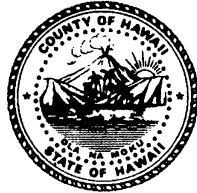


COUNTY OF HAWAI‘I



STATE OF HAWAI‘I

RESOLUTION NO. 271 19

A RESOLUTION ADOPTING THE INTERIM RECOVERY STRATEGY REGARDING THE 2018 KĪLAUEA ERUPTION.

WHEREAS, both the Mayor and the Governor proclaimed a state of emergency on May 3, 2018, and the President issued a Major Disaster Declaration on May 11, 2018, for the Kīlauea eruption; and

WHEREAS, due to the severity of this disaster, the Mayor determined a need for short-term and long-term recovery and formed an Executive Team to advise him on matters related to recovery; and

WHEREAS, an Interim Recovery Strategy has been prepared for Council review and approval; and

WHEREAS, a consultant has been procured to prepare a comprehensive recovery plan, which would supersede the Interim Recovery Strategy, to address short-term and long-term recovery needs; and

WHEREAS, a spending plan and reporting system are immediately needed to manage the various funding sources for recovery that have been secured to date, driving the need for an interim recovery strategy; and

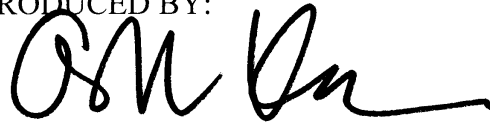
WHEREAS, a forthcoming overall recovery framework to be prepared for future disasters will provide the context for the Interim Recovery Strategy and hiring policies; now, therefore,

BE IT RESOLVED BY THE COUNCIL OF THE COUNTY OF HAWAI‘I that the Interim Recovery Strategy attached as Exhibit A is hereby adopted.

BE IT FINALLY RESOLVED that the County Clerk shall transmit a copy of this resolution to the Mayor, the Planning Director, the Director of Public Works, the Director of Finance, and the Director of Human Resources.

Dated at Kona, Hawai'i, this 18th day of September, 2019.

INTRODUCED BY:



COUNCIL MEMBER, COUNTY OF HAWAI'I



COUNCIL MEMBER, COUNTY OF HAWAI'I

COUNTY COUNCIL
County of Hawai'i
Hilo, Hawai'i

I hereby certify that the foregoing RESOLUTION was by the vote indicated to the right hereof adopted by the COUNCIL of the County of Hawai'i on September 18, 2019.

ATTEST:

ROLL CALL VOTE

	AYES	NOES	ABS	EX
CHUNG	X			
DAVID	X			
EOFF	X			
KANEALI'I-KLEINFELDER	X			
KIERKIEWICZ	X			
LEE LOY	X			
POINDEXTER	X			
RICHARDS	X			
VILLEGAS	X			
	9	0	0	0




COUNTY CLERK CHAIRPERSON & PRESIDING OFFICER

Reference: C-430/FC -50
RESOLUTION NO. 271 19

Exhibit A - Interim Recovery Strategy

Disaster: Kilauea Volcanic Eruption and Earthquakes 2018

Report Date: August 2019

I. Purpose

The purpose of this Interim Recovery Strategy is to provide focus around the County's ongoing efforts to coordinate recovery actions related to impacts of the 2018 Kilauea Eruption. The Interim Recovery Strategy has been crafted with input from public, private, nonprofit and community sectors; it will be superseded by a Comprehensive Recovery Plan anticipated by the end of 2019.

To better support community resilience, this strategy focuses on establishing overarching goals and objectives, identifying partners, and building capacity so all sectors are working together and contributing toward shared goals. Key to stakeholder action is a collective impact framework that brings all sectors together in a structured way to achieve goals.

This strategy is the first step in a forthcoming policy platform that will be the model for standing up the County's disaster response and recovery efforts related to future disasters, and is being crafted in a way to better align with federal support systems and processes. A consistent model will help to eliminate barriers and improve the County's ability to leverage federal dollars critical to building communities that are resilient, safer, and stronger.

II. Interim Recovery Objectives and Strategies

A. Recovery Support Function Framework

The Interim Recovery Strategy is organized by Recovery Support Functions (RSF), as defined by the Federal Emergency Management Agency's (FEMA) National Disaster Recovery Framework in order to improve access to resources, and better align and coordinate County, State, and Federal agencies, nongovernmental partners, and community stakeholders.

