

Scope of Work KAUAI NARS WEEDING

OVERVIEW

The Division of Forestry and Wildlife (DOFAW) is seeking services to provide 1) invasive plant control in the Natural Area Reserves and adjacent areas of Kauai.

Bids are solicited on a \$/acre basis. DOFAW will subsequently issue a Purchase Order(s) for desired acreages and work with the contractor to further refine which particular areas will be weeded.

All work, reports, and invoices shall be submitted to DOFAW no later than May 20, 2024 for purchase orders issued before June 30, 2023.

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Description of the Services – Invasive Plant Control

I. APPROACH / METHODOLOGY – General approach to overall control

- A. Target Species. Weed control efforts within the project areas designated in **Exhibit A-1 (within the fenced units of the Kauai NARS)** will focus on Himalayan ginger, strawberry guava, Australian tree fern, and other priority weed species identified in the initial project phase.
- B. Work Areas.
 1. Work areas are located within existing watershed management units, and are delineated by geographic location, target species presence, and prior weed control history. Each project area is significantly larger than the required acres, to allow flexibility and prioritization of weed control by Contractor. The location of the acres treated will be left partially up to expertise of Contractor. There should be a resweep of the areas weeded last fiscal year. Then work out from the previously weeded polygon areas. (See example in **Exhibit A-2**)
 2. DOFAW will provide helicopter transportation, as needed. DOFAW will also provide chainsaws and a chipper, if large patches of strawberry guava are encountered and most efficiently disposed of via chipper.
- C. Methodology.
 1. During each ground sweep, Contractor's field crew shall line up within sight distance of one another and shall walk along a compass bearing, visually scanning for target weeds throughout the target area. Due to the topographical features in certain target areas, crews may be required to spread, squeeze together, or split up to cover a drainage, ridge, or uluhe patch.
 2. Waypoints of known mature Himalayan ginger should be loaded onto a GPS and placed on maps to aid in determining where to transect and where potential hot-spots are likely to be located. Transects should be planned to cover a circle of approximately 50-meter radius or

block around any previously known or encountered. Ideally, the extent of any transect should be determined by any additional mature ginger discovered. When prioritizing locations to transect around a known mature ginger point, the side with the most intact vegetation should be the priority to complete to keep ginger from spreading uphill further into the heart of the watershed.

3. If feasible/appropriate any Himalayan ginger, strawberry guava, Australian tree fern, and other target weeds encountered shall be treated on-site. Appropriate weed control methods may include hand-pulling, basal bark, clip-and-drip, incision point application (IPA) for large tree species and/or backpack spray herbicide application. Herbicide use, application, and disposal shall be in accordance with applicable State, County or other environmental regulations and as outlined on product labels.
4. During all weed activities, GPS data on 1) target weed patches encountered, including GPS points for all mature ginger encountered with number of stalks treated; 2) areas thoroughly transected; 3) areas broadly transected or scanned (i.e. cliff sides, uluhe patches, etc.) shall be collected for subsequent mapping.

The contractor will be expected to count the number and types of plants treated and removed, amount of chemical used, and GPS coordinates (polygons) of area treated. Trees with a girth larger than 2” may be cut stumped using a chainsaw and then treated; the downed tree and its limbs must be reduced to two foot lengths, and neatly stacked in piles. Progress will be measured in acres treated, plant species and numbers of individuals removed. The contractor must collect data during control operations using GPS units. The contractor must provide evidence of work previously conducted in this manner.

Control methods other than pulling, foliar, cut stump, and frilling must be approved by NARS program manager prior to execution of said method.

Requirements

Experience in surveying for and controlling invasive plant species, including safe pesticide usage and GIS expertise.

Possess wilderness first aid certification, safety protocols, and safety plan.

Selected vendor must provide list of weeding methods it intends to use to complete work.

II. DELIVERABLES

On or before the expiration of this Contract, Contractor shall complete all the tasks and activities described herein to the satisfaction of DOFAW within the outlined project areas as specified above and in **Exhibit A-1**. In addition, during the Contract Term, Contractor shall complete and submit to DOFAW all the following:

