

# **Request for Proposal**

## **National Tropical Botanical Garden**

### **Lower Limahuli Preserve Emergency Stream Debris Removal**

#### **I. Summary of Work**

Bids are solicited for the emergency removal of debris deposited in the Limahuli Stream resulting from the April 14-15, 2018 flooding event. A contractor is sought to provide materials, labor, and equipment for the removal and proper disposition of all vegetative debris that has the potential to dam the stream and create a safety hazard for downstream public use areas. This includes vegetative debris that was uprooted and deposited along approximately 8,000 feet (1.25 miles) of shallow rocky stream bed which is roughly 10-30 feet wide in most sections, as well as trees and shrubs whose roots have been completely exposed, making them at risk to be uprooted in a future flood event. Vegetative debris that are part of this scope of work include: roots, stumps, branches, trees and shrubs that are larger than two inches in diameter. Rocks, boulders and silt deposited by the flood event are not part of this scope of work.

In order to preserve soil cohesion and prevent unnecessary erosion, only fully exposed roots and stumps should be removed from the stream channel. Roots and stumps still buried in the soil will be cut as close to soil level as feasible and left in place. All vegetative debris that is removed from the stream channel must be cut into manageable pieces no longer than six feet in length, and stacked well outside of the flood way where they cannot be swept back into the stream by future five-year flood events. Contractor and project monitor must agree on a debris pile location before debris can be stacked there. It is the Contractor's responsibility to clear existing vegetation at debris pile locations in order to facilitate access and stacking of debris at those locations.

It is the responsibility of the Contractor to adequately photo and geospatially document their progress on this project. This will include building a photo library documenting each debris pile prior to removing it and after the debris removal has been completed. Additionally the Contractor must provide accurate GPS coordinates for all final debris piles which will be left permanently in place once the project is completed.

It is expected that work crews will hike into the project site daily and contractor will be prepared to operate safely and efficiently under backcountry conditions.

A full description of the project and maps are attached in Appendix A.

#### **II. Description of Terrain and Vegetation**

The Lower Limahuli Valley is a remote section of Limahuli valley located on the North Shore of Kauai. The area is only accessible on foot and conditions are often wet and muddy. Stream side vegetation can be dense and contractor must be aware to not damage native vegetation to the extent possible. The terrain is moderately sloping and rainfall can range from 10-20 inches per month.

### **III. Access**

Access to Limahuli valley is via Kuhio Highway which is currently closed except to escorted convoys of permitted vehicles. Limahuli Garden, the gateway to Limahuli Preserve is located at 5-8301 Kuhio Highway and Contractor will have to arrange daily access past the Waikoko Check Point from the Kauai Planning Department for Contractors vehicles and workers.

Access to Lower Limahuli Preserve is by foot only. Contractor's workers can park at Limahuli Garden and hike into project area from there. The Contractor will be responsible for coordinating work schedules, timing, and communication with the NTBG point of contact working at Limahuli Garden. Low impact backcountry camps can be utilized for overnight stays during these periods should the contractor desire to do so.

Weather conditions at the project area can change rapidly. The Contractor must have a flexible schedule and be able to respond when the weather does not allow for safe work to take place. There is no cell phone coverage in the project area and Contractor should be prepared to establish radio contact with NTBG staff in the event of an emergency.

### **IV. Equipment, Supplies, and Labor**

All equipment, tools, transportation and labor will be provided by the Contractor as part of their bid. All work will be performed under a single contract.

### **V. Site Preparation**

NTBG staff will mark any rare native plant species near the stream corridor with a bright color flagging tape – these plants must not be disturbed during the debris removal process. Contractor must also be aware that ancient archaeological sites exist in the project area and Contractor will ensure that they are not damaged during the debris removal process. NTBG will provide Contractor with maps of known archaeological sites adjacent to the work site so Contractor can be extra cautious while working in these areas.

