Department of Land & Natural Resources DIVISION OF AQUATIC RESOURCES 1151 Punchbowl Street, Room 330 Honolulu, Hawaii 96813

Valid not longer than: November 8, 2024

Date Issued: November 9, 2023

#### SPECIAL ACTIVITY PERMIT

The Department of Land and Natural Resources hereby grants permission for certain activities involving aquatic organisms belonging to the people of Hawaii, under Section 187A-6, Hawaii Revised Statutes, and other applicable laws.

The Permittee is

Name: Hannah Bernard Address: Hawaii Wildlife Fund (HWF)

Title: Executive Director P.O. Box 790637
Affiliation: HWF Paia, HI 96779

Email: bernardhannah@icloud.com

This permit is issued, subject to the general and special conditions, to take (capture, harass, collect eggs, measure, tag, take tissue samples, possess parts of specimens\*, and excavate nests) various amounts and sizes of regulated organisms (hawksbill, olive ridley and green sea turtles), in various regulated and non-regulated locations of Maui, Molokai, Lanai and Kaho'olawe\*\* (as authorized by DAR or KIRC\*\* – see section A. Locations), as listed in the table below, using non-regulated gear, for the purposes of enhancing species recovery, as authorized by U.S. Fish and Wildlife permit ES829250 (version 10) (ePermits: PER0017915-10) and any amendments to permit ES829250. \*The possession of parts of turtle specimens (e.g. shells or preserved tissue/specimens) for educational or research purposes is authorized pending approval of these activities under the U.S. Fish and Wildlife permit ES829250 (version 10) (ePermits: PER0017915-10) and any amendments to permit ES829250, and pending verification that the turtle parts have been determined to be legally obtained by USFWS).

**Authority:** This permit is issued solely for the take of endangered or threatened aquatic life for scientific purposes, as authorized by, and subject to the provisions of, Sections 187A-6 and 195D-4, Hawai'i Revised Statutes ("Haw. Rev. Stat."), and Chapter 13-124, Hawai'i Administrative Rules ("HAR"), and implies no authorization related to any other applicable law or regulation. The permittee is solely responsible for obtaining all other permits and/or authorizations from state, federal and/or county authorities that may be required to conduct the activity.

This permit, signed by authorized representative of the Department of Land and Natural Resources (the Department), authorizes the permittee, and assistants designated on the final page(s) of, or attachments to, this permit, to engage in activities otherwise prohibited by law, subject to the conditions, which include the **Take** (sampling) of certain aquatic life from waters of the State, as follows below in Table 1:

Spc.	Spc. Description	Spc. Amt.	Morphology	Spc. Size	Island	Location	Comments
Code							
			Re	egulated species			
7822	Eretmochelys imbricata   Hawksbill sea turtle   Eretmochelys imbricata	As required	(Adult/Juvenile)		Molokai, Lanai and Kaho'olawe*	State waters (various locations throughout Maui Nui)	Regulated and non-regulated areas authorized; Locations specified in annual report.  For Kaho'olawe* see section A. Location)
	Continued on next page						

616	Chelonia mydas	As	Turtles	Adult/Juvenile	Maui,	State waters	Regulated and non-regulated
	Pacific Green sea turtle	required	(Adult/Juvenile)	Turtles (Any	Molokai,	(various	areas authorized; Locations
	honu   Chelonia			Size)	Lanai and	locations	specified in annual report.
	mydas agassizi				Kaho'olawe*	throughout	
						Maui Nui)	For Kaho'olawe* see
							section A. Location)
7823	Lepidochelys olivacea	As	Turtles	Adult/Juvenile	Maui,	State waters	Regulated and non-regulated
	Olive Ridley Sea	required	(Adult/Juvenile)	Turtles (Any	Molokai,	(various	areas authorized; Locations
	Turtle   Lepidochelys			Size)	Lanai and	locations	specified in annual report.
	olivacea				Kaho'olawe*	throughout	
						Maui Nui)	For Kaho'olawe* see
1	1		I		I		section A. Location)

### I. SPECIAL CONDITIONS

#### A. Location

All activities with hawksbill, olive ridley and green sea turtles (including education, outreach, reconnaissance for nests and nest excavation) will occur on the islands of Maui, Molokai, Lanai and Kaho'olawe\*\* (\*\*excepting restricted 2 nautical mile boundary Zone A and Zone B surrounding Kaho'olawe - unless authorized from KIRC), including any Marine Life Conservation District (MLCD), Fisheries Management Area (FMA), or other marine area managed by the Department where such activities would otherwise be prohibited under State law (see table of managed areas below). Permittee will conduct operation on Molokai and Lanai after approval from Maui DAR (contact Russell Sparks: <a href="maisted-russell.t.sparks@hawaii.gov">russell.t.sparks@hawaii.gov</a> or other Maui DAR staff) and only after approval from Maui DAR and from the \*\*Kaho'olawe Island Reserve Commission (KIRC) before conducting activities on Kaho'olawe. Prior to conducting authorized activities on Lanai, the permittee shall coordinate with Pulama Lanai and the PIFWO. Pulama Lanai must approve all activities prior to implementation (contact Rachel Sprague at email: rsprague@pulamalanai.com or telephone: 808-565-3702). Activities are authorized in managed areas listed below if necessary (after consultation with Maui DAR):

