripping, providing conditions for disease-carrying mosquitoes or rodents to breed, and presenting possibly dangerous areas for children. This provision of free vehicle removal service to the Community illustrates how the SRPMIC is responding to the needs of the Community while providing financial relief and improving health and safety. The SWP has developed an outreach brochure for this program in order to increase the Community's awareness to this free service.

Developing Programs

The Solid Waste Program continues to develop and respond to the environmental needs of the Community. The following list presents the many on-going tasks the SWP is developing, enhancing and implementing:

- ◆ Similar to the inoperable vehicle program, the SWP has developed a tire removal program. Tires often provide breeding conditions for disease-carrying mosquitoes which make them a direct short-term health threat to the Community.
- ◆ The current program and outreach plan is under expansion and development for household hazardous waste removal, as well as, appliance removal and recycling.
- ◆ A program and outreach plan is under development for an extensive residential, commercial and government recycling program. In 2008, EPNR SWP will include a Recycling Coordinator to assist in developing and implementing the Community-wide recycling program.

EPPD Program's Next Steps

The EPPD Program continues to develop programmatic tasks that are in line with achieving EPA's goals of tribes developing the capacity to manage their own environmental protection programs, and to develop and implement solid and hazardous waste programs in accordance with individual tribal needs and applicable federal laws and regulations.

EPPD's next steps will include filling the gaps in the hazardous waste and recycling programs. These gaps will be addressed in the Integrated Solid Waste Management Plan and the Integrated Hazardous Waste Management Plan, both of which will be completed in 2008.

Additionally, EPPD will be working to bridge the similar efforts performed under the Hazardous Waste Program and the Pesticide Program. Currently the Pesticide Program carries out inspections for fuel storage tanks in tandem with pesticide inspections. The PP also assists the LUC with environmental assessments of properties. Performing pesticide and hazardous material inspections require similar training, certification, and often similar field inspections. Developing a program that

encompasses both areas would improve EPNR's efficiency and abilities to protect the health and safety of the Community and its environment.

Currently EPNR and EPA are Regulatory Partners, such that if violations occur, EPNR addresses those violations internally. If the rare incidence occurs that EPNR can not address the violation or it is not under SRPMIC's authority, EPNR will notify EPA and will request enforcement assistance. As the SRPMIC receives delegated authority over these programs, EPNR will be responsible for investigations, enforcement, and compliance with all laws regarding solid and hazardous wastes. This increase in capacity will require designated field officers to perform the pesticide investigations, the storage tank investigations (both above- and under-ground), as well as respond to other field concerns such as hazardous wastes throughout the Community, including Emergency Response, while maintaining all administrative and enforcement records.

As the Community develops and grows, EPPD will focus on expanding personnel number and structure so that it can effectively respond to the Community's needs while ensuring the laws and regulations are enforced and the environment is protected.

EPPD Staff Qualifications

Figure 2.1 is a short organizational chart listing the current positions in EPPD. This figure is presented with **Table 2.3** to illustrate how the qualifications and training relate to specific EPPD positions. **Table 2.3** lists standard qualifications that the EPPD Staff have available for in-house expertise.

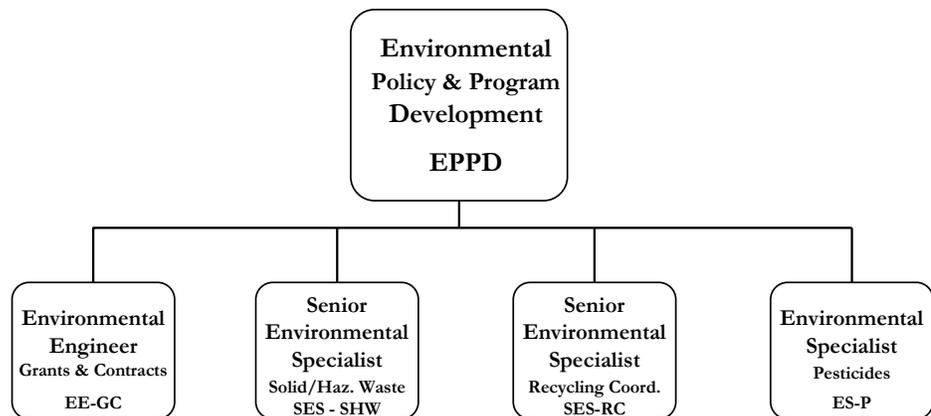


FIGURE 2.1 illustrates EPPD's programmatic organization.

ENVIRONMENTAL PROTECTION &
 NATURAL RESOURCES DIVISION
 INTEGRATED NATURAL RESOURCES
 MANAGEMENT PLAN

Table 2.3 EPPD Standard Training Qualifications

Accreditation/Training/Certification	Provider/Agency	EDDP Position
16-Hour RCRA Training/ 8-Hour RCRA Refresher	Any national trainer	All positions
EPA Tribal Environmental Investigations Training	ITCA ⁴ /EPA	All positions
Solid Waste Enforcement Training	NIJC ⁵ /EPA	SES - SHW
Developing a Tribal Integrated Solid Waste Management Plan	IITEP ⁶	SES - SHW
Grant Management Training	Any national trainer or SRPMIC-HR	EE-GC
Multiple Task/Time Management	Any national trainer or SRPMIC-HR	EE-GC
Hazwoper Training – 40 hr (May replace 16-hr RCRA Training)	Any national trainer	All positions
Hazwoper Training – 8 hr (May replace 8-hr RCRA refresher)	Any national trainer	All positions
Health and Safety Training – 24 hrs	EPA	All positions
Pesticide Inspector Residential Training	EPA	ES-P
Pesticide Regulatory Education Program	EPA	ES-P

⁴ ITCA – Inter Tribal Council of Arizona, Inc.

⁵ NIJC - National Indian Justice Center, Inc.

⁶ IITEP – Institute for Tribal Environmental Professionals



Air Quality Program

The EPNR's Air Quality Program's mission is to assess the Community's airshed and develop a program to address air quality issues.

Since 1997, the Air Quality Program (AQP) has progressed to assess the Community's airshed⁷ and to develop a program that addresses air quality issues throughout the Community. With the assistance of federal funding from the Environmental Protection Agency (EPA), the AQP has worked to develop a comprehensive air quality program that consists of the following components:

1. Ambient air quality monitoring at five (5) monitoring stations.
2. Emission inventories.
3. Education and outreach.
4. Regulatory development.
5. Participation in regional and national initiatives.

The AQP addresses challenging air quality issues such as the non-attainment designation under the National Ambient Air Quality Standards (NAAQS) for particulate matter and ozone. Additionally, the AQP uses five (5) ambient air monitoring sites to assess various sources of air pollution impacting the Community. The AQP collects extensive air quality data at the monitoring sites and shares a sub-set of the data (the air toxics data) in a multi-agency collaboration in the greater Phoenix metropolitan area, the Joint Air Toxics Assessment Project (JATAP). By participating in the JATAP, the SRPMIC recognizes that air pollution is not contained by geographical boundaries and the Community's welfare is dependent on understanding the air pollution concerns throughout the Phoenix metropolitan area.



The AQP has begun to develop a regulatory component whereby the Community can establish jurisdictional authority and enforcement for sources of air pollution within the exterior boundaries of the reservation.

⁷ Airshed – Region associated with a given air supply, with discrete atmospheric conditions.

The Clean Air Act

Understanding the Clean Air Act

The original Clean Air Act (CAA) of 1963 was established to fund the study and clean-up of air pollution as a direct response to heavy industrial air pollution events in the 1940s and 1950s that resulted in human deaths. However, there was no comprehensive federal response until the more stringent Clean Air Act in 1970, the same year the Environmental Protection Agency (EPA) was established.

In 1990, the Clean Air Act was drastically revised and expanded. The 1990 Amendments gave EPA greater authority to implement and enforce regulations which reduced air pollutant emissions. The 1990 Amendments also emphasized more cost-effective approaches to reduce air pollution.

Most importantly, the 1990 Clean Air Act Amendments lead to EPA's Tribal Authority Rule (TAR) which was passed in February 1998. TAR gives tribes the ability to develop air quality management programs, write rules to reduce air pollution that are appropriate for their lands, and to implement and enforce their rules.

Clean Air Act Section 103 Project Grants provide federal funds for conducting and promoting research, investigations, experiments, demonstrations, surveys, studies, and training related to air pollution. Section 103 Grants generally fund air program development and air pollution research and assessment. These grants require no matching funds, meaning they can be 100% federally funded.

Once an Air Program is fully developed and able to become an Air Pollution Control Program, Clean Air Act Section 105 Project Grants are available which could require up to a 40% match of both money and resources. Tribes can be granted a reduced match as low as 5%. Section 105 Grants are the next step for EPNR's Air Quality Program to become a Compliance and Enforcement Program which should be accomplished in 2008.

Which air pollutants are concerns for the Community?

There are six (6) common air pollutants that the EPA considers "criteria pollutants":

1. particulate pollution (or particulate matter (PM))
2. ground-level ozone
3. carbon monoxide
4. sulfur oxides
5. nitrogen oxide
6. lead

Of these six, particulate matter and ground-level ozone are the most common pollutants in the Phoenix metropolitan area and pose health concerns for the Community.

Particulate matter (PM) includes very fine dust, soot, smoke, and chemical droplets from machines such as motor vehicles. PM can be a direct health threat resulting in a number of respiratory illnesses, both chronic (long-term) and acute (short-term). There are two general designations for particulate matter. Prior to 1997, particulate matter less than or equal to 10 microns (PM₁₀) was the size of concern. For visual reference sake, seven PM₁₀ particles equal one human hair (EPA, 2007⁸). After 1997, EPA established more stringent standards which included even smaller particles, those under 2.5 microns (PM_{2.5}).

Ground-level ozone is a regional air pollution concern because it is not directly emitted into the air, but is created by chemical reactions driven by sunlight. Industrial emission and vehicle exhaust are major sources of nitrogen oxides (NOx) and volatile organic compounds (VOC) in the air. NOx and VOC react with sunlight to produce ground-level ozone. Ground-level ozone can also cause both chronic and acute human health problems like PM. However, ground-level ozone poses an additional concern for the Community by interfering with a plant's ability to produce and store food which can compromise crop growth, reproduction, and overall health (ENN CNN, 2000⁹).

What are the standards for these air pollutants?

There are two (2) groups of standards that comprise the National Ambient Air Quality Standards (NAAQS) used for air pollution control. These are *primary standards* and *secondary standards*. Primary standards are set to protect human health, while secondary standards protect human and public welfare, such as environmental protection and personal property. **Table 3.1** (EPA, 2007¹⁰) lists the standards for PM and ozone. These standards illustrate the stringency placed on these pollutants.

Table 3.1 National Ambient Air Quality Standards for PM and Ozone (EPA, 2007)

Averaging Period	PM _{2.5}	PM ₁₀	Ozone
1-hr	--	--	0.12 ppm
8-hr	--	--	0.08 ppm
24-hr	35 µg/m ³	150 µg/m ³	--
Annual	15 µg/m ³	revoked ⁴	--

Notes:

1. All standards listed are primary and secondary standards.
2. ppm – parts per million – is equivalent to one milligram per liter
3. µg/m³ – microgram per cubic meter – is equivalent to 10⁻⁶ milligrams per liter
4. Due to lack of evidence linking health problems to long-term exposure to coarse particle pollution, the agency revoked the annual PM₁₀ standard in 2006 (effective December 17, 2006).

⁸ EPA (April, 2007) The Plain English Guide to the Clean Air Act, (Pub. # EPA 456/K-07-001)

⁹ Environmental News Network (June, 2000) Smog spells invisible damage for drops, (CNN.com)

¹⁰ <http://www.epa.gov/air/criteria.html>

What are hazardous air pollutants?

Hazardous air pollutants (HAPs) are pollutants that are known or suspected to cause serious health problems such as cancer or birth defects. The pollutants are commonly referred to as toxic air pollutants or air toxics. The 1990 CAA Amendments list 188 toxic air pollutants that EPA is required to control. Examples from this list include benzene, which is found in gasoline; perchloroethylene, which is emitted from some dry cleaning facilities; methylene chloride, a solvent and paint stripper; as well as dioxin, asbestos, toluene, cadmium, mercury, chromium, and lead.

Ambient Air Quality Monitoring

What air parameters are monitored?

The AQP has developed an ambient air monitoring network to measure concentrations of PM_{2.5}, PM₁₀, ozone, air toxics (HAPs), and associated meteorological conditions. These meteorological conditions include ambient temperature, pressure, relative humidity, wind speed, wind direction, and the standard deviation of the wind direction (sigma theta) which enable the calculation of atmospheric stability and wind profiles for the prediction of air pollutant behavior through the use of computer modeling.

Ambient Air Quality Monitoring Stations

The AQP manages five (5) fully functional monitoring sites within the Community at the following locations (listed with the parameters measured at each location):

1. The Senior Center - measures ozone, PM₁₀, PM_{2.5}, HAPs, and meteorological.
2. Red Mountain Trap and Skeet - measures ozone and meteorological.
3. The Lehi Community Building - measures ozone, PM₁₀, and meteorological.
4. The Salt River High School - measures ozone and PM₁₀.
5. Differential Optical Absorption Spectroscopy (DOAS) Station parallel to the 101 Freeway south of McKellips Road - measures HAPs.

Objectives of the Ambient Air Quality Monitoring Stations

There are four (4) main objectives for the Ambient Air Quality Stations:

1. Determine the highest air pollutant concentrations in the Community.
2. Determine representative pollutant concentrations in areas of high population density.
3. Determine the impact from significant sources or source categories (such as automobiles) on ambient pollution levels.
4. Determine general background pollution concentration levels.

Joint Air Toxics Assessment Project



In addition to monitoring ambient air quality, the AQP participates in the Joint Air Toxics Assessment Project (JATAP) which fulfills regional and national initiatives to monitor the air toxics. The JATAP of the greater Phoenix metropolitan area is an effort that has been jointly planned by the EPA Region 9, EPA-Office of Air Quality Planning and Standards (OAQPS), the Arizona Department of Environmental Quality (ADEQ), the Maricopa County Environmental Services Division (MCESD), the Pinal County Air Quality Control District (PCAQCD), the Inter Tribal Council of Arizona (ITCA), the Gila River Indian Community (GRIC), the Salt River Pima-Maricopa Indian Community (SRPMIC), the Fort McDowell Yavapai Nation (FMYN), and the Institute for Tribal Environmental Professionals (ITEP).

What air parameters are monitored under the JATAP?

For JATAP, the SRPMIC AQP participated in one-in-six day canister sampling schedule, meaning physical samples are collected every six (6) days, for twenty (20) species of volatile organic compounds (VOCs). Additionally, each 6-day sampling event is alternated between one (1) 24-hour sample and two (2) 12-hour samples at the Senior Center site.

These 20 VOCs, which are a critical subset of the 188 EPA listed air toxics (ref. pg. 22), include:

- | | |
|-------------------------|----------------------------|
| 1. benzene | 11. 1,2-dichloroethane |
| 2. toluene | 12. Hexachlorobutadiene |
| 3. o-xylene | 13. 1,2,4-trimethylbenzene |
| 4. 1,1-dichloroethene | 14. 1,3,5-trimethylbenzene |
| 5. 1,2-dichloropropane | 15. m- and p-xylene |
| 6. Ethylbenzene | 16. styrene |
| 7. 1,3-butadiene | 17. Tetrachloroethene |
| 8. bromoethane | 18. Trichloroethene |
| 9. carbon tetrachloride | 19. vinyl chloride |
| 10. dichloromethane | 20. chloroform |

JATAP Monitoring Station

The JATAP monitoring station, located near the interchange of the freeways 101 and 202, was established in a joint effort with the ADEQ Air Quality Program. The JATAP uses a Differential Optical Absorption Spectroscopy (DOAS) Station, a monitoring method of continuous light path measurements from two separate instruments a distant apart for measuring mobile sources of six (6) selected air toxic elements concurrently. The DOAS measurements are then compared to the discrete results from the canister samples to verify results as a means of quality assurance and quality control (QA/QC).

The six (6) air toxic elements measured with the DOAS are:

- | | |
|-------------|-----------------|
| 1. benzene | 4. formaldehyde |
| 2. toluene | 5. mercury |
| 3. o-xylene | 6. ethylbenzene |

Objectives of the JATAP Monitoring Station

There are four (4) main objectives for the JATAP Station:

1. Determine the presence and concentrations of air toxics within the Community's airshed.
2. Provide further information on the diurnal¹¹ variation in air pollutant concentrations and to gain better knowledge of the selected element concentration levels in the local environment.
3. Provide additional insight on the east-west¹² transport of air toxics throughout the greater Phoenix metropolitan area.
4. Determine which air toxics are of most concern to the Phoenix area and tribal communities.

Additional Air Toxics Assessments

In addition to the on-going ambient air quality monitoring and the JATAP VOC sampling, the AQP has participated in two lengthy speciation¹³ monitoring events at the Senior Center site. These two events occurred over the two year period of 2005 – 2006. During 2005, twenty (20) elements were monitored using the canister sampling method. In 2005 - 2006, PM_{2.5} filters were analyzed for forty-eight (48) air toxics for the EPA Speciation Trends Network. The findings from the 2006 speciation collection showed that air pollutants associated with land sources and soil content, such as sulfur, aluminum, calcium, silicon and iron are the prevalent pollutants in the fall. This corresponds to the increase in agricultural activity and dust storms.

Data Management

Data is validated on the AQP Data Network System and then submitted to the EPA Air Quality System (AQS) database each quarter. AQS is EPA's repository of the ambient air quality data. All air quality programs that are funded by the EPA are required to report the data each quarter to EPA AQS. The parameters reported include the criteria pollutants along with precision and accuracy data. Data certification of annual data from the AQP in the AQS Database is reported to EPA Region 9 each year.