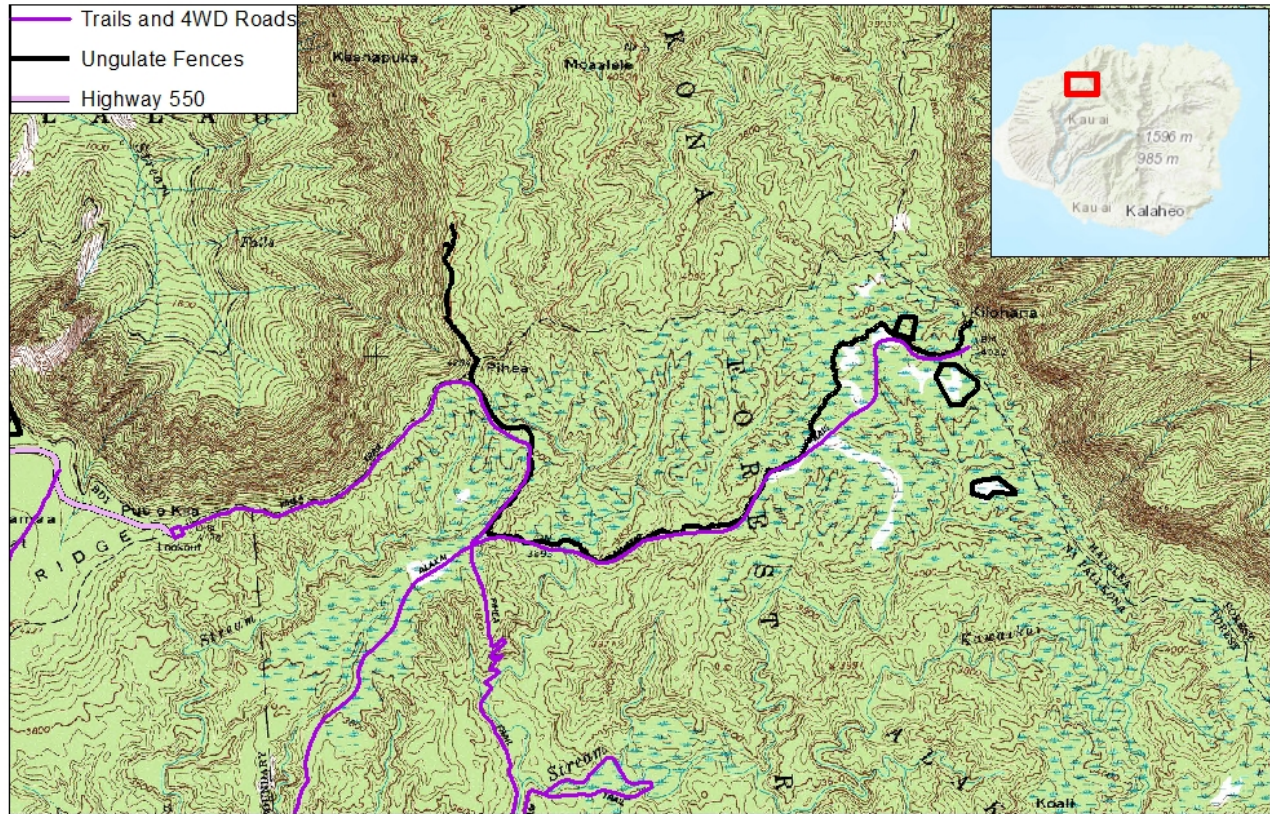
1. Progress Report(s). Contractor shall prepare and submit Progress Reports which summarize work performed during the reporting period with each invoice. Reports will include 1) a short narrative describing work performed including number of acres transected; 2) GIS shapefiles showing the locations of areas transected and locations of mature ginger with number of mature stalks

recorded in its attribute table; 3) a database export table identifying the type, number and size of weeds treated; the quantities and types of herbicide used; and labor/work hours expended.

