



# Blue Lake Rancheria Case Study

Impacts of Preparedness Grant Funding

May 2023



FEMA

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## I. Overview

In 2022, the Federal Emergency Management Agency (FEMA) National Preparedness Assessment Division (NPAD) conducted a grant effectiveness case study with the Blue Lake Rancheria to better understand the effects of preparedness grant funding investments made by the Tribe. To conduct this case study, FEMA personnel held a virtual interview with Blue Lake Rancheria's Office of Emergency Services (BLROES) in September 2022. During the case study, participants discussed the Tribe's use of preparedness grant dollars to invest in community resilience, investment and allocation strategies, and recommendations for improving FEMA's administration of its preparedness grant programs. The case study resulted in the following findings:

- The geographic isolation of Blue Lake Rancheria has shaped the Tribe's emergency management and investment strategies.
- The Blue Lake Rancheria's resourceful investment of funding from multiple federal and state grant programs significantly improved its ability to advance community and energy resilience for its members and whole community stakeholders in the greater North Coast region of California.
- Investments using FEMA preparedness grant funding in planning, training, exercises, and equipment play a critical role in Blue Lake Rancheria's emergency management approach, supplement investments using other FEMA, federal, and state grant funds in technology to ensure energy resilience, and result in positive impacts to the Tribe's response and recovery outcomes during disaster incidents.
- In particular, the Blue Lake Rancheria's investment of 2016 Tribal Homeland Security Grant Program (THSGP) funding to create the Resilience Training and Innovation Center (RTIC) filled an important gap in the North Coast region's resilience framework by providing trainings to local emergency managers, including from other tribal nations and remote areas, and helping build relationships between the Tribe and other federal, state, local, and tribal stakeholders in the emergency management community.

## II. Background

### About Blue Lake Rancheria

The Blue Lake Rancheria is a federally recognized tribal government in northwestern California that was established in 1908 within the aboriginal territory of the Wiyot people. The Tribe includes about 50 enrolled members and has 100 acres of land located in rural, geographically isolated Humboldt County, which is 300 miles north of San Francisco. The Tribe has economic enterprises

**Image 1: Acorns are a cultural food of the Wiyot people**



that support hundreds of local jobs, government operations and programs, economic diversification, resilience and sustainability efforts, environmental protection, and a wide array of social services.<sup>1</sup> These enterprises and programs include the Blue Lake Hotel, Blue Lake Casino, PlayStation 777: Gas and Convenience Store, biodiesel manufacturing, and local food production which helps support local students and meal delivery programs in the community.

**Image 2: A traditional Wiyot hat**



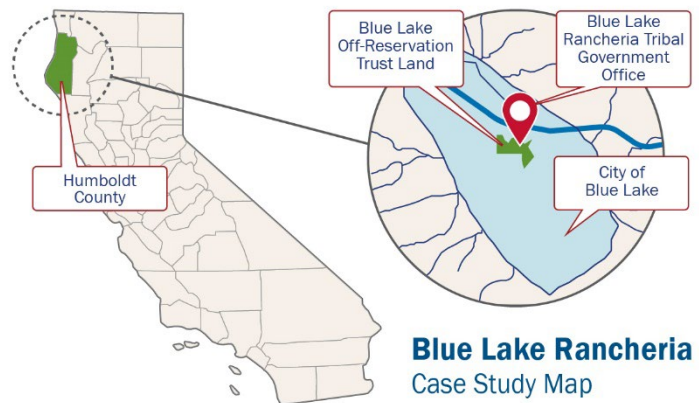
Though the Tribe is small, it has played an important role in building and sustaining the preparedness of the larger North Coast region and the State of California. In recent years, Blue Lake Rancheria has been recognized as a leader in sustainability and resilience due to efforts to combat climate change, as well as for individual and community preparedness.<sup>2</sup>

## Assessing Risks and Capabilities

### THREATS AND HAZARDS

Tribal lands are situated in Humboldt County, California near the city of Blue Lake and many geographically high-risk areas, including Matthew's Dam and the Mad River, a natural historical floodplain. It also sits near many geological fault lines, including the Cascadia Subduction Zone. This puts the Tribe at risk for impacts due to flooding and earthquakes.

