Post-Fire Monitoring

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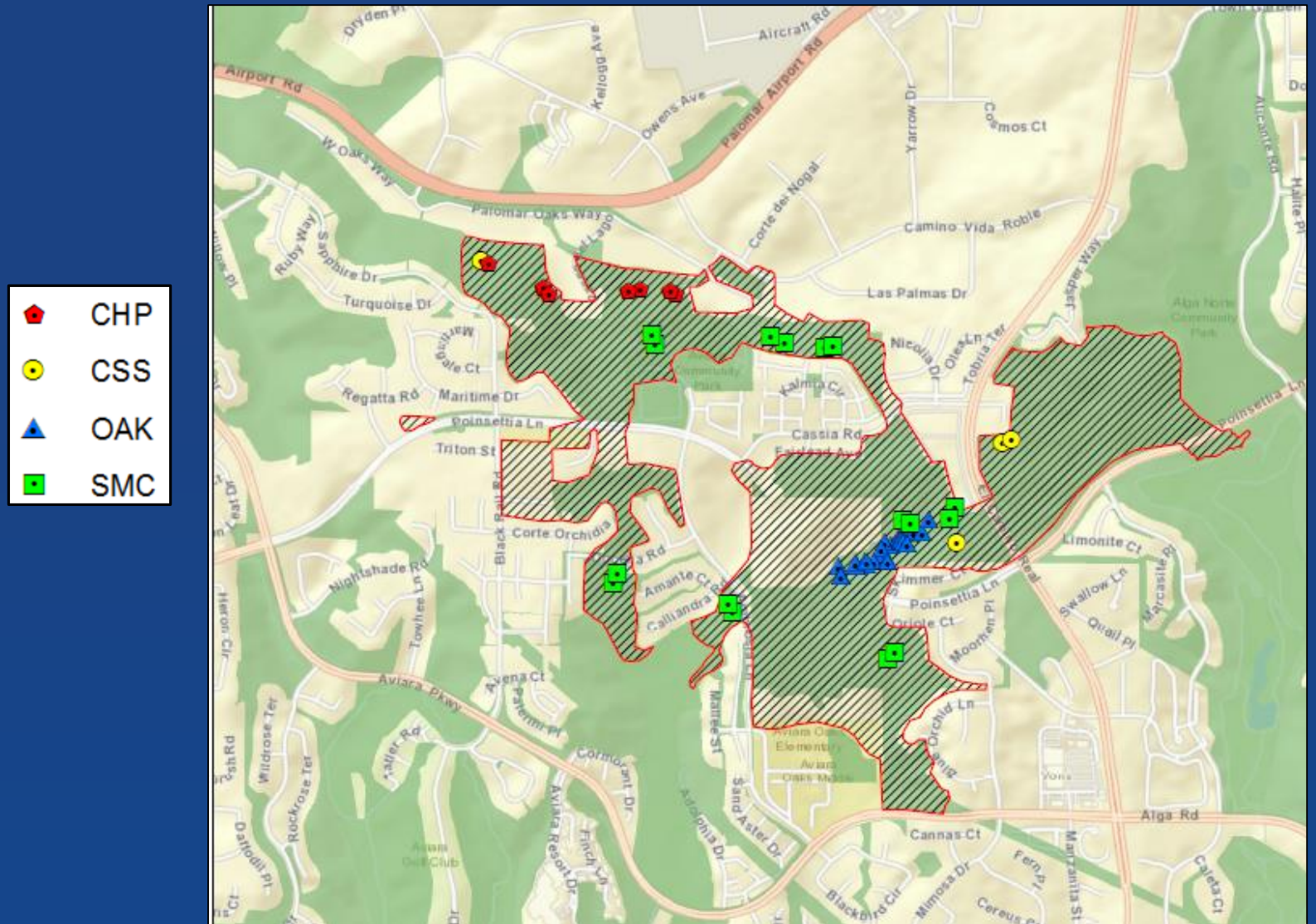
Post-Fire Monitoring

Why?

