

**PART 1—  
INTRODUCTION**



# CHAPTER 1.

## PLANNING PARTNER PARTICIPATION

### 1.1 BACKGROUND

The Federal Emergency Management Agency (FEMA) encourages multi-jurisdictional planning for hazard mitigation. Such planning efforts require all participating jurisdictions to fully participate in the process and formally adopt the resulting planning document. Chapter 44 of the Code of Federal Regulations (44 CFR) states:

“Multi-jurisdictional plans (e.g. watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan.”  
(Section 201.6.a(4))

In the preparation of the Humboldt Operational Area Hazard Mitigation Plan Update, a Planning Partnership was formed to leverage resources and to meet requirements of the federal Disaster Mitigation Act of 2000 (DMA) for as many eligible local governments in Humboldt County as possible. The DMA defines a local government as follows:

“Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.”

There are two types of Planning Partners in this process, with distinct needs and capabilities:

- Incorporated municipalities (cities and the County)
- Special purpose districts

Municipal governments have permit authority and can adopt rules and regulations governing land use. Special purpose districts do not possess this power, and therefore have no ability to implement actions that impact future land uses. Districts are service providers and owners and operators of critical facilities and infrastructure. The differences in capability and function between municipalities and districts dictate the types of mitigation actions selected by each category of planning partner. Jurisdictional annex templates were created to capture relevant data for each planning partner.

### 1.2 THE PLANNING PARTNERSHIP

#### 1.2.1 Initial Solicitation and Letters of Intent

The planning team solicited the participation of the County and all County-recognized special purpose districts at the outset of this project. A meeting was held on December 3, 2012 to engage potential stakeholders for this process. The purpose of the meeting was to introduce the planning process to jurisdictions in the County that could have a stake in the outcome of the planning effort. All eligible local governments within the planning area were invited to attend. Various agency and citizen stakeholders were also invited to this meeting. The goals of the meeting were as follows:

- Provide an overview of the Disaster Mitigation Act.

- Provide an update on the planning grant.
- Outline the Humboldt Operational Area plan update work plan.
- Describe the benefits of multi-jurisdictional planning.
- Solicit planning partners.
- Select a Steering Committee.

All interested local governments were provided with a list of planning partner expectations developed by the planning team and were informed of the obligations required for participation. Local governments wishing to join the planning effort were asked to provide the planning team with a “notice of intent to participate” that agreed to the planning partner expectations (see Appendix A) and designated a point of contact for their jurisdiction. In all, formal commitment was received from 34 planning partners by the planning team, and the Humboldt County Planning Partnership was formed.

Maps for each participating city are provided in the individual annex for that city. These maps will be updated periodically as changes to the partnership occur, either through linkage or by a partner dropping out due to a failure to participate.

## **1.2.2 Planning Partner Expectations**

The planning team developed the following list of planning partner expectations, which were confirmed at the kickoff meeting held on December 3, 2012:

- Each partner will provide a “Letter of Intent to Participate.”
- Each partner will support and participate in the selection and function of the Steering Committee overseeing the development of the update. Support includes allowing this body to make decisions regarding plan development and scope on behalf of the partnership.
- Each partner will provide support for the public involvement strategy developed by the Steering Committee in the form of mailing lists, possible meeting space, and media outreach such as newsletters, newspapers or direct-mailed brochures.
- Each partner will participate in plan update development activities such as:
  - Steering Committee meetings
  - Public meetings or open houses
  - Workshops and planning partner training sessions
  - Public review and comment periods prior to adoption.

Attendance will be tracked at such activities, and attendance records will be used to track and document participation for each planning partner. No minimum level of participation will be established, but each planning partner should attempt to attend all such activities.

- Each partner will be expected to perform a “consistency review” of all technical studies, plans, and ordinances specific to hazards identified within the planning area to determine the existence of plans, studies or ordinances not consistent with the equivalent documents reviewed in preparation of the Operational Area plan. For example: if a planning partner has a floodplain management plan that makes recommendations that are not consistent with any of the County’s basin plans, that plan will need to be reviewed for probable incorporation into the plan for the partner’s area.

- Each partner will be expected to review the risk assessment and identify hazards and vulnerabilities specific to its jurisdiction. Contract resources will provide jurisdiction-specific mapping and technical consultation to aid in this task, but the determination of risk and vulnerability will be up to each partner.
- Each partner will be expected to review the mitigation recommendations chosen for the overall county and determine if they will meet the needs of its jurisdiction. Projects within each jurisdiction consistent with the overall plan recommendations will need to be identified, prioritized and reviewed to determine their benefits and costs.
- Each partner will be required to create its own action plan that identifies each project, who will oversee the task, how it will be financed and when it is estimated to occur.
- Each partner will be required to sponsor at least one public meeting to present the draft plan at least two weeks prior to adoption.
- Each partner will be required to formally adopt the plan.

It should be noted that by adopting this plan, each planning partner also agrees to the plan implementation and maintenance protocol established in Volume 1. Failure to meet these criteria may result in a partner being dropped from the partnership by the Steering Committee, and thus losing eligibility under the scope of this plan.

### **1.2.3 Linkage Procedures**

Eligible local jurisdictions that did not participate in development of this hazard mitigation plan update may comply with DMA requirements by linking to this plan following the procedures outlined in Appendix B.

## **1.3 ANNEX-PREPARATION PROCESS**

### **1.3.1 Templates**

Templates were created to help the Planning Partners prepare their jurisdiction-specific annexes. Since special purpose districts operate differently from incorporated municipalities, separate templates were created for the two types of jurisdictions. The templates were created so that all criteria of Section 201.6 of 44 CFR would be met, based on the partners' capabilities and mode of operation. Each partner was asked to participate in a technical assistance workshop during which key elements of the template were completed by a designated point of contact for each partner and a member of the planning team. The templates were set up to lead each partner through a series of steps that would generate the DMA-required elements that are specific for each partner. The templates and their instructions can be found in Appendices C, D and E to this volume of the Hazard Mitigation Plan Update.

### **1.3.2 Workshop**

Workshops were held for Planning Partners to learn about the templates and the overall planning process. Topics included the following:

- DMA
- Humboldt Operational Area plan background
- The templates
- Risk ranking
- Developing your action plan

- Cost/benefit review.

Separate sessions were held for special purpose districts and municipalities, in order to better address each type of partner's needs. The sessions provided technical assistance and an overview of the template completion process. There was 94-percent attendance of the partnership at these sessions.

In the risk-ranking exercise, each planning partner was asked to rank each risk specifically for its jurisdiction, based on the impact on its population or facilities. Cities were asked to base this ranking on probability of occurrence and the potential impact on people, property and the economy. Special purpose districts were asked to base this ranking on probability of occurrence and the potential impact on their constituency, their vital facilities and the facilities' functionality after an event. A principal objective of this exercise was to familiarize the partnership with how to use the risk assessment as a tool to support other planning and hazard mitigation processes. Tools utilized during these sessions included the following:

- The risk assessment results developed for this plan
- Hazard maps for all hazards of concern
- Hazard mitigation catalogs
- Federal funding and technical assistance catalogs
- Copies of partners' prior annexes, if applicable.

