

COUNTY OF HAWAI'I
HAWAI'I FIRE DEPARTMENT
OCEAN SAFETY DIVISION



OPERATIONAL PLAN
STANDARD OPERATING GUIDELINES
7030.01
July 1, 2015

OVERVIEW

Ocean Safety Operations is responsible for public education, prevention, and emergency responses on the beaches and near shore waters throughout identified areas guarded by our Water Safety Officers.

Our Rescue Water Craft (RWC) operations provide Ocean Safety services utilizing lifeguard stations and mobile response assets. Mobile response assets include ATV's and RWC.

The geographical area of the island of Hawai'i includes rugged cliff shoreline, sandy beaches with extremely hazardous surf and wind conditions, popular snorkeling areas, and off shore areas used for ocean recreation activities.

Ocean recreation activities include, swimming, wading, snorkeling, shoreline fishing, free diving and SCUBA diving, kite surfing, body boarding, surfing, stand up paddle boarding, kayaking, canoeing, and general beach activities.

We have experienced a significant increase in ocean recreation activity over the years. The addition of our RWC mobile response unit will increase the ability of our personnel to reduce injuries and prevent fatalities. Our RWC will allow us to perform additional preventive measures by increasing public contact opportunities and also reduce response and transport times for ocean related incidents.

PURPOSE

The purpose of this document is to establish clear direction in the utilization of our RWC for all ocean related events, in addition to the care, maintenance, and training.

SCOPE

These guidelines apply to all Hawai'i Fire Department Ocean Safety personnel who have been trained as operators in the RWC program and for all Hawai'i Fire Department (HFD) personnel who may respond to or be involved in an incident involving a RWC.

DEFINITIONS

District or Base:	An area or location where the RWC may be stationed and respond from identified as Hilo, Puna (Isaac Hale), Punalu'u, Kona (Kahalu'u), and South Kohala (Hapuna) or Spencer beach parks.
Emergency Recovery Location (ERL)	Specific shoreline areas that are identified as locations where a victim can be retrieved from a RWC.
Incident Action Plan (IAP):	A plan of action usually developed by the IC.
Incident Commander (IC):	The person or persons in command of an incident.
Incident Command Post (ICP):	A location where command of an incident is identified
RWC Operator:	Department personnel whom have completed the HFD RWC training program and all required annual training.
Personnel Protective Equipment (PPE):	Equipment or gear used for protection against a hazard or risk.
Personal Floatation Device (PFD)	An approved US Coast Guard floatation vest.
Rescue Water Craft (RWC):	A personal watercraft powered by an inboard internal combustion engine coupled with a jet driven propulsion system with a hull constructed of fiberglass having a customized rescue sled fastened at its stern and equipped with various safety features used to perform ocean related rescue operations.

POLICY

- A. The RWC program shall provide water rescue service as a component of its mission. This mission shall include but not limited to the following operations:
- Ocean search and rescue operations
 - Support to shore based incident command
 - Shoreline evacuations due to acts of nature including but not limited to tsunami warnings, high surf, shark sightings, etc.
 - Non-emergency interagency requests for logistical support operations such as evidence collection, safety platform for dive teams, observations etc.
- B. The safety of RWC operators and their support staff shall be the highest priority in mission delivery considerations.
- 1) All RWC operations should be conducted in teams of 2 or more personnel. More team members may be involved as conditions and operations allow.
 - 2) The respective HFD on duty Battalion Chief shall be promptly notified anytime that a company is dispatched for water rescue activity with a RWC.
 - 3) The Special Operations Battalion Chief shall be notified when a RWC responds to an incident outside of their base location.
- C. RWC Operations shall comply with all laws, rules and regulations established by the State of Hawai'i, the US Coast Guard, and the HFD (with the exceptions as identified in appendix A).
- D. RWC response shall only be done by HFD Ocean Safety operators trained, equipped, and certified in accordance with the HFD training requirements as an agency of the United States Lifesaving Association (USLA).
- E. RWC program members shall maintain their current certification and training as a minimum standard as requirement by the HFD and identified in the Supplemental Agreement with the Hawai'i Government Employees Association (HGEA).
- F. RWC members shall be required to attend annual training on any or all of the following: RWC physical characteristics, basic RWC operating techniques, launching and recovery protocols, hazard recognition, shore-based accident prevention, water safety practices, care and maintenance of RWC equipment, and basic RWC troubleshooting.

- G. Department members shall don all proper rescue water safety equipment (PPE) if applicable, prior to initiating rescue operations.
- H. The operator of the RWC is responsible for the safe operation of their RWC as well as for the safety of the team.
- I. The RWC may be dispatched by the Battalion Chief to various districts as a support resource for rescues, mutual aid, or special operational needs.
- J. The RWC must always be in the state of readiness at its assigned designated location for the day. The RWC shall not respond with less than two (2) personnel on board (one must be certified as an operator and the other needs to be trained and designated as the grabber).
- K. Operators assigned to a RWC shall ensure that all equipment is properly cared for and response ready.
- L. Upon launching the RWC to an emergency utilizing the vehicle and trailer, the flashing lights may be used to alert the public to clear the way for a safe, unobstructed response. For clarification, use of lights is just for the launching of the RWC at a boat ramp and not to respond to other launch locations.
- M. The RWC Operator is responsible for and must ensure that all pre and post operational checks have been satisfactorily completed.
- N. Every day the RWC operator must call “on-duty” when the RWC is available to respond to emergency incidents. Their base station for the day must be identified when this notification is made. Example: Fire Control, Ski-2 on duty, Hāpuna Beach Park.
- O. When driving to any location whether trailering the RWC or not, the driver must call by radio to dispatch “in transit” and give the location traveling to. As an example, when transporting the RWC to Hapuna, the operator shall say “fire control, ski 2 vehicle in transit to Hapuna.”