The rural, isolated North Coast region of California faces other hazards like tsunamis, severe storms, wildfires, drought, floods, and landslides. Impacts of these hazards include air quality reductions and disruptions to fuel and electricity, which can last from hours, to weeks, to months. In addition, non-tribal hazardous



**Image 3: The Mad River**



infrastructure is located on and adjacent to tribal lands, including a wastewater treatment plant, decommissioned landfill, and large biomass power plant. In 2016, the Tribe identified a cyberattack and severe storm/high winds as threats and hazards. In 2021, the top three biggest local hazards facing the Blue Lake Rancheria community were earthquakes, wildfires, and infectious disease outbreaks. Starting in 2022, the Tribe conducted an Emergency Management Performance Grant (EMPG)-funded seismic assessment, which provided important insight prior to the December 2022 Ferndale Earthquake.



## APPROACH TO EMERGENCY MANAGEMENT AND COMMUNITY RESILIENCE

Due to the threats and hazards faced in the region, the Tribe's ancestors engaged in natural hazard mitigation which includes the use of cultural burning practices to renew the earth. Families in the community share in conducting these controlled burns. Each family also participates in local harvests and food storage to mitigate future drought, crop failure, and other environmental challenges. Blue Lake Rancheria continues to build on ancient practices, and in both ancestral and modern cases, the Tribe's primary goal remains the same: to reduce or eliminate loss of life and property and environmental damage resulting from disasters.<sup>3</sup>

The Tribe promotes a whole community approach to engagement and emergency management, focusing on emergency planning efforts that better prepare the entire Tribe for emergency incidents. The Tribe also focuses on protecting its most vulnerable community members, such as tribal elders, when undertaking planning efforts and considering the community's preparedness. Additionally, the Tribe is focused on building resilience across five sectors: energy, water, food, communication/IT, and transportation. In 2010, the Tribe established the Blue Lake Rancheria Office of Emergency Services (BLROES) in response to identified capability gaps and ongoing emergency preparedness needs. BLROES leads emergency preparedness and disaster mitigation, response, and recovery across a wide array of planning, training, exercise, and certification efforts. BLROES works with multiple external partners to lessen the severity of impacts from disasters and secure adequate resources to continually improve resilience and preparedness within the tribal community and across the North Coast region. These partners include emergency planners and responders at the local, regional, state, and federal levels.<sup>4</sup>

**Image 4: A whole community approach to hazard mitigation helps the tribe combat flooding from the Mad River**



The Tribe's low-carbon community resilience projects have earned them national and international recognition, including the DistribuTECH/PowerGrid International's "2018 Distributed Energy Resource Project of the Year" and the 2017 U.S. FEMA "Whole Community Preparedness Award" for proactive efforts to address emergency preparedness challenges, where the Tribe was selected as one of 11 Individual and Community Preparedness Award recipients from around the country. The White House also recognized the Tribe as a climate champion due to its pioneering commitment to cutting carbon pollution and preparing for the impacts of changing climate.<sup>5</sup>

