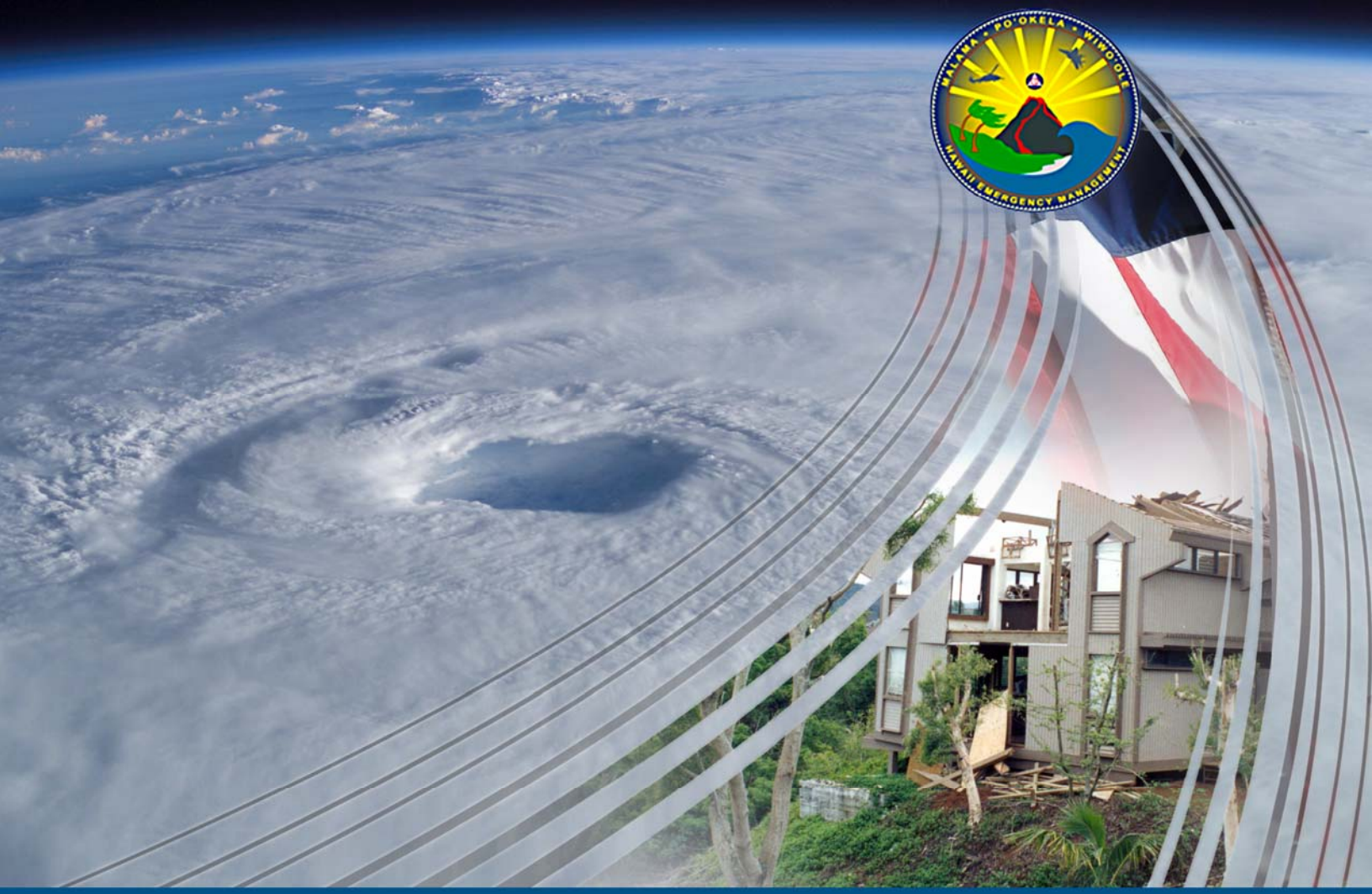

Hawaii Catastrophic Hurricane Operations Plan (OPLAN)

July 16, 2009

Version 2.0

FEMA

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Dear Emergency Management Partner:

It is with great satisfaction that the State of Hawaii's Civil Defense Division and the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA-Region IX) now share the jointly developed, state-wide response plan to be implemented before, during and following catastrophic events; a document that many of you labored hard and long to make a reality.

As many of us know, the official signing into operation of the State of Hawaii All-Hazards Concept Plan (CONPLAN) and the State of Hawaii Catastrophic Hurricane Operations Plan (OPLAN) is the culmination of more than a year of work by local, State and federal planners at all levels to delineate roles and responsibilities in response to a category 4 hurricane making a landfall on Oahu. The single, overarching goal of the numerous work groups, meetings and the rigorous exercise of the plans in June 2009 remains simple: the increased safety of the people of Hawaii and their property in the event of a major hurricane or other disaster.

The development and testing of the CONPLAN and OPLAN also represents an "emergency response first" following Hawaii's agreement to be the first state in the nation to engage in a joint planning exercise that fully employs the FEMA Integrated Planning System (IPS), which is scheduled to become a national template for joint federal/state and local disaster planning.

During the complex and demanding CONPLAN/OPLAN development processes, nine response objectives were identified as critical to save and sustain human life, minimize suffering, stabilize and restore critical infrastructure and set the conditions for recovery. The result of this sustained collaboration now provides disaster planners and responders – both in Hawaii and beyond -a clear and coherent roadmap for allocating resources and support.

It will remain our collective responsibility and high priority to maintain constant vigilance, through testing and periodic adjustment, to guarantee the ongoing effectiveness of both the CONPLAN and OPLAN. We are confident, though, that the State's safety has now effectively been taken to a higher level.

We hope that after becoming familiar with these plans you will agree that the State is safer and better served today than before CONPLAN and OPLAN became valued and integral elements in Hawaii's architecture of readiness.

Robert G. F. Lee
Major General, Hawaii National Guard
Director of Civil Defense

Nancy Ward
Regional Administrator
FEMA Region IX

DOCUMENT CHANGE CONTROL

Version	Date	Summary of Changes	Name

Changes to this plan should be submitted to the Federal Emergency Management Agency Region IX Operational Planning Branch, via email to ian.dixon@dhs.gov.

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Federal Emergency Management Agency Region IX
State of Hawaii Director of Civil Defense
16 July 2009

1. SITUATION.

a. Purpose. This Operations Plan (OPLAN) provides specific and detailed strategies to execute a unified State and Federal response to a catastrophic hurricane in the State of Hawaii. It outlines the intended response to a category 4 hurricane that makes landfall on Oahu, the most populated island in the State of Hawaii. The plan is scalable to address response to hurricanes of lesser severity or landfall impacting neighbor islands. The deployment of resources under this plan may be undertaken in whole or in part, as individual decisions are made and risks are evaluated. The focus of this plan is on hurricane response and setting favorable conditions for long-term recovery for the State of Hawaii.

b. Background. This OPLAN is a result of a focused and collaborative process utilizing the principles of the Integrated Planning Process (IPS). Federal, State, local, Non-Governmental Organizations (NGO), and private sector participated in the process to develop an executable plan that represents the combined capabilities of these entities. The focus of the plan scenario is the support of the State of Hawaii population center, located on the Island of Oahu. However, this plan is scalable and adaptable for use in other neighbor islands.

c. Authorities. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), describes the programs and processes by which the Federal Government provides disaster and emergency assistance to State and local governments, tribal nations, eligible private nonprofit organizations, and individuals affected by a declared major disaster or emergency. The Stafford Act covers all hazards, including natural disasters and terrorist events.

d. Threat. This OPLAN addresses the multiple effects of a category 4 hurricane impacting the Island of Oahu. These effects include, but are not limited to: high winds, flooding from rain, and storm wave inundation of coastal and low-lying areas.