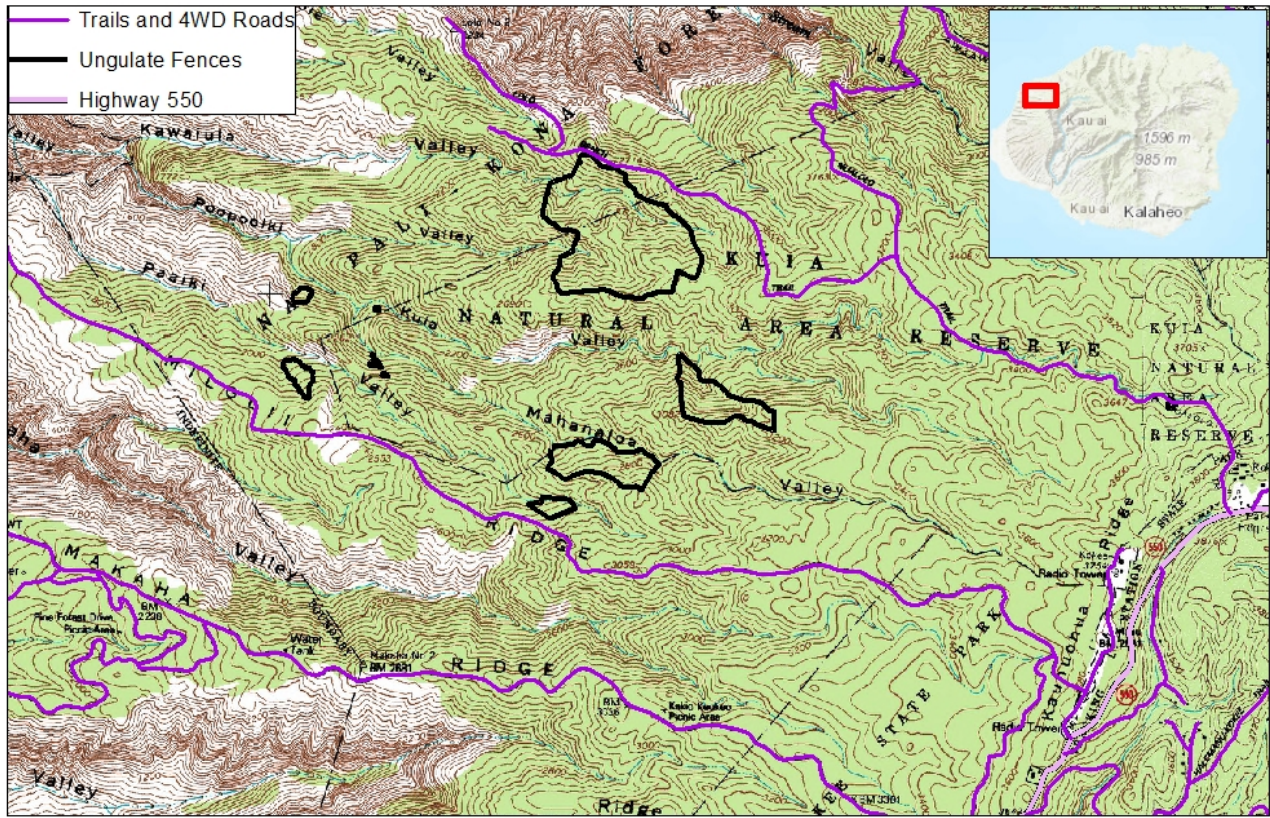
2. Final Report. In addition to the aforementioned progress reports, Contractor shall prepare and submit a Final Report which shall include all of the progress reporting information required and 1) a brief description of project locations and cumulative acreage covered to date; 2) a summary of any challenges encountered or other relevant observations; 3) recommendations for future actions.