In addition, the Blue Lake Rancheria Tribe is a resource during disaster incidents for the larger North Coast region. When disaster strikes, the tribal community serves as an unofficial gathering spot for neighboring communities, including Humboldt and Del Norte Counties. Tribal lands are located at the junction of two main routes, SR299 and Hwy101, and are one of the only places on SR299 that is inland from the Pacific Coast and out of the tsunami zone that also has the capacity to operate for

multiple days to weeks.<sup>6</sup> Given its critical infrastructure and emergency power, the region serves as a refuge for those evacuating from surrounding regions. The Tribe received as many as 10,000 people on their tribal lands during the 2019 public safety power shutoff. In 2011, the Tribe also served as a stopping point for neighboring residents who self-evacuated from low lying areas because of a tsunami threat. In the past, the Tribe has also established memorandums of understanding with the Humboldt County Office of Emergency Services (OES). For example, during the COVID-19 pandemic, the Tribe provided Humboldt County OES with \$25,000 worth of frozen meals to support the quarantining of residents experiencing homelessness in local hotel rooms. The Tribe's ability to support evacuees from the North Coast region and work collaboratively with its neighboring county illustrates continued community resilience and major contributions to regional preparedness.

### III. Grant Funding and Priorities

The Tribe uses multiple federal, state, and local incentives, policies, and programs to help fund and structure its preparedness efforts. Within this portfolio of resources, the Tribe's preparedness grant-funded investments amplified the impact of the Tribe's previous efforts by building and sustaining existing capabilities in community resilience and outreach. This section summarizes these investments by grant program, and the following section describes their impacts, which center on Blue Lake Rancheria's engagement and work with state, local, tribal, territorial partners (SLTT) and whole community stakeholders.

#### Grant Allocation Priorities

The Tribe engages SLTT partners and federal stakeholders in planning meetings to solicit input regarding the feasibility and prioritization of potential mitigation measures and projects to inform funding allocation decisions. Blue Lake Rancheria evaluates available resources and community needs that are outlined in the Hazard Mitigation Plan to determine which projects to fund, including for preparedness priorities. The Tribe achieved a majority of the projects in the most recent 2021 Hazard Mitigation Plan, with several in progress or near completion. The Blue Lake Rancheria Tribe has used FEMA Hazard Mitigation Assistance in the past to develop and update its Hazard Mitigation Plan.

#### Grant Programs

The Tribe leveraged multiple grant programs to invest in preparedness capabilities and community resilience, which included FEMA's Emergency Management Performance Grant (EMPG) program, Tribal Homeland Security Grant Program (THSGP), and State Homeland Security Program (SHSP). The [California Governor's Office of Emergency Services](#) provided the Tribe with SHSP funding from FY 2017 through FY 2019 and EMPG funding from FY 2015 through FY 2019 to support the Tribe's preparedness goals. The Tribe applied for and received THSGP funding in 2016, which allowed for the Tribe to invest additional preparedness grant funds. Since FY 2015, the Blue Lake Rancheria Tribe invested 74 percent of its total grant project funding in three primary Core Capabilities: Community Resilience, Operational Coordination, and Planning. **Table 1** displays the Tribe's EMPG, SHSP, and THSP grant funding since FY 2015.

**Table 1: FEMA Preparedness Grant Program Funding by Program Since FY 2015**

Grant Program	Award Amount				
	FY15	FY16	FY17	FY18	FY19
SHSP	\$0	\$0	\$96,157	\$158,786	\$337,782
THSGP	\$0	\$430,800	\$0	\$0	\$0
EMPG	\$108,686	\$124,066	\$107,025	\$33,358	\$152,926
<b>Total</b>	<b>\$108,686</b>	<b>\$554,866</b>	<b>\$203,182</b>	<b>\$192,144</b>	<b>\$490,708</b>

## IV. Capability Impacts

Since FY 2015, Blue Lake Rancheria Tribe's investments using FEMA preparedness grant funding have primarily consisted of the creation of the Blue Lake Rancheria Resiliency Training and Innovation Center (RTIC), which greatly enhanced the opportunity for collaborating among surrounding communities and tribal partners; establishing the Tribal Emergency Response Team (TERT); investing in planning, organization, equipment, training, and exercises for emergency management; and promoting energy resilience and microgrid use. In addition, the BLROES operates entirely on funding from grant programs, including FEMA preparedness grants. Blue Lake Rancheria uses EMPG funding and HSGP funding to fund both specific staff positions and other staff salaries to support all hazard emergency management duties. Each of these grant-funded projects has played an important role in building and sustaining the Tribe's emergency preparedness capabilities in service of the goals identified in the Tribe's Hazard Mitigation Plan.

