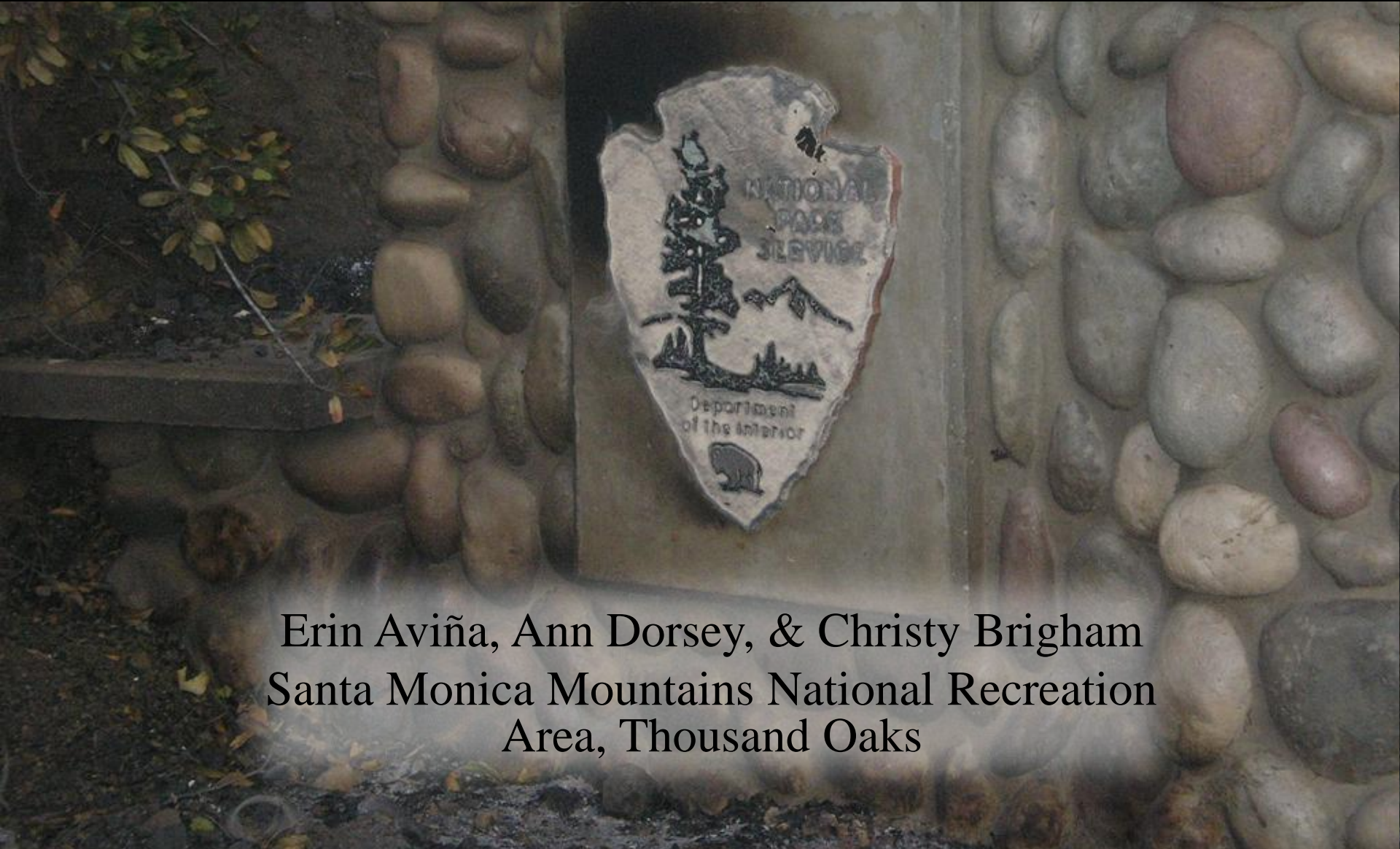


Post-fire recovery plan for Solstice Canyon in Malibu, CA USA



Erin Aviña, Ann Dorsey, & Christy Brigham
Santa Monica Mountains National Recreation
Area, Thousand Oaks

The Recovery Plan

- ❖ Solstice Canyon
- ❖ Goals & Objectives
 - ❖ Plan
 - ❖ Results
- ❖ What we learned
 - ❖ What next?