(1) Flooding. Flooding is common during any heavy rain event and will exacerbate storm inundation from a hurricane. Heavy rains in steep areas cause rapid runoff and flash flooding in low-lying areas. In the Honolulu/Waikiki areas, approximately 42% of buildings are expected to be at least moderately damaged by flood waters.

(2) Wind. A typical Pacific hurricane will extend for 150 miles from the center for a total cross section of 300 miles. The strongest winds usually occur in the right side of the eye of the hurricane. Tropical storm force winds could onset 24 hours prior to landfall, increasing to hurricane strength as the storm approaches and decreasing to tropical storm force as the hurricane passes. Wind speed usually decreases significantly within 12 hours after landfall. Several days prior to landfall, Hurricane Iniki was forecasted to remain well south of the Hawaiian Islands. A special bulletin was issued when Hurricane Iniki abruptly turned north, less than 24 hours prior to landfall. Onset of tropical force winds associated with Iniki occurred on

Kauai three hours after hurricane warnings were broadcast. Hurricane Iniki made landfall approximately eight hours later.

The State of Hawaii's topography causes orographic speed-up resulting in intensification of wind speed across ridges and through valleys. As winds funnel between urban buildings and structures, they have the potential to amplify effects. High-rise buildings are vulnerable to hurricane force winds, and it is not uncommon for these structures to suffer a great deal of damage to windows due to debris.

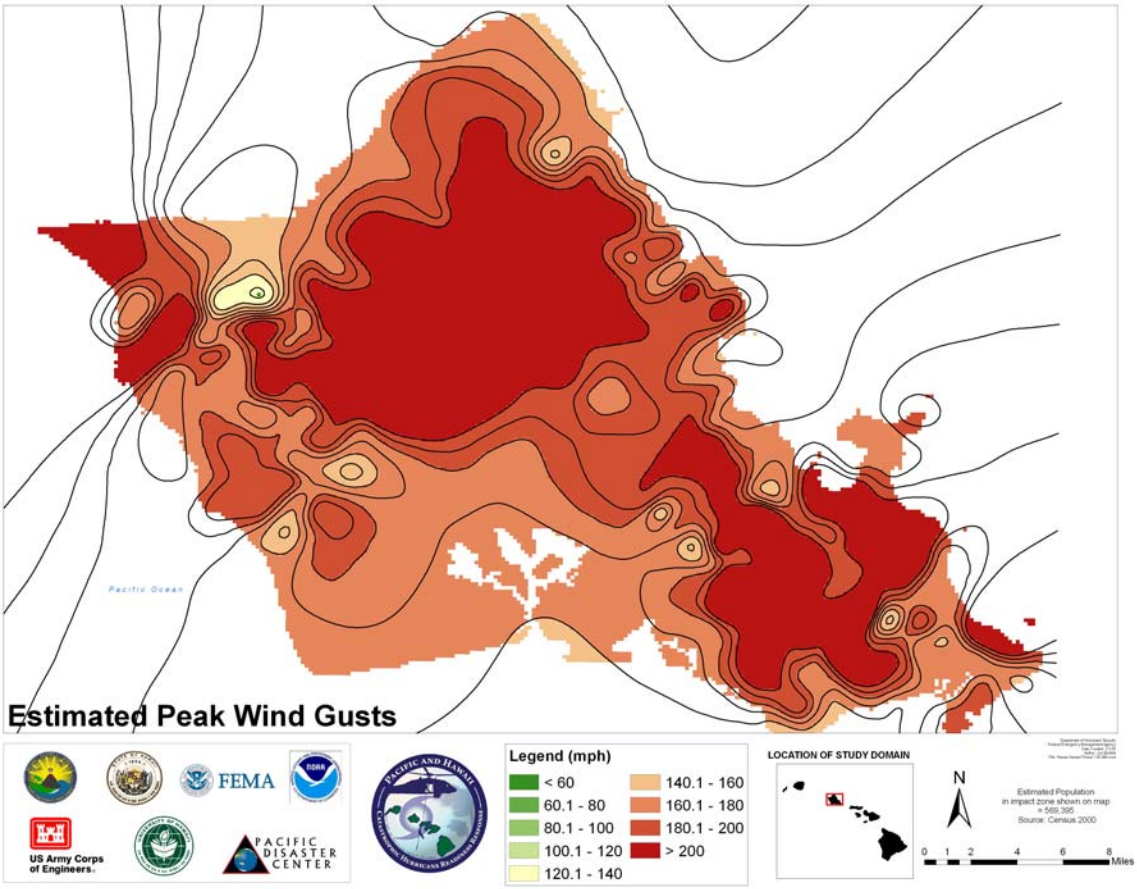

Figure 1-1: Peak estimated wind speeds (gusts) for a strong category 4 hurricane, coming from any direction (for more detailed information refer to Annex B: Intelligence).

(3) Inundation. As a category 4 hurricane approaches the Island of Oahu, there is a large increase of storm surge across low-lying coastal areas. Strong hurricane winds and waves push the water onshore, and increase water levels over a period of several hours.

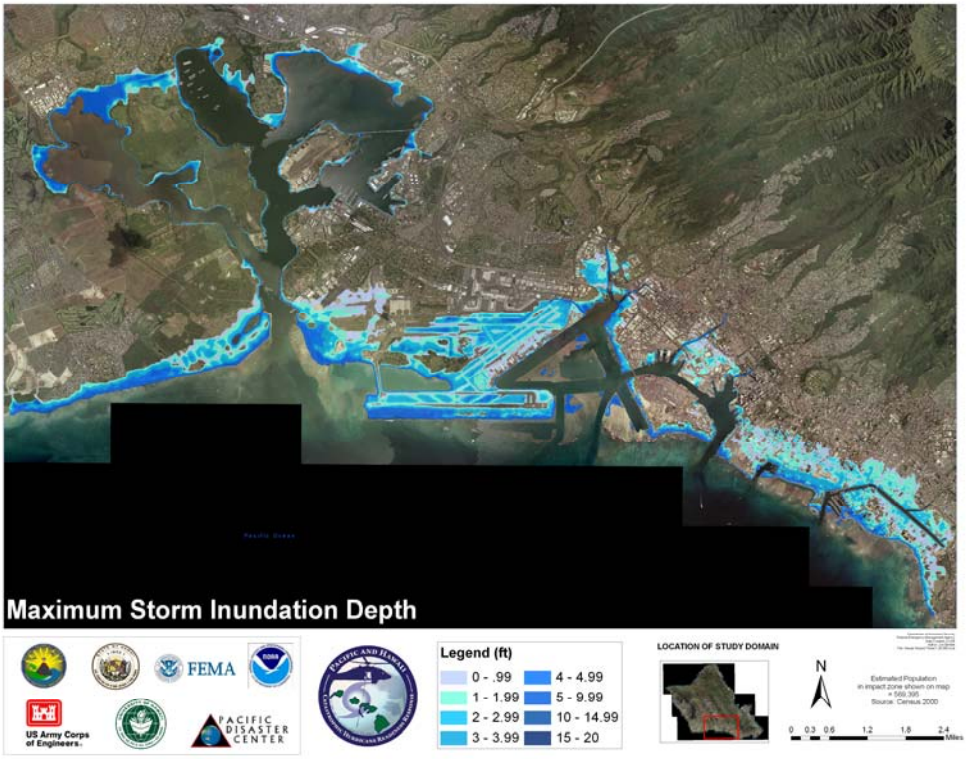

Figure 1-2: The maximum water depth expected during a catastrophic hurricane, from Pearl Harbor to Diamond Head (for more detailed information refer to Annex B: Intelligence).

e. Critical Considerations. Following a category 4 hurricane making landfall on the Island of Oahu, there will be significant disruption of basic services including transportation, healthcare, water, and electricity.