### **1.3.3 Prioritization**

44 CFR requires actions identified in the action plan to be prioritized (Section 201.c.3.iii). The planning team and steering committee developed a methodology for prioritizing the action plans that meets both the needs of the partnership and the requirements of 44 CFR. The actions were prioritized according to the following criteria:

- **High Priority**—Project meets multiple plan objectives, benefits exceed cost, funding is secured under existing programs, or is grant eligible, and project can be completed in 1 to 5 years (i.e., short term project) once funded.
- **Medium Priority**—Project meets at least 1 plan objective, benefits meet or exceed costs, requires special funding authorization under existing programs, grant eligibility is questionable, and project can be completed in 1 to 5 years once funded.
- **Low Priority**—Project will mitigate the risk of a hazard, benefits meet or exceed costs, funding has not been secured, project is not grant eligible, and time line for completion is long term (5 to 10 years).

These priority definitions are dynamic and can change from one category to another based on changes to a parameter such as availability of funding. For example, a project might be assigned a medium priority because of the uncertainty of a funding source, but be changed to high once a funding source has been identified. The prioritization schedule for this plan will be reviewed and updated as needed through the plan maintenance strategy.

### **1.3.4 Benefit/Cost Review**

44 CFR requires the prioritization of the action plan to emphasize a benefit/cost analysis of the proposed actions. Because some actions may not be implemented for up to 10 years, benefit/cost analysis was qualitative and not of the detail required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) grant program. A review of the apparent benefits

versus the apparent cost of each project was performed. Parameters were established for assigning subjective ratings (high, medium, and low) to costs and benefits as follows:

- Cost ratings:
  - **High**—Existing funding levels are not adequate to cover the costs of the proposed action; implementation would require an increase in revenue through an alternative source (for example, bonds, grants, and fee increases).
  - **Medium**—The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years.
  - **Low**—The action could be funded under the existing budget. The action is part of or can be part of an existing, ongoing program.
- Benefit ratings:
  - **High**—The action will have an immediate impact on the reduction of risk exposure to life and property.
  - **Medium**—The action will have a long-term impact on the reduction of risk exposure to life and property or will provide an immediate reduction in the risk exposure to property.
  - **Low**—Long-term benefits of the action are difficult to quantify in the short term.

Using this approach, projects with positive benefit versus cost ratios (such as high over high, high over medium, medium over low, etc.) are considered cost-beneficial and are prioritized accordingly.

It should be noted that for many of the strategies identified in this action plan, funding might be sought under FEMA’s HMGP or PDM programs. Both of these programs require detailed benefit/cost analysis as part of the application process. These analyses will be performed on projects at the time of application preparation. The FEMA benefit-cost model will be used to perform this review. For projects not seeking financial assistance from grant programs that require this sort of analysis, the Partners reserve the right to define “benefits” according to parameters that meet their needs and the goals and objectives of this plan.

### 1.3.5 Analysis of Mitigation Initiatives

Each planning partner reviewed its recommended initiatives to classify each initiative based on the hazard it addresses and the type of mitigation it involves. Mitigation types used for this categorization are as follows:

- **Prevention**—Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.
- **Property Protection**—Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.
- **Public Education and Awareness**—Actions to inform citizens and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.
- **Natural Resource Protection**—Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration,

watershed management, forest and vegetation management, and wetland restoration and preservation.

- **Emergency Services**—Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.
- **Structural Projects**—Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.

The analysis of initiatives in each jurisdiction’s annex documents the comprehensive range of alternatives selected by each planning partner, as required under section 201.6 (c)(3)(ii) 44 CFR.

## 1.4 COMPATIBILITY WITH PREVIOUS REGIONAL HAZARD PLAN

The jurisdictions listed in Table 1-1 participated in the initial Humboldt Operational Area Hazard mitigation Plan. The table lists the dates that each of these jurisdictions adopted the previous hazard mitigation plan.

The initial plan identified 272 jurisdiction-specific strategies and six countywide strategies to address natural hazards of concern. For those participating in the plan update, initial plan participants reviewed the strategies previously included in their annexes to determine which remain relevant for the plan update. Each strategy was identified with one of the following implementation status findings:

- The strategy has been completed (identified in the implementation status table of each jurisdiction’s annex).
- The strategy has been removed or is no longer feasible (identified in the implementation status table of each jurisdiction’s annex).
- The strategy has been carried over to the current hazard mitigation plan in one of the following ways:
  - Incorporated in the current plan’s action plan matrix exactly as presented in the initial plan (identified in the implementation table of each jurisdiction’s annex and indicated in the action plan matrix)
  - Addressed by one or more actions in the current plan’s action plan matrix, but not incorporated in this plan exactly as presented in the previous plan (identified in the implementation status table of each jurisdiction’s annex).

A progress report summarizing the findings of this review was prepared by the planning team and has been included as an appendix to this plan (Appendix B of Volume 1).

## 1.5 FINAL COVERAGE UNDER THE PLAN

Table 1-2 lists the jurisdictions that submitted letters of intent and their ultimate status in this plan. Of the 34 planning partners who submitted letters of intent, 31 fully met the participation requirements specified by the Steering Committee and prepared annexes included in this volume. Another partner, County Service Area #4, is part of the unincorporated Humboldt County planning area and is covered under the Humboldt County annex; so 32 partners in all will seek DMA compliance under this plan.

One partner was unable to attend a workshop and did not complete an annex; another partner attended a workshop but was unable to complete an annex. The remaining jurisdictions will need to follow the linkage procedures described in Appendix B of this volume to achieve DMA compliance.

**TABLE 1-1.  
JURISDICTIONS THAT PARTICIPATED IN PREVIOUS HAZARD PLAN**

Jurisdiction	Previous Annex Adoption Date
Humboldt County	December 11, 2007
City of Arcata	December 19, 2007
City of Blue Lake	November 18, 2008
City of Eureka	February 5, 2008
City of Ferndale	December 11, 2007
City of Fortuna	March 8, 2008
City of Rio Dell	December 18, 2007
City of Trinidad	February 13, 2008
Orleans Community Services District	July 15, 2008
Orick Community Services District	May 14, 2008
Humboldt Community Services District	January 8, 2008
Willow Creek Community Services District	February 7, 2008
Willow Creek Fire Protection District	December 13, 2007
Weott Community Services District	January 27, 2008
McKinleyville Community Services District	December 19, 2007
Redway Community Services District	February 21, 2008
Humboldt #1, Fire Protection District	December 18, 2007
Arcata Fire Protection District	March 25, 2008
Rio Dell Fire Protection District	April 10, 2008
Samoa Peninsula Fire Protection District	December 19, 2007
(Shelter Cover) Resort Improvement District #1	January 17, 2008
Garberville Sanitary District	January 22, 2008
Humboldt Bay Municipal Water District	December 13, 2007
Humboldt Bay Harbor, Recreation, and Conservation District	February 13, 2008
Reclamation District #768	June 5, 2008
St. Joseph Health System, Humboldt County (Redwood Memorial Hospital, St. Joseph Hospital)	December 23, 2008

