MOUTAIN TRIBE – TRIBAL ENVIROMENTAL PLAN

Demographics: The Mountain Tribe is located in (state) and includes 23,669 acres in County; 12,633 acres in County; and 5,582 acres in County. The Tribal Government is comprised of an elected Tribal Council and Tribal Court System organized under the Indian Reorganization Act. Tribal headquarters are located at 500 Mountain Avenue and an ambulatory Tribal Clinic at 1607 Mountain Road. The River flows through the land creating vast farmlands and recreation attractions. Mountain Tribe shares the Valley with City. The 2009 tribal population is 1,200 with a regional population of 79,801. The Mountain Tribe is within 10 miles of Dam that is susceptible to terrorist risks and banned from public thoroughfare and use. We have 5 bridges crossing the River including Interstate and a transcontinental (BNSF) railroad all susceptible to terrorist risks. Natural hazards are drought, monsoon, flooding, microburst, thunderstorm, wildfire and power outages during extreme heat.

Mission Statement: To establish and exercise our sovereign rights and powers to preserve the environment given to us by our ancestors and through environmental stewardship, improve the health and lives of individual Tribal citizens.

Urgent Environmental Issues #1

A. Climate Change

1. Drought potential impacts

a. Traditional Practices - greater stress on traditional fish, plant and animal species
b. Water Supply – Reduced availability and reliability of surface water, less groundwater recharge, increased treatment, increased potential for overdrafting groundwater. Potential increased conflict over water rights. Higher human water demands reduce water needed to support ecosystem/species.
c. Water Quality – Increase in water-borne illnesses, taste and odor issues, higher contaminate loading, increase in algal blooms, decrease in dissolved oxygen, impacts to aquatic species.
d. Health – Change in prevalence and spread of disease and mortality, reduced water supply reliability, increased malnutrition, increased health care costs [1]
e. Critical Resource Impact – Decrease in power generating ability with decrease in water resources for power plant located on the reservation.
f. Financial Impacts – MIT relies heavily on its Agricultural farming industry. Decreased ability to irrigate crops would have catastrophic financial consequences.

Indicators – All indicators listed under D.3

2. More extreme flood Events

a. Traditional Practices – Reduced water quality for traditional aquatic species, habitat disturbance/loss
b. Sacred Sites and Practices – Damage to sacred site, temporary inaccessibility to sacred sites, exposure of sacred artifacts and remains
c. Water Supply – Damage to conveyance infrastructure, increased treatment, service interruption

d. Water Quality – Wastewater spills, contaminated storm water runoff, turbidity
e. Health – Change in prevalence and spread of diseases, mortality, displacement[1]
f. Financial Impacts – Decreased revenue from agriculture crop damage

Indicators – All Indicators listed under D.3

3. More Frequent and intense wild fires

a. Traditional Practices – Reduced water quality for traditional aquatic species, increased sedimentation in streams, habitat and species reduction, reduced air quality
b. Sacred Sites and Practices – Damage to sacred sites, species disruption
c. Water Supply – Damage to conveyance infrastructure, increased treatment, service interruption, sedimentation
d. Water Quality – Damage to infrastructure, increased turbidity and sedimentation
e. Health – Poor air and water quality, displacement, illnesses exacerbated ; especially respiratory illnesses, morbidity[1]

Indicators – All indicators listed under C.3

4. More erosion

a. Transportation infrastructure loss, eroding roadways [2]
b. Financial Impacts – Decreased revenue from agriculture crop damage
c. Traditional Practices – river channel changes, habitat disturbance or loss

5. Invasive Species and Insect Infestation

a. Traditional Practices - Reduced productivity / greater stress on traditional fish, Plant and animal species.
b. Water Supply – Potential for increased pesticide runoff pollution
c. Water Quality – Increased treatment, contaminate loading
d. Health – Change in prevalence and spread of disease and mortality and increased Health care costs.
e. Financial Impacts- Decreased revenue from agriculture crop damage

B. Long Term Goal: Mountain Tribe will have a comprehensive Climate Change Adaptation Plan that will identify hazards, risks and vulnerabilities and contain long term mitigation Strategies to protect human health, cultural resources, critical infrastructures and economic resources.