(1) Life Saving and Sustaining Measures.

(a) Physical Injuries and Psychological Distress. The majority of physical injuries and psychological distress will occur in both highly populated and isolated areas within the Island of Oahu. Flying debris, maritime accidents, and Hazardous Material (HAZMAT) incidents will create a surge of medical injuries and require responses from emergency responders. Residents who choose to shelter in single-wall construction homes will increase their risk of physical injury. There will be a surge of existing and new occurrences of psychological concerns which will strain medical resources at shelters and hospital. Individuals with physical injuries and psychological distress will also require pharmaceutical services.

(b) Search and Rescue (SAR). SAR assets on Oahu are limited and will require augmentation pre-landfall. The majority of SAR response will require "light" SAR teams integrated into the local population.

(c) Medical Support. Measures will be taken prior to an emergency to create 20 - 25% surge capacity of casualty carrying spaces during a catastrophic hurricane. One-third of the nursing facilities are within the inundation zone and may require patient evacuation to a shelter

or an appropriate medical care facility. Hospital and nursing patients may need to be evacuated before and after a catastrophic hurricane, depending on the structural integrity of facilities.

(d) Mass Casualties. The City and County of Honolulu (C&C) Medical Examiner has jurisdiction of all human remains on the Island of Oahu, including the responsibility for issuing death certificates for the deceased. There is limited capability, resources, and storage facilities to store and process human remains, which will include all unearthed corpses at cemeteries. The post mortem processing of human remains will require cultural sensitivity and respectful care.

(2) Mass Care and Sheltering.

(a) Displaced Population. Approximately 650,000 people are expected to be displaced from their homes after a catastrophic hurricane on Oahu. The vast majority of residential structures within the State are unable to withstand catastrophic hurricane winds. At-risk areas include flood prone and costal residential areas.

(b) Special Needs. According to the Healthcare Association of Hawaii (HAH), 20% of the State-wide population is considered to have special needs. A large Special Needs and elderly population within the State will require pre- and post-landfall medical assessment and specialized support following a catastrophic hurricane. Special Needs patients will require acute and chronic medical attention at shelters (Alternate Care Sites) and hospitals. Special Needs shelters must be ADA-compliant and will be expected to have a level of specialized equipment available. Although Special Needs shelters may be expected to have a level of specialized equipment available, there are insufficient resources to provide such equipment to many locations at once. Shelter management must recognize the need to keep people with disabilities and their mobility devices, service animals, accompanied caregivers, and/or other durable medical equipment together. Shelters must also develop a plan for transferring/transporting patients to appropriate medical locations, if required.

(c) Food Distribution. The majority of locations for receiving bulk food, storage, and movement operations are located within the inundation zone. The resumption of standard food distribution operations is dependent on the operability of seaports. Debris clearance will be required to distribute food. Emergency food supplies, in the form of pre-packaged meals, will be distributed through commodity Points of Distribution (PODs) which will be established and operated at the direction of Hawaii State Civil Defense (SCD).

(d) Sheltering. An estimated 650,000 displaced people and 80,000 visitors will require short- or long-term housing in temporary public shelters and congregate care sites. Emergency general population shelters will open only as determined by C&C.

(e) Pets. There are 289,000 pets (cats and dogs) on the Island of Oahu. Pet care must be factored within the mass care for the population. Human and pet shelters are co-located and pet shelter spaces cannot displace human shelter space. Service animals are not considered pets and will be sheltered with owners. Emotional support or comfort animals are not recognized under Americans with Disabilities Act of 1990.

(3) Tourists and Tourism. Tourists represent an economic life-blood of the State of Hawaii. Because of their large numbers and limited airlift and advanced warning time, it is not feasible to evacuate the tourists prior to tropical storm force winds making flying conditions unsafe. Tourists must shelter in place, primarily in the hotels in which they have been staying and be evacuated post-landfall, based on airlift availability.

(4) Water Supply. Water system integrity is essential for firefighting, sanitation, decontamination, and life sustainment. The major degradation in the capacity of the water system on an isolated island community is a very serious condition as it is very difficult to logistically support requirements from off island sources. Maintaining the water supply will require generators and refueling capabilities to key sites. The majority of the urban population on Oahu is served by the "lower" water supply system.

(5) Fuel to Maintain Essential Services. Critical facilities (e.g., hospitals and emergency medical facilities, water wells, waste water treatment, command and control nodes, hub shelters, and fuel distribution) will be dependent on temporary emergency power for prolonged periods of time. This will require regular diesel fuel deliveries and the staging of additional storage capacity at select sites.

(6) Power Infrastructure. The power transmission and distribution systems are extremely vulnerable to hurricane force winds and are subject to island-wide outages before, during, and after a catastrophic hurricane. Approximately 61% of Oahu's power generation facilities are located within the inundation zone. Government assistance will be required to ensure a timely restoration of the power infrastructure.

(7) Debris Clearance. The combined effects of moving water and heavy debris will compromise transportation routes and low-lying bridges. A collaborative effort will be required to insure timely clearance of critical transportation routes.

(8) On-Island Critical Resources. Relocating critical commodities and equipment to sites outside the inundation zone prior to the onset of high winds is critical. Security of on-island critical resources and critical operations will be necessary.

(9) Port Operations. 80% of the goods and 100% of the fuel in the State of Hawaii are imported through the State's airports and seaports. Debris, power outages, saltwater inundation, flooding, and damage to the ports will be extensive. Structural integrity of runways, docks, and facilities will be compromised. A strategy to maintain continuity post-landfall will be required.

f. Critical Assumptions.

(1) Life Saving and Sustaining Measures. Untrained volunteers will conduct SAR operations autonomously and may become secondary victims.

(2) Mass Care and Sheltering. The majority of sheltered individuals will not arrive at the shelter with disaster kits and will require food and water support. In addition, off-base

military personnel and dependents will need to be sheltered by the State of Hawaii. Many pet owners will not bring food, crates, pet supplies, or litter for their pets and will be hand carried and/or on leashes.

(3) Fuel. Refinery capability will cease on Oahu for several weeks as refineries are in the inundation zone.

(4) Power Infrastructure. Power will be out for 30-40 days, and possibly longer in some locations.

(5) Debris Clearance. The debris generated by the storm will isolate population centers, particularly in the East Oahu, North Shore, and Waianae areas.

g. Mission-Essential Tasks. The following response objectives have been identified as priority for response operations following a catastrophic hurricane. Each appendix listed below corresponds to Annex C (Operations) and Annex D (Logistics).

Appendix 1. Perform Life Saving And Sustaining Measures. Saving and sustaining the lives of the population is paramount. This is accomplished through SAR operations and maintaining the necessary levels of medical care. Federal SAR and medical assets will be deployed to the State of Hawaii prior to hurricane landfall in order to provide an immediate post-landfall response and augment State and local SAR and medical capabilities.

Appendix 2. Conduct Mass Care And Sheltering. Over 650,000 people will require emergency sheltering and congregate care and one million people will require feeding after a catastrophic hurricane. This will be accomplished by establishing an integrated hub and spoke system of emergency medical care sites, temporary shelters, water supply, and staging sites. A hub is based upon isolated population centers of gravity and consists of a hub shelter, water supply station, and a staging site. These hubs have been pre-identified and are distributed throughout the Island of Oahu. The hub shelter will support several subordinate shelters through food distribution, communications, supplies, etc.

Appendix 3. Minimize Risk To Tourists. Actions will be taken to restrict the number of tourists arriving to Oahu or any other designated county 24 hours pre-landfall or upon the issuance of a hurricane warning. Post-landfall evacuation will be executed by the Mass Evacuation Task Force (METF). Operations include coordination of transportation, tracking of evacuated tourists, medical care at evacuation sites, and transportation coordination to Aerial Points of Embarkation (APOEs) and Seaports of Embarkation (SPOEs).

