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Promulgation

[Insert promulgation statement or copy of document signed by emergency management authority.]

Letter of Approval and Implementation

[Insert a copy of letter or signed statement provided by the authority who has reviewed and approved this plan for implementation.]

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The following individuals and organizations have received a copy of this plan.

Record of Changes

Date of Change	Page or Section Changed	Summary of Change	Authorization Signature	Date of Signature

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Introduction

Purpose

The purpose of this plan is to establish effective coordination of preparedness, response and initial recovery activities following a disaster affecting the community of Wahiawā-Whitmore Village.

This plan identifies essential functions that the community may, with appropriate training and advance preparations, sustain in an emergency in the event that local disaster responders and emergency services personnel are overwhelmed or unavailable. This plan reflects a multi-hazard approach to planning, in that a similar concept of operations can be applied to all types of emergency situations, regardless of the exact nature of the incident. The procedures outlined in this plan offer flexibility and scalability so that all or parts of the plan may be implemented based on community capabilities and the needs of the given situation.

Scope

The community of Wahiawā-Whitmore Village developed this plan with the intent to promote collaborative and cooperative resilience to multiple hazards. The planning area covers Wahiawā - Whitmore Village.

Over the course of a year, the community has:

- Assessed the hazards most likely to affect the community, and their potential impacts.
- Identified vulnerabilities (of people, groups, establishments) within the community.
- Identified community capacities and resources available to assist during an emergency.

Based on this information, the community recognizes the need to become self-sufficient for at least 14 days, with the ability to sustain itself until county, state and/or federal assistance arrives. Community members have identified activities they can take to prepare for and respond to a hazard incident, thereby reducing disaster impacts. To facilitate implementation of these activities, the community has established a trained Community Preparedness and Response Team (CPRT), whose mission is to support preparedness, response and initial recovery efforts during a disaster. This plan provides the goals, objectives and procedures for CPRT engagement in preparedness and response activities.

Situation Overview

Community Description



(DBEDT ARCGIS File)

Wahiawā is a town located in Central O'ahu, and is part of Honolulu County, Hawaii. Whitmore Village is a smaller, connected and neighboring community. Both are located in the Wahiawā District, on the central plateau of O'ahu between two mountain ranges – the Waianae range to the west and Koolau range to the east – that run almost parallel to each other. Wahiawā is surrounded on three sides by Lake Wilson, which runs between Wahiawā and Whitmore Village. Approximately 59% of the land in this area is used for agriculture, while 39% of the remaining land is used for residential, commercial and industrial purposes (Wahiawa, Hawaii). In Hawaiian, *wahi a wā* means "space of the wa people," and this place, the two communities taken together, have traditionally been seen as part of the ahupua'a of Waianae Uka, and part of Kūkaniloko, the birthsite of ali'i (Sterling and Summers).

The resident population of this district, as of 2012, was 27,502, with roughly equal numbers identifying as male and female. 8.4% of the population were five years or younger, 74.9% were 18 years and older and over, and 12.4% were 65 years and over, with a median age of 32.7. The racial or ethnic makeup of the community is as follows (alone or in combination): White: 36.3% white, 62.7% Asian (primarily Filipino and Japanese), 21.6% Native Hawaiian and other Pacific Islander. The average household size was 3.07 residents, and there were 6,294 families living in the district at this time. The median household income was \$60,554, and 11.4% of the population lived below the poverty level, with 8.9% of families living below the poverty level. For persons 25 years and over, 89.2% had received a high school degree or higher, and 19% a bachelor's degree or higher. The foreign-born population of this district was 15.7%,

and 24.2% spoke a language other than English. The median value of an owner-occupied housing unit was \$471,800, and median rent was \$1,378 (State House District 46).

There are several governmental offices and other sources of public and quasi-public infrastructure in the community. The community of Wahiawā-Whitmore Village has four public elementary schools, one public middle school and one public high school, as well as several smaller parochial and private schools. Wahiawā-Whitmore Village is supported with a public library, a post office, a district courthouse and Wahiawā General Hospital as well as Wahiawā Health, a federally qualified health clinic. The community benefits from multiple city and state parks. The Honolulu Police Department operates the Wahiawa Substation in Wahiawā.

The main economic drivers for Hawai'i are tourism and the military. Locally, for Wahiawā and Whitmore Village, these larger drivers are visible, because our community is bordered by military bases and military training areas, and tourists often drive through Wahiawā on their way to the North Shore. The top five industries in the community, in terms of the percentage of the population that they employ are hospitality (14.7%), retail (12.5%), government (11%), construction (10.6%) and healthcare (9.7%). About 62.2% of employed residents work for the private sector, while 20.5% work for state and federal government and 6.6% work for the non-profit sector. There has been some recent state investment in local agriculture with Agricultural Development Corporation lands in the Whitmore Project, and there are both traditional and ag-tech educational pipelines in the schools, along with a recently revitalized attention to CTE (career technical education). The largest single employer in the district is the Hawaii Department of Education, primarily due to the presence of four public elementary schools, a middle school and a high school, all of which are Title I schools because they serve high poverty communities. Wahiawā General Hospital is also an important employer in the district, and the hospital's current state of economic uncertainty is a source of concern for the community (State House District 46 Sectors; Data Access and Dissemination Systems).

We anticipate some challenges providing physical security for community members who are either houseless or living in very unstable, older structures that are in poor repair. We also anticipate radical lack of mobility, because our power lines are all above ground and are none too stable, so in case of a hurricane, downed power lines will essentially isolate people within very small pockets, and we will have no capacity for ingress or egress. We also anticipate that we will have inadequate stores of food, water and emergency medical supplies.

Community Risk Assessment

Hazard Exposure

Hazard exposure identifies the people, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.

Types of Hazards

ТҮРЕ	PROBABILITY OF OCCURRENCE	SEVERITY OF CONSEQUENCES	AREA(S) AFFECTED	POTENTIAL ISSUES ASSOCIATED WITH DISASTER
HURRICANE	MEDIUM	HIGH	All areas of the island of <u>Q'ahu</u> .	 Many people needing emergency shelter; Debris clogging streets, toppled trees and utility poles; Vulnerable populations trapped indoors and unable to access hurricane safe shelter and other types of aid.
TSUNAMI	LOW	LOW	Usually limited to coastal and lower lying areas of <u>O</u> ahu.	 Power outages; Loss of potable water supply; Large numbers of individuals who will: 1) Seek refuge in <u>Wahiawā</u>, as it is above the coastal inundation zone; 2) Many work in <u>Wahiawā</u> who may be unable to return to coastal areas; 3) Need to return to their homes in <u>Wahiawā</u> from the lower lying, <u>disaster stricken</u> areas; Vulnerable populations trapped indoors and unable to access shelter and other types of aid.
FLOOD	MEDIUM	MEDIUM	All areas from storm water runoff and overflow from <u>Kaukonahua</u> Stream and overflow of Lake Wilson.	 Individuals in need of shelter and/or assistance. Debris and high water may render certain streets blocked and impossible to use. Vulnerable populations trapped indoors and unable to access safe shelter and other types of aid.
FIRE	LOW	LOW	Most likely localized to particular buildings.	 Fire vehicle access to housing situated along steep driveways, and otherwise difficult to reach areas. Vulnerable populations trapped indoors and unable to access hurricane safe shelter and other aid.
EARTHQUAKE	LOW	MEDIUM	All of <u>O'ahu</u> .	Vulnerable populations trapped indoors and unable to access hurricane safe shelter and other aid.
LANDSLIDE	LOW	LOW	Most likely localized to steep slopes and hillsides.	 Individuals in need of shelter and/or assistance. Sediment and debris clogging streets, toppled buildings, trees and utility poles. Vulnerable populations trapped indoors and unable to access safe shelter and other aid.
POWER OUTAGE	HIGH	HIGH	Entire area.	 Neighborhood security is potentially compromised during power outages. Food, water and basic supplies may be difficult to obtain when grocery and other stores are closed. Vulnerable populations trapped indoors and unable to access hurricane safe shelter and other aid.
DISEASE/ PANDEMIC	нісн	HIGH	All areas of the island of <u>O</u> anu.	 Hospital and clinics will be overcrowded; May need to designate a temporary place of treatment and/or quarantine; Outreach may be needed for residents who may live alone and are otherwise unable to drive themselves to get medical help.
SOCIAL DISTURBANCE	MEDIUM	MEDIUM	Can be widespread or more localized.	 High profile areas in and around <u>Wahiawā</u> like Schofield Barracks. Some unprepared individuals may resort to lawlessness and looting in their search for food and water. Police may be occupied elsewhere and unable to respond to the incident(s) immediately. May entrap residents, students and workers in <u>Wahiawā</u> until the situation is cleared.
HAZARDOUS SPILL	MEDIUM	MEDIUM	Can be widespread or more localized.	• May be spillover effects from an attack in another location.

