

# HAWAI'I'S VOLCANO CIRCUS RED ROAD RESILIENCE HUB

## MEET THE HVC RED ROAD RESILIENCE HUB TEAM LEADERS



HVC manages the Seaview Performance Arts Center for Educations: SPACE L-R - Morgan Langham (HVC Executive Director, Galen Alpine (HVC Project Manager) EJ Patterson, Hub Leader, Taliesin McEnaney (HVC- Program Development, Kevin Kushel, Hub Leader

#### HICCUP CIRCUS

Hawaii Island Community Circus Unity Project Empowering Puna since 1992



Through outreach programs and services, **HVC** helps to improve conditions in the broader community by engaging and connecting youth and adults in cultural, artistic, and agricultural activities.

We believe in the power of circus to impart selfconfidence, collaboration, resilience, responsibility and communication in adults and kids alike.











#### **Seaview Community School**

Hawai'i Academy of Arts and Science PCS A hybrid learning program for students in K-6 now accepting student interest forms for 2023-2024 school year

#### Join us for a unique school experience!

- inclusive class culture supporting homeschooling families
- student centered & holistic learning
- certified teacher support
- flexible pacing
- research based curriculum included with enrollment
- performance opportunities with Hawai'i's Volcano

#### Weekly elective classes

\*circus\*gardening \*fun with film \*science \*art \*music \*Hawajian studies \*writing \*STEAM



Contact us: cbarcia@haaspcs.net sbradley@haaspcs.net or call 808-437-7604



Learn more: https://tinyurl.com/Seaviewschool

Apply online by 2/28/23 for priority

<u>haaspcs.org</u>
\*Select Seaview as preference # 1





#### **OUT ON A LIMB**

A Project of Hawaii's Volcano Circus





**Food Cultivations Classes Community Gardens Gleaning Program** Locally grown food shared in community

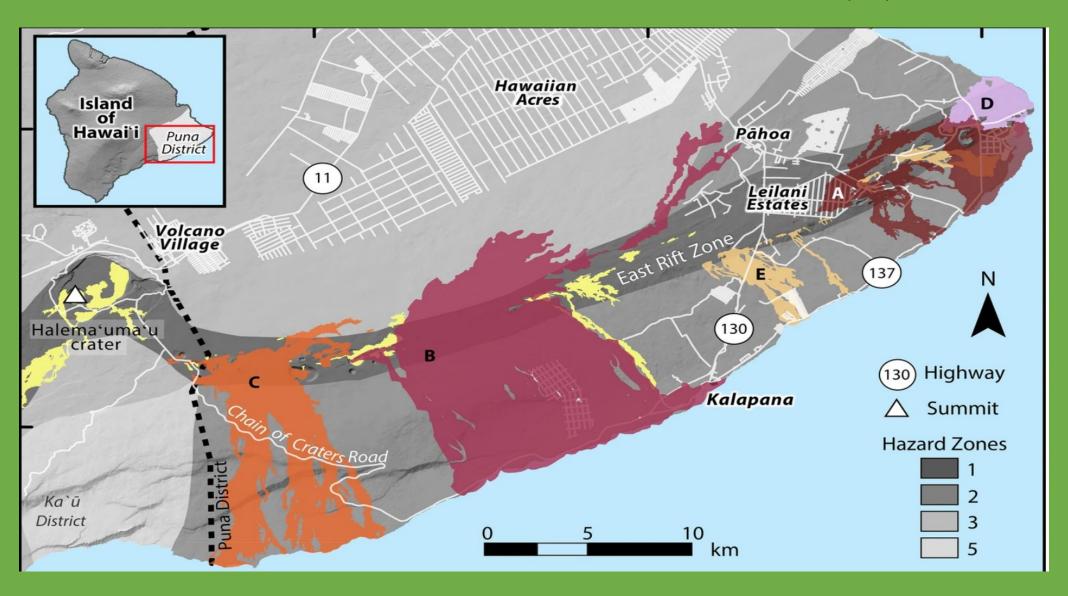








# LOWER RIFT ZONE HAZARD MAP - RED ROAD COMMUNITIES



## THE RED ROAD COMMUNITIES

- → Opihikao
- → Seaview
- → Puna Palisades
- → Kehena
- → Kikala Keokea
- → Kaimu /Kalapana



- Many communities rely on rainwater catchment and solar power. There is no municipal water for much of the area. The average annual income is () below the HI state average. Top ranking for food insecurity in Hawaii, and is considered a "food desert". The Red Road is cut off by lava flows on west and east sides Kalapana (1990s) and Kapoho (2018), with no new roads built that connect the area to Pahoa, the nearest town.