¹¹ Diurnal – Occurring during the day, typically everyday.

¹² Air typically moves in the east-west directions, since bounded by mountains on north and south.

¹³ Speciation – looks for specific chemical element species in the collected air or filter samples.



The AQP participates in posting air quality monitoring results on the AIRNow.gov website, which is a cross-agency U.S. Government website. The EPA, National Oceanic and Atmospheric Administration (NOAA), National Park Services (NPS), tribal, state, and local agencies developed the AIRNow.gov website to provide the public with easy access to national air quality information. The website offers daily Air Quality Index (AQI) forecasts as well as real-time AQI conditions.

The AQI is a numbered and color-coded system. The color codes range from green (“good”) to purple (“very unhealthy”) that alert the public to health risks associated with current air pollutions. Basically, the AQI number and color tells the public how clean or polluted their ambient air is and what associated health effects might be a concern for them. The AQI focuses on health effects the public may experience within a few hours or days after breathing polluted air. **Figure 3.1** is an example of the type of interactive map that can be found on AIRNow.gov. The data is presented on AIRNow.gov for public health alerting only and is not used to formulate or support regulation, guidance or any other agency decision or position.

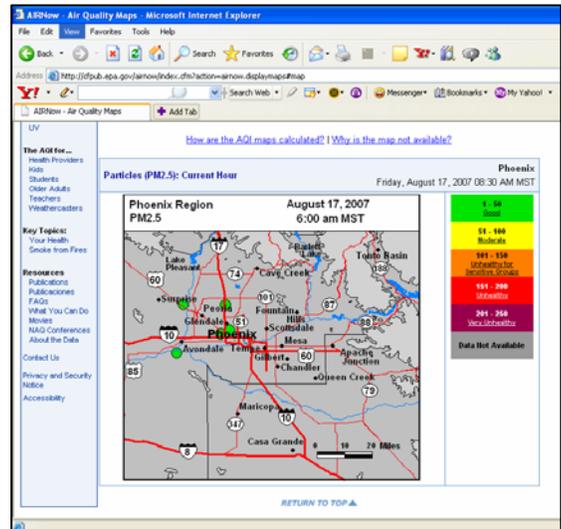


FIGURE 3.1 illustrates the type of interactive map found on AIRNow.gov and the AQI color coded system.

The AQP has also provided air quality data in the past to the Tribal Environmental Exchange Network (TRES). TRES is a web-based, automated system for collecting, validating, and reporting air quality data from several participating Tribes. The interactive web address is <http://wxweb.meteostar.com/tribal/>.

Air Quality Program's Next Steps

The AQP will be developing a Community-specific website for public access that will be similar to the AIRNow.gov website in that it will provide the Community with real time measurements, forecasts, real time visibility photography, and most importantly, health alerts such as High Pollution Advisory System.

The AQP is also actively working on an Eligibility Determination and has begun to develop a regulatory component whereby the Community can establish jurisdictional and enforcement authority for sources of air pollution within the exterior boundaries of the Community.

AQP Staff Qualifications

Figure 3.2 is a short organizational chart listing the current positions in AQP. This figure is presented with **Table 3.2** to illustrate how the qualifications and training relate to specific AQP positions. **Table 3.2** lists standard qualifications that the AQP Staff have available for in-house expertise.

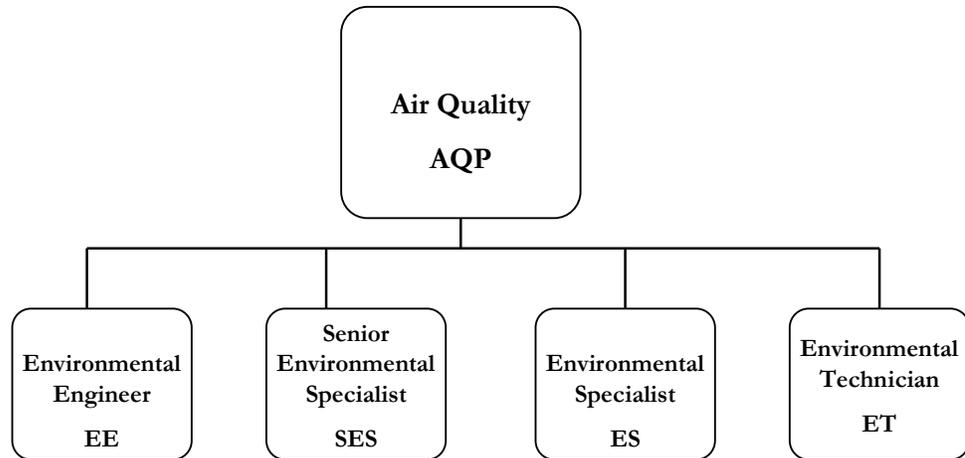


FIGURE 3.2 illustrates the AQP’s programmatic organization.

Table 3.2 AQP Standard Training Qualifications

Accreditation/Training /Certification	Provider/Agency	AQP Position
Certified PM _{2.5} Performance Evaluation	EPA	SES
Fundamentals of Air Pollution Technology	ITEP ¹⁴ - NAU ¹⁵	EE, SES, ES
AIRS – Air Quality System	ITEP - NAU/EPA	SES, ES
Air Quality Program Administration	ITEP - NAU	SES, EE
PM _{2.5} Instrument Operation	ITEP - NAU/EPA	SES
Ozone Monitoring	ITEP - NAU	SES
EPA Air Quality Monitoring	EPA	SES
EPA Air Toxics	EPA	EE, SES
Data Management	ITEP - NAU	SES, ES
Hazwoper Training – 40 hr	EPA or	All
Hazwoper Refresher Training – 8 hr	Any national trainer	
Basic Inspector Training	EPA, CARB ¹⁶ , NETI ¹⁷ , ITEP	All
Advanced Inspector Training	EPA, CARB, NETI	EE, ES
Smoke School	Any national trainer	EE, ES

¹⁴ ITEP - Institute for Tribal Environmental Professionals

¹⁵ NAU – Northern Arizona University

¹⁶ CARB – California Air Resources Board

¹⁷ NETI – National Enforcement Training Institute

Table 3.2 continued - AQP Standard Training Qualifications

Accreditation/Training /Certification	Provider/Agency	AQP Position
Basic Health & Safety – 8 hr Occupational Safety & Health Administration (OSHA) Refresher	EPA – APTI ¹⁸	EE, SES, ES
Air Inspector Workshop	EPA - APTI	EE, ES
Permitting	EPA	EE
Tribal Emission Inventory Software Solution (TEISS)	IITEP	All
Tribal Data Toolbox	IITEP	SES, ES, ET
Air Pollution and Ecosystems	IITEP	EE
Air Modeling	IITEP	EE, ES
Uniform Air Quality Training Program 100 series ----- 200 series	CARB	EE, ES EE
Clean Air Act	EPA	EE

AQPP Program Documents

Table 3.3 lists the main documents used by the Air Quality Program.

Table 3.3 AQPP Program Documents

Title	Author/Agency	Year Published
Quality Assurance Handbook for Air Pollution Measurement Systems (Vol. II: Part 1)	EPA	2000
Developing a Tribal Air Program - Training Manual	IITEP & EPA	2002
Introduction to Tribal Air Quality - Training Manual	IITEP & EPA	2005
Quality Assurance Project Plan for the SRPMIC Ambient Air Quality Monitoring Program	SRPMIC EPNR (as CES)	2002
Quality Assurance Project Plan for the Phoenix Metropolitan Joint Air Toxics Assessment Project	EPA	2005
Standard Operating Procedures for Met One Instruments Speciation Air Sampling System (SASS)	SRPMIC EPNR Air Quality	2005
Standard Operating Procedures for 3-Channel Canister Sampler (VOC Sampler)	SRPMIC EPNR Air Quality	2005
AQS Data Coding Manual	EPA	2005
AQS Data Reports and Retrievals	EPA	2005
Quality Assurance Handbook for Air Pollution Measurement Systems (Vol. IV: Meteorological Measurement)	EPA	2006

¹⁸ APTI – Air Pollution Training Institute



Land Use Compliance Program

The Land Use Compliance Program provides an important level of protection for the Community's natural and archaeological resources by ensuring that impacts to these resources are taken into account prior to major ground disturbance activities.

The Land Use Compliance (LUC) Program is distinctly different from the other EPNR programs in that it currently has an enforcement and compliance program in place. Many of EPNR programs (Air Quality, Water Quality, and Range Management for example) are in the monitoring and capacity-building process and are not staffed for enforcement and compliance yet. LUC proactively protects the Community's natural and archaeological resources by performing critical environmental and archaeological inspections prior to development projects.

By following guidance set by many federal laws and adhering to the SRPMIC Antiquities Ordinance (SRO-102-86), the LUC Program ensures that Community development is conducted responsibly and that natural and archaeological resources are protected. Any land use activity that requires ground-disturbance of any kind (such as residential, commercial, right-of-way, restoration, or industrial construction and/or development) must be reviewed prior to lease approval, construction activity, or development to ensure that there will be no adverse effect to the natural environment, endangered species, or important archaeological sites.



LUC works closely with several SRPMIC entities, such as Engineering and Construction Services, Membership and Real Property Management, Economic Development Division, and the Cultural Preservation Program of the Cultural Resources Department, in order to assist in many Community developmental projects. LUC must collaborate with external agencies as well, such as the Bureau of Indian Affairs and the Arizona State Historic Preservation Office.

As previously mentioned, prior to 2005, EPNR was named Cultural and Environmental Services (CES). Under CES, cultural services were provided through the Cultural Preservation Program (CPP) which included the Community Garden Project, Section 106 Compliance as directed by the National Historic Preservation Act (NHPA), the Native American Graves Protection and Repatriation Act (NAGPRA), and a component of archaeology. In the fall of 2005, CPP separated from CES and EPNR was formed with a Land Use Compliance Program. CPP is now housed with the other cultural programs under the Cultural Resources Department (CRD).

As a result from the CES division, EPNR's Land Use Compliance Program incurred the cultural responsibilities required to provide archaeological protection during ground-disturbing activities, while CPP incurred the remainder of the cultural responsibilities. EPNR continues to work closely with the newly-formed CRD and the CPP on permit compliance, on-the-ground projects, and Community outreach programs.

Since its creation, the Land Use Compliance Program has two sections, each enforcing its own set of federal and SRPMIC laws and guidance. These two sections, when combined, provide a two-tiered level of protection for the Community:

1. National Environmental Policy Act (NEPA) Compliance
2. Archaeological Protection

National Environmental Policy Act (NEPA) Compliance

The National Environmental Policy Act (NEPA), signed into law on January 1, 1970, requires agencies to integrate environmental values into their decision making processes by considering the environmental impacts of the proposed land use activities, as well as alternatives to those activities. NEPA establishes national environmental policies and goals for the protection, maintenance, and enhancement of the environment. NEPA also provides a process for implementing these goals.

NEPA Process

The LUC Program uses the NEPA process to ensure ground-disturbing activities do not adversely impact the Community's natural resources. The NEPA process consists of an investigation of the proposed activity/project followed by an evaluation of the environmental effects of the proposed activity. There are three levels of analysis depending on whether or not an activity could significantly affect the environment. These three levels include:

- ◆ Categorical Exclusion (CE) determination
- ◆ Preparation of an Environmental Assessment/Finding of No Significant Impact (EA/FONSI)
- ◆ Preparation of an Environmental Impact Statement (EIS)

At the first level, an activity may be categorically excluded from a detailed environmental analysis if it meets certain criteria which have previously been determined as having no significant environmental impact, such as land sales and deed or gift conveyances.

At the second level of analysis, LUC prepares a written Environmental Assessment (EA) or Programmatic Environmental Assessment (PEA) to determine whether or not the activity would significantly affect the environment. If the answer is no, the LUC issues a Finding of No Significant Impact (FONSI). The FONSI may include measures which the project will take to reduce potentially significant impacts.

If the EA determines that the proposed project may have significant environmental consequences, then an Environmental Impact Statement (EIS) is prepared. An EIS is a more detailed evaluation of the proposed project and possible alternatives. The public, other federal agencies, and outside parties may provide input into the preparation of an EIS and comment on the draft EIS when it is completed. If the Community anticipates that a project may significantly impact the environment, or is environmentally controversial, the Community may choose to prepare an EIS without having to first prepare an EA.

The Endangered Species Act

LUC also upholds the Endangered Species Act (ESA) when considering environmental impacts. The ESA, created in 1973, provides a program for the conservation of threatened and endangered (T&E) animals, plants, and habitats in which they are found. The U.S. Fish and Wildlife Service (FWS) maintains the list of over 1,500 endangered species and 300 threatened species which include insects, reptiles, fish, birds, mammals, flowers, grasses, and trees. The ESA prohibits any action, on-the-ground or administrative, that results in a "taking" of a listed species, or adversely affects its habitat. Therefore, when the LUC Program investigates possible environmental impacts from proposed activities, they not only need to account for protecting the natural resources present but also the impact the activity might have on T&E species or habitats.

Archaeological Protection

The second area of protection that the LUC Program provides is for the Community's precious and unique archaeological resources. LUC provides compliance assistance for several federal laws related to the protection of archaeological sites and artifacts and enforces the Salt River Antiquities Ordinance (SRO-102-86).

Archaeological Resources Protection Act

In 1906, the U.S. Congress enacted the Antiquities Act to deal with the theft and vandalism of archaeological sites on public lands. The Act established a criminal

penalty of a \$500 fine and/or imprisonment for 90 days (USDOE, 2006¹⁹). At that time (1906), since few archaeological sites were affected and high-quality artifacts sold for only a few dollars each, this penalty was considered significant. However, the problem continued to worsen over time. By the 1970s, individual artifacts were selling for thousands of dollars and many archaeological sites on public lands were damaged or destroyed by theft and vandalism and the 1906 penalties no longer reflected the severity of the violation.

In 1974, the Antiquities Act was declared unconstitutionally vague, and the U.S. Congress responded by enacting the Archaeological Resources Protection Act of 1979 (ARPA). ARPA, as amended in 1988, significantly increased the penalties²⁰ for theft and vandalism of archaeological sites on public and Native American lands and placed important protection and management responsibilities on federal agencies, such as the Department of Energy (DOE). ARPA outlines measures to protect archaeological resources on federal and Native American lands and contains ranges of penalties based on the severity of the violation. There are steep felony-level penalties for those convicted of serious violations, as well as civil penalties, such as forfeiture of vehicles and equipment, for minor violations. ARPA also established procedures for land managers to issue permits for authorized excavation and removal of archaeological resources from the land they manage. The SRPMIC incorporated these guidelines into its own Antiquities Ordinance.

National Historic Preservation Act

Similar to ARPA, the National Historic Preservation Act (NHPA), created in 1966, was enacted due to public concern that many of the nation's historical resources were not adequately protected. NHPA has been strengthened and expanded by several amendments since 1966, but the basic provision of NHPA is to require government agencies to evaluate the impact of all ground-disturbing activities on properties listed or eligible for listing in the National Register of Historic Places. This process is known as a Section 106 Review.

Under the act, federal power was diffused to the states, who in turn were encouraged to diffuse it further to local agencies. Thus, the SRPMIC maintains its own preservation program and adopted the Antiquities Ordinance in 1986.

SRPMIC Antiquities Ordinance (SRO-102-86)

In 1986, the SRPMIC created its own Antiquities Ordinance, (SRO-102-86) which states, "It is the policy of the Salt River Pima-Maricopa Indian Community that sites within the external boundaries of the community reflecting historic or prehistoric evidence of human activity shall be preserved so that members of this community and

¹⁹ U.S. Department of Energy - Office of Air, Water & Radiation Protection Policy & Guidance (Feb., 2006) Archaeological Resources Protection Act (CRM Information Brief DOE/EH-41-0004r).

²⁰ In the 1988 ARPA amendments, fines began to range from \$10,000 to \$100,000 and imprisonment sentences from one to five years.

others may gain greater knowledge concerning the historic and prehistoric habitation of this community.”

The ordinance established a criminal penalty of up to a \$500 fine and/or imprisonment for 90 days. These penalties are similar to the Antiquities Act of 1906 and may require updating based on the significant development that is occurring throughout the Community.

Clearance Status

The following list contains the typical steps a proposed ground-disturbing activity undergoes in order to obtain Clearance Status. LUC communicates closely with ECS, MRPM, and EDD throughout each of these steps. LUC relies on the assistance and coordination from CPP on many archaeological activities associated with providing cultural and archaeological clearance.



1. Submit a Request for Environmental Review (RER) to LUC.
2. LUC determines which type of NEPA analysis is necessary.
 - a. LUC conducts the NEPA analysis.
 - b. LUC can categorically exclude a project or prepare an ES with a FONSI, which both typically result in NEPA clearance.
 - c. LUC can require an EIS.
 - d. If no environmental impact is found, LUC gives NEPA clearance.
3. LUC determines if proposed project might impact T&E wildlife or habitat.
 - a. LUC can request a T&E species survey if project poses any impact to T&E species.
 - b. LUC can prohibit proposed project if it is found to impact T&E species.
 - c. If no T&E impact is found, LUC gives T&E clearance.
4. LUC determines if proposed project requires a NHPA Section 106 Review.
 - a. LUC conducts NHPA Section 106 Review.
 - b. If no archaeological impact is found, LUC gives NHPA Section 106 clearance.
5. LUC determines if proposed project requires further consultation with CPP regarding areas of cultural significance.
 - a. LUC and CPP conduct archaeological investigation.
 - b. LUC can require archaeological monitoring during construction if proposed project is found to be an area of cultural significance.
 - c. If no cultural impact is found, LUC gives archaeological clearance.
6. Once a proposed project proves there will be no adverse effect to the natural environment, endangered species, or important archaeological sites, it receives Clearance Status and activity can begin.

