

# EPA-TRIBAL ENVIRONMENTAL PLAN

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SAMPLE

# TABLE OF CONTENTS

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## EPA - TRIBAL ENVIRONMENTAL PLAN

<b>Section 1.0 - Introduction .....</b>	<b>1-1</b>
1.1 Tribal Lands .....	1-2
1.2 Tribal Jurisdiction .....	1-4
1.3 Tribal Environmental Plan – 2001 .....	1-4
1.4 Environmental Planning Department .....	1-5
1.5 EPA-Tribal Environmental Plan – 2015.....	1-6
<b>Section 2.0 - Environmental Program Priorities.....</b>	<b>2-1</b>
2.1 Water and Water Quality.....	2-1
2.2 Air Quality .....	2-7
2.3 Climate Change.....	2-11
2.4 Sources of Assistance & Funding Opportunities .....	2-14
<b>Section 3.0 - EPA Program Priorities .....</b>	<b>3-1</b>
3.1 Clean Water Act Section 106 Tribe’s Treatment as a State.....	3-1
3.2 Clean Water Act Section 319 Non-Point Source Pollution .....	3-1
3.3 Clean Air Act Section 103.....	3-2
<b>Section 4.0 - Inventories of Regulated Entities.....</b>	<b>4-1</b>
4.1 Regulated Entities: .....	4-1

# SECTION 1.0

## INTRODUCTION

ADD BACKGROUND INFORMATION, FOR EXAMPLE: BACKGROUND ON WHAT WAS DONE TO PREPARE FOR THE TEP, WHY IT IS IMPORTANT TO THE TRIBE TO HAVE ONE, ETC.

### 1.1 TRIBAL LANDS

ADD BACKGROUND INFORMATION ON THE TRIBAL LANDS, FOR EXAMPLE, HISTORY, SIZE, LOCATION, POPULATION ETC.

#### TRIBAL LAND USES

The Reservation is unofficially divided into three areas: the Area 1, Area 2, and Undeveloped Areas referenced by the original parcel owners.

The lands of the Reservation are utilized for economic development, Tribal government, Tribal services, and residential uses. **Table 2** identifies the types of facilities located on the three areas of the Reservation.

**TABLE 2**  
TRIBAL FACILITIES  
[EXAMPLE]

Area 1	Area 2	Undeveloped Areas
Administrative Offices	Casino and Events Center	Idle Woodland
Compliance Offices	Parking Garage	Idle Pasture Land
Day Care Facility	Parking Lot	Rural residences
Dental Clinic	Church	Compliance Office
Gaming Commission	Residences (#)	
Tribal Police	Wastewater Treatment Plant	
Learning Center	Wastewater Effluent Storage	
Medical Administration	Potable Water Storage Tanks	
Medical Clinics	Equipment Staging Areas	
Pole Barn	Golf Course	
Public Works Department		
Residences (#)		
Tribal Meeting Hall		
Youth Center		

Source: include citation

## 1.2 TRIBAL JURISDICTION

### **Tribal versus State Jurisdiction**

There is a distinction regarding Tribal environmental compliance requirements between Federally-held Tribal lands and Tribal land held in fee. Lands held in Trust by the BIA (Tribal Community Trust lands) are blanketed under federal law. Compliance with environmental regulations, such as the Clean Air Act and Clean Water Act, is under the jurisdiction of the USEPA. State, county, and local laws and regulations do not apply to these lands. Tribal lands held in fee title (Tribal Community Fee lands), must comply with local jurisdiction. Environmental regulation is under the jurisdiction of the State and corresponding State agencies, or where the State has conferred compliance responsibility to local jurisdictions (counties, cities, special districts), Tribal actions must comply with local laws, regulations, and plans.

### **Tribal Jurisdiction over Non-Members**

Generally, Indian tribes may retain inherent power to exercise civil authority when conduct of non-tribal members on fee lands within the boundaries of the Reservation threatens or has some direct effect on the political integrity, the economic security, or the health and/or welfare of the Tribe [*Montana v. United States*, 450 U.S. 544, 566 (1981); see also *Atkinson Trading Co. Inc. v. Shirley*, 532 U.S. 645 (2001)]. In relation to Tribal environmental compliance, rulings of the US Supreme Court have maintained that tribe's have the authority to exercise jurisdiction over non-tribal member actions that may result in non-compliance with Tribal ordinances of Federal statutes relating maintenance of the Reservation's environment.

## 1.3 TRIBAL ENVIRONMENTAL PLAN – 2001

A Tribal Environmental Plan (TEP) was prepared in September 2001. The 2001 TEP was developed to provide a framework for the management of environmental issues facing the Tribe, by identifying the most important environmental issues and outlining strategies to address these issues, including Federal funding sources for implementation. The TEP was required by the US Environmental Protection Agency as a requirement of initiating funding from the General Assistance Program (GAP) to develop and implement Tribal environmental programs.

The following were identified in the 2001 TEP as key environmental issues facing the Tribe:

1. Water Quantity and Quality;
2. Wastewater Treatment;
3. Environmental Planning;
4. Environmental Structure;
5. Natural and Cultural Resources Management;
6. Hazardous Materials Management;
7. Air Quality;
8. Solid Waste Management;
9. Casino Environmental Management; and
10. Community Outreach.

The 2001 TEP has helped to guide the Tribal Environmental Planning Department, Public Works Department, Cultural Resources Department, Tribal Medical Services Department, and the Tribal Council in developing the Tribe's Environmental Program. Since the development of the TEP, the Tribe has applied for and received various grants (GAP and Clean Water Act) to implement many of the projects and actions identified in the TEP, including Treatment as a State under the Clean Water Act. Future uses of the EPA GAP funding will be used to maintain existing environmental programs, expand the capacity of such programs and to develop new capacities within the Tribe's Environmental Planning Department to best serve the needs of the tribal membership.