CARE AND MAINTENANCE

Always refer to the specific manufacturer recommendations and HFD guidelines for the operation, inspection, care, use, and maintenance of the RWC.

A. Inspection:

- 1) The RWC shall be inspected daily. Daily entries in the logbook shall document that pre-op and post-op inspections and cleaning were conducted.
- 2) The RWC operator shall be responsible for all documentation in the RWC run logbook. This includes but is not limited to maintenance, training, and response to all incidents.

- 3) The RWC trailer shall receive a visual inspection after each use. Air pressure in the tires and axles shall be checked daily.
- 4) If a RWC and/or trailer is damaged to the extent that it may compromise safe operations, it shall be placed out-of-service and immediate notification and arrangements made for repair.

B. Care:

- 1) All RWC must be cared for in conformance with the specific manufacturer's recommendations and departmental guidelines.
- 2) The RWC shall be washed, motor flushed, and thoroughly cleaned after each use.
- 3) Routine cleaning and/or polishing must be performed in a manner consistent with the manufacturer recommendations and departmental policies

C. Maintenance:

- 1) Due to construction and design complexity, all repairs to RWC shall be approved by the RWC Program Director (Special Operations Battalion Chief).
- 2) Some routine maintenance and servicing of the RWC may be done by personnel such as fluid replacement, fuses, spark plugs, and lubrication etc. Service and replacement components must meet manufacture recommendations or the approval from RWC Program Director.
- 3) Post-op procedures shall be completed after each use for the day. Personnel must follow the RWC post-op checklist.

OPERATIONS

The RWC are fundamentally designed as recreational watercraft and are not specifically designed as a rescue vessel. However, the combination of trained professionals and key rescue components transforms it into the industry standard lifesaving tool for aquatic emergencies. Operation of the RWC shall conform to manufacture recommendations and departmental guidelines at all times.

- A. RWC operators shall establish radio communication with a shore based fire dispatch prior to launch. Once an IC is identified, the RWC operator shall communicate with them directly. Until such time that an IC is established on land, the ski operator shall be identified as the IC. Transfer of command shall occur according to proper IC procedures as practical over the radio. They shall take all necessary measures to ensure communications are continued throughout the incident.

- 1) The primary operating radio channel shall be designated by command on the VHF fire radio channel. The radio call sign for the east Hawai'i RWC will be "Ski 1." The RWC radio communication call sign for the land based RWC backup in east Hawai'i will be "Ski 1-1." The radio call sign for the west Hawai'i RWC will be "Ski 2" and the backup land based radio identified as "Ski 2-2."
 - 2) A secondary means of radio communication may be established between RWC Operator and fire dispatch if available. This may include a backup VHF portable radio or other means of communication including but not limited to cell phones.
- B. The RWC load capacities shall not exceed manufacturer specifications.
- C. All personnel operating in or near a water hazard should have available and/or wear the following Rescue safety equipment:
- Rescue Tube
 - Approved PFD
- D. Member(s) equipped with a throw bag shall be strategically positioned on the RWC or along the shoreline. This is to support the recovery of rescue personnel and/or victims in the water during water rescue operations.
- E. Department members operating in or near a water hazard shall not wear turnout clothing, fire helmets or other attire that may pose an undue threat of drowning unless required to for operations.
- F. Night operations are inherently more dangerous to rescuers and are therefore not represented as an assured component of the department's water rescue mission.
- 1) Missions in these conditions are prohibited without the authorization of the Battalion Chief on duty.
 - 2) Compliance of all US Coast Guard and State of Hawai'i requirements shall be followed prior to any night operations.
 - 3) Adequate lighting with a backup portable light carried by rescue personnel shall be standard equipment.
 - 4) Night conditions may be hazardous (rain, fog, and surf). This presents serious concerns to the safety of rescuers so extreme caution needs to be taken.
- G. RWC Operators shall communicate and coordinate with the respective Battalion Chief, Captain, or Incident Commander during an incident and shall notify dispatch prior to launching.

