Control of *Chromolaena odorata*:
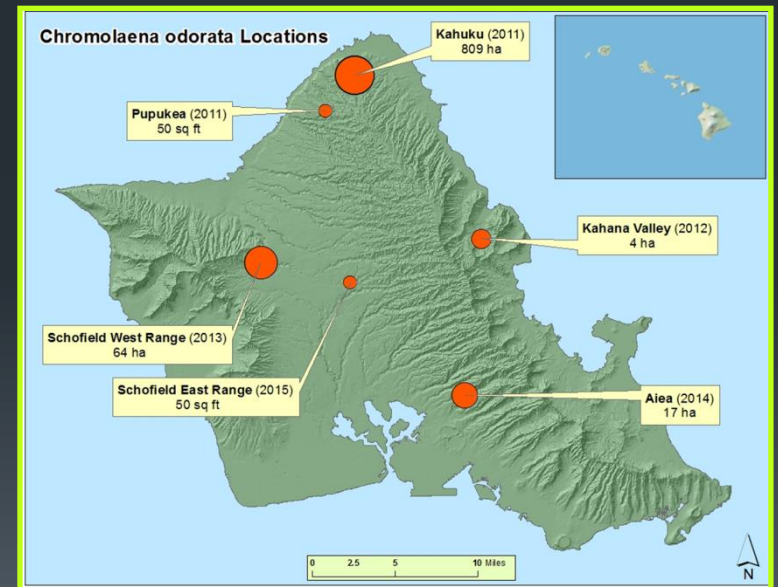
A Bedeviling Problem

ChrOdo Overview

- Native Range

- Habitat (Prime vs. Poor)

- Growth habit & Reproduction

- WRA Score: 28 (High Risk)

