

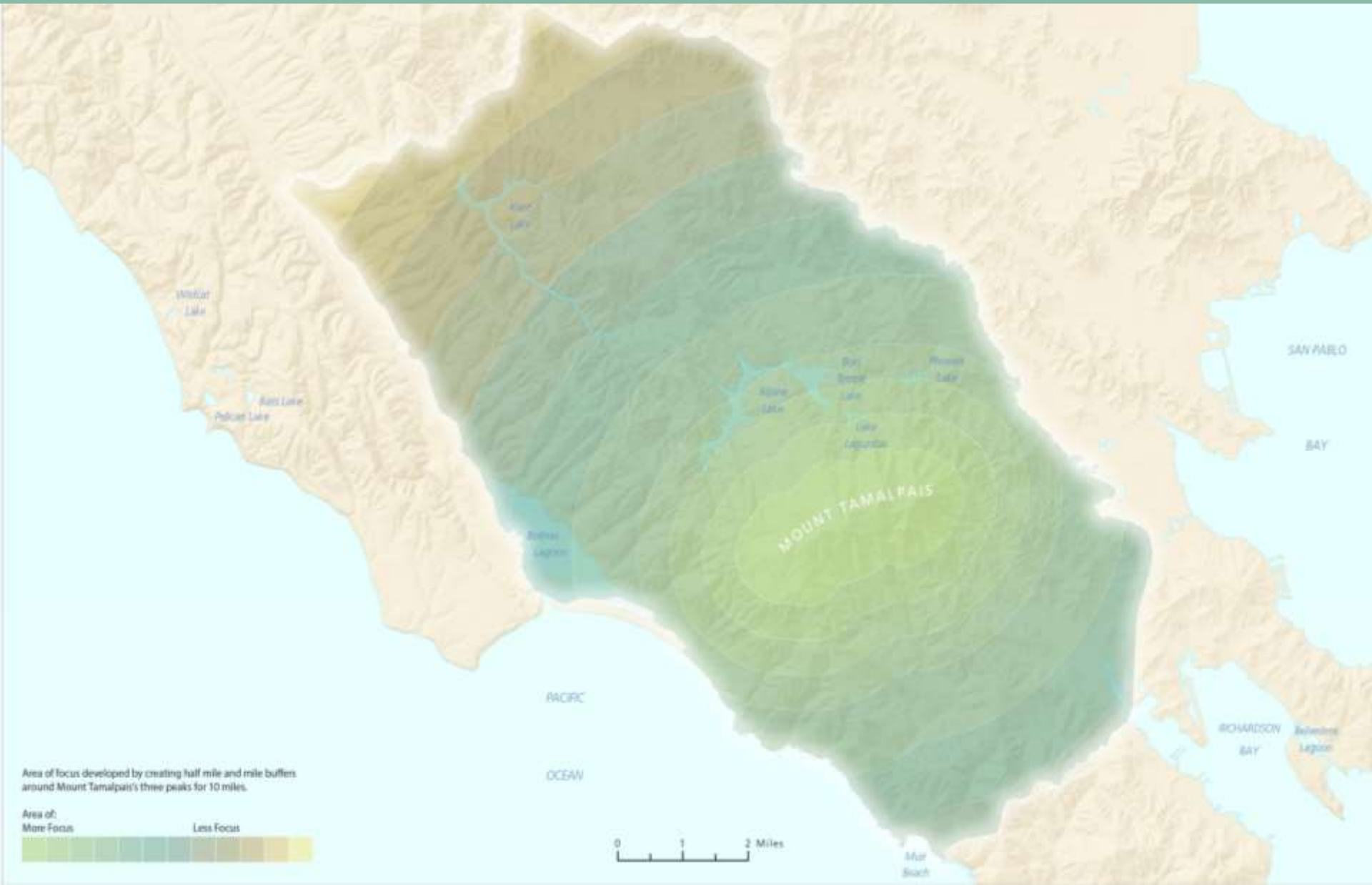
ONE TAM

Early Detection Across Boundaries

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Area of focus developed by creating half mile and mile buffers around Mount Tamalpais's three peaks for 10 miles.

Area of:
More Focus Less Focus





TLC GOVERNANCE STRUCTURE



TAMALPAIS LANDS COLLABORATIVE

EXECUTIVE TEAM

Comprised of the executive officers of each of the five TLC partners; provides overarching guidance on the partnership's direction and priorities.

WORKING GROUP

Develops and manages the work plan, budget, and day to day operations of the TLC. Members also serve as liaisons from the TLC to their home organizations.

COMMITTEES

COMMUNICATIONS

Develops shared messaging and communications pieces around TLC's work.