### Blue Lake Rancheria Resiliency Training and Innovation Center (RTIC)

Though Blue Lake Rancheria has conducted training and exercises since 1983, the Tribe's remote location often makes traveling to pursue training outside of the region time-intensive and costly. Cost and travel time are increasingly significant obstacles as the need for self-sufficiency during disaster incidents increases, and the trainings that support self-sufficiency become more important. Additionally, Blue Lake Rancheria community members noted a lack of trust as a deterrent for some members to attend trainings in venues outside the reservation. These challenges inspired the Tribe to create the [Blue Lake Rancheria RTIC](#), a training venue located within the BLR reservation, using 2016 THSGP funding. The RTIC

**Image 5: Blue Lake Rancheria conducts trainings for the whole community at the RTIC**





ensures a cost effective, accessible, and trusted option for the Tribe and surrounding communities to conduct trainings.

A primary function of the RTIC is to facilitate training and certifications of additional emergency managers and emergency preparedness personnel within the Tribe and surrounding communities. According to the 2019 Blue Lake Rancheria Resiliency Training & Innovation Center Annual Report, the RTIC has hosted at least 40 free training courses offered by 13 different federal, state, local, and higher education training agencies and graduated over 1,000 students. The largest event hosted by the RTIC was the FEMA National Emergency Management Advanced Academy (NEMAA), which occurred over an eight-month period in 2019 and included students from all over the Pacific, including six California tribes, and 33 graduates, 41 percent of whom were from tribal nations. The RTIC does not charge fees to students or training agencies for its use and advertises trainings in classroom and virtual environments using a monthly bulletin. **Figure 1** highlights the types of training accessible through the RTIC.

**Figure 1: Training Courses Offered by the RTIC**



BLROES also uses the RTIC as a base of operations, which proved especially useful during the COVID-19 pandemic.<sup>7</sup> During the onset of the COVID-19 pandemic, the RTIC was able to host county officials who discussed best practices to mitigate the outbreak and provided continued guidance throughout the pandemic. In addition, due to trainings offered by the RTIC prior to the COVID-19 pandemic and the relationships built in the greater North Coast region during these trainings, BLROES staff were trained in the Incident Command System, understood FEMA programs, and felt more comfortable and knowledgeable interacting with other partners in the North Coast region. The RTIC was also able to continue hosting its grant-funded trainings virtually when public health conditions necessitated closing the facility to the public.

As part of its role in providing training to the Blue Lake and larger North Coast community, the RTIC has played a critical role in facilitating partnerships and providing a meeting place between the Tribe, its neighbors, and federal stakeholders. For instance, in 2019 alone, the RTIC provided nearly 600 hours of training to 710 students from the community and surrounding region. In addition to its primary function, the Tribe also describes the RTIC as a place of networking between governments, agencies, non-profits, and the public, as well as a venue for cultural education and understanding between tribal and non-tribal citizens, which can help break down barriers that limit collaboration. For example, the Tribe has increased collaboration with Humboldt County as a result of the RTIC serving as a forum for community leaders to discuss and address challenges posed by emergency incidents. In 2018, the Humboldt County Department of Health and Human Services (HC DHHS) was able to offer their employees just-in-time trainings at the RTIC. The HC DHHS provided critical training in writing emergency operations plans for rural jurisdictions, which better prepared the county for emergency incidents.