## **1.4 ENVIRONMENTAL PLANNING DEPARTMENT**

In 2001, a Tribal Environmental Planner (Planner) was hired through funding from the USEPA General Assistance Program (GAP) grant to assist in developing an environmental program to reduce environmental hazards on the Reservation and ensure continued compliance with Federal and local regulations. The Planner was also responsible for the administration and management of environmental grant activities. With the adoption of Tribal Council Resolution No. 2000-121, the Environmental Planning Department was given responsibility for the protection of the Reservation's environmental resources on lands held in trust for the Tribe by the Bureau of Indian Affairs, lands held in fee by the Tribe, and individual fee and trust lands within the boundaries of the Reservation. The Environmental Planning Department works with the Tribal Council Designee, Tribal Legal Counsel, Tribal Public Works Department, Cultural Resources Department, Tribal Medical Services, and casino managers to manage the Tribal environmental resources.

### **OPERATIONS**

The Tribal Environmental Planning Department is a funded extension of the Tribal Council and operates under the guidelines outlined in the *Policies and Procedures Environmental Planning Department* (Policies and Procedures) developed in 2000 by the Environmental Planning Department. **Table 1-1** provides a personnel summary within the Environmental Planning Department.

Policies and Procedures include provisions to carry out the following:

1. Maintenance of files and records pertaining to the protection of the environment;
2. Accounting for funding environmental protection operations;
3. Administration of personnel within the Environmental Planning Department;
4. Procurement of supplies and equipment to implement provisions of the Environmental Protection Ordinance; and
5. Procedures for environmental planning.

**TABLE 1-1**  
ENVIRONMENTAL PLANNING DEPARTMENT STAFFING

Title	Name	Responsibility	Phone Number
Environmental Manager		Grant development and administration, Tribal Council coordination/reporting, Budgeting; Compliance review, and Department management.	
Administrative Assistant III		Administrative coordination/ support, Staff scheduling/ coordination, and Document coordination/support.	
Air Quality Specialist		Air quality grant implementation, Air quality program implementation, Air Quality monitoring/reporting, Document preparation, Compliance decisions, and Director support.	
Water Quality Specialist		Clean Water Act grant implementation, Water quality program implementation, Water Quality monitoring/reporting, Document preparation, Compliance decisions, and Director support.	

## 1.5 EPA-TRIBAL ENVIRONMENTAL PLAN – 2015

In May 2013, the U.S. Environmental Protection Agency (EPA) released its new guidance for the Indian Environmental General Assistance Program (GAP), an assistance award program that helps tribes to establish and develop environmental programs in Indian Country. A new component of the GAP guidance requires that tribes and EPA jointly develop an EPA-Tribal Environmental Plan (ETEP) defining mutual roles and responsibilities for program implementation.

Through the development of this ETEP, both the EPA and the tribe have identified long-term environmental program planning, and will be better positioned to ensure that GAP is being used effectively to build Tribal environmental program capacity. This ETEP is specific to this tribe and serves as a living and adaptable document for both tribes and EPA as environmental partners to use in planning and implementing our work. The ETEP is a guidance document, and is not intended to create any enforceable obligation for the tribe.

The EPA 2013 GAP guidance specifically lists the following components for developing an ETEP:

1. Identification of Tribal Environmental Program priorities, including capacity building and implementation goals,
2. Identification of EPA program priorities and management requirements,

3. Inventory of regulated entities, and
4. Identification of mutual roles and responsibilities.

## **PURPOSE**

The scope of this plan shall cover the period of 2016 through to 2020 and is meant to guide the tribe in realizing the environmental goals and priorities as identified at the time this document was drafted.

Tribal staff recognizes that priorities and needs change, and shall amend the document as the tribe sees fit to serve the needs of the Tribe's environmental programs. The administration of this plan shall be by the Tribe's Environmental Planning Department under the direction of the Tribal Council.

## **2015 ETEP – ORGANIZATION**

This ETEP contains the following five sections:

### **(1.0) *Introduction***

- Summary of the history of the Tribe's Environmental Planning authority and operations;
- Environmental management goals of the Tribal Council; and
- ETEP purpose and organization.

### **(2.0) *Tribal Environmental Program Priorities***

- Summary of the resource conditions on tribal lands;
- Summaries of environmental program priorities;
- Tribe's long-term environmental program development goals;
- Intermediate program development milestones within the four-year planning period;
- Plans to manage authorized environmental programs; and
- Assistance needed to implement the environmental programs.

### **(3.0) *EPA Programs and Priorities***

- Tribe's Treatment as a State Responsibilities;
- EPA Implementation Programs; and
- Programs with no applicable regulated entities within or adjacent to Tribal lands.

### **(4.0) *Inventories of Regulated Entities***

- Description of entities regulated under EPA or other environmental programs.

## **SECTION 2.0**

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### **ENVIRONMENTAL PROGRAM PRIORITIES**

The environmental program priorities presented in this section are an important factor in how the tribe will partner with the EPA to meet short and long-term program development milestones for building capacity. This ETEP also addresses specific technical assistance and training the tribe may need from EPA. The following details are presented for each priority:

- Short description of the priority;
- The tribe's long-term environmental program development goals that help to address or support the priority;
- Intermediate program development milestones the tribal government would like to meet during the time period of the ETEP;
- The tribe's plans to manage authorized environmental programs; and
- Any type of assistance (training, technical assistance, EPA direct implementation actions, financial, etc.) that may be needed.