Appendix 4. Maintain Functionality of the Water Distribution System. Maintaining the existing water distribution system is critical to maintain firefighting and other emergency services, waste water and sanitation operations, and providing potable water to the affected population. Initial actions will concentrate on re-establishing water supply at critical locations aligned with the mass care hub and spoke system. Over time, this will progress to greater system restoration. This will be accomplished by deploying pre-positioned assessment teams, starter teams, and emergency power generators at critical locations to isolate damage and start water pumps. In

addition response operations will include the deployment of potable water to shelters and other critical locations supporting life sustaining measures.

Appendix 5. Deliver Fuel To Maintain Essential Services. Fuel will be required for emergency power generation at critical facilities, first responder and passenger transportation vehicles and debris clearance and assessment operations. Pre-positioned fuel storage capacity at pre-identified locations and the development and implementation of a cooperative fuel distribution strategy will be required to ensure the proper allocation and prioritization of limited fuel resources. An Energy Task Force will define a strategy for fuel delivery to essential facilities and define the roles and responsibilities of coordinating and cooperating agencies.

Appendix 6. Conduct Debris Clearance. A coordinated debris clearance strategy enables the mobility of emergency services to perform life saving and sustaining measures, and the transportation/distribution of essential commodities throughout the Island of Oahu. The prioritization of roadway clearance should consider SAR operations, life saving and sustaining activities, critical medical facilities, shelters, response command and control sites, fuel delivery arteries, commodity distribution arteries, HAZMAT, as well as harbor and airport operations. In order to accomplish this mission-essential task, a Debris Task Force will determine on-island debris clearance assets, emergency routes, and prioritization to execute debris clearance the first 48 hours post-landfall.

Appendix 7. Protect On-Island Critical Resources. Due to the geographic isolation of the State of Hawaii, the protection of on-island critical resources is essential for a timely response following a catastrophic hurricane. A framework has been established to identify and relocate all life saving and sustaining commodities, equipment, and assets that are at risk to hurricane force winds, rain, or storm inundation. An efficient and timely protection of on-island government and private industry resources is necessary for an effective response. Pre-identified Critical Resource Relocation Sites (CRRS) will provide a 'safer' location to stage Federal, State, local, NGO, and private sector resources pre-landfall.

Appendix 8. Maintain Continuity of Port Operations. Continuity of port operations is essential to sustaining the population of the State of Hawaii due to geographic isolation. Airports are essential to the delivery of passengers and time critical cargo; seaports are essential for the delivery of bulk products and commodities. Following a catastrophic hurricane, the seaport Unified Command and airport Emergency Operations Center (EOC), will conduct assessments and determine a strategy for port operations in a degraded environment using a combination of commercial, Maritime Administration (MARAD), and Department of Defense (DoD) capabilities to ensure the continued throughput of passengers and cargo.

Appendix 9. Restore Power Infrastructure. Power restoration is essential to the recovery of the economic and industrial base of the State of Hawaii. The government will provide support to the Hawaiian Electric Company (HECO) to more speedily restore the electrical power grid on the Island of Oahu. Government support to HECO will be provided in the form of technical assistance, coordination of transportation resources, placement of repair crews at responder support camps, and priority handling of Emergency Support Function (ESF) #12 cargo to expedite restoration of the power grid.

2. MISSION. The mission of joint State/Federal response organization is to save and sustain human life, minimize suffering, stabilize and restore critical infrastructure and set the conditions for recovery following a catastrophic hurricane in the State of Hawaii.

3. EXECUTION. The Federal Government will move rapidly to provide life saving and sustaining resources to the State of Hawaii and to restore critical services. If required, and where practical, resources will be staged in Hawaii. As soon as feasible, SCD and the Federal Emergency Management Agency (FEMA) will form a joint State/Federal Unified Coordination Group (UCG).

The response and recovery structure is organized, staffed, and managed in a manner consistent with NIMS principles and is led by the UCG. A State/ Federal Joint Field Office (JFO) will be established at an agreed upon location and is the facility where the UCG, UCG Command Staff, and UCG General Staff operate. For the purposes of this plan, unless otherwise stated, a specific section within the UCG General Staff will refer to a joint State/Federal section. For example, Operations Section is the joint State/Federal Operations Section of the UCG General Staff.

a. Senior Leader's Intent. The State Coordinating Officer (SCO) and the Federal Coordinating Officer (FCO) will ensure unity of effort by establishing a joint State/Federal UCG to coordinate disaster response activities that are consistent with the priorities set by the Governor of Hawaii and the Senior Policy Group.

(1) Governor of the State of Hawaii executes authority for civil defense through the Director of Civil Defense, IAW HRS 128, and the designated SCO. The SCO will form a joint UCG with Federal counterparts and achieve joint incident objectives.

(2) The FEMA Region IX Regional Administrator will ensure a coordinated Federal response through the rapid deployment of an Incident Management Assistance Team (IMAT) and pre-identified resources. The Regional Administrator will support and forward the Governor's request for a pre-landfall declaration that, when approved, appoints an FCO. The FCO will participate in the UCG to ensure joint incident objectives, priorities, and operations for the effective allocation, integration, and use of resources at the field level.

b. Concept of Operations. Objectives will be met through key tasks by phase linked to National Weather Service (NWS) criteria. Preparation for, and response to, catastrophic hurricanes will be consistent with the Federal Interagency Hurricane Concept Plan. Adherence to the execution checklist, logistics execution schedule, and will ensure key tasks are completed. For detailed information refer to Annex X and Annex D, Appendix 10.

(1) General. NWS will make recommendations regarding the initiation of this OPLAN with regards to pre-defined meteorological and environmental thresholds. These conditions may include:

- The State of Hawaii is inside the 5-day probable track area of a hurricane.
- There is a 10-20% chance that hurricane force winds (64 knot, 74 mph) will come ashore somewhere in the State of Hawaii. In the worst case scenario, the onset of tropical storm force winds will occur within 38 to 50 hours.

- A Hurricane Watch has been issued for the Hawaiian Islands by the NWS.