- Fires are on the rise
- Natural vegetation communities that have burned can transition to grassland→ a positive feedback loop for fire
- Reduction in quality of habitat for native plants and wildlife
- Goal: Document and determine recovery

Post-Fire Monitoring

2014 Poinsettia Fire, 360 acres burned



Post-Fire Monitoring

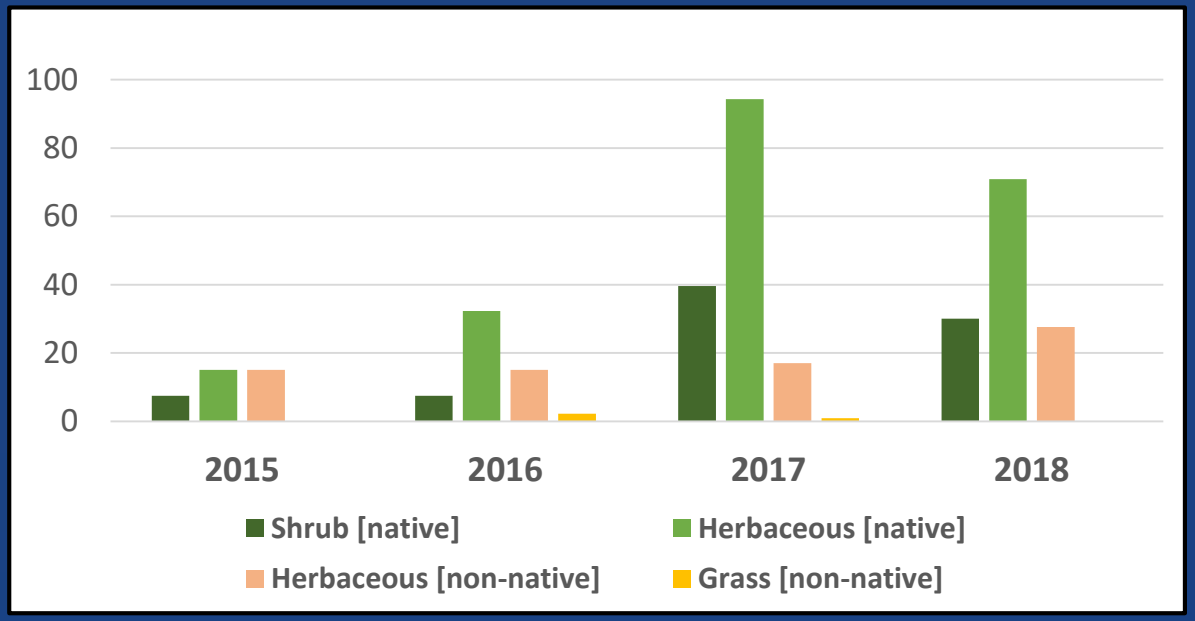
Methodology

- 24 monitoring plots
- Native and non-native cover, species richness, dead and resprouting shrubs
- Photo documentation