The Tribe has identified the following Environmental Program Priorities:

#### **2.1 WATER AND WATER QUALITY**

##### **SURFACE WATER**

*PROVIDE BACKGROUND INFORMATION, FOR EXAMPLE: Description and name of the watershed, names of water bodies, creeks, rivers, dams, topography, etc.*



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## **Surface Water Quality**

*PROVIDE BACKGROUND INFORMATION, FOR EXAMPLE: What influences surface water quality such as land use and waste disposal; whether there are any known water quality issues, any levels of contaminants, exceedances, etc.*

## **GROUNDWATER**

*PROVIDE BACKGROUND INFORMATION, FOR EXAMPLE:*

*Where the tribe is located within a groundwater basin, any information you know about the groundwater aquifer, the uses of groundwater on the reservation, groundwater storage if any, whether there are groundwater wells on tribal lands, and how many.*

## **Groundwater Quality**

*ADD BACKGROUND INFORMATION, FOR EXAMPLE:*

The 2014 Consumer Confidence Report (CCR) completed by the Tribe details the sources of the drinking water supply and the level of contaminants found during water quality testing. The water, which is pumped from 850-1000 feet below ground surface level, is treated with chlorine injections in order to kill bacteria that may be present. In 2014, the Tribe supplemented their drinking water supply with water purchased from the County, the City, and the County Water Works District. The purchased water was mixed with the Reservation's well water in the potable water storage tanks located in the upper and lower Reservation.

According to the CCR, the following activities are the most prominent sources of pollution: erosion of natural deposits, runoff from fertilizer use, leaching from septic tanks, and byproducts of the water chlorination process. The water quality analysis within the CCR showed that there were no analytes tested that exceeded their Maximum Contaminant Level (MCL). The MCL is the highest level of a contaminant that is allowed in drinking water in accordance with the Federal Safe Drinking Water Act before the water is deemed unsafe. Some areas of concern include radionuclides, metals, nitrates, and byproducts of chlorination.

Wells contain naturally occurring detectable levels of uranium. The identified levels are not considered harmful as they are below the MCL for uranium. The uranium is most likely derived from the erosion of natural deposits from certain minerals found in the aquifer. The erosion of natural deposits is also the source of arsenic in the water. The water analysis showed arsenic concentrations below the MCL. Nitrates were detected at levels below the MCL. There are many sources of nitrates including: runoff and leaching from fertilizer use, leaching from septic tanks, sewage, and erosion from natural deposits. No positive sample for microbiological contaminants was identified.

## **THE TRIBE'S PROGRAMS**

### **Clean Water Act Section 106**

In November 2003 the EPA approved the Tribe's original Quality Assurance Project Plan (QAPP) to initiate a Water Quality Monitoring Program (WQMP). The QAPP details operational provisions involved in performing surface water and groundwater sampling on the property, which includes Tribal Trust land, Tribal Fee land, Trust Allotment land and Individual Fee land for a total of XX acres. Since the development of the 2003 QAPP,

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the tribe purchased additional lands with varying portions having been conveyed in trust to the BIA and a larger wastewater treatment plant (WWTP) has been constructed and a corresponding National Pollutant Discharge Elimination System (NPDES) permit (Permit No. CA00XXXX) for the discharge of tertiary treated recycled water has been issued to the Tribe. Accordingly, the QAPP was updated to address the increase in land holdings and changes to the Tribe's operations and was approved by EPA in 2013. As stated in the QAPP, the problem is not that there exists contamination and a need for remediation, but that a water quality monitoring program should be implemented to ensure water quality in the future. As addressed in the September 2001 "Tribal Environmental Plan" publication, there is currently "no clear oversight by management of water quality monitoring and record keeping ensuring accuracy, reliability, and consistency."

### **Clean Water Act Section 319**

The Tribe prepared a Nonpoint Source Assessment Report and Nonpoint Source Management Program and submitted this document to the EPA in November of 2002. EPA approved both the Assessment Report and Management Plan in December of 2002. Since that time, the Tribe has used grant funding to implement the management plan to understand the relationship between land uses on Tribal land and water quality. However, the size of the Reservation has greatly increased as described above since the original 2002 assessment. The Tribe has updated its NPS Assessment Report that was prepared to support the Tribal NPS pollution prevention program in assessing the effects of NPS pollution on water quality in the expanded Reservation and to supplement the development of the NPS Pollution Best Management Practices Plan; however, formal approval has not yet been received.

In addition, The Tribe developed a NPS Management Program Plan to fulfill the USEPA's application requirements for Clean Water Act, Section 319(h) Grant funds. The Nonpoint Source Management Program Plan was revised in 2013 to incorporate management considerations associated with changes to the Tribe's land holdings since the development of the 2002 Nonpoint Source Management Program Plan. Revisions include updates to the management program to outline projects for Clean Water Act Section 319(h) funding for Fiscal Years (FY) 2014 through 2019.

### **WATER AND WATER QUALITY PRIORITY: WATER QUALITY MONITORING PROGRAM DEVELOPMENT**

The Tribe is committed to the continuation and expansion of the WQMP to monitor, manage, and protect water resources to the highest attainable quality of the Tribe's ability. Looking forward, the Tribe's goals are to maintain and expand upon the WQMP to include:

1. Establish Core Administrative Capacities,
2. Increased continuous data monitoring capacity,
3. Expansion of water quality monitoring stations and frequency,
4. Increase of water quality monitoring staff, and
5. Improve/protect the Tribe's drinking water sources.