- H. RWC personnel should hydrate with not less than 8 ounces of fluid prior to initiating any on-water activity. All RWC must have spare hydration fluids on board at all times.
- I. Upon arrival on-scene, RWC operators shall initiate an ongoing risk assessment as a basis in the development of an action plan. Prior to initiating any operations, all pertinent information and/or resource requirements shall be communicated to incident command for notification and/or approval. The on-scene report for sea rescue operations should include the incident location, number of victims, and the victims' condition, any hazards, weather, water conditions, and vessel condition (if applicable).
- J. Use of the RWC is primarily used for response to emergency incidents. However, the RWC may also be used for other situations including but not limited to the following:
- Assistance with searches as a safety vessel or transporter for rescue divers
 - Demonstrations during community events or safety education
 - Assistance with the Junior Lifeguard program
 - Shark patrol for possible sightings or attack
 - Other uses as requested and approved by the Fire Chief

RESPONSE

General Response Guidelines – Although specific response guidelines are identified in this manual, the RWC operator must always use their discretion when responding to an incident. Considerations taken when deciding whether to respond includes but are not limited to, weather outlook, surf or ocean conditions, availability of resources, and location of the incident. The RWC will be stationed on a daily basis at Isaac Hale Beach Park (Pohoiki) in East Hawai'i and Hāpuna Beach Park in West Hawai'i. However, on any given day depending on the surf conditions or other determining factors, the RWC may be relocated to either Richardson's or Punalu'u beach in east Hawai'i and Kahalu'u or Spencer beach in West Hawai'i. The RWC will respond from and launch only from the beach or area designated as their base for that day. At no time will the RWC respond by driving on land to launch from an area other than their base location.

DISPATCH GUIDELINES

- A. Upon receiving a 911 emergency call within the response area of the RWC base, dispatch will respond the appropriate RWC, in-district fire company, rescue company, and Battalion Chief (BC). Response guideline limits are identified for each district originating from specific launch points. However, the RWC operator will make the final decision on any response missions.

EXAMPLE 1: (RWC based out of Hāpuna Beach): Swimmer in distress outside beach sixty nine.

Dispatch: Ski-2, Company 14, Rescue Company 7, and BC-2, respond to swimmer in distress outside beach sixty nine.

RWC communication: Ski-2 copy, swimmer in distress outside beach sixty-nine. Fire Control, Ski-2 responding, two personnel on board.

Upon arrival on scene: Fire Control, Ski-2 on scene, 1 victim in distress in the open ocean, commencing with rescue. Fire Control, Ski-2 retrieved victim and heading to Hāpuna ERL south end (victim alert with difficulty breathing).

Dispatch: Medic 14 fire control, per Ski-2, respond to Hāpuna south end to meet up with Lifeguard 29 (Hāpuna) and patient coming in with Ski-2. Patient awake and alert with difficulty breathing.

Dispatch to communicate with Lifeguard 29 via radio or cell phone to ensure proper notification.

Fire Control, Lifeguard 29, patient retrieved from Ski-2 and extricated to Medic 14.

Ski-2 back in quarters.

EXAMPLE 2: (RWC based out of Isaac Hale beach): Patron runs up to tower at Isaac Hale calling for help for a surfer in distress outside Pohoiki.

Ski-1 operator: Fire Control, Ski-1, we have a still alarm, surfer in distress at Pohoiki, Ski-1 responding with 2 personnel on board.

Dispatch: Ski-1 responding. Company 10, Rescue Company 2, Chopper 1, BC-1, respond with Ski-1 to surfer in distress outside Pohoiki.

RWC communication: Ski-1 on scene, surfer in distress in the impact zone, enacting rescue. Fire Control, Ski-1, victim on-board and transporting to Pohoiki Boat ramp ERL. Dispatch to notify Lifeguard 7 to assist with victim at the Pohoiki Boat ramp ERL.

Once victim on shore: Fire Control, Ski-1, victim on shore, no medical assistance needed.
All other units may stand down.

Ski-1 back in quarters.

COMMUNICATION

RADIO:

FREQUENCIES:

1. Isaac Hale: F3, PL1 or F1, PL1
2. Richardson: F2, PL1 or F1, PL1
3. Punalu'u: F2, PL6 or F1, PL6
4. Kahalu'u: F2, PL1 or F1, PL1
5. Hāpuna: F3, PL2 or F1, PL2

Note: When utilizing frequency 1 (F1), you will be able to receive all alarms, and when transmitting, your communication will override other radio traffic. This should be used in cases where the RWC operator may not be able to communicate using their in-district frequency while on an incident.

CELL PHONE:

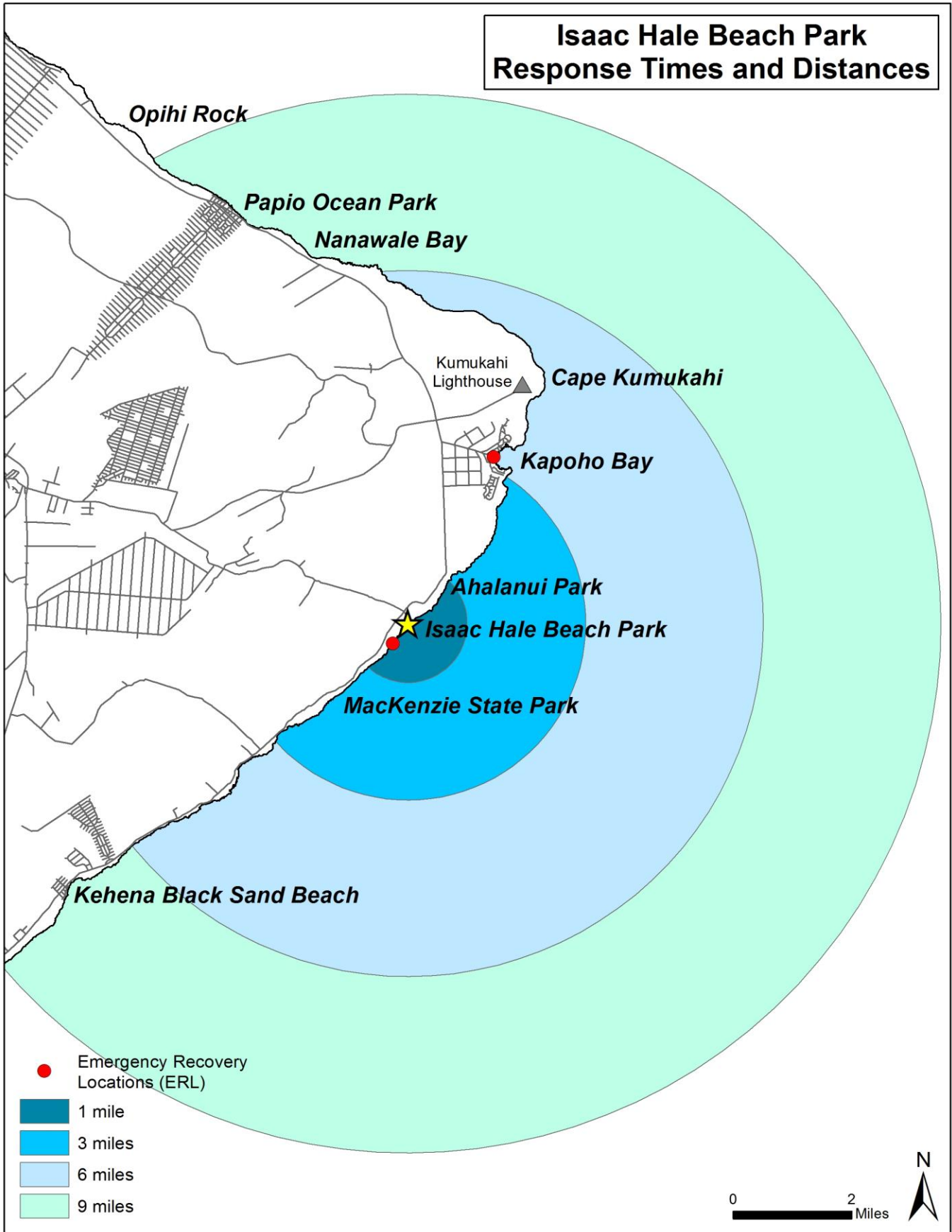
Cell phones shall be utilized to communicate with fire dispatch and/or IC in the event that there is no radio coverage.

OPERATIONAL BASE LOCATIONS

ISAAC HALE Beach Park:

- Launch point: Pohoiki Boat ramp
- Retrieval point: Pohoiki Boat ramp
- Identified ERL
 - Pohoiki Boat ramp
 - Kapoho Bay – Turn in to Kapoho Kai road and go all the way in to the “T.” Turn left at the “T” and fronting the 3rd house on the right. Retrieval from this area will be at the discretion of the RWC operator based on ocean and surf conditions.
- Response guidelines limits: North to Cape Kumukahi (lighthouse) and South to Kahena Beach – up to one (1) mile offshore

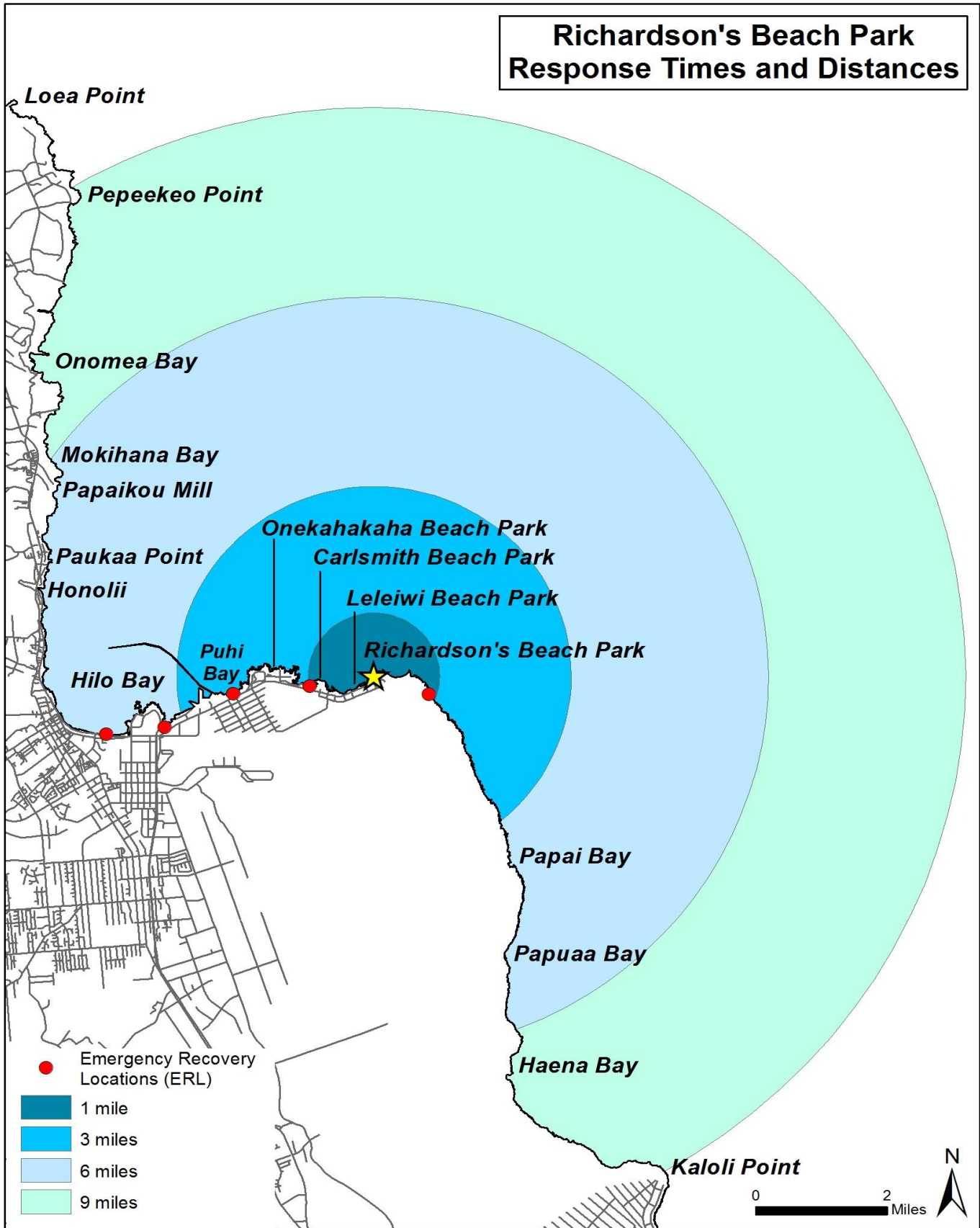
Isaac Hale Beach Park Response Times and Distances