**TABLE 1-2.  
PLANNING PARTNER STATUS**

Jurisdiction	Submitted Letter of Intent?	Attended Workshop?	Completed Template?	Will Be Covered by Plan?
Humboldt County	Yes	Yes	Yes	Yes
City of Arcata	Yes	Yes	Yes	Yes
City of Blue Lake	Yes	Yes	Yes	Yes
City of Eureka	Yes	Yes	Yes	Yes
City of Ferndale	Yes	Yes	Yes	Yes
City of Fortuna	Yes	Yes	Yes	Yes
City of Rio Dell	Yes	Yes	Yes	Yes
City of Trinidad	Yes	Yes	Yes	Yes
Briceland Community Service District	Yes	No	No	No
Humboldt Community Service District	Yes	Yes	Yes	Yes
Manila Community Service District	Yes	Yes	Yes	Yes
McKinleyville Community Service District	Yes	Yes	Yes	Yes
Orick Community Service District	Yes	Yes	Yes	Yes
Orleans Community Service District	Yes	Yes	No	No
Redway Community Service District	Yes	Yes	Yes	Yes
Weott Community Service District	Yes	Yes	Yes	Yes
Westhaven Community Service District	Yes	Yes	Yes	Yes
Willow Creek Community Service District	Yes	Yes	Yes	Yes
Arcata Fire Protection District	Yes	Yes	Yes	Yes
Briceland Fire Protection District	Yes	Yes	Yes	Yes
Fortuna Fire Protection District	Yes	Yes	Yes	Yes
Humboldt Fire Protection District No. 1	Yes	Yes	Yes	Yes
Loleta Fire Protection District	Yes	Yes	Yes	Yes
Petrolia Fire Protection District	Yes	Yes	Yes	Yes
Rio Dell Fire Protection District	Yes	Yes	Yes	Yes
Samoa Peninsula Fire Protection District	Yes	Yes	Yes	Yes
Willow Creek Fire Protection District	Yes	Yes	Yes	Yes
County Service Area #4	Yes	No	No	Yes <sup>a</sup>
Garberville Sanitary District	Yes	Yes	Yes	Yes
Humboldt Bay Harbor, Recreation and Conservation District	Yes	Yes	Yes	Yes
Humboldt Bay Municipal Water District	Yes	Yes	Yes	Yes
Reclamation District #768	Yes	Yes	Yes	Yes
Shelter Cove Resort Improvement District No. 1	Yes	Yes	Yes	Yes
Southern Humboldt Community Healthcare District	Yes	Yes	Yes	Yes

a. County Service Area #4 is part of the unincorporated Humboldt County planning area and is covered under the Humboldt County annex.

## **CHAPTER 2.**

# **HUMBOLDT COUNTY TRIBAL STAKEHOLDERS**

### **2.1 BACKGROUND**

A significant portion of California’s Native American population resides in Humboldt County. Prior to European settlement, the Humboldt County area was populated by peoples of four language families in 14 tribal groups: the Karuk, Yurok, Hupa, Tsnungwe, Chilula, Chimariko, Wiyot, Sinkyone, Mattole, Walaki, Lassik, Nogatl, Wintun, and Whilkut Tribes. Many Tribes and Tribal members did not survive the contact period with Western settlers. The majority of those that did survive banded together into eight distinct Tribal governments, including the following:

- The Big Lagoon Rancheria
- The Blue Lake Rancheria
- The Hoopa Valley Indian Tribe
- The Karuk Tribe of California
- The Bear River Band of the Rohnerville Rancheria
- The Table Bluff Tribe of Wiyot Indians
- The Cher-Ae Heights Indian Community of the Trinidad Rancheria
- The Yurok Tribe

Together, these eight Tribal governments constitute over 8,346 individuals. Each operating under its own independent Tribal Council, these eight sovereign tribal governments were federally recognized between 1864 and 1979. The Tsnungwe Tribe, which has a fully functional Tribal government and may soon be federally recognized, also has a traditional territory that extends slightly into the eastern portion of Humboldt County. Federal recognition of this tribe in the coming years is highly likely.

Given their multi-millennial history of living in the area, the region’s Native American peoples are proven experts in successfully mitigating every possible natural hazard faced in Humboldt County. Collectively, the County’s tribal oral traditions tell of a long legacy of surviving natural hazards. For instance, Yurok and Wiyot oral histories tell of a massive tsunami over 300 years ago. This tsunami has recently been positively correlated with sediment tests in Humboldt Bay as well as with written history in Japan. These histories indicate that the Tribes are well-versed in the necessities of hazard mitigation.

The Humboldt Operational Area Hazard Mitigation Plan Update was prepared by and for a group of 32 Planning Partners. The tribes are independent sovereign nations, many of whom have their own federally approved hazard mitigation plans, and are therefore not official Planning Partners. However, given the importance of the local tribes, the Humboldt Operational Area planning partnership chose to make an effort to consult with each of the eight Tribal governments in preparing this plan. The results of those inquiries are the following tribal summaries that were developed by the planning team based on a review of readily available documents and resources.

### **2.2 HUMBOLDT COUNTY TRIBAL PROFILES**

The following profiles provide a summary of the tribes’ history, organization, geographical location in Humboldt County, land area and population, and whether they have an approved state level hazard mitigation plan. Since the development of the initial Humboldt Operational Area Hazard Mitigation Plan, FEMA has released new guidance for tribal hazard mitigation plans. This Tribal Multi-Hazard Mitigation Planning Guidance assists Indian Tribal governments and other tribal entities to identify and assess their risk to natural

hazards through the Federal Emergency Management Agency's (FEMA's) multi-hazard mitigation planning process. Based on the requirements of 44 CFR 201.7, this guidance helps:

- Indian Tribal governments identify their risks from natural hazards and protect their members and other resources;
- Indian Tribal governments develop and adopt new mitigation plans, or revise or update existing mitigation plans, to meet the requirements of 44 CFR 201.7;
- Plan reviewers evaluate mitigation plans from different Indian Tribal governments in a fair and consistent manner;
- Indian Tribal governments exercise flexibility and apply for assistance as either a grantee or sub-grantee under FEMA grant programs with a single plan type; and
- Provide guidance and culturally relevant examples to other tribal entities that comply with similar planning requirements under 44 CFR 201.6 as a local government.

Indian Tribal governments with an approved Tribal Mitigation Plan in accordance with 44 CFR 201.7 may apply for assistance from FEMA as a grantee. If the Indian Tribal government coordinates with the State for review of their Tribal Mitigation Plan, then the Indian Tribal government also has the option to apply as a sub-grantee through a State or another tribe. A grantee is an entity such as a State, territory, or Indian Tribal government to which a grant is awarded and that is accountable for the funds provided. A sub-grantee is an entity, such as a community, local, or Indian Tribal government; State-recognized tribe; or a private nonprofit (PNP) organization to which a sub-grant is awarded and that is accountable to the grantee for use of the funds provided.

If the Indian Tribal government is eligible as a grantee or sub-grantee because it has an approved Tribal Mitigation Plan and has coordinated with the State for review, it can decide which option it wants to take on a case-by-case basis with respect to each Presidential Disaster Declaration, and for each grant program under a Declaration, but not on a project-by-project basis within a grant program. For example, an Indian Tribal government can participate as a sub-grantee for Public Assistance (PA), but as a grantee for the Hazard Mitigation Grant Program (HMGP) under the same Declaration. However, the Indian Tribal government would not be able to request grantee status under HMGP for one HMGP project, then request sub-grantee status for another HMGP project under the same Declaration.

By acknowledging the tribes as stakeholders, the Humboldt Operational Area planning partnership recognizes the tribal level plans as existing mechanisms that could support or enhance hazard mitigation within the operational area. This is a requirement of section 201.6.b.3, of 44 CFR. These tribal plans offer an opportunity to partner and share information between planning efforts that can leverage resources within the operational area. The Humboldt Operational Area planning effort and those of the tribal governments are separate and autonomous efforts. However, these efforts may provide opportunities to work together as partners in the pre-disaster and post-disaster mitigation of hazards within the Humboldt Operational Area.

## **2.2.1 The Big Lagoon Rancheria**

### ***Tribal Profile***

The Big Lagoon Rancheria consists of members belonging to both the Yurok and Tolowa Tribes. Before the arrival of white settlers, both Tribes used a large portion of northern Humboldt County and coastal Del Norte County for fishing, hunting, gathering, ceremonial purposes, and for their villages. The original Big Lagoon Rancheria land was purchased in 1918 and members of the Rancheria expanded the Rancheria in 1985 by purchasing additional property adjacent to the Rancheria. During 2005 and 2006, the Rancheria purchased additional properties totaling 21 acres within a half-mile of the Rancheria. In 2004, the Rancheria purchased

2.2 acres of commercial property in McKinleyville. The Rancheria's Constitution was approved on May 5, 1985.