### **VI. Pre-bid On-site Meeting**

Bidders will be required to inspect the site prior to completion of the bid. Maps and pictures of the project area are included in Appendix A. Terrain and logistic conditions present difficulties that need to be taken into consideration for the successful bid. To arrange a site visit for the purposes of a bid proposal or for any question regarding the RFP, please contact:

Katie Champlin  
Interim Director, Limahuli Garden and Preserve  
Office: 808-826-1668 x.3, Cell: 808-651-7051  
kchamplin@ntbg.org.

### **VII. Additional Requirements**

In addition to costs for the line item tasks above, the prospective contractor must also:

1. Provide certificate of insurance (that names NTBG as additionally insured).
2. Arrange to visit the site by contacting the contracting officer Katie Champlin.

3. Have a current Contractors License in good standing with the State of Hawaii

#### **VIII. Bid Elements**

Qualified contractors are requested to submit a bid for the following aspects of the project costs:

- Equipment and Labor
- Materials
- Documentation
- Cost by debris pile site type (Significant, Moderate, Minor – see Appendix A)
- Overhead and taxes

#### **IX. Bid Deadline and Contract Award**

All bids must be received at NTBG office located at 3530 Papalina Road, Kalaheo, HI 96741, no later than 4:00 pm on Monday, August 20, 2018. NTBG will award the contract no later than 4:00 pm on Wednesday August 22, 2018.

#### **X. Project Commencement and Completion**

The successful bidder must be ready to commence with the project no later than one week following the award notification. Project must be completed including all documentation no later than November 1, 2018. Extension of this deadline is possible but must be approved by FEMA.