HEALTH ADVISORY

Guides the science-based study of the health of Mt. Tam's natural resources.

CONSERVATION

Carries out studies on and planning for enhancement of key natural resources while offering community science opportunities, and tracks and manages invasive plants on the mountain.

PROGRAMS

Coordinates the community science, restoration, youth, and other shared volunteer and educational programming.

PROJECT & PROGRAM SUBCOMMITTEES

Library Backpacks

Provides park passes for checkout at Marin libraries to increase access for the community to public lands.

West Peak

Leads the restoration effort of Mt. Tam's West Peak, a former Air Force base at the mountain's highest point.

Bolinas Lagoon

Leads the planning for helping this important ecosystem become more resilient to climate change.

Roy's Redwoods

Leads the development of concepts for enhancing and protecting this old growth redwood grove and providing a sustainable visitor experience.

Wildlife Picture Index Project

Directs all aspects of the remote sensing wildlife camera program.

Bat Inventory

Oversees the coordination and implementation of 3-year bat inventory.

Early Detection Rapid Response

Oversees the protocol development, data management and implementation of EDRR program.

Pollinator Inventory

Oversees the coordination and implementation of 2-year inventory of pollinators.

Seeps & Springs Inventory

Oversees the coordination and implementation of 2-year inventory of seeps and springs.

Volunteer Work Days

Coordinates quarterly mountain-wide volunteer events, drawing 100+ volunteers to help restore habitat, maintain trails, and more.

Outreach, Interpretation, & Roving Ranger

Manages the Roving Ranger program, a mobile trailhead and mountain education hub, and leads outreach efforts to engage the wider Marin community in the TLC's work.


Youth Initiative, Internships, & LINC

Plans and implements programs that provide youth opportunities to gain place-based educational and work experience in natural resources.

One Tam Community Ambassador Program

Builds a team of dedicated volunteers that help connect our work to the Marin community.





Carries out studies on and planning for enhancement of key natural resources while offering community science opportunities, and tracks and **manages invasive plants on the mountain.**

5 year goal: Survey all roads and trails for invasive plants



Species
list

December 2015

EDRR
Subgroup
Formation

January 2016

Pilot
Season

March 2016



TAMALPAIS LANDS COLLABORATIVE

Early Detection of Invasive Plants Protocol



Cover photo attribution:
Yellow Starthistle
(*Centaurea solstitialis*)
Andry Zharkikh
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	Description	Data Collected
Priority One	<p>Highly invasive; typically not widespread.</p> <p>Control or even eradication is often feasible.</p>	<p>Polygons</p>
Priority Two	<p>Highly invasive; typically widespread.</p> <p>Outlier patches may be targeted.</p>	<p>Polygons for patches $<100\text{m}^2$;</p> <p>Buffered points for patches $>100\text{m}^2$</p>



Photo credit: Josh Nuzzo



Photo credit: Andy Rogers

Old favorites including

- several brooms
- several asters
- several ivies
- several perennial grasses
- riparian invaders