**TABLE 3**  
**WATER QUALITY MONITORING PROGRAM DEVELOPMENT INTERMEDIATE GOALS AND MILESTONES**

Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Establish Core Administrative Capacities	Seek grant and tribal program funding to support hiring staff with appropriate skills, knowledge and experience to manage the WQMP.	B.2.2	2016
	Develop a training plan for staff that reflects the capacity-building priorities for the WQMP.	B.2.3; D.3.2	2016-2017
Increased Water Quality Monitoring Program Capacities	Determine the feasibility and cost analysis of continuous monitoring of selected WQ stations in relation to the Tribe's NPDES permit.	D.3.10	2017
	Procure technical WQ equipment to implement continuous monitoring.	D.3.13	2017
	Identify tribal land use activities that may have the potential to impact tribal water resources.	D.3.9	2018
	Establish new monitoring stations, draft WQ monitoring plan amendments, and update the Tribe's QAPP.	D.3.10	2018
	Inventory environmental resources not previously inventoried on tribal trust lands which may serve as indicators for watershed health.	D.3.9	2016 and with each subsequent land purchase
	Seek grant and program funding support for equipment purchases.	D.3.10	2016
Improve and Protect Drinking Water	Implement the Tribe's Wellhead Abatement Plan	D.3.35	2019

Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Sources	Delineate wellhead protection zones and integrate into land use planning	D.3.341	2019
	Draft Wellhead Protection Ordinance to coordinate with other Tribal government operations	B.2.8	2017

<sup>1</sup>-Capacity indicators from Appendix I *Guidebook for Building Tribal Environmental Program Capacity of the Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia* (May 15, 2013)

To realize these ambitions the Tribe shall need financial and technical assistance to meet program goals and objectives. Technical assistance either from the EPA or other state and local governments including the Institute for Tribal Environmental Professionals shall be solicited for continued professional development of tribal staff skills. Through the use of the Tribe’s future EPA assistance agreements, the Tribe shall seek the financial support to expand tribal water quality stations, water quality staff, and to procure water quality supplies and equipment. Through Tribal and EPA grant funding, the Tribe will ensure wells are appropriately abandoned to protect water quality and wellhead protection zones are delineated and integrated into the Tribe’s planning activities.

**WATER AND WATER QUALITY PRIORITY: WETLAND PROGRAM DEVELOPMENT**

At this time, there is no official wetlands program operated by the Tribe. Projects being conducted by the Tribal departments are responsible for ensuring compliance with the Clean Water Act. The Tribe is committed to establishing a Wetlands Program under the Environmental Planning Department. The long term advance of a Wetland program shall include the following:

1. Development of a Wetlands Program,
2. Integrate identified wetlands into existing tribal water and land monitoring efforts,
3. Seek and apply for funding opportunities to implement and sustain a tribal wetland program,
4. Train tribal staff in the delineation of wet land resources,
5. Purchase wet land monitoring and assessment field and reference tools,
6. Ensure the validity of wet land monitoring and assessment efforts, update the tribal Quality Assurance Project Plan (QAPP) to include wet land methods and procedures,
7. Develop tribal baseline data on wet land conditions and formulate a GIS strategy or protocol to prioritize wet land conservation, protection and restoration needs for urban and non-urban areas.
8. Develop spatial assessment and analysis tools that can be used to: rank wetlands based on their suitability for conservation, restoration, and mitigation needs; determine conservation/restoration priority areas.

**TABLE 4**  
**WETLAND PROGRAM DEVELOPMENT INTERMEDIATE GOALS AND MILESTONES**

Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Develop a Wetlands Program	Seek grant and tribal program funding to support development of a 6 year Wetlands Program Plan	D.3.17	2017
Integrate Wetlands into Existing Tribal WQMP	Generate monitoring plan and update WQMP QAPP to integrate wetland assessments.	D.3.18	2018
	Gather, compile, and organize wetland metadata, plant data, and GPS data.	D.3.18	2018
	Develop GIS assessment and analysis tools that can be used to rank wetlands.	D.3.18	2019
	Gather, compile, and organize wetland metadata, plant data, and GPS data.	D.3.18	2019-2020

<sup>1</sup>-Capacity indicators from Appendix I *Guidebook for Building Tribal Environmental Program Capacity* of the *Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia* (May 15, 2013)

The Tribe shall need financial and technical assistance to meet wetland program goals and objectives. Technical assistance either from the EPA, other state and tribal governments, or private contractors shall be solicited as the Tribe moves forward with to achieving all four aspects of the EPA's CEF for wetland program development. Where appropriate, the Tribe shall use future EPA assistance agreements in order to support staff, equipment and supplies procurement, and program implementation.

**WATER AND WATER QUALITY PRIORITY: STORM WATER MANAGEMENT AND LOW-IMPACT DEVELOPMENT INFRASTRUCTURE DEVELOPMENT**

At this time, there is no official stormwater management program operated by the Tribe. Projects being conducted by the Tribal departments are responsible for ensuring compliance with the Clean Water Act, including stormwater requirements under the EPA National Pollution Discharge Elimination System General Construction Permit.

The Tribe seeks to develop the in-house capacity to plan, design and implement Low Impact Development (LID) technologies into future tribal projects requiring Tribal Council approval to reduce the expense and impact of urban development upon the Tribe's open spaces. The Tribe's long term goals are to develop the knowledge, skills and abilities of tribal staff to identify watershed hydrological limitations in project developments, design LID structures to mitigate development impacts and to provide professional oversight on the construction of LID infrastructure into tribal urban developments.