Exhibit A-1
Weed Control Work Areas

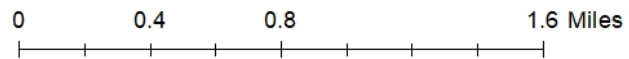
Hono O Na Pali NAR and Vicinity

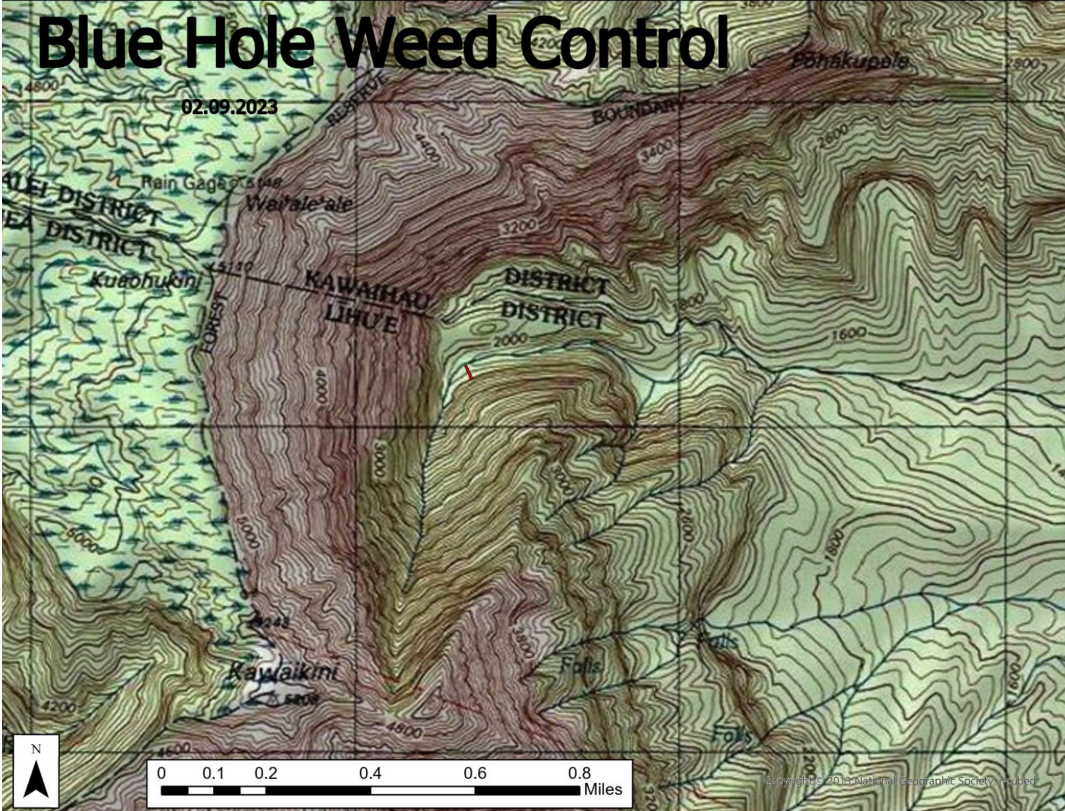


Kuia NAR and Vicinity



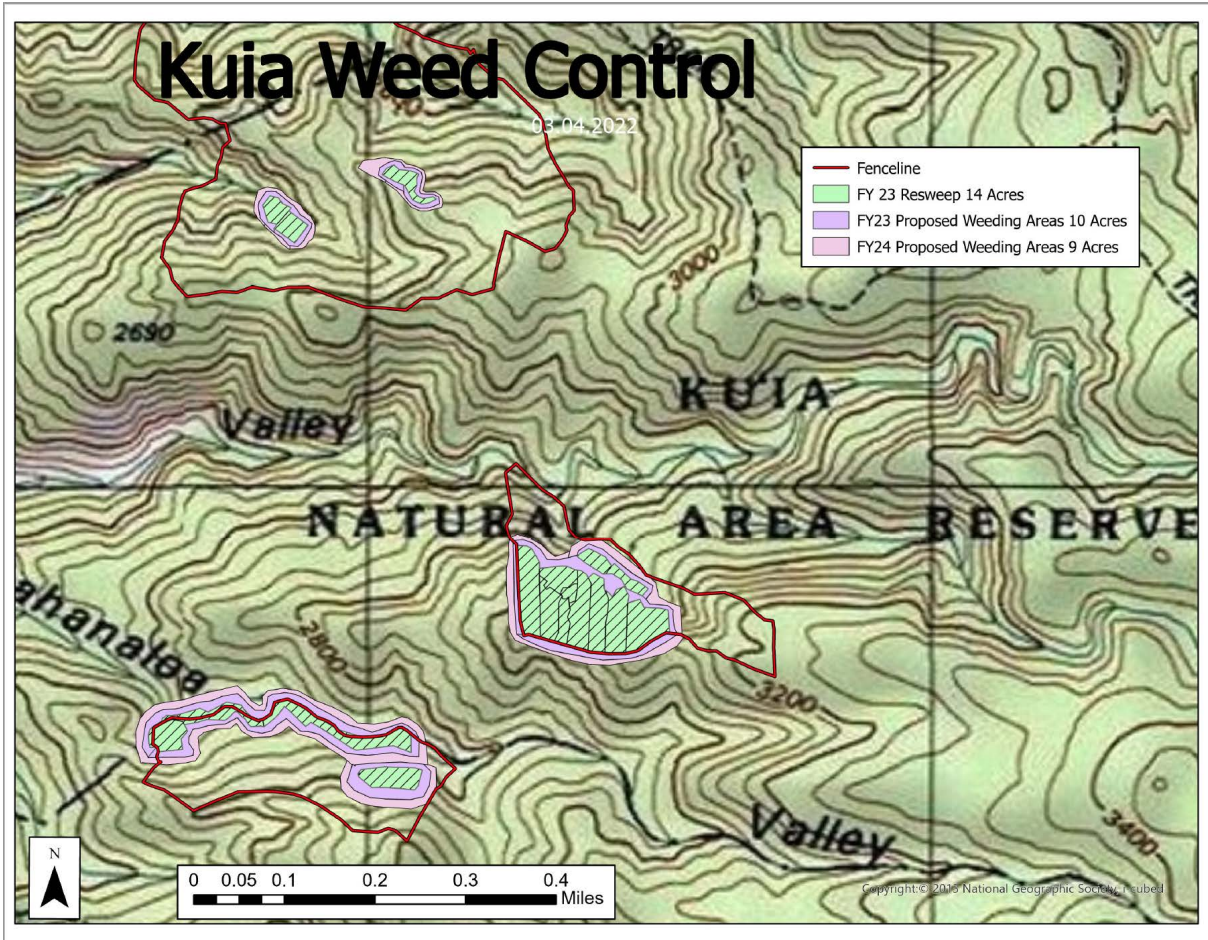
DOFAW 598-4170. Features approximate.





[End of Exhibit A-1]

Exhibit A-2
Example of expanding weeding areas to work



[End of Exhibit A-2]