Island of MAUI	Island of KAUA'I	Island of HAWAI'I
Kahului Harbor FMA <sup>1</sup>	Ahukini Pier FMA	Areas within the West Hawaii
Honolua-Mokuleia MLCD <sup>2</sup>	Hanamaulu Bay FMA	Regional Fishery Management Area
Ahihi-Kinau NAR <sup>3</sup>	Kapaa Canal FMA	(continued):
Molokini Shoal MLCD	Nāwiliwili Harbor FMA	
Kahekili Herbivore FMA	Port Allen FMA	(1) Ka'ūpūlehu Marine Reserve
	Waikaena Canal FMA	(2) North Kohala Fish Replenishment Area
Island of LANA'I	Waimea Pier & Bay FMA	(FRA <sup>6</sup> )
Manele Harbor FMA	Hā'ena CBSFA <sup>8</sup>	(3) Puakō-'Anaeho'omalu FRA
Manele-Hoopoe MLCD		(4) Kaloko-Honokōhau FRA
	Island of HAWAI'I	(5) Kailua-Keauhou FRA
Island of MOLOKA'I	Areas within the West Hawaii	(6) Red Hill FRA
Kaunakakai Harbor FMA	Regional Fishery Management Area:	(7) Nāpoʻopoʻo-Hōnaunau FRA
	Hilo Bay FMA	(8) Hoʻokena FRA
Island of KAHO'OLAWE	Kailua Bay FMA	9) Ka'ohe Beach FRA (Pebble Beach)
Restricted 2 nautical mile boundary	Kawiahae Harbor FMA	(10) Miloli'i CBSFA (including Miloli'I
Zone A and Zone B surrounding	Kealakekua Bay MLCD	FRA)
Kaho'olawe	Keauhou Bay FMA	(11) Kikaua Point-Mākole'ā Point Netting
	Kiholo Bay FMA	Restricted Area (NRA <sup>7</sup> )
<u>Island of O'AHU</u>	Kona Coast FMA	(12) Nenue Point–Kealakekua Bay NRA
Ala Wai Canal FMA	Old Kona Airport MLCD	(13) Hanamalo Point–Kanewa'a Point NRA
Coconut Island MLR	Lapakahi Bay MLCD	(Part of Miloli'i CBSFA)
Hanauma Bay MLCD	Papawai Bay FMA	(14) Kanonone–Kalīpoa NRA
Heiea Kea FMA	Puako FMA	
Honolulu Harbor FMA	Waiakea PFA <sup>5</sup>	
Kapalama Canal FMA	Wailea Bay MLCD	Island of HAWAI'I
Paiko Lagoon Wildlife Refuge	Wailuku River FMA	West Hawaii Regional Fishery

Pōkaʻi Bay FMA	Wailoa River FMA	Management Area (WHRFMA)
Pūpūkea MLCD	Wawāloli FMA	
Waialua Bay (Hale'iwa Harbor)		Areas in the WHRFMA outside
Waikīkī-Diamond Head SFMA		of all smaller FMA, MLCD, FRA
Waikiki MLCD		and NRA
Wahiawā Public Fishing Area		

<u>Table 2 – Regulated Areas – Definitions</u>: FMA<sup>1</sup> = Fisheries Management Area, MLCD<sup>2</sup> = Marine Life Conservation District, NAR<sup>3</sup> = Natural Area Reserve (DOFAW), MLR<sup>4</sup> = Marine Laboratory Refuge, PFA<sup>5</sup> = Public Fishing Area, FRA<sup>6</sup> = Fish Replenishment Area, NRA<sup>7</sup> = Netting Restricted Area, CBSFA<sup>8</sup> = Community-Based Subsistence Fishing Area