**Images 6 and 7: Blue Lake Rancheria hosts whole community listening sessions at the RTIC**



The RTIC serves as a venue for information sessions, including those that focus on the use of grant funding to better prepare attendees' communities. One example is the RTIC's hosting of a session which detailed the process for applying to FEMA's Building Resilient Infrastructure and Communities (BRIC) Hazard Mitigation Assistance program. Because the RTIC is located on tribal lands, the BRIC information session experienced higher attendance from tribal leadership in surrounding communities and was able to provide more awareness of FEMA's grant opportunities to regional stakeholders. This increased contact may serve to create a more collaborative relationship between FEMA and its tribal counterparts by building trust, increasing visibility, and creating a deeper mutual understanding of preparedness grant program guidelines and community needs. In the future, the Tribe hopes to expand the trainings offered at the RTIC, continue to grow its pool of emergency preparedness experts, and better equip the community for future emergency incidents.

## Tribal Emergency Response Team (TERT)

Blue Lake Rancheria's TERT was founded in 2017 and its six current members work closely with the Tribe's fire department and provide training and support for community members. In 2022, Blue Lake Rancheria's TERT received \$15,000 as part of California's Office of Emergency Services (OES) emergency response grant funding to aid in establishing trainings to improve community resilience.

Additionally, the Tribe also received \$100,000 in funding

from the Listos California Tribal Grant Program. These funds will be used to help establish preparedness academies and resiliency fairs so that residents can better prepare for disasters.<sup>8</sup> The academies will provide education on a wide variety of topics and will be used to discuss disaster preparation, medication storage, and evacuation strategies for multiple disaster scenarios. In addition, the Tribe will conduct tabletop exercises using the disaster toolkit to simulate different scenarios and determine additional community needs and response gaps in the future.

"That's our assessment [of effectiveness], to not only grow our own knowledge and our own capabilities, but to actually grow the people around you."

Anita Huff –  
Director, Office of Emergency Services

## Additional Impacts

### PLANS AND EXERCISES

Blue Lake Rancheria partnered with FEMA to create the Tactical Interoperability Plan, which resulted from multiple meetings between the Tribe and FEMA stakeholders and helps to outline Blue Lake Rancheria's current capabilities and identify preparedness gaps. While creating the Tactical Interoperability Plan, the Tribe also encouraged neighboring tribes to join to witness the planning process and begin creating a working relationship with FEMA points of contact. These increased interactions help to build trust and spread awareness of the opportunities available to tribes and the community through FEMA preparedness grant programs.

"[We] asked if we could invite other tribes so that they could see the process because with tribes, it's about trust."

Anita Huff –  
Director, Office of Emergency Services

In addition to the Tactical Interoperability Plan, the Tribe also used preparedness grant funds to prioritize planning and exercising for four key annexes to the Tribe's Shelter Operations Plan and Tribal Emergency Operations Plan. These annexes include an Evacuation, Shelter, and Care Plan; Sheltering Supplies Plan; a TERT Response Plan; and a Volunteers in Police Service (VIPS) Response Plan. Additionally, the Tribe used preparedness grant funds in FY 2019 to develop a cybersecurity plan. After Blue Lake Rancheria established its IT department, the Tribe used approximately \$300,000 in HSGP funds to hire a new director whose planning and expertise are used to help the Tribe combat cyber threats, which numbered over 12,000 hits per day at their peak. HSGP funding has also allowed Blue Lake Rancheria to include cyber protocols in its mitigation planning in addition to furthering the training of IT personnel. The Tribe has also used preparedness grants to fund exercises that test equipment for its local fire department, sponsor an active shooter drill, practice the execution of sheltering plans, and conduct tabletop exercises. Each of these grant-funded

planning, training, and exercise activities has contributed to the Tribe’s readiness for emergency incidents.