By integrating RSF's into current and future post-disaster planning, the County will be able to facilitate a more flexible, context-based, and collaborative recovery process that is scalable and based on regional needs. The current RSF's include: Community Planning and Capacity Building, Economic Recovery, Health and Social Services, Housing, Infrastructure Systems, and Natural and Cultural Resources. A menu of goals, objectives and other considerations are organized within these RSF's.

B. Goals and Objectives

Resilience - the ability and capacity to survive, adapt, grow, and thrive no matter what kind of shocks or stresses hit - underlies the fabric of recovery planning, and factors into decisions and efforts to rebuild a strong, safe, and thriving Puna.

Recovery is complex; it is a multi-faceted, years-long, community-wide commitment. The goals and objectives in Attachment A are being elevated to showcase the breadth of recovery needs - immediate, near-term and long range. Each will be reviewed during the development of the Comprehensive Recovery Plan, modified as appropriated, and prioritized based on a combination of regional plans and strategies, feasibility, and community sentiments.

While a Comprehensive Recovery Plan is being developed to navigate long-term decisions and efforts, the goals and objectives in Attachment A are being lifted up

Planning for a resilient future for the region will require a holistic look at risk, vulnerabilities, challenges, and capacities. Recovery will provide opportunities to understand risks, address vulnerabilities, tackle challenges with creativity and innovation, and build capacity in a forward-facing, future-minded manner so resources and investments are maximized. As a result, residents are uplifted, and the community's ability to bounce forward in the face of future emergencies and disasters is bolstered.

III. Interim Work Plan

A. Immediate Priorities

While work proceeds on the various interim strategies and objectives, the Recovery Team - in partnership with County departments and agencies engaged in recovery activities - shall prioritize the following items until the Comprehensive Recovery Plan is adopted. A progress report for each of the immediate priorities is due to the Committee on Government Relations & Economic Development on a monthly basis, with the first one expected at the October 1, 2019 committee meetings. All subsequent reports should communicate progress on the following fronts, and be submitted until the Comprehensive Recovery Plan is adopted.

- **Reconstruct Infrastructure.** Expedite temporary access to enable kipuka residents to get home or go back to work on their property. Ensure timely and accurate submittal of all information required by Federal agencies responsible for issuing disaster recovery grant funding related to improvements and/or restoration of infrastructure, and public assets/recreational facilities.
 - o The first update shall include a list of all County Departments seeking federal resources including date application submitted, summary of projects, cost estimates, and status of request.
- **Develop Capacity.** Assemble a team wholly dedicated to recovery efforts. Define how cross-governmental and inter-departmental collaboration will work. Identify and institute project management to ensure accountability and that the project is on track. Ensure proper IT systems are in place to foster efficient and collaborative workflows.
 - o The first update shall include the following: a list of all individuals and organizations working on recovery activities, their role, scope of work, and length of contract (if applicable) - Administration designees, contracted individuals, and hired consultants; a list of positions yet to be filled and status of recruitment efforts; a detailed outline of work process between County departments and agencies as well as between all levels of government; a detailed overview of systems tools selected to aid with recovery projects task management; and a detailed report confirming all necessary IT infrastructure is in place to support recovery efforts.
- **Define Financial Tracking and Reporting.** Identify budget monitoring systems and define financial tracking procedures to ensure transparency and accountability.
 - o The first update shall include a detailed overview of systems selected to aid with recovery budget monitoring; a summary of how resources and expenses are reported and tracked including the process and timeframe for calculating resources/expenditures, and how recovery financial information can be accessed or provided to all interested stakeholders; and a copy of all monthly reports submitted to the State Director of Budget and Finance relating to funds transferred by the Governor.