RICHARDSON'S Beach Park:

- Launch Point: From the beach near the lifeguard tower
- Retrieval Point On the beach near the lifeguard tower
 - Alternative retrieval point is the Hilo boat ramp (in the event that the shoreline is inaccessible)
- Identified ERL
 - Richardson's Beach area
 - King's Landing – Retrieval from this area will be at the discretion of the RWC operator based on ocean and surf conditions.
 - Puhi Bay
 - Carlsmith (four miles) fronting the wall along the shoreline
 - Reed's Bay
 - Bayfront
- Response guidelines limits: North to Pāpa'ikou Mill and Southeast to Paipai Bay – up to one (1) mile offshore

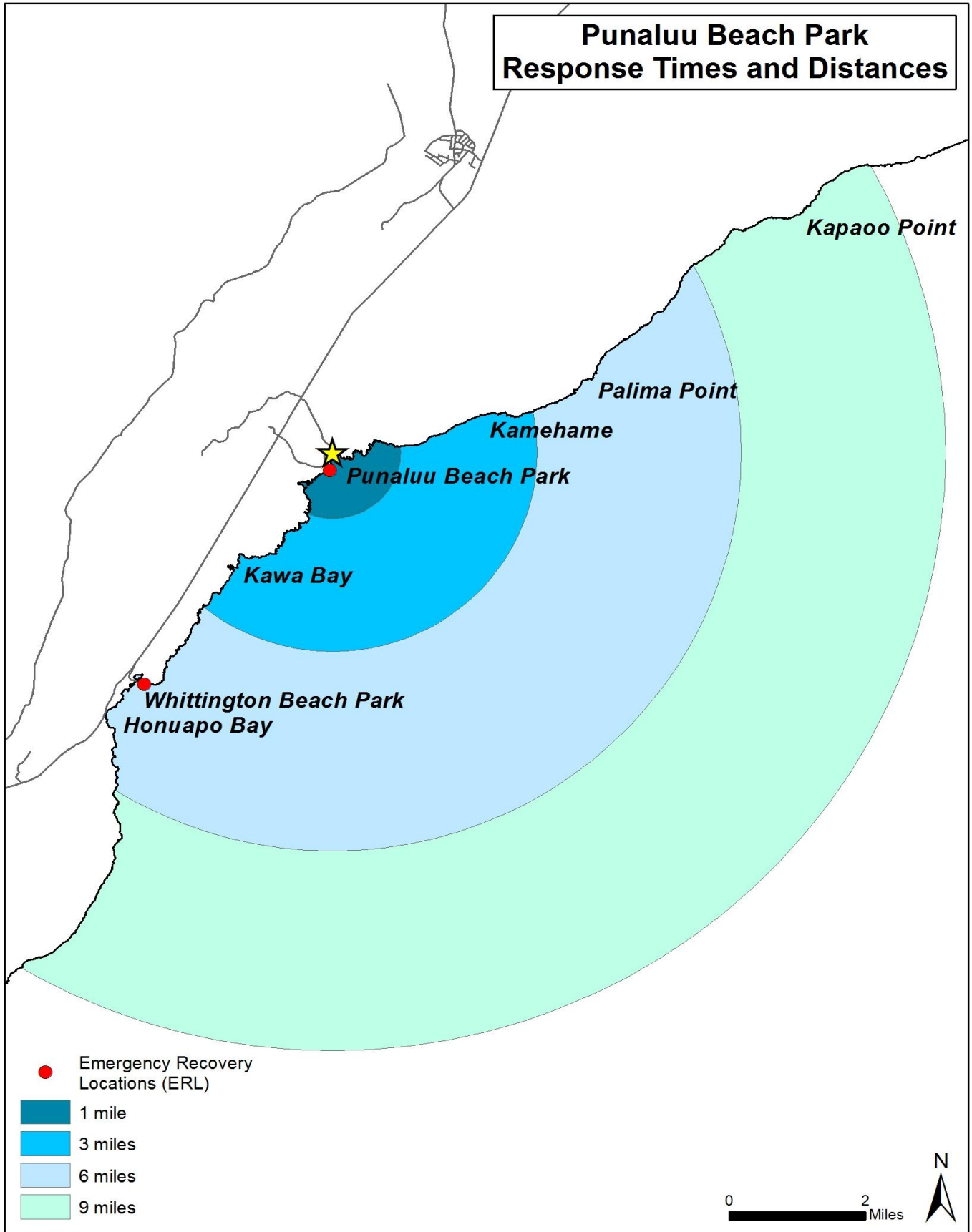
Richardson's Beach Park Response Times and Distances