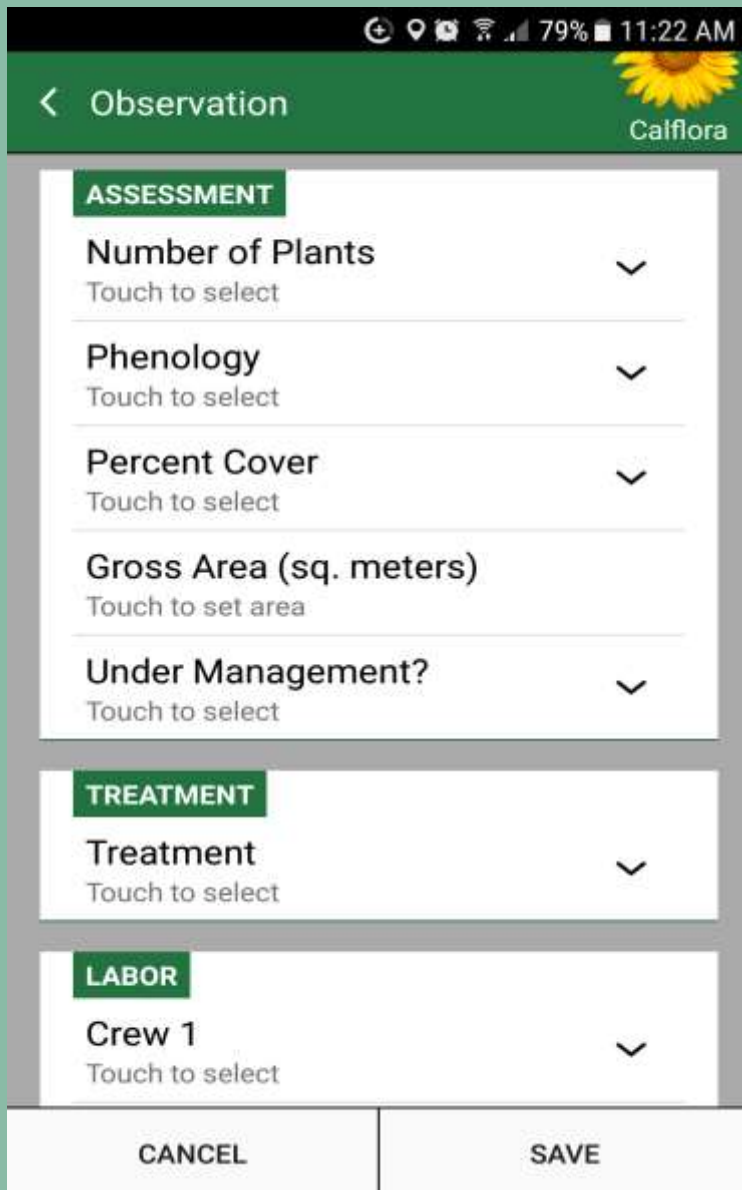


- Polygons (mostly)
- 20m patch distance
- Tracklogs record survey path
- Treat patches you can effectively remove in 10 minutes or less
 - Who knows when you'll be back!

- Repeated surveys
- Tracking treatment and labor effort
- Requires frequent reiteration in training

But, it works!





The screenshot shows the Calflora mobile application interface for recording an observation. At the top, there is a green header with a back arrow, the word "Observation", and a sunflower icon with the text "Calflora". Below the header, the form is organized into sections: "ASSESSMENT", "TREATMENT", and "LABOR". Each section contains a dropdown menu with a chevron icon and a "Touch to select" prompt. The "ASSESSMENT" section includes "Number of Plants", "Phenology", "Percent Cover", "Gross Area (sq. meters)", and "Under Management?". The "TREATMENT" section includes "Treatment". The "LABOR" section includes "Crew 1". At the bottom of the form, there are two buttons: "CANCEL" and "SAVE".

- Basic assessment info is common to all agencies
- Slight variations in treatment and time tracking
- Frequent reiteration during training





	Unique EDRR Miles	Repeat EDRR Miles	Total Miles
All Teams	164	29	193
One Tam Added Capacity	80	25	105