- Potential Hawaii Introduction

OISC Control Sites

- Kahuku Training Area

- Ahupuaʻa O Kahana State Park

- Camp Smith

- Keaīwa Heiau State Park

- Pūpūkea Coastal/Residential
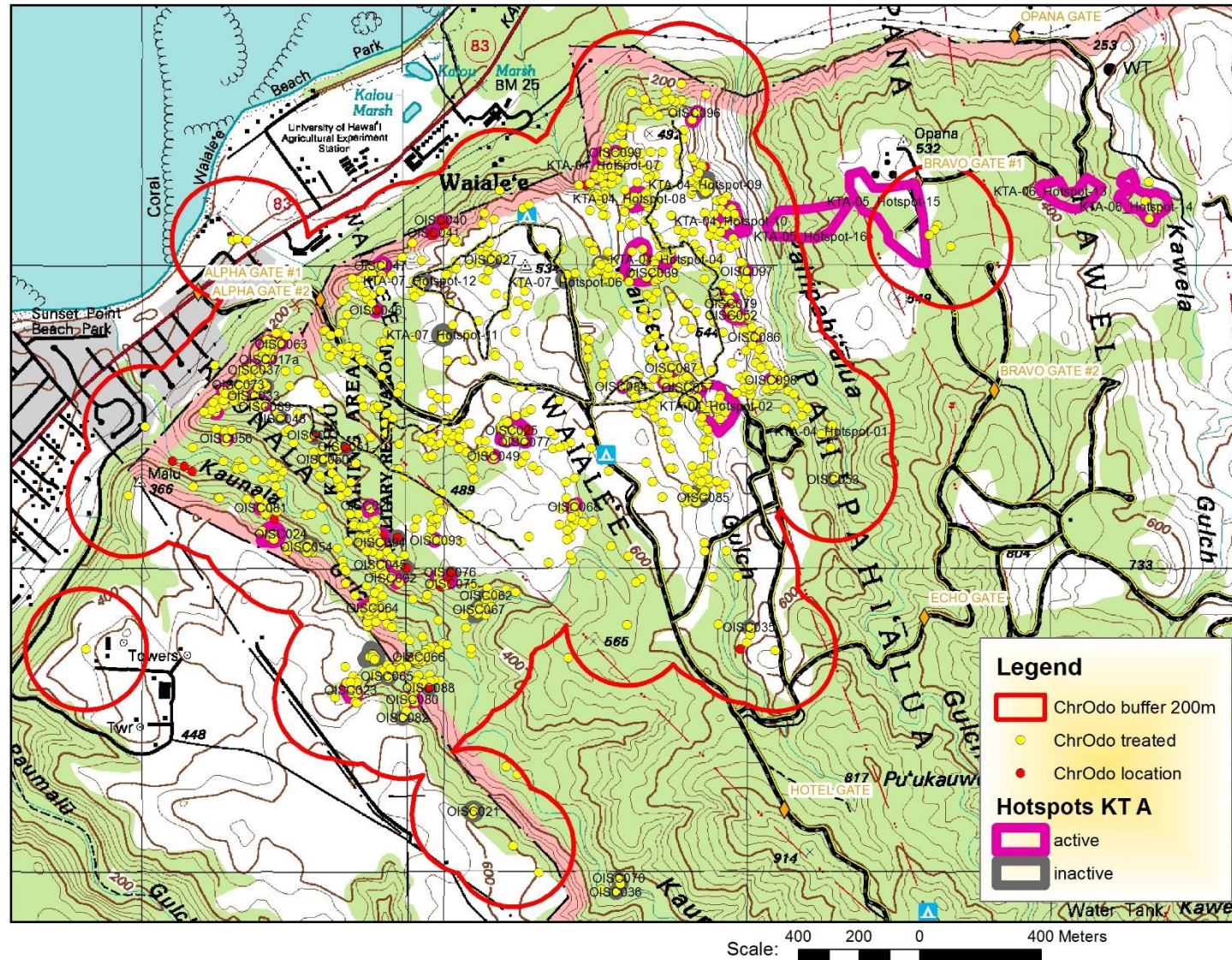
- Keamanea Watershed