**Location**

The Big Lagoon Rancheria is located north of the City of Trinidad, on the southern end of Big Lagoon, and adjacent to the Pacific Ocean.

**Land Area**

The Big Lagoon Rancheria lands include 22 acres of trust land and 21 acres of tribal fee property within the Big Lagoon area. The trust land is on the southern edge of Big Lagoon and nearly adjacent to the Pacific Ocean. A 5-acre tribal fee parcel is located adjacent to Highway 101, with another 16-acre tribal fee parcel adjacent to the Big Lagoon County Park and Big Lagoon. The developed area of the Rancheria is low-density residential, and the neighboring community of Big Lagoon is also low-density residential with one school. The land surrounding the Rancheria has been used for forestry and sawmills operations during the last 150 years and currently has 126 homes. There is a small but popular County Park that provides public access for boating on Big Lagoon near the Big Lagoon Rancheria. Highway 101 is the primary route from the Rancheria to the more urban portions of Humboldt County that have stores and medical services.

**Hazard Overview**

The primary hazards for the Big Lagoon Rancheria and surrounding area are winter storms and earthquakes, and there is a potential for damage from tsunamis. In the event of a large earthquake and tsunami, the Tribe would become isolated from medical services by the closure of Highway 101 south of Trinidad and Westhaven. Highway 101 is vulnerable to both flooding and tsunamis as it passes over the Little River and behind Clam Beach. This area has been mapped by the Humboldt County Tsunami Working Group and was identified as being subject to high-velocity wave hazards. The tsunami danger has not been mapped for the Big Lagoon Rancheria but much of the developed portion of the Rancheria is below 35 feet in elevation and is therefore at risk of flooding. Further evaluation of the risk of a destructive wave hitting the community should be evaluated.

Winter storms bring large amounts of rain, large surf, and heavy winds. In the recent past homes in the non-Indian Community Development Corporation community of Big Lagoon were moved inland because of the erosion of the coastal bluffs during winter storms. The erosion caused by winter storms is likely to continue. Although this does often pose an immediate threat to property, it has the potential to pose a long-term threat to property and the environment in the area. Winter storms also cause power outages, and because Big Lagoon is relatively isolated, it can take several days before power is restored.

**Population**

The total population of the Big Lagoon Rancheria is 17, according to the 2010 U.S. Census.

**Approved Plan**

The Big Lagoon Rancheria does not have a FEMA-approved, state-level, multi-hazard mitigation plan.

**2.2.2 The Blue Lake Rancheria**

**Tribal Profile**

Blue Lake Rancheria (BLR) is a Sovereign Indian Nation located 7 miles east of the City of Arcata and 12 miles northeast of Eureka. The Rancheria is dedicated to the education, self-confidence, and upward mobility of its members. Blue Lake Rancheria is a Wiyot Tribe located in historical Wiyot territory, but the Tribe

includes members who are Wiyot, Tolowa, Hupa, Kuruk, Yurok, and Cherokee Indians. The Tribal Business Committee and the General Council have set as a priority the provision of education, social services, and community safety for tribal members, as well as for the Blue Lake Community as a whole. For decades, the Rancheria has worked hard in the areas of education, entrepreneurship, and philanthropy to become one of the most respected and prosperous tribes in Northern California.

Blue Lake Rancheria was established as a 30-acre reservation for homeless Native Americans through an Executive Order on December 24, 1908. The Executive Order was designed to aid Native Americans displaced by the immigration of Europeans. On August 18, 1958, the U.S. Congress terminated the Blue Lake Rancheria pursuant to Public Law 85-671—later determined to be an illegal and unjust act. After a lawsuit spanning decades (*Tillie Hardwick v. United States of America*), the Blue Lake Rancheria was reinstated as a federally recognized tribe on December 15, 1983, with an approved constitution granted by the Secretary of the Interior on March 22, 1989.

Wiyot territory historically extended from Little River, north of McKinleyville along the coast, south to Bear River Ridge, and inland 25 miles. Within this territory, there existed many hundreds of historic and prehistoric villages, ceremonial, burial, and summer sites of the Wiyot Tribe. Of the three principal groups of Wiyot, the Mad River Wiyot were known as the Batawat, the Wiki on the Humboldt Bay, and Wiyat. Wiyat is a native name for the Eel River Delta; later the name was applied to all who spoke the language, whether living on the Eel River, Humboldt Bay or Mad River. Wiyot is used in preference to the old name of “Whishosk.”

### **Hazard Overview**

Both the seismic and hydrologic settings of the Rancheria are very active. Hence, earthquakes and floods constitute the greatest level of threat to the Rancheria from natural hazards. BLR is less than 1,000 feet away from the Blue Lake Thrust Fault, 3,000 feet away from the primary trace of the Mad River Fault, and subject to the influences of the regional Mendocino Triple Junction, the Coast Range thrust Fault, and the Cascadia Subduction Zone. Earthquakes with a Richter magnitude of 6.0 or higher have occurred nine times in the last fifteen years and larger earthquakes between 6.9 and up to 9.1 Richter magnitude are forecast. Peak ground acceleration (PGA) at BLR is anticipated up to 0.8 g (the acceleration due to gravity - Pacific Watershed Associates, 2006) while FEMA loss models only calculate losses for earthquakes generating 0.55 g PGA. Estimates of losses to structures, contents, and functions, including displacement costs, for an earthquake generating 0.55 g PGA at BLR are approximately \$23.3 million. For earthquakes with 0.8 g PGA, losses are estimated to approach 100% and are valued at approximately \$71.5 million.

Earthquake events, along with many of the other hazard events, also have the potential to close down the Highway 299 transportation corridor and isolate BLR and the City of Blue Lake from critical municipal and county emergency services, hospitals, shelter, food, as well as from gaming industry patrons. Moreover, frequent closures of Highways 299 and 101 have effectively removed or sharply limited ground access to Humboldt County for state and federal emergency services to the county several times in the last decade. It is estimated that Humboldt County would not receive substantial state or federal aid in a regional or statewide seismic disaster for a minimum of one week and possibly up to three weeks.

BLR is situated within the 100-year floodplain of both the Mad River and Dave Powers Creek (Powers Creek) and contains lands designated as Zone A2, B, and C per the 1999 Flood Insurance Rate Map (FIRM). Each zone has varying degrees of susceptibility to flooding. Flood events much smaller than the 100-year flood but resulting in localized water depths from 9 to 18 inches have occurred three times in the last 15 years (e.g., 1992, 1994, and 2003). The loss estimate methods provided in the How-To Manual (Sheets 3a, 3b, and 4) indicate that the Rancheria could sustain structural, content, and functional losses of up to \$24.2 million in

a flood event with water surface elevations two or more feet above grade. Using FEMA's HAZUS-MH model results in loss estimates for a two-foot flood event at an even greater value of \$38.4 million.

After floods and earthquakes, wildfire is the hazard to which the Rancheria is most vulnerable and could generate the next greatest losses, up to \$15.3 million. The last wildland fire at BLR occurred in the summer of 2003 when grasslands north of the Casino burned. The source of the fire remains unknown.