Post-Fire Monitoring
Coastal Sage Scrub 2018

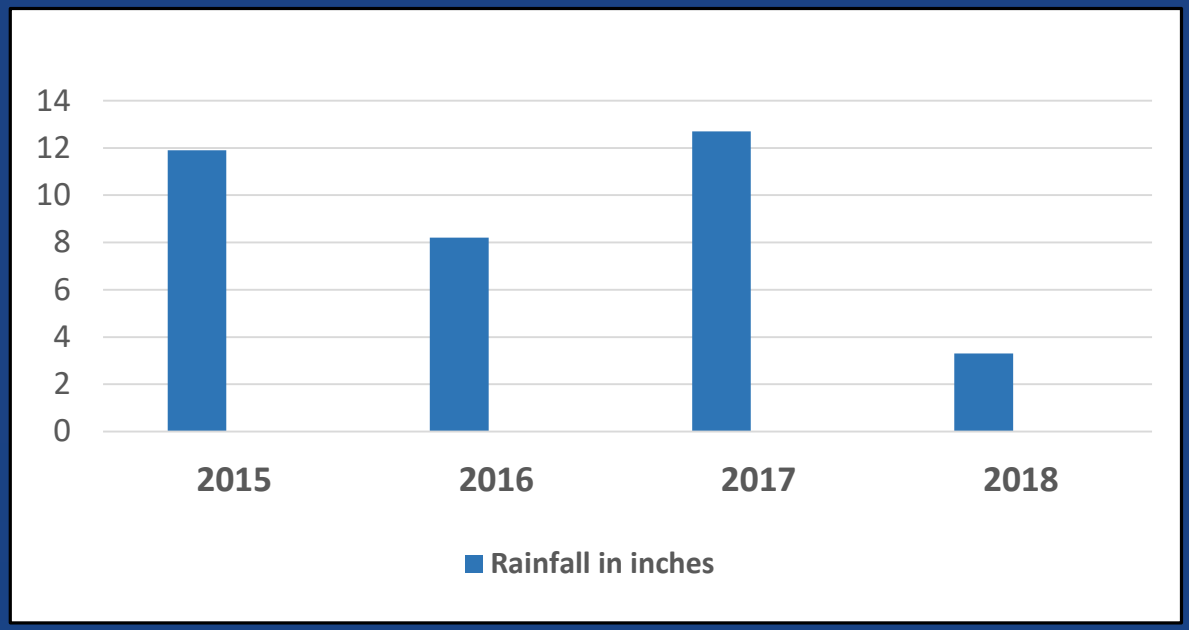
Post-Fire Monitoring

Coastal Sage Scrub Percent Cover



Vegetation Type	2015	2016	2017	2018
Shrub [native]	7.5	7.5	39.6	30.1
Herbaceous [native]	15.1	32.3	94.3	70.9
Herbaceous [non-native]	15.1	15.1	17	27.6
Grass [non-native]	0	2.2	0.9	0

Post-Fire Monitoring
Rainfall from 2015 to 2018



Water Year (Oct-Sep)	Actual Rainfall (in.)	Normal Rainfall (in.)	% of Normal
2015	11.9	10.3	115
2016	8.2	10.3	79
2017	12.7	10.3	123
2018	3.3	10.3	32