## EQUIPMENT AND ORGANIZATION

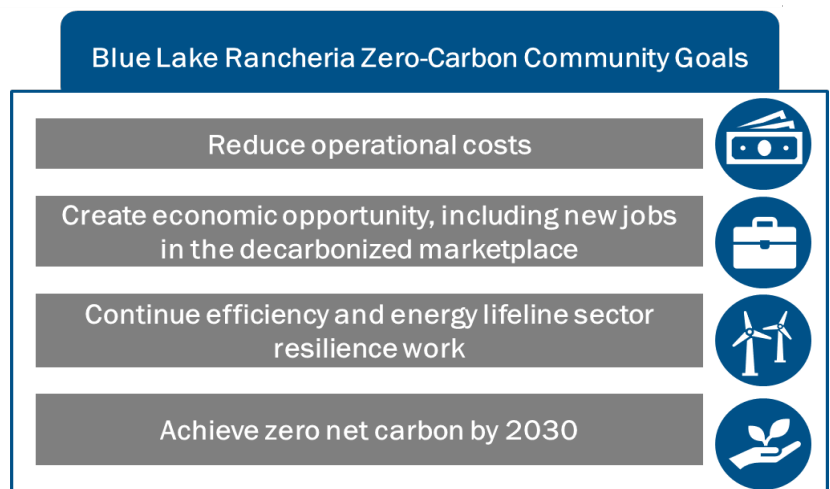
Blue Lake Rancheria used pass-through EMPG funding from the state of California to purchase equipment that enabled the Tribe to better respond to community members during disasters, including the COVID-19 pandemic. The Tribe utilized Zumro inflatable tents during the pandemic for drive-up testing.<sup>9</sup> These tents were preparedness grant funded and aided the Tribe’s response to COVID-19. The Tribe also used additional EMPG grant funding to provide community members with resources for disaster preparedness, such as solar blankets, Red Cross “go bags,” and food and water supplies. Additionally, Blue Lake Rancheria used EMPG funds to purchase a Public Safety Pickup, which is shared by both the fire and law enforcement services of Blue Lake Rancheria.

Additional investments have provided Blue Lake Rancheria with the capacity to advance search and rescue capabilities. For example, investing state grants in utility task vehicles (UTV) has helped community members find lost children on the reservation. Although the tribal reservation does not typically experience large wildfires, community members are still impacted by smoke inundation from fires and other nearby tribal communities have needed to evacuate to their lands in recent years. As a result of prior investments and partnerships, the Tribe developed clean air shelters by retrofitting existing facilities to ensure that elders and others with health issues had a healthy air environment available to them.<sup>10</sup> Although Blue Lake Rancheria does not currently have formal evacuation plans or agreements with surrounding tribes or counties, the Tribe has participated in discussions with the Community Organizations Active in Disaster (COAD) regarding future possibilities for formalized collaboration.<sup>11</sup>

## Energy Resilience and the Microgrid

Since 2002, Blue Lake Rancheria has accelerated the transition to a zero-carbon community for its economic, environmental, health, and overall resilience benefits.<sup>12</sup> To achieve zero-carbon sustainability resilience by 2030, the Tribe takes a “lifelong sector” approach to sustainability and resilience goals, which are outlined in **Figure 2**.

**Figure 2: Blue Lake Rancheria’s Zero Carbon Community Goals**





In line with its achievements in energy resiliency, the Tribe is a pioneer in renewable energy. In 2013, Blue Lake Rancheria began migrating its government fleet to [electric vehicles \(EV\)](#). Currently, there are eight Level 2 EV charging stations installed in the tribal community, including locations such as PlayStation 777 and the newly created Tribal Justice Center. In addition, Blue Lake Rancheria is developing a green commute program for its employees. The Tribe makes use of [green fuels](#) by

**Image 8: The Blue Lake Casino**



manufacturing biodiesel to fuel its public transit buses and by using waste oil from kitchens. Green fuel, also known as biofuel, can play an important role in reducing the global energy demand due to its availability and its environment-friendly and renewable properties.<sup>13</sup> To date, the Tribe has reduced energy consumption by 35 percent and has reduced greenhouse gas emissions by 40 percent from their 2014 baseline using a range of approaches, including the use of biodiesel to power public buses and aggressive energy efficiency.