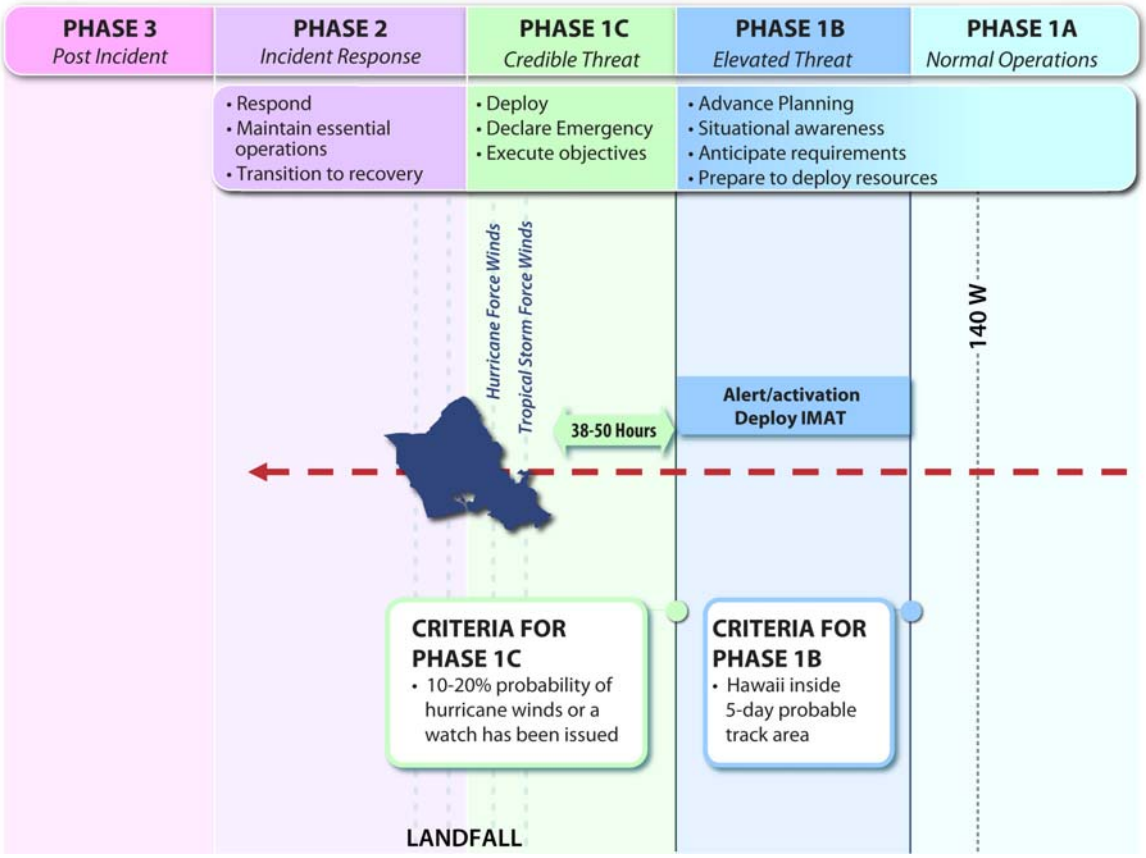

Figure 3-1: Example of tasks by phase for hurricane response.

(2) Phase 1: Prepare. This phase consists of three sub-phases that range from steady-state operations to the pre-landfall positioning of State and Federal assets. Actions taken before a severe hurricane makes landfall are focused on awareness, preparedness, and protection.

(a) Phase 1a: Normal Operations. Normal operations are the "steady state" in the absence of a specific storm or threat. Actions during this phase include:

- SCD, FEMA Region IX, and DoD participation in the annual Makani Pahili hurricane preparedness exercise
- OPLAN revisions on a bi-annual basis
- Ongoing mitigation activities, risk assessments, and hazard analysis

(b) Phase 1b: Elevated Threat. This sub-phase occurs when the Hawaiian Islands are within the 5-day probable track of a hurricane system presenting a plausible threat to the State of Hawaii. This sub-phase involves heightened situational awareness which includes collecting, analyzing, and disseminating pertinent information to anticipate requirements ensuring a prompt response.

Actions are taken to heighten situational awareness triggered by actionable data or knowledge of a precursor event meeting Critical Information Requirements (CIR) criteria. In addition, State, C&C, and Federal partners commence preparatory actions such as verification of communications systems, alerting/mobilizing key personnel, and issuing advisories.

(c) Phase 1c: Credible Threat. This phase starts when the NWS determines that the Hawaiian Islands have a 10-20% chance of experiencing hurricane force winds, or a Hurricane Watch has been issued. The period of time from beginning of this phase to the onset of tropical storm force winds is estimated to be between 38-50 hours, depending on size and movement of the storm. Preparations during this sub-phase are intended to accomplish the UCG's pre-landfall objectives.

(3) Phase 2: Incident and Incident Response. Once landfall occurs, priorities shift from building capabilities to employing resources to save lives, protecting property and the environment, and preserving the social, economic, and political structure of the State of Hawaii and C&C. If a Joint Field Office (JFO) has not already been pre-identified and occupied, one will be established. FEMA Region IX Regional Response Coordination Center (RRCC) will coordinate Federal support until the JFO is operational.

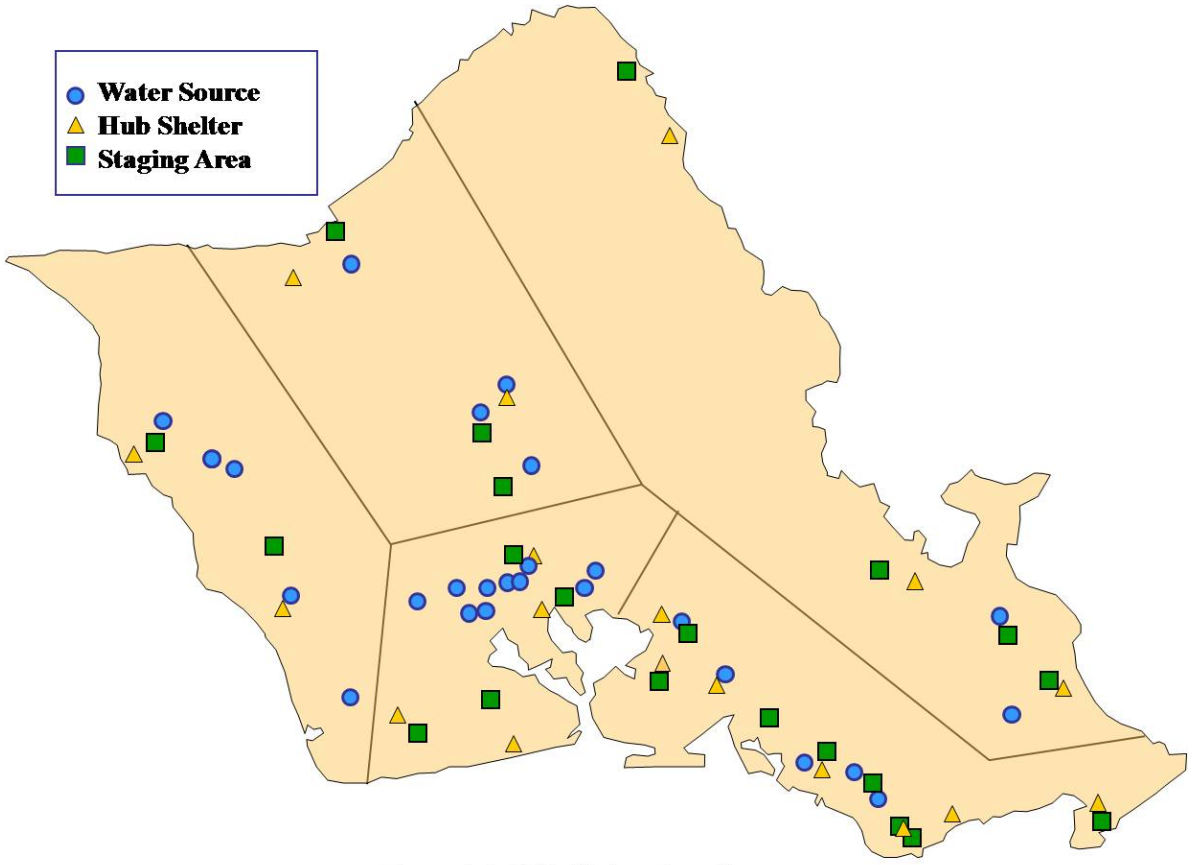

Figure 3-2: Hub Shelter Distribution

(a) Response Strategy. The core of the response is a hub and spoke strategy supporting population centers. Staging sites will support hub shelters and other shelters in the vicinity with commodities. Wells, provided with emergency power, will provide water to the hub shelters. Honolulu Police Department (HPD) Command and Control (C2) sites provide communications and coordination support. Hub shelters will be a focal point of support for C2, medical support, and Special Needs assistance. Debris clearance and fuel delivery operations will support this strategy.