Land Use Compliance Activities

In addition to carrying out the tasks associated with clearing a proposed project, the LUC Program is involved in many other activities that support the Community's preservation efforts of both the environment and culturally important areas. These are some examples of the activities the LUC perform:

1. Provides assistance (both physical surveys and documentation preparation) with professional review of proposed home sites, rights-of-way, commercial development, and other ground-disturbing construction within the exterior boundaries of the Community.
2. Maintains an extensive data base and record system in fulfillment of NEPA compliance and all other archaeological preservation requirements.
3. Conducts environmental and cultural resource surveys prior to lease approval to ensure the protection of the Community's natural and cultural resources.
4. Coordinates with the Solid Waste and Hazardous Waste Programs and provides environmental review and inspections of proposed structures for demolition and illegal dump sites for clean-up.
5. Assists MRPM and the SRPMIC Housing Division to ensure lease and deed records are up-to-date and appropriate changes are recorded.
6. Assists the CPP and CRD with identification of archaeologically sensitive areas outside of the Community.
7. Assists CPP with the Native American Graves Protection and Repatriation Act (NAGPRA)²¹ Program.
8. Interprets archaeological reports submitted to various SRPMIC departments by outside agencies.
9. Provides archaeological monitoring during ground-disturbing construction in areas of known archaeological importance and briefs all heavy equipment operators working in the areas on the archaeology of the site.
10. Provides field assistance in the handling and care of artifacts recovered during testing and data recovery operations.
11. Provides electronic mapping of the Community including current and historic conditions in order to improve historic preservation planning.
12. Provide archaeological impact review of Special Projects, such as Brownfield clean-up and restoration projects.



²¹ The NAGPRA law is the main mechanism the SRPMIC uses to respectfully repatriate (to restore to one's own country) its ancestors that have been displaced or disturbed.

Land Use Compliance Program's Next Steps

There are four (4) main areas that LUC intends to work on in the future in order to improve program efficiency and increase archaeological preservation activities.

1. Implement the use of new technology and resources, including the Electronic Document Management System (EDMS), to improve tracking and management of RER activities.
2. Continue to improve and streamline the communication and administrative steps between ECS, LUC, and CPP in order to make the clearance process more efficient for all entities involved.
3. Work to streamline and expand the existing clearance process to include more extensive review from other EPNR programs, where applicable. An example might be having the Water Quality Program review a plan for water conservation opportunities or streamline the stormwater requirements under the compliance section.
4. Develop a Cultural Resource Management Plan (CRMP) that contains proactive components, such as evaluating and identifying archaeologically significant areas that require protection and preservation, and reactive components, such as procedures to minimize damage to the cultural resources.

LUC Staff Qualifications

Figure 4.1 is a short organizational chart listing the current positions in LUC. This figure is presented with **Table 4.1** to illustrate how the qualifications and training relate to specific LUC positions. **Table 4.1** lists standard qualifications that the LUC Staff have available for in-house expertise.

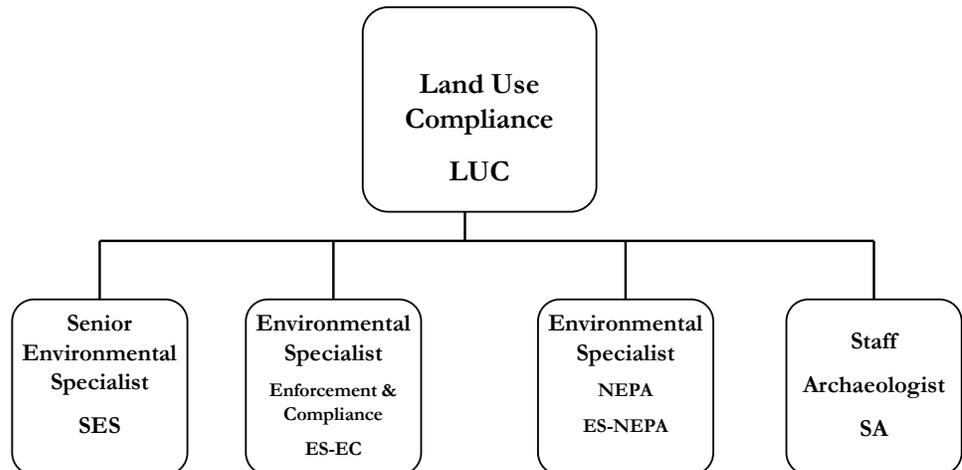


FIGURE 4.1 illustrates the LUC's programmatic organization.

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

Table 4.1 LUC Program Standard Training Qualifications

Accreditation/Training/Certification	Provider/Agency	LUC Position
NEPA in Indian Country	IIRM ²²	SES/ES-NEPA
Comprehensive NEPA	Any national trainer	ES-NEPA/SA
NEPA	CLE ²³ International	ES-NEPA
16-Hour RCRA Training/ 8-Hour RCRA Refresher	Any national trainer	ES-NEPA
Tribal Underground/Aboveground Storage Tank	ITCA ²⁴	SES/ES-NEPA
Archaeological Curation, Conservation, Collections Management	NPI ²⁵	SA
Identification and Management of Traditional Cultural Places	NPI	SA
Phase I Environmental Site Inspections	BIA ²⁶	ES-NEPA/SA
Endangered Species Act Training	BIA/US FWS	SA
Introduction to ArcGIS	ESRI	SES/ SA ES-NEPA
Identification/Management of Tribal Cultural Plans	NPI	SA
Archaeological Damage Assessment and Expert Witness Training	ARI ²⁷	SA
Native American Cultural Property Law	NPI	SA

LUC Program Documents

Table 4.2 lists the main documents used by the LUC Program.

Table 4.2 LUC Program Documents

Title	Author/Agency	Year Published
EPNR Home Site Lease Review - Standard Operating Procedures	EPNR	2005
EPNR Commercial Lease Review - Standard Operating Procedures	EPNR	2005
NEPA Compliance - Departmental Manual	BIA	Revised 2007

²² International Institute for Indigenous Resource Management

²³ Continuing Legal Education

²⁴ Inter Tribal Council of Arizona, Inc.

²⁵ National Preservation Institute

²⁶ Bureau of Indian Affairs

²⁷ Archaeological Research Investigations



Range Management Program

Range Management began in 1995 primarily as a program for the protection of wild horses and has continued to expand management activities of additional natural resources throughout the Community rangeland.

Wild, free-roaming horses are living symbols of the historic and cultural spirit of the Community. The wild horses not only contribute to the diversity of life in the rangelands, but also enrich the lives of the Community Members. After mounting concern about the state of herds, well-being of the horses, and the capture and selling of animals, the Range Management Program (RMP) was created in 1995 as a response to the passing of SRO-187-95, which placed all of the wild horses and burros within the Community boundaries under protection from sale and slaughter. The Community wild horse population is flourishing due in part to the efforts of the RMP and the impacts of SRO-187-95.

There are two traditional definitions for the term ‘range’ that are appropriately applicable for the Community’s rangeland;

1. An open region over which animals may roam and feed.
2. The region throughout which a kind of ecological community naturally lives.

The Range Management Program recognizes all components of the rangeland to be valuable and in need of protection, management, and improvement when necessary. These components include the following:

- ◆ Fish and wildlife, as well as their habitat
- ◆ Livestock
- ◆ Riparian areas
- ◆ Vegetation
- ◆ Cultural and recreational areas

The RMP has adopted an approach of total range management for the protection and preservation of the Community's natural resources. In addition to management of the wild horse population, RMP has already begun taking steps towards total range management by participating in the following two, well-established projects:



1. Cooperative management of the Community's bison herd in Clarkdale, Arizona.
2. Coordination with the Arizona Game & Fish Bald Eagle Nestwatch Program.

The RMP has developed two documents, pending approval, for other management activities:

1. Wood Harvesting Permit System
2. Proposed Native Plant Ordinance

In addition to these, the RMP has many programmatic gaps that need management plans and personnel to ensure that the Community's natural resources are protected and preserved for future generations.

Wild Horse Management

In accordance with SRO-187-95, the RMP manages and protects the SRPMIC wild horses and burros. The ordinance also addresses the overpopulation of the animals and required management to reduce and stabilize the herd. Through the ordinance, the RMP has authority to conduct regular roundups of the horses in order to provide veterinary care, adoption activities, donations to other tribes, and other management practices.

In 1995 when RMP was created, an inventory showed that there were 58 horses in the original herd. Since that time, herd protection and enforcement of SRO-187-95 has resulted in drastic population growth. It is estimated that in 2007, the population was just over 300. In a desert environment, one horse requires about 180 acres to live on. Based on this stocking rate, 300 horses would require 54,000 acres, which is slightly larger than the entire Community. There is currently an overpopulation of horses that require control for not only the health of the horses, but also for protection of the rangeland ecosystems. EPNR has set a goal to reduce the wild horse population by at least 25% in 2008.

The four (4) main management practices for the wild horse herds include:

1. Breeding Management (Sterilization and Contraception)
2. Horse Adoption Programs
3. Horse Donations to Other Tribes
4. Introduction of New Breeding Lines

The following section briefly describes the RMP wild horse population management steps in more detail.

Breeding Management

Past efforts have primarily consisted of sterilizing adult males in an attempt to reduce the overall breeding rate, which has not been very successful. Even a single intact stallion can breed 30 mares in one year, illustrating how the current methods have been ineffective. A more effective method for controlling breeding rates is needed. The RMP is investigating best management practices and cutting-edge methods that are both more humane and more effective at controlling breeding rates, such as non-surgical contraception of mares.

Horse Adoption Programs

The Range Management Program has developed a horse adoption program as a means to reduce the mature horse population. During the annual roundups, some young, healthy horses are selected, examined, and vaccinated by a veterinarian as part of the preparation for adoption. The RMP is actively developing a training plan to gentle the horses prior to adoption. The RMP regularly holds adoptions throughout the year and allows qualified persons to adopt up to four (4) horses at a time. Once an adopter has a horse, there is a one-year period of conditional ownership. During that year, the RMP will conduct site visits to ensure proper care is given to the horse(s). After the one-year period, the adopter receives a certificate indicating ownership of the horse(s).

Horse Donations to Other Tribes

The RMP has also begun a donation process with other Tribes. In the fall of 2007, the Jicarilla Apache Nation of New Mexico adopted 20 horses, which not only helps the SRPMIC control their horse population, but it also enhances genetic variability of the Jicarilla Apache Nation's herds. The RMP continues to seek opportunities with other tribes for similar donations.

Introduction of New Breeding Lines

Similar to the SRPMIC contribution to the Jicarilla Apache Nation, the RMP has developed a program that introduces studs obtained from other Indian nations, such as the Hopi stud donation, as a means of introducing new blood lines to the Community's herd. This introduction of new breeding lines allows the herd to remain healthy by increasing genetic variability.

Bison Herd Management

The Community received the original bison herd in 1995 from the Crow Nation of Montana as a gift of appreciation. The original herd consisted of five (5) animals [one (1) bull and four (4) cows]. The herd has grown substantially over the years, such that the Community and other Tribes are able to use the bison for feasts and certain ceremonial purposes when available.

The bison herd resides on Community-owned land in Clarkdale, Arizona (Yavapai County), at the Phoenix Cement Company, an enterprise of the SRPMIC. This site was selected because it is a much milder climate for the bison due to the higher elevation (3,000 - 3,300 feet) as compared to the Community located in Maricopa County (1,000 - 1,200 feet).

Since there is a lack of naturally-occurring vegetation at the Clarkdale site, the Community's bison herd is kept in two three-acre enclosed pens and requires supplemental feeding throughout the year.

During the years 2003-2005, several calves died possibly due to inbreeding. By early 2005, the herd numbered thirty-six (36) and the RMP, concerned about the future of the herd, developed a long-term management plan. The SRPMIC joined the Inter Tribal Bison Cooperative (ITBC) in 2006. Membership in the ITBC has been beneficial for the Community as the ITBC has provided technical guidance and mechanisms for bison population control. The ITBC recommended that a maximum of fifteen (15) animals be kept in the six-acre area. Upon that recommendation, the RMP began actively managing the herd in an attempt to reduce the population to the recommended number.



The ITBC served as an opportunity for another member, the Jicarilla Apache Nation of New Mexico, to request and receive ten (10) of the Community's bison. This generous exchange was beneficial for both tribes. The ITBC provided the Community with a new bull in 2006 to introduce a new breeding line for improved health of the herd.

The RMP has developed a management plan for the bison and is awaiting input and approval from Community Council on the future of the herd. The bison herd has become a unique natural resource for the Community and is a valuable asset. The bison herd could provide cultural, economic, and recreational benefits to the Community. If harvested on a limited basis based on population management, the bison could provide a healthy alternative if selected as a food source for school or public service systems.

Wood Harvesting Permit System

Pursuant to a total range management plan, protection and preservation of the Community's hardwood vegetation is important for sustaining a healthy rangeland. Woody vegetation, such as mesquite and cottonwood trees, provide food, shelter and shade for many wildlife species and are crucial habitat for many birds and animals, including the protected wild horse population.

Not only are many woody species culturally important to the Community, but SRPMIC maintains the principle that Community members are entitled to use the wood for fuel. However, in order to ensure that these woody species are preserved for the Community's future generations and the wildlife that depends upon them, the harvesting of these trees needs to actively be monitored and measured to ensure that the practice is being conducted sustainably.

The current permitting process does not limit the volume of wood per person, which is outdated considering current cooking and heating methods. It does not limit what type of species is collected or the locations of harvest, and does not apply manageable fuel reduction practices, such as:

- ◆ Collecting fallen trees.
- ◆ Harvesting dead limbs.
- ◆ Cutting of live trees in specified areas only in order to reduce fuel and potential fire hazards.
- ◆ Ensuring that living trees are not damaged or over-harvested.

RMP has recommended a Draft Wood Harvesting Permit System in order to halt the possible declining state of the woody species in the Community. The permit system is based on best management practices for fuel reduction (listed above), preservation of environmentally-sensitive areas, seasonal regulations, and limiting the amount of wood that can be taken based on a usage-per-person. The permitting system takes into account ceremonial plants for use as such, as long as the special requirement details are included in the permit application.



EPNR staff, the RMP, and Salt River Police Department (SRPD) Rangers will use the Wood Harvesting Permit System as a starting point to work together to develop a comprehensive permitting program. This approach will require the coordination and enforcement of the permitting system. The outcome will allow Community Members access to fuel wood while at the same time ensuring a sustainable and safe harvest to promote a healthier ecosystem. A monitoring component would allow baseline conditions to be established and the success of the permitting system and the increased numbers and diversity of woody species could be quantified.

Proposed Native Plant Ordinance



Similar to the Wood Harvesting Permit System, EPNR and the Cultural Preservation Program of Cultural Resources Department have developed a Proposed Native Plant Ordinance (NPO) that extends protection from not just the woody species, but to all native plants. SRPMIC recognizes that Arizona has some of the rarest and most unusual native plants species in the United States. Most of them are many years old and the fragile Sonoran Desert climate that supports them makes regeneration of many species difficult. Native plants are natural resources of aesthetic, ecological, educational, historical, medicinal, nutritional, scientific, recreational, cultural and religious value to the Community. They are in need of protection from poachers, as the SRPMIC is surrounded by an urban environment where these plants may be in demand.

Proposing an ordinance to protect native vegetation illustrates SRPMIC's sovereignty. Many states, including Arizona, already have laws protecting native plants from destruction and removal. Other tribes, including the Gila River Indian Community, enforce the protection of native plants. The establishment of a formal native plant protection system will reiterate the importance the Community has on preserving and protecting all of the Community's natural resources.

Arizona Bald Eagle Nestwatch Program



The Arizona Bald Eagle Nestwatch Program (Nestwatch) began as a weekend volunteer effort by the U.S. Forest Service and Maricopa Audubon Society in 1978, at a time when the eagles were experiencing a population decline with an uncertain future. Today, with the coordination and cooperation of many partners like the SRPMIC, both the Nestwatch program and the bald eagle population have increased in capacity.

The Nestwatch program, now run by the Arizona Game and Fish Department, monitors breeding bald eagles in areas with high recreational pressures such as the nesting areas within the Community. SRPMIC's cooperation with and collaboration on the Nestwatch program has resulted in over twenty (20) years of eagle data, education and conservation, and is a successful intergovernmental project.

Programmatic Gaps & Needs

The Range Management Program was established in 1995 to ensure that the Community's wild horses and burros would be protected and sustained in harmony with the environment. That was merely the starting point for the RMP to preserve and protect the Community's natural environment. In 2007, with over a dozen years of active management of the wild horse herd, the RMP is expanding its reign towards total range management that is intended to protect and preserve the ecosystems and wildlife of the rangelands for future generations.

The following list contains some additional management activities the Community needs to pursue under the Range Management Program in order to maintain and protect the many natural resources under its jurisdiction:

1. Cattle grazing monitoring and control
2. Hunting and fishing permitting
3. Invasive species monitoring and control
4. Wetland delineation and monitoring
5. Species surveys
6. Habitat and ecosystem restoration
7. Recreational vehicular traffic controlling
8. Planning for future development of the open rangelands

The following sections briefly discuss each management activity.

Cattle Grazing Monitoring and Control

The grazing of cattle throughout Community land is important to the livelihood of Community ranchers. There is a need, however, to make sure it is occurring in a manner that protects the environment and the Community's health.

Overgrazing by cattle overall can have detrimental effects on vegetation which can lead to erosion problems, loss of other wildlife habitat, and facilitation of invasive vegetation establishment. Cattle drinking from and crossing rivers and other natural water bodies can cause fecal and bacterial contamination of the water. This condition could be detrimental to recreational activities in the river and to the Community's health in general.