Solstice Canyon

❖ Malibu, CA.

❖ 550-acre

❖ Perennial stream

❖ Floristically diverse



Too much *Euphorbia*!!



Lots of blood, sweat &
tears!!!



Corral Canyon Fire



Corral Canyon Fire



Corral Canyon Fire

➤ Open space



Invasive colonization



Invasive colonization



Invasive colonization



Invasive colonization



Goal



Goals

Maintain past restoration efforts

- ❖ Remove all target invasives
- ❖ Close the canopy
- ❖ High native cover
- ❖ Maintain floristic diversity

Objectives

- Reduction in *E. terracina* by 50%
- Decrease all non-native by 50%
- Increase native cover by 20%

In 3 seasons!!

Post-fire recovery plan

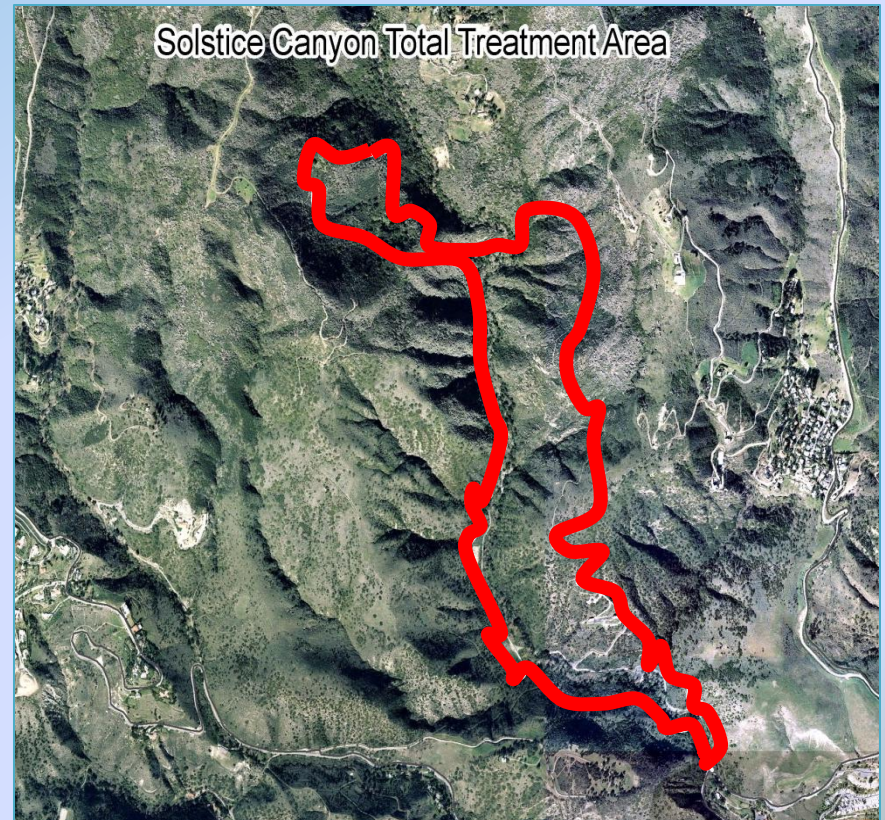
1. Surveys
2. Defining of treatment areas
3. Pre-treatment assessments
4. Treatment prioritization
5. Treatment
6. Post-treatment assessment