- **Articulate the Process for Community Engagement and Decision-Making.** Develop a plan for ongoing community engagement. Spell out the process for how decisions are made now and what is the process going forward to be more inclusive prior to long-term decisions being made.
 - The first update shall include the following: a robust stakeholder meeting list; timing of community touch points, engagement format and meeting size; a precise narrative around the current decision making process; a thorough definition of the role each level of government plays, where the Administration and County Council factor in, how and when the community is able to participate, and how and when natural and cultural resources are being considered and elevated; and a supplemental visual graphic, such as a flow chart, that illustrates the entire decision making process.
- **Implement Case Management.** Establish a case management program to identify unmet needs and connect households to resources to resolve issues. Harness data to understand gaps and position long-term decision making.
 - The first update shall include a list of individuals contracted to manage the \$1.7 million FEMA Case Management grant; the vendor awarded the case management contract; details of contractor's scope of work; and status of merging the various case management databases into one system.
- **Manage Development of the Comprehensive Recovery Plan.** Ensure timely completion of a Comprehensive Recovery Plan that guides long-term strategy, policy, and investment, to create a more resilient, safe, secure, and stable Puna region.
 - The first update shall include a list of all components that make up the Comprehensive Recovery Plan; individuals and organizations working on the long-range plan; an overview of scope of work and anticipated end product; summary of work completed to date; and planned community touch points to inform plan development.
- **Initiate Plans for Federally-Funded Actions.** Be ready to deliver an Action Plan that meets Department of Housing and Urban Development requirements as soon as the Community Development Block Grant - Disaster Relief (CDBG-DR) federal register is issued. Begin prioritizing projects and developing proposals to be submitted to the Economic Development Administration's Disaster Recovery Grants Program.
 - The first update shall include an overview of the process and status of developing the CDBG-DR Action Plan; clear description of internal policies and processes for grants management should HUD decide to award CDBG-DR funds directly to the County; a summary of EDA's 2019 Disaster Supplemental Appropriation funding opportunity; status of defining and prioritizing recovery activities that are consistent with Department of Commerce Disaster Recovery Investment Priorities and align with the County's Comprehensive Economic Development Strategy (CEDS);
- **Develop a Communication Plan and Shore Up Communication Systems.** Develop a communication plan that includes strategic use of website, social media, and other appropriate means of pushing out and gathering information during natural disasters and recovery periods. Stand-up a multi-media communications system that effectively informs, engages, and listens to a range of target audiences.
 - The first update shall include a list of all County personnel and contractors involved with recovery related communication; and a detailed summary of tools utilized and activities underway to support communication and outreach.

- ***Pursue Multiple Funding Opportunities.*** While major funding is available from Federal and State partners, each comes with a unique set of rules, regulations and deadlines, and is often sector specific, making it complex to align the various sources and harmonize solutions. Public-private partnerships will be a valuable tool to leverage in the rebuilding of infrastructure systems.
 - o The first update, as well as all subsequent reports, shall include a monthly status report on the Recovery budget including project expenditures and descriptions, newly obtained funds (ie. grants, loans, private donations), along with requests to allocate funds beyond what is articulated in Attachment B (Work-in-Progress Budget). The first update shall include a list of rules, regulations, and deadlines to spend money for each of the available funding streams; as new resources are secured, a report of this nature should be provided to the Council.

B. Work-in-Progress Funding Sources

To date, the following funding sources have been committed for emergency response, near-term recovery, and long-term recovery (see Figure 1):

- **Governor’s Allocation.** The Mayor requested assistance from the Governor, who promptly responded with \$12M on June 7, 2018 to assist with emergency response, followed by \$10M on October 29, 2018 to assist with continued relief and recovery planning.
 - o Ordinance 18-86: \$12M for emergency response—target spend-down by end of FY 2018-19.
 - o Ordinance 19-2: \$10M for relief and planning—target spend-down by end of calendar year 2019.
- **State Legislature. Act 9/2019:** Appropriated a total of \$60M to assist with recovery. The anticipated spend-down is by the end of FY 2020-21.
 - o Ordinance 19-52: \$20M subsidy to provide relief, recovery, mitigation, and remediation assistance;
 - o Ordinance 19-30: \$40M loan to obtain non-state funds to provide relief, recovery, mitigation, and remediation assistance.
- **FEMA.** In addition to Individual Assistance and Public Assistance under the Stafford Act, FEMA provided the following grant assistance in response to applications by the County:
 - o Ordinance 18-87: Pre-Disaster Mitigation Grant (\$225,000) for risk assessment and mitigation alternatives study—\$75,000 match;
 - o Ordinance 19-33: Disaster Case Management (\$1.73M)—no match required;
 - o Ordinance 19-10: Public Assistance, Section 428—amount based on cost estimates that are still being developed, currently estimated at \$120M; requires 25% match. This is a relatively new FEMA program that would allow the County to consolidate the estimated cost estimates to replace public facilities taken or damaged by the eruption with the flexibility to use the funds to build replacement facilities outside the damaged area in lieu of past policies that only allowed strict replacement only in the original location.
- **Ordinance 19-8:** EDA for economic recovery plan (\$250,000)—\$250,000 match.