Monitoring cattle grazing and the environmental damage caused by cattle should be performed on a quarterly basis. If overgrazing problems occur, re-vegetation and establishment of cattle-restricted areas may be necessary in order to provide for the wild horses that utilize the area while protecting water quality, riparian vegetation, and the ecosystem.



If the Water Quality Program (WQP) finds that water contamination along the Verde River is a problem, Range Management can work with the WQP to come up with a solution to address contamination conditions. This may be accomplished by installing watering troughs or automated wells or pumping systems away from the rivers.

If the rangelands are stocked appropriately and monitored frequently enough to catch problems early and address the concerns in a timely manner, extreme measures or restrictions should not be necessary.

Hunting and Fishing Permitting

Currently, the SRPMIC does not have any permitting system in place for hunting or fishing; two culturally significant activities. As the Community continues to grow and develop, wildlife will be further confined and restricted to preserve areas. Establishing a permit system would allow hunting and fishing to remain possible for future generations by ensuring they occur at sustainable rates.

Once baseline population estimates are determined for fish and wildlife, conducting annual wildlife surveys would allow changes in populations to be determined. Hunting and fishing permits would provide a mechanism to manage wildlife populations. Depending on annual survey outcomes, management measures such as increasing or decreasing permits or catch numbers could be implemented to maintain the health of wildlife populations. The goal of implementing a hunting and fishing permit system is to ensure wildlife and fish continue to thrive within the Community.

Invasive Species Monitoring and Control

Invasive species, whether microorganism, insect, plant, or animal, are nonnative species that can harm or endanger humans, native plants, animals, or other aspects of biodiversity. If included as part of total range management, monitoring invasive plant species would provide an additional layer of protection for the rangeland ecosystem, as well as agricultural areas throughout the Community.

Tamarisk, a type of large shrub or small tree, is extremely invasive in Southwestern riparian areas because it can survive in highly disturbed and drought-prone environments and often out-competes native vegetation. Tamarisk also sequesters salt in foliage, which is where the common name, salt cedar, comes from. In areas where flooding does not flush the accumulated salts out of the soil, the leaf litter increases the salinity of the soil surfaces, making it more difficult to support native vegetation, since native species are typically less salt-tolerant than tamarisk. These qualities can result in impenetrable thickets which support lower biodiversity than the native vegetation they displace. As part of the RMP, mapping and long-term monitoring all invasive species, not just tamarisk, is the first step to determining problematic areas.



The EPNR WQP has already taken strides to remove tamarisk in some riparian areas, but more needs to be done. The WQP received grant monies in 2006 for a tamarisk removal pilot project along the Verde River, and began the lengthy regulatory process, which requires biological- and environmental-impact assessments; permit applications have delayed the project significantly. EPNR could combine the efforts of the WQP and the RMP to execute a comprehensive tamarisk removal plan that would map out the densest areas in the Community, including possible irrigation laterals, and develop an action plan for removal. The CRD fully supports salt cedar removal as a means of increasing native vegetation to support traditional cultural uses of native species.

In keeping with the tradition of environmental stewardship, several tribes, such as the Fallon Paiute-Shoshone Tribe of Nevada, and the Ak-Chin and Cocopah Indian Communities in Arizona, have received sizable funds from the EPA and U.S. Fish and

Wildlife Services for tamarisk removal. EPNR's RMP and WQP should have adequate capacity in the next year or two (by 2009) to pursue developing a Community-wide tamarisk removal plan. If such a plan was initiated, SRPMIC would be on the forefront of tamarisk control in the Southwest.

Wetland Delineation and Monitoring

Wetlands and riparian areas are important for ecological habitats, flood and storm control, water quality treatment, and overall ecosystem health. In 1989, the North American Wetlands Conservation Act was developed. This Act recognized that wetland ecosystems provide essential and significant habitat for fish, shellfish, and other wildlife of commercial, recreational, scientific and aesthetic value. The Act allowed for federal grant funds to be available for protection, restoration and management of wetland ecosystems and associated habitats.

Wetland areas are important to the health of the Verde and Salt Rivers. They provide fish and wildlife habitat, thermal cooling of waters under vegetation shade, nutrient removal (excess nitrogen and carbon) from the water, and overall enhancement of the Community. They can also allow for perimeter groundwater recharge, which is important for cottonwood trees and other upland plants. Wetlands also provide flood storage areas and erosion control during storm events.



The SRPMIC would benefit from performing baseline wetland delineations along the Verde and Salt Rivers. A collaborative partnership between EPNR's RMP and WQP with CRD could conduct the wetland survey simultaneously with invasive species and other wildlife surveys (see next section) to minimize resource expenditures and effort.

Wildlife and Species Surveys

Similar to the wetland and vegetation species surveys, wildlife and species surveys are important in determining the condition of the rangeland. Just like the wild horse and buffalo inventories, wildlife surveys would set a baseline condition, such as acreage covered, number of species, or animals present per acre, which future surveys would be compared to. These plants and animals would be indicator organisms for the overall health of the river or rangeland.



Wildlife, fish, and bird counts would help RMP set permit limits, such as fewer permits for species that do not reproduce quickly and/or are low in population, and more permits for higher populated animals and fish, with higher reproduction rates. These surveys would be conducted annually to ensure that the Community's rangelands are managed sustainably. These types of surveys would be ideal for partnering with Community schools or youth groups. The participants would gain valuable scientific experience, reconnect with the environment, and provide important information to the Community.

Habitat and Ecosystem Restoration



Should the species surveys result in annual losses or declining conditions, the RMP would investigate cause and effect of found losses and determine if the conditions can be easily mitigated or corrected, or if more lengthy habitat and ecosystem restoration actions are required. EPNR's RMP and WQP would work together and could coordinate with external agencies to determine best management practices for restoring the habitat to the baseline (original survey) condition. Similarly, during the course of surveying, a degraded condition requiring restoration may be discovered which could indirectly benefit species harvested.

Developing a Community-wide species inventory of animals and plants, both native and nonnative, would be a monumental effort on SRPMIC's behalf. It would set a precedent for all future activities to be compared to and provide a catalyst for improvement and preservation. It would also enable the RMP to develop the desired total range management plan with a large dataset, allowing improved targeting of areas that need attention.

Recreational Vehicular Traffic Controlling



In the interim period, prior to plan development and timely species surveys, the rangeland should be surveyed for areas of high recreational vehicular traffic. Through coordination of RMP and the SRPD Rangers, areas of high traffic should be identified and monitored to determine whether habitat is at risk, if air or water quality problems are present, and whether solutions for traffic control are needed. Usually these are easy solutions, such as posting signs where critical habitat is located since most recreational visitors are just not aware that they may be doing harm to wildlife. Other solutions might be putting in a designated trail, rather than allowing visitors to blaze their own trail. Exclusion barriers and structures to discourage vehicle traffic can also be installed. Specific recommendations and action plans to protect the fragile desert habitat will be determined and developed through collaboration within the Community.

Planning for Future Development of the Open Rangelands

As the SRPMIC continues to grow and develop on a scale equivalent to the surrounding areas in Maricopa County, there will be an increased need for land to accommodate the expansion of infrastructure and services. The need for available land to develop housing and businesses has recently begun in the northwestern section of the SRPMIC and will continue to move toward some of the open rangelands that are currently utilized by wildlife such as the wild horses.



The inevitable loss of open land will necessitate a further reduction in numbers of wild horses in order to keep a sustainable balance between the horses and the ecosystem. In order to proactively address the changes to the landscape, the RMP will need to consider and determine the adjustments necessary to keep a balance between the current and expected change in open space. Coordination with the EDD will be necessary to generate approximate timeframes and scope of development plans.

Range Management Program's Next Steps

As one of the newer programs within EPNR, the Range Management Program includes many potential and needed natural resource protection activities. Like the Community, EPNR is developing at a rapid pace and does, at times, face challenges trying to keep up with development. It is crucial to the protection of the Community and its natural resources that the Range Management Program increases its monitoring to all plants and animals within the rangeland, just as it did for the wild horses in 1995. The wild horse population is an inspiring example of what the Community can do; growing from a herd of 58 to over 300 in twelve years under the management, protection, and preservation of the RMP and SRPD Rangers. Now that the RMP has established its ability to protect the horses, it can focus on finding the proper balance between the population and the ability of the land to support them.

If the RMP applies lessons learned and performed similar activities for other plant and animal species throughout the Community, the results in another twelve years could be unprecedented. The RMP needs to establish accurate current plant and animal counts as well as current environmental conditions. That information is necessary to determine how the land can sustainably support the wildlife present, what management activities RMP needs to implement, and when more drastic means of protection or preservation may be necessary.

The RMP will need substantial increases in resources to perform these surveys and develop the monitoring and permitting systems. There are several federal funds available for developing these activities that EPNR's RMP should pursue. The Community needs these activities and skills in-house to ensure the preservation of the rangelands and their natural resources for future generations.

RMP Staff Qualifications

Figure 5.1 is a short organizational chart listing the current positions in RMP. This figure is presented with **Table 5.1** to illustrate how the qualifications and training relate to specific RMP positions. **Table 5.1** lists standard qualifications that the RMP Staff have available for in-house expertise.

ENVIRONMENTAL PROTECTION &
 NATURAL RESOURCES DIVISION
 INTEGRATED NATURAL RESOURCES
 MANAGEMENT PLAN

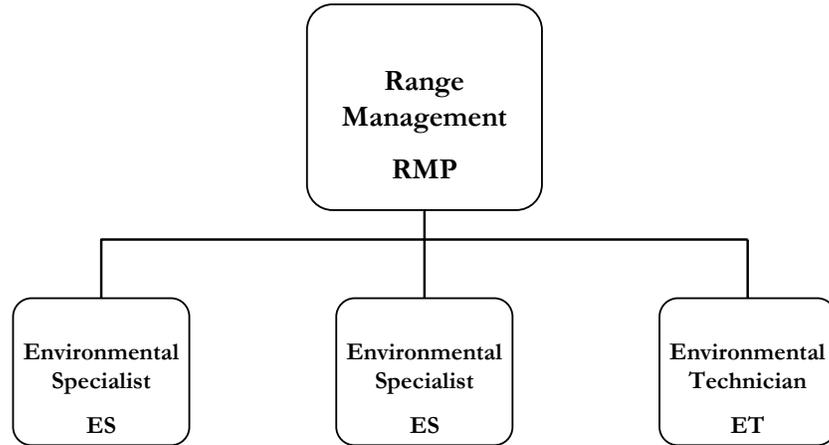


FIGURE 5.1 illustrates the RMP’s programmatic organization.

Table 5.1 RMP Standard Training Qualifications

Accreditation/Training/Certification	Provider/Agency	RMP Position
State and National Licensed Veterinary Technician	Arizona State Medical Examining Board	ES
Secretarial Order 3206 – Endangered Species Act Training	Inter Tribal Council of Arizona & BIA	ES
Biological Assessment Writing Training	AZ Game and Fish	ES
SRPMIC Department of Corrections (DOC) Sensitivity Training (Juvenile Inmates Horsemanship Program)	SRPMIC DOC	ES

RMP Program Documents

Table 5.2 lists the main documents used by the Range Management Program.

Table 5.2 RMP Program Documents

Title	Author/Agency	Year Published
Draft Bison Management Plan	ENPR - RMP	2007
Draft Five Year Wild Horse Management Plan	ENPR - RMP	2002 – amended in 2007
Proposed Native Plant Ordinance	ENPR	2005
Proposed Wood Cutting Regulations for the Red Mountain Preserve	ENPR	2007
Standard Operating Procedures for Automobile and Horse Collisions	ENPR	2002
Standard Operating Procedures for Horses in Canals	ENPR	2002



Water Quality Program

The Water Quality Program's mission is to assess the Community's water resources to ensure the quality and safety of the surface water and groundwater.

The Water Quality Program (WQP), created in 1997, focuses on monitoring, assessing, and reporting on the quality of surface and ground water in the Community. The Program is responsible for developing standards for the protection of these water sources. Because water quality monitoring is critical to the health and welfare of Community residents, the WQP has developed a comprehensive program that addresses water quality issues throughout the Community. Over the past ten years, with the assistance of federal funding from the EPA, the WQP has established a holistic monitoring plan of the Community's water that includes:

1. The Salt River
2. The Verde River
3. Irrigation tail waters (non-point sources (NPS))
4. A NPS treatment wetland (the Cottonwood Wetland)
5. Groundwater

Using direction set forth by the Clean Water Act and SRO-180-95, the WQP has established water quality guidelines, from management plans to Standards, and has laid the foundation towards achieving Treatment-as-a-State (TAS) status. The WQP enforces these guidelines for surface water, point source pollution control, non-point source pollution control, sole source aquifer designation, and wellhead protection. The WQP continues to expand the monitoring program and develop enforcement plans and strategies in preparation for when TAS status is designated, at which time the Community will have program authority to administer and enforce the water quality standards, a role currently filled by the EPA.

The Clean Water Act

Understanding the Clean Water Act

By the first Earth Day in 1970, the United States had major surface water pollution problems (Sax et al., 2000²⁸). Many sewage systems had been dumping raw, untreated sewage into the rivers. Only about one third of industrial wastewater was being treated prior to discharging into lakes and rivers. Much of the U.S.'s surface waters were quickly deteriorating.

In 1972, the Federal Water Pollution Control Act Amendments were enacted by overwhelming margins (Sax et al., 2000). As amended in 1977, the law became known as the Clean Water Act (CWA). The CWA achieves the following objectives:

1. Establishes the basic structure for regulating discharges of pollutants into waters of the U.S.
2. Gives the EPA authority to implement pollution control programs.
3. Requires the setting of water quality standards (WQS) for all contaminants in surface waters.
4. Makes it unlawful for any person to discharge any pollutant from a point source into navigable water without a permit.
5. Funds grants for the prevention, reduction, and elimination of pollution.
6. Funds the construction of sewage treatment plants.

The CWA is comprised of six (6) Titles, each with its own Sections. **Table 6.1**, a list of CWA Titles and section numbers, is provided for further clarity because many of the WQP's efforts fall under different sections and section grants.

Table 6.1 The CWA Titles and Corresponding Section Numbers

Title No.	Title Name	Section Numbers
Title I.	Research and Related Programs	Sections 101 - 121
Title II.	Grants for Construction of Treatment Works	Sections 201 - 221
Title III.	Standards and Enforcements	Sections 301 - 320
Title IV.	Permits and Licenses	Sections 401 - 406
Title V.	General Provisions	Sections 501 - 509
Title VI.	State Water Pollution Control Revolving Funds	Sections 601 - 607

²⁸ Sax, J.L., Thompson, B.H., Leshy, J.D., and R.H. Abrams (2000) Legal Control of Water Resources – Cases and Materials (3rd Edition)

What is Treatment-as-a-State Status?

The WQP has completed the lengthy application for Treatment-as-a-State (TAS) status. Once SRPMIC is designated with TAS status, under CWA Section 518(e), the EPA will be authorized to treat the SRPMIC in a manner similar to a State for the purpose of the CWA Title and Sections listed in **Table 6.2**.

Table 6.2 Applicable TAS CWA Title and Section Numbers

Title/Section No.	Title/Section Name
Title II	Grants for Construction of Treatment Works
Section 104	Research, Investigations, Training and Information
Section 106	Grants for Pollution Control Programs
Section 303	Water Quality Standards and Implementation Plans
Section 305	Water Quality Inventories
Section 308	Inspections, Monitoring, and Entry
Section 309	Federal Enforcement
Section 314	Clean Lakes
Section 319	Non-Point Source Management Programs
Section 401	Certification
Section 402	National Pollutant Discharge Elimination System
Section 404	Permits for Dredges or Fill Material
Section 406	Coastal Recreation Water Quality Monitoring and Notification

TAS status will give the Community authority to administer programs and enforce the water quality standards, which consists of the following basic steps:

1. Use own authority to adopt water quality standards for all surface waters of the US and additional surface waters within the Community boundaries.
 - ✓ **The SRPMIC adopted water quality standards into Tribal Law in 1999. WQP has completed revised Draft Water Quality Standards which reflect federal requirements and are consistent with state requirements.**
2. Although the CWA does not require water quality standards for groundwater, the SRPMIC can use their own authority to set targets for groundwater.
 - ✓ **The WQP has completed Draft Aquifer Water Quality Standards.**
3. If the water quality standards are not met, SRPMIC must develop a strategy for meeting the standards.
 - ✓ **The WQP has completed Draft Inspection, Compliance, and Enforcement Protocol.**
4. If the water quality standards are met, the SRPMIC implements anti-degradation policies and program to keep water quality at acceptable levels.
 - ✓ **The WQP has completed Draft Anti-degradation Implementation Procedures.**



What is the current collaboration between EPNR and the EPA?

Water quality collaboration between EPNR and the EPA began in 1996, when EPNR applied for and was awarded CWA grant funds from **Section 305** to conduct a Water Quality Assessment. That assessment resulted in a Water Quality Management Plan and the initial assessment of the Community’s water resources. Subsequent **Section 106** funds support the surface and groundwater monitoring program.

In 2003, the SRPMIC was awarded **Section 319** grant funds to begin non-point source (NPS)²⁹ pollution management activities ranging from NPS Investigations and Best Management Practice (BMP) recommendations to on-the-ground treatment projects. Due to the Community’s commitment to addressing NPS pollution control and annual performance, EPNR has been awarded Section 319 grant funds annually since 2003.

Additionally, **Section 104(b)(3)** grant funds were used to develop a Stormwater Program that addresses the reduction of pollutants due to stormwater runoff. Since 2005, SRPMIC has procured its own funds to make this a Tribally-funded program.