В. Activities. The permittee is authorized to take (capture, harass, collect eggs, measure, tag, take tissue samples, possess parts of specimens\*, and excavate nests) regulated organisms (hawksbill, olive ridley and green sea turtles), in various regulated and non-regulated locations on Maui, Molokai, Lanai and Kaho'olawe\*\* (as authorized by DAR or KIRC\*\*; see section A. Locations), as listed in Table 1, using non-regulated gear. The objective of the activity is to conduct activities with various amounts and sizes (to be specified in final report) of honu ea or hawksbill sea turtle (Eretmochelys imbricata), olive ridley sea turtle (Lepidochelys olivacea) and the honu or green sea turtle (Chelonia mydas), in conjunction with surveys and ecological research, for the purpose of enhancing their survival, provided such actions are in compliance with the Endangered Species Act and other applicable federal laws, and in accordance with the special conditions outlined in permittee's federal U.S. Fish and Wildlife permit ES829250 (version 10) (ePermits: PER0017915-10) and any amendments to permit ES829250. The following activities are authorized with adults turtles: nesting beach surveys, capture, handle, measure, weigh, attach radio/satellite transmitters, attach tags (flipper and Passive Integrated Transponder (PIT)), biosample, photograph, release and recapture and for turtle nests: locate and monitor, place screens and habanero powder on nests at risk of predation, insert temperature data logger, excavate, salvage unhatched eggs and dead hatchlings; and relocate nests. All recovered eggs, shell fragments, dead hatchlings and tissue samples will be sent to NOAA NMFS, Protected Species Division, Pacific Islands Fisheries Science Center (PIFSC), Honolulu, HI, for analysis. A brief description of select activities are described below - please refer to U.S. Fish and Wildlife permit ES829250 (version 10) for a full description of activities and conditions. \*The possession of parts of turtle specimens (e.g. shells or preserved tissue/specimens) for educational or research purposes is authorized pending approval of these activities under the U.S. Fish and Wildlife permit ES829250 (version 10) (ePermits: PER0017915-10) and any amendments to permit ES829250, and pending verification that the turtle parts have been determined to be legally obtained by USFWS).

Note on activities between September 4<sup>th</sup> – November 8<sup>th</sup>, 2023: This permit is annual renewal that usually gets renewed at the same time each year in order for HWF staff to be able to attend to turtle nests or other turtle activities year round. Due to a backlog in DAR processing permits in 2023, the permit was not able to be renewed on the expiration date; correspondence occurred which verified that certain activities had to be continued during this short period of time (to maintain health of turtle nests) when the permit was in the process of being renewed. This renewed permit (SAP 2024-65) covers any activities that occurred between September 5<sup>th</sup> – November 4<sup>th</sup> of 2023, and any data about the collection of organisms will be included in this permit's annual reporting materials at the end of the year for comprehensive record keeping.

### Methods/Monitoring.

<u>Marking of Nests</u>. Permittee is authorized to mark or delineate confirmed turtle nests with appropriate buffer/boundary around nest area on beach. Permittee will verify actual nest/nesting activity before marking or delineation of nest.

<u>Night surveys</u>. All night surveys of nesting beaches are conducted using ambient light when possible. A night-vision scope shall be used to observe sea turtles from a distance. All light from cellular phones and other portable devices with illumination should be shielded from the sea turtles. When absolutely necessary (e.g., to ensure safety while gaining access to the beach), a flashlight fitted with a red filter may be used. However, flashlights or other

artificial lights shall not be directed toward the ocean or towards other turtles or hatchlings. Dark clothing shall be worn during night surveys.

<u>Cameras</u>. Cameras capable of infrared photo- or videography may be used when filming at night. No artificial white light or flash photography is authorized.

<u>Nesting sea turtle females</u>. Nesting sea turtle females shall not be harassed (approached or restrained) prior to the start of oviposition. A minimum distance shall be kept of at least 50 feet from a nesting female sea turtle until oviposition has begun. However, if a nesting sea turtle is blocked from sight, no more than two observers may move to the maximum distance necessary to maintain line of sight, but no closer than 20 feet, until oviposition has begun. No lights may be used at if an observer is less than 50 feet from the sea turtle.

<u>Nest Protection Activities.</u> For hawksbill and olive ridley sea turtles <u>only</u>, nest contents may be relocated on the same beach they were laid within 12 hours of egg deposition and/or prior to 0900 the morning following egg deposition, only when imminent destruction of the nest is expected. Nest relocation must be in accordance with the "Hawksbill Sea Turtle Nest Relocation Protocol" (2001; attached) developed by the permittee and reviewed by the PIFWO. Nests may be relocated (excavated, transported, and reburied) if they are laid seaward of the debris line marking the high tides or close enough to this line such that nest flooding is probable at high tide. All nest translocations shall be conducted in coordination with Maui DAR staff or Joseph Schwagerl or other USFWS staff Oahu/Maui National Wildlife Refuge Complex.

- a. Nests that are at a high risk of predation may be protected by placing a self-releasing screen over the nest and encircling the nest with habanero powder, in accordance with the following Special Terms and Conditions:
  - i. The permittee shall only place a nest screen and habanero powder on a nest(s) where there has been evidence of attempted predation. Additionally, the nest(s) must be on a beach that is consistently monitored.
  - ii. The screens shall be made of a metal non-ferrous material or plastic with a dimension of 4 feet by 4 feet. The screen mesh size shall be no smaller than 2 inches by 4 inches. Screens of this size are large enough to keep mammalian predators out yet still allow hatchlings to escape from the nest.
  - iii. The screen shall be centered directly over the egg chamber to make it less likely that predators will burrow to the eggs and to ensure that anchoring stakes placed along the edge of the screen will not enter the egg chamber.
  - iv. The sand surface shall be leveled in a 4-foot by 4-foot square centered on the temporary nest marker. The screen shall be placed down, the marker removed, and the four comers of the screen secured. About 2 inches of sand shall be placed on top of the screen after anchoring so that the screen is well covered.
  - v. For the surface treatment of nests with habanero pepper powder; 15 ml of powder (made from red savina habanero peppers, *Capsicum chinense*) shall be sprinkled in a 0.5-m-diameter circle on the surface of the sand above the nest to intercept predators. A thin layer of sand may be scattered on top of the powder to reduce the potential of disturbance by wind or rain.
  - vi. Screened nests shall be checked each morning during the period of anticipated hatching to prevent hatchlings from becoming trapped by the screens. All screens shall be removed from the beach after hatchling emergence is complete.