- Private Sources. Numerous entities have donated money to help support recovery efforts.
 - Ordinance 19-22: Contribution from private sources; amended by the Council to support immediate recovery and relief efforts:
 - Department of Public Works - \$50,000 for emergency roads recovery
 - Department of Research & Development - \$50,725 to support business recovery and development for farmers, ranchers and food producers impacted by the 2018 eruption; assist with public outreach for naming of Fissure 8; temporary interpretive signage and banners;
 - Department of Parks & Recreation - \$54,275 for stand-by water, porta-pottys, outdoor signage at Isaac Kepo`okalani Hale Beach Park; equipment for Pāhoa Aquatics Center; recreational activities for Puna keiki; support for Puna Senior Centers; support for recovery activities at Volcano Cooper Center;
 - Hawai`i Police Department - \$15,000 for safety efforts in Leilani Estates.
 - Ordinance 19-84: Contribution from private source; amended by the Council to purchase software for recovery related project and expense management related to recovery efforts.

Other funding sources being sought include:

- HUD Community Development Block Grant Disaster Relief (CDBG-DR) provides flexible grants to help with community rebuild and crucial seed money to assist with the recovery process. The grant may finance a broad range of recovery activities such as housing, infrastructure (including match to FEMA sources), economic development, public service, and mitigation programs;
- Ordinance 19-49: \$50M allocation (\$40M from FHWA, \$10M County match) to Department of Public Works for Highway 132 Road Restoration;
- FEMA Hazard Mitigation Grant Program (HMGP) helps communities implement hazard mitigation measures following a Presidential Major Disaster Declaration to reduce the risk of loss of life and property from future disasters;
- Cities for Financial Empowerment Fund could provide funds to setup a professional, one-on-one, municipally-led, free financial counseling center;
- Economic Development Administration is awarding \$587M in grants to eligible regions to address economic challenges in disaster-impacted areas.

C. Work-in-Progress Budget

A working budget is attached as Attachment B, subject to refinement, revision, and the upcoming Comprehensive Recovery Plan findings and recommendations.

D. Work-in-Progress Schedule

A working schedule for the recovery effort is attached as Attachment C, subject to refinement, revision, and the upcoming recovery plan findings and recommendations.

E. Recovery Team: Coordination & Collaboration

In June 2018, the Mayor appointed the following personnel to a Recovery Executive Team to advise him on recovery matters: Civil Defense Administrator, Department of Research & Development Director and Deputy, Planning Department Director and Deputy, Department of

Public Works Director and Deputy, Corporation Counsel and/or Deputy, Executive Assistants as assigned; as needed, Finance Director or Deputy, Department of Water Supply Chief Engineer or Deputy, Office of Housing & Community Development Administrator or Assistant, Department of Parks & Recreation Director or Deputy. The Mayor appointed the Director of the Department of Research & Development as the Acting Recovery Officer until the hiring of a Recovery Officer.

The Recovery Executive Team coordinates intergovernmentally through a designated Federal Disaster Recovery Coordinator, currently Robert Troy, and a State Disaster Recovery Coordinator, currently Thomas Travis.

The Recovery Executive Team coordinates with the community through Hawai`i County Council Members, Recovery Outreach Coordinator, and the Puna Community Development Plan Action Committee. The Intergovernmental Recovery Management Organization for this disaster is shown in Attachment D.

The Recovery Officer and members of the Recovery Executive Team will meet bi-weekly with members of the County Council to exchange information, highlight progress on goals, objectives and projects, and identify concerns meriting attention.

F. Staffing

Recovery requires dedicated, yet evolving teams, to coordinate governmental and community stakeholders, and support implementation of interim and long-term strategies. An intergovernmental Recovery Management organizational chart with responsibilities of Federal, State, and County departments and agencies, with links to community-driven disaster support groups has been developed and is shown in Attachment D.