What’s next?

In summary, EPNR has already achieved many of the requirements and has been awarded several opportunities that accompany TAS status. The WQP has drafted the remaining documents and plans in preparation of TAS status. Once SRPMIC has been designated with TAS status, the draft Water Quality Standards and implementation plans will be applicable and enforceable, and all but two of the TAS opportunities will be applicable to the Community as shown in **Table 6.3**.

Table 6.3 Status of Achievement for TAS CWA Title and Section Numbers

Title/ Section No.	Title/Section Name	Current Status	TAS Status
Title II	Grants for Construction of Treatment Works		✓
Section 104	Research, Investigations, Training and Information	✓	✓
Section 106	Grants for Pollution Control Programs	✓	✓
Section 303	Water Quality Standards and Implementation Plans	Draft	✓
Section 305	Water Quality Inventories	✓	✓
Section 308	Inspections, Monitoring, and Entry	Draft	✓
Section 309	Federal Enforcement	Draft	✓
Section 314	Clean Lakes	n/a ¹	n/a ¹
Section 319	Non-Point Source Management Programs	✓	✓
Section 401	Certification	Draft	✓
Section 402	National Pollutant Discharge Elimination System	Draft	✓
Section 404	Permits for Dredges or Fill Material		✓
Section 406	Coastal Recreation WQ Monitoring and Notification	n/a ¹	n/a ¹

n/a¹ – not applicable due to lack of resource.

²⁹ Non-point source pollution can not be linked to a single specific (“point”) pollution source, such as a treatment plant.

Salt & Verde Rivers

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. Therefore, by the very purpose of the Clean Water Act, the majority of the Community's CWA Section 106 funds have been applied towards the development of the surface water program for the prevention, reduction, and elimination of pollution to these water resources, as well as drafting the Surface Water Quality Standards for these rivers and other surface water resources.

Where does the monitoring take place?

Currently, there are three (3) established surface water sampling locations along the Verde and Salt Rivers. Additional sites are being considered for an expanded monitoring program. **Figure 6.1** contains an aerial view of the Community with a magnified section showing the 3 sampling locations, which are:

1. The Verde River (VR-1) – just downstream of the SRPMIC boundary with Ft. McDowell near Pole 2.
2. The Salt River (SR-1) – just upstream of its confluence with the Verde River near the Phon D. Sutton Recreational Center.
3. The Salt River (SR-2) – downstream of its confluence with the Verde River near Pole 7.

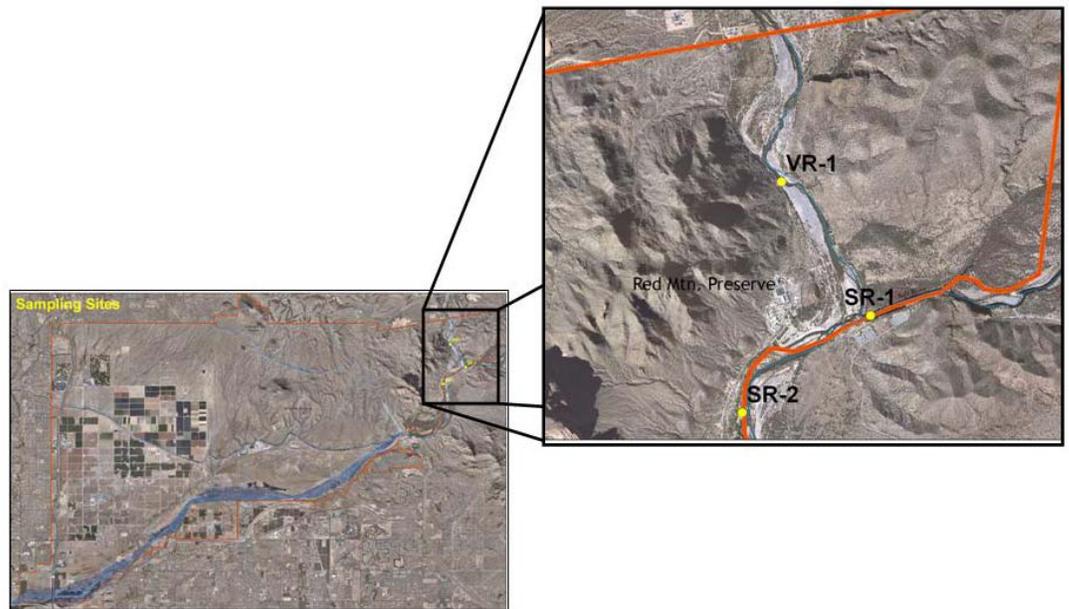


FIGURE 6.1 shows the three surface water sampling locations along the rivers and with reference to the Community boundaries.

When and what parameters are monitored?

These three locations were monitored in the summer of 2003, and biannually in 2004, 2005, 2006, and 2007. Current and future monitoring is planned for annual winter and summer monitoring at a minimum per the Quality Assurance Project Plan (QAPP). Sampling for bacteria in the summer months, especially in advance of high recreational use, is planned for 2008. Samples are collected at each location and sent to Community and EPA-approved laboratories for the analysis of the inorganic and organic constituents, as well as, total dissolved solids (TDS) - as an indicator of salt content, suspended solids (SS) - generally silts and soils, nutrients, and bacteria.

Additional in-situ measurements are made at each location for water flow rate, pH, dissolved oxygen, temperature, and turbidity (water condition due to suspended solids). Flow rate information for VR-1 is collected from a U.S. Geological Survey (USGS) gauging station. These parameters can provide insight to the overall health of the river's ecosystem.

Other Considerations

Additional monitoring activities may occur to investigate possible bacterial contamination due to human recreational activities and/or cattle grazing, especially during the summer months. These may be coordinated with the Environmental Health Program (EHP) in Health and Human Services Department (HHS) or with EPNR's Range Management Program.



Cottonwood Wetland

The First NPS 319 On-the-Ground Project

The Cottonwood Wetland is located in the southwestern corner of the SRPMIC at an agricultural tail water outfall to the Salt River. In 2003, NPS Section 319 funds were used to construct a wetland to provide water quality treatment to the agricultural tail water. This project is the first NPS 319 on-the-ground project for the SRPMIC and has been a successful pilot project, so much so, that the Community was awarded funds in 2006 for a second on-the-ground NPS 319 project to be completed in the spring of 2008 in the Lehi District.

Project Milestones

1. In 2005, EPNR completed and EPA approved the QAPP, which began an intense one year water quality monitoring program at the wetland. The monitoring results indicated the treatment wetland could provide potential water quality improvements.



2. In 2005, expansion efforts included the creation of a multi-purpose trail and proper removal and disposal of area debris such as discarded tires. Rain gauges, staff gauges³⁰, a safety platform at the outlet, and two new signs were installed. In coordination with the CRD's Cultural Preservation Program, a vahtho was built near the seating area under a mature cottonwood tree to create an outdoor classroom.
3. In 2007, further expansion efforts removed invasive salt cedar trees from the area bordering the wetland and replanted the area with native vegetation.



4. Multiple outreach materials have been generated from this site, such as a wetland brochure and a trail map. An article about the Cottonwood Wetland was published in Southwest Hydrology Magazine in December 2006. Numerous articles have been written for the Salt River Au Authum Action News.
5. This project contributed to the Community receiving the 2005 EPA Award for Environmental Excellence. It also was awarded the 2005 Water Reuse Project of the Year by the Arizona Water and Pollution Control Association.

On-Going and Future Efforts

The Cottonwood Wetland is monitored monthly for water quality. All surface water quality data from the rivers and the wetland are maintained in a surface water quality database.

The wetland remains an opportunity for environmental education and outreach, as well as an opportunity for hands-on research and learning for Community members, children, and school classes. In addition to the environmental aspect, the Cottonwood Wetland also continues to be a platform for cultural preservation and education. This wetland is a NPS 319(h) success story for EPA Region 9, and documents and experiences from this project continue to be a resource for other tribes wishing to implement wetlands on their lands.

³⁰ Staff gauges (posts with length scales) were installed in the water flow path in order to measure water depth.

Groundwater Program



Above and Beyond the Clean Water Act

SRPMIC Public Works is charged with treating and delivering the Community's drinking water supplies and ensuring they comply with the Safe Drinking Water Act (SDWA). Since groundwater is the primary drinking water supply, the WQP has proactively developed a Groundwater Monitoring Program to ensure the health and safety of the Community. Through the Groundwater Program, the WQP provides an additional level of protection for the Community's drinking water supply.

The CWA does not require water quality standards for groundwater; however the Community can use its own authority to set targets for groundwater. The WQP has developed a Procedures Manual for Sampling Groundwater (2000), drafted Aquifer Water Quality Standards, and focuses on the assessment of groundwater well data. In addition, the WQP has developed Draft Soil Remediation Standards as a means of providing an additional level of protection to the Community's precious groundwater.



Groundwater Database

The Community has groundwater data from as early as 1959. Since that time, there have been many agencies and entities that have monitored groundwater within or adjacent to the Community boundaries for a variety of purposes. **Table 6.4** contains a list of some of the agencies and entities as well as the types of groundwater monitoring they perform(ed).

Table 6.4 Summary of Community Groundwater Monitoring Activities

Agency/Entity	Type of Groundwater Monitoring
SRPMIC Public Works	Arsenic monitoring in drinking water wells
SRPMIC Public Works	SDWA Compliance monitoring in drinking water wells
SRPMIC EPNR	Nitrogen impact due to old feedlot
SRPMIC EPNR	Wastewater impact (around Victory Acres)
SRPMIC EPNR	Compliance monitoring in drinking water systems
Tri-Cities Landfill	Monitoring wells for possible leaching from landfill
Salt River Landfill	Monitoring wells for possible leaching from landfill
Leasees	Monitoring drinking water quality
City of Mesa	Compliance monitoring for recharge facility
SRP Water Dept.	Compliance monitoring

Along with data obtained from ECS (Water Resources), the WQP has compiled, developed and continues to maintain a Groundwater Quality Database that is a master repository for all this groundwater data. The WQP has developed a similar database, a Soil Contamination Database, to compile soil contamination data as a preventative measure to groundwater protection.

Stormwater Program

The Stormwater Program is currently responsible for building program capacity to ensure compliance with CWA Section 402, National Pollutant Discharge Elimination System (NPDES), which establishes a framework for regulating municipal, industrial, and construction stormwater discharges.

Similar to the Floodplain and Drainage Ordinance (SRO-185-95), as a first step in program-building, the WQP has drafted a Stormwater Ordinance. Pending approval and adoption of the drafted Stormwater Ordinance, the WQP will be responsible for the implementation and management of stormwater discharges associated with development, construction, excavation, industrial, and mining sites, including improved and unimproved real estate. This task will require designated inspectors. The program will also have authority under tribal law to enforce compliance.

Regulatory Component

The Stormwater Program has developed a Best Management Practices Manual for Stormwater Management Program, as well as Permitting, Inspection, Compliance and Enforcement Manuals. The WQP is currently coordinating with ECS to develop internal permitting and inspection procedures that will allow SRPMIC to ensure the following three (3) general requirements under the NPDES Program for obtaining a stormwater permit are met:



1. The land use activity must submit a Notice of Intent (NOI) to EPA Region 9 and SRPMIC that includes general information of the planned activity. This certification process is currently coordinated through EPNR's Land Use Compliance Program.
2. Any construction impacting an area of one acre or more must develop and implement a Stormwater Pollution Prevention Plan (SWPPP) with appropriate SRPMIC-approved best management practices (BMPs) to minimize discharge of pollutants from the site. Before any construction activity begins on a project site, the WQP and EPA Region 9 must review and approve the completed SWPPP and the WQP must verify that the BMPs have been integrated into the project design.
3. The land use activity must submit a Notice of Termination (NOT) to EPA Region 9 and the WQP when final stabilization of the site has been achieved as defined by the permit or when another operator has assumed control of the site.

EPNR and EPA are regulatory partners to ensure NOI's and SWPPP's are being filed. Currently, EPNR is acting as the on-site manager. When the ordinance is adopted by Council, EPNR will have enforcement authority, until then, EPA is responsible for enforcement and compliance.

Riparian Restoration

The Water Quality Program has, out of consequence to water quality improvements, included restoration activities of the Community's riparian areas and habitats in its Program activities. The WQP considers healthy riparian and river systems, along with the wildlife habitat they provide, to contribute to improved water quality in such systems. This is also a recognized objective of the U.S. Environmental Protection Agency.



The WQP has coordinated efforts with EPNR Range Management and SRPMIC Cultural Preservation Program in a number of restoration activities. The Cottonwood Wetland serves as a multi-use facility that not only improves the quality of agricultural tail waters discharging to the Salt River but also provides an area for riparian habitat that has been declining in the region for years.

The WQP has initiated the practice of removing salt cedar trees and replacing them with native vegetation (cottonwood, goodings willow, coyote willow and wetland plants such as rushes and reeds) in order to improve water quality. The WQP received federal grant monies in 2006 for a salt cedar removal pilot project along the Verde River. The lengthy regulatory process, which requires environmental-impact assessments and permit applications, have delayed the project significantly. EPNR could combine the efforts of the WQP and the RMP to execute a comprehensive salt cedar removal plan that would map out the densest areas in the Community, including possible irrigation laterals, and develop an action plan for removal.

The WQP developed a Native Plant Nursery Feasibility Study with a major focus on growing riparian vegetation. The WQP completed this study under the NPS 319 program, as riparian plants would enhance many of the Community's NPS outfalls to the Salt River. This study investigated available resources, such as Community property, water, and native plant expertise. It also provided some guidance on nursery start-up needs, possible funding sources, as well as contacts at other tribes that have successfully begun such enterprises. Such a nursery could supply much of the vegetation needed for the Va Shly'ay Akimel Ecosystem Restoration Project.



The Va Shly'ay Akimel Ecosystem Restoration Project is a collaborative project along the Salt River between the SRPMIC, the U.S. Army Corps of Engineers, and the City of Mesa. The project includes restoring wetland and riparian habitat along approximately 14 river miles, from the Granite Reef Dam to the 101/202 interchange. The restoration project will require a substantial water supply to support the riparian and wetland areas which will add to the complex hydrogeological activities currently occurring in the area.

The WQP has been consistently involved with the planning and design of the Va Shly'ay Akimel Project. The participation of the WQP on this project has been and will continue to be crucial to ensuring the design accounts for the hydrogeological complexities in the area and protects the Community's natural resources.

Programmatic Gaps & Needs



As part of the CWA Section 319 NPS funding requirements, grant recipients must have a watershed based plan in place by 2008. In anticipation of this requirement, the WQP has been actively developing a NPS Management Watershed Plan since October 2006. In June 2007, the first stakeholders meeting took place. Community President Enos and Vice-President Harvier were in attendance, as well as participants from Engineering and Construction Services, Health and Human Services, Public Works, Community Development Department, EPNR WQP and Range Management. External participants from Salt River Materials Group and leased farms attended the event. Through this collaborative meeting, many watershed issues were discussed and several were determined to be programmatic needs. As an outcome of the stakeholders meeting, the WQP will be pursuing several collaborative opportunities to fill the gaps. The WQP will need substantial resources, including funding and personnel, to address these issues adequately. In September 2007, the Draft NPS Management Watershed Plan was completed and submitted to EPA for review.

Septic System Task Force and Management Plan

Since most Community homes are on septic systems, ensuring the proper installation and maintenance of these systems is important for protecting the Community's health. The stakeholders meeting set out to determine which SRPMIC departments are involved with installation and maintenance of septic systems, system monitoring, and ensuring homeowners understand how to maintain the systems.



As an outcome from this meeting, it was determined that there is no one-stop guidance on septic systems in the Community. As of 2007, Public Works is responsible for installation and maintenance. EHP and Indian Health Services (IHS) are responsible for responding to septic system issues. IHS funds most installation and repairs. Public Works is responsible for closing systems. Currently, no outreach and education program for homeowners exists.

The WQP plans to coordinate a Septic System Task Force and Management Plan, which has already been included in funded workplans for FY2009. The plan will address the various stages of the septic system life, from installation to closure, and provide the Community, from departmental managers to homeowners, guidance on departmental responsibility, coordination, and contact information. An additional component will include conducting a septic system inventory that includes a map, possible repair history, investigation of needed repairs, and/or groundwater quality concerns. A final component will be a brochure on septic system maintenance for the homeowners. Tribal funding will likely be sought for these tasks.

There are two major driving forces behind achieving these goals:

1. Protecting the Community's groundwater.
2. Protecting the health and wellbeing of Community residents.

Watershed Mapping

The WQP plans to develop an interactive computer watershed map which has been written into funded workplans for FY2009. This watershed map will link the Community's land use to the vast water quality data collected. Through the use of geographical information system (GIS), a watershed map will allow the user to interactively check historical as well as real-time water quality of the surface waters, from the rivers to the Cottonwood Wetland, as well as the groundwater. This effort will be linked to the National Environmental Information Exchange Network program.



Once the watershed map is developed, different layers can be added that would allow the user to read about various projects, such as downloaded information of the Brownfields projects or photographs from a salt cedar removal project. It could also be linked to air data collected by the Air Quality Program or other available SRPMIC data, for example.

Combined with automated samplers and other remote monitoring technology, this type of accessibility would provide departmental managers an opportunity to monitor pollution problems as they occur and vastly improve response times. This type of map would also provide an opportunity to inform the Community residents about their environment. It would allow real-time monitoring and communication of the Community's environmental conditions and natural resources.