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Egg counting. A small amount (a handful or cupful) of sand may be removed from the egg chamber to allow visual access for egg counting. Once the turtle starts covering the eggs, the excavated sand must be pushed back in place so that the nest is covered appropriately by the turtle. One flashlight with red filter may be used to illuminate the egg chamber to observe egg deposition. The light must be extinguished when the turtle begins covering the nest.

<u>Data Collection</u>. Adult female hawksbill, green sea turtles and olive ridley sea turtles may be restrained on their nesting beaches for short periods of time. Total restraint time shall not exceed 30 minutes to record standard body measurements, attach tags, and take small tissue samples from the edge of the flipper; or shall not exceed 2 hours if radio/satellite transmitter attachment is also included. Nesting female hawksbill, green and olive ridley sea turtles may be restrained on their nesting beaches for no more than 15 minutes to remove radio/satellite transmitters. Sea turtles must be protected from temperature extremes of heat and cold, and kept moist during handling, measuring, and satellite tagging.

<u>Handling</u>. The permittee shall use care when handling live animals to minimize any possible injury. Appropriate resuscitation techniques shall be used on any comatose sea turtle prior to returning it to the water (see Resuscitation Requirements in U.S. Fish and Wildlife permit TE829250-9). In the event of an emergency, contact the Stranded Sea Turtle Hotline at telephone: 808-983-5730 (Monday through Friday, 0700 to 1600 local Hawaiian time); 808-288-5685 (after hours pager); or 808-587-0077.

<u>PIT Tags/Biopsy Activities</u>. Please refer to special conditions outlined in permittee's federal U.S. Fish and Wildlife permit ES829250 (version 10) (ePermits: PER0017915-10) and any amendments to permit ES829250.

#### C. Gear.

Regulated Gear: n/a

<u>Non-regulated Gear</u>: Permittee will use non-regulated gear (e.g. cameras, flashlights with red filters, PIT tags, etc.) as approved for research/conservation activities in federal protected species permit. Please refer to special conditions outlined in permittee's federal U.S. Fish and Wildlife permit TE829250-9 and any amendments to permit TE829250-9.

- D. Distribution of Samples/Invasive Species, Disease and Parasites. The permittee will mitigate for the spread of invasive species, disease and parasites between sampling areas (if sampling in environmentally different areas) by utilizing best management practices, including but not limited to, ensuring that all organisms, hand tools or collection bags/containers are inspected and absent of any non-natives or invasive organisms before transportation to lab aquariums (not applicable where invasive species, disease and parasites are target species for collections) or before collection in a new area, and ensuring that all gear is disinfected or sterilized between collection areas (see General Conditions O. Other Collection Guidelines: Aquatic Invasive Species.). Efforts will be made by permittee and authorized assistants to ensure that collection of samples is conducted in such a manner as the process does not result in any additional harm to surrounding organisms or environment. Researcher will implement collection/sampling design that removes a sustainable proportion from the local population of target organisms and make efforts to distribute collection activities across shoreline/reef flat/benthic areas, so as not to consolidate the impacts of collection in one location (if applicable/if collecting samples). . Discretion should be used to avoid conflicts with fishers and others during authorized activities. Efforts will be made by permittee and authorized assistants to communicate with the public that have inquiries about the collection activities or methodology. Permittee and authorized assistants will clearly state the overall objective of the project, that these activities require permits, and that the methods the researchers are employing are not approved for recreational fishing but research, education, propagation or management activities ONLY.
- **E. Possession and Transportation.** In some cases, the permittee and authorized assistants may recover eggs, shell fragments and dead hatchlings from nests or collect tissue samples from turtles or eggs. All recovered eggs, shell

fragments, dead hatchlings or tissue samples will be sent to NOAA NMFS, Protected Species Division, Pacific Islands Fisheries Science Center (PIFSC), Honolulu, HI, for analysis.