In 2013, the Red Road, County Hwy 137, was awarded Hawai'i Scenic Byway status recognizing the area's unique qualities and significant natural and cultural sites.

## THREATS AND HAZARDS FACING THE RED ROAD

#### **Tropical Storm**



#### Lava Inundation



Hurricane

Tsunami

ShorelineThreats

#### THREAT/IMPACT: LAVA FLOW

PHASE	IMPACT	LIFELINE
Pre-Impact	Community Planning: Evacuation & stay-in-place plans, go-bags, emergency kits, shut-off procedures, pet &/or non-companion animal procedures/supplies; Identification of Special Needs Residents; CERT house alerts; Packing & Transportation Assistance; Evacuation traffic management Security for Evacuated Residences	Communication Health/Medical/Social Services Energy Transportation Hazardous Materials
Impact: Daytime Wind/Rain	Loss of communication; Loss of power; Down wires; Structural damage or failure; Storm debris	Communication Only as long as can safely be provided: Energy; Assessment; Food, Water, Ice; Transportation First-Aid/Medical
Impact: Nighttime Wind/Rain	Loss of communication; Loss of power  Made more hazardous because unseen:  Down wires; Structural damage or failure; Storm debris	Communication  Only as long as can safely be provided: Energy;  Assessment; Food, Water, Ice; Transportation  First-Aid/Medical
Road Access	Blocking of necessary evacuation areas Prevention of fire-fighting and medical assistance	Communication  Only as long as can safely be provided: Energy;  Assessment; Food, Water, Ice; Transportation  First-Aid/Medical

#### THREAT/IMPACT: LAVA FLOW, CONT.

PHASE	IMPACT	LIFELINE
Social and Physical Vulnerabilities	Need for: Immediate alert and assistance with packing and transportation for evacuation Coordination to find desirable alternate housing/assistance Stress, anxiety, depression, loss of way of life and loss of community	Communication Health/Medical/Social Services Wellness support Transportation
Recovery	Loss of job, worktime, schooling Limited funds/ability to repair damaged homes Continued needs: To support alternative housing and needs for special and general affected population Security for damaged and evacuated residences Assistance with insurance claims Rescue and care of lost or abandoned animals	Communication Health/Medical/Social Services Energy Transportation Safety/Security

#### THREAT/IMPACT: TROPICAL STORM:

Note: The HVC facility does not meet hurricane criteria.

Concentration will be on preparing residents for evacuation or functioning independently during the storm's impact

PHASE	IMPACT	LIFELINE
Pre-Impact	Community Planning: Evacuation & stay-in-place plans, go-bags, emergency kits, shut-off procedures, pet &/or non-companion animal procedures/supplies; Identification of Special Needs Residents; CERT house alerts; Packing & Transportation Assistance; Evacuation traffic management Security for Evacuated Residences	Communication Health/Medical/Social Services Energy Transportation Hazardous Materials
Impact: Daytime Wind/Rain	Loss of communication Loss of power Down wires Structural damage or failure Storm debris	Communication Only as long as can safely be provided: Energy; Assessment; Food, Water, Ice; Transportation; First-Aid/Medical
Impact: Nighttime Wind/Rain	Loss of communication Loss of power Made more hazardous because unseen: Down wires; Structural damage or failure Storm debris	Communication  Only as long as can safely be provided:  Energy; Assessment; Food, Water, Ice; Transportation;  First-Aid/Medical
Prolonged Storm Heavy Rainfall	Loss of communication Loss of power Down wires Structural damage or failure Water infiltration for stay-in-place Dwindling or damaged supplies Storm debris	As soon as it is safe to do so, the facility begins offering services: Communication; Wellness check Assessment including hazardous materials/down wire reports; Food, water, ice & other supplies; Limited shelter Battery charging; First Aid/Medical; Road, house access clearance of storm debris Wellness activities; Children's activities; Transportation; Safety/Security

#### THREAT/IMPACT: TROPICAL STORM CONT.

PHASE	IMPACT	LIFELINE
Secondary Impact: Road Access Affected	Need for an adequate supply of food, water, ice and other essentials for remaining residents Blocking off of hazardous situations (ex. Down wire) until electric/gas companies can reach areas and road crews can repair roads Security for damaged or evacuated residences Rescue and care of lost animals	Communication; Wellness check; Assessment including hazardous materials/down wire reports; Food, water, ice & other supplies; Limited shelter; Battery charging; First Aid/Medical; Road, house access clearance of storm debris; Wellness activities; Children's activities; Transportation; Safety/Security
Social/Physical Vulnerabilities	Large aged population, many living alone, many below poverty line Many in temporary or unpermitted homes or homes in disrepair Unknown: Number of residents needing continuous medical care or continually functioning medical equipment; Number of residents without transportation; Number of residents needing assistance in packing/evacuating; Number of residents with language, physical or mental needs	Communication Establishing contact/trust through social service team Social services Volunteer assistance program Transportation Medical Evacuation follow-up
Recovery	Added security as people reenter area  Home inspections before residents reenter homes	Communications Food, water, ice Battery charging First-aid/medical