Park surveys

Goal: locate large populations

Information gathered

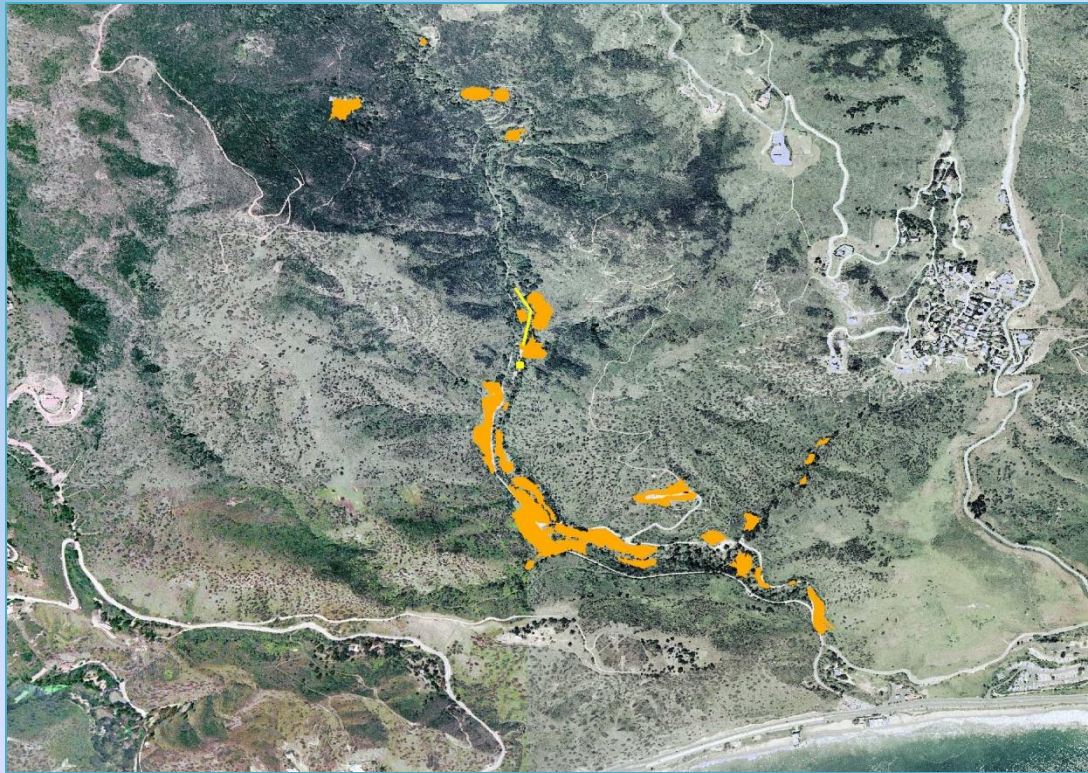
- Location
- Size
- Dominant target



Post-fire recovery plan

1. Surveys
2. Defining of treatment areas
3. Pre-treatment assessments
4. Treatment prioritization
5. Treatment
6. Post-treatment assessment

Defining of treatment areas



37 acres

Post-fire recovery plan

1. Surveys
2. Defining of treatment areas
3. **Pre-treatment assessments**
4. Treatment prioritization
5. Treatment
6. Post-treatment assessment

Pre-treatment assessments

Data collected:

1. % cover of natives
2. % cover non-natives
3. % cover target species
4. % cover bare ground
5. % cover litter
6. Phenology of target species



Post-fire recovery plan

1. Surveys
2. Defining of treatment areas
3. Pre-treatment assessments
4. **Treatment prioritization**
5. Treatment
6. Post-treatment assessment

Treatment prioritization

Scoring system:

1. Native/ Weed ratio – *habitat quality*
2. Identity of target species - *abundance*
3. Proximity to creek and/or foot traffic –*will it travel*

Post-fire recovery plan

1. Surveys
2. Defining of treatment areas
3. Pre-treatment assessments
4. Treatment prioritization
- 5. Treatment**
6. Post-treatment assessment

Treatment

- Based on the proximity of the target species to surrounding native plant populations
- Removed using approved IPM methods