Hub Area Name	Hub Shelters	Water Sources	Staging Areas	HPD C2 Locations
Pearl	Kapolei High	Hoaeae Wells; Honouliuli Wells II; Kunia 228 Reservoir 1, 2, Wells I; Kunia 440 Reservoir 1, 2, Wells II; Kunia Wells III; Waipahu 228 Reservoir 1, Wells I; Waipahu 228 Reservoir 2, Wells II; Waipahu Wells III	Barbers Point/National Guard	HPD Kapolei
Pearl	Waipahu High	Waipahu 228 Reservoir 1, Wells I; Waipahu 228 Reservoir 2, Wells II; Waipahu Wells III	Leeward CC	HPD Pearl City
Pearl	Kanoelani Elementary	Waipahu 228 Reservoir 1, Wells I; Waipahu 228 Reservoir 2, Wells II; Waipahu Wells III	Central Oahu Regional Park	HPD Pearl City
Pearl	Campbell High	Hoaeae Wells; Honouliuli Wells II; Kunia 228 Reservoir 1, 2, Wells I; Kunia 440 Reservoir 1, 2, Wells II; Kunia Wells III; Waipahu 228 Reservoir 1, Wells I; Waipahu 228 Reservoir 2, Wells II; Waipahu Wells III	Holomua Elementary	HPD Pearl City
Pearl	Leeward CC	Pearl City 285 Reservoir 1, 2, & Wells; Pearl City Shaft	Leeward CC	HPD Pearl City
South	Aiea High	Halawa 277 Reservoir & Wells	Halawa District Park	HPD Pearl City

South	Moanalua High	Moanalua Wells/Booster	Navy Exchange	HPD Kalihi
South	Radford High	Moanalua Wells/Booster	Navy Exchange	HPD Kalihi
South	Farrington High	Kalihi Pump Station/Wells	Farrington High	HPD Kalihi
South	Kaahumanu Elementary	Beretania Pump Station/Wells	Stevenson Intermediate/ Roosevelt High	HPD HQ
South	Kaiser High	Kaimuki Pump Station/ Wells; Wilder Wells	Hanauma Bay Parking Lot	HPD HQ
South	Kapiolani CC	Kaimuki Pump Station/ Wells; Wilder Wells	State Civil Defense; Kapiolani CC	HPD HQ
South	Kalani High	Kaimuki Pump Station/ Wells; Wilder Wells	University of Hawaii – Manoa; Kapiolani CC	HPD HQ
Windward	Waimanalo Elementary & Intermediate	Waimanalo Tunnel 1	Waimanalo Regional Park	HPD Kailua
Windward	Kailua High	Kailua 272 Reservoir	Kailua Regional Park (alternate: C&C Refuse Baseyard)	HPD Kailua
Windward	Castle High		Windward Community College	HPD Kaneohe
Windward	Brigham Young University; Kahuku High & Intermediate		HFD, Kahuku	HPD Kahuku
Central	Waialua High & Intermediate	Waialua Reservoir &Wells	Haleiwa Town	HPD Wahiawa
Central	Mililani High	Mililani Wells I	Mililani USPS	HPD Wahiawa
Central	Leilehua High	Wahiawa Booster 1; Wahiawa Wells I	47th TC Motor Pool HING	HPD Wahiawa
Leeward	Makaha ES	Makaha 525 Reservoir & Well I; Waianae 390 Reservoir 1 & 2	Makaha Resort & Golf Club	HPD Waianae
Leeward	Nanakuli High & Intermediate	Nanakuli 350 Reservoir/Booster; Barbers Point 215 Reservoir	Lualualei Naval Reserve	HPD Waianae

Table 3-1: Geographical hub and spoke relationship

(4) Phase 3: Post-Incident (Recovery and Mitigation). Even as immediate response operations commence, the need to begin recovery operations emerges. Initial recovery operations may be conducted simultaneously with response until the focus of efforts gradually gives fully to recovery operations. This phase includes actions taken to meet UCG objectives and to set conditions to transition responsibility to long-term recovery that restore services, continue government operations, and promote economic recovery. The JFO remains the central coordination point among Federal, State, local, NGOs, and private sector entities that are providing recovery and mitigation assistance until and if a Transitional Recovery Office (TRO) is established.

The Federal Government is responsible for promoting public policy and community rebuilding which will strengthen community resiliency and protect the Federal investment. During this phase, required mitigation actions, through programs such as Hazard Mitigation Planning Grants and the National Flood Insurance Program (NFIP) are implemented to ensure that communities rebuild stronger to reduce or eliminate their long-term risks from future hurricane-related hazards.

Hazard mitigation is defined as sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. Mitigation activities include risk analysis, risk reduction, community adoption of risk insurance programs, and risk communication activities.

c. Key Federal Roles and Responsibilities.

(1) Specific Roles and Responsibilities.

(a) FEMA. Coordination of incident management and response efforts, life saving assistance, SAR operations, comprehensive national incident logistics planning/management and sustainment capability, mass care, emergency assistance, disaster housing, human services, issuance of mission assignments, resource and human capital, incident action planning, financial management, emergency public information and protective action guidance, media and community relations, and congressional and international affairs.

(b) U.S Coast Guard (USCG). Oil and hazardous materials (e.g., chemical, biological, and radiological) response, and SAR operations.

(c) U.S. Department of Defense (DoD). Provides Defense Support of Civil Authorities (DSCA) in response to requests for assistance during domestic incidents. With the exception of support provided under Immediate Response, the obligation of DoD resources to support requests for assistance in the Pacific Command's AOR is subject to the approval of the U.S. Pacific Command (USPACOM) Commander, if the capabilities to support the request are available in USPACOM.

(d) U.S. Army Corps of Engineers (USACE). Infrastructure protection and emergency repair, infrastructure restoration, engineering services and construction management, and emergency contracting support to life saving and sustaining operations.

(e) U.S. Department of Transportation (DOT). Transportation safety, restoration/recovery of transportation infrastructure, movement restrictions, and transportation system damage and impact assessment. All requests for transportation will be coordinated through the Logistics Section and/or ESF #7.

(f) Federal Aviation Administration (FAA). Aviation/airspace management and control.

(g) U.S. Department of Health and Human Services (HHS). Public health, medical and mental health services, and mass fatality management.

(h) National Weather Service (NWS). Coordinating agency for criteria on task by phase execution, and ongoing weather subject matter expert support.

(i) U.S. Department of Agriculture (USDA). Nutrition assistance, animal and plant disease and pest response, food safety and security, natural and cultural resources and historic properties protection and restoration, safety and well-being of household pets, and support to wildland, rural, and urban firefighting operations.

(j) U.S. Department of Energy (DOE). Energy infrastructure assessment, repair and restoration, energy industry coordination, and energy forecast.

(k) U.S. Department of Homeland Security (DHS). Lead agency for protection of Critical Infrastructure and Key Resources (CIKR). DHS will designate an Infrastructure Liaison (IL) to respond and support the RRCC and/or JFO. The IL will facilitate, support and review assessments and information on CIKR in the affected area with State, Federal, local, and private sector partners. Through the analysis of identified CIKR and review of existing infrastructure and intelligence-related analyses, the IL will make restoration recommendations to the Operations Section Chief within the JFO.

(l) Environmental Protection Agency (EPA). Oil and hazardous materials (e.g., chemical, biological, and radiological) response, and environmental short- and long-term cleanup.

(m) General Services Administration (GSA). Resource support (e.g., facility space, office equipment and supplies, and contracting services).

d. State and Local Coordination Requirements. Upon execution of this OPLAN, SCD will direct, oversee, and execute response support. Key responsibilities include:

(1) SCD leads all State of Hawaii response and recovery operations. SCD coordinates local requests for support from the Federal government through FEMA and Emergency Management Assistance Compact (EMAC) support through the EMAC-A Team. SCD operates the State emergency supply warehouse.

(2) C&C Department of Emergency Management (DEM). Lead for all response and recovery operations within C&C. Coordinates request for support from the State of Hawaii through SCD.

e. NGO Coordination Requirements. Per the National Response Framework (NRF), an NGO is an entity with an association that is based on interests of its members, individuals, or institutions. It is not created by government, but it may work cooperatively with government. Such organizations serve a public purpose, not a private benefit.

