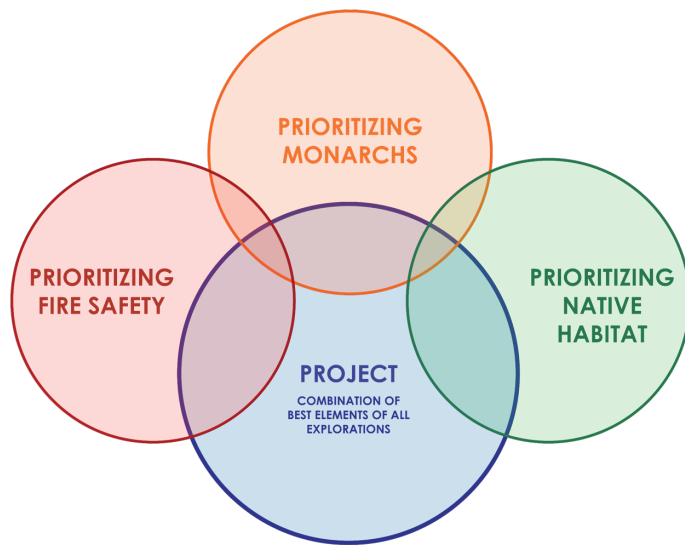


Albany Hill Forest Management & Habitat Restoration Plan

Parks, Recreation, and Open Space Commission Meeting
February 13, 2025



Project Priorities



KEY STRATEGY 1

PUBLIC BID PROCESS – optimize chances for a successful outcome by separating project by expertise:

- **REMOVALS** – one contractor in charge of tree removals and processing
- **RESTORATION** – second contractor in charge of site protection and restoration activities

KEY STRATEGY 2

REMOVE FROM OUTSIDE IN – stand dynamics have an impact on remaining eucalyptus; changes in wind and solar exposure, water availability

- **PERIPHERY OF SITE FIRST** – remove high fire and impact rated trees first, provide buffer zone for tree decline in remaining areas.
- **MONARCH MANAGEMENT AREAS** – sensitive habitat areas will be the last zones in project plan, to allow for assessment, replacement tree growth timelines, and City oversight.

KEY STRATEGY 3

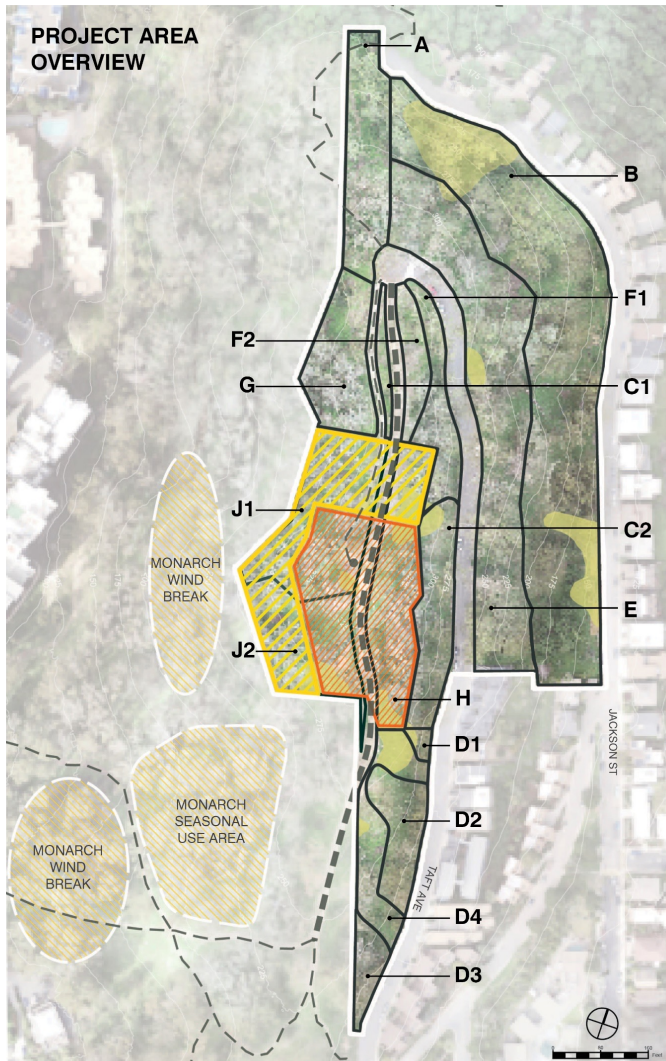
PROTECT EXISTING BEFORE RESTORING – by staggering the restoration and removal phases, we can prioritize the natural assets already present on the hill.