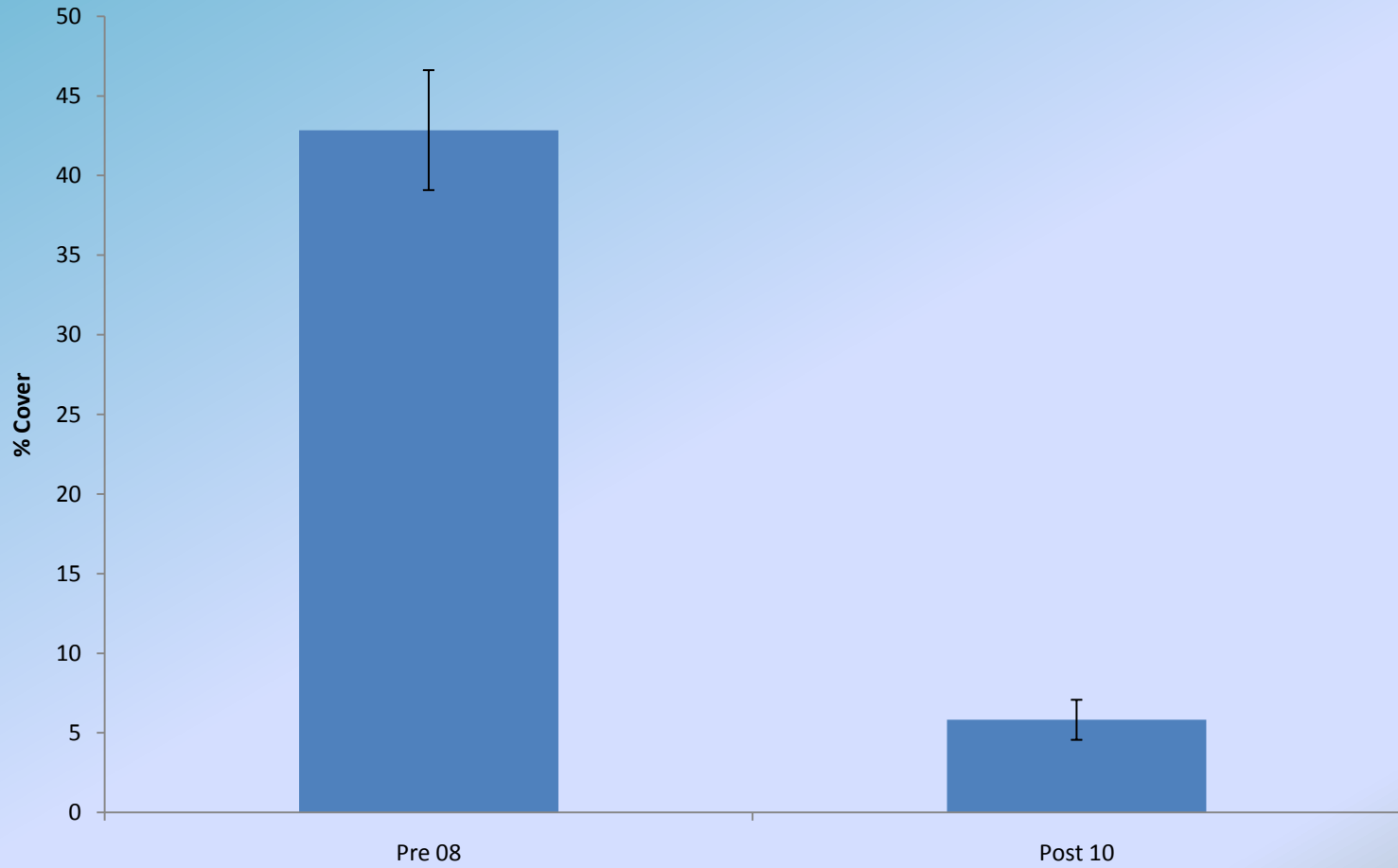
Post-fire recovery plan

1. Surveys
2. Defining of treatment areas
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