This Map shows the general locations of *Chromolaena* known on Oahu. The size of the dots represents the population size (number of plants found to 2015) with the Army's Kahuku Training Area as the largest infestation.
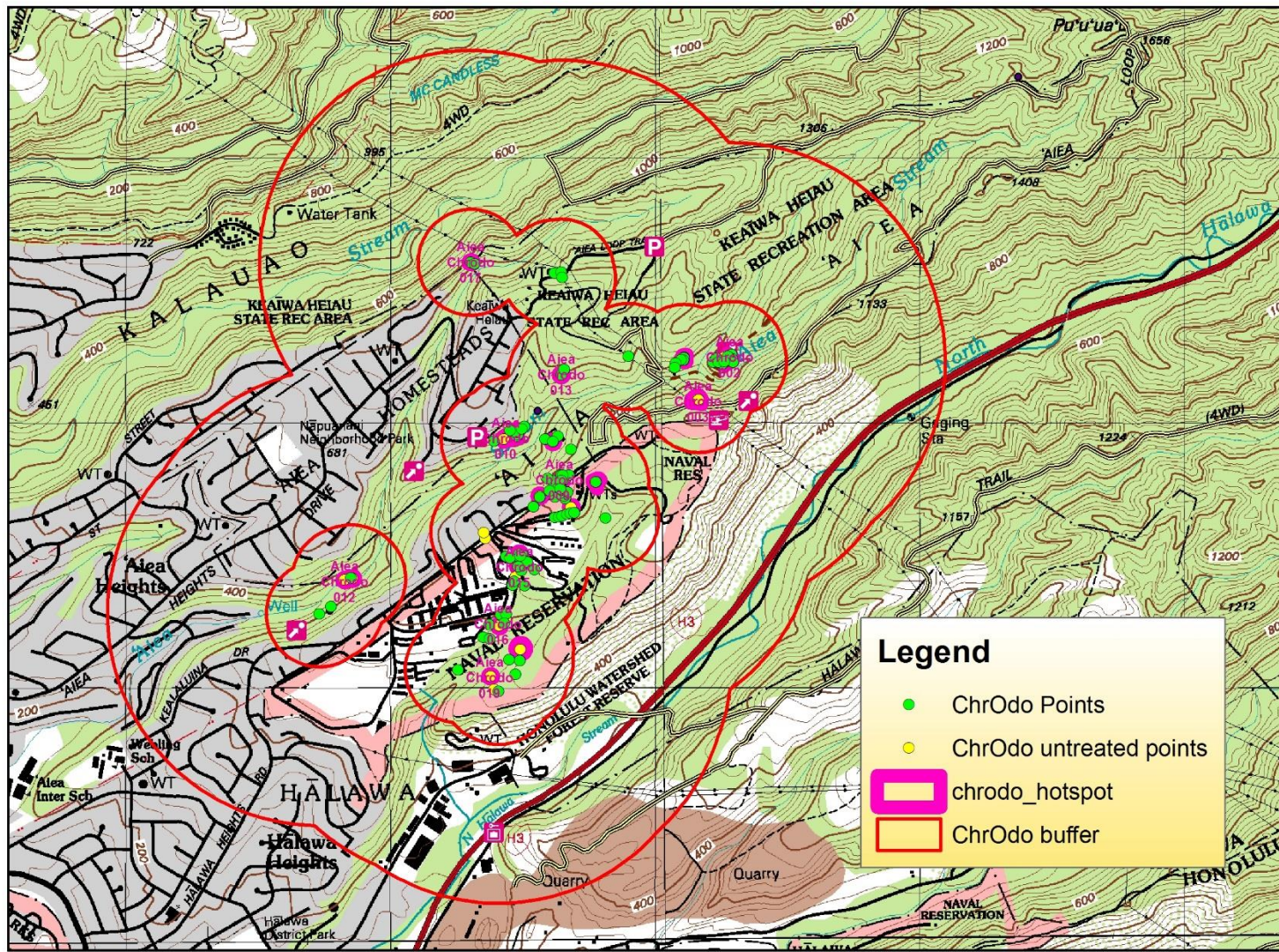
Oʻahu Detection Timeline