- **SALVAGE, STORE AND REPLANT** – existing native plants will be salvaged for transplant, collect seed and/or cuttings for propagation
- **PRIORITY NATIVE PLANT STANDS (PNPS)** – Project biologists will work with the restoration contractor to flag PNPS for protection during subsequent removals work

KEY STRATEGY 4

ADAPTIVE MANAGEMENT – this project is the start of a long-term stewardship and management effort that will taper off in time. Allowing time and space for adjustments along the way will improve outcomes.

- **PATCH PLANTING** – contract-grown plant patches (islands) will be installed to “inoculate” the site with native species. Over time, more successful species from the patches can be used for propagation to expand the zones of native species.
- **FIELD TEST REPLACEMENT TREES** – providing the structure and habitat that works for monarchs AND lowering fire risk AND keeping ecological integrity on the hill will require some experimentation. The project proposes trial tree planting, evaluated over time to determine which species is best suited for Albany Hill.

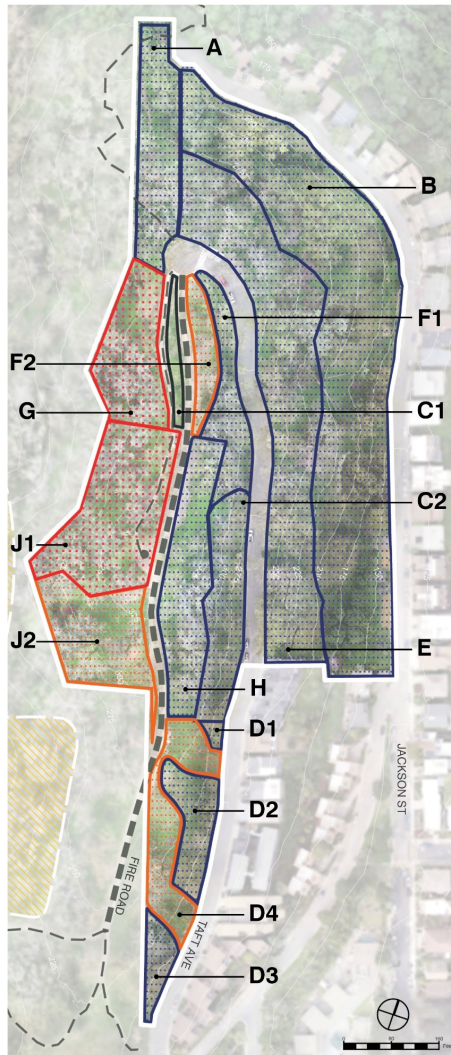


Implementation Plan

7 Phases:

- Phase 1 Restoration – Pilot Phase
- Phase 2 Removals – Exterior
- Phase 3 Restoration – Exterior
- Phase 4 Removals – Interior
- Phase 5 Restoration – Interior
- Phase 6 Removals – Monarch Management Area
- Phase 7 Restoration – Monarch Management Area

Restoration Overview







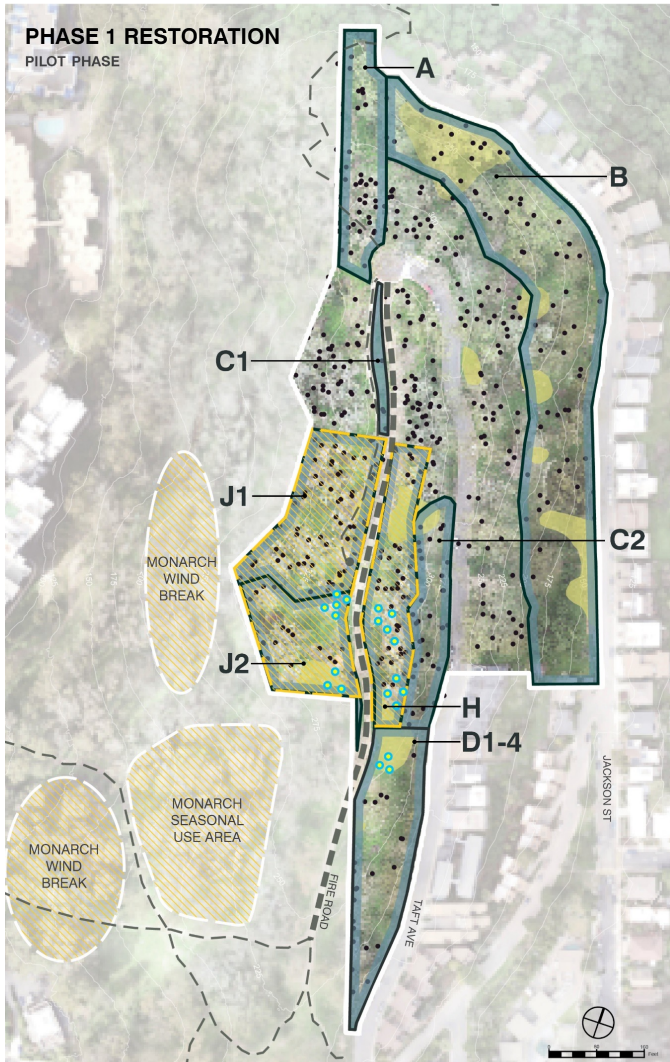
- Four phases of restoration
- Restoration strategy and species determined by existing habitat types on Albany Hill
- Three habitat types:
 - Oaks
 - Perennials
 - Grassland
- Restoration project includes construction drawings with plant quantities, etc.