Tropical Cyclone (Hurricane):

Tropical cyclones (hurricanes) are a possible hazard that could affect more than 50% of the community. There is between 10 and 100% probability of tropical cyclone occurrence in the next year, or at least one chance in the next ten years, so occurrence is likely. The hurricane season is generally understood to be June 1 to November 30, although that window is widening with climate change and more extreme weather event patterns. The area most likely to be affected by this hazard includes Whitmore Village and the town of Wahiawa, both of which are situated on the uplands of Central O'ahu. In both areas, since many of the homes in Wahiawa and Whitmore Village are single wall construction built in the '50s, '60s and '70s, before hurricane rated building codes were established, it is anticipated that many will be damaged by a major hurricane. In addition to the hazard to personal property, it is important to note that most of the utilities in these two communities are above ground on wooden utility poles, many of which are over 50 years old. It is anticipated that in the event of a category 4 or higher hurricane, many of these poles will be blown down, damaging homes and blocking roads. Hurricane activity could disrupt communications, as all telephone poles, electrical wiring and communication boxes are above ground and vulnerable not only to wind damage but also by damage from flying objects like tree branches. Transportation would also be disrupted for similar reasons - fallen telephone wires and poles are likely to block roads and sidewalks. Healthcare will likely also be disrupted, for our community and surrounding communities, as Wahiawa Health, Wahiawa General Hospital and Wahiawa Renal Treatment are all located along Kilani Ave, which will likely be impassable due to fallen poles, wiring and debris. The probable duration of this hazard depends upon the severity of the storm, but could last from days to months, due to lingering hazards from the effects of the storm. We are likely to have more than 24 hours warning, and the existing warning systems, most of which originate with HIEMA, include outdoor siren systems, cell phone alerts and media alerts.

(www.soest.hawaii.edu/met/Faculty/businger/poster/hurricane/hurricane).

What is a hurricane?

A hurricane is a type of tropical cyclone – an organized rotating weather system that develops in the tropics. Hurricanes rotate counterclockwise in the northern hemisphere and travel from east to west.

Tropical cyclones are classified as follows:

• Tropical Depression – An organized system of persistent clouds and thunderstorms with a closed low-level circulation and maximum sustained winds of 38 mph or less.

• Tropical Storm – An organized system of strong thunderstorms with a well-defined circulation and maximum sustained winds of 38 to 75 mph.

• Hurricane – An intense tropical weather system with a well-defined circulation and sustained winds of 74 mph or higher.

Hurricanes are classified as follows:

o Category 1 – Sustained winds 74 to 95 mph. Minimal damage, primarily to shrubbery, trees, foliage and unsecured items. No real damage to structures. Storm surge typically four to five feet above normal.

o Category 2 – Sustained winds of 96 to 110 mph. Moderate damage. Some trees blown down, some damage to roofing materials, windows and doors. Storm surge typically 6 to 8 feet above normal.

o Category 3 – Sustained winds of 111 to 130 mph. Extensive damage. Some structural damage to roofing materials, some structural damage to smaller buildings. Storm surge typically nine to twelve feet above normal.

o Category 4 – Sustained winds of 131 to 155 mph. Extreme damage. Large trees blown down. Extensive damage to roofing materials, windows and doors. Complete failure of roofs on some residences. Storm surge typically thirteen to eighteen feet above normal.

o Category 5 – Sustained winds of greater than 155 mph. Catastrophic damage. Complete roof failure on many residences and industrial buildings. Extensive damage to windows and doors. Complete structural failure to some buildings. Storm surge typically greater than 18 feet above normal.

How will you know if a hurricane is coming?

Typically there are several days warning before a tropical storm or hurricane strikes. There is usually considerable coverage in local media as the storm develops in the eastern Pacific and moves toward Hawaii.

So, when should you be concerned? The National Weather Service as well as State and County agencies will be tracking the storm and will be issuing storm alerts which have very specific meanings.

• Tropical Storm Watch – This is an announcement that tropical storm conditions (winds of 39 to 73 mph) are possible within 48 hours.

• Tropical Storm Warning – This is an announcement that tropical storm conditions (winds of 39 to 73 mph) are possible within 36 hours.

• Hurricane Watch – This is an announcement that hurricane conditions (winds of 74 mph or higher) are possible. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane watch is issued 48 hours prior to the anticipated onset of tropical force winds. Preliminary precautions should be taken.

• Hurricane Warning -- This is an announcement that hurricane conditions (winds of 74 mph or higher) are possible. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane warning is issued 36 hours prior to the anticipated onset of tropical force winds. Actions for the protection of life and property should begin immediately.

How should you prepare for a hurricane?

• Review your home insurance policy. Check exceptions and exemptions to make sure that you are adequately covered.

• Make plans to secure your property. Prepare to board up windows with 5/8-inch plywood. • Install hurricane straps or additional clips to securely fasten your roof to the rest of the structure.

• Place important documents such as insurance policies, bank account information, credit card information, and important contact addresses and telephone numbers for all important persons and institutions etc. in a weather tight container to ensure that they are available after the storm passes.

• Make sure that trees and shrubs are trimmed and will not be a danger. Secure lawn furniture and other loose items.

• Clean clogged rain gutters clear debris from your streambed and make sure that other drainage systems are in working order.

• Consider building a safe room for sheltering in place. If that is not possible, identify the safest areas of your home such as an interior room with no windows.

• Listen to radio and TV for current weather information. Consider purchasing a battery powered radio with weather band capability. Turn your refrigerator and freezer to their coldest settings and keep the door closed.

• Avoid using the phone except for serious emergencies. Consider using text messaging to contact family members. A text is more likely to work when voice systems are overloaded. Designate a point of contact with an area code other than Hawaii since it will be likely that telecommunications within the State will be flooded during and after the hurricane.

• Ensure a supply of water for sanitary purposes such as flushing toilets. Fill the bathtub and other large containers.

• Have a 21-30 day disaster supply kit including food, water and other essentials.

• Prepare to evacuate when directed to by local authorities or when you feel in danger. Take your emergency supply kit with you. Have a plan for how to care for your pets.

• Keep a supply of low denomination cash handy. Checks, credit cards and ATMs will probably not be usable during a disaster emergency.

• Turn off utilities; water, gas and electricity if instructed to do so.

What should you do after a hurricane?

- If you have evacuated to a shelter, wait for the "All Clear" announcement before returning home.
- Likewise, wait for the "All Clear" before leaving your home or attempting to drive.
- Be aware of hazards such as downed power lines, broken gas lines, contaminated water, weakened structures, broken glass etc.
- Assess damage to your home and property. Take pictures to document damage.
- Remove any standing water from your home as well as wet objects such as carpet, mattresses, or other items which may contribute to the growth of mold.
- Contact your insurance agent to file a damage claim if necessary.
- Contact family members here and on the mainland to let them know your situation.

Flooding:

Special Flood Hazard Areas (SFHAs) are subject to inundation by the 1% annual chance flood. The 1% annual chance flood (100- year), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones. Neither Wahiawa nor Whitmore Village have been designated as SFHAs, although both lie in close proximity to Lake Wilson (Wahiawa Reservoir/ Dam). Neither lie within a tsunami evacuation zone (one possible source of flooding) nor in a dam evacuation zone.

Wahiawa -Whitmore Village Emergency Operations Plan



(FEMA Flood Map Service)

Dams are a critical part of our state infrastructure, and more than 80% of our dams were constructed prior to 1940, to support the sugarcane plantations. Given the age of these facilities, the State Dam Safety Program plays a vital role in regulating and promoting the safety of these structures.



(FEMA Flood Map Service)

This is the flood map that illustrates areas flooded in the event of a Wilson Dam failure obtained from the City and County Dam Safety office. Water from Wahiawa Reservoir/Dam goes down Kaukonahua Stream and enters the ocean near Waialua. There is some danger of flooding from spillage of Lake Wilson, though, as is apparent from this visual depiction of water heights in the reservoir over the past twenty years. If the dam is not in good repair, with capabilities to release pressure when there is heavy rainfall, the areas around Lake Wilson are susceptible to some flooding.



(FEMA Flood Map Service)

Flooding can disrupt transportation, destabilize existing structures and lead to contaminated water and soil, so updated repair and maintenance of Wahiawa Reservoir/Dam is critical. The last dam inspection report completed by the engineers at DLNR on the Wahiawā Reservoir and sent to the owners of the dam, Dole Food (Daniel Nellis) and Sustainable Hawaii (Howard Green) back in October of 2015, identified 21 areas of deficiency, only 8 of which had been completely addressed at the time of the report (Wahiawa Dam). The duration of the hazard and speed of onset will depend almost entirely on the state of repair of the dam, so the new report due to come out soon will provide critical information. There are no existing warning systems in place for flooding due to dam water release failure (Wahiawa Dam), but there is proposed legislation before the 2020 legislature (HB 2031/SB 2303).