The Rancheria is surrounded on all but one side by wildlands or former agricultural lands consisting of infrequently maintained grasslands and heavily wooded riparian corridors, beyond which are heavily forested slopes. To the north and east, the Rancheria is bounded by roads from which burning cigarettes thrown from cars or traffic accidents could ignite wildfires. To the south and west, BLR interfaces with vegetation rooted along the Mad River and Powers Creek to which emergency vehicles have very limited access. Once a wildland fire enters the Rancheria, there is a high probability that the fire would ignite residential areas comprised of wooden houses, wooden outbuildings, manufactured homes, trailers—most with combustible siding and decks and non-rated roofing materials—and combustible trees. There are also forty-four above-ground propane tanks immediately adjacent to individual residences that could explode in a single or multi-structure conflagration. Insufficient ingress and egress for emergency vehicles, less than 70% defensible space, and limited fire hydrants make portions of the Rancheria particularly vulnerable. The Tribal Office and gaming facilities, on the other hand, have large defensible spaces, sufficient fire hydrants, and more than one access road to reach them. The Sapphire Palace gaming facility is housed in a plastics-based, tented building that is ignition resistant but is susceptible to melting from contact with hot embers.

Severe winter storms with attendant saturated soils and wind gusts of up to 70 mph are responsible for annual nuisance damages and chronic power outages. Falling trees are a constant threat, particularly to residents of manufactured homes or trailers with less structural strength. Severe storms in the winter of 2006 resulted in blown-off roofing materials in several older buildings, a toppled communications tower on the Casino roof, and three power outages. The power outage of January 2006 lasted six days. Long power outages are of particular concern to BLR as a high percentage of the population are aging, elderly, or infirm, and many are dependent on properly-functioning medical devices and are particularly vulnerable when domestic heating, lighting, cooking, refrigeration, and media access are not accessible. Loss estimates from severe storms, including repairs and displacement, are \$985,000.

Other natural hazards, including tsunamis, technological hazards such as chemical spills, poor air quality, and dam failure are also identified in the risk assessment. A failure of Matthews Dam would cause a high-velocity debris torrent at a depth roughly ten feet above the roof elevation of the Casino complex. This event would result in a devastating 100% loss of all BLR structures. If a properly executed, an approximately sixteen-hour warning period between the time of dam failure and arrival of the debris torrent at BLR would allow sufficient time to avert loss of life, and a small percentage of personal effects could be saved. The remaining hazards, such as tsunamis and hazardous spills would result primarily in indirect, mostly economic effects from associated road closures.

### ***Vulnerabilities***

In general, most vulnerable at BLR are the residential structures and inhabitants of the Rancheria. The greatest economic losses to residents result from the sum of structural replacement costs and displacement costs during reconstruction. Loss of contents in the residential structures is less substantial. Conversely, the gaming enterprises and Tribal government buildings, while the least structurally vulnerable, would suffer the most economic damage due to losses to high-value contents and, more importantly, the loss of functions. The gaming enterprise is the largest economic asset of the Tribe, and functional downtime equates with substantial economic losses. Downtime is particularly problematic for the gaming business because it cannot be temporarily relocated elsewhere—like most other businesses—due to permitting restrictions.

The greatest vulnerability for non-residents and patrons of the gaming enterprise are their automobiles during a large flood or earthquake. With an average of 750 patrons with 500 vehicles on site at any given time, potential economic losses could be as high as \$10 million dollars in vehicle damage alone.

### **General Mitigation Activities**

For most of the hazard event types, under personal mitigation before the event hazard, the CPC decided it was important to have an evacuation plan and have an emergency kit. The CPC emphasized the importance of an emergency kit for every family in the community. This kit will contain information on personal mitigations that individuals should be aware of, as well as lists of resources for additional information. The CPC also ranked a high priority to the establishment of a buddy system with neighbors especially for those members of the community who need more help like the elderly and the sick.

The workplace questionnaires described previously asked not only what staff found unsafe in their workplaces but also what mitigation activities they would suggest to mitigate the vulnerabilities. After reviewing these suggestions, the recommended mitigation activities for the Rancheria workplaces include (in order of priority):

- Assemble and install earthquake kits in the office buildings.
- Become a primary contact for the County Office of Emergency Services for any nearby hazard events.
- Install a backup generator for the Tribal office.
- Perform regular emergency/evacuation drills and first responder/ICS refresher courses.
- Perform CPR training.
- Highlight the natural gas shutoff valve, and turn it off during/after an emergency.
- Develop written procedures for emergency response.
- Develop a central gathering location and a procedure for head counts after an emergency.

These activities are all feasible and generally cost-effective.

### **Population**

The Tribe has 51 enrolled members.

### **Approved Plan**

Blue Lake Rancheria completed a state-level, multi-hazard mitigation plan in 2008 and that plan was updated in 2012. For more information about this plan, contact Jody Brundin at the BLR Office of Emergency Services by calling 707-668-5101

## **2.2.3 The Hoopa Valley Tribe**

### **Tribal Profile**

The People of Hoopa Valley are one of California's first cultures. The first American trappers and gold miners entered Hoopa in 1828. They came up the Trinity River into the rich valley which has always been the center of the Hupa World, the place where the trails return. Legends say this is where the people came into being. The Tribe's treaty was signed providing the whole Hoopa Valley as a reservation. In 1876, an executive order was signed acknowledging this treaty. Since first European contact, the culture and traditions remain to this day.

In 1864, a Peace and Friendship Treaty was negotiated with the United States. In 1896, the Department of the Interior began preparing a land allotment list. In 1909, a Proclamation was handed down by President Theodore Roosevelt. This list was not completed and approved until 1923. The Hupa People successfully avoided the physical destruction of their valley homeland, and in modern times created one of the first successful Self-Governance Tribal structures in the nation.

The Tribe's traditional language belongs to the Athabaskan Language family, which relates the Tribe to other peoples in the region and, more remotely, to the Athabascans from the interior of Alaska and northern Canada, as well as to the Navajos and Apaches Tribes of the Southwest. The Tribe's traditional way of life was based on the semiannual king salmon runs that still occur on the Trinity River, which flows through the center of the Hoopa Valley Reservation. In addition, the Tribe made use of other indigenous foods, especially acorns. Both these resources remain important as ceremonial foods. Today some 2,500 Hupa people live on the Hoopa Valley Reservation, in the heart of the Tribe's traditional territory.

The Hupa people traditionally occupied lands in the far northwestern corner of California. The boundaries of the reservation were established by Executive Order on June 23, 1876 pursuant to the Congressional Act of April 3, 1864. The boundaries were expanded by Executive Order in 1891 to connect the old Klamath River (Yurok) Reservation to the Hoopa Valley Reservation. Further confirmation of the ownership by the Hupa Tribe of the Hoopa Valley Reservation came on October 31, 1988 with President Ronald Regan's signature on Public Law 100-580, the Hoopa/Yurok Settlement Act.

The Hupa People have occupied their lands since time immemorial, and the past century has really been the shortest in the Tribe's history. However, up until the late 1800s, there is little-to-no written record on the rich history and culture that is now the Hoopa Valley Tribe. Much of the tradition and lore that still exists today has been passed along between generations via an extensive oral tradition. The ceremonies and traditions continue in the similar manners as they have since the beginning, and will continue in this custom.

### ***Location***

The Reservation is located in the northeastern corner of Humboldt County in Northern California. It lies approximately 50 miles inland from the Pacific Ocean and is bisected by the Trinity River as the river travels between the community of Willow Creek and its confluence with the Klamath.

### ***Land Area***

The Hoopa Valley Indian Reservation is the largest reservation in California. According to the Executive Order issued by President U.S. Grant on June 23, 1876, the Reservation encompasses 89,572 acres. As currently surveyed, the Reservation is nearly square with sides 12 miles in length or approximately 144 square miles. This area encompasses roughly 50% of the Hupa aboriginal territory.