Initial Detection @ KTA: January 2011

OISC begins survey/treatment @ KTA: March 2011

Plants detected in Kahana Valley: January 2013

Plants detected on Aiea Loop Trail: November 2014

Plants detected in Keamanea Watershed: January 2015

Plants detected on Camp Smith property: March 2015

Kahuku Training Area (KTA)

Legend
- ChrOdo buffer 200m
- ChrOdo treated
- ChrOdo location

Hotspots KT A
- active
- inactive

Scale: 400 200 0 400 Meters

Aiea

Legend

- ● ChrOdo Points
- ○ ChrOdo untreated points
- ▭ chrodo_hotspot
- ▭ ChrOdo buffer

Scale: 480   240   0   480 Meters

Kahana

Legend

- ChrOdo_pts_untreated
- ChrOdo_pts_treated
- ChrOdo buffers
- Hotspots_KTA (2xs a year)
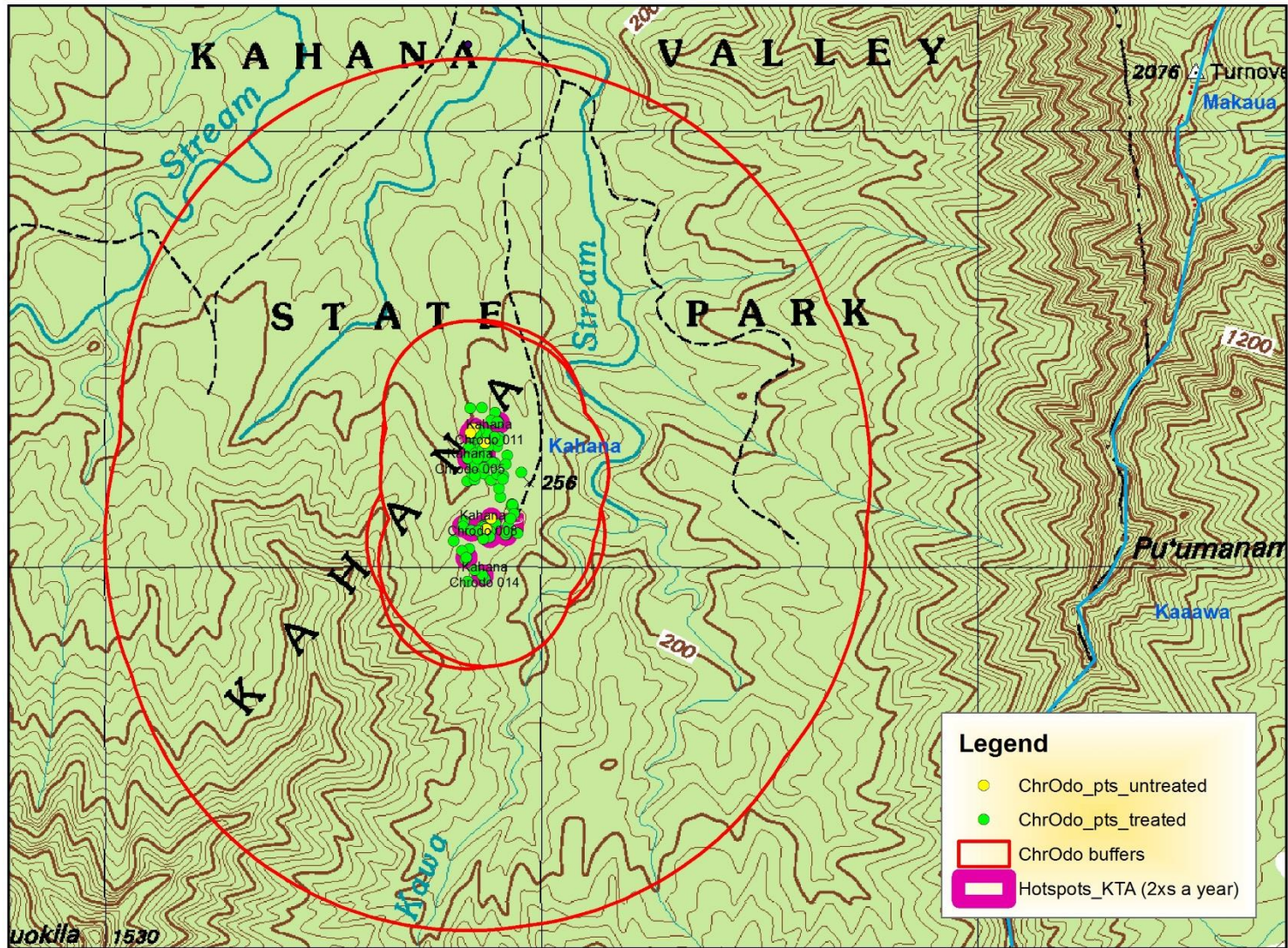
Scale: 290 145 0 290 Meters