With land use planning and development, hydrological processes are often ignored or are considered secondary expenses. By incorporating hydrological processes into land use development and retaining hydrology functionality in the landscape, developers and urban managers can often reduce storm water treatment and emergency flooding costs. The long term advance of a LID program shall include the following:

1. Development of a LID planning document,
2. LID tribal policy,

3. Staff knowledge and design capacity to implement LID technologies into tribal projects,
4. Implementation of tribal policy and LID planning into tribal projects.

**TABLE 5**  
LID PROGRAM GOALS AND MILESTONES

Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Development of a LID Planning Document	Prepare a feasibility study of current and future tribal projects with the potential for LID inclusion.	B.2.8	2017
	Draft a Tribal LID planning strategy to guide LID design and implementation into tribal projects.	B.2.8	2018
Adopt a Low Impact Development Tribal Policy	Utilizing the Tribal LID planning document, draft a LID Tribal Policy	B.2.8	2018
	Release the LID Tribal Policy for internal and peer review and comments.	B.2.8	2018
	Provide a Tribal Council Workshop on the LID Tribal Policy and seek a Tribal resolution adopting the policy.	B.2.8	2020
Increase Staff LID Knowledge	Seek and attend a basic principles and techniques course on LID design and implementation for tribal staff	B.2.8	2018
Implementation of LID Policy	Incorporate LID design and planning into the implementation of tribal projects.	B.2.8	2020

<sup>1</sup>-Capacity indicators from Appendix I *Guidebook for Building Tribal Environmental Program Capacity* of the *Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia* (May 15, 2013)

To realize these goals the Tribe shall seek financial and technical assistance to meet program goals and objectives. Technical assistance either from the EPA or other state and tribal governments shall be solicited for the basic understanding LID concepts and designs. Through the use of the Tribe's future GAP assistance agreements, the Tribe shall seek the financial support to send tribal staff to LID trainings; and also to support tribal staff salaries and benefits while researching, developing and drafting LID planning and policy documents.

## 2.2 AIR QUALITY

The Tribe is located in northeastern County, in the unincorporated community of Somename in the foothills of the Mountain Range. Regional climate and topography play a large role in ambient air pollution concentrations. The Reservation lies within the foothills of the central portion of the Valley. Airflow patterns within the Valley can generally be characterized by one of four directional types; northwesterly up-valley winds, marine winds from the Bay, down-valley and foothill drainage (down sloping) winds, and northerly (non-marine) winds resulting from the exiting of a low pressure system. During the winter, down-sloping winds from the Mountains predominate because of high-pressure systems to the east, and during the summer, northwesterly winds predominate because of the entrance and exit of low-pressure systems. The Air Basin is approximately 300 miles long and shaped like an oblong bowl, allowing air pollutants such as the ozone precursors nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG) to be retained near the valley floor. On

average, near the Valley floor there are 35-40 days each year that exceed the federal health-based standards for ground-level ozone. The boundaries of the designated Air Basin encompass many counties and several federally recognized Tribes. Non-Tribal lands located within the basin are under the jurisdiction of the Air Pollution Control District, California Air Resource Board (CARB), and the EPA, while Tribal lands are only subject to EPA jurisdiction.

Under the federal Clean Air Act (CAA, located at; <http://www.epa.gov/air/caa/>) six pollutants are designated as Criteria Air Pollutants (CAPs): ozone, carbon monoxide (CO), NO<sub>x</sub>, PM<sub>10</sub>, and sulfur dioxides (SO<sub>x</sub>). The California Clean Air Act includes the same six criteria pollutants under the CAA, plus the following four pollutants: vinyl chloride, hydrogen sulfide, sulfates, and visibility reducing particles. The six criteria pollutants and four California pollutants are designated attainment, nonattainment, or maintenance as defined below:

- Attainment – a criteria pollutant that has not violated standard set under the CAA
- Nonattainment – either the Federal or California standard has been violated
- Maintenance – the standard has been violated; however, the air basin now shows attainment and has applied for maintenance status

**Table 6** shows the ambient air attainment status applicable to the Reservation, located within the Air Basin.

**TABLE 6**  
FEDERAL AND CALIFORNIA AMBIENT AIR ATTAINMENT STATUS

Pollutants	Designation/Classification	
	Federal	California
Ozone 1-hour	No Federal Standard	Nonattainment/Severe
Ozone 8-hour	Nonattainment/Extreme	Nonattainment
PM <sub>10</sub>	Attainment	Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: Air Pollution Control District, 2013.

Ambient air quality data is collected through a network of air monitoring stations located throughout the Air Basin. This data is used by the United States Environmental Protection Agency (USEPA) to determine the ambient air attainment status of an air basin. **Table 7** provides a three-year summary listing the highest annual concentrations observed at the 1st Avenue monitoring station. This station was selected because of its relative proximity to the Reservation.

**TABLE 7**  
FEDERAL AND STATE AIR MONITORING DATA

Pollutant	Standard	2010	2011	2012
<b>PM<sub>10</sub> Federal 24-hour:</b>				
Highest	150 ug/m <sup>3</sup>	62.8	71.6	74.2
Days Exceeded		0	0	0
<b>PM<sub>2.5</sub> Federal:24-hour:</b>				
Highest	35 ug/m <sup>3</sup>	75.2	76.4	80.8
Days Exceeded		20	38	24
<b>Ozone State 1-hour:</b>				
Highest	0.09 ppm	0.133	0.133	0.124
Days Exceeded		3	2	0
<b>Ozone Federal 8-hour:</b>				
Highest	0.07 ppm	0.105	0.103	0.108
Days Exceeded		4	15	20
<b>PM<sub>10</sub> 24-hour State:</b>				
Highest	50 ug/m <sup>3</sup>	62.2	77.0	78.3
Days Exceeded		48	53	56

*Source:* California Air Resource Board, 2013.