(1) Hawaii State Voluntary Organizations Active in Disaster (HSVOAD) is the lead coordinating body for members providing disaster services. HSVOAD coordinates through SCD and FEMA Voluntary Agency Liaisons with National VOAD to help integrate the provision of services within the State of Hawaii.

(2) American Red Cross (ARC) provides subject-matter expertise on regulations, policy, and all relevant ARC issues including general mass care planning, preparedness, response, and recovery activities. ARC is the primary agency for staffing shelters within the C&C.

(3) Healthcare Association of Hawaii (HAH) is a non-profit organization representing Hawaii's healthcare providers. HAH provides subject-matter expertise on hospital status (including damages, available casualty carrying space, and staffing needs). ESF #8 is the lead for medical care issues medical care issues associated with a response. HAH will provide liaisons to DEM and ESF #8, if requested.

f. Private Sector Coordination Requirements. SCD and FEMA will coordinate with the private sector to support establishing critical private-sector preparedness activities that are ready for implementation. During incident management, appropriate private sector entities may be notified and requested to provide relevant subject matter expertise. Representatives of private sector entities should be included, as appropriate, in long-term community recovery coordination and planning efforts.

(1) HECO and its subsidiaries is a for-profit company that serves 95% of the residents of the State of Hawaii. HECO provides subject-matter expertise on power infrastructure assessments, regeneration priorities and status, replacement part status, and repair crew support requirements. During an event, HECO provides liaisons to DEM, SCD, and ESF #12 through the Hawaii State Energy Council, as needed. All HECO requests for support are coordinated through ESF #12 and Hawaii Department of Business, Economic Development, and Tourism (DBEDT).

g. Key Decisions. Key decisions required during a hurricane scenario include, but are not limited to:

(1) FEMA will use its authority under the surge account to pre-position required resources. The President may declare an emergency or major disaster, thus invoking the Stafford Act and the appointment of an FCO to lead Federal support efforts. The FCO serves in the UCG,

working directly with the SCO to meet assistance requirements. Certain criteria must be met in order for a pre-landfall emergency declaration to be considered. Such criteria include the following:

- A projection by the NWS that the State of Hawaii, or portion of it, will be threatened by a catastrophic hurricane.
- A state of emergency is declared by the Governor of Hawaii.

(2) FEMA, or agencies with primary jurisdictional authority for certain aspects of a response, proactively notify and deploy Federal resources or teams in anticipation of or in response to catastrophic events in coordination and collaboration with SCD, DEM, ARC, and private sector entities.

(3) The establishment of initial operating facilities, JFO, SAs, or other pre-landfall facilities. Decisions on location, establishment, staffing, program priorities, resources, and demobilization will be required.

(4) USCG as the Captain of the Port in affected areas, in coordination with the seaport Unified Command, will modify port conditions in preparation for and during recovery from hurricane force winds.

h. Critical Information Requirements (CIRs). Senior level decision makers responsible for implementing this plan will require information about:

- The hurricane's projected path, intensity, and likelihood of destruction
- Demographics (including individuals displaced, self-evacuees, injured, and killed) and information on Special Needs populations
- Evacuation plans, timelines, and instructions (to include the evacuation of critical facilities such as hospitals and nursing homes)
- Requests and/or need for State and Federal assistance
- Status of declarations and ESF activations
- Location, capabilities, and number of all deployed response resources including equipment, commodities, and personnel
- Identification of national-level and Governor priorities
- Anticipated flooding from rainfall and storm inundation, as well as risks from vulnerable water structures
- Damage to and status of critical facilities and infrastructure
- Potential chemical, physical, and natural hazards that may affect the safety and health of response and recovery workers
- Status of shelters and their commodities
- Information on damage to residential dwellings, temporary housing plans, and power restoration timeline
- Factors that have a significant economic impact
- Ability of government organizations to continue essential functions and services

4. ADMINISTRATION, RESOURCES AND FUNDING.

a. Administration. State, local, and Federal departments and agencies have responsibilities to manage financial activities within their established processes. For FEMA, the availability of services shall be administered through the FEMA National Response Coordination Center (NRCC) at the national level, the RRCC at the regional level, and the JFO at the field level.

(1) Senior Financial Advisor Responsibilities. This plan does not alter or impact the responsibilities of Senior Financial Advisors in other State, local, and Federal departments and agencies. When other State, local, and Federal departments and agencies are operating programs under their own statutory authority and funding, there is an expectation that coordination among agencies with financial responsibilities will occur.

(2) Coordination of State Mutual Aid Agreement(s). If SCD anticipates that its resources may be exceeded, the Governor of Hawaii can request assistance from the Federal Government and/or from other States through mutual aid and assistance agreements such as the EMAC. EMAC will be activated when the governor declares an emergency through the Governor's Emergency Declaration. SCD coordinates all EMAC requests and does not need to exhaust mutual aid agreements before requesting Federal assistance.

(3) Financial Oversight. The Financial Management Support Annex to the NRF provides basic financial management guidance for all Federal departments and agencies providing assistance for incidents requiring a coordinated Federal response.

(4) Personnel Administrative Management Responsibilities.

(a) Emergency management and incident response activities require carefully managed resources (e.g., personnel, teams, facilities, equipment, and/or supplies) to meet incident needs. Utilization of the standardized resource management concepts such as typing, inventorying, organizing, and tracking will facilitate the dispatch, deployment, and recovery of resources before, during, and after an incident.

(b) Resource management should be flexible and scalable in order to support any phase of the incident and be adaptable to changes. Efficient and effective deployment of resources requires that resource management concepts and principles be utilized in all phases of emergency management and incident response.

(5) Authorities For and Policy On Personnel Augmentation. Each State, local, and Federal department and agency possesses individual policies for personnel augmentation that is predicated on their authorities, various policies, Memorandums of Understanding (MOUs) and mutual aid agreements.

(6) Personnel training.

(a) State, local, and Federal departments and agencies must ensure their employees who are engaged in incident response, recovery and mitigation activities are able to perform in accordance with standard resource typing guidelines and operational requirements.

(b) Personnel reporting for duty at the JFO should be fully trained in the appropriate incident management doctrine and procedures and be knowledgeable in the operations of the agency they represent. Upon arriving at the JFO, State, local, and Federal department and agency representatives may be required to partake in certain training such as ethics, equal employment opportunity, etc.

(7) Travel and Travel Reimbursement. It is anticipated that travel to field facilities will be required by certain State, local, and Federal employees. Departments and agencies should refer to their parent organization's travel policies and procedures.

b. Resources. Resource support will be provided in conjunction with the National Incident Management System (NIMS) and ESF #7. These activities rely on a combination of the following:

- FEMA Logistics Management Directorate (LMD) and GSA are the co-lead agencies responsible for executing logistics management and resource support responsibilities, authorities, and requirements on all levels
- Private-sector vendors will ensure timely, effective, cost efficient, agile, flexible, and proximate resourcing to implement logistics support requirements for Annex D phases 1a through 3 actions
- FEMA will establish Incident Support Bases (ISBs) both on the west coast of the Continental U.S. (CONUS) and in the State of Hawaii
- ISBs will be temporary in nature and will have the transportation and Material Handling Equipment (MHE) capabilities necessary to receive, pre-position, and deploy commodities, equipment, and personnel as requested by the State of Hawaii; all ISBs will be outside of the hurricane impact area

(1) Concept of Logistics Support. Throughout all phases, transportation and logistics will be the joint responsibility of the State of Hawaii and FEMA. Emphasis will be on the re-establishment of the State's transportation system to facilitate the effective movement of resources into and throughout the Island of Oahu (and the neighbor islands) from ISB, Federal Staging Areas (FSAs), State SAs, shelter areas, and other sources. This integration will ensure unity of effort and efficient use of transportation assets to deliver required resources. Situational awareness of the hurricane's impact to the State of Hawaii's transportation infrastructure will be paramount to developing and implementing a logistical capability for delivering emergency disaster relief supplies and employment of emergency response teams. Commodities and resources located in the Hawaii Distribution Center (HI-DC) will be augmented by additional resources from CONUS post landfall. As necessary, FEMA will issue mission assignments to other Federal agencies to provide additional resources and support. For more detailed information, refer to Annex D.