Complete Target Well Closure Plan and Protocols

In 2000, the Community inventoried and investigated both active and inactive groundwater wells. Since that time, the WQP has identified wells posing high risks for groundwater contamination and has recommended wells for closure. IHS and ECS have also identified health risks and recommended wells for closure. In order to ensure efforts are not duplicated, the WQP is completing a Target Well Closure Plan which will include specific protocols and inter-department coordination. It is crucial that these protocols are thorough and comprehensive, while streamlining steps and eliminating the duplication of effort. The WQP has been working closely with IHS and ECS since summer 2007 and has formed excellent working relationships with each.



Inventory Irrigation Canal Systems

Another water quality issue that poses a health threat to the Community is the condition of the irrigation canal and lateral systems. There are a few concerns related to the upkeep of these systems. Areas with stagnant water can lead to nuisance conditions; such as mosquito breeding, algal growth, and odors. Areas of high erosion can increase the amounts of sediment transported to the Salt River. Canals that are prone to clogging with trash and debris can become problematic if they cause water to overflow, which can lead to flooding and public safety issues.



Repair and upkeep of these canals are the responsibilities of the Community. ECS maintain the laterals, and while maintenance is often performed, it is rarely documented. There is some mapping of the system, but it is incomplete, out-of-date, and not easily accessible. Since these systems carry water throughout the entire Community, they provide a connectivity of growth. But they can, if not in good condition, spread health risks.

The WQP completed an initial water quality assessment of the irrigation canal systems in the late summer of 2007. Based on these findings, and in conjunction with the EHP, the WQP intends to proactively develop a plan that will periodically monitor the water quality in these canals and look for areas of possible mosquito breeding and erosion. The findings will be mapped in GIS format, possibly in conjunction with the watershed map. This will allow a benchmark to be set for future survey comparisons. It will also provide a level of safety for the Community by ensuring that the irrigation systems that are so prominent in the Community do not pose health risks.

Data Manager

One programmatic need that is common to most of the EPNR programs is the need for a data manager. It is most evident in the WQP, whose main purpose is to monitor water quality data in a timely manner and address potential problems. A dedicated EPNR staff member would be charged with keeping the water quality data up-to-date and disseminate the results rapidly. This need will be crucial when the Community obtains TAS status and is responsible for compliance and enforcement. This manager should be in place to maintain the groundwater database, the surface water database, the watershed map, and all other components prior to obtaining TAS status.

Water Quality Program's Next Steps

In addition to tackling programmatic gaps and needs, the WQP will be focusing its future efforts on increasing their work force to include data management, field inspectors, data analyst, and compliance and enforcement capacity. In addition to increasing the work force, the WQP will be developing the required protocols for each of these new facets, from personnel training and record keeping to enforcement procedures and protocol.

WQP Staff Qualifications

Figure 6.2 is a short organizational chart listing the current positions in WQP. This figure is presented with **Table 6.5** to illustrate how the qualifications and training relate to specific WQP positions. **Table 6.5** lists standard qualifications that the WQP Staff have available for in-house expertise.

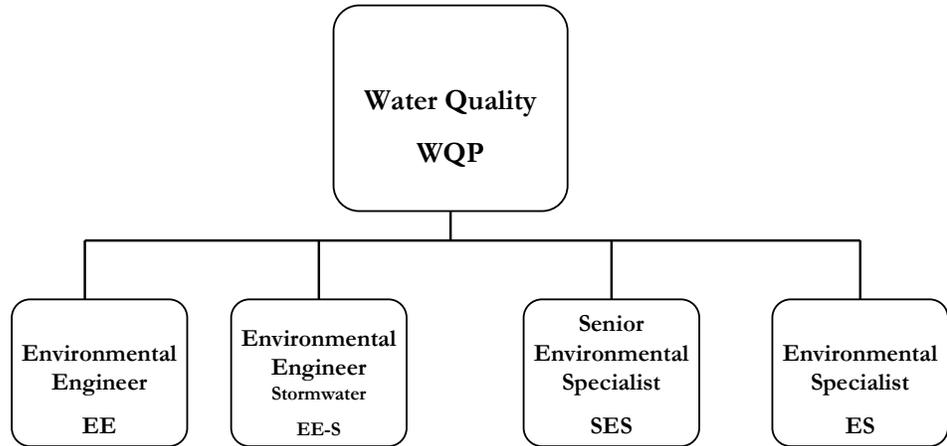


FIGURE 6.2 illustrates the WQP's programmatic organization.

Table 6.5 WQP Standard Training Qualifications

Accreditation/Training/Certification	Provider/Agency	WQP Position
Arizona Water Law	CLE International	ES
Arizona Water Quality Law	Testlaw Practice Group	ES
Safe Drinking Water Act Drinking Water Sampling	ITCA	ES
Wastewater Infrastructure Issues	Lorman Services	ES
Drinking water/Wastewater Lab Analysis	ITCA	ES
Quality Assurance Quality Control Development	ITCA	ES
Media Specific NPDES Inspections	IITEP ³¹	SES
Tribal Water Quality Monitoring & Clean Water Act 106 Grant Guidance	EPA	SES, ES, EE
Tribal Clean Water Act 106 Workshop	EPA	SES
Tribal Non-point Source Program Workshop	EPA	SES
Water Quality Laws and Requirements	ASU/ADEQ ³²	SES
Water Quality Sampling	GCC ³³	SES
Phase II – Stormwater	EPA	SES/EE-S

³¹ IITEP – Institute for Tribal Environmental Professionals

³² ADEQ – Arizona Department of Environmental Quality

³³ GCC - Gateway Community College

WQP Program Documents

Table 6.6 lists the main documents used by the Water Quality Program.

Table 6.6 WQP Documents

Title	Author/Agency	Year Published
Draft Surface Water Quality Standards	EPNR - WQP	2007
Draft Aquifer Water Quality Standards	EPNR - WQP	2007
Draft Soil Remediation Standards	EPNR - WQP	2007
Draft NPS Management Watershed Plan	EPNR – WQP	2007
Draft Best Management Practices Manual – Stormwater Management Program	EPNR - WQP	2007
Draft Inspection, Compliance, and Enforcement Standard Operating Procedures	EPNR	2007
<i>(Draft Revised)</i> Quality Assurance Project Plan for Surface Water and Groundwater Monitoring	EPNR	2007
<i>(Original)</i> Quality Assurance Project Plan for Surface Water and Groundwater Monitoring	EPNR	2002
Procedures Manual for Sampling Surface Water	EPNR	2000
Procedures Manual for Sampling Groundwater	EPNR	2000
Non-point Source Management Program of the SRPMIC	EPNR	2000



Special Projects

Special (adjective): unusual; exceptional; unique; particular; highly valued.

EPNR manages several projects that are funded through unique opportunities and span specific timeframes. These projects are referred to internally as Special Projects. Special Projects require extensive coordination within EPNR, CDD, and other departments, as well as the coordination and partnering with external agencies.



In addition to the numerous relationships EPNR develops for each of the Special Projects, EPNR maintains Community outreach and interaction as one of its top priorities. These Special Projects are pursued solely for the well-being of the Community and its environment. Thus, EPNR continues to engage the Community with public review and meetings. The Community's concerns and input are thoughtfully considered and addressed in every process. The results from the Special Projects include restored land, strengthened relationships, and future opportunities.

This section briefly describes three (3) examples of the EPNR's Special Projects:

1. Brownfields Assessment and Cleanup – of which the Community has two (2).
2. The Va Shly'ay Akimal Ecosystem Restoration Project
3. National Environmental Information Exchange Network Program

Brownfields Assessment & Cleanup

Brownfield sites are real property where the reuse, expansion, or redevelopment may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. In 1980, the EPA's Office of Solid Waste and Emergency Response created the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to address such brownfields through cooperative agreements. Under Section 104 of the CERCLA, substantial funds were made available for the assessment and cleanup of brownfields, thus giving CERCLA its second name,

'Superfund'. By the 1990s it became evident that the Superfund was not sufficient enough to fund all the brownfields requiring clean-up. In 1995, EPA officially created their Brownfields Program with its foundation built on providing grants for assessment and clean-up. The objectives of the brownfield assessment and cleanup cooperative agreements are to provide funding:

1. To inventory, characterize, assess, and conduct planning and community involvement related to brownfield sites.
2. To capitalize a revolving loan fund and provide sub-grants to carry out cleanup activities at brownfield sites.
3. To carry out cleanup activities at brownfield sites owned by the grant recipient.

The Community has had the unique opportunity to tap into three federal funding programs to address the Community's two (2) brownfield sites, the closed Cypress Landfill and the Feedlot Site.

Cypress Landfill

The Cypress Landfill, located north of the Salt River, just south of the Cypress Golf Course, was approximately 200 acres with close to 120 acres (60%) of environmentally impaired land. The Community was awarded CERLCA 104(k) funds to assess and clean-up the landfill. The SRPMIC involved Community Members and numerous departments throughout the process. Extensive notice was provided not only by using the Community newspaper, but also by targeting the Community Members within a 1.5 mile area with additional mailings.



The clean-up effort began in 2003 and was completed in 2005. The clean-up of the Cypress Landfill resulted in the following outcomes/benefits:

1. 2,200 old tires were removed and properly disposed.
2. 7.75 tons of metals were removed and recycled.
3. 580 tons of waste were removed and properly disposed.
4. An underground fire was extinguished.
5. The landfill was capped with clean soil and is now suitable for redevelopment.
6. This clean-up project contributed to the Community receiving the 2005 EPA Award for Environmental Excellence.
7. The successful and timely completion of this project resulted in a positive performance evaluation for the Community and contributed to the second award of federal funding for the assessment and clean-up of the Feedlot Site.

Feedlot Site

The Feedlot Site is approximately 160 acres formerly operated by Texzona Cattle Feeders from 1963 to 1990. At peak capacity, the feedlot held up to 60,000 head of cattle in more than 200 fenced lots. It was estimated to have generated and accumulated 129,000 cubic yards of cow manure bio-waste. The feedlot closed in 1990 and most of the facility was dismantled in 1991. Because of the high potential for

groundwater contamination³⁴, the Community was awarded CWA NPS 319 (reference pg. 51) funds, for 2003 – 2005, to assess the extent of soil and groundwater pollution, begin clean-up, and draft a proposal and apply for additional federal funds to continue the assessment and clean-up. In 2006, the Community was awarded grant funds through the EPA Brownfields Program to assess, characterize, and clean-up and remediate the site. Project effort began in 2007 and is planned for completion in 2009. Upon completion of the Feedlot clean-up, the following long-term benefits are anticipated:

1. Reduced health risks for the Community.
2. Improved and protected groundwater quality.
3. Rectified environmental justice issues.
4. Created green-space.
5. Increased revenue to the Community from lease arrangements.
6. Created spill-over economic effects of improved quality of life and increased commercial opportunities.

Va Shly'ay Akimel Ecosystem Restoration Project



The Va Shly'ay Akimel Ecosystem Restoration Project is a collaborative ecosystem restoration project along the Salt River between the SRPMIC, the U.S. Army Corps of Engineers (USACE), and the City of Mesa. The project includes restoring wetland and riparian habitat along approximately 14 river miles; from the Granite Reef Dam to the 101/202 interchange. The Project is approximately two (2) miles wide and consists of approximately 17,435 acres (USACE, 2004³⁵). The restoration project will address environmental degradation, areas of possible flooding, and related land and water resource issues.



A feasibility study was completed in 2004 and a design alternative was developed that incorporates new riparian areas, both open water and wetland, cottonwood and willow forests, mesquite bosques, and low-flow channel features into the existing river structure. This dynamic design will allow for habitat restoration to occur simultaneous to the sand and gravel operations. The restoration design will have the potential to increase riparian habitat acreage and quality, which will expand wildlife diversity and quantity, help control invasive vegetation like salt cedar, and increase native vegetation which is of cultural significance to the Community. The Project is currently in the Design Phase and is expecting completion in 2009. EPNR anticipates significant Community involvement throughout the design process. This is the first USACE ecosystem restoration project undertaken with a sovereign Indian community.

³⁴ The extent of animal bio-waste contributed high nitrate-nitrogen pollution to the soil which had a very high potential for contaminating the underlying groundwater.

³⁵ USACE (2004) Va Shly'ay Akimel FINAL Salt River Ecosystem Restoration Study

National Environmental Information Exchange Network



The U.S. EPA and states, tribes, and territories are working together to develop a National Environmental Information Exchange Network (NEIEN). This Exchange Network is an Internet- and standards-based, secure information network that facilitates the electronic reporting, sharing, integration, analysis, and use of environmental data from many different sources. The Exchange Network not only allows partners to submit the required data to EPA and gather data to make informed decisions, but it also reduces partner costs, time, and effort, while overcoming delay's in data transmission. This system ultimately allows real-time data exchange and consequently rapid response and action if any possible human health or environmental concerns are present (EPA, 2006³⁶).

2003 marked the first year of the Exchange Network active data exchange. Since that time, the Exchange Network has grown to its current size of 55 interacting partners, including six (6) tribes. In keeping with the SRPMIC's environmental achievements, it was the fourth tribe to exchange data through the Exchange Network.

The following list is the thirteen (13) current Data Exchange Areas, of which EPNR has successfully established data flows in the three (3) checked areas and has applied for funds to establish an exchange system for EPNR's water quality data.

- ✓ 1. Air Quality Sub-system (AQS)
- 2. Beach Environmental Assessment and Coastal Health
- 3. Electronic Discharge Monitoring Report
- 4. Fish Tissue Data Exchange
- ✓ 5. Facility Registry System (FRS)
- 6. Permit Compliance System
- ✓ 7. National Emissions Inventory (NEI)
- 8. Pacific Northwest Water Quality Data Exchange
- 9. Resource Conservation and Recovery Information
- 10. Safe Drinking Water Information Exchange
- 11. Substance Registry System
- 12. Toxics Release Inventory
- 13. Toxics Release Inventory State Data Exchange

EPNR's participation in the NEIEN Project will assist EPNR's media specific programs to organize, store, and transmit environmental data as needed. EPNR will utilize the system for data collected from air quality, water quality, solid waste inventories, underground and above-ground storage tank inventories, pesticide use and inventory, as well as other environmental information.

³⁶ EPA (2006) Tribal Participation on the Environmental Information Exchange Network



Community Outreach

While EPNR is charged with developing and operating the many programs that protect the Community's environmental and natural resources, they maintain Community outreach and environmental education at the top of their priority list.

EPNR knows that Community participation is essential to the success of environmental protection, and is doing its best to promote educational opportunities to the Community and encourage awareness and participation.

There are two main goals of EPNR's Community outreach. The first is to make the Community aware of the intent of each program within EPNR and why it is important to the entire Community and to each individual. The second goal is to determine the Community's values and needs, and if such needs are not met, EPNR can develop the programs to meet them.

Target Audience

EPNR's target audience is the entire Salt River Pima-Maricopa Indian Community, with an approximate population of almost 9,000 members. EPNR receives input from all levels of Community; including every department and component of the tribal government to individual Community Members. EPNR incorporates all this Community input into the development of environmental programs that are beneficial to the environment, the Community and indirectly to the neighboring communities that benefit from the protection of the environment and natural resources. These programs are further designed to address and incorporate regulatory compliance.

Environmental Stewards

EPNR is energetic in its positions as environmental stewards. EPNR utilizes multiple opportunities to educate the Community at all levels about the environment, and how protecting the environment and their health go hand in hand.

Outreach Activities

Au-Authum Action News

EPNR writes articles twice a month in the Community newspaper, ranging from Wild Horse Management to the installation of new trails at the Cottonwood Wetland. These articles are vital to keeping the Community updated on the various programs and strides EPNR and the Community is making and taking to protect the land and its people. These articles are distributed to hundreds of households throughout the Community.

Annual Calendar

In 2006, a new tradition was started by the creation of an annual EPNR outreach calendar. Since it is generated on an annual basis, it keeps consistent and updated information readily available for Community Members and colleagues. The calendars are created in-house with EPNR's own talented and creative staff with a limited budget. Each program within EPNR selects its own photographs, text, and layout. Not only is the calendar informative and up-to-date, but it also has important Community meeting dates preprinted on the calendar so Community Members are aware of current information. Each year, over 500 calendars are made and distributed to a number of households through out the Community, EPA, other tribes, tribal councils, and enterprises throughout the Community.

Earth Week

One innovative approach EPNR utilizes in generating environmental awareness is through their Earth Week Celebrations. In the first year, April 2004, CES held a one day open house on Earth Day. The second year, April 2005, Earth Week was started by including daily articles in the newspaper and CES staff attended schools and gave talks and experiments for the students. The third year, April 2006, marked an exciting change in the Earth Week Celebrations with week long activities which is also preprinted in the Annual EPNR Calendars.



In 2006, the Earth Week Celebrations resulted in over 140 visitors to the EPNR open house and over 76 volunteers at the Community-wide Clean-Up Challenge. Other outside participants included Liberty Wildlife and Arizona Game and Fish. The Salt River Landfill, Salt River Materials Group, and Casino Arizona provided outreach support through event donations such as refreshments and water.

In 2007, EPNR coordinated the Clean-Up Challenge with over 300 participants, an Adopt-a-Senior Clean-Up Project, Project Can-It, and many other activities. These Earth Week Celebration activities involve every level of the Community and every school level, from elementary to high school. All internal EPNR programs participate in the activities along with personnel from other external departments, such as ECS and Information Technology. Other program participants include Youth Services, the Boys and Girls Club Lehi District, Youth Council, the Miss Salt River Pageant Committee, and the Diabetes Program.

The Cottonwood Wetland

EPNR staff uses the demonstration wetland project to not only provide non-point source pollution control but to educate the public, from school children to dignitaries. In 2003, SRPMIC was awarded EPA funds to construct a demonstration treatment wetland to address non-point source pollutants. Since that time, EPNR has used this project as an outstanding environmental outreach opportunity.