#### THREAT/IMPACT: TSUNAMI AND OTHER SHORELINE THREATS

PHASE	IMPACT	LIFELINE
Pre-Impact	Need for: Survey of tsunami zone and residences Survey of vulnerable sections of Hwy 137 Monitoring of emergency phones	Safety/Security Assessment Communication
Impact -Daytime	Possible damage/destruction of shoreline residences within tsunami zone; Possible damage to Hwy 137 Need for: Alerts to at-risk residents; Evacuation of special needs population; Hub "waiting zone" during evacuation period; Communication; Assistance at SeaView Lawn for Coast Guard & emergency helicopters	Safety/Security Assessment Communication Food, water Community-centered activities at hub
Impact – Nighttime	Unseen hazards Possible damage/destruction of shoreline residences within tsunami zone; Possible damage to Hwy 137 Need for: Alerts to at-risk residents; Hub "waiting zone" during evacuation period; Communication; Barriers/warning lights around road damage	Safety/Security Assessment Communication Food, water Community-centered activities at hub
Road Access	Possible damage to Hwy 137 – the community-connecting road; Limits of access from outside support/supplies Need for: Hub "waiting zone" during evacuation period; Communication; Barriers/warning lights around road damage	Safety/Security; Assessment; Communication; Food, water Community-centered activities at hub
Recovery	Disruption of outside services/supplies Need for: Food water, battery charging for residents engaged in repairs Security for evacuated residences	Food, water Community-centered activities at hub

## HOW DO WE KNOW? ANECDOTAL INFORMATION

- Kehena Beach Drop 1975
- Kalapana Lava Flow 1990
- Tsunami Evacuations 2010 & 2014
- Iselle 2014
- Lava Flow 2018
- Big Swell 2022
- Wind Event 2022

## RECENT DISASTERS



Eruption Event - 2018



Hurricane Iselle - 2014

## CAPABILITIES AND ASSETS OF THE RED ROAD RESILIENCE HUB:

NOTE: HUB OFFERINGS ARE INDICATED AS AVAILABLE, TO BE DEVELOPED BY HUB OR PROPOSED BASED ON PLANNING/FUNDING DOES NOT CONTAIN PROVISIONS FOR MASS CARE OR FIRE SUPPRESSION

Capabilities Needed	Significance	Hub Offerings
	FACILITY	
Facility for community meeting,	Needed for all communities acting together	SPACE facility
planning, training		
Facility for distribution of food,	Needed for prolonged threats, when road access	SPACE facility
water, ice and emergency supplies	is disrupted, power lost, water sources	Needed: independent water & energy sources,
water, ice and emergency supplies	compromised, and during recovery period	ice-making, freezer, secure storage space and
		emergency supplies
Facility for shelter	Needed during prolonged storm rains, during	SPACE facility but not during initial storm impact
	recovery as people repair damaged homes and	<ul> <li>does not meet hurricane criteria</li> </ul>
	as temporary holding during tsunami	Needed: additional restrooms, cots, blankets,
	evacuations	food, water
Facility for charging phones and	Essential during loss of power	SPACE facility
small power tools		Needed: fast charging stations
Wellness Activities	Providing support for stress, anxiety, depression	Team: Social Service, Medical