What is a flood?

A flood occurs any time a body of water rises to cover what is usually dry land. Flooding can develop slowly over a period of several days or may develop quickly causing a flash flood.

How will you know if a flood is coming?

Pay attention to the weather and weather forecasts. If heavy rains are forecast and you are in a flood zone, take necessary precautions. If flooding is possible, authorities will probably issue one or more of the following announcements:

- Urban and Small Stream Flood Advisory Minor flooding is expected in low-lying areas, but it is not expected to cause major property damage or be life threatening.
- Flash Flood Watch Flooding is possible. Take immediate precautions to protect property if you are in a flood prone area. Be ready to evacuate.
- Flash Flood Warning Flooding is imminent or occurring now. Evacuate to high ground now if you are in a flood prone area.

How do you prepare for a flood?

- Avoid building in a floodplain unless you elevate and reinforce your home. Keep a supply of sandbags or other materials to protect your home from floodwaters.
- Consider mitigation actions such as waterproofing walls one to two feet above the foundation.
- Be aware of streams, drainage channels, roads and other areas known to flood suddenly.

• Understand that if your property abuts a stream, you are responsible for maintenance and keeping it clean to the middle of the stream. Do not use the stream to dispose of yard waste or other items, which could be washed downstream.

• Flash flooding can occur quickly and without warning. Be prepared to move to higher ground. Do not wait for instructions to move.

• Gather important documents in a weatherproof container.

• Be aware that flood losses are not covered under most homeowner's insurance policies. Consider buying special flood insurance if your home is located in a flood prone area.

• If your home is in imminent danger of flooding, turn off utilities such as electricity, water and gas. Elevate essential items.

• Never attempt to walk or swim through floodwaters, as they may be contaminated with chemicals or sewage.

• Do not walk or drive through fast moving floodwaters. Six inches of fast moving water can knock you off of your feet. Two feet of fast moving water will float most vehicles. Also, there may be unseen hazards below the water.

• Listen to radio and TV for information and announcements.

What should you do after a flood?

• If you have evacuated, return home only if authorities indicate it is safe. • Remove any standing water from your home as well as wet objects such as carpet, mattresses, or other items, which may contribute to the growth of mold.

• Assess damage to your home and property. Take pictures to document damage.

• Be aware of hazards such as downed power lines, broken gas lines, contaminated water, weakened structures, broken glass etc.

• Be careful in areas where floodwaters have receded. Roads may have been undermined and may collapse under the weight of a car.

• Service damaged septic tanks, cesspools and leaching systems as soon as possible. Damaged sewage systems are a serious health hazard.

• Clean and disinfect or dispose of everything that got wet. Floodwaters could have contained sewage or harmful chemicals.

Earthquakes:

The estimated Richter scale magnitude of the biggest quake on record to strike Honolulu, which provides the benchmark for the city's seismic design standards, is 7.0. If an earthquake of that magnitude struck Wahiawa in the near future, we would likely experience long-lasting blackouts (with fallen power lines also blocking exit) and failure of underground water and sewer lines. Because there has been little attention paid to retrofitting buildings to bring them into alignment with current building codes, historic structures and older homes, especially those with walls made of unreinforced masonry, could crumble. Homes built through the 1950s=1970s (that is, the majority of the homes in Wahiawa and Whitmore Village) could be shaken off their post-and-pier footings. If the shaking lasted long enough, areas of loosely packed soil could succumb to 'liquefaction,' a state in which the ground behaves like a liquid. Roads already in poor repair could buckle, low-rise buildings might sink, but the few high-rises in Wahiawa—which are anchored in the underlying rock—should be able to ride out a quake of this magnitude without collapsing. The Karsten Thot Bridge and the H-2 overpass which frame the perimeter of Wahiawa, however, could come crashing down.

Since 1994, the state Department of Transportation has been under a federal mandate to bring all of its bridges and overpasses up to federal earthquake standards, a mandate that has not yet been fulfilled. According to the Federal Highways Administration (FHWA) National Bridge Inventory (NBI) Inspection, the Karsten Thot bridge currently ranks as in fair condition. Bridges are inspected biennially by DOT. Also, the bridge is prioritized as no. 10 out of 50 bridges for the state to continue repair/replacement work. The most recent previous work on the bridge (2016-2018) focused on addressing structural elements related to the bridge. Additional work is slated to occur on the bridge, though that information has not yet been provided for the DOT to include in the "future projects" section of the map. The Oahu Metropolitan Planning Organization has recently released a plan making recommendations about transportation infrastructure in the area which makes no recommendations concerning the bridge ("Public Participation").



("Story Map Series).

While the immediate event, with aftershocks, could last days, hazards resulting from such an earthquake could last months, depending on damage to infrastructure. We are likely to have minimal or no warning, and there are no existing warning systems for the earthquakes themselves. While Wahiawa and Whitmore Village are in the 'safe zone' with respect to tsunamis generated by earthquakes, we are likely to see many evacuees should a tsunami hit any of O'ahu's coastal areas.

What is an earthquake?

An earthquake is a violent shaking of the earth caused by slippage or movement of crustal plates along a fault line or by volcanic activity. Since Hawai'i has no fault lines, earthquakes are primarily caused by volcanic activity.

How will you know if an earthquake is coming?

You will not know an earthquake is coming. Earthquakes are inherently unpredictable and occur at any time without obvious warning.

How do you prepare for an earthquake?

While O'ahu and Wahiawa are at low risk of a major earthquake, the risk is not zero. So there are some precautions which can be taken before and during an earthquake.

- Fasten heavy furniture such as tall bookcases, hutches, cabinets, large screen TVs and water heaters to the wall with straps or brackets.
- Store heavy or breakable objects and hazardous chemicals on lower shelves or in secured cabinets.

• If you are inside, stay there. Few people are hurt by the shaking, but many are injured by running outside where they are hit by falling debris.

- Drop to the floor and assume the "duck and cover" position by covering your head with your hands.
- If possible, get under a sturdy table, desk or other piece of furniture.
- If nothing else is available, take cover near an inside corner of the building away from windows, outside doors and anything that could fall.
- If outdoors, stay there. Move away from buildings, utility wires and other overhead objects. Most earthquake injuries are from collapsing walls, flying glass and falling debris.

- Family members may not be together during an earthquake. Make a plan for how to contact each other when it is safe. What should you do after an earthquake?
- Check others for injuries and provide first aid as necessary. Don't move seriously injured persons unless they are still in danger.
- Check gas, water and electrical lines for damage.
- Don't touch electrical lines or damaged electrical equipment.
- Don't use any open flame or electrical equipment, which could create a spark until you are sure that there is no gas leak.
- Be prepared for aftershocks.
- Assess damage to your home and property. Take pictures to document damage for insurance purposes

Tsunami

While it is unlikely that a tsunami will have a direct effect on Wahiawa or Whitmore Village in the form of inundation or other property damage, there will be indirect or secondary effects. These could include dealing with many refugees seeking higher ground, loss of electrical power, loss of water supply, disruption of state and city services and isolation from the rest of the island. In addition, depending on the timing of the tsunami, there may be people at work or at school who are unable to leave or return to the valley.



What is a tsunami?

Tsunamis are ocean waves caused by underwater earthquakes or landslides. Tsunamis are not visible from the surface of the ocean and do no damage until they reach land where they can cause severe flooding and property damage for a mile or more inland. A tsunami is not a single wave but is a series of waves where the first wave is usually not the largest or most destructive. A tsunami wave can range from a few inches in height to 100 feet or more. There is no tsunami season. Tsunamis are a year-round, 24-hours a day threat to all shoreline areas in Hawai'i.

How will you know if a tsunami is coming?

A tsunami may be generated by a distant event or a local event. If it is a distant event, we may have as much as five hours warning. If it is a local tsunami, it could strike within minutes. The Pacific Tsunami Warning Center monitors seismic events around the Pacific with mid-ocean buoys and other information sources and determines if a tsunami has been generated. If they detect that a tsunami is possible due to a distant event, they will issue one or more of the following announcements.

• Tsunami Watch – A tsunami watch is issued when a major earthquake has occurred in a distant area of the Pacific Basin and a tsunami may have been generated which may impact Hawai'i. Persons in tsunami inundation zones should prepare to evacuate.

• Tsunami Warning – A tsunami warning is issued when the Pacific Tsunami Warning Center has confirmed that a tsunami has been generated. Evacuate coastlines immediately. Civil Defense will sound sirens at least 3 hours prior to the expected arrival of the first wave in Hawaii. Thereafter sirens will sound at one hour intervals and then 30 minutes prior to the first wave arrival. Turn on your radio or TV, listen to Civil Defense official announcements and instructions.