Pollutants of concern are CAPs that have been identified in an air basin as being present in concentrations above their corresponding ambient air quality standard. The pollutants of concern under the federal and California CAA in the Air Basin are ozone, PM<sub>2.5</sub>, and PM<sub>10</sub>. Major sources of CAPs on the Tribe include motor vehicle emissions from Tribal enterprises, wood-burning fireplaces, and pollutants transported from the adjacent Valley.

### **INDOOR AIR QUALITY**

The total quantity of air pollutants emitted indoors is less than that emitted by outdoor sources. However, once emitted, indoor air pollutants are diluted much more slowly, due to the partial trapping effect of the building shell. Additionally, indoor emissions occur in closer proximity to people; Californians, like others from industrialized nations, spend most of their time indoors. California adults spend an average of 87 percent of their time indoors, and children under 12 years of age spend about 86 percent of their time indoors. Most of the time spent indoors is spent in the home; however, working adults spend about 25 percent of their time at other indoor locations such as office buildings, stores, and restaurants, primarily for work, while children spend about 21 percent of their time in school on a school day. Because of these time budgets, the trapping effect of buildings, and people's proximity to indoor emissions, there is a much higher likelihood that people will be exposed to indoor pollutants than outdoor pollutants. Investigators have calculated that pollutants emitted indoors are 1,000 times more likely to be inhaled than those emitted outdoors.

Chemicals found in indoor air pollution can cause a variety of impacts on human health, from irritant effects to respiratory disease, cancer, and premature death. Indoor air pollutants can be elevated to levels that may result in adverse health effects. The health impacts of greatest significance include asthma, cancer, premature death, respiratory disease and symptoms, and irritant effects.



Inadequate ventilation can increase indoor pollutant levels by not bringing in enough outdoor air to dilute emissions from indoor sources and by not carrying indoor air pollutants out of the building. High temperature and humidity levels can also increase concentrations of some pollutants. Ventilation is a standard engineering approach to assuring good indoor air quality and comfort. Ventilation removes and dilutes indoor contaminants, removes moisture from the air, which helps to prevent mold growth, and removes body effluents such as carbon dioxide that lead to a stuffy environment. Natural ventilation, through open windows and doors, is the primary ventilation route for residences, while mechanical ventilation, using heating, ventilation, and air conditioning (HVAC) systems, is most common in commercial buildings. Adequate and effective ventilation, and ducting of exhaust from combustion appliances, are necessary for acceptable indoor air quality, even when known air contaminants are minimized.

**Tribal PROGRAMS**

**Clean Air Act Section 103b**

In 2014, the Tribe commenced development of an air quality program under CAA Section 103b funding for Fiscal Year 2014-2015. The funds are being used to develop an air monitoring station on Tribal lands. The first phase of monitoring will entail installation of equipment to measure PM2.5 and ozone O3. A second phase would entail installation of equipment to measure PM10 and installation of a weather tower. The Tribe’s QAPP for the ambient air quality monitoring station was approved on February, 6 2015.

**AIR QUALITY PRIORITY: ESTABLISH THE TRIBE’S AIR QUALITY PROGRAM (INCLUDING INDOOR AIR QUALITY).**

The Tribe is committed to developing an Air Quality Program to monitor, manage, and protect air resources, including indoor air, to the highest attainable quality of the Tribe's ability. Looking forward, the Tribe's goals are to develop an Air Quality Program including air quality monitoring which would require the Tribe to:

1. Establish Core Administrative Capacities,
2. Establish Staff Technical Capabilities
3. Establish data monitoring capacity,
4. Expansion of water quality monitoring stations and frequency,
5. Increase of water quality monitoring staff,
6. Maintain and increase the efficiency of water quality monitoring data collection, and
7. Increase the capacity and efficiency of water quality data management.

**TABLE 8**  
AIR QUALITY PROGRAM DEVELOPMENT INTERMEDIATE GOALS AND MILESTONES

Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Establish Core Administrative Capacities	Seek grant and tribal program funding to support hiring staff with appropriate skills, knowledge and experience to manage air quality.	B.2.2	2016
	Develop a training plan for staff that reflects the capacity-building priorities for the Air Quality Program.	B.2.3	2016

Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Establish Staff Technical Capacities	Complete appropriate training and acquired baseline knowledge and skills related to the CAA.	C.3.2	2017
	Staff has completed appropriate indoor air quality training and acquired skills related to indoor air quality (e.g., Healthy Homes training).	C.3.2	2017
Develop Preliminary Air Quality Inventories	Complete an emissions inventory and submit to the National Emissions Inventory Database.	C.3.6	2018
	Complete a report analyzing air quality and radiation hazard issues impacting the Tribe and evaluated air pollution control options.	C.3.9	2018
	Complete an indoor air quality assessment and report.	C.3.10	2018
Develop Air Quality Monitoring Program	Develop an air monitoring strategy and associated quality assurance project plan for ozone.	C.3.7	2019
	Establish a program to collect and upload quality assured ambient air monitoring data into the Air Quality System (AQS) database	C.3.8	2020
Implement Indoor Air Quality Improvement Program	Prepare a report recommending actions to improve indoor air quality and reduce levels for radon, mold, moisture, and environmental pollutants	C.3.12	2019
	Incorporate indoor air quality improvements or features as part of building renovation programs (e.g., weatherization and rehabilitation) and new construction.	C.3.13	2020
	Establish a radon program that tests residential and other occupied structures for radon, identifies those above the EPA action level, and conducts outreach and education in the community	C.3.11	2019

<sup>1</sup>-Capacity indicators from Appendix I *Guidebook for Building Tribal Environmental Program Capacity of the Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia* (May 15, 2013)

To realize these ambitions the Tribe shall need financial and technical assistance to meet program goals and objectives. Technical assistance either from the EPA or other state and tribal governments shall be solicited for continued professional development of tribal staff skills. Through the use of the Tribe's future EPA assistance agreements and funding under the CAA, the Tribe shall seek the financial support to develop and implement a Tribal Air Quality Program.