Post-Fire Monitoring
Coastal Sage Scrub

2015

2016

2017

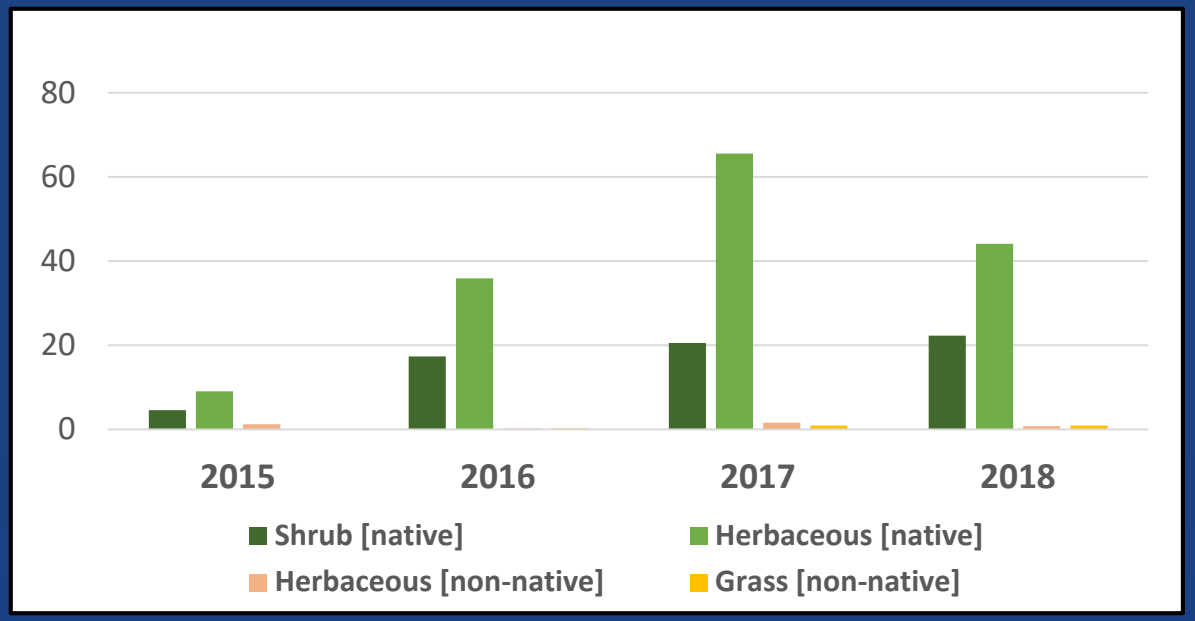
2018

Post-Fire Monitoring

Southern Maritime Chaparral 2018

Post-Fire Monitoring

Southern Maritime Chaparral Percent Cover



Vegetation Type	2015	2016	2017	2018
Shrub [native]	4.5	17.3	20.5	22.3
Herbaceous [native]	9	35.9	65.6	44.1
Herbaceous [non-native]	1.2	0.2	1.6	0.7
Grass [non-native]	trace	0.2	0.9	0.9

Post-Fire Monitoring
Southern Maritime Chaparral

2015

2016

2017

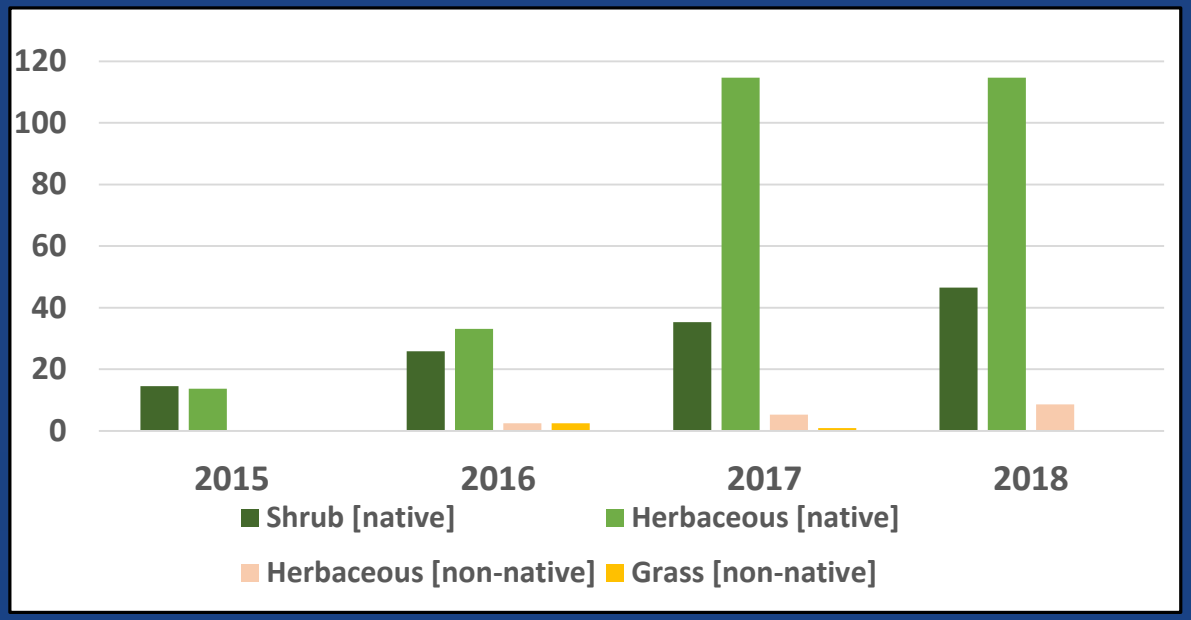
2018

Post-Fire Monitoring

Southern Mixed Chaparral 2018

Post-Fire Monitoring

Southern Mixed Chaparral Percent Cover



Vegetation Type	2015	2016	2017	2018
Shrub [native]	14.5	25.8	35.3	46.5
Herbaceous [native]	13.7	33.1	114.7	114.7
Herbaceous [non-native]	0	2.4	5.2	8.6
Grass [non-native]	0	2.4	0.9	3.4