## CAPABILITIES AND ASSETS OF THE RED ROAD RESILIENCE HUB: CON'T

NOTE: HUB OFFERINGS ARE INDICATED AS AVAILABLE, TO BE DEVELOPED BY HUB OR PROPOSED BASED ON PLANNING/FUNDING

Capabilities Needed	Significance	Hub Offerings
	EQUIPMENT	
Personal and area nighttime	Assessing hazards, rescues, evacuation traffic	Needed: flashlights, headlamps, temporary
emergency lights	direction, evacuation assistance, road or	road lighting, hazardous area lighting
	hazardous area warnings.	
Emergency-only access roads	Hwy 137 vulnerable, Kamaili Rd one-lane, Hwy	Hub advocacy and future management
	130 susceptible to lava flows	County constructed
Road closure/hazardous area	Restriction of area access; blockade of	County supplied; law enforcement
blockades	hazardous areas	coordination
		Hub safety/security team
	SERVICES	
Preparation information	Evacuation/Stay-in-Place Planning & Retrofit	SPACE facility
	Information	Meetings, Workshops, web/print materials
Intra-Communities Communication	Information, Volunteer Activities	Web page, e-news, social media
Community Demographics	Analysis & Identification of Needs	Survey with software support
Maintaining needed supplies	Ordering, stocking, inventorying, distribution	SPACE facility Needed: secure storage space
	supplies and equipment	Team: Logistics
Formation and Coordination of	Teams necessary for threat response:	SPACE facility
volunteer response teams	Coordination, Communication, Assessment,	Volunteer Recruitment, management and
	Logistics, Safety/Security, Medical, Social	practice
	Services, Transportation	Specialized training

#### CAPABILITIES AND ASSETS OF THE RED ROAD RESILIENCE HUB: CON'T

NOTE: HUB OFFERINGS ARE INDICATED AS AVAILABLE, TO BE DEVELOPED BY HUB OR PROPOSED BASED ON PLANNING/FUNDING

Capabilities Needed	Significance	Hub Offerings
	SERVICES cont.	
Evacuation Planning, Alerts & Assistance for special needs population	Safe and speedy evacuation of those with medical needs and those without transportation	Teams: Social Services, Medical, Communication, Coordination, Transportation
Threat alerts	Every doorstep notification of possible need for evacuation	Team: Safety: CERT Team
Evacuation Traffic Control	Traffic management day or nighttime	Team: Safety
Hazardous site assessment	Assessment of road damage/blockage, down wires, active lava, other hazards	Teams: Assessment, Safety, Hazardous
Communication during active threat	Reliable, timely communication to and from community and between residents & hub	SPACE facility Teams: Communications
Shelter	Shelter after initial impact, during prolonged rain conditions for stay-in-place residents experiencing structural damage; wait-time shelter for tsunami evacuees	SPACE facility but not during initial storm impact – does not meet hurricane criteria Needed: additional restrooms, cots, blankets, food, water
Security for Evacuated Residences	Limiting access to areas and to specific residences	Team: Security/Safety

### CAPABILITIES AND ASSETS OF THE RED ROAD RESILIENCE HUB: CON'T

NOTE: HUB OFFERINGS ARE INDICATED AS AVAILABLE, TO BE DEVELOPED BY HUB OR PROPOSED BASED ON PLANNING/FUNDING

Capabilities Needed	Significance	Hub Offerings
	SERVICES cont.	
Assessing structures	Assessment of residents before residents re-enter	Team: Safety-CERT
Transportation into and out of community	Replenishing supplies, returning people with special needs or without transportation to homes	Teams: Transportation, Medical, Social Services
Medical during recovery	Providing first-aid, arranging further medical for injuries during recovery	Teams: Medical, Social Services, Transportation
Social Services	Arranging/coordinating shared resources, available outside support and housing, helping with compensation forms	Team: Social Service, Medical
Wellness Activities	Providing support for stress, anxiety, depression	Team: Social Service, Medical
Food, Water, Ice	Supplement damaged or dwindling supplies for stay-in-place residents and for residents returning to do repair work	Team: Logistics
Clearing of Roads and resident driveways	Re-opening access roads and then assistance in clearing driveways for stay-in-place residents then returning residents	Team: Access

# FACILITY AND EQUIPMENT NEEDS

### CAPABILITY TARGETS BY QUARTERS - FUNDING GOALS.

HVC will seek funding to improve facility resilience and function in the event of a disaster, including but not limited to:

Quarter 1	<ul><li>water filtration system</li><li>emergency communication devices</li></ul>
Quarter 2	<ul> <li>battery charging system for cell phones and power tools</li> <li>ice making machine, freezer, and refrigerator.</li> </ul>
Quarter 3	emergency supply storage and shelving
Quarter 4	<ul> <li>independent power; solar system, batteries and water supplies</li> <li>improved restrooms</li> </ul>

## SERVICES IN DEVELOPMENT:

### CAPABILITY TARGETS BY QUARTERS - COMMUNITY ORGANIZATION AND DATA COLLECTION

Quarter 1	<ul> <li>Prepare and test a general survey and a request-for-volunteers survey</li> <li>Post both surveys online</li> <li>Hold an introductory all-community meeting and distribute surveys (March 25 2023)</li> </ul>
Quarter 2	<ul> <li>Organize response teams and response teams will generate responsibility lists</li> <li>Research and compile a list of needed emergency equipment and supplies for storage at HVC facility</li> </ul>
Quarter 3	<ul> <li>Implement an all-communities communication network (web page)</li> <li>Tabulate survey results and distribute through the all-communities communication network</li> </ul>
Quarter 4	<ul> <li>Compile self-reporting lists of evacuation assisted-medical requests and evacuation assisted -non-medical requests</li> <li>Social services teams contact evacuation assistance request residents to aid in evacuation preparation and understand specific needs</li> </ul>