### 2.3 CLIMATE CHANGE

The *Fourth Assessment Report*, issued by the International Panel on Climate Change (IPCC) in 2001, anticipates that the average global temperature between the years 2000 and 2100 could rise from 0.6° C (33.0° F) to 4.0° C (39.2° F) (IPCC, 2007). The extent to which human activities affect global climate change is a subject of considerable scientific debate. While many in the scientific community contend that global climate variation is a normal cyclical process that is not necessarily related to human activities, the IPCC report

identifies anthropogenic greenhouse gases (GHGs) as a contributing factor to changes in the Earth’s climate (Michaels, 2004; IPCC, 2007).

**EFFECTS OF GREENHOUSE GASES**

The Earth’s temperature is regulated by a process known as the “greenhouse effect.” GHGs consist of primarily water vapor (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), which trap the heat of the sun, preventing radiation from dissipating into space. Water vapor is the most abundant GHG and CO<sub>2</sub> is a distant second. Without the effect of these GHGs, which are both naturally occurring and anthropogenic, the average temperature on the Earth would be approximately –18° C (-64.4° F), instead of the current average of 15° C (59° F).

Results from IPCC models, have allowed inferences that anthropogenic CO<sub>2</sub> in the lower atmosphere has increased by approximately 31 percent since the year 1750. At the same time, average temperature in the lower atmosphere has increased approximately 0.6° C (33.0° F) to 0.8° C (33.4° F). Due to the challenges inherent in modeling the complexities of the Earth’s climate, the proportional importance of anthropogenic activities as opposed to natural feedback systems is exceptionally difficult to establish. Nonetheless, the IPCC concludes that “most of the observed increase in globally-averaged temperatures since the mid-20<sup>th</sup> century is very likely due to the observed increase in anthropogenic GHG concentrations.” As noted above, this EIS assumes that an increase in anthropogenic GHG concentration is in fact contributing to global warming.

IPCC theorizes that a continuation of this warming trend could have profound implications, which may include: flooding, erratic weather patterns, increased sea levels, and reduced arctic ice. The IPCC projects a number of future GHG emissions scenarios leading to a varying severity of impacts on the environment and the global economy. According to the 2007 IPCC report, if anthropogenic GHG continue to increase in the atmosphere there will be a point at which the above impacts would become irreversible, this point is commonly referred to as the “tipping point.” Although the 2007 IPCC Report states the tipping point may be as far off as 20 years, some experts contend the tipping point has already been reached.

**Table 9** illustrates the State contribution to the global increase in GHG emissions. As shown, without modifications in human activities or the introduction of new technologies, GHG emissions are anticipated to increase.

**TABLE 9**  
GLOBAL GREENHOUSE GAS EMISSIONS

Regions	Estimated GHG Emissions Million metric tons per year of CO <sub>2</sub> e <sup>1</sup>
	<b>1990</b>
Global Emissions	626,395
California Emissions	427
	<b>2020</b>
Global Emissions	882,246
California Emissions	600

<sup>1</sup>Carbon Dioxide Equivalent (see above) Source: CARB, 2007

**Tribal PROGRAMS**

Impacts associated with Climate Change that would affect the Tribe include severe drought, loss of forest canopy, and increase in severe weather. Currently, the Tribe is developing a Tribal Hazard Mitigation Plan (THMP) to address the Tribe’s response to such events. All Tribal agencies have a vested role in addressing these hazards, including the Environmental Planning Department and assisted in the development of the THMP.

**CLIMATE CHANGE PRIORITY: CLIMATE CHANGE ADAPTATION AND MITIGATION STRATEGIES**

Track climate change adaptation and mitigation assessments and strategies for Native American Tribes, develop tribal specific climate change adaptation and mitigation strategies and recommendations, and provide feedback to the Tribal Council. The long term advance of a climate change adaptation strategy shall include the following:

1. Build tribal capacity to appropriately address climate change issues for the Tribe.
2. Staff attendance at climate change adaptation and mitigation meetings
3. Development of tribal specific Climate Change adaptation and mitigation strategies and recommendations.
4. Implementation of recommendations and strategies.
5. Development of the Tribe’s Water Efficiency Policies and Programs
6. Development of research reports and publications.

**TABLE 10**  
CLIMATE CHANGE ADAPTATION INTERMEDIATE GOALS AND MILESTONES

Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Build Tribal Capacity to Appropriately Address Climate Change	Seek funding to support staff time and travel.	C.3.15	2017
Attend Climate Change Adaptation and Mitigation Meetings.	Attend meetings, take notes and compile outcomes for review.	C.3.15	2017
Develop Tribal Specific Climate Change Adaptation and Mitigation Strategies and Recommendations.	Conduct Climate Change Vulnerability/Risk Assessment	C.3.14	2017
	Draft the Tribe’s Climate Change Strategic Plan.	C.3.15	2018
Implementation of recommendations and strategies.	Present recommendations and strategies from the Tribal Climate Change Strategic Plan to the Tribal Council for adoption.	C.13.15	2019
Development of Tribal Water Efficiency Policies and Programs	Develop tiered policies for water preservation and efficient uses. Policies should range from voluntary to mandatory based on the extent of a current drought and availability from Tribal water sources	D.3.7	2016