The reservation consists of rugged, mountainous terrain and a broad valley that is bisected by the Trinity River and its many tributaries. The area is characterized by relatively wet, cool winters and dry summers. The primary hazards are earthquakes, flooding from winter storms, and wild land fire during the dry summer and fall.

### ***Hazard Overview***

Winter storms can bring large amounts of rain, damaging winds, and occasionally some snow. Rain can cause landslides that block Highway 96 and cause flooding on the Trinity River. The most significant flooding is caused during the late winter and early spring if a warm storm brings a large amount of rain that melts snow in the surrounding mountains. These rain-on-snow events can cause rapid increase in flows and flooding.

Earthquakes are possible at any time in northern California. Aside from damage to property and the potential for injuries, the largest problem associated with an earthquake is the loss of access to emergency medical care and the disruption of power. A clinic on the reservation can address many issues; but if Highway 96 or 299 is blocked, all acute patients would need to be transported by air to Eureka or Redding.

During the summer months, there is a consistent danger of wildland fire. The reservation has its own wild land fire department which responds to over 200 incidents a year. Fire has the potential to destroy homes, block roads, and cause respiratory problems for residents of the Reservation. Fire protection services are bolstered by mutual aid agreements with other fire services in the area.

Insufficient water in the Klamath and Trinity Rivers should also be considered when planning for hazards. As with all natural disasters, low water levels in the rivers are not entirely the consequence of natural weather patterns, such as drought, but the result of management decisions. Both rivers are controlled by upstream reservoirs and decisions as how much water is released are political decisions. Nevertheless, these political decisions can have dramatic impacts on the ability of the rivers to support salmon. Fish kills have occurred in the past and caused harm to Tribes that rely on the Salmon for subsistence and ceremonial purposes.

### ***Population***

The 2010 census states the reservation population is 3,041. By utilizing the 2005 BIA Report and the 2010 census population statistics, the population on the reservation was determined to include 1,893 Hoopa, 752 other Native Americans, and 396 non-Indians. New members are added to the Hoopa Tribal role following an application process and final approval by the Tribal Council.

### ***Approved Plan***

The Hoopa Tribe does not have a FEMA-approved, state-level, multi-hazard mitigation plan.

## **2.2.4 The Karuk Tribe**

### ***Tribal Profile***

The Karuk áraaraha, the Upriver People, are from the middle course of the Klamath and lower course of the Salmon Rivers. Karuk villages once extended from Seiad Valley to 15 kilometers below Bluff Creek along the Klamath River and in vicinities along the middle and lower Salmon River. The Karuk have lived in this region since the beginning of time and retain millennial ties to the land. Today, the Karuk Tribe sustains its traditions and sovereignty as a federally-recognized Tribe. The Karuk Tribe upholds the right of self-governance through many programs that help ensure autonomy as a self-leading community.

The Karuk Tribe provides a variety of programs and services, including social, educational, environmental, cultural, health, general assistance, self-governance, housing, transportation, and land use planning for tribal members and others residing in the communities. The Karuk Tribal Health Program operates health clinics in Orleans, Happy Camp, and Yreka, serving all patients regardless of their ability to pay.

### ***Location***

The Karuk Tribe of California's present-day service area is northeastern Humboldt County and all of Siskiyou County. The *Federal Register* describes the area as “[t]he counties of Siskiyou, northeastern Humboldt from State Highway 96 milepost HUM 28.61 north to the Siskiyou County Line in the State of California.”

### ***Land Area***

Karuk lands include approximately 650 acres of trust land and 800 acres of fee land (land owned by the Tribe but not yet in trust). These lands are mostly isolated parcels dispersed across central and western Siskiyou

County and northeastern Humboldt County. They are generally located in small communities surrounded by National Forest lands. The Karuk Tribe’s “near reservation” service area is described above.

In Humboldt County, the Tribe serves the community of Orleans and those residing in the surrounding area. This area covers 214 square miles and is extremely rural. The population density for the Tribe’s service area is 6.87 per square mile, which the U.S. Census Bureau labels as a “frontier.” Community members served include tribal members, members of other tribes, and non-Indians.

### ***Hazard Overview***

The Tribe’s service area consists of rugged, mountainous terrain that is bisected by the Klamath River and its many tributaries. It receives abundant sun from May through September. Winter weather consists of heavy rains (most of the region’s annual rainfall is received between October and April); rock slides precipitated by rain; rain-on-snow events that cause severe landslides; and high winds. Travel through the service area is confined to Highway 96, a narrow two-lane road that winds along the Klamath River corridor. Highway 96 is built into steep mountains, making it subject to falling rocks year-round and landslides that cause the road to close during winter storm events. High winds and landslides during winter storms frequently destroy power lines, which may be unreachable by electrical utility workers until Highway 96 can be cleared and reopened.

A February 2007 storm closed Highway 96 or restricted travel to one-way controlled traffic at two locations (one near Orleans) for nearly two weeks; the accompanying power outage in Orleans lasted nine days. In August 2013, fast-moving wildfire burned through the community of Orleans, disrupting power for a number of days and causing severe resource damage to tribal lands and housing. The fire resulted in an evacuation of many Tribal and community members, with the Tribe facilitating an evacuation center until the evacuation order was lifted. Events such as these further isolate the Tribe’s already rural communities and prohibit residents from accessing services outside the immediate area due to long distances and transportation barriers.

The Karuk Hazard Mitigation Plan identified risk from the following hazards:

- Flood Events
- Wildfire
- Air Quality
- Landslides
- Dams and Dam Failure
- Road & Bridge Failure
- Water Quality
- Volcanic Eruptions
- Earthquakes
- Drought
- Other Events

### ***Population***

The total population in the Humboldt County portion of the Tribe’s Service Area, according to the 2010 U.S. Census, is 506, with 319 of these residents as Karuk tribal members or descendants.

### ***Approved Plan***

The Karuk Tribe of California has a FEMA-approved, state-level, Multi-Hazard Mitigation Plan. The plan was approved in August 2006. The plan may be viewed at: <http://www.karuk.us>. Information is available by contacting Russell Attebery, Karuk Tribal Chairman, at [battebery@karuk.us](mailto:battebery@karuk.us) or (530) 493-1600, ext. 2019.

## **2.2.5 The Bear River Band of the Rohnerville Rancheria**

### ***Tribal Profile***

The Bear River Band of the Rohnerville Rancheria currently occupy only a small portion of their ancestral lands which previously encompassed much of the Eel River delta. The original Rohnerville Rancheria was purchased by the United States in 1910 and consisted of 15.187 acres located just outside the city limits of Fortuna. This Rancheria was terminated on July 16, 1966, and the 15.187 acres were divided into individual parcels and given to individual members of the Tribe.

On March 4, 1986, the United States signed a Stipulation to Restoration of Indian Country which established that the original boundaries of the Rohnerville Rancheria, among others, be as they existed immediately prior to the Rancheria Act. By the time the boundaries were re-established only a small portion of the land remained in Indian ownership. Since the land base on the original Rohnerville Rancheria was too small for providing housing and social services for Tribal members, it was necessary for the Tribe to acquire additional property. The Tribe acquired additional property on Singley Hill road. On July 12, 1991, the Tribe entered a grant deed transferring the 65-acre parcel to the United States in trust for the Tribe. The Secretary of Interior accepted this property in Trust on January 20, 1994.