Given that each natural disaster is unique in size, scope, scale, location, and impact, temporary staffing teams to support ongoing recovery efforts will be built accordingly. To support Kīlauea Eruption recovery efforts, it is anticipated that temporary personnel will be hired as needed and over the course of administering funded recovery projects and programs.

Recovery is transient. Each disaster will have different needs, so it is not realistic to pre-determine *temporary* civil service positions with fixed job descriptions. Multi-year employment contract hiring, authorized under HRS §127A-12(c)(7) and §76-77(10), allows for expedient hiring, which is necessary for the urgency of recovery needs. It also allows for greater flexibility in scoping responsibilities and adjusting the size and make-up of the team as recovery moves through various phases, requiring changing skill sets.

G. Transitional Reconstruction Policies

The Recovery Executive Team drafted interim land use and building permit policies to control access in the Lower East Rift Zone during the period when the Hawaiian Volcano Observatory advisory level was at Advisory, reflecting a time of higher potential hazards and risk uncertainty. With HVO's advisory level downgraded to Normal, those policies are no longer in effect.

Normal procedures for grading, building, and planning permits currently apply in the absence of an emergency proclamation or moratorium ordinance. All damaged public infrastructure has been documented; requests for funds to rebuild damaged infrastructure has been submitted to FEMA. FEMA is doing its due diligence to determine how much funds will be allocated to support infrastructure rebuild. FEMA will also provide the County with parameters on how the funds can be spent and where, based on risk and vulnerability assessments. Work is being done to review County ordinances and identify opportunities to update to accelerate processes during times of emergency and natural disaster.

ATTACHMENT A: WORK-IN-PROGRESS GOALS & OBJECTIVES

1. Community Planning & Capacity Building Recovery Support Function
Goal: Develop and implement a Comprehensive Recovery Plan that brings the whole community together to plan and create a safer, stronger, more resilient Puna region.

Objectives include:

- Shore Up Outreach & Engagement. Provide various opportunities and platforms for residents to obtain information and provide feedback on projects and strategies for regional recovery on an ongoing basis.
- Design Based on Needs and Experience. Incorporate lived experiences and actual needs of the end-user into planning, as well as lessons learned from previous projects so decisions are grounded, mindful of the future, and positively impact the community-at-large.
- Cultivate and Increase Community Capacity. Provide ongoing technical support, funding opportunities through a Puna Strong Grants Program, and accessible information systems to support individual and community-driven self-help and resiliency initiatives. Create a community culture that fosters flexibility so all can prosper in the face of challenges, emergencies, and natural disasters.
- Increase Community Readiness. Continue to strengthen Civil Defense's partnership with Community Emergency Response Teams (CERT) to monitor, educate, and maintain readiness to respond to ongoing proximate hazards associated with potential recurring eruptions and future natural disasters. Ensure communication protocols and notification systems are in place to support consistent, ongoing updates of evolving emergency situations.

2. Economic Recovery Support Function

Goal: Build a diverse and thriving economy that provides a range of opportunities, fosters innovation, encourages formation of new industries, strengthens existing businesses, and supports access to educational opportunities.

Objectives include:

- Establish Economic Resilience. Build a responsive capacity that can withstand, adapt and bounce forward from shocks and disruptions to an economic base, positioning Puna as a model community for resilience, sustainability, and innovation.
- Promote a Positive Re-Vision for the Region. Hone in on economic weak spots, map out regional assets, and identify opportunities such as eco-villages and Vacation Destination Zones to encourage new economies and investment towards resilience-building goals. Incorporate natural and cultural resources in all asset mapping and visioning/planning efforts.
- Nurture a Diverse Economic Base. Find ways to revitalize existing and support emerging industries and economic activity across various trades including food and agriculture, culture and arts, energy, science and technology, tourism. Consider and lift up a suite of creative financing resources and opportunities, and capacity building modules to encourage development of these trades.
- Foster Community-Driven Tourism Efforts. Recognizing that the global community is interested in seeing the aftermath of the 2018 eruption and earthquake activities, encourage and empower community to work with Hawai'i Island Visitors Bureau to create experiences that are culturally appropriate, respectful of impacted

neighborhoods, and provides benefits to affected towns and communities. Incorporate The Pono Pledge in all activities and find ways to elevate these important pillars.