# **Appendix A**

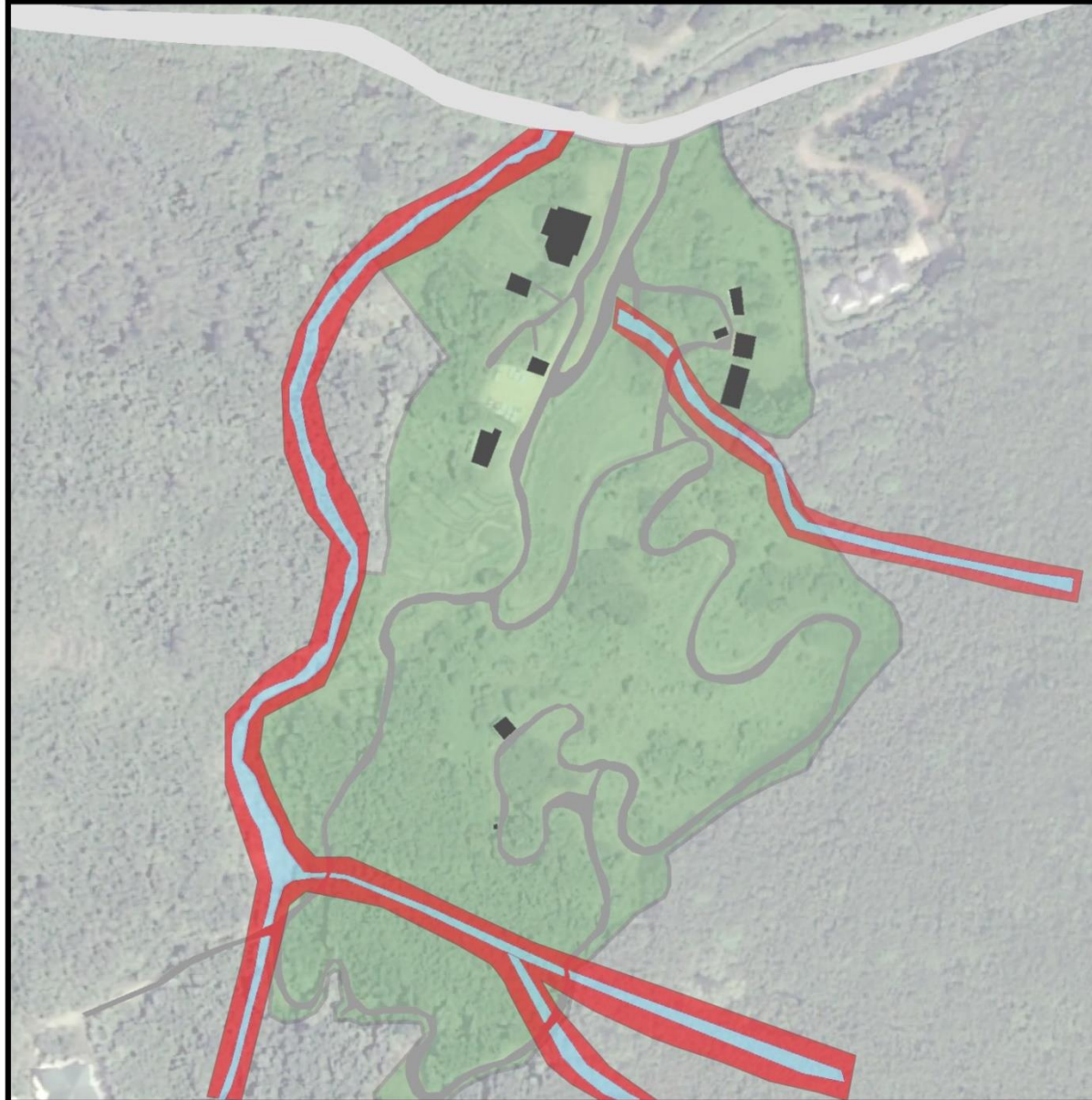
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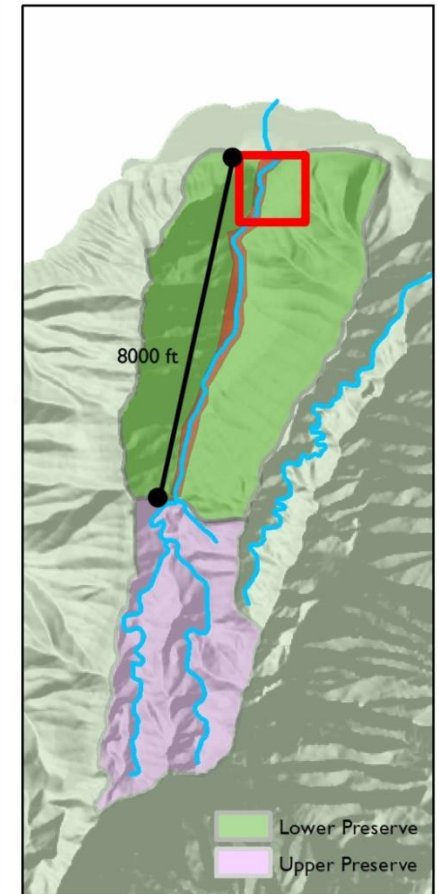
**Lower Limahuli Preserve Emergency Stream Debris Removal**