As a modern Tribal government, the Bear River Band provides a variety of social, educational, environmental, linguistic, cultural, general assistance, self-governance, housing, transportation, and land use planning services for Tribal Members residing on and off of the Rancheria.

### ***Location***

The Rohnerville Rancheria is located north of the City of Fortuna and east of the community of Loleta. The Bear River Band has ownership or governmental control of four parcels of land within their aboriginal territory. The four parcels include the original Rohnerville Rancheria east of the city of Fortuna, the Singley Hill and the Fearrian Road parcels in Loleta, and the Basayo Subdivision in Fortuna.

### ***Land Area***

The Bear River Band lands include approximately 185 acres. The Old Rancheria lands are east of the City of Fortuna and the current Rancheria land is north of Fortuna off of Singley Hill Road. The Tribe owns an additional parcel within the city of Fortuna on which it has constructed housing for Tribal members.

The land is primarily rural residential with the exception of the property within the City of Fortuna. The Rancheria has a casino and housing and is surrounded by pasture and open space lands. The Tribe is planning to construct additional housing on its property off of Singly Hill Road which will also be surrounding by ranch lands and open space.

### ***Hazard Overview***

Earthquakes and the possibility of wildland fire are the primary hazards in the area. Although the Rancheria is in a relatively coastal and moist area, the Rancheria is surrounded by grass-lands which have burned in the past. Very little sunshine is needed to dry the fuels sufficiently and increase the risk of wildland fire. The current roads are adequate for emergency access/egress to the Rancheria during dry weather, but may not be adequate for wet weather. In the event an evacuation is necessary, residents of the Rancheria and visitors to the Casino can drive either north or south on Singley Hill Road, which connects with Highway 101 traveling in either direction. The Loleta Volunteer Fire Department provides fire protection services to the Rancheria and is partially funded by the Rancheria.

Storms with strong damaging winds and heavy rain are possible during the winter months. Tribal Officials have commented that it is difficult to drive on Bear River Road during many of the winter storms. The road was constructed without proper drainage and residents on the downhill side of the road often have to put sandbags across their driveways during winter rain events.

### ***Population***

The current enrollment of the Tribe is 291 members. Many of these members live in the surrounding communities of Loleta, Fortuna, Rio-Dell and Eureka.

### ***Approved Plan***

The Rohnerville Rancheria does not have a FEMA-approved, state-level, Multi-Hazard Mitigation Plan.

## **2.2.6 The Table Bluff Rancheria**

### ***Tribal Profile***

The Wiyot people have inhabited California's northern shores for thousands of years. Before the coming of white settlers, Wiyot people around Humboldt Bay and on Indian Island hunted the area's wildlife, fished for salmon, and gathered roots for medicine, food and basketry. Before 1850, there were approximately 1500 to 2000 Wiyot people living within this area. After 1860 there was an estimated population of 200 people left. By 1910 there was an estimate of less than 100 full blood Wiyot people living within the Wiyot territory. This rapid decline in population was due to disease, slavery, target practice, 'protection,' being herded from place to place, and of course, massacres.

After the massacres of 1860 nearly all Wiyot people were removed from their homelands, but some returned. In the early 1900s, a church group purchased 20 acres, in the Eel River estuary, for homeless Wiyot people. The Federal Government later transferred this land into trust status in 1908. This land became known as the Table Bluff Rancheria of Wiyot Indians, now referred to as "The Old Reservation."

In 1958, the Federal Government passed the California Rancheria Act that terminated the Tribe in 1961. In 1975, the Tribe filed suit against the Federal Government for unlawful termination, and in 1981, in *Table Bluff Band of Indians v. Lujan (United States)*, it was determined the Tribe's termination was unlawful and trust status was reinstated. In 1991, during another lawsuit regarding drinking water contamination and other sanitation issues on the Old Reservation, the court mandated new land be purchased and the Tribe moved to another location. This location was approximately 1-mile away up on the bluff, and serves as the present Table Bluff Reservation. The original 20 acres were put into fee simple under the individual families, but deemed to be under the Tribe's jurisdiction as long as held in Indian hands. Some Wiyot people reside on 88 acres of land called the Table Bluff Reservation, 16 miles south of the City of Eureka.

### ***Location***

Wiyot territory starts at Little River and continues down the coast to Bear River, then inland to the first set of mountains. Towns that are within the traditional Wiyot territory are McKinleyville, Blue Lake, Arcata, Eureka, Kneeland, Loleta, Fortuna, Ferndale, and Rohnerville. Rivers within this territory are Mad River (Batwat), Elk River, Eel River and the Van Duzen River.

Currently the Wiyot Tribal lands consist of an 88-acre parcel on the southern edge of Humboldt Bay and a 20-acre parcel known as the Old Rancheria. They also recently acquired 1.5 acres of Indian Island which is the center of the Wiyot people's world.

### ***Land Area***

The Table Bluff Reservation is located 16 miles south of Eureka in the Eel River Bottom on the southern edge of Humboldt Bay. This property ranges in elevation from about 40 feet above sea level at the edge of Humboldt Bay to near 130 feet above sea level on the southern edge of the property near residential areas.

### ***Hazard Overview***

According to the hazard mapping conducted by Humboldt State University, the residential portions of the Table Bluff Reservation are not at risk from a tsunami. However, the re-acquired property on Indian Island is at risk of flooding in the event of a tsunami. The Table Bluff Reservation, however, may be cut off from Eureka in the event of a Tsunami as Highway 101 North may be inundated by flood waters between College of the Redwoods and Eureka. Members of the Tribe would still have access to emergency medical services in Fortuna.

Other hazards include high winds and heavy rain from strong winter storms and earthquakes. Strong winter storms along with increased rates of runoff from bare slopes have caused flooding of the Eel River. Historically floods have covered much of the Eel River bottom. However, the Reservation is located on a bluff which may protect it from any flooding of the Eel River.

Earthquakes have the potential to isolate members of the Wiyot Tribe who live on the Table Bluff reservation from other members of the Tribe who live in the communities of Fortuna and Eureka. Earthquakes may damage area roads and may it impossible to get emergency medical care and to access goods and services.

### ***Population***

Currently there are over 526 enrolled members.

### ***Approved Plan***

The Table Bluff Rancheria does not have a FEMA-approved, stage-level, Multi-Hazard Mitigation Plan.

## **2.2.7 The Cher-Ae Heights Indian Community of the Trinidad Rancheria**

### ***Tribal Profile***

The Trinidad Rancheria was established in 1917. Descendants of three tribes of California presently occupy the Rancheria including the Yurok, Weott, and Tolowa peoples. All three tribes share a similar cultural heritage. Traditionally these groups lived throughout the coastal region of what is now northern California, residing on lands from the Humboldt Bay area to the Oregon coast.

Since the mid-1970s the tribe has accomplished an enormous revitalization, including the development of housing facilities and the provision of health and welfare benefits for its tribal members. A community council that is made up of the entire adult voting tribal membership governs the Trinidad Rancheria. A five member tribal council is elected from the Rancheria community.

### ***Location***

The Tribe owns property at two separate sites in Trinidad; 46.5 acres on the west side of Highway 101 along the Pacific Coast and 9 acres on the eastern side of Highway 101 approximately one-mile from the City of Trinidad. Highway 101 bisects the Rancheria on the northeast corner of the Rancheria in Trinidad. The Tribe also owns the Trinidad Pier and Seascape Restaurant in the City of Trinidad. The pier is the northernmost oceanfront pier in the state and sits in one of the state's most beautiful settings at Trinidad Harbor. It is

accessible from Main Street in central Trinidad. A third parcel of 27.5 acres is located two miles north of McKinleyville east of the Eureka/Arcata Airport.