C. Feasible Solutions –

1. Identify climate change impacts for the Mountain Indian Reservation
   a. Initial scoping of climate change impacts on resources important to the tribe
   b. Build and maintain support with tribal leadership and community

(outreach and education)
c. Seek Tribal Council approval of resolution supporting the climate change adaptation initiative

d. Create climate change planning team
e. Build internal and external partners

2. Impact and Vulnerability Assessments, Risks and Priorities
a. Develop climate change scenarios based on available information
b. Identify/ characterize current and projected impacts on planning areas of interest
c. Assess vulnerabilities of planning areas and their impacts
d. Assess risks
e. Prioritize planning areas for development of adaptation strategies

3. Adaptation Strategies: Goals and Actions
a. Develop goals for adaptation for high priority planning areas
b. Develop and prioritize adaptation actions to achieve goals
4. Write and Integrate Adaptation Plan
a. Write adaptation plan, provide draft for review and finalize plan
b. Seek tribal council approval of climate change adaptation plan
c. Integrate climate change adaptation plan into other management activities and planning documents.

Resource Needs and Potential Resources – Potential Technical Assistance and financial Resource partners: US EPA – Climate Change Ready Water Utilities, EPA Tribal Science Council; Indian Health Services, CDC "Climate Ready Program, US Forest Service, US Department of Agriculture, US Army Core of Engineers, Administration for Children and Families, National Institute of Environment and Health Services, HUD, US Fish and Wildlife Services, US Geological Survey Climate change Research and Development Program, US National Parks Service, US Department of Transportation. Additional Staff will be needed and training for all MIT EPA staff. Planning committee should consist of MIT EPA, MIT Public Health, Health Clinic, Tribal Utilities, Tribal Roads Department, Tribal Agriculture, Tribal Entities, Tribal Law Enforcement, Fire Department, Tribal Council (Policy advisor) and Tribal Attorney.

References:
1. MIT Threat and Hazard Vulnerability Impact Study **THIRA**
2. MIT Hazard Mitigation Study

Urgent Environmental Issues #2

A. Hazardous Waste and illegal dumping

1. **Hazardous Waste potential impacts**
   a. Hazardous waste products traditionally contain corrosive toxic, ignitable or reactive ingredients.
   b. Sources of Hazardous Waste - Abandoned items such as tires, appliances, furniture, car batteries, boxes, paint, construction and demolition debris and other house hold garbage items.
   c. Cause of the Hazardous waste – often discarded items by people both on and off the reservation.
   d. Health – Hazardous chemicals caused by improper disposal leak toxins into the atmosphere where to they can be inhaled and which can result in human health problems and increased health costs.
   e. Water Quality – increase hazardous chemical seep into the soil and contaminate ground water systems creating water-borne illnesses, taste and order issues, higher contaminate loading, increase in algal blooms, decrease in dissolved oxygen, impacts to aquatic species.
   f. Critical Resource Impact – Hazardous chemicals have the ability to contaminate plant life by settling on plants and bodies of water. Once the chemicals are released into the atmosphere they may enter the food chain and adversely affect those animals and human who consume the plants.
   g. Financial Impacts – MIT relies heavily on its Agricultural Farming and livestock Contamination of crops and livestock would be a catastrophic financial disaster.

2. **More extreme Hazardous evens**

   a. Traditional Practice – public awareness threw community notification sources, trash removal dumpsters once a year has proven ineffective at preventing the problem/ further the hazard waste goes unresolved and continues posse a financial loss.

   b. Sacred Site and Practices – hazardous waste and illegal dumps damage sacred site, temporary inaccessibility to sacred site, exposure to sacred artifacts and remains

   c. Water Supply – Trash and hazardous chemical as a result of the illegal dumping causes damage to other infrastructure on the reservation including water, plant and livestock.

   d. Water Quality – contaminates water spills, storm water runoff camels.

   e. Health – the by-products of hazard waste is prevalent in the spread of diseases, mortality and displacement.

   f. Financial Impacts – Decreased revenue from agriculture crops and livestock.