# CAPABILITY TARGETS IN THE EVENT OF A DISASTER - POST Q4 SOCIAL SERVICES TEAMS, CERT TEAMS AND SECURITY TEAMS

By the end of Quarter 4, HVC Social Services Teams will be working toward the capacity to:

- Contact residents with medical evacuation assisted requests
- Contact residents with non-medical evacuation assisted requests.
- Begin evacuation of residents requesting evacuation assistance.
- Conduct a general door-by-door notice and compile lists of those indicating a stay-in-place decision
- Manage traffic on access roads
- Assist in evacuating affected residents to the hub
- By the end of Quarter 4, during the extent of a tsunami evacuation, HVC will have the capacity to provide limited water, food and communication assistance.

## RESOURCES NEEDED - CAPABILITY TARGETS BY QUARTERS

#### Driven by Quantitative Impacts (5)

- By the end of Quarter 4, on receiving notice of a shoreline threat (tsunami, big swell, rogue wave event) safety/security team will have the capacity to monitor vulnerable road sections and assist in clearance of SeaView Lawn for rescue helicopters.
- By the end of Quarter 4, as soon as, or, for as long as possible, the safety/security team will have the capacity to patrol evacuated residences.
- By the end of Quarter 4, as soon as, or, for as long as possible, the assessment team shall have the capacity to survey and report adverse and hazardous locations.

## RESOURCES NEEDED - CAPABILITY TARGETS BY QUARTERS

#### • Driven by Quantitative Impacts (6)

- By the end of Quarter 4, prior to, during and after a disaster, HVC will have the capacity to provide timely accurate updates of conditions through its communication system
- By the end of Quarter 4, after the most dangerous phase of the disaster has ended and it is deemed safe, a CERT team will have the capacity to provide wellness checks.
- By the end of Quarter 4, during a prolonged but not dangerous phase of the disaster (Ex. Continued rains), HVC will have the capacity to offer food, water, ice, limited shelter, battery charging, outside contact, wellness activities and first-aid to stay-in-place residents whose homes have been damaged or supplies exhausted.

## RESOURCES NEEDED - CAPABILITY TARGETS BY QUARTERS

#### • Driven by Quantitative Impacts (7)

By the end of Quarter 4, during recovery, HVC will have the capacity to offer food, water, ice, limited shelter, battery charging, outside contact, wellness activities first-aid, children's activities, social services.

# MEASURABLE OBJECTIVES: COMMUNITY COMMUNICATION AND COLLABORATION - CAPABILITY TARGETS BY QUARTERS

Quarter 1	<ul> <li>20% of residents will have attended a resilience hub meeting</li> <li>20% of residents will have submitted response to the general survey</li> </ul>
Quarter 2	75% of residents will have accessed the HVC communication system
Quarter 3	<ul> <li>200 residents will have attended at least one follow up hub meeting</li> <li>30 residents will have submitted requests for evacuation assistance in the event of a disaster.</li> </ul>
Quarter 4	<ul> <li>20 residents requesting evacuation assistance will have conferred with the social services team on evacuation plans and needs</li> <li>25 residents will have volunteered for a response team</li> <li>10 residents will have completed CERT training</li> <li>10 residents will have taken Vibrant Hawai'i offered specialized training</li> </ul>

## SUMMARY

We serve a very large rural community in the heart of a number of different natural disasters. Our project goals not only meet the basics of disaster preparedness but also build a healthy community through physical and mental well being supported by our school, arts and agriculture programs.







## RED ROAD RESILIENCE HUB RESOURCE FAIR

We just hosted out first Red Road Resilience Hub Resource Fair. This was inspired by wanting to collect data for our survey to help us better understand the needs of our community. In this three day event, with the helping hands of school keiki and community we harvested 400 lbs of food from out gardens and feed over 350 people from our Imu. We had amazing resource booths, fantastic circus and music performances, a seed and plant exchange and free circus workshops. Our outreach capacity is large and we look forward to getting to serve our community better each year.

## RED ROAD RESOURCE FAIR

17 local organizations tabled

400 lbs of food harvest from SPACE

350 people fed!





## SUPPORTERS PAGE

We are so grateful for our partners that help us make it all possible; The County of Hawaii, Hawaii Community Foundation, Vibrant Hawaii, Arts and Science Center, Men of Pa'a, Center for Getting Things Started and of course our amazing community of helping hands.