# Project Area – Limahuli Garden & Preserve

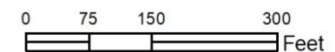
## LIMAHULI GARDEN



## LIMAHULI VALLEY



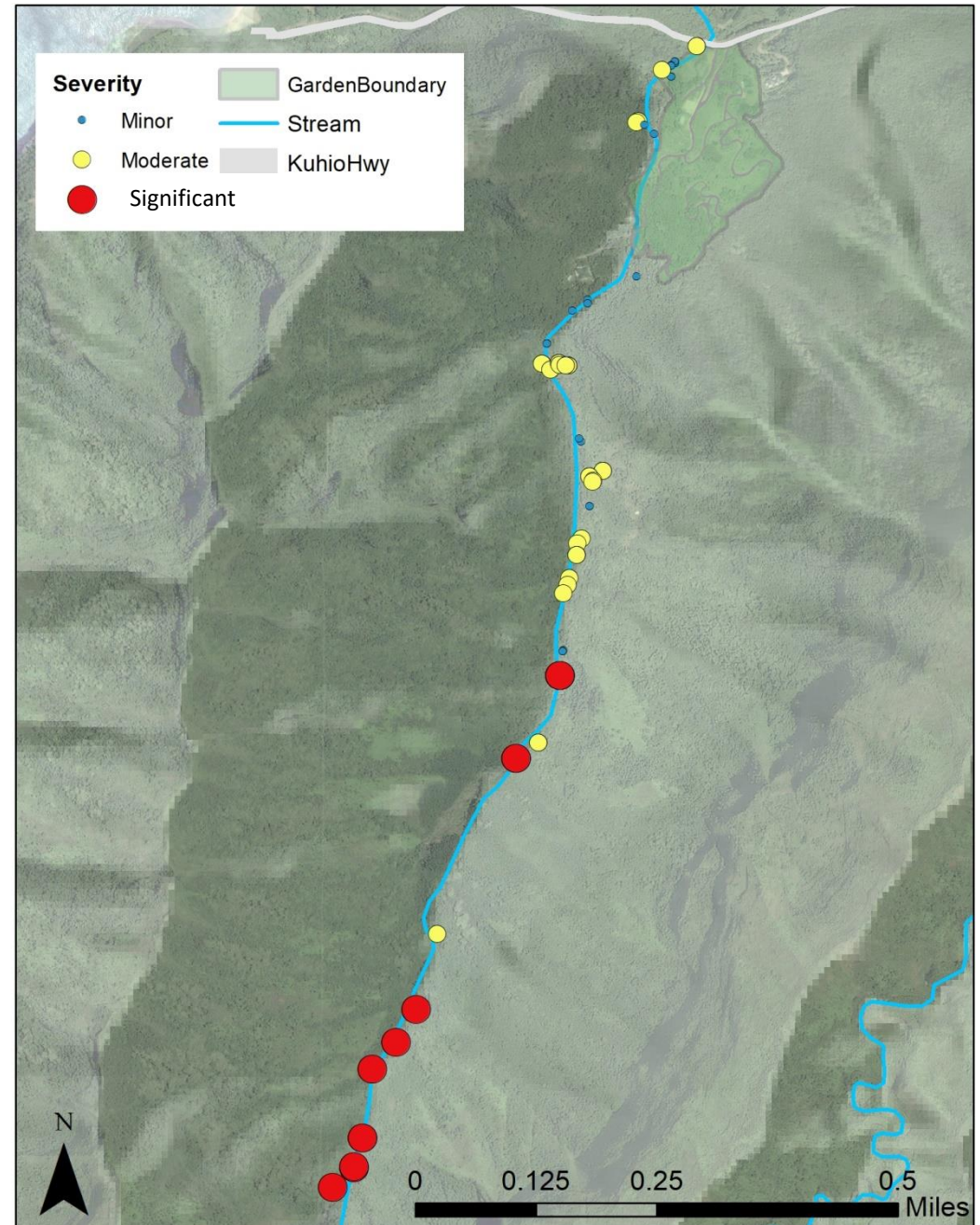
- Streams
- Buildings
- GardenBoundary
- Project Area





## LIMAHULI PRESERVE STREAM DEBRIS

Vegetative Debris Map showing locations of major vegetative debris deposits in Limahuli Stream.



# Limahuli Stream Debris Assessment

Cold Pond to Waterfall

8/8/2018

Type of Site	Count
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Significant	11
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Moderate	18
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Minor	95
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Site definitions:

**Significant:** Challenge to count individual trees that need to be removed due to high volume and tangle , stream blocked or almost completely dammed.

**Moderate:** Over 5 trees that need to be removed, potential for dam forming

**Minor:** Individual trees that need to be removed, can move easily in strong water





“Moderate” debris accumulation





“Minor” debris accumulation





“Minor” debris accumulation





“Significant” debris accumulation





“Significant” debris accumulation





Rock and Silt not part of RFP Scope of work