In partnership with the Schatz Energy Research Center and Pacific Gas and Electric Company (PG&E), and with primary funding from the California Energy Commission Electric Program Investment Charge, Blue Lake Rancheria completed a \$6.3 million [low-carbon community microgrid](#). The microgrid supports

**Image 9: The Blue Lake Rancheria Microgrid**



Blue Lake Rancheria tribal government offices, including

BLROES, supporting infrastructure, a certified American Red Cross shelter, and economic enterprises—two restaurants, an event center, a hotel, and a casino. The microgrid has improved resilience across the Rancheria and provides secure, cost-effective forms of energy.<sup>14</sup> Blue Lake Rancheria's microgrids provide energy for medicine storage, air conditioning for the elderly and vulnerable, and increased cooking capacity for families.

The Tribe's microgrid is vital to providing essential services, such as water, food, and communication, during disaster incidents, which has resulted in multiple impacts, including lives saved in the community.<sup>15</sup> When California's largest electric utility provider shut off power to surrounding regions in October 2019, the Blue Lake Rancheria renewable energy microgrid aided in not only providing the Tribe with power, but also enabled the Tribe to provide those

**Image 10: The microgrid powered charging relief stations during the public safety power shutoff**





in surrounding communities with gas, ice, and energy to charge their phones and electric vehicles. For example, Blue Lake Rancheria was able to provide residents with a place to buy gas during an outage and supply over 100 gallons of diesel fuel to the United Indian Health Service to keep their medicines cool overnight. First responder vehicles received priority for refueling during the outage and were permitted to pump fuel without the restrictions placed on private or commercial vehicles during the incident. The Tribe worked with the Department of Public Health to set aside a block of rooms for medical patients that needed access to power for medical devices.<sup>16</sup> The Tribe also continued to use the microgrids to serve the broader community during the COVID-19 pandemic, even when the Tribe closed its businesses to prevent the spread of the virus. The microgrid provided clean, controlled power so that the Tribe's government programs, such as home meal deliveries to the elderly, could continue.<sup>17</sup>

## V. Conclusion

This case study illustrates the positive impact of preparedness grant dollars on Blue Lake Rancheria's preparedness and community resilience infrastructure, including the investment of preparedness grant funding to create Blue Lake Rancheria's RTIC, which continues to provide a space to enhance preparedness and resiliency training. As a result of these investments, Blue Lake Rancheria has increased its ability to provide training options and increased the community's capacity to prepare for and recover from disasters. All grant investments have played a part in building and sustaining the Blue Lake Rancheria Tribe's capability and continue to help augment the Tribe's role in the community and surrounding regions.

Feedback collected from Blue Lake Rancheria can also better enable FEMA to support the Tribe's preparedness activities in the future. Suggestions highlighted that there is a need for increased communication from FEMA to tribal nations to expand awareness of grant funding programs and their applicability to tribes. FEMA could consider increasing technical assistance on cost sharing for tribes, with an emphasis on relevant topics, such as the use and processing of in-kind donations. Lastly, FEMA could further analyze the ways in which tribal emergency services managers are funded and consider ways that these managers can be better resourced year-to-year to build and sustain capabilities in these communities.

### Future Plans

The Blue Lake Rancheria Tribe indicated that it may use future grant funds to explore expanding the capability of the RTIC and increasing the Tribe's and regional community's resilience. The RTIC has influenced planning for the [Ta'm Resilience Campus](#), which the Tribe is currently in the process of building. Once completed, the campus will serve as a multi-functional venue that deploys programs to support regional resilience strategies.<sup>18</sup> The Ta'm campus creates dedicated space for activities to build resilience capacity across the lifelong sectors. The Tribe plans to use the campus to further training, ranging from plans for emergency management to agricultural and career training, and the site will also be home to the RTIC upon completion. Each of these efforts will be key factors in

ensuring that Blue Lake Rancheria can continue to enable and lead whole community preparation for, response to, and mitigation of future incidents.