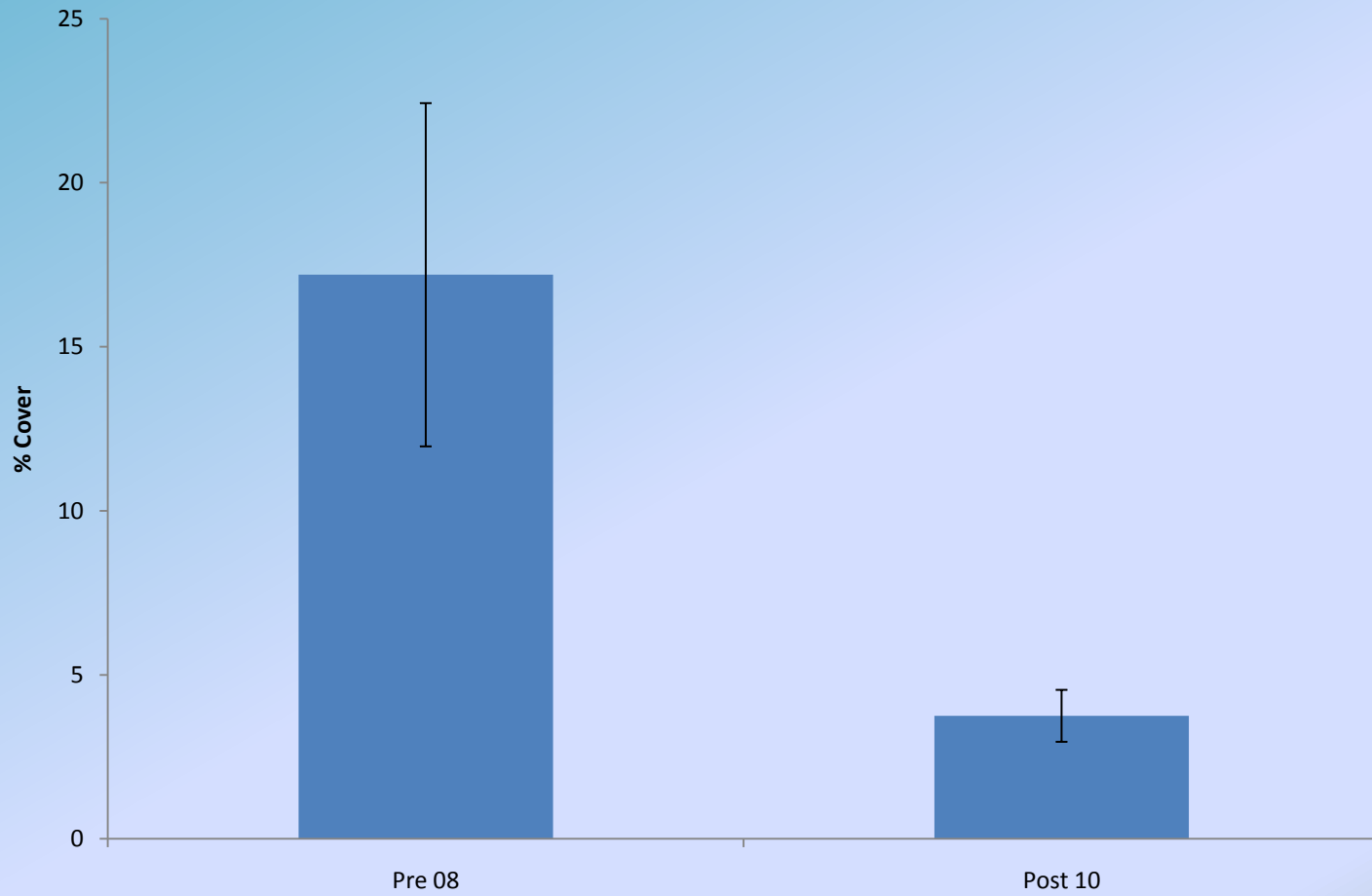
Post-treatment assessment

- To ensure control methods were meeting management objectives
- same as collected during pre-treatment assessments