3. **More Frequent and intensive wild fires** –

a. Traditional Practices – Hazardous waste effect and reduce water quality for traditional aquatic species, increased sedimentation in water way, habitat and species reduction, reduced air quality.

b. Sacred Sites and Practices – Damage to sacred sites, species disruption.

c. Water Supply – Effects to water conveyances infrastructure, increased treatment, service interruption and sedimentation.

d. Disposal Efforts – hazardous wastes are often disposed in the closed sewage infrastructure as house hold trash and, paints, medication, hypodermic needle and construction material are forced into the sewage pipes as a mean of disposal. resulting in damage to sewage systems, costs and loss sewage integrity.

e. Health – Poor air and water quality, displacement, illnesses exacerbated ; especially respiratory illnesses, morbidity

4. Invasive Species and Insect Infestation

a. Traditional Practices - Reduced productivity greater stress on traditional fish, Plant, livestock and animal species.

b. Water Supply – Potential for increased hazardous runoff pollution.
c. Water Quality – Increased treatment, contaminate loading
d. Health – Change in prevalence and spread of disease and mortality and increased Health care costs.
f. Financial Impacts- Decreased revenue from agriculture crop damage

B. Long term goal: Through outreach and education, stricter enforcement of environmental codes, and long term planning and mitigation efforts the Mountain Tribe will significantly reduce illegal dumping and improper disposal of hazardous waste to protect human health, cultural resources, critical infrastructure and economic resources.

C. Feasible Solutions -

(1) Identify illegal dumping and hazardous waste impacts for the Mountain Indian Reservation

a. Initial scoping of illegal dumping and hazardous waste impacts on resources important to the tribe

b. Build and maintain support with tribal leadership and community (outreach and education)

c. Seek Tribal Council approval of resolution supporting the dealing and removing hazardous waste adaptation initiative

d. Create planning team to identify and mitigate risks from Trash and hazardous waste.

e. Build internal and external partners

f. Strengthen existing MIT Environmental Codes and add stricter enforcement authorities for MIT Police Department.

(2) Impact and Vulnerability Assessments, Risks and Priorities

a. Develop trash and hazardous waste removal scenarios based on available information
b. Identify/ characterize current and projected impacts on planning areas of interest
c. Assess vulnerabilities of planning areas and their impacts
d. Assess risks
e. Prioritize planning areas for development of adaptation strategies

(3) Adaptation Strategies: Goals and Actions

Resource Needs and Potential Resources – Staff training. Potential resources for staff training – EPA RCRA Orientation Manual, EPA Hazardous Waste Regulations- User friendly reference documents, Universal Waste Website, Waste Environmental Management system (EMS).

Potential Resources for public Education – EPA Public Service Announcements, Hazardous Waste Recycling Program

Potential Funding sources – EPA GAP, CA Household Hazardous Waste Grant Program, State Assistance Programs for Waste Reduction, EPA Hazardous Waste Management Program for Tribes.

Indicators – All indicators listed under E.3

Urgent Environmental Issues #3

A. Drinking Water and Water Quality

1. Inadequate Water Supply in CA Village
   a. Mesquite Creek Well failure
   b. Water contamination from Trihalomethanesp (By-product of drinking water chlorination),Copper and Lead (Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives), iron and manganese
   c. Aging infrastructure that needs replacement.
2. Inadequate Water Supply in AZ Village –
   a. Mesquite Creek Well failure
   b. Water contamination from Trihalomethanesp (By-product of drinking water chlorination),Copper and Lead (Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives), iron and manganese
   c. Aging infrastructure that needs replacement
3. Avi Resort and Casino
   a. Mesquite Creek Well failure
   b. Water contamination from Trihalomethanesp (By-product of drinking water chlorination),Copper and Lead (Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives)
   c. Aging infrastructure that needs replacement.
4. Drought Concerns with decreasing water supply
5. Aging infrastructure repair and replacement

B. **Long term goal**: Significantly repair and replace aging infrastructure and reduce ground water pollutions to ensure the protection of safe drinking water to the entire reservation population.

C. **Feasible Solutions** –

1. Work with Mountain Tribal Utilities Authority to identify potential funding for infrastructure repair and upgrade.
2. Ensure timely testing and reporting of required contaminates.
3. Provide Community Outreach and Education of sources of groundwater contamination.

Resource Needs and Potential Resources: Staff Training. Funding for infrastructure repair and/or replacement, Community Outreach and education.
Potential Staff Training Resources: EPA Safe Drinking Water Act, EPA "What's up with our Nation's Water",

Potential funding sources: EPA GAP, EPA 106 Water Pollution Grants, USGS, Natural Resources Defense Council, USDA – Water Quality and Natural Resource Conservation Service, CA State Water Resources and Control Board, EPA Clean Water State Revolving Fund, Arizona Department of Environmental Quality.