PUNALU‘U Beach Park:

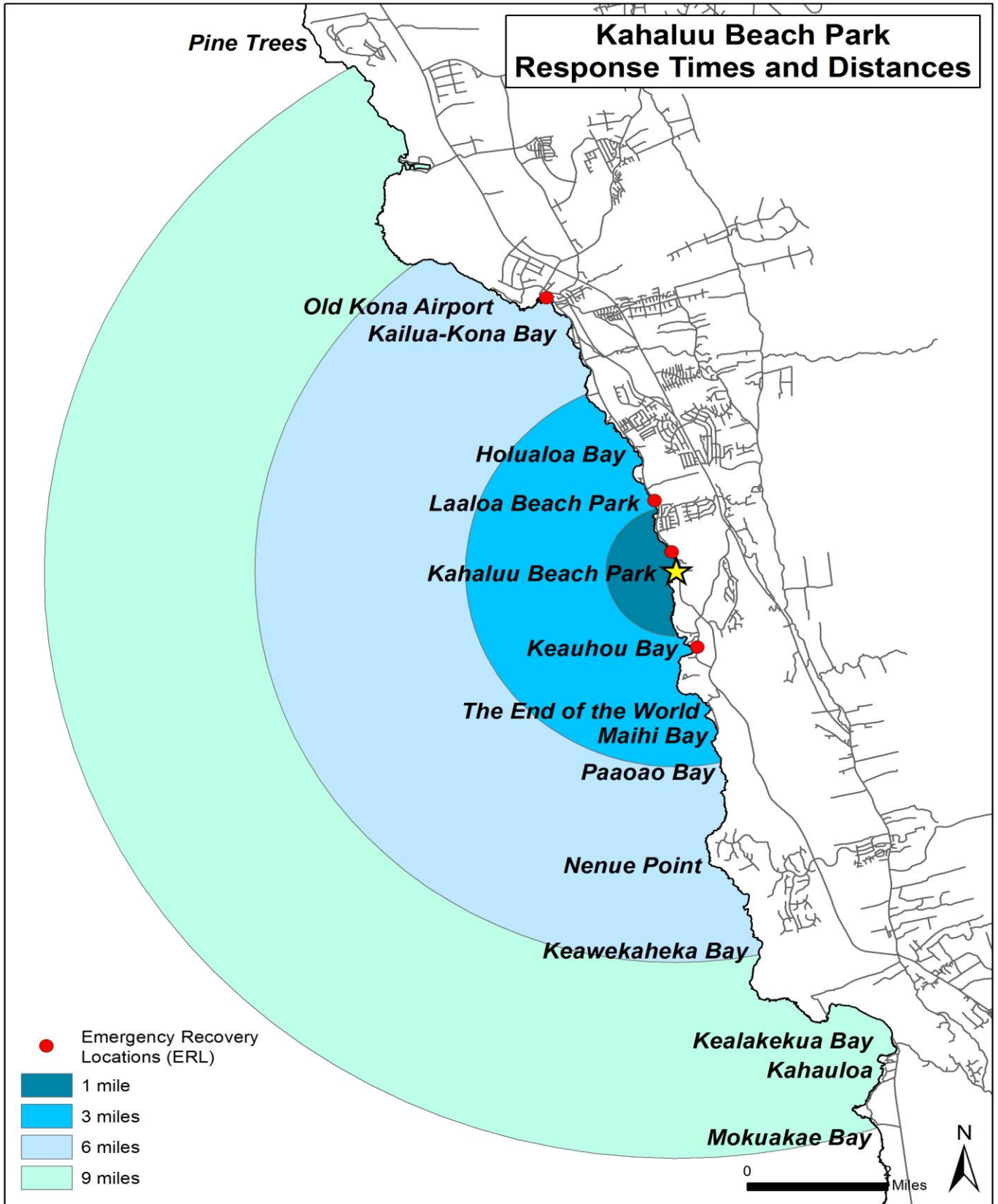
- Launch Point: From the beach near the lifeguard tower
- Retrieval Point: On the beach near the lifeguard tower
- Identified ERL
 - Punalu‘u Beach area
 - Whittington Park – fronting the parking lot area on the left. Retrieval from this area will be at the discretion of the RWC operator based on ocean and surf conditions.
- Response guidelines limits: Northeast to Palima Point and South to Whittington Beach Park – up to one (1) mile offshore