There are unique educational plant signs throughout the wetlands which provide the scientific plant names, the common English names, and the names in O’Odham and Piipaash. An informational site brochure was created and is distributed to educate the Community and other visitors on the importance of wetlands, riparian areas, and how they can do their part to help reduce non-point source pollutants. In 2005, an outdoor classroom area was added to the wetland along with a new site sign, a trail system, handout maps, and a display case. All of these additions improved access and educational opportunities. In 2006, a traditional shade structure (“vahtho”) was built adjacent to the outdoor classroom to enhance cultural relevance for visitors.

This wetland continues to be included in tours, as a part of Earth Week Celebrations, and is monitored for pollution control. The wetland was used as a platform for educating the water resources industry by publishing an article in the January 2006 issue of Southwest Hydrology. In May 2006, it received the prestigious Water Reuse Project of the Year Award by Arizona Water and Pollution Control Association.

Additional Outreach

During special projects or events, additional mailings are sent out to the Community. An example of this effort was during the Cypress Landfill Clean-up, when an informational brochure was sent to every resident within a 1.5-mile radius of the project. A special “Lunch at the Landfill” event was held to mark the completion of the successful Cypress Landfill clean-up.



EPNR participates in many Community events, such as school science fairs and Community career fairs. EPNR has held poster contests in the Community school with Earth Day themes. The winning posters have been showcased during the Earth Week Celebrations and the 2008 EPNR Annual Calendar.

EPNR continues to be present at several levels of meetings, from general tribal public meetings and district meetings held by Council representatives to Community Council meetings. EPNR clearly presents critical information at these meetings, regardless of the audience.

Watershed Protection Booklet

The WQP has been actively developing a Watershed Protection Booklet for the Community that provides useful watershed information for every level of Community Member. The contents range from learning about the water cycle and where the Community gets its drinking water to what steps a household can take to ensure its septic system is operating properly.



In the fall of 2007, the WQP presented an outline along with some important watershed lessons to one of the Salt River High School art classes taught by Ms. Niamh Savani. That presentation marked the start of a unique collaboration. The students were given assignments to draw various art pieces that captured the lessons that would be presented in the booklet. The students completed the art work by the end of the fall 2007 semester, and the booklet is scheduled for completion in time for Earth Week 2008.



Juvenile Inmate Horsemanship Program

The Juvenile Inmate Horsemanship Program is a collaborative effort between the EPNR RMP and the Salt River Department of Corrections (DOC), which provides an opportunity for incarcerated juveniles to learn responsibility, develop work ethics, and gain field experience by assisting the RMP staff at the horse facility.

RMP staff is required to complete training through the DOC which includes classes on how to interact and work with the inmates. A corrections officer transports the inmates to and from the DOC facility to the horse facility and remains at the work site. Inmates typically work at the facility weekly or bi-weekly performing a range of responsibilities from cleaning horse stalls and stacking hay to assisting in round-ups, adoption preparations, and veterinarian care.

There are many attributes this program aims to instill in the inmates, such as:

- ◆ Gaining responsibility by caring for the animals on a regular basis.
- ◆ Developing work ethics through daily chores associated with the care and maintenance of the horses.
- ◆ Learning valuable skills such as basic horse care and health requirements.
- ◆ Improving communication skills through positive and productive interaction with RMP staff.
- ◆ Increasing awareness to employment opportunities and the benefits of furthering education.

Outreach Budget

Although the Community and EPA fund EPNR and its programs, outreach funds are rarely a specific budget or line item. Most outreach that EPNR conducts is above and beyond the programmatic tasks necessary to protect the Community's natural and historic resources. This is typical of the EPNR's ability to perform multiple tasks and create a reliable team to achieve their goals.

Outreach Results

The main result of EPNR's efforts is an overall increase in the Community's awareness on the importance of environmental protection. The number of participants in the annual Community-wide Clean-Up Challenge has increased each year and continues to exceed expectations. The number of visitors requesting a tour of the wetland is on the rise. EPNR continues to have a higher level of presence in the Community. Not only is there increased participants associated with Earth Week, but there has been increased yearly attendance in the Earth Week Celebrations and other EPNR events held throughout the year. EPNR's efforts have inspired teacher-initiated projects in the schools throughout the year, such as decorating recycled 55-gallon drums and turning them into garbage cans.

In addition to the improved Community environmental awareness, EPNR has a direct effect on the Community Council. The Council is aware of the benefits and the subsequent effects a healthy environment has on the Community. There are numerous benefits of health, welfare, water quality, and air quality occurring as a result of EPNR's efforts. The greatest benefit is that attitudes and behaviors are changing on every level, from farmers becoming more aware of their NPS impacts and taking steps to minimize them to Council's approval of funds for environmental programs and projects. EPNR knows that changing behavior takes a long time and EPNR is committed to addressing the challenges that lie ahead.

The Salt River Pima-Maricopa Indian Community's Environmental Protection & Natural Resources Division is committed to doing the best job possible for the Community Members, land, water, air, plants, animals, and ecosystems. By acting as environmental stewards and through its extensive outreach programs, EPNR is not only protecting the environment but improving the health of the Community, while subsequently benefiting everyone in the Phoenix valley. EPNR strives to work openly with anyone, to ensure no person or component within the Community is left out.



Strategic Plan

As EPNR's roles and responsibilities continually increase and evolve, it has established a three-year plan that outlines the steps EPNR must take to meet the growing demands of the developing Community.

Even though the SRPMIC environmental program began in the late 1980s and early 1990s, it wasn't until the late 1990s that the individual programs and internal structure were developed. Since that structuring, EPNR has made significant strides to developing environmental programs dedicated to protecting, preserving, and restoring the Community's natural resources and archeological heritage.

EPNR has proactively planned for the protection of the Community's environment and natural resources. As the Community continues to develop and grow, EPNR develops and evolves to meet the growing demands. One tool that EPNR uses to map its growth and progress is a Strategic Plan (Plan). The current Plan has been developed for the three year period, 2008 – 2011. It will be reviewed annually, and revised as needed. It outlines the major EPNR goals for that specified timeframe and lists the specific task required to track, report, and monitor the success in achieving those goals.

What are the Plan Goals?



- Goal 1. Provide timely, high-quality service to Community Members and Departments.
- Goal 2. Promote and encourage awareness and involvement in environmental programs and projects.
- Goal 3. Develop, review, and revise the Community's regulatory framework as it applies to environmental protection and natural and archaeological resources.
- Goal 4. Recruit and retain a highly motivated and innovative team of professionals committed to excellence and service.
- Goal 5. Conduct comprehensive and inclusive long-term planning to enhance service to the Community and provide clear direction to EPNR staff.

How will EPNR achieve its Goals?

Many of the steps EPNR intends to take to achieve its goals are inclusive of EPNR as a whole and those are the following:

Timely, High-Quality Service

- ◆ Standardized file management, naming, and retention systems for all electronic and paper files.
- ◆ Develop an Internal Communications Plan.
- ◆ Enhance reporting format and procedures.
- ◆ Implement new technologies to improve productivity, including expanding the use of the NEIEN, Electronic Document Management System, Microsoft Project and SharePoint.
- ◆ Enhance Internet and Intranet systems.

Promote Environmental Awareness

- ◆ Promote effective reporting, including accomplishments reporting.
- ◆ Establish environmental hotline.
- ◆ Conduct outreach events throughout the year.
- ◆ Develop appropriate outreach material.
- ◆ Develop Frequently Asked Questions (FAQ) sheets for various EPNR programs, projects, and functions.
- ◆ Explore opportunities to create a Community Board or Committee to oversee environmental issues.

Regulatory Framework

- ◆ Update and implement the revision of current ordinances and/or develop new regulations.
- ◆ Develop a stronger regulatory framework by identifying gaps in the current regulations.
- ◆ Standardize regulatory procedures for enforcement and compliance.

Team of Professionals

- ◆ Develop and expand employee training programs.
- ◆ Create Career Development Plans to include mentoring, position-specific training, and advancement opportunities.
- ◆ Recognize employees and accomplishments.
- ◆ Define and communicate professional standards and expectations.

Long-Term Planning

- ◆ Review, revise, and update Strategic Plan annually.
- ◆ Communicate the Strategic Plan.
- ◆ Measure and report progress on goal achievement.

Program Specific Tasks

In addition to the inclusive EPNR tactical steps, EPNR has discerned specific goals for the individual programs that will improve operational efficiency of some programmatic tasks.

- ◆ Environmental Programs and Policy Development will be developing, reviewing, and revising EPNR's regulatory framework to ensure it can meet the demands for environmental enforcement and compliance.
- ◆ The Air Quality Program will be enhancing its remote technology by developing Community access to real-time data, visibility cameras, current air quality conditions, and other pertinent information.
- ◆ Land Use Compliance will be working to streamline and expand the existing clearance process to include more extensive review from other EPNR programs where applicable.
- ◆ Range Management Program will be developing innovative methods of tracking, managing, and reducing the population of the Community's wild horse and bison herds.
- ◆ Water Quality Program will be focusing on achieving Treatment-as-a-State status and increasing its enforcement and compliance capabilities.

Communication – the Key to Success



EPNR maintains communication at the top of its priorities in order to effectively achieve its goals. There are several key activities that EPNR will pursue in the future to improve communication, both internally and externally. Some activities will enhance both internal and external communication simultaneously.

EPNR Website

- ◆ EPNR recognizes that developing its own website is a critical need that will vastly increase opportunities for informing the Community on important environmental, natural resource, and archaeological issues.
- ◆ EPNR will be developing the website to provide current environmental conditions, project updates, where to go for help and assistance, outreach activities and calendar, and other resourceful information.

Environmental Hotline and Concern Tracking

- ◆ EPNR plans on creating an Environmental Hotline, telephone and email, which the Community can use to access information and express concerns, issues, questions, or complaints. This will be an important step towards Community involvement and communication.
- ◆ EPNR will develop a tracking system for environmental complaints/concerns. This system will be developed to track all EPNR complaints and concerns, as well as track each according to each program. This system will track not only

the complaint, but the solution/response, response time, and possible repercussions. Tracking such characteristics will allow problematic conditions to be discerned from single-occurrence events.

Water Quality Conditions

- ◆ WQP's focus thus far has been on refining monitoring programs and protocols, and is now at the forefront of developing programs in order to provide important water quality information to the Community.
- ◆ Over the next few years, the WQP will be developing opportunities to inform the Community on protecting the watershed, water quality conditions, and other pertinent water related programs.

Air Quality Conditions

- ◆ The AQP uses technologically advanced equipment to monitor air quality conditions in the Community. It is now able to expand that technology to develop Community awareness opportunities.
- ◆ The AQP will be taking steps to provide the Community with real-time air quality data, such as installing and implementing visibility cameras with links to intranet and internet sites, as well as establishing a High Pollution Advisory System.



Outlook

As EPNR continues to evolve and redefine itself, it is appropriate to conclude this INRMP with EPNR's outlook, rather than merely summarize what has been presented.

Within the past few years, the Community has experienced unprecedented development. When considering this growth, combined with the increased drought conditions that have occurred, as well as the predicted climate changes, the SRPMIC will continue to face increasing challenges to protect and preserve the environmental, natural, and cultural resources of the Community. The efforts of EPNR have created a solid foundation and framework for future expansions to address these challenges. EPNR has determined its resource limitations, developed a strategic plan based on those limitations, and will respond with appropriate expansions in the future.

What are the resource limitations?

Number of Personnel

The main resource limitation is the number of personnel. When considering the extensive tasks, effort, and projects that each of the 20-some EPNR personnel are charged with, it is evident that this resource is strained. Many personnel have roles in multiple EPNR programs, such as Land Use Compliance and Range Management Program. This multiple-program effort has been necessary over these 'departmental-building' years and the cross-training is encouraged and valuable. But now, as EPNR has matured and each program has extensive obligations to the Community, this multiple-program effort is becoming a strain on the personnel and is no longer feasible. Each program is able to fully utilize its personnel. Additionally, an increase in media-specific expertise is needed in all EPNR programs and will be critical to the continued success of EPNR.

This is an important time for EPNR to increase its internal capacity. In general, when agencies find themselves short-staffed, they merely become project managers that outsource the science and technology work to external parties because it no longer has

the time to do such work internally. This can result in a lack of internal expertise and a dependence on external assistance, as well as overall personnel dissatisfaction, as they tend to become less challenged by the project work and more taxed with the mundane administrative details. Additionally, using tribal and grant funds to hire and support internal capacity further sustains the Community's economy and human resources.

Record System

The second resource limitation is the current record system. Each program in EPNR has developed appropriate record-keeping systems that have met each program's goal. Now, in the advent of mass technological advances and expedient electronic data systems, is the time for EPNR to evaluate and update its record systems into a single repository, which can efficiently and easily provide up-to-date information to EPNR and the Community. This resource limitation was addressed in the Strategic Plan Goal #1. EPNR is actively working towards overhauling its record-keeping system through initiatives such as the NEIEN and the EDMS utilizing both Community and federal funds.

What are the resource recommendations?

EPNR must address these two resource needs, personnel and record system, prior to being able to adequately enforce compliance of federal laws and the Community's environmental laws and ordinances. The Community is striving for delegated authority over federal programs and treatment-as-a-state status. In order for the Community to be prepared for such responsibilities, EPNR needs full financial and administrative support.

There are four (4) major recommendations that EPNR should consider in the short-term (1 - 4 years) that will improve EPNR efficiency, enforcement capabilities, and preparedness for delegated authority over environmental laws. These recommendations include:

1. Restructuring some of EPNR's internal programs.
2. Expanding EPNR's Range Management Program.
3. Creating key support positions, consisting of Technology and Policy Advisor, Administrative Staff, Technology and Data Manager, and Permitting Specialist.
4. Changing the funding source of two (2) key EPNR positions from EPA grant-funded to Community-funded positions.

Figures 10.1 and 10.2, on the following pages, are departmental and positional organization charts that take these resource recommendations into consideration. These charts are merely examples and are subject to change due to unforeseen circumstances such as funding opportunities or required responses to the Community's needs.

ENVIRONMENTAL PROTECTION &
 NATURAL RESOURCES DIVISION
 INTEGRATED NATURAL RESOURCES
 MANAGEMENT PLAN

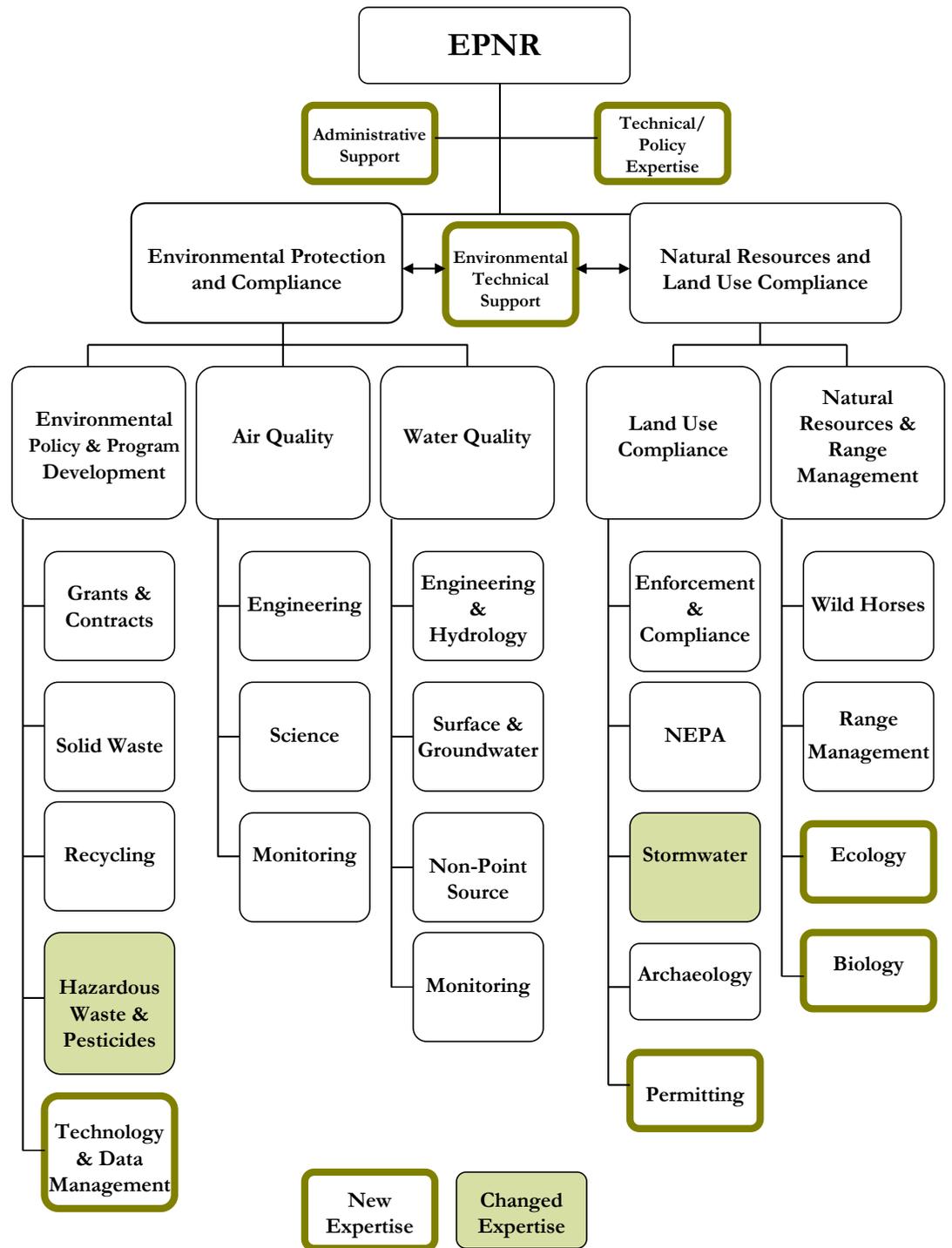


FIGURE 10.1 illustrates the recommended EPNR’s departmental organization which includes increased support to enhance the performance of the current programs. The new areas of expertise are outlined in green. The shaded areas are current positions but are recommended to be changed within EPNR’s internal structure.