(a) Logistics Management. Concurrent to the national and regional teams pushing resources, FEMA Region IX Logistics staff will deploy to the Pacific Area Office (PAO) on Oahu and establish a JFO and FSAs. Once FSAs are established and the JFO is functional, the distribution management will revert to a pull strategy. The Pull Strategy requires UCG identifying resource requirements and requesting resources before deployment. The NRCC and FEMA Region IX RRCC will jointly determine when to transition from a push to a pull approach.

(b) Pre-Positioned Resources. FEMA maintains a HI-DC located on Oahu at 99-1269, Iwaena Street, Aiea, Hawaii, 96701. Table 1 shows a "snapshot in time" of the disaster support inventory at the HI-DC. During phase 1b, an updated inventory list of disaster resources will be provided and encapsulates FEMA's prepositioned resources that would be immediately available post-landfall.

Commodity	On Hand	Neighbor Island	Total
Admin Kits	3		**3**
Blanket, Cotton	10,256	10,500	**20,756**
Camp Kit	586		**586**
Camp Pads	2,175		**2,175**
Chainsaw	170		**170**
Chair, Folding	175		**175**
Chair, Secretary	119		**119**
Cook Set	-		**-**
Cots	5,557	6,000	**11,557**
Diapers	45,792		**45,792**
Dinnerware Kit	2,020		**2,020**
Fans Standing	3		**3**
File Cabinet	20		**20**
Flashlights (ea)	797		**797**
Fuel Can 1 Gal	659		**659**
Fuel Can 5 Gal.	72		**72**
Generators < 10 KW	47	33	**80**
Generators >10KW	83		**83**
HDR (meal)	72,000		**72,000**
Hygiene Kit, toothpaste etc	4,012	6,000	**10,012**
Infant Care Kit, w/o Formula	995		**995**
Insect Netting	620		**620**
JFO Kit	3		**3**
Lantern, Electric (flashlights)	88		**88**
Lantern, Dual-Fuel	1,031		**1,031**
Material Handling Equipment (MHE) Kit	1		**1**
Microwaves	2		**2**
MRE (meal)	40,896		**40,896**
Partitions	318		**318**
Personal Toilet Kit w/ Backpack Tent	264		**264**
Personal Toilet Kit w/ Tent	1,227	144	**1,371**
Pillow, Various Sizes	-	6,000	**6,000**
PPDS (Progam and Project Delivery System) 250-person IRR Container, 20 ft. (ea)		18	**18**
PPDS 500-person IRR Container, 40 ft (ea)		3	**3**
PPDS Home Recovery Kit, 20 ft. (ea)		12	**12**
Refrigerators (ea)	4		**4**
Sand Bag	1,894		**1,894**

Screen for Digital Projector	1		**1**
Sheeting, Blue Roof, Reinforced 20x100 (rolls)	934	1,200	**2,134**
Table, Folding 4'	15		**15**
Table, Folding 5'	43		**43**
Tarp, Non-Reinfor20x100 roll	2,937		**2,937**
Tent, GP Medium	121		**121**
Tent, Unifold	8		**8**
Tents, Commercial (4-8 person)	1,802		**1,802**
Tents, Yurt	500		**500**
Wash Cloth		6,002	**6,002**
Wash Kit, Disp (Towel, Soap)	8,841		**8,841**
Water (liters)	180,000		**180,000**
Water Container, Collapsible, 5 Gal.	12,149		**12,149**

Table 1: Inventory at Distribution Center

c. Funding. Federal funding to support hurricanes will be consistent with applicable laws and authorities. This plan does not provide additional funding mechanisms. There are two main types of funding:

(1) Stafford Act.

(a) The Stafford Act provides the legal framework for program requirements, fiduciary and material support, and materiel acquisition and disbursement.

(b) Authorized Federal response, recovery, and mitigation operations will be funded under the DRF once an emergency declaration has been made; the DRF is not available for activities not authorized by the Stafford Act, for activities undertaken under other authorities or agency missions, or for non-Stafford Act incidents requiring a coordinated Federal response.

(c) DRF, appropriated to FEMA, is available for purposes of the Stafford Act; reimbursement may be provided from the DRF for activities conducted pursuant to these sections.

(d) Use of disaster funds will be triggered by an emergency or major disaster declaration from the President, however, before a major disaster or emergency declaration, the Stafford Act authorizes FEMA to pre-deploy personnel, who may be from various Federal agencies, and equipment to reduce immediate threats to life, property, public, employee, and responder health and safety, and to improve the timeliness of its response.

(e) Prior to Stafford Act declarations, the FEMA Assistant Administrator for Disaster Operations (for NRCC Operations), the OCFO, or their designees, determine the required funding levels for the Surge Funding; FEMA is authorized to obligate funds to mobilize and deploy resources as needed.

FEMA issued interim policy guidance on June 9, 2006, to clarify the circumstances for which a requesting state will be considered for a Presidential emergency declaration in advance of a hurricane making landfall. This policy provides for pre-landfall emergency declarations with federal assistance limited to Category B (Emergency Protective Measures) of the FEMA Public

Assistance Program. This includes Direct Federal Assistance, which provides for the mission assignment of federal resources to lessen the burden on state responders.

(2) Federal-to-Federal Support.

(a) Initiatives that require additional resources, reallocation of existing resources beyond agency authorization, and/or an adjustment in department or interagency policies or strategic priorities will be coordinated interagency pursuant to Homeland Security Presidential Directive (HSPD)-1 and submitted to Office of Management and Budget for consideration.

(b) Generally, the requesting agency provides funding for the incident consistent with provisions of the Economy Act, unless other statutory authorities exist; DHS coordinates assistance using the multiagency coordination structures in the NRF and in accordance with NIMS.

(c) The FEMA Disaster Finance Center and National Processing and Service Centers support the JFO Finance and Administration Section as appropriate.

5. OVERSIGHT, COORDINATING INSTRUCTIONS, AND COMMUNICATIONS.

a. Oversight. The UCG will exercise oversight over the operation.

b. Coordinating Instructions. SCD has the authority to initiate or execute this plan unilaterally, and upon concurrence and coordination with FEMA Region IX, may initiate and execute the federal supporting elements within this plan. The UCG, when established, directs the activities of the JFO. Any issues that cannot be resolved at the UCG level will be forwarded to the Region for adjudication, and issues that cannot be resolved at the Region will be elevated to FEMA Headquarters for adjudication. This also includes general policy guidance for managing resources in support of the incidents.

c. Communications. Effective emergency management and incident response activities rely on flexible communications and information systems that provide a Common Operating Picture (COP) to emergency management personnel and their affiliated organizations. Establishing and maintaining a COP and ensuring accessibility and interoperability are the principal goals of the Communications and Information Management component of NIMS and are essential for Federal response and recovery operations. The COP will be developed by FEMA and SCD in coordination with supporting Federal, State, local, NGOs, and private sector partners.

In the field, Mobile Emergency Response Support (MERS) provides the initial response communications connectivity for Federal responders and supports others as directed by Operations Section Chief. This connectivity consists of but is not limited to satellite, VHF, UHF, high frequency, and microwave line-of-sight systems interconnected by fiber optic cables to voice and data switches, local area networks, and desktop devices, such as personal computers and telephones. MERS establishes initial communications to support operations at the JFO. Additional information concerning communications systems can be found in Annex K.