Punaluu Beach Park Response Times and Distances



KAHALU‘U Beach Park:

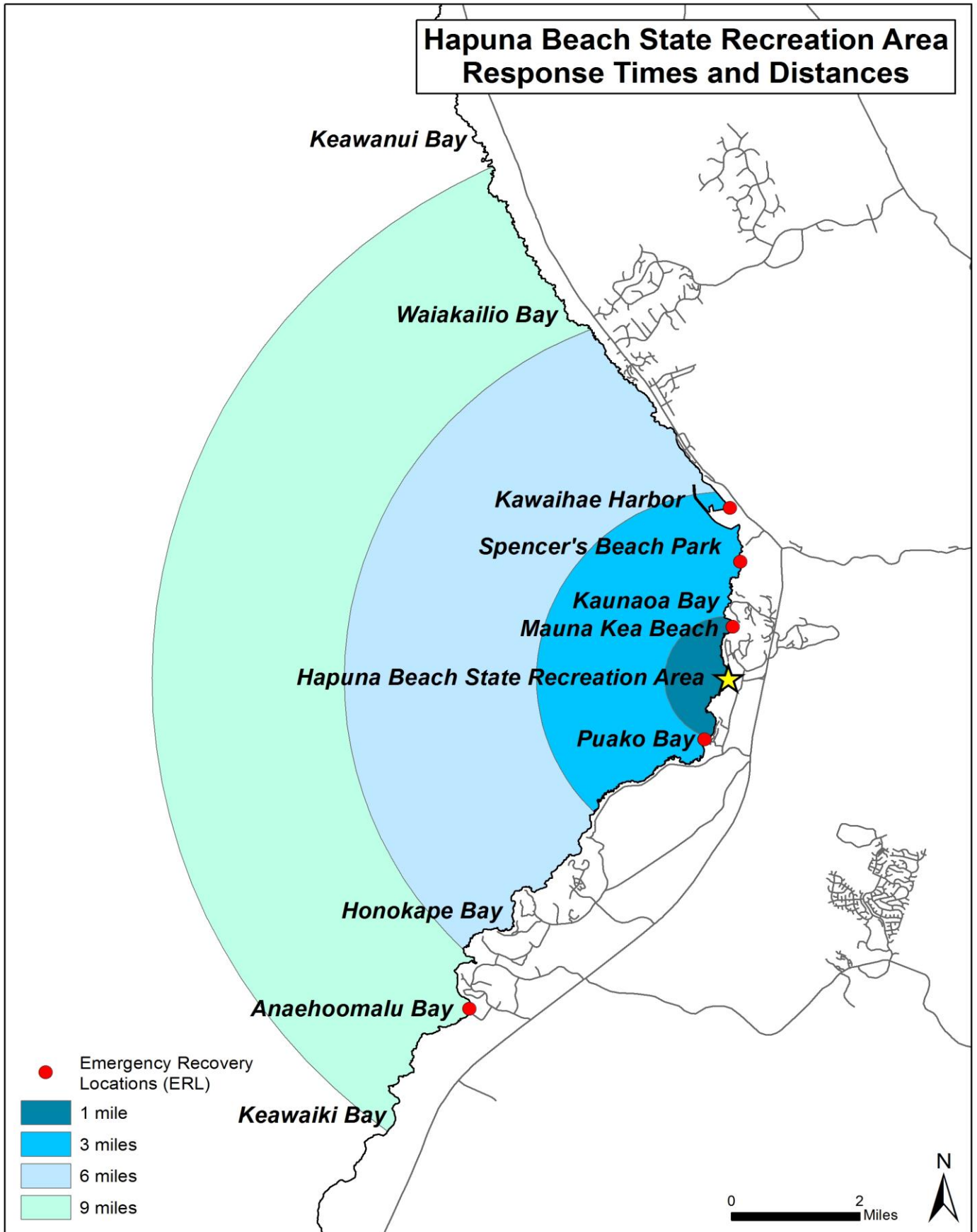
- Launch Point: From the beach fronting the north lifeguard tower
- Retrieval Point: On the beach fronting the north lifeguard tower
 - Alternative retrieval point is the Keauhou boat ramp (in the event that the shoreline is inaccessible)
- Identified ERL
 - Kahalu‘u Beach area
 - Keauhou Boat Ramp
 - La‘aloa Beach area - Retrieval from this area will be at the discretion of the RWC operator based on ocean and surf conditions.
 - Kailua-Kona boat ramp
- Response guidelines limits: North to Old Airport Recreation area and South to Kealakekua Bay – up to one (1) mile offshore



HĀPUNA Beach Park:

- Launch Point: From the beach - location to be identified on a daily basis depending on ocean and surf conditions
- Retrieval Point: On the beach - location to be identified on a daily basis depending on ocean and surf conditions
- Identified ERL
 - Spencer beach area – near the lifeguard tower
 - Kawaihae boat ramp
 - Mauna Kea Beach area – south end
 - Hāpuna Beach area – south end of beach
 - Puakō boat ramp
 - Anaehoomalu Beach area (fronting the parking lot)
- Response guidelines limits: North to Kawaihae boat harbor and South to Anaehoomalu Bay – up to one (1) mile offshore