ENVIRONMENTAL PROTECTION &
 NATURAL RESOURCES DIVISION
 INTEGRATED NATURAL RESOURCES
 MANAGEMENT PLAN

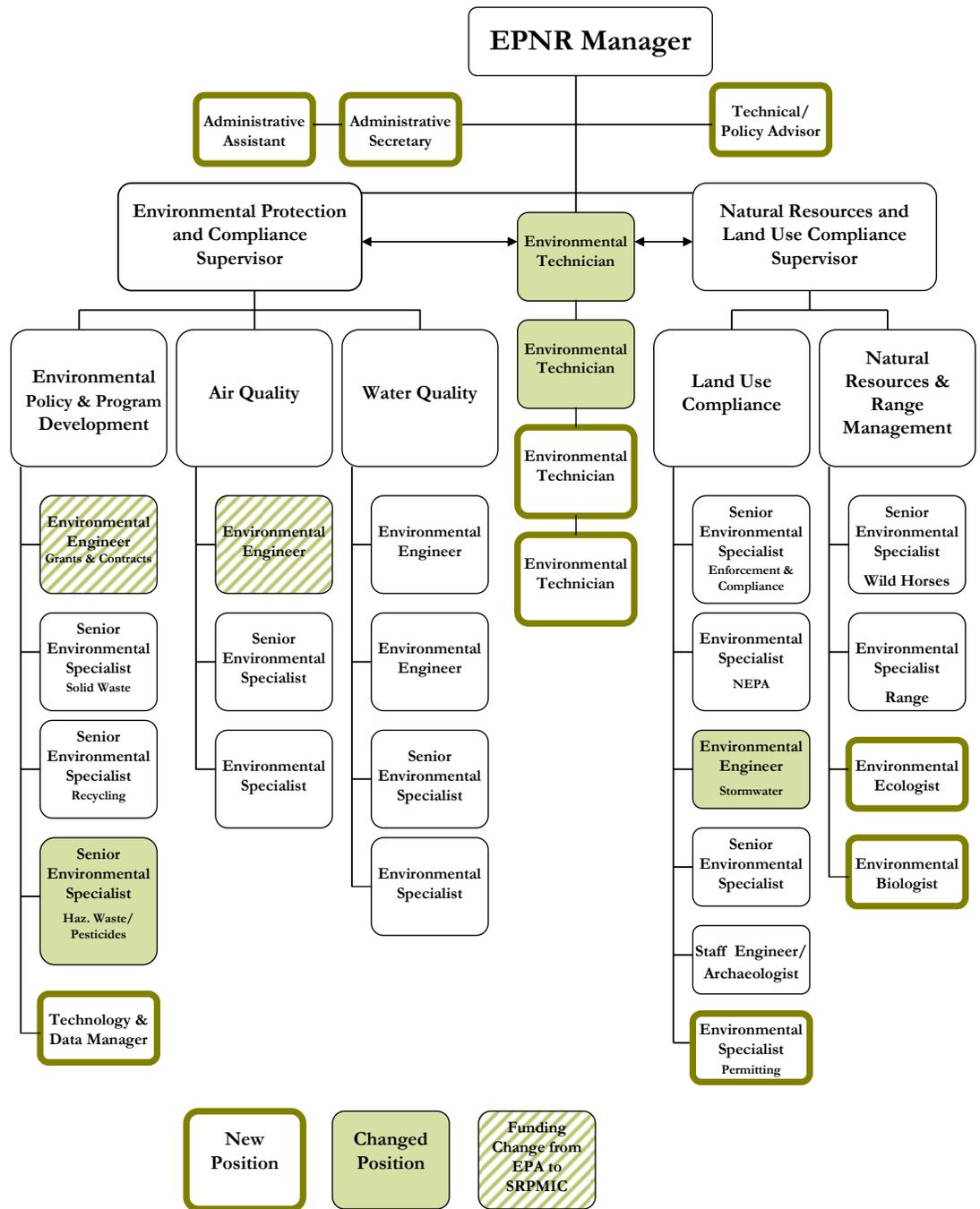


FIGURE 10.2 illustrates the recommended EPNR’s departmental organization which includes position classification and title or area of expertise. The new positions are outlined in green. The shaded expertise are current to EPNR but are recommended to be changed within EPNR’s internal structure. The two patterned positions are recommended to change from EPA funded-positions to Community-funded positions.

Resource Recommendations

Restructure Internal Programs

There are four (4) main recommendations regarding restructuring internal programs. They are associated with the “Changed Positions” in **Figure 10.2**, the Recommended Positional Organization Chart.

1. **Converting EPPD’s Pesticide Program into a Hazardous Waste Program.** Currently there is a designated Pesticide Program and hazardous wastes fall under the Solid Waste Program. The Pesticide Program carries out inspections for fuel storage tanks in tandem with pesticide inspections. The PP also assists the LUC with environmental assessments of properties. Performing pesticide and hazardous material inspections require similar training, certification, and often similar field inspections. Developing a program that encompasses both areas would improve EPNR’s abilities to protect the health and safety of the Community and its environment.
2. **Transferring the Stormwater Program to the LUC Program.** The Stormwater Program was created through EPA funding because it fell under the Clean Water Act goals to address the reduction and elimination of pollutants due to stormwater runoff. Now, it is a tribally funded program and requires extensive coordination to ensure that construction and development projects are in compliance with proper drainage and flood control measures. Basically, a construction project requires clearance for a Stormwater Pollution Prevention Plan (SWPPP) similar to the environmental and archeological clearances required. By incorporating the Stormwater Program into the LUC Program, the requirements can be streamlined, communication will improve, and EPNR can provide ‘one-stop-shop’ requirement clearances to its applicants.
3. **Increasing the number of Environmental Technicians.** EPNR has two (2) Environmental Technicians; one supports the Air Quality and Water Quality Programs, and the second supports the Range Management Program and Land Use Compliance and often crosses-over to support the Pesticide Program. These technicians mainly provide essential field assistance. Every EPNR program has project sites and duties throughout the Community, which continue to increase over time. Due to the rise in field effort required, EPNR needs to, at the very least, double the number of Environmental Technicians from two (2) to four (4) in the next year. This increase would allow EPNR to develop an Environmental Technician Program.
4. **Developing an Environmental Technician Program.** The Environmental Technician Program (ETP) is a unique environmental mentoring and training program being developed by EPNR. This program is in-line with the Strategic Plan Goal #4 – EPNR is committed to developing and retaining a highly motivated and innovative team of professionals. Since the Environmental

Technician is an entry-level environmental position, EPNR considers the ETP to be an outreach and training component for EPNR personnel.

The ETP would consist of assigning Environmental Technicians to support the Air Quality and Water Quality Programs for a period between six months to a year. A second set of Technicians would be assigned to support the Range Management, Land Use Compliance, and Pesticide Programs for the same time period. At the end of that period, the teams would be rotated or switched to support the other set of programs for the next 6 to 12 months. At the end of one to two years, each technician will have experience in each of EPNR's programs. This would allow the technicians to determine if they would want to pursue advanced positions in one program or go on to pursue media-specific educational opportunities. EPNR would like to fill the positions with Community Members who would benefit from this type of experience and exposure to the numerous environmental programs.

Expand Range Management Program

Due to the extensive programmatic gaps in the Range Management Program, it needs to be expanded. There are two (2) recommendations for the RMP.

1. **Changing focus from Wild Horse Management to Natural Resource Management.** The RMP is successfully achieving its intended goals and objectives. But it is time that the Community and EPNR expand its environmental protection to the other plants and wildlife that comprise the rangelands. The Verde River corridor and the open rangelands are precious and unique natural ecosystems. In order to ensure that these areas are sustained, RMP should modify its internal structure so Wild Horse Management is a section of the program and no longer the main focus. Natural Resource Management should include wildlife, restoration, native vegetation, and monitoring and survey. These additional sections would benefit the Community in preserving and protecting the Community's culture, unique wildlife, native vegetation, and recreational opportunities.
2. **Increasing scientific expertise in the Program.** As the Program shifts from Wild Horse Management to Natural Resource and Range Management, a shift in expertise needs to occur as well. Enhancing the Program with staff ecologists and/or biologists will allow EPNR to make more-informed scientific and programmatic decisions.

Create Support Positions

There are several support positions that, if added to the EPNR Division, would enhance the efficiency of all EPNR programs. These positions would work together and with the EPNR program personnel to insure that all program components are addressed. The following support positions are recommended:

1. **Technical and Policy Advisor** – EPNR is striving for delegated authority over many federal environmental programs. An environmental expert needs to be in place before that can happen. The Advisor must be knowledgeable on all environmental mediums, laws, and regulatory policies in order to assist EPNR on all scientific and regulatory issues.
2. **Administrative Staff** – The EPNR Division is comprised of over 20 positions and continues to increase along with the number of projects and duties. EPNR needs an administrative staff, consisting of an Administrative Assistant and Administrative Secretary, to assist all EPNR staff on administrative effort so EPNR can improve its technical efficiency and continue to provide high-quality services to the Community.
3. **Technology and Data Manager** – This position would assist each EPNR program with monitoring equipment, mapping systems (GIS), data sets, intranet and internet sites, and any electronic peripheral equipment. This position would provide the much needed technological support to EPNR, so that the EPNR program personnel can focus their efforts on the science, policies, and technology of the corresponding program. Computer technology changes and advances so quickly, that a designated manager is able to keep up-to-date on the current technologies ensuring that the EPNR program remains technologically current.

This position would also fill an important gap that currently exists in the timely presentation of data. Currently, due to personnel resource limitations, environmental data may be collected and/or sent out for laboratory analysis, which have lag-times for returning results. That data is then entered into a database and finally made available for interpretation and analysis. This process could take up to two weeks, by which time may be too late if there was an environmental concern at the time of sampling. The Technology and Data Manager would be able to generate reports within a day (during typical circumstances) of receiving data from the field or laboratory, thereby, significantly reducing the response time. This may be a single-person position at the on-set and develop into a multiple person program as it matures.

4. **Permitting Specialist** - In addition to the current Land Use Compliance activities that require appropriate permits, there are several types of activities that the Community may want and need to permit in the future. A permitting system should be developed with a designated specialist in order to efficiently work with the individual EPNR programs and address the numerous types of environmental permits that may be required, such as:

- ◆ **Individual Burn Permits** would limit entities from burning wastes during high air pollution days, improving the Community's air quality.
- ◆ **Hunting and Fishing Permits** would provide the Community a mechanism to manage wildlife in times of need for population control.
- ◆ **Wood Harvesting Permits** would enhance the Community's management of wildfire fuel, sustainable resources, restoration, reforestation, and native vegetation protection.
- ◆ Other required environmental quality permits that protect the Community's health and natural resources such as **Dust Control Permits** and **Stormwater Permits**.

Community Funded Positions

There are two (2) fundamental positions in EPNR that are EPA grant funded that the Community should financially support. Those positions are the Grants and Contracts Manager in EPPD and the Environmental Engineer in AQP.

1. **Grants & Contract Manager** – This position is a key position within EPNR and supports every EPNR Program and not just EPPD. If the Community would show its commitment to EPNR by financially supporting this position, it could leverage the grant funds more appropriately in expanding and developing the Solid and Hazardous Wastes Programs.
2. **Air Quality Program Environmental Engineer** – The AQP has been supported by the CAA Section 103 funds which are for program development. The AQP is no longer in the development phase but is ready for active Air Pollution Control activities. In order for the AQP do continue to progress, the Community needs to increase its financial support of AQP personnel. By showing its financial support, the Community can apply for CAA Section 105 funds to become a compliance and enforcement program.

Where is EPNR going?



EPNR is strategically working towards achieving delegated authority over certain federal programs and treatment-as-a-state status. This is a hefty goal which will take extensive time, coordination, and collaboration to achieve. EPNR can only achieve this with a significant increase in personnel resources. EPNR has made significant strides over the last ten years for the protection and preservation of the land, ecosystems, wildlife, history, and natural resources of the Community. With the proper support and resources, EPNR will continue to provide exemplary service to the Community.



Index

- above-ground storage tank, 14
- Administrative Staff, 82
- agricultural inspections (pesticides), 11
- air toxics, 22
- AIRNow.gov, 25
- airshed, 19
- Ambient Air Quality Monitoring Stations, 22
- annual calendar, 68
- Antiquities Act (US), 31
- Antiquities Ordinance (SRPMIC), 31-33
- Archaeological Resources Protection Act, 30-31
- Asbestos Hazard Emergency Response Act, 13
- Au Authum Action News, 68
- bald eagles, 41
- bird exclusion devices, 12
- bison herd management, 39
- Breeding Management (wild horses), 38
- Brownfields, 63-64
- Burn Permits, 83
- carbon monoxide, 20
- categorical exclusion, 29-30
- cattle grazing issues, 42
- CERCLA, 63-64
- Certified Environmental Systems Manager, 13
- Certified Hazardous Materials Manager, 13
- Clean Air Act, 20
- Clean Water Act, 49
- clearance status, 32
- collaboration symbol, 6
- Community Clean-Up Program, 14
- Comprehensive Environmental Response, Compensation, & Liability Act, 63
- Cottonwood Wetland, 53-54, 57, 69
- criteria pollutants (air quality), 20
- Cultural Resources Management Plan, 34
- Cypress Landfill, 64
- Data Manager, 82
- DOAS, 23
- Department of Corrections (SRPMIC), 70
- Department of Energy (U.S.), 31
- Dust Control Permits, 83
- Earth Week, 68
- ecosystem restoration, 45, 57, 65
- Electronic Data Management System, 34
- Emergency Response Plan, 17
- Endangered Species Act, 30
- environmental assessment (EA), 29-31
- Environmental Hotline, 74
- environmental impact statement, 29-30
- Environmental Technician Program, 80
- expand internal programs, 81-82
- Federal Water Pollution Control Act Amendments, 49
- Federal Insecticide, Fungicide, and Rodenticide Act, 10-11
- Feedlot Site, 64-65
- finding of no significant impact, 29-30
- Fish and Wildlife Service (U.S.), 30

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

FONSI, 29-30
Fuel Storage Tank Inspection, 14
General Assistance Program, 7
genetic variability (wild horses), 38
grants and contracts coordination, 8
groundwater database, 55
habitat restoration, 45, 57, 65
Hazardous Air Pollutants, 25
Hazardous and Solid Waste Amendments, 13
Hazardous Waste Program, 80
hazardous waste removal, 13
Health and Human Services, 53
Horse Adoption Program, 38
Horse Donations to Tribes, 38
hunting and fishing permits, 43, 83
Illegal Dump Sites Clean-Up, 15
Inoperable Vehicle Removal Program, 15
Integrated Hazardous Waste Management Plan, 13
Integrated Pest Management Plan, 11
Integrated Solid Waste Management Plan, 13
invasive species, 43
irrigation canal systems, 59
joint evaluation process, 9-10
Joint Air Toxics Assessment Project, 19, 23-24
Juvenile Inmate Horsemanship Program, 70
lead, 20
Lunch at the Landfill, 69
National Ambient Air Quality Standards, 21
National Emissions Inventory, 66
National Environmental Information Exchange Network, 66
National Environmental Policy Act, 29
National Historic Preservation Act, 31
Native American Graves Protection and Repatriation Act, 33
Native Plant Nursery Feasibility Study, 57
Native Plant Ordinance, 41
NEIEN, 66
Nestwatch Program, 41
nitrogen oxides, 20, 21
non-point source, 51, 53
Notice of Intent (stormwater), 56
Notice of Termination (stormwater), 56
NPDES, 56
NPS Watershed Management Plan, 58
ozone, 20, 21
particulate matter, 20, 21
particulate pollution, 20
Permitting Specialist, 82
personnel limitations, 76
Pesticide Ordinance, 11
PM₁₀, 21
PM_{2.5}, 21
Pre-treatment Inspections (pesticides), 12
primary standards (air quality), 21
programmatic environmental assessment, 30
rangeland development planning, 45
record system, 77
recreational vehicular traffic control, 45
recycling program, 16
Request for Review (LUC), 32
Resource Conservation and Recovery Act, 13
resource limitations, 76
restricted-use pesticide, 10
restructure internal programs, 80
rodent control, 12
salt cedar, 43, 54, 57
Salt River, 52, 57, 65
secondary standards (air quality), 21
Septic System Task Force, 58
Stormwater Permits, 83
Stormwater Pollution Prevention Plan, 56, 80
Strategic Plan, 72
Structural Inspections (pesticides), 12
Structures of Concern Demolition, 15
sulfur oxides, 20
Superfund, 64
Tamarisk, 43, 54, 57

ENVIRONMENTAL PROTECTION &
NATURAL RESOURCES DIVISION
INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN

Target Well Closure Plan, 59
Technical and Policy Advisor, 82
threatened and endangered species, 30
Tire Removal Program, 16
Title V Permit, 13
Treatment-as-a-State, 50
TREX, 25
Tribal Authority Rule, 20
underground storage tank, 14
Va Shly'ay Akimel Ecosystem Restoration
Project, 57, 65
Verde River, 52, 57
Volatile organic compounds, 21, 23
watershed mapping, 59
Watershed Protection Booklet, 69
Website, 74
well closures, 59
wetland delineation, 44
Wild Horse and Burros Ordinance, 36
wildlife and species surveys, 44
wood harvesting, 40, 83
Worker Protection Standards, 11