• Tsunami Advisory – A tsunami advisory may be issued due to the after effects of a tsunami. There may be strong currents or unusual wave action. Officials may close beaches or harbors. In the event of a local tsunami there may be little or no warning. If you feel a strong earthquake and are near the coast, immediately evacuate to higher ground. Do not wait for an evacuation order. Civil Defense may or may not issue an Urgent Tsunami Warning. Evacuate coastal areas immediately. It is recommended that you do not take your car. Roads will be gridlocked and you may be trapped in a traffic jam. If you are in or near a substantial high rise building, you can do a vertical evacuation by climbing above the 4th floor. Turn on your radio or TV and listen for Civil Defense announcements and instructions.

How do you prepare for a tsunami?

As noted above, Wahiawa and Whitmore Village are not at direct risk for tsunami damage. However, we will be affected by those fleeing those in inundation zones, and you may not be at home when a tsunami warning sounds.

• Check tsunami inundation maps for your work location, school or places you often go. The maps can be found in the front of the telephone book or at Department of Emergency Management web site (http://www1.honolulu.gov/dem/new_tsunami_evacuation_zone_maps_.htm) or at the Pacific Tsunami Warning Center web site (http://ptwc.weather.gov/).

• If you are outside the tsunami evacuation zone, stay where you are. Keep streets and highways clear for emergency responders.

• Plan and practice evacuation routes for work or school locations in a tsunami evacuation zone.

• Discuss tsunamis with your family to help reduce fear and anxiety and to be sure that everyone knows how to respond.

• If your children go to school in a tsunami inundation zone, know what the school's disaster plan is and how they expect parents to respond.

- Make a plan with your family on where you will meet if separated and how you will communicate.
- Do not tie up phone lines or the cellular network with non-emergency calls.
- Rely on radio and TV for the most current and up-to-date emergency information.

What should you do after a tsunami?

• Wait for the Civil Defense "ALL Clear" announcement before leaving or returning home.

- Stay out of damaged areas.
- Stay away from beaches and shorelines. Typically, the ocean does not settle down for several days after a tsunami.

Pandemic

The novel coronavirus is not the first infectious disease to prompt government action in the Hawaiian Islands. Public health interventions under the Kingdom of Hawai'i included everything from vessel screenings to travel bans to quarantine laws. The first wave of imported diseases that swept through Hawai'i came with Captain James Cook in 1778, whose sailors brought gonorrhea, syphilis and tuberculosis. But the first foreign disease that brought a local intervention was cholera or $ma'i' \overline{o}ku'u$ in 1804. Kamehameha retrained his native Hawaiian healers on how to diagnose and cure ailments and illnesses plaguing his people by gathering the doctors whose ships were in the harbor, so that he could train his kahuna to be experts as healers in how to handle the cholera outbreak. Hawaii's vulnerability to disease and geographic isolation prompted the kingdom's first known public health measure in 1836, when Kuhina Nui Kīna'u ordered all ships entering Hawaiian waters to be boarded and inspected for smallpox, because they observed whenever ships came into Honolulu Harbor, diseases escalated. If there was anyone sick on board, that ship was to be placed under quarantine. A yellow flag was to be raised. No one was allowed to disembark. Similar orders would follow to help contain the spread of disease, including laws to quarantine the sick and orders banning interisland travel. By the 1850s, the kingdom began collecting vital statistical data, mandating vaccination for certain diseases, and instituted the first Board of Health, long before anything comparable was established in the United States (Hiraishi).

The last time a major pandemic swept through the islands, a century ago, more than 2,300 people in Hawaii died from what was called the Spanish flu, which was the fourth most fatal epidemic in the historical record of Hawaii. Health officials in the Territory initially downplayed the severity of the crisis, but before it was over, hospitals were overrun, makeshift medical facilities were set up and businesses temporarily shuttered as Hawaii struggled with the outbreak. The 1918 Spanish flu pandemic was the fourth most fatal epidemic in the historical record of Hawaii. Overcrowding and global troop movements during the war helped push the 1918 flu across the globe, the CDC says, and the lack of vaccines and treatments created a major public health emergency. From the Spanish flu, health officials learned that social distancing and shutting down events and gathering places are effective measures to battle a dangerous respiratory virus. In Hawaii the first cases of the Spanish flu showed up on Oahu in the island's military and naval bases at the end of June 1918. The first wave of the 1918 pandemic, blamed on shipping from Japanese and Chinese ports, quickly swept across Oahu, lasting for a couple of months, followed by a second wave in December and January. Public officials were unresponsive. As late as October 1918, the chief quarantine officer of the U.S. Public Health Service in Honolulu denied the severity of the influenza situation. It did not help that there were strict press controls during World War I, which contributed to a dearth of public information about the pandemic. Eventually, the waves of disease exposed shortages of physicians, hospital beds, nurses and other medical personnel and facilities. Oahu suffered from an inconsistent, patchwork response of closings and openings throughout the pandemic. The Spanish flu epidemic proved the world had become a smaller place and that Hawaii was not protected anymore by its geographical isolation (Hurley).

What is a pandemic?

Pandemic (from the Greek $\pi \alpha v$, *pan*, 'all' and $\delta \eta \mu o \zeta$, *demos*, 'people') is generally taken to signify an epidemic of disease that has spread across a large region, for instance multiple continents or worldwide, affecting a substantial number of people. A disease or condition is not a pandemic merely because it is widespread or kills many people; it must also be infectious. A widespread endemic disease with a stable

number of infected people is not a pandemic. Widespread endemic diseases with a stable number of infected people such as recurrences of seasonal influenza are generally excluded as they occur simultaneously in large regions of the globe rather than being spread worldwide. A pandemic is an epidemic occurring on a scale that crosses international boundaries, usually affecting people on a worldwide scale.

How will you know if a pandemic is coming?

The public will be informed if there is a threat of a pandemic, and the severity of the threat, by the World Health Organization, which will issue an official declaration would come from the WHO, though the agency may be reluctant to unleash this term anytime soon. This term will likely only be used by WHO infectious disease officials when a virus is discovered to be spreading in an unstoppable fashion in countries on several continents.

How do you prepare for a pandemic?

To prepare for a pandemic, the community needs to be ready to adopt basic strategies of containment and mitigation to control the outbreak. Containment may be undertaken in the early stages of the outbreak, including contract tracing and isolating infected individuals to stop the disease from spreading to the rest of the population, other public health interventions on infection control, and therapeutic countermeasures such as vaccinations which may be effective if available. When it becomes apparent that it is no longer possible to contain the spread of the disease, management will then move on to the mitigation stage, in which measures are taken to slow the spread of the disease and mitigate its effects on society and the healthcare system. It is highly likely that the community will need to be prepared to pursue containment and mitigation measures may be undertaken simultaneously.

A key part of managing an infectious disease outbreak is trying to decrease the epidemic peak, known as "flattening the epidemic curve." This helps decrease the risk of health services being overwhelmed, and provides more time for a vaccine and treatment to be developed. Non-pharmaceutical interventions may be taken to manage the outbreak. In a flu pandemic, these actions may include: personal preventive measures such as hand hygiene, wearing face-masks, and self-quarantine; community measures aimed at social distancing such as closing schools and cancelling mass gatherings; community engagement to encourage acceptance and participation in such interventions; and environmental measures such as cleaning of surfaces.

Another strategy, suppression, requires more extreme long-term non-pharmaceutical interventions so as to reverse the pandemic by reducing the basic reproduction number to less than 1. The suppression strategy, which includes stringent population-wide social distancing, home isolation of cases, and household quarantine, was undertaken by China during the most recent COVID-19 pandemic where entire cities were placed under lockdown, but such strategy carries with it considerable social and economic costs.

What should you do after a pandemic?

Depending on the severity of the pandemic, there will be public health, social and economic recovery measures that need to be pursued. The strategies that will need to be adopted to slowly reopen, first the local society and economy and then the broader visitor-connected society and economy, include continued physical distancing, diagnostic testing, contact tracing and quarantine/isolation of identified cases. Community members should continue to be on alert for symptoms, follow good hygiene practices of frequent hand-washing, mask-wearing and social distancing.

Vulnerabilities

Wahiawa General Hospital, the Wahiawa Wastewater Treatment Plant, the Wahiawa Honolulu Police Department, the Wahiawa Fire Department, the Wahiawa Substation Electrical Power Plant, the Lake Wilson Reservoir/ Dam and most of our public schools are sources of community strength and can help us address areas of vulnerability in a disaster situation. The broader community of Central O'ahu depends on these institutions to function effectively, but it is important to note that they are all located in Wahiawa Town, with only two ways out of town, both over bridges that could easily be damaged in a hurricane. Moreover, these institutions themselves are not prepared for disaster, simply because there has not been the public investment necessary to renovate, repair and maintain these structures, bring them up to current building code or strengthen them to create shelter space.

Coping Capacities

Community Resource Mapping was conducted to identify coping capacities, and the capabilities of people, organizations and systems using available skills and resources, to face and manage adverse conditions, emergencies or disasters.