Hapuna Beach State Recreation Area Response Times and Distances



SAFETY MESSAGE

- A. All members shall be accounted for through the Incident Command System prior to initiating at any water rescue emergency.
- B. Due regard for mechanical injury potential including lifting, motion, and crushing possibilities should be applied anytime members are working on or near the RWC.
- C. RWC personnel shall establish and maintain radio communication with Command (if established) or fire dispatch during an incident.
 - 1. Command shall monitor the appropriate fire frequency and communicate with other responding agencies as necessary.
 - 2. RWC Operators shall monitor and operate on the HFD Fire channel unless directed to another frequency by the Incident Commander.
- D. RWC personnel shall don all pertinent PPE prior to launch (see appendix A for exceptions).
- E. RWC shall be started and run for not less than ten (10) seconds prior to launch.
- F. Alternative systems of RWC launching and retrieval shall serve in support of conventional methods and employed anytime deemed necessary to ensure personnel safety or to expedite response due to poor launch site conditions or other operational constraints.

REFERENCES

NFPA 1006 Standard for Rescue Technician Professional Qualifications
U.S. Coast Guard Navigation Rules
State of Hawai‘i Administrative Rules Title 13, Department of Land and Natural Resources
Subtitle II
United States Lifesaving Association (USLA) manual
Personal Water Rescue Craft Training Manual; Hawaiian Lifeguard Association; Honolulu, HI;
1998
Yamaha Owners/Operations Manual for specific RWC

APPENDIX A

PERSONAL FLOATATION DEVICE (PFD) USE BY RESCUE WATER CRAFT OPERATORS

To ensure the overall safety of our Rescue Water Craft (RWC) operators, as well as to represent the highest degree of boating safety through example, a properly fitted high impact-rated USCG approved Personal Flotation Device (PFD) is standard issue for all of our operators. We encourage them to don the PFD while engaged in routine preventative patrols while underway when the conditions are mild to moderate. However, because of the unique nature of how we use the craft, as well as the dynamic environment associated with surf impact zones, the donning and doffing of the PFD is left to the discretion of the operator based on real time conditions and overall totality of circumstance.

The justification for exception to the mandatory PFD wear requirement exists under extraordinary and or exigent circumstance where the wearing of a PFD may serve as a hindrance to the safety of the operator. An example of this may be the conscious decision to enter a surf zone to perform an intensely practiced and orchestrated rescue technique. Wearing a PFD would not allow an operator to escape the impact of a wave. In most situations the conscious decision to not don a PFD should normally be predicated with a potential IDLH situation (Immediately Dangerous to Life or Health). An IDLH situation is defined by the National Fire Prevention Academy (NFPA) as an environment that poses an immediate threat to life and or health or would impair an individual's ability to escape from a dangerous situation. In these situations safety gear may be abandoned. The decision to don or doff a PFD while in the operation of a RWC is dependent on various factors and or situations.

We operate our RWC in some of the most extreme surf conditions found anywhere on the planet. An operator cannot break the surface of the water if need be wearing a PFD and therefore may not be able to perform a rescue or self-rescue if separated from the craft. They may not be able to submerge to avoid a craft being propelled at them by the force of a wave.

All of our operators have swim fins tethered to their waist with a fin belt and the RWCs are all retrofitted with a specially designed rescue sled. Donning and doffing procedures are covered in the 5 week RWC operator training course which is the most intense RWC rescue training in existence. Operators train in and must be able to endure extreme surf conditions relying on their own ability with only the aid of swim fins and NOT a life jacket (PFD) should they have to abandon and or become separated or from the RWC in these surf conditions.

Under the State of Hawai'i DLNR's Administrative Rule 13-256-14 (Safety and Enforcement) for boating and ocean recreation in State waters (3 nautical miles), law enforcement and rescue personnel are granted a general exemption from the stated rules associated with Thrill Craft (Personal Water Craft or PWC) requirements to include mandatory PFD wear. See below:

§13-256-14 Safety and enforcement. The restrictions cited in this chapter shall not apply in the event of an emergency, to law enforcement or rescue craft, or to vessels participating under a valid ocean waters event permit issued by the department or the U.S. Coast Guard. [Eff 2/24/94] (Auth: HRS §§200-2, 200-3, 200-40) (Imp: HRS §§200-2, 200-3, 200-4) §

This is the same logic applied under HAR 13-244-18 for the extreme sport of Tow Surfing with a PWC. It reads as follows; *surfers engaged in tow-surfing with Thrill Craft (PWC) shall not be required to wear a lifesaving device.* But, they must also carry certain specialized equipment and have a properly retrofitted PWC and sled similar to what we utilize.

The same rules apply to a grabber as in the case of the operator. Wearing a PFD under certain circumstances would potentially hinder a rescue attempt and or jeopardize the safety of the rescuer and/or victim(s). A rescuer would not be able to dive down to retrieve a victim who may be unconscious and is submerged. Lifeguards, as an operator or crew member on a RWC, must be able to break the surface of the water without resistance. They must be also be able to submerge to adequate depths in order to avoid and or lessen the impact of breaking waves, heavy whitewater, and the unpredictable path of a 1200 pound craft being propelled by the force of a wave if they become separated from it. Our grabbers are equipped with swim fins and a rescue tube as well.