- **F. Annual Report:** Upon 90 days post expiration of the permit or 30 days prior to expiration of the permit (depending on **renewal** or **non-renewal** status), the permittee must provide to DAR a final written report summarizing the results of the collection activity carried out under this permit and (if available/applicable) analysis of the data.
  - 1. The annual report should provide a written description of the activity and objective and a written explanation as to how the collection of or activity with a fully protected or regulated marine species for scientific, education, management or propagation purposes is benefiting the State of Hawai'i in general and specifically, the improved management of the species or related species.
  - 2. The annual report must describe the following, in form specified by the Department; access to reporting template on the DAR Permitting Portal can be found at: <a href="https://inforps-dp.hawaii.gov/dlnraquaticpermitting/#/research-spreadsheet">https://inforps-dp.hawaii.gov/dlnraquaticpermitting/#/research-spreadsheet</a> or via email from permit coordinator (for info from #2. a. & c. and #3) include all other info (#1, #2 b. & d. into a PDF report) consult permit coordinator for most up-to-date reporting template (if necessary):
    - a. **Species name and total quantities and sizes** of all regulated and non-regulated specimens collected under this permit.
    - b. Results of chemical, genetic, physiological, histological, pathological, statistical or other analysis of data (if possible/applicable).
    - c. GPS coordinates (decimal degrees) of location of each sample taken or action conducted and associated geographic location (e.g. windward side or east side of Patch Reef 8, or north side of Lilipuna Pier). Multiple samples collected in one single area can be geo-referenced by a single GPS point and associated geographic location.

If GPS is not available: Make accurate note of your sampling location in field and obtain GPS location from Google Earth after field sampling (<u>Note:</u> Instructions are for the downloaded program - Google Earth Pro, not web version):

- i. Click "Tools" in the top line menu and open Options.
- ii. In the "3D View" tab, **find** the "Show Lat/Long" section. Change the default from Degrees, Minutes, Seconds to **Decimal Degrees**.
- iii. Next, click the pushpin icon in the menu; click and drag the pushpin that appears to the point on the map from which you wish to obtain a GPS coordinate:

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(e.g.: Lat: 21.441646, Long: -157.799076)
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- iv. Enter GPS coordinate into spreadsheet with associated sampling information (species, amount, size).
- d. **Photo-documentation** of a representative example of organisms collected, methodology, and gear:
  - i. Photo-documentation of a **representative example** of **all activities conducted compiled with associated data** (date, species, location, activity, quantities, sizes, etc.)

- ii. Photo-documentation will include one (1) photo each of the following: **nesting turtles**, **nests**, **nest excavations**, **eggs (live, unhatched, and egg shell fragments)**, **hatchlings (live/mortalities)**, **nest environment**, **and habitat parameters or anthropogenic activities impacting success/outcome of nest/nest activities (oviposition-egg depositing) or turtle parts or preserved specimens/tissue acquired (if authorized under USFWS permit)**.
- 3. An inventory (species list) of organisms (dead or alive) present at the facility or with the permittee the end of the report period, in form acceptable to the Division, must accompany the annual report;
- 4. The annual report is due at the Division's Honolulu office one month (30 days) before expiration of the permit if renewal is needed or within three months (90 days) after expiration of the permit if renewal is not needed or as otherwise instructed by the Division.
- G. Use of Organisms, Parts of Organisms, Tissue Samples or other Aquatic Resources. The permittee may not convey in any fashion (including, but not limited to, selling, trading, or giving) any organisms, parts of organisms, tissue samples or other aquatic resources to any person or party in Hawai`i that does not already have a permit from the Department authorizing possession of same and without written approval from DAR. Organisms taken under authority of this permit may be used for scientific study or educational purposes ONLY, except as authorized by prior written approval of DAR.
  - **a.** This permit **authorizes the permittee and authorized assistants** to **transport** recovered turtle eggs, eggshell fragments and dead turtle hatchlings listed in Table 1 within the state of Hawai'i to the **following institutions** and authorizes the following institutions to **receive** recovered turtle eggs, eggshell fragments and dead turtle hatchlings from **the permittee and authorized assistants:** 
    - NOAA/NMFS, Protected Species Division, Pacific Islands Fisheries Science Center (PIFSC), Honolulu, Hawaii 96818

### II. GENERAL CONDITIONS:

- A. 1. **Effective Date.** This permit becomes effective upon the following:
  - a. All persons who are actively involved in activities authorized by this permit have read this permit in total
    and acknowledge understanding and agreement to abide by its conditions by signing the signature sheet at
    the end of the permit. Note: All authorized assistants should read, agree to the terms and conditions and
    sign the permit;
  - b. Both copies of the signed signature sheet of the permit must be returned to the Division of Aquatic Resources (DAR).
  - c. Upon approval and signature by the Chairperson of the Department, a **copy of the fully executed permit** will be returned to the applicant.
  - 2. Authority granted by this permit ends on the "Expiration Date" on the first page of this permit.
  - 3. The permittee must carry a copy of this permit on location while performing activities authorized by this permit.