ТҮРЕ	NAME	LOCATION	HAZARD ZONE	VULNERABILITIES	DM ROLE
Police Station	Wahiawa Police Station	330 N Cane St, Wahiawa, 96786	HURRICANE	Older, weak structure	Social control/ policing
Fire Station	Wahiawa Fire Station	640 California Ave, Wahiawa 96786	HURRICANE	Older, weak structure	Emergency health care/ fire
High School	Leilehua High School	1515 California Ave, Wahiawa 96786	HURRICANE	Older, weak structure	Emergency shelter
Hospital	Wahiawa General Hospital	128 Lehua St, Wahiawa 96786	HURRICANE	Older, weak structure	Emergency health care
Health Clinic	Wahiawa Health Clinic	302 California Ave., Wahiawā 96786	HURRICANE	Older, weak structure	Supportive health care
Water Treatment	Wahiawa Wastewater	111 California Ave., Wahiawa 96786	HURRICANE & FLOOD	Close to Lake Wilson - flood	Clean water source
Post Office	Wahiawa Post Office	115 Lehua St, Wahiawa 96786	HURRICANE	Older, weak structure	Public communication
Courthouse	Wahiawa District Court	1034 Kilani Ave, Wahiawa 96786	HURRICANE	Older, weak structure	Shelter/ gathering place/storage
Gymnasium	Wahiawa District Park	1129 Kilani Ave, Wahiawa, HI 96786	HURRICANE	Being renovated	Shelter/ gathering place/ storage

Planning Assumptions

The community of Wahiawā-Whitmore Village has made the following planning assumptions:

• Given the hazards, vulnerabilities and coping capacities outlined above, the community of Wahiawā-Whitmore Village has elected to self-organize to better plan and prepare for and respond to potential hazard impacts in the community.

- The community may receive warning of an impending hazard event with:
 - As much as five days (120 hours) notice for tropical cyclones approaching Hawaii,
 - <u>Approximately</u> five (5) hours for a tsunami originating in the Aleutian Islands,
 - <u>Approximately</u> fourteen (14) hours for a tsunami originating from the coast of South America, and
 - Little or no warning time for a local earthquake and/or tsunami hazards originating within the state of Hawaii.
- During a major or catastrophic incident, the capabilities of local (county) first responders and other governmental agencies to provide prompt and effective emergency response and short-term recovery measures will be overwhelmed.
- Transportation infrastructure may be damaged and local transportation services will be disrupted leaving the community isolated.
- Widespread damage to commercial telecommunications facilities will be experienced.
- Homes, public buildings, and other critical facilities and equipment will be destroyed or severely damaged.
- Debris may make streets impassable.
- Public utilities will be damaged and either partially- or non-operational.
- Citizens may be forced from their homes.
- Significant loss of life and injuries can be expected.
- Citizens in life-threatening situations will require immediate rescue and medical care.
- There will be shortages of a wide variety of supplies necessary for emergency use after a disaster.
- We will not be able to rely on the support of military forces stationed at Schofield Barracks and Wheeler Air Force Base.

Concept of Operations

This section of the plan describes the community's approach to emergency operations, with a focus on preparedness and response activities. It is anticipated that after a disaster the community would need to be self-sufficient for an undetermined period of time before assistance arrives. This plan outlines activities that will be taken to fill anticipated gaps, prepare, and care for the immediate needs of community members until disaster management assistance arrives.

In addition, when directed, the CPRT and other trained volunteers will provide support to civil authorities in response to hazard events affecting their community to protect life, property and critical infrastructure.

The concept of operations allows for a minimal community footprint to organize, control and conduct response operations with the flexibility to implement a cadre of community members to lead these efforts.

Preparedness Objectives

The community of Wahiawā-Whitmore Village has identified the following preparedness objectives, which are pursued during non-disaster times:

- Develop/improve the capability within the community to monitor hazard occurrences and maintain situational awareness.
- Participate in disaster management related training and exercises to build capacity of community members to perform duties as outlined in this plan.
- Promote hazard awareness and preparedness through public education and outreach activities.
- Form collaborative partnerships with local non-governmental organizations (NGOs) such as the Red Cross, Salvation Army, faith-based groups, etc.
- Participate in community service projects that foster resilience and benefit/enhance the lives of residents.

Response Objectives

The community of Wahiawā-Whitmore Village has established the following response objectives:

- Assist with the evacuation of people and animals, especially community members with limited mobility or that require extra time to evacuate.
- Conduct rapid damage assessment to provide decision makers with relevant information to expedite light search and rescue operations, communicate the nature and extent of the hazard, and inform response planning and execution.
- Augment search and rescue capabilities and access to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.
- Provide support to local law enforcement agencies to include but not be limited to security watches to prevent looting, protection of critical infrastructure and key resources, points of distribution, and traffic control.
- Debris clearance to facilitate transport of people and animals, and the delivery of vital response personnel, equipment, supplies and services into affected areas.
- Assist civil authorities in providing life-sustaining services to the affected population with a focus on medical, hydration, feeding, and sheltering to those in greatest need.

Fulfillment of some of the objectives listed above is dependent upon CPRT members and volunteers receiving and/or maintaining training certifications in specified topics.

Operational Activities

The operational phases and activities described below and pictured in Figure 1 below outline the flow and progression of the community's anticipation of, and response to a hazard event in keeping with established preparedness and response objectives.

Monitor/Maintain Readiness

- Priority of effort is building community readiness and resilience by accomplishing the preparedness objectives established by the community.
- Focus on developing and maintaining situational awareness and preparedness.
- Establish the conditions for expanded cooperation and coordination with community partners and organizations via active engagements in planning, meetings, conferences, workshops, training programs and exercises.

Community Actions

- Promote hazard awareness and preparedness among community members.
- Review and update plans and procedures.
- Participate in trainings and exercises.
- Anticipate requirements and validate available resources and services.
- Establish redundant methods to monitor/receive hazard alerts/warnings from official sources.*
- Periodic testing of systems such as backup communications and generators.* (LHS & BWS)

Assess

• Upon receipt of an official hazard notification (e.g., watch, warning or advisory) for the area of interest, the community anticipates likely impacts and the level of response that will be required.

Community Actions

- Most likely threats to the community are identified, along with critical resources (including personnel) needed for response.
- Measures are taken to protect assets and critical equipment (hospital, heavy equipment, generators).

<u>Notify</u>

• If the hazard meets the threshold for activation of the CPRT, required personnel are notified.

Community Actions

- Using established protocols, notify CPRT members of impending activation.
- Communicate event-specific response objectives and actions.

<u>Activate</u>

- CPRT members are deployed to the incident location and community response actions are underway.
- Priority of effort is focused on life-saving measures and protecting property.

Community Actions

- Evacuation assistance
- Property protection
- Debris clearance

Coordinate/Support

- Community coordinates/aligns response activities with onsite disaster management authorities.
- Priority of effort is to support local response agencies and authorities in accordance with established protocols.

Community Actions

- Coordination of activities with disaster management authorities and local response personnel. Potential activities may include:
 - o Search and rescue
 - o Property protection
 - o Debris clearance
 - o Damage assessment
 - Volunteer assistance in support of disaster relief efforts (e.g., Red Cross, CERT, sheltering).

<u>Deactivate</u>

• CPRT support is deactivated when assignments are concluded and no further requests for assistance are anticipated from civil authorities or the community.

Community Actions

• Account for all personnel and equipment.

• Submit any required reports and/or documentation.

Four (4) Activation Levels

• Level 1 – Full Activation.

o An actual or threatening incident is of such magnitude that it requires, or may require, extensive response and recovery efforts and significant community and state resources. The WWVEOC is fully staffed post disaster with representatives in all assigned positions and is coordinating with the four disaster response zones.

o Staffing: All WWV volunteers

o Notification: All volunteers will be notified of the threat via phone, text, email, and messengers if necessary.

o Potential Triggers: Cat 2 or higher Hurricane anticipated to make landfall with effects in Wahiawa-Whitmore Village within two days.

• Level 2 - Partial Activation.

o A situation or threat has developed that may require WWV coordination, support, and monitoring. The WWVEOC is partially staffed post disaster with representatives from select staff positions and is coordinating as needed with the four disaster response zones and DEM as needed.

o Staffing: Command Group, Primary Staff, Disaster Response Zone Command.

o Notification: All volunteers will be notified of the threat via phone, text, email, and messengers if necessary.

o Cat 1 Hurricane anticipated to make landfall within one day with effects in Wahiawa-Whitmore Village.