- Accelerate Development of a Boat Ramp in Puna. Work in partnership with the State Department of Land & Natural Resources Division of Boating and Ocean Recreation to accelerate the process to locate and construct a boat ramp in Puna to support subsistence gathering rights and area lawai`a (fishermen/fisherwomen), a group that drives critically important economy of the region. Keep Hawai`i's Congressional delegation apprised of the evolving situation so they can advocate for funding and assist with process acceleration as necessary.
- Pursue Workforce Development. Support eruption displaced and impacted businesses and workers. Build a resilient workforce through ongoing training and workshops that increase capacity and the ability to adapt to or shift between industries. Embark on a long-term planning horizon, in partnership with educational institutions and business organizations, to encourage innovation and entrepreneurship.
- Encourage Small Business. Establish a business case management program to empower businesses in Pāhoia Town, Volcano Town and interested entrepreneurs in the Puna region with resources and tools to provide operational continuity, develop and enhance brand identity, and increase ability to market globally.
- Assist Kua O Ka Lā New Century Public Charter School with Interim Needs and Permanent Relocation. Hundreds of students were displaced as a result of the school being taken during the 2018 lava flow. Utilize existing funds to support immediate temporary facility upgrade needs. Convene stakeholder meetings to keep immediate and long-term efforts progressing forward. State, County, and community stakeholders must unite and work with a sense of urgency to assist Kua O Ka Lā NCPCS in finding and securing a permanent location.
- Support and Increase Educational Opportunities. Collaborate with the Department of Education to improve educational outcomes and find ways to bridge learning and trades work with the University of Hawai`i-Hilo and Hawai`i Community College. Lean on businesses and organizations to provide students with ongoing mentorship opportunities and internship programs for hands-on learning.
- Increase Access to Resources to Drive Positive Impact. Explore the Impact Hub model and consider where in Puna to invest in a network of collaborative, community spaces. Determine feasibility and prioritize development of: certified kitchens to enhance the region's culinary scene, process goods and develop value-added products; multi-use space for presentations and movie screenings; computer and technology lab; and recording studio, to build an innovative, entrepreneurial eco-system.

3. Health and Social Services Recovery Support Function

Goal: Establish and maintain a robust cross-sector network to provide a coordinated suite of health, medical and social services that support individual and community post-disaster recovery and resilience.

Objectives include:

- Establish a Case Management System. Set-up a case management program to assist each impacted household to resolve unmet needs including but not limited to housing, employment, health care, behavioral health, substance abuse, transportation, child care, and animal care.
- Boost Community and Youth Programs. Sponsor and encourage community-based youth and social programs that promote empowerment, facilitate meaningful conversations,

cultivate a prepared and collaborative lifestyle, and generate momentum around building resilient people and communities.

- Uphold Public Health. Work in collaboration with stakeholders from the State and health care sector to enhance public health programs and improve overall health outcomes including but not limited to establishing permanent air quality stations and providing mental health care support and services for those impacted by the disaster.

4. Housing Recovery Support Function

Goals: Increase and provide safe and healthy housing choices to meet the diverse needs of those impacted and displaced by volcanic activity.

Objectives include:

- Explore Housing Opportunities. Develop a suite of housing choices that are consistent with existing plans such as the General Plan and the Puna Community Development Plan and considers studies currently underway such as the Risk and Vulnerability Assessments, and Multi-Hazard Risk Mitigation Study. Evolve thoughtful policies that consider, adapt to and mitigate risks, hazards, and climate change.
- Empower to Resolve Situations. As part of the housing choices suite, offer up tools to self-resolve or access to resources that support a range of options including but not limited to transitional/temporary rental housing, permanent relocation, transfer development rights, retrofitting surviving homes, and rebuilding. Housing choices are subject to change upon completion of data-driven studies and risk analysis of the area.
- Reinforce Case Management. Leverage the case management program to reach disaster impacted and displaced households, gauge individual circumstances, present potential housing choices, and understand individual decisions to help guide long-term planning, design, and construction.
- Create Innovative Housing Options. Design housing options with area risks, potential hazards, and climate change in mind to ensure housing is safe, secure, functional, and resilient, with ability to move or withstand future disasters. The goal should be to create a model communities of eco-living and sustainability that merges concepts of ahupua`a with pioneering research and proven technologies.