**Priority One
Patches**

16

**Priority Two
Patches**

1116

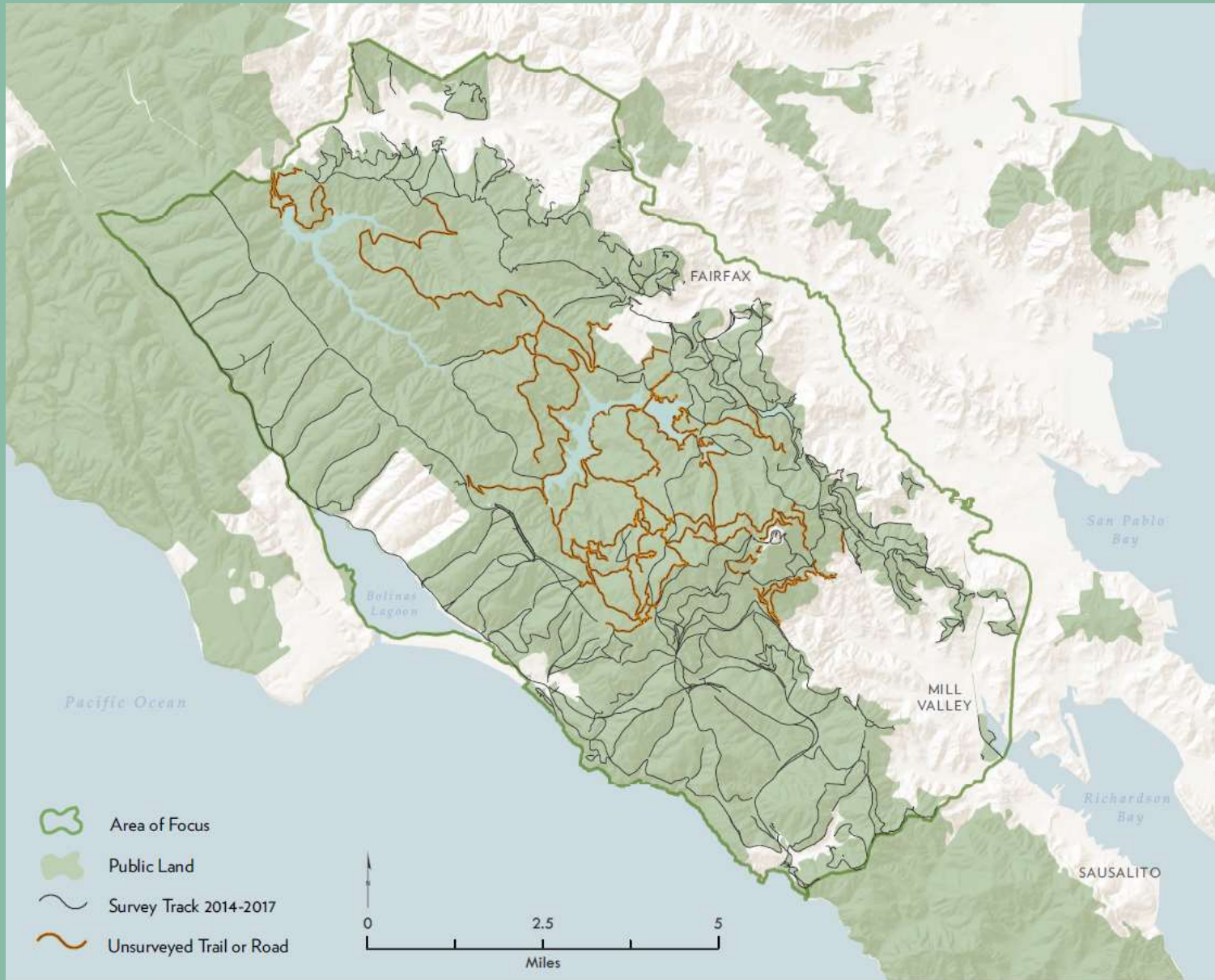




- 10 min trail treatments
 - Bags, tools in pack
- Biweekly calls for coordination
- Divvy up new problems with partner help
- Build time into survey schedule for treatments April – July



LOOKING FORWARD





- Balance between survey and treatment
- Survey return intervals
- Incorporating infrastructure areas
- Riparian surveys



WHIPPET

BETA

BETA

WHIPPET helps land managers prioritize invasive plant populations:

- ✓ **Ranks** based on impacts, invasiveness, and feasibility of control.
- ✓ **Integrates** species data with spatial analysis.
- ✓ **Allows** users to select species and area to analyze.
- ✓ **Uses** data from the Cal-IPC Inventory, Calflora, and other sources.

Start by logging in with your Calflora e-mail address and password.

Calflora e-mail address

Calflora password

Log In to WHIPPET

Calflora Sign Up

Read User Guide

WHIPPET for Desktop

TREATED INFESTED ACRES
 ORGANIZATIONS: Marin County Parks data pro (OneTam EDRR), Marin Municipal Water District (One Tam EDRR), Mount Tamalpais State Park (One Tam EDRR), San Francisco Bay Area Network of National Parks (One Tam EDRR) May - August, 2016
 PLANT LIST: One Tam EDRR Priority Ones AREA: One Tam

Plant	Mapped Gross Acres	Mapped Infested Acres	Treated Gross Acres	Treated Infested Acres	Mechanical Treated Infested Acres	Other Treated Infested Acres	Percent of Infested Acres Treated	GPRA Treated Infested Acres	Total Treatment Hours	Mechanical Treatment Hours	Other Treatment Hours
<i>Asplenium trichomanes</i>	0.09599	0.00355	0.09599	0.00355	0.00355		100.00 %	0.00355	1.20	1.20	
<i>Bromus racematosus</i>	1.58975	0.02997	1.43921	0.02809	0.02809		94.68 %	0.02902	37.00	37.00	
<i>Carex pendula</i>	0.20915	0.00104	0.00599	0.00003	0.00003		2.88 %	0.00003	0.10	0.10	
<i>Centaurea calcitropa</i>	1.51814	0.02651	0.89123	0.01186	0.01061	0.00105	43.97 %	0.01175	36.46	35.13	1.33
<i>Olinchus graveolens</i>	1.05124	0.00957	0.88261	0.00441	0.00441		46.08 %	0.00441	4.20	4.20	
<i>Elymus caput-medusae</i>	0.00311	0.00002	0.00311	0.00002	0.00002		100.00 %	0.00002	1.00	1.00	
<i>Solanum elaeagnifolium</i>	0.27501	0.01313	0.25250	0.00758	0.00758		57.73 %	0.00758	2.10	2.10	
TOTAL	5.32316	0.08349		0.05533	0.05428	0.00105			82.17	80.84	1.33



STEAL
WITH
PRIDE



Thank you!

Photo credit: Lieven Leroy