- B Validity. This permit conveys authority ONLY of the Department relating to its jurisdiction over aquatic resources: the permittee remains responsible for obtaining all other prior permission from other applicable authorities (such as owners of and tenants upon private lands; other divisions of the Department; other local, State and Federal agencies). This permit is valid only if accompanied by a valid National Marine Fisheries Service (NOAA Fisheries) Marine Mammal Protection Act / Endangered Species Act permit or a United States Fish and Wildlife Service (USFWS) Endangered Species Act permit. The permittee shall notify DAR of any proposed changes in research activities prior to implementing such changes for appropriate review and permit amendment. DAR may require the permittee to accommodate the presence of an observer during authorized activities.
- C. **Compliance with all applicable County, State, and Federal Requirements.** This permit conveys a privilege to engage in only those activities under the jurisdiction of the Department of Land and Natural Resources. The permittee is responsible for complying with all applicable County, State, and Federal requirements. The permit does not convey any privilege of access over or through private property.
- D. **Liability.** This permit does not make the Department of Land and Natural Resources or the State of Hawaii liable in any way for any claim of personal injury or property damage to the permittee or assistants which may occur during any activity conducted under this permit; moreover, the permittee and all assistants agree to hold the Department and State harmless against any and all claims of injury, death or damage resulting from activities of the permittee or any assistant or from actions or omissions under this permit.
- E. **Parties Authorized under Permit**. Only the permittee and their authorized research assistants are allowed to participate in the authorized activity. The permittee and each assistant is individually responsible and accountable for his or her actions while performing activities authorized by this permit. The permittee is additionally responsible and accountable for the actions of each assistant. The permittee or their assistant(s) must have with them a copy of this permit while conducting activities authorized by this permit.
- F. **Transferability.** This permit is neither transferrable nor assignable to another person. Any person whose name does not appear on this permit and is conducting any activity described herein is subject to prosecution for violation of State laws.
- G. **Revocability.** This permit is revocable at will should the Department deem revocation necessary.
- H. **Changes to the Permit.** The permittee may request changes to the permit. Any such request to make changes to the permit must be made in writing and received by the Department at least thirty days prior to the change. The addition of new assistants will require each individual to sign the Attachment on page 13, 14, 15, 16 or 17 stating that they have read, understood, and agree to abide by all general and special permit conditions. No change may be implemented without written approval from the Department.

The permittee may request to:

- 1. Add assistants to the permit;
- 2. Add another permittee or replace an existing permittee in the manner stated above; and
- 3. Change the activities authorized under this permit.
- I. This permit authorizes collection of organisms protected by Federal law only with prior appropriate Federal authority, which must be described on Page 1 of this permit (if applicable).
- J. This permit does not authorize the sale of any collected organism.
- K. This permit expires on the date indicated on Page 1. **If no renewal is needed**, the permittee must email a PDF of this permit with all signature sheets (or a complete list of assistants if signatures are not available) and additionally

email a **PDF version of a final report** (to <u>catherine.a.gewecke@hawaii.gov</u>) with complete information on all activities authorized under this permit (see <u>Special Conditions</u>, <u>Section F. Annual Report</u>) within <u>three months</u> (90 days) after the expiration date. <u>If renewal is needed</u>, permittee must submit a <u>PDF version of a final report</u> to the Division <u>one month</u> (30 days) <u>prior</u> to the expiration date for DAR biologists to review, in addition to turning in expired permit with signatures no later than the regular <u>three months</u> (90 days) after expiry date. If complete report cannot be submitted <u>one month</u> (30 days) <u>prior</u> to the expiration date, the permittee will submit a short synopsis of research conducted (PDF version- <u>one month</u> (30 days) <u>prior</u> to the expiration date) in past year including information on quantities, genus species and activities conducted, and submit full report no later than the regular <u>three months</u> (90 days) after expiry date.

- L. **Access to Data.** The permittee and assistants agree to provide access to data obtained under authority of this permit upon request of the from DAR or authorized agent of the Department, and to provide to the Division a copy of each report, published for distribution, prepared with data obtained under this permit. The permittee agrees to provide Department staff access to organisms obtained and held under this permit for on-site inspection of the premises.
- M. **Notification.** The permittee agrees to notify the island office of the Division of Conservation and Resources Enforcement (DOCARE Oahu Central Office: 808-643-3567) at least 24 hours prior to any authorized activity being conducted in the field. See section P. **Other Collection Guidelines** (below) for additional requirements.
- N. **Violation of Permit Conditions.** A violation of any terms or conditions of this permit or any violation of State law not covered by this permit may result in revocation of the permit and other penalties as provided by law. In addition, the Department may consider any such violation as grounds for denying any future application for this or any other permit issued by the Department. Any person whose permit has been revoked shall not be eligible to apply for another permit until the expiration of two years from the date of revocation. See HAR § 13-124-7.1.
- O. **Coral Activities**: Activities under this permit shall abide by the following conditions (if applicable):
  - 1. Coral the Permittee must notify DAR Oahu (<u>catherine.a.gewecke@hawaii.gov</u>) or dar.sap@hawaii.gov) within 24 hours of:
    - i. Any instance of major damage caused to coral or other marine natural resources, because of collection or other research activities conducted under this permit.
  - 2. Fragmentation This permit **does not authorize** fragmentation of coral colonies.
  - 3. Rare Species The following *Porites* species require special permission from the Division prior to collection under this permit: *Porites pukoensis, Porites duerdeni, Porites studeri*. The following *Montipora* species require special permission from DAR prior to collection under this permit: *Montipora dilitata*. The following *Pocillopora* species require special permission from DAR prior to collection under this permit: *Pocillopora ligulata, Pocillopora molokensis*.
  - 4. No impact-causing activities will be conducted on (or immediately adjacent to) any intact, attached coral colony measuring larger than 1 m x 1 m x 1 m. Specific efforts will be made to avoid damage to any large colonies of living coral.