Indicators – D.3

Other Capacity Building Activities to build a successful Environmental Program

Establishing Core Administrative Capacities

A. Build a solid organizational system for the Mountain Environmental Program
   1. Define staff roles and relationships to Tribal Council and other Departments.

   2. Define clear Environmental Department Policies and Procedures and a common operating plan.

   3. Build a solid multi-year training plan for staff that takes into account staff turn-over and the following:
      a. Include culturally relevant training.
      b. Air Quality
      c. Clean Water and Safe Drinking Water
      d. Solid Waste
      e. Hazardous Waste
      f. Underground Storage Tank
      g. Tribal Contaminated Site Remediation and Emergency Response
      h. Chemical Safety and Pollution Prevention
      Each of these programs have their own indicators for capacity that will be built upon over time.

   4. A solid program evaluation system to ensure that environmental goals and financial resources are appropriately managed.

   5. Intergovernmental Agreements, MOUs or MOAs needed to implement the Mountain Environmental program and protect the health and welfare of reservation population.

   6. Policies and procedures to coordinate environmental protection programs with other tribal government initiatives.

a. Work with Tribal Planner on including environmentally sound principles and practices into roads, housing infrastructure projects.
b. Work with the Agriculture Department on including environmentally sound principles and practices in natural resource management.
c. Work with Tribal Administration on including environmentally sound principles and practices into economic development.
d. Ensure the Tribal Administration, MIT Environmental staff and US EPA Region 9 staff work together to successfully complete all quarterly and end of year reporting in an efficient manner.

All indicators under B.2

B. **Long term goal**: The Mountain Tribal Administration will have a solid Administrative core of policies and procedures as deemed appropriate by the Mountain Tribal Council, to ensure the successful integration of environmental programs with Tribal Government initiatives and planning processes to protect human health, cultural resources, critical infrastructure and economic resources .

Resource Needs and Potential Resources: financial resources for staff training. Department involvement from Tribal Legal Department, Tribal Planner, Tribal Agriculture Department, Tribal Administration and Tribal Council.

Potential Partners and Technical Assistance: EPA Region 9, Bureau of Indian Affairs, Arizona Department of Environmental Quality, U.S. Forrest Service, , US Department of Agriculture, US Army Core of Engineers, Administration for Children and Families, National Institute of Environment and Health Services, HUD, US National Parks Service, US Department of Transportation.

Establishing Core Financial Management Capacities

A. Work with Tribal Accounting to ensure that all accounting systems, internal controls and financial reporting procedures are in adherence to the requirements found in 40 C.F.R § 31 "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments"; 40 C.F.R § "Environmental Program Grants for Tribes", 2 C.F.R §225 "Cost Principles for State, Local and Indian Tribal Governments and OMB Circular A-133 "Audits of States, Local Governments and Non-Profit Organizations."

1. Yearly review of policies and procedures for Accounting Department.
2. Provide EPA with a letter of compliance to be added to Mountain's Grant file.
3. Ensure written policies and procedures are provided to EPA Region 9 Grant office upon request.

B. Ensure that Mountain's procurement procedures meets the minimum requirements for purchasing systems as outlined in 40 C.F.R. §31.

1. Yearly review of policies and procedures for Procurement/Purchasing Department.

2. Provide EPA with a letter of compliance to be added to Mountain's grant file.
3. Ensure written policies and procedures are provided to EPA Region 9 Grant office upon request.

C. Current Indirect Cost Rate

1. Provide current Indirect Cost Rate to EPA Region 9 each year.

D. Monitor and provide assistance to Grants Department to demonstrate proficiency in processing financial payment request, submitting required annual Federal Financial Reports and preforms annual financial audits as required.

1. Monitor to ensure that financial payment requests are made in no less than a quarterly basis.
2. Participate in the submission of the Annual Federal Financial Reporting.
3. Provide assistance to auditors when requested.

E. **Long term goal**: The Mountain Tribal Administration will have a solid Administrative core of financial management policies and procedures as deemed appropriate by the Mountain Tribal Council, to ensure the successful integration of environmental programs with Tribal Government initiatives and planning processes to protect human health, cultural resources, critical infrastructure and economic resources .