5. Infrastructure Systems Recovery Support Function

Goal: Build and restore natural and strategic infrastructure that provides important services, protects communities, promotes prosperity, supports future growth patterns, and encourages regional infrastructure resiliency.

Objectives include:

- Conduct Damage Assessments. Inspect damage to individual and public infrastructure, and provide best estimates for restoration as well as alternative investment scenarios as required by Federal funding programs.
- Promote Resilient Infrastructure. Build or retrofit infrastructure systems to have the ability to adapt to or withstand a range of extreme weather patterns and hazards, and considers the impact of future risks, hazards, and climate change.
- Roads Recovery and Development. Prioritize getting lava-locked residents with homes and farms back to their properties. Accelerate review of lava inundated roads such as Highway 137, Pohoiki Road and Lighthouse Road; develop a road restoration plan including timeline for action based on various studies underway, community needs, governmental permitting and review processes, and feasibility.

- **Be Inclusive in Planning.** Include private and community sector infrastructure owners and operators and related service providers in identifying, prioritizing and developing critical infrastructure systems and assets. Develop public-private partnerships where it makes sense.
- **Expand and Advance Transportation Initiatives.** Improve regional connectivity within Puna that enhances overall transportation systems, increases efficiency of mass transit systems, is multi-modal (i.e. accommodates buses, bicycles, pedestrians) and provides context-sensitive solutions including but not limited to roundabouts and regionally appropriate/updated street standards.
- **Plan for Wastewater Systems.** Once area risk and vulnerability assessments are complete, accelerate feasibility studies of public sewerage systems to support long-term recovery and revitalization of Puna. Take active steps to secure the \$600,000 appropriated by the 2019 Hawai`i State Legislature for planning and design of a wastewater treatment plant in Pāhoa; leverage available Recovery resources to provide the County's share of matching funds (20 percent of state funds).
- **Ensure Reliable Energy.** Work with local utility and industry stakeholders to incorporate renewable, resilient and energy efficient solutions such as microgrids and battery storage into immediate and long-term community planning and design.
- **Ensure Reliable Communications.** Improve telecommunication and broadband Internet systems infrastructure and increase access to support telework and educational opportunities. Improve the County's ability to communicate immediately and in an ongoing fashion prior to, during and after emergencies and natural disasters.
- **Invest in Water Infrastructure.** Investigate the feasibility of restoring lava inundated water infrastructure. Determine where to rebuild appropriate infrastructure that supports long-term recovery of the region. Prioritize service to regional centers as identified in the Puna CDP, and pursue public-private partnerships where possible.
- **Consider Drainage Issues.** Ensure that with each approved recovery project, Puna's regional flood problems are improved upon.
- **Craft Sound Access Policies.** During the pause of volcanic activity, access to the impacted area was managed to minimize exposure to ongoing hazardous conditions. Review lessons learned and develop policies that will assist in swift and resilient recovery by clearly laying out how impacted residents can return, streamlining permitting, and presenting a host of funding solutions from grants to loans.
- **Create an Infrastructure Resiliency Evaluation Framework.** Establish a metrics system to help community and decision makers prioritize needs and investments in infrastructure systems. Criteria for evaluating resiliency of infrastructure should include, but not be limited to, impact on quality of life, area risks and hazards, climate change, the ability to provide multiple benefits, complementing and leveraging environment and existing programs or infrastructure, and life-cycle cost benefit assessment.

6. Natural and Cultural Resources Recovery Support Function

Goal: Preserve, protect, rehabilitate and restore the region's natural and cultural resources and historic properties impacted by eruption activity.

Objectives include:

- **Conduct Damage Assessments.** Inspect damage to natural and cultural resources and historic assets, and provide best estimates for protection, rehabilitation, and restoration as well as alternative investment scenarios as required by Federal funding programs.