• Level 3 – Enhanced Steady State.

o A situation or threat has developed that requires enhanced monitoring and coordination.

o Staffing: The WWVEOC is not staffed with personnel.

o Notification: Command Group. Situation information will be shared with WWV members and posted to WWV HHARP webpage, on Rep. Perruso's website.

o Potential Triggers: Possible Flooding from Lake Wilson

• Level 4 – Normal Operations.

o Routine monitoring of a situation. No event or incident is anticipated.

o Staffing: None

o Notification: Monitor emails, texts, WWV website, media reports, FEMA reports, Central Pacific Hurricane Center, Pacific Tsunami Warning Center



Figure 1: Operational Flow Diagram

Organization and Assignment of Responsibilities

Critical Community Functions

The community of Wahiawā-Whitmore Village has identified the following functions as being critical during an emergency:

- Immediate response
- Damage assessment
- Light search and rescue
- Life sustaining services
- Potable water
- Essential transportation
- Security (e.g., Neighborhood Watch groups)
- Communications

Organizational Structure

During an emergency, the community of Wahiawā-Whitmore Village will establish a temporary emergency response structure to coordinate CPRT activities associated with the functions identified above. The organizational structure outlines the operational matrix for emergency response and identifies primary functions and responsibilities. It is intended to be flexible and scalable. All or some of the positions may be activated and staffed based on the needs of the event at hand.

Incident Commander: Assumes the overall responsibility for managing the entire incident, including:

- Ensuring overall incident safety.
- Providing information services to internal and external stakeholders, such as disaster survivors, agency executives, and senior officials.
- Establishing and maintaining liaisons with other agencies participating in the incident.

Operations: Major activities of the Operations Section may include:

- Implementing strategies and developing tactics to carry out the incident objectives.
- Directing the management of all tactical activities on behalf of the Incident Commander.
- Supporting development of the Incident Action Plan to ensure it accurately reflects current operations.
- Organizing, assigning and supervising the tactical response resources.

Planning: Major activities of the Planning Section include:

- Preparing and documenting Incident Action Plans.
- Managing information and maintaining situational awareness for the incident.
- Tracking resources assigned to the incident.
- Maintaining incident documentation.
- Developing plans for demobilization.

Logistics: Is responsible for all services and support needs, including:

- Ordering, obtaining, maintaining and accounting for essential personnel, equipment and supplies.
- Providing communication planning and resources.

- Setting up food services for responders.
- Setting up and maintaining incident facilities.
- Providing support transportation.
- Providing medical services to incident personnel.

Finance and Administration: This section is responsible for:

- Contract negotiation and monitoring
- Timekeeping
- Cost analysis
- Compensation for injury or damage to property
- Documentation for reimbursement



Figure 2: Basic Organizational Structure

Direction, Control, Coordination

This section of the plan describes:

- How the community will direct and coordinate response activities before assistance arrives; and
- How the community will coordinate with local authorities and support emergency management efforts after assistance arrives.

Overall Direction and Control

The Mayor, as head of the local emergency management authority, has overall direction and control during a disaster. Community actions are not intended to duplicate efforts or establish a parallel emergency management structure, but to supplement or fill gaps during the interim period before local response personnel arrive.

Interim Direction and Control: Emergency Response Plan Execution

Concept of Operations: This plan uses a Mission Command Response developed by the US Military, tailored to the severity of the incident and required support to the civil authorities. It allows for a minimal Wahiawa-Whitmore Village (WWV) team footprint to command and control and conduct response operations with the flexibility to implement our Incident Command Staff and four Zone Commanders.

Response Objectives

• Conduct rapid damage assessment to provide decision makers with relevant information to expedite

light search and rescue operations, provide the nature and extent of the hazard, and inform response planning.

• Augment search and rescue capabilities, including personnel services, and access to survivors in need, with the goal of saving the greatest number of endangered lives in the shortest time possible.

• Support local law enforcement agencies to include but not limited to security watches to prevent looting of vulnerable areas, protection of critical infrastructure and key resources, points of distribution, and traffic control.

• Clear debris to facilitate evacuation of people and animals, and the delivery of vital response personnel, equipment, and services into affected areas.

• Assist civil authorities with providing life-sustaining services to the affected population with a focus on medical, hydration, feeding, and sheltering to those in most need.

Coordination with Local Disaster Management Authority

The Wahiawa- Whitmore Village HHARP team met with representatives from the local disaster management agency to discuss how the community can best support response activities during an event, and how these will be coordinated. The community will coordinate with the local disaster management agency through the communication mechanisms described throughout this plan.

Coordination with Other Community Groups

We will be coordinating with NGOs such as the American Red Cross, community organizations like ALEA Bridge, and privately owned public health institutions like Wahiawa General Hospital and Wahiawa Health to prepare for and provide an organized community response to disaster. While we are waiting for the City and Council to move CERT training online, so that members can get trained virtually, once trained, we plan to use this training to provide interim assistance via the CPRT team. The CPRT, may of whom will be CERT trained, will not only help provide interim assistance to the community before help arrives to other activities as directed by CERT leadership and/or stipulated by the Incident Commander.

Information Collection and Dissemination

During activation, the collection, analysis and dissemination of information to all personnel is essential in maintaining situational awareness and supporting decision making.

The community has devised the following mechanisms to collect and disseminate information during a disaster:

- PACE
- Technology: portable 2 way FRS walkie talkies, HAM radio, cell phone apps

Critical Information Requirements

Pre-Incident:

- What areas are projected to be impacted by the event?
- What critical infrastructure is expected to be impacted?
- What are the anticipated missions (key activities)?

Post-Incident:

- Where and in what numbers are the major concentrations of casualties?
- Where and in what numbers are the major concentrations of displaced persons?
- What conditions exist that are increasing states of lawlessness and criminal activity?
- Where and when will an increase of lawlessness and criminal activity be likely to occur?
- What roads are inaccessible or impassible?
- What is the operational status of key infrastructure in the community?
- Have CPRT members or volunteers sustained any deaths, serious injuries or hospitalizations?
- Is there any degradation of community capabilities which would prohibit response to missions?

Emergency Communication Planning Coordination with Other Community Groups

PACE is a methodology to help build a resilient communication plan for Wahiawa-Whitmore Village in order to ensure communications regardless of the situation.

PACE is an acronym for Primary, Alternate, Contingency, and Emergency.

Primary: the best and intended method of communication between parties.

Alternate: common but less-optimal method of accomplishing the task. Often monitored concurrently with primary means.

Contingency: method will not be as fast/easy/inexpensive/convenient as the first two methods but is capable of accomplishing the task. Often (but undesirably) the receiver rarely monitors this method.

Emergency: method of last resort and typically has significant delays, costs, and/or impacts. Often only monitored when the others means fail.

The PACE plan system is expressed as a list showing the order of communication precedence; primary, alternate, contingency, and emergency. The plan designates the order in which organizations plan to move through available communications systems until contact can be established. In the general plan, it is important to understand the order in which you would plan to use various communication systems and the agreed-upon method between zones and groups.

In the detailed plan, the phone numbers to be called will be shared and designated radio frequencies and channels will be used if using radios. The PACE Plan ensures that everyone agrees on which systems to monitor and in the correct order as the higher level of communications fail.

Emergency Management and Communications Managers will coordinate the development of PACE plans for the many different functions and departments within our organization to ensure that Incident Command and clinical staff can maintain critical communication links. Plans at all levels must reflect the training, equipment status, and true capabilities of the organization. If a clinical team has a disaster plan but team members are untrained, lack the proper equipment or contact information, they will not be effective in an emergency.

Developing comprehensive PACE plans will not ensure perfect communications in a disaster but helps to clear some of the fog and friction found in every emergency situation.

Volunteers will use all organic communications assets during training events, but we will focus on operator level proficiency and the technical development of communications personnel through training and support of operators in the interim. Our objective is that all users of communication assets will be completely familiar with the use and maintenance of assets, and that Wahiawa-Whitmore Village will develop and maintain a highly trained pool of communication operators that provide required support to assigned disaster response zones.

Communications Plan

- § Primary: Phone
- § Alternate: Email
- § Contingency: FRS
- § Emergency: HAM

As noted above, primary communications during operations will be by telephone and email if those services exist. In the absence of telephone and internet services, communications within and between Wahiawa-Whitmore Village elements will be by Family Radio Service (FRS) radios. Zone teams are assigned channel number of their zone number plus 8. For example, zone one will use channel 9 and zone two will use channel 10, etc. Communications between zone teams and the Wahiawa EOC will use FRS channel 2.

Communications between Wahiawa and the Oahu Department of Emergency Management and other outside agencies will be via the Area HAM radio station. Communications between the Wahiawa EOC and the ham radio station will be via FRS channel 2.

Plan Development and Maintenance

The community of Wahiawā-Whitmore Village has the overall responsibility for coordinating the development, enhancement and maintenance of this plan.

A working group/committee/planning group comprised of the following members is responsible for leading the planning effort:

- Amy Perruso
- Moana Olaso
- John Mackey
- Keoni Ahlo
- Nahoku Ahlo
- Anthony Sarrocca
- Keith Yabusaki

Other community members are invited to serve on the planning committee or may be asked to provide input into the plan by the committee.