## VI. Appendix A: References

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- <sup>1</sup> [About | Blue Lake Rancheria \(bluelakerancheria-nsn.gov\)](#)
- <sup>2</sup> [FACT SHEET: 16 U.S. Communities Recognized as Climate Action Champions for Leadership on Climate Change | whitehouse.gov \(archives.gov\)](#), ; [Blue Lake Rancheria Tribe Undertakes Innovative Action to Reduce the Causes of Climate Change | U.S. Climate Resilience Toolkit](#) ; [Recognizing Tribal Climate Action | whitehouse.gov \(archives.gov\)](#) ; [September 28, 2017 Press Release: Blue Lake Rancheria Tribe Recognized as National Leader for Disaster Preparedness Work, FEMA Region 9.](#)
- <sup>3</sup> [Office of Emergency Services | Blue Lake Rancheria \(bluelakerancheria-nsn.gov\)](#)
- <sup>4</sup> [Office of Emergency Services | Blue Lake Rancheria \(bluelakerancheria-nsn.gov\)](#)
- <sup>5</sup> [FACT SHEET: 16 U.S. Communities Recognized as Climate Action Champions for Leadership on Climate Change | whitehouse.gov \(archives.gov\)](#), ; [Blue Lake Rancheria Tribe Undertakes Innovative Action to Reduce the Causes of Climate Change | U.S. Climate Resilience Toolkit](#) ; [Recognizing Tribal Climate Action | whitehouse.gov \(archives.gov\)](#) ; [September 28, 2017 Press Release: Blue Lake Rancheria Tribe Recognized as National Leader for Disaster Preparedness Work, FEMA Region 9.](#)
- <sup>6</sup> U.S. Climate Resilience Toolkit: <https://toolkit.climate.gov/case-studies/blue-lake-rancheria-tribe-undertakes-innovative-action-reduce-causes-climate-change>
- <sup>7</sup> [Resiliency Training & Innovation Center | Blue Lake Rancheria \(bluelakerancheria-nsn.gov\)](#)
- <sup>8</sup> TERT Funding: <https://www.msn.com/en-us/news/us/blue-lake-rancheria-receives-115k-for-emergency-preparedness/ar-AA104XpP>
- <sup>9</sup> Zumro Inflatable Tents: <https://www.zumro.com>
- <sup>10</sup> Impacts of Wildfires: [https://www7.nau.edu/itep/main/tcc/Tribes/pn\\_rancheria](https://www7.nau.edu/itep/main/tcc/Tribes/pn_rancheria)
- <sup>11</sup> Community Organizations Active in Disaster (COAD): <https://www.humboldtcoad.org/>
- <sup>12</sup> [Sustainability and Resilience | Blue Lake Rancheria \(bluelakerancheria-nsn.gov\)](#)
- <sup>13</sup> Othman, M. F., Adam, A., Najafi, G., & Mamat, R. (2017, June 1). *Green fuel as alternative fuel for Diesel Engine: A Review*. Renewable and Sustainable Energy Reviews. Retrieved September 23, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/S1364032117307840?via%3Dihub>
- <sup>14</sup> Microgrid: <https://toolkit.climate.gov/case-studies/blue-lake-rancheria-tribe-undertakes-innovative-action-reduce-causes-climate-change>
- <sup>15</sup> [Reservation's Solar Microgrid Aids Community During Power Shut-offs : NPR](#)
- <sup>16</sup> [Amid shut-off woes, a beacon of energy - The Washington Post](#)
- <sup>17</sup> Blue Lake Rancheria COVID-19 Efforts: <https://microgridknowledge.com/blue-lake-rancheria-microgrid-controller-covid-19/>
- <sup>18</sup> Ta'm Resilience Campus: <https://www.tea.bluelakerancheria-nsn.gov/tea/tam/>