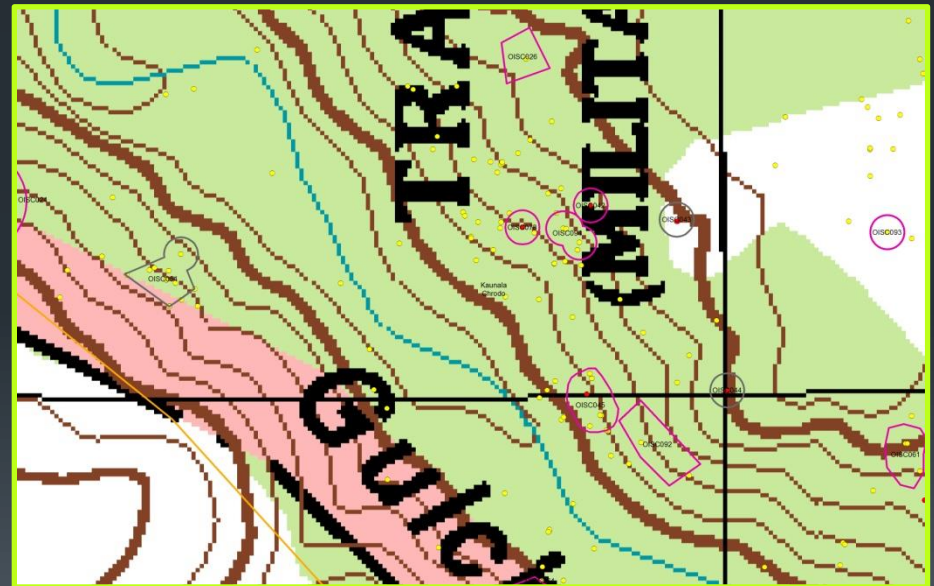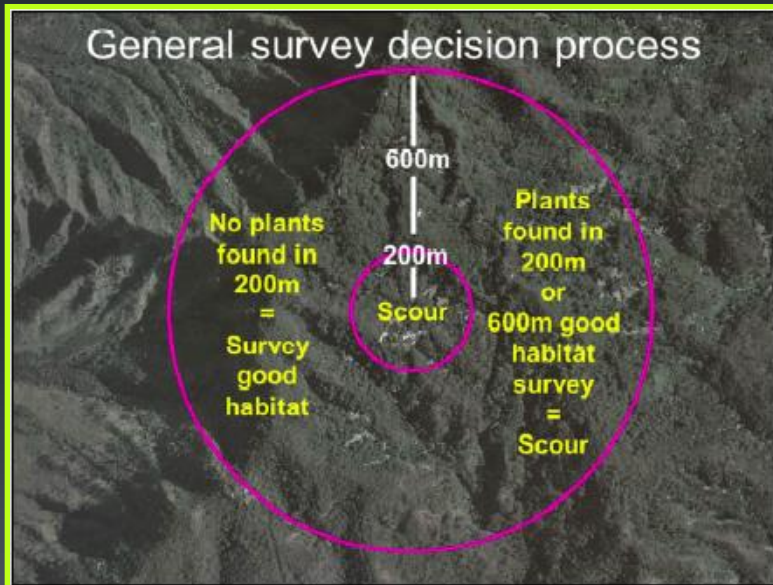# OISC Survey Strategy

- Delimit
  - 200 Meter Buffer
  - 600 Meter Buffer

- Hotspots
  - ≥ 5 Mature Plants
  - 10 Meter Radius

General survey decision process

600m
200m
Scour

No plants found in 200m = Survey good habitat

Plants found in 200m or 600m good habitat survey = Scour

ChrOdo Treatments

- Hand pull

- Cut Stump

- Foliar/Drench

  - Power spray vs. Backpack spray

ChrOdo Ops: Acheivements

- 2014
  - 1473 acres surveyed; 5268 plants treated; 2108.5 field hours
- 2015
  - 3873 acres surveyed; 11,875 plants treated; 3,659.0 field hours
- KTA
- Outreach
  - Groups we have reached
  - Partnerships
- Treatment method (Power-Sprayer)

ChrOdo Ops: Complications

- Decontamination

- Treatment method (cut/stump, pull)

- Survey strategy

- Reaching the public

- New populations, distant areas

- Labor and money

- Surrounding vegetation

ChrOdo Ops: Future Efforts

- Outreach

  - Social Media Marketing Campaign

  - Connecting target audiences

  - Invasive Weed Mobile App

  - Motocross Wash Rack

- Fieldwork

  - Cross-agency collaboration

  - Survey/treatments of known infestations

  - Reconissance/delimiting for any future populations

Open Floor!

- Experience with new wind dispersed species?

- Survey strategy?

- Better decontamination signage and materials?

  - All state trails?

- Other groups to target for outreach?

- Means to convey urgency for ChrOdo to the broader public?

- Cut-stump regrowth experience?

- Other questions/comments?