- **Increase and Enhance Recreational Opportunities.** Provide opportunities for safe ocean access, community gatherings, and cultural sharing, and support efforts to create resilient multi-use recreational facilities that encourage community well-being.
- **Leverage Sustainable, Creative Planning Elements.** Deploy a multi-pronged approach that considers and integrates impacts of area risks and vulnerabilities into planning for resource preservation, and integration of open spaces, historic and cultural resources.
- **Mobilize and Build Community Capacity.** Provide technical assistance and financial tools to help impacted communities develop a suite of natural and cultural resource recovery programming, create networks for sustained program implementation, and enhance capability and readiness for future disasters.
- **Elevate Puna Ahupua`a Awareness Project.** Ahupua`a are traditional Hawai`i land divisions that typically trend mauka to makai (from the uplands to the sea) and are foundational to Hawai`i geography, culture, and society. Consider the map of ahupua`a in the district of Puna developed by the University of Hawai`i at Hilo Geography major Kaylyn Ells-Ho`okano and Hawai`i Community College Geography instructor Drew Kapp, assisted by the Spatial Data Analysis and Visualization Labs, in all future Puna-related planning and decision making. Look for ways to develop online repositories of information, stories, and photos of the numerous features noted on this map. Incorporate appropriate physical signage to heighten awareness of the culturally and historically significant features.

ATTACHMENT B: WORK-IN-PROGRESS BUDGET

	Totals	Appropriated						Pending												
		Gov \$12M Response	FEMA & EDA Grants	Gov \$10M Relief & Planning	Donations	Leg \$20M Subsidy	Financial Empowerment Center Grant	Leg \$40M Loan	FEMA Public Assistance	Federal Highways	CDBG-DR / Other Fed									
EMERGENCY RESPONSE	\$7,500,000	\$7,500,000																		
NEAR-TERM RECOVERY	\$186,192,692																			
Community Planning & Capacity Building	\$5,912,630		\$475,000	\$4,028,630	\$9,000		\$1,400,000													
Mobilize Recovery Organization	\$1,610,630			\$1,601,630	\$9,000															
Communicate Effectively	\$150,000			\$150,000																
Secure Recovery Financial Resources																				
Develop Recovery Strategic Plan	\$2,692,000		\$475,000	\$2,217,000																
Build NGO/Community Capacity	\$1,460,000			\$60,000			\$1,400,000													
Puna Strong Grants Program	\$220,000			\$220,000																
Economic	\$1,150,000			\$400,000			\$500,000													
Interim: Economic Revitalization Strategies																				
Long-Term: Economic Recovery Report Implementation																				
Assist Puna Lawai`a with Temporary Solutions for a Puna Boat Ramp	\$500,000						\$500,000													
Assist Kua O Ka Lā NCPCCs with Immediate Relocation Needs	\$400,000			\$400,000																
Establish Business Case Management System	\$250,000						\$250,000													
Health & Social Services	\$3,392,925		\$1,700,000	\$1,572,570	\$120,355															
Provide Continuing Relief	\$3,392,925		\$1,700,000	\$1,572,570	\$120,355															
Coordinate Public Health Programs																				
Housing	\$1,100,000			\$100,000			\$1,000,000													
Interim: Housing Assistance for Affected Families																				
Provide One-stop Housing Services				\$100,000																
Expand Housing Market Choices																				
Revolving Loan Program							\$1,000,000													
Infrastructure	\$174,538,337	\$4,500,000			\$50,000		\$200,000		\$40,000,000	\$123,285,000		\$6,503,337								
Roads	\$57,553,337				\$50,000					\$51,000,000		\$6,503,337								
Parks	\$41,040,000	\$3,755,000								\$37,285,000										
Replacement Boating Access	\$35,000,000									\$35,000,000										
Water																				
Mass Transit																				
Energy																				
Telecommunications	\$600,000	\$600,000																		
Wastewater	\$200,000						\$200,000													
Drainage																				
Critical Facilities	\$145,000	\$145,000																		
Regional Infrastructure Match	\$40,000,000								\$40,000,000											
Natural & Cultural Resources	\$98,800			\$98,800																
Lower Risk Profile of Affected Area	\$98,800			\$98,800																
Preserve & Steward Natural & Cultural Resources in Puna Ahupua`a																				
LONG-TERM RECOVERY																				
Pending Recovery Strategic Plan	\$22,100,000			\$3,800,000			\$18,300,000													