#### P. Other Collection Guidelines:

1. Collecting generally - the Permittee must give notice, in form specified by the Department (email or phone call), to DAR (<a href="mailto:catherine.a.gewecke@hawaii.gov">catherine.a.gewecke@hawaii.gov</a> or <a href="mailto:dar.sap@hawaii.gov">dar.sap@hawaii.gov</a>) and to the Department's Division of Conservation and Resources Enforcement (DOCARE: 808-643-3567), at least 24 hours prior to initial commencement of any series of field collection/sampling activities taken place under this permit or on a schedule agreed to by DOCARE and the permittee (i.e. one call notifying of a period of time sampling that

will occur across different locations throughout the year). **Researcher will provide the following info when DOCARE is notified:** SAP #, researcher name/institution, date, location, activity description (e.g. sampling or collection of regulated organisms, using regulated gear or conducting activities in a regulated area), description of boat being used (color, size, type of boat)(if applicable), description of vehicle on shore (if applicable), number of people involved in activity, etc.

2. An **Aquatic Invasive Species** (**AIS**) **Mitigation Plan** will be filed with the Division prior to conducting any collection under this permit. The Plan will include methods and protocols to minimize AIS or disease movement through gear, supplies and activities of the permittee. Permittee must take actions to verify that collection tools have been disinfected before use if previously used in collection activities.

Invasive Species/Disease/Parasites: All collection gear deployed must be visually checked for invasive species/disease/parasites and disinfected with 10% bleach solution for 10 minutes before deployment in alternate location, if current or previous activities involved collecting or conducting activities between multiple watersheds/distinct reef areas/islands. If collection gear cannot be bleached, gear must be thoroughly rinsed with fresh water and dried in sun for 24 hours before deployment in alternate location, sterilized with another viable method or alternate sampling gear should be utilized. If sampling disease or anomalous growth specimens, gear should be sterilized between each specimen or new collection gear should be used. If collecting in Kaneohe Bay or Maunalua Bay: Kaneohe Bay: All collection gear utilized in Kaneohe Bay must be visually checked for invasive species/disease/parasites (e.g. Kappaphycus spp., Eucheuma denticulatum, Gracilaria salicornia and Mycale grandis/armata) and disinfected with 10% bleach solution for 10 minutes before deployment in alternate location other than Kaneohe Bay. Maunalua Bay: All collection gear deployed in Maunalua Bay must be visually checked for invasive species/disease/parasites (e.g. Avrainvillea amadelpha/lacerata and Gracilaria salicornia) and disinfected with 10% bleach solution for 10 minutes before deployment in alternate location other than Maunalua Bay. The following species remain a concern to the division: Alien invasive algae (Kappaphycus spp., Eucheuma denticulatum, Gracilaria salicornia, Acanthophora spicifera, Hypnea musciformis and Avrainvillea amadelpha/lacerata), Coral disease (Montipora White Syndrome, Porites trematodiasis, Montipora black band disease, Porites tissue loss syndrome, and Porites spp. and Montipora spp. tumors, Montipora spp. growth anomaly), Orange keyhole sponge (Mycale armata/grandis).

(If applicable) Permittee will mitigate for the spread of invasive species/disease/parasites by ensuring that all organisms (e.g. coral colonies, fragments or live rock) collected from Kaneohe Bay are absent of any algae fragments or basal attachments of the invasive alga *Kappaphycus spp., Eucheuma denticulatum, Gracilaria salicornia*, or other invasive species/disease/parasites (unless collecting these non-native species specifically) before transporting organisms to alternative location for research.

(If applicable) Permittee will mitigate for the spread of invasive species/disease/parasites by ensuring that all organisms (e.g. coral colonies, fragments or live rock) collected in Maunalua Bay are absent of any algae fragments or basal attachments of the invasive alga *Avrainvillea amadelpha/lacerata*, *Gracilaria salicornia*, or other invasive species/disease/parasites (unless collecting these non-native species specifically) before transporting organisms to alternative location for research.