F. **Resource Needs and Potential Resources:** Training for Accounting and Procurement staff. Funding source EPA Region 9.

Key Resources: MIT EPA staff, MIT CEO, MIT Controller, MIT Administrator, MIT Accounting, MIT Grants and Contracts

Indicators – all indicators are listed under B.3

Establishing Core Information Management Capacities

A. Establish a data collection and reporting guidelines system.

1. Administrative Records
2. Useful reference materials
3. Inventories
4. Information Requests
5. Human Health Data
   a. Ensure that all human health data follows the applicable HIPPA laws to ensure privacy and confidentiality.
6. Environmental mapping

B. **Long term goal**: The Mountain Tribal Administration will have a solid Administrative core of information management policies and procedures as deemed appropriate by the Mountain Tribal Council, to ensure the successful integration of environmental programs with Tribal Government initiatives and planning processes to protect human health, cultural resources, critical infrastructure and economic resources .

C. **Resource Needs and Potential Resources:** Planning team of Environmental, Public Health, Finance, Grants and Contracts, Administration, GIS, and Information Technology staff

Key Resources: Environmental Information Exchange Network & Grant Program; GAP Online; EPA Quality Management System; Doing Business with EPA: Specifications for non-EPA Organizations

Indicators – All indicators are listed under B.4

Establishing Core Public Participation, Community Involvement, Education and Communication Capacities

A. Develop outreach methods that will be used for public notification, public input and educational awareness.

1. Tribal Newsletter that goes out to all Tribal staff and homes each Friday

2. Social Media
   a. EPA Website
   b. Department of Emergency Response Facebook page (currently in development)
   c. Public notification and warning system
   d. E911 project/reverse 911

3. Community meetings, events and workshops

B. Develop, revise and maintain a file of Environmental Education materials

1. News letter
   a. Tribal Weekly
   b. MIT EPA
2. Pamphlets
3. Brochures
4. MIT EPA Website
5. MIT Department of Emergency Response Website
6. EPA printed materials

C. Develop a format for public notices, press releases and other types of communications.

1. Work with new Public Information Officer on completing her PIO training. Mountain is choosing to use the National Incident Management System courses for all PIO Training. (FEMA recognized Tribal Training Officer is part of MIT EPA Staff)

   a. Introduction to Incident Command System, ICS-100
   b. IS-200.B: ICS for Single Resources and Initial Action Incidents
   c. ICS-300 – Intermediate ICS for Expanding Incidents
   d. IS-700.A: National Incident Management System (NIMS)
   e. IS-800.B: National Response Framework, An Introduction
   f. ICS-29 Public Information Officer Awareness
   g. G-209 Basic Public Information Officer Course
   h. IS 702 National Incident Management System Public Information Systems
   i. L-925 All-Hazards ICS Public Information Officer Course
   j. G-291 Joint Information System/Joint Information Planning for Tribal, State and Local PIOs
   k. IS-42 Social Media in Emergency Management

2. Develop Public Information and Educational Resources that address the Functional and Access Needs Populations on the Mountain Reservation

a. Vision Impaired
b. Hearing Impaired
c. Non-English speaking

3. Develop methods that will be used to identify public concerns and respond to issues raised.
   a. Surveys
   b. Public Meetings
   c. Monitor Social Media Comments
   d. MIT EPA Website

4. Develop a Tribal community-based advisory group to assist with planning and implementation of the tribal environmental program.
   a. MIT EPA Staff
   b. MIT Emergency Management Staff
   c. MIT Public Health Staff
   d. MIT Health Care Clinic
   e. MIT Agriculture Department
   f. MIT Administration

D. Long term goal: The Mountain Tribe will have a long term strategy and tools to inform the public of environmental initiatives, threats and risks; engage in public participation and input and educational strategies that include the whole tribal community, that fosters environmental resilience, and protects human health, cultural resources, critical infrastructure and economic resources.

E. **Resource Needs and Potential Resources:** MIT Public Information Officer, MIT Emergency Management, MIT Public Health, MIT Tribal Clinic, MIT Tribal Police Department, MIT Telecom, MIT Tribal Training Officer, Mohave County Emergency Management, Arizona Department of Emergency Management and Military Affairs, Local Area PIO Working Group,

Indicators – All Indicators are listed under B.6