Plan maintenance responsibilities include:

- Maintaining a plan review and revision schedule.
- Reviewing all plan components and proposed changes for consistency.
- Ensuring that CPRT members and volunteers are notified of changes to the plan.
- Maintaining an accurate record of changes.

Plan Review and Approval

Upon completion of a final draft plan, the Wahiawā-Whitmore Village community planning committee will submit the plan for review and approval by General Bruce Oliveira.

Thereafter, the Wahiawā-Whitmore Village community planning committee will review and update this plan at least once per year, and optimally after every hazard event and/or exercise.

Updates may be initiated at any time to:

- Revise terminology, contact information, roles and responsibilities.
- Update risk assessment information, and planning assumptions.
- Incorporate lessons learned from real events or exercises.

On a yearly basis, and in accordance with the guidance presented in Modules 5 and 6 (see HHARP User Guide), the committee will submit the plan for review and approval by HI-EMA and the HHARP Program Administrator, General Bruce Oliveira.

Plan Distribution and Access

The primary distribution method of the Wahiawā-Whitmore Village community plan will be digital.

The plan will be available to all community members and accessible via online access at Representative Perruso's Capitol webpage, her representative website and (hopefully) on the Wahiawa Community and Business Association website.

Printed copies will be shared with all members of WWVEOC, the public library and the Leilehua High School library.

Notifications of plan updates will be communicated via website notifications and emails to the community, along with social media alerts..

Training and Exercising the Plan

All CPRT members and volunteers are expected to be familiar with the contents of this plan and participate in trainings and exercises to support plan enhancements.

Community Emergency Response Team (CERT)

Community Emergency Response Team (CERT) training is a program that teaches basic disaster management and response skills to prepare individual citizens and their families before a disaster strikes. The Department of Emergency Management sponsors the training and educates residents to ensure that the population has the best possible chance of surviving and recovering from a disaster. CERT trained individuals can better assist their families, neighbors, and communities until first responders can reach affected areas after a disaster. Training consists of 16 classroom hours and a 4 hour field exercise to test community members' skills.

Topics Covered:

- Damage assessment
- Warning and notification
- Evacuation
- Identify and assist those with access and functional needs
- Emergency triage and first aid
- Search and rescue
- Preparedness
- Periodic reporting to City
- Suppress small fires
- Emergency utility control

CERT teams will know where to go, how to organize their efforts, and will get to work without any specific order being issued. A CERT member's first responsibility is to themselves, their family, and finally their community.

Additional Trainings (Red Cross):

First Aid:

Prepare for the unexpected with first aid training from the American Red Cross. Developed and taught by experts, our convenient, affordable courses can help your organization become OSHA compliant – and empower your team to provide care when it's needed most. With award-winning online classes, plus first aid courses at more than 550 locations across the United States, and our best-in-class blended Simulation Learning, we offer training that's designed to suit your schedule and your learning style

CPR:

This training helps community members learn the skills and confidence necessary to perform this lifesaving procedure when it's needed most. These CPR trainings cover the procedures/steps for caring for adults, as well as children. There are also online refresher materials that can help community members retain the knowledge they've gained.

AED:

Sudden cardiac arrest can happen to anyone, at any time. With Red Cross AED and CPR training, community members can learn when – and how – to use an automated external defibrillator (AED). These CPR/AED courses are developed and taught by experts with decades of combined experience – and deliver simple-to-use techniques and information that can help community members save lives.

FEMA trainings: https://training.fema.gov/is/crslist.aspx?all=true

Exercising the Plan

Crisis Prevention and Response Team (CPRT)

Disaster Management Authority

- Maintain readiness through planning and preparedness.
- Develop/maintain situational awareness and hazard monitoring capability.
- Enhance coordination/collaboration with community partners.
- Hazard notification(s) received from official source(s).
- Assess official hazard notification for area of interest.
- Anticipate likely impacts and level of response required.
- If hazard meets the threshold for activation of the CPRT, notify required personnel using established protocols.
- CPRT members deployed to incident location.
- Focus on life-saving measures and property protection.
- Community coordinates/aligns response activities with onsite response agencies/authorities in accordance with established protocols.
- Deactivate CPRT when assignments are concluded.
- Account for all personnel and equipment.
- Submit required reports/documentation.

Tasks to Teams

• Tasks

o WWV Community Emergency Response Teams CERT

- o WWV Neighborhood Security Watch NSW
- o WWV Damage Assessment Teams DAT
- o WWV Flood Monitoring Team FMT

Coordinating Instructions

• Critical information requirements.

- o Pre-incident:
 - What areas are in the projected Impact Zone?
 - What critical infrastructure is projected to be impacted by the incident?
 - What are the anticipated missions?
- o Post-incident:
 - Where and in what numbers are the major concentrations of casualties and displaced persons?
 - What conditions exist that facilitate an increase of lawlessness and criminal activity?
 - Where and when will an increase of lawlessness and criminal activity occur?
 - Where are the inaccessible or impassable roads?
 - What is the operational status of key infrastructure in the community?

• WWVEOC Functions

- o During a major disaster operation (Hurricane)
 - Command and Control
 - Response Planning
 - Light search & rescue
 - Damage assessment
 - Light fire suppression
 - Logistical support
 - Medical operations
 - Communications and coordination
 - Security Watch
 - Personnel accountability
 - Documentation
 - Care & feeding of WWV team members
 - Shelter operations, if required
 - Road clearing operations for personnel with chainsaws trained in proper use

• Insurance & Liability for WWV Members

o WWV members are required to maintain their own insurance for health & auto. Members are required to possess personal auto insurance to operate their automobiles/trucks while activated as a WWV member. No liability protection exists for gross negligence or wanton disregard. Members are instructed to always remain within their scope of training, assigned responsibilities, and act as any reasonable person would act in similar circumstances.

• Non-disaster operations

- o Stream monitoring
- o Training
- o Exercises
- o Public education & outreach
- o Assist Non-Governmental Organizations (i.e. Red Cross)
- o Community service projects

Sustainment-refers to efforts to support and maintain a disaster response.

• Logistics

o Situation: See Base ERP

o Assumptions:

- No logistical points of distribution available until after 14 days
- Local vendors' goods and services, if available, will be utilized to promote community resiliency.

o Mission: WWV logistics section provides logistic support to sustain WWV operations during emergency response.

o Execution:

• Phase 0 Tasks: Continuous situational awareness and preparedness. This phase sets the conditions for operations and cooperation with community partners, government, and NGOs, via active engagements for planning, conferences, training programs and exercises, and coordination.

• Phase I Tasks: Provide timely and accurate status of WWV critical equipment to update Logistics Common Operating Picture and provide situational awareness. Provide status of power generation, vehicles, water distribution, water purification, and refueling. Relocate and protect critical equipment to prevent damage and ensure equipment availability for operations.

• Phase ll/lll Tasks: Provide status of critical equipment for potential employment in support of mission assignments. Coordinate with Operation Coordinator and Personnel Coordinator for required personnel. Coordinate for transportation of required equipment and personnel.

• Phase IV/V Tasks: Account for all equipment and return when no longer required.

o Service and Support

• Logistics coordinator will be the subject matter expert for WWV sustainment and will provide logistical sustainment analysis for each request for assistance.

• Logistics section is responsible to plan/coordinate internal logistics support operations.

• Maintenance – Logistics section will identify community maintenance • support for duration of operations.

• Transportation – Establish a transportation coordination cell to handle all personnel, equipment, and supply movement functions.

o Mass Care

• Feeding – Food provisions are focused on meeting the needs of an affected population during an emergency.

• Work with American Red Cross, faith-based organizations and identify food establishments.

- Establish short-term distribution of food plan.
- Establish long-term distribution of food plan.
- Assess community food supply needs and storage requirements.
- Organize and train a feeding team to support the needs of the community

• Shelter – In some cases urgent shelter provision is needed for those whose houses have been destroyed or unsafe.

• Identify designated emergency evacuation shelter.

o Evacuation – The evacuation plan will be a guide for the whole community to coordinate their efforts with disseminating early warning to ensure timely and orderly evacuation of the vulnerable areas and persons.

- Identify evacuation routes
- Establish evacuation procedures
- Evacuation Maps
- o WWV Emergency Supplies

• WWV has the following supplies on hand to support staff during emergency operations. These supplies may be accessed and assigned by each staff section during an event.

- Office supplies
- Bathroom supplies
- Paper goods and utensils
- Extended shelf life water
- First Aid Kits

o Staff Preparation - During an emergency, all staff members are expected to report to duty with the following supplies:

- Toiletries
- Flashlight and batteries

• Personnel

o Mission – The WWV Personnel section will provide information in the planning, preparation and execution of personnel and administrative support and actions during an emergency.

o Assumptions:

• WWV personnel will be supported by the Personnel Section. Limited tracking of non-WWV personnel medically treated by WWV Medical (who, where, time/date sent for treatment elsewhere) will be conducted.

o Duties and Responsibilities

- Conduct staff coordination between other WWV staff sections.
- Maintain situational awareness with ongoing missions.
- Conduct staff planning, analysis, and input as required.
- Assist with development and updating of plans as required.