### ***Land Area***

The Trinidad Rancheria comprises of 83 acres on three parcels in Humboldt County. The land uses on the property include commercial, low density residential and sections of coastal beach and bluff. Land uses on surrounding the tribe include, both low and medium density residential, commercial, and state park. The potential hazards include: earthquakes, landslides, tsunami, winter storms, flooding, wildland fire, and toxic chemical/biological spills on Highway 101 (which bisects the Rancheria and is within very close proximity to Tribal homes).

### ***Hazard Overview***

Strong winter storms bring large surf which frequently damages portions of Scenic Drive. Scenic Drive is the only access road to portions of the Rancheria including the Casino. Northern parts of Scenic Drive near Trinidad are less susceptible to landslides and failure of the coastal bluff. The southern portion of scenic drive has been closed for up to a year at a time because of erosion of the coastal bluff supporting the road base.

A tsunami has the potential to damage additional portions of Scenic Drive and inundate the Trinidad Pier and Seascape Restaurant in the City of Trinidad. Both the pier and the accompanying restaurant are close to sea-level and would likely feel the impact of any change in sea-level, particularly a large rapid rise in sea level or a wave. If a large earthquake occurs patrons of the restaurant and restaurant staff would need to evacuate before any official tsunami warning is issued. In the event of a large earthquake and Tsunami the Tribe would also become isolated from medical services by the closure of Highway 101 south of Trinidad Westhaven. Highway 101 is vulnerable to both flooding and Tsunamis as it passes over the Little River and behind Clam Beach. This area has been mapped by the Humboldt County Tsunami Working Group and was identified as being subject to 'High velocity wave hazard.

Earthquakes have the potential to damage property and injure people at any time. If an earthquake occurs while an event is in progress at the Casino the Tribe may need to provide food, water, and shelter for a large number of people. Highway 101 may be closed until bridges are inspected or repaired. If a tsunami accompanies the earthquake it may be several weeks before large portions of 101 are reconstructed.

The risk from wild land fire is relatively small. Fire in stands of Redwoods along the coast is infrequent although based on the fire history in other stands of Redwoods it does occur. Adequate defensible space as well as sufficient access/egress would help mitigate this risk.

### ***Population***

According to the 2010 U.S. Census, the total population of the Rancheria is 132. These numbers are for the Trinidad Rancheria and Off-Reservation Trust Land. There are 52 members on the Rancheria and 21 members on Off-Reservation Trust Land. However, Trinidad Rancheria has its own population records as recent as 2006, showing Reservation population at 102 Tribal members, an estimated 31 non-Tribal members, and 52 children living within the Rancheria boundaries. The 2005 BIA report states there are 171 members enrolled.

### ***Approved Plan***

The Trinidad Rancheria has a FEMA-approved, state-level, Multi-Hazard Mitigation Plan. The plan was approved in April of 2006. The plan is kept on file with FEMA and on file in the Tribe's Operations building. Questions can be directed to Jonas Savage, EPA Technician and Emergency Planner for the Rancheria.

## **2.2.8 The Yurok Tribe**

### ***Tribal Profile***

The Yurok Tribe is California's largest Indian Tribe with over 6,500 enrolled members. The Yurok Tribe's people are also known historically as the Pohlik-la, Ner-er-er, Petch-ik-lah and Klamath River Indians. For millennia, traditional Yurok religion and sovereignty was pervasive and practiced throughout all of the Tribe's historic villages along the Pacific Coast and inland on the Klamath River. The Yurok people carried on extensive trade and social relations through this region and beyond. Yurok commerce traditionally included a monetary system based on the use of dentalium shells, and other items as currency. The Yurok traditional ceremonies include the Deerskin Dance, Doctor Dance, Jump Dance, Brush Dance, Kick Dance, Flower Dance, Boat Dance, and others, that have drawn Yurok people and neighboring Tribes together for renewal, healing and prayer. This whole land, this Yurok country, stayed in balance and was kept that way by the Tribe's good stewardship, hard work, wise laws and constant prayers to the Creator.

The Yurok social and ecological balance, thousands of years old, was shattered by the invasion of the non-Indians beginning in the 17th century. As white explorers, gold-miners and settlers came to this region, the Yurok people lost more than three-fourths of its population through fatal contact with European diseases and unprovoked massacres by vigilantes. The Yurok people agreed to sign a "Treaty of Peace and Friendship" with representatives of the President of the United States in 1851, however, the US Senate failed to ratify the treaty. In 1855, the US Government ordered the Tribe's people to be confined on the Klamath River Reserve which was created by Executive Order. The relocation of Yurok families to unfamiliar lands caused great hardships. The forced removal of children to US Government boarding schools where they were denied the right to practice their cultural traditions caused the disruption of the Tribe's heritage. Throughout the past history of Yurok contacts with the US Government and State of California, the Tribe has fought to protect and maintain access to its Ancestral Lands. These struggles were legally complicated by the fact that the Yurok people had never established a formal structure with a written form of government. After the land-based natural resources and fisheries of the Tribe's aboriginal lands had been decimated, and the traditional stewardship of the people ignored, the Yurok people knew it was time to establish a federally recognized Tribal Sovereignty and Authority to protect and preserve both the traditions of the Tribe's people and the land and river of its ancestors.

On November 24, 1993, the Constitution of the Yurok Tribe was certified and approved, after having passed a Ratification Election by a majority of the Yurok Tribal members. The Constitution defines the territory, jurisdiction and authority of its Tribal Government. The Yurok Tribe's main offices are located in Klamath, California and the Tribal government employs nearly 200 individuals. Enrolled and registered to vote Tribal members elect nine of its members to the Tribal Council. The Tribal Chairperson and Vice Chairperson are elected at-large. Seven council members represent the seven Tribal Districts. Each Council member serves a term of three years and regularly meets at least monthly. Individual council members have District meetings at least quarterly. All regular and special meetings of the Council are open to members of the Yurok Tribe. All votes of the Council are a matter of public record.

### ***Location***

The Yurok Tribe's Territory consists of all Ancestral Lands, specifically including, but not limited to, the Yurok Reservation's lands, which currently extend from one mile on each side from the mouth of the Klamath River and upriver for a distance of 44 miles.

### ***Land Area***

The Yurok Reservation is 63,035 acres. Only a small portion of the Yurok Reservation has been developed for residential housing, and much of that lacks basic services such as electricity and telephone.

### ***Hazard Overview***

The Yurok Hazard Mitigation Plan identified that there was a medium or high risk of the following hazards:

- Bridge Failure
- Dam Failure
- Drought
- Earthquake
- Extreme Heat
- Fish Kill
- Flood
- Hailstorm
- Landslide
- Road Failure
- Winter Storms
- Structural Fires
- Tsunami
- Water Contamination
- Wildfire
- Windstorm

The Hazard Mitigation Plan examines each hazard and outlines potential mitigation measures which are intended to lessen the impact of each hazard. The Yurok Hazard Mitigation Plan available from the Tribe should be consulted for an in-depth discussion of how hazards affect the Yurok.

### ***Population***

The 2005 BIA report states there are 4,912 members enrolled.

### ***Approved Plan***

The Yurok Tribe of California has a FEMA-approved, state-level, Multi-Hazard Mitigation Plan. The plan was originally approved in May 2006 but was recently updated to reflect changes from the regions 2008 wildfires. The Tribe is currently waiting for FEMA's review and approval on the updated Hazard Mitigation Plan. The plan may be viewed at: <http://www.yuroktribe.org> and questions can be directed to Nicole Wright, planner for the Tribe.