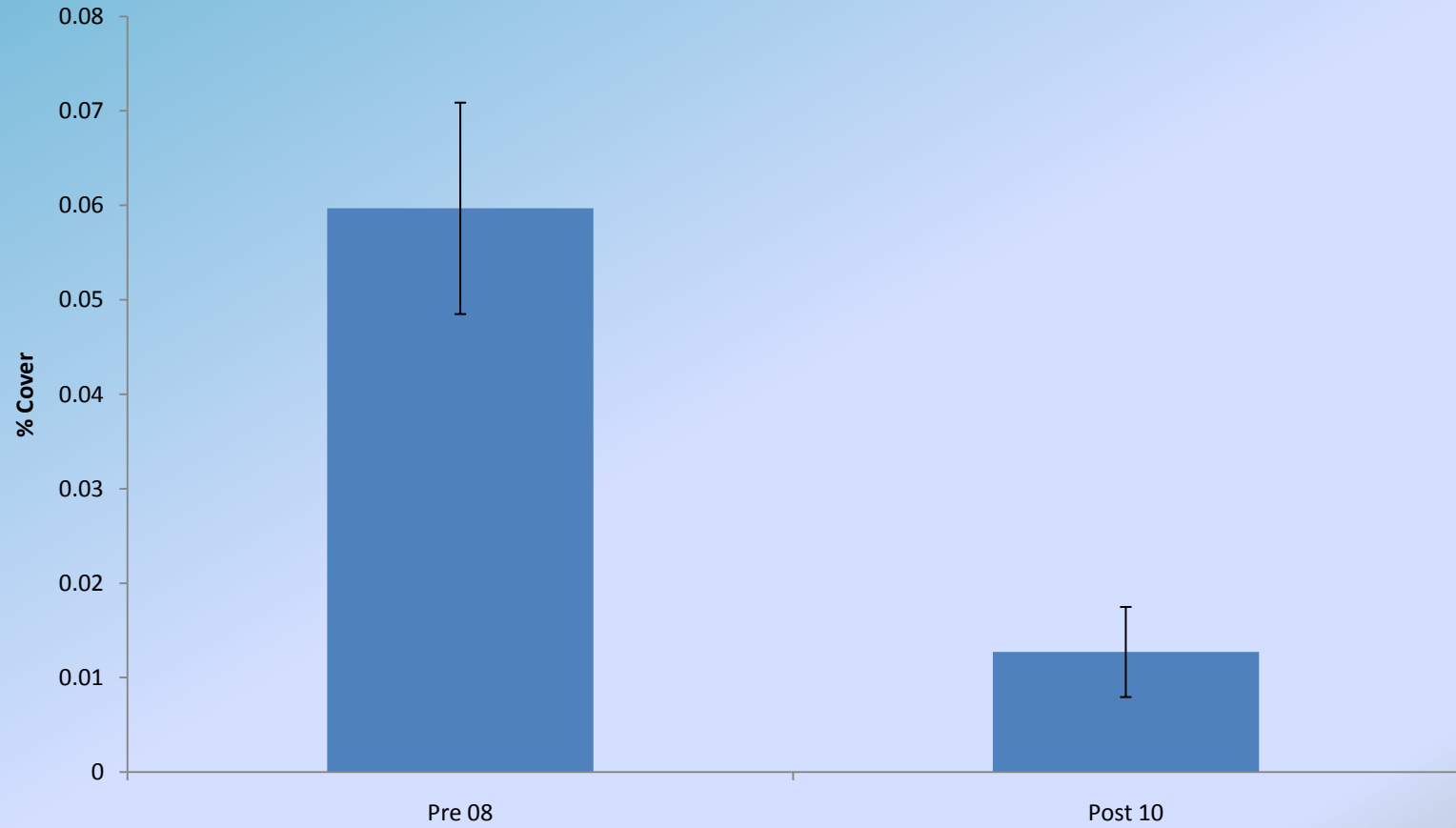
86% reduction in non-native plant species