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Goal	Program Activity	Capacity Indicators <sup>1</sup>	Completion Date
Climate Change Strategic Plan Community Outreach	Develop and implement community outreach materials and strategies for a centralized database or webpage for public review.	C.3.15	2020

<sup>1</sup>-Capacity indicators from Appendix I *Guidebook for Building Tribal Environmental Program Capacity of the Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia* (May 15, 2013)

The Tribe shall seek the assistance of other tribes and state and federal agencies in building the knowledge and capacity to address climate change risks. The Tribe also looks forward to continued EPA funding to support climate change adaptation tool development. Tribal challenges to realize these climate change priorities lie in the need for additional staff, staff training, and opportunities to meet and collaborate with other tribal and government agencies developing similar mitigation strategies.

## **2.4 SOURCES OF ASSISTANCE & FUNDING OPPORTUNITIES**

The Tribe anticipates that the majority funding of the Tribe’s priorities listed within this document can be met utilizing EPA, GAP funding. For additional funding tribal staff shall prepare and submit grants from state, federal, and local granting agencies for program implementation. The Tribe may also use general funds to achieve certain priorities as well.

Technical assistance for priority implementation shall be sought through the Tribe's existing relationships with other tribes, state and federal agencies. Where appropriate and available the Tribe may utilize EPA GAP funding to train staff in technical knowledge and skills to implement program priorities as well. Third party contractors will be hired for technical support and implementation when it is cost effective and benefits tribal programs.

## **SECTION 3.0**

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### **EPA PROGRAM PRIORITIES**

As the EPA Indian Policy underscores, until tribal governments assume responsibility for managing programs authorized, approved, or delegated by the Agency, EPA retains responsibility for human health and environmental protection by managing federal statutory environmental programs. This section presents Federal environmental programs the Tribe is implementing with TAS status; federal environmental programs the Tribe is not planning to develop and therefore fall under the EPA; and programs that are not relevant currently because there are no applicable regulated entities within or adjacent to Tribal lands.

#### **3.1 CLEAN WATER ACT SECTION 106 and TREATMENT AS A STATE**

In November 2003 the EPA approved the Tribe's original Quality Assurance Project Plan (QAPP) to initiate a Water Quality Monitoring Program (WQMP). The QAPP details operational provisions involved in performing surface water and groundwater sampling on the Reservation's property, which includes Tribal Trust land, Tribal Fee land, Trust Allotment land and Individual Fee land for a total of 222 acres. Since the development of the 2003 QAPP, the Tribe purchased additional lands with varying portions having been conveyed in trust to the BIA and a larger wastewater treatment plant (WWTP) has been constructed and a corresponding National Pollutant Discharge Elimination System (NPDES) permit (Permit No.CA008000) for the discharge of tertiary treated recycled water has been issued to the Tribe. Accordingly, the QAPP was updated to address the increase in land holdings and changes to the Tribe's operations and was approved by EPA in 2013. As stated in the QAPP, the problem is not that there exists contamination and a need for remediation, but that a water quality monitoring program should be implemented to ensure water quality in the future. As addressed in the September 2001 "Tribal Environmental Plan" publication, there is currently "no clear oversight by management of water quality monitoring and record keeping ensuring accuracy, reliability, and consistency."

#### **3.2 CLEAN WATER ACT SECTION 319 NON-POINT SOURCE POLLUTION**

Under the Section 319 of the CEA, EPA requires an approved Nonpoint Source Assessment Report and a NPS Management Program as a precursor to applying for Clean Water Act, Section 319(h) Grant funds. Clean Water Act Section 319(h) funds are provided only to designated tribal agencies to implement their approved nonpoint source management programs. Through this grant program, tribal nonpoint source programs include a variety of components, technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and regulatory programs. The Tribe prepared a Nonpoint Source Assessment Report and Nonpoint Source Management Program and submitted this document to the EPA in November of 2002. EPA approved both the Assessment Report and Management Plan in December of 2002. Since that time, the Tribe has used grant funding to implement the management plan to understand the relationship between land uses on the Reservation and water quality.

### **3.3 CLEAN AIR ACT SECTION 103**

The EPA authority for awarding these grants is Section 103 of the Clean Air Act, 42 USC §7403. All funded activities must be related to air pollution and/or air pollution control. In addition, the goal of these grants is to assist tribes in developing the capacity to manage their air quality programs in accordance with their individual needs. Grants awarded under these programs are governed by administrative requirements under 40 CFR Part 31. There is no matching requirement for Section 103 grants.

EPA Region 9 anticipates awarding approximately 30 grants to federally-recognized tribes within the Region 9 geographic area for funding tribal air pollution control programs, air quality education and assessment projects, and the development of tribal air program capacity. It is expected that the awards will range from \$50,000 to \$120,000. Projects will be funded for work to be done in Fiscal Year 2016 (FY16), between October 1, 2015, and September 30, 2016. The Tribe recently started a program funded under the Clean Air Act to monitor PM2.5, PM10, O3, and the associated QAPP was approved in April 2015.

## **SECTION 4.0**

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### **INVENTORIES OF REGULATED ENTITIES**

In general, the presence of regulated entities determines which federal environmental statutes are applicable. The Agency maintains many program-specific databases of regulated entities and data query tools to help identify regulated entities that may affect tribal interests, including the Facility Registry System (FRS) – a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest.

#### **4.1 REGULATED ENTITIES:**

<<Per March 11, 2015 communication with Willard Chin of the EPA, the EPA is drafting Regulated Facilities document>>