Quarantine Protocol. If transporting and holding live organisms (including live rock) in an aquarium/tank (if applicable): After inspection, organisms transported to other locations on island must have a quarantine protocol involving either closed-system tanks for the entire research period or closed-system tanks for a select amount of quarantine time followed by flow-through tanks with UV lights on outfall. Organisms will be placed into flow-through tanks only if observations indicate that no invasive species are present. Permittee will sacrifice any AIS/disease/parasites if found at this stage, and keep host organisms in closed system tanks for research. Length of quarantine time and type of holding tank (closed-system or open-system) will be determined based on location of collection/location of holding and type of organism collected, after consultation with DAR. Exceptions (after consultation with DAR): If quarantine process is not possible (due to capacity/lack of available closed-system tanks), the quarantine process may not be required for researchers working with organisms such as marine mammals, turtles, fish and invertebrates (other than coral) collected

from areas outside of area where research tanks are located, if researchers are able to conduct initial inspection of organisms for AIS/disease/parasites before transporting organisms back to open-system (flow-through tanks) at research location. DAR will work with researchers on a case by case basis, that work with coral and live rock collected from areas outside of outside of the area where research tanks are located, but which may have limited quarantine capacity (lack of available closed-system tanks), to determine if the quarantine process is necessary.

Transport out of Kaneohe Bay/Maunalua Bay (Oahu). Any specimens collected in Kaneohe Bay should not be transported outside of Kaneohe Bay unless being moved to a closed-system aquarium, preserved or verified to be free of non-native organisms (e.g. *Kappaphycus spp., Eucheuma denticulatum, Orange keyhole sponge (Mycale armata/grandis)*) after undergoing quarantine treatment. Any specimens collected in Maunalua Bay should not be transported outside of Maunalua Bay unless being moved to a closed-system aquarium, preserved or verified to be free of non-native organisms (e.g. *Avrainvillea amadelpha/lacerata*) after undergoing quarantine treatment.

- 3. No organism other than those listed on this permit will be collected or impacted by any activities conducted under this permit.
- 4. Collecting and transport activities under authority of this permit must be supervised directly, on site, by either the permittee or their authorized assistants (who must be a signatory of this permit).
- 5. Gear and Methods: Use of any chemical substances pursuant to Section 188-23, Hawai'i Revised Statutes, electrical shocking devices, or explosives remains expressly prohibited.
- 6. Use of Organisms: Organisms collected under authority of this permit may not be used for personal consumption or sale; organisms collected under this permit may not be traded, bartered or loaned to other individuals, institutions or entities;
  - a. Written approval must be obtained from the Division prior to:
    - i. Purchasing or any other acquisition of regulated organisms (regardless of origin) from any other party;
    - ii. Exchanging or donating any organisms collected under this permit to any other person, party or organization (unless authorized by this permit);
- 7. Sampling Moratoriums: The Division may request a voluntary sampling moratorium, or in some cases, implement a mandatory sampling moratorium, for certain organisms authorized for collection under any current permit, during times of ecosystem pressure caused by natural or anthropogenic stressors. Example of ecosystem pressure may include coral bleaching events, which have occurred most recently in Hawaii during the months of July/August to November. Please take this into consideration when applying for a permit, plan your collections accordingly and be prepared to take a sampling hiatus (if necessary) until the stressor event is determined to have ended. Exemptions may be provided for studies or projects that have a research objective directly related to the naturally or anthropogenically caused stressors, which require collecting data or samples during this period, or select projects that are evaluated to not cause additional pressure during this period.

Q. **OWNERSHIP OF BIOGENETIC RESOURCES.** The State holds legal title to the natural resources and biogenetic resources gathered from state lands, including submerged lands. See Haw. Op.Atty.Gen. Opinion No. 03-03 (April 11, 2003). Biogenetic resources refer to the genetic material or composition of the natural resources and other things connected to, or gathered from public lands. See <u>Davis v. Green</u>, 2 Haw. 327 (1861); United States v. Gerber, 999F.2d 1112 (7th Cir. 1993).

DAWN N. S. CHANG, Chairperson Department of Land and Natural Resources

- cc: (x) DOCARE (Maui, Molokai, Lanai and Kaho'olawe\*)
  - (x) DAR (Maui, Molokai, Lanai and Kaho'olawe\*)
  - (x) Special Agent in Charge, USFWS, Honolulu
  - (x) NMFS

By my signature below, I acknowledge receipt and understanding of the general and special conditions of this Special Activity Permit. Further, I agree to abide by all of these conditions when conducting activities authorized by this permit. In addition, the following list of designated assistants are authorized to conduct activities under this permit.

PRINCIPAL PERMITTEE: Hannah Bernard

DESIGNATED	<b>ASSISTANTS</b> :
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Signature:		Signature:			
Print Name:	Luke Sundquist	Print Name:	Susanne Canja		
Signature:		Signature:			
Print Name:	Jody Kimmel	Print Name:	Cheryl King		
Signature:		Signature:			
Print Name:		Print Name:			

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