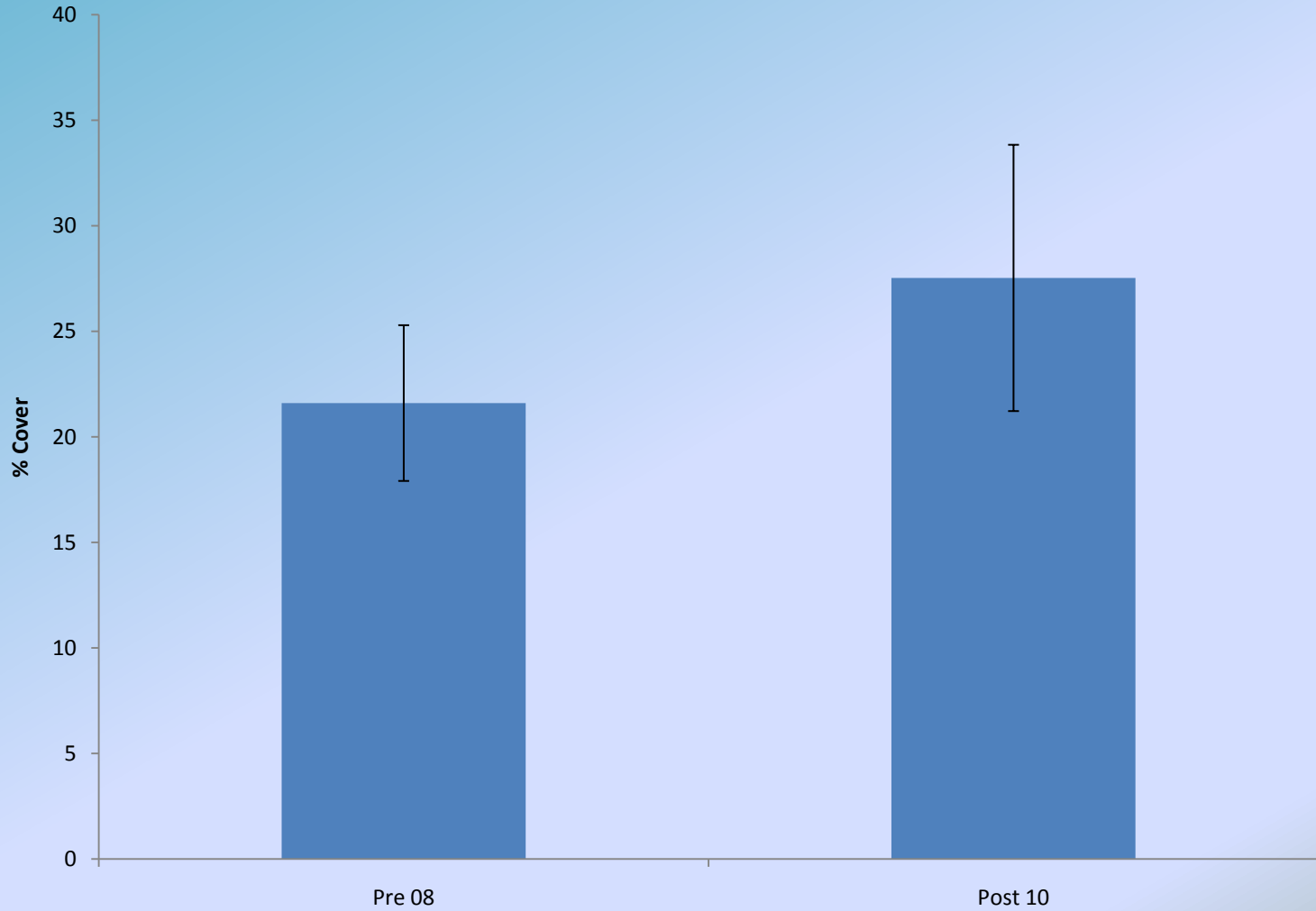
78% reduction in *Euphorbia terracina*



79% reduction in other invasive target species



22% Increase in native plant species



Future work needed

- Future monitoring -5.6 acres



Future work needed

- Future monitoring – 5.6 acres
- Can it be applied in other parks

Questions??