• Collect and maintain update of all personnel statistics, request and reports.

• Initiate Sign-in Roster for all WWV personnel. In addition, complete a Daily Personnel Statistics.

• Take appropriate actions to ensure WWV members are recognized as the emergency has been brought under control.

Medical

o Resources

- General Supplies
- Disposable/consumable goods
- Bandages
- Gloves
- Storage
- Equipment
- Generators to power medical devices
- Other medical equipment

o Tasks

- Identify medical providers who live or work in Wahiawa-Whitmore Village.
- Identify location for treatment.
- Procure supplies, and equipment.
- o Treatment
 - Acutely Injured or Ill: emergency treatment and transport to healthcare or alternate facility ASAP
 - Chronically Ill: prepare for existing medical conditions, need for electricity, H20, water, bathrooms, refrigeration.

This plan, in its entirety or parts thereof, will be exercised at least once annually, and an Exercise Evaluation Summary and Improvement Plan prepared with the results of the exercise to inform any potential changes to the plan.

Any updates to the plan will follow the guidelines for Plan Review and Approval listed above.

Authorities and References

State Laws, Regulations and Directives

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- Hawaii Revised Statutes Chapter 128A Homeland Security
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Glossary of Terms

Advisory: A notice that highlights special weather conditions that are less serious than a warning. They are for events that may cause significant inconvenience, and if caution is not exercised, the conditions could lead to situations that may threaten life and/or property.

Community Emergency Response Team (CERT): A program that educates people about disaster preparedness and provides training in basic disaster response skills.

Concept of Operations (CONOPS): A component of an emergency operations plan that clarifies the overall approach to an emergency (i.e., what should happen, when, and at whose direction) and identifies specialized response teams and/or unique resources needed to respond to an incident.

Coping Capacity: The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters (UNISDR 2009).

Debris Flow: Another term for a landslide or mudslide. See landslide definition.

Disaster: A serious disruption of the functioning of a community or society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources (UNISDR 2009).

Disaster Management: the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular, preparedness, response and recovery in order to lessen the impact of disasters (IFRC).

Drill: A type of exercise that is a coordinated, supervised activity usually employed to test a single specific operation or function in a single agency. Drills are commonly used to provide training on new equipment, develop or test new policies or procedures, or practice and maintain current skills.

Earthquake: A trembling or shaking of the ground caused by the sudden release of energy stored in the rocks beneath the earth's surface (McGraw-Hill).

Emergency Supply Kit: Items to help you survive during and after an emergency, including food, water, and other supplies. Also referred to as a Disaster Supply Kit.

Emergency Operations Plan: A document that specifies actions to be taken in the event of an emergency or disaster situation that identifies authorities, relationships, and the actions to be taken by whom, when and where, based on predetermined assumptions, objectives, and existing capabilities.

Evacuation: The organized, phased, and supervised withdrawal, dispersal, or removal of children, personnel, and visitors from dangerous or potentially dangerous areas.

Exercise: A way to train for, assess, practice, and improve performance in prevention, protection, response, and recovery capabilities in a risk-free environment. Exercises can be used for: testing and validating policies, plans, procedures, training, equipment, and interagency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; identifying gaps in resources; improving individual performance; and identifying opportunities for improvement.

FEMA: The Federal Emergency Management Agency is the lead emergency management agency in the U.S.

First Responder: Includes organizations and individuals who assume an emergency management role. Also known as emergency management or response personnel.

Flood: A general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters, unusual or rapid accumulation or runoff of surface waters, or mudslides/mudflows caused by accumulation of water.

Full-Scale Exercise: A multiagency, multijurisdictional operations-based exercise involving actual deployment of resources in a coordinated response as if a real incident had occurred. A full-scale exercise tests many components of one or more capabilities within emergency response and recovery and is typically used to assess plans and procedures under crisis conditions and assess coordinated response under crisis conditions. Characteristics of a full-scale exercise include mobilized units, personnel, and equipment; a stressful, realistic environment; and scripted exercise scenarios.

Functional Annex: A component of an emergency operations plan that describes procedures and missions for likely hazards.

Functional Exercise: A single-agency or multiagency operations-based exercise designed to evaluate capabilities and multiple functions using a simulated response. Characteristics of a functional exercise include simulated deployment of resources and personnel, rapid problem solving, and a highly stressful environment.

Hazard: A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage (UNISDR 2009).

Hazard Exposure: People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses (UNISDR 2009).

Hazard-Specific Annex: A component of an emergency operations plan that describes strategies for managing specific hazards.

Hurricane: A tropical cyclone with winds of 74 miles per hour or higher.

Incident Command System (ICS): A standardized on-scene emergency management construct specifically designed to provide an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. The Incident Command System is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. ICS is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.

Landslide: Processes that result in the downward movement of falling or flowing rock, soil, organic materials, or a combination of these.

Mitigation: Activities taken to reduce the loss of life and lessen the impact to property from disasters.

National Incident Management System: NIMS is a comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines. It is intended to be applicable across a full spectrum of potential incidents, hazards, and impacts, regardless of size, location or complexity. NIMS is intended to be used by the whole community. The intended audience for this section is individuals, families, communities, the private and nonprofit sectors, faith-based organizations, and local, state, tribal, territorial, and federal governments.

National Response Framework: Guidelines for U.S. response to all types of disasters and emergencies. It is built on scalable, flexible, and adaptable concepts identified in the National Incident Management System to align key roles and responsibilities across the Nation.

NOAA Weather Radio: A radio with a special receiver to receive information from the network of radio stations that broadcast continuous weather information from the National Weather Service.

Preparedness: Measures taken to prepare for and reduce the effects of disasters, including plans or preparations made to save lives and to help response and rescue operations.

Prevention: Actions taken to avoid an incident or to intervene to stop an incident from occurring.

Response: Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic needs of those affected (UNISDR 2017).

Recovery: Restoring or improving livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society (UNISDR 2017).

Shelter-in-Place: A procedure to keep you safe by remaining inside. It involves selecting an interior room or area in which to take refuge. Where you shelter depends on the type of hazard or threat.

Stafford Act: Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707, signed into law November 23, 1988; amended the Disaster Relief Act of 1974, PL 93-288. This Act constitutes the statutory authority for most Federal disaster response activities especially as they pertain to FEMA and FEMA programs.

Tabletop Exercise: A discussion-based exercise intended to examine various issues surrounding a hypothetical situation (scenario). Tabletop exercises can be used to assess plans, policies, and procedures or to assess types of systems needed to guide the prevention of, protection against, response to, or recovery from a defined incident. Tabletop exercises are typically aimed at facilitating understanding of concepts, identifying strengths and shortfalls, and/or achieving a change in attitude. Participants are encouraged to discuss issues in depth and develop decisions through slow-paced problem-solving rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions. Tabletop exercises can be breakout (i.e., groups split into functional areas) or plenary (i.e., one large group).

Thunderstorm: A storm with thunder and lightning, often accompanied by rain or hail.

Tropical Cyclone: A rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation (NOAA NWS).

Tropical Storm: A severe storm that develops over tropical seas with winds from 39 to 73 miles per hour.

Tsunami: A Japanese term meaning wave ("nami") in a harbor ("tsu"). A series of travelling waves of extremely long length and period, usually generated by disturbances associated with earthquakes occurring below or near the ocean floor (UNESCO IOC, 2016).

Volcano: An opening in the earth's crust that allows molten rock, gases, and debris to escape to the surface (Ready.gov).

Vulnerability: The characteristics and circumstances of a community system or asset that make it susceptible to the damaging effects of a hazard (UNISDR 2009).

Warning: A notice issued when a hazardous incident (geological or meteorological event) is occurring, is imminent, or has a very high probability of occurring. A warning is used for conditions posing a threat to life or property.

Watch: A notice issued when the risk of a hazardous incident (geological or meteorological event) has increased significantly, but its occurrence, location, and/or timing is still uncertain. It is intended to provide enough lead time so that those who need to set their plans in motion can do so.

Acronyms

CEDT	C
CERI	Community Emergency Response Team
CoH CDA	County of Hawaii Civil Defense Agency
CONOPS	Concept of Operations
CPRT	Community Preparedness and Response Team
DEM	Department of Emergency Management
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
HI-EMA	Hawaii Emergency Management Agency
ICS	Incident Command System
IFRC	International Federation of Red Cross and Red Crescent Societies
KEMA	Kauai Emergency Management Agency
MEMA	Maui Emergency Management Agency
UNISDR	United Nations International Strategy for Disaster Reduction
VOAD	Voluntary Organizations Active in Disaster

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