Post-Fire Monitoring
Southern Mixed Chaparral

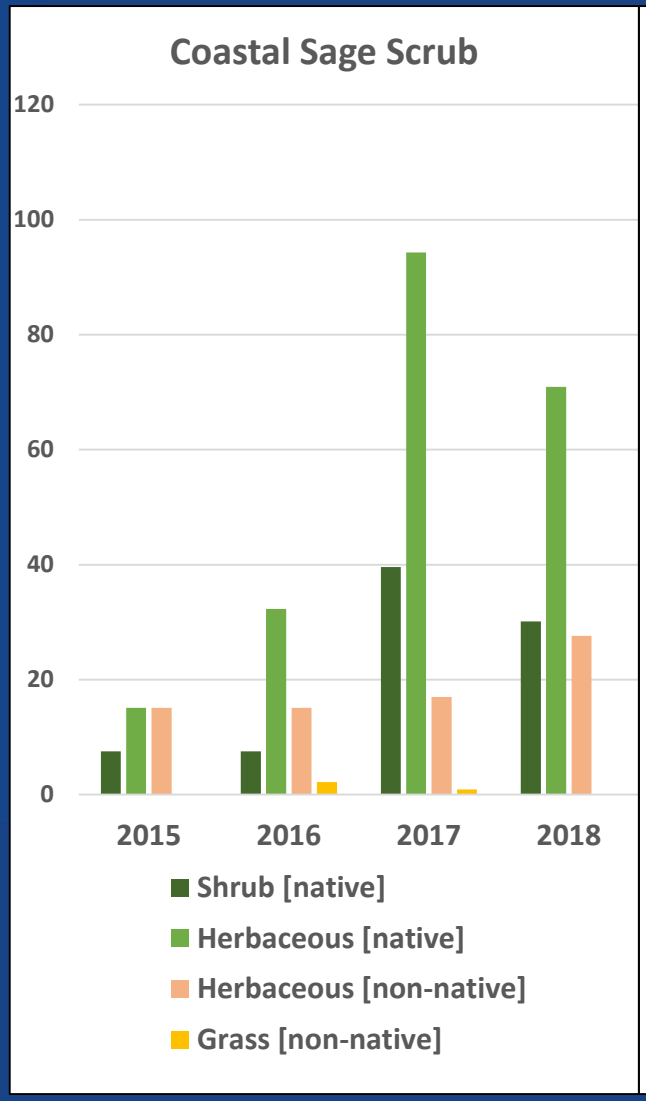
2015

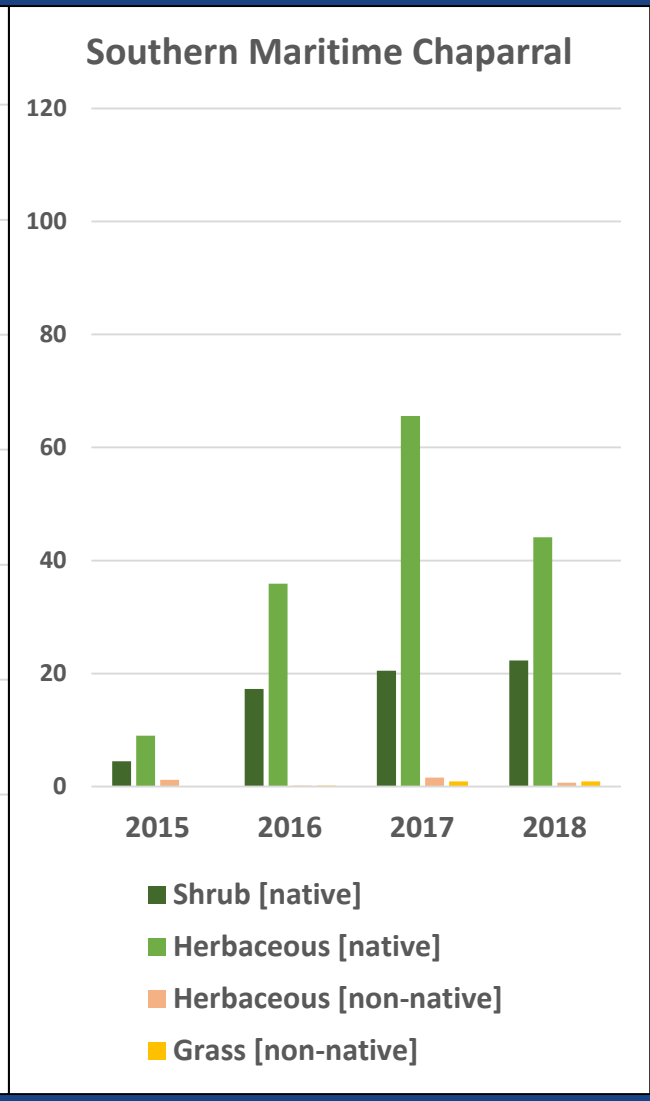
2016

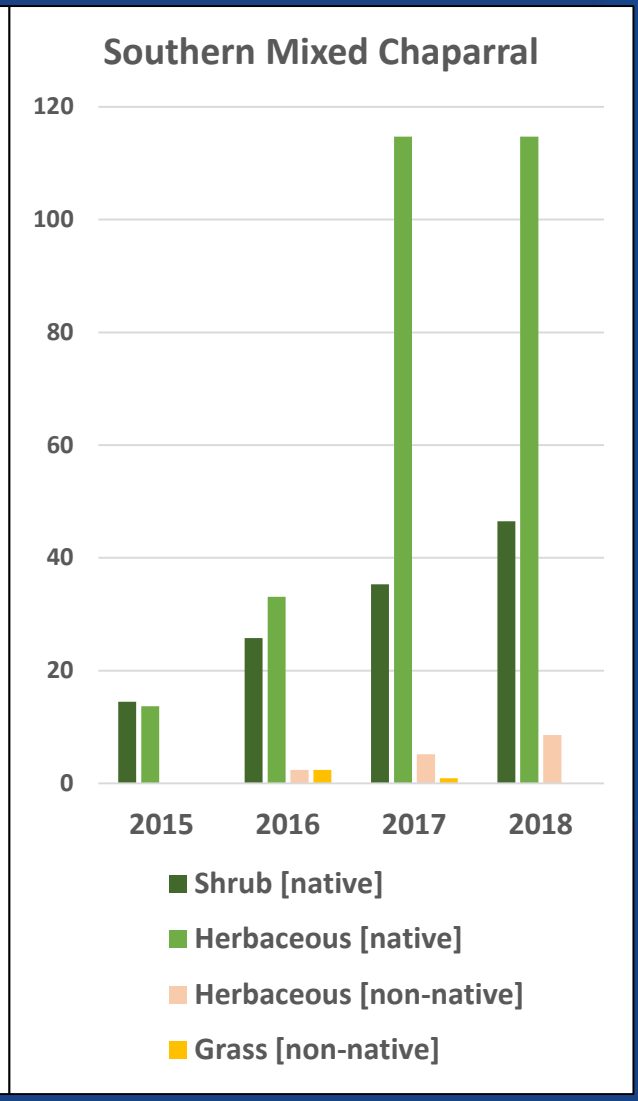
2017

2018

Post-Fire Monitoring
Vegetation Type Comparison







Post-Fire Monitoring
Oak Recovery

2015

2016

2017

2018

Post-Fire Monitoring
Oak Recovery

2015

2016

2017

2018

Post-Fire Monitoring
Results

- Good recovery of native habitats
- CHP recovering better than CSS
- Weed cover low on slopes, but higher in drainages and in CSS
- Oaks recovering slowly; little recruitment

Post-Fire Monitoring

Showy penstemon