Removals Overview

- Three phases of tree removals:
 - Hazard and trees at the site perimeter first
 - Interior areas of the site second
 - Monarch habitat zone last
- Critical Monarch Zone is excluded from this project
- The construction drawings include removal information



	Removals Phase 2: 5.3 ac total
	Removals Phase 4: 2.8 ac total
	Removals Phase 6: 2.4 ac total
	Critical Monarch Zone - N.I.C.



AREA A

- Trail protection
- Identify and flag removal access routes

AREA B1-2, C1-2, D

- Pre-removal plant salvage
- Identify and flag priority native plant stands
- Identify and flag removal access routes

AREA H

- Plant field trial trees
- Pruning/limbing of Eucalyptus near trails

AREA J1

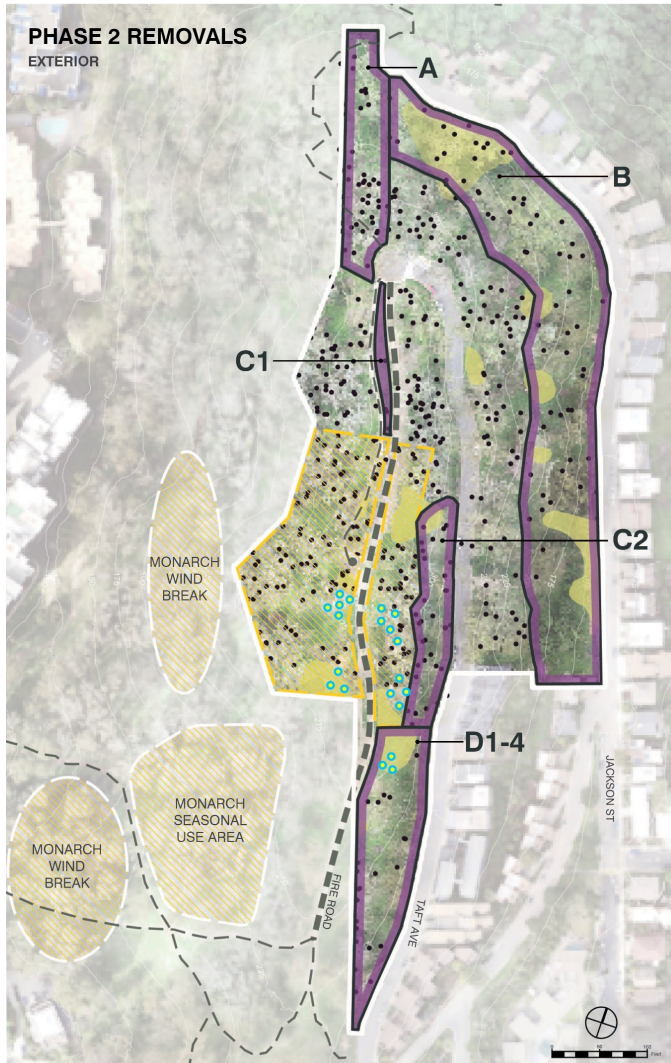
- Pruning/limbing of Eucalyptus near trails

AREA J2

- Plant field trial trees
- Pruning/limbing of Eucalyptus near trails

Phase 1 Restoration Pilot Phase

- PLANT SALVAGE IN AREAS SLATED FOR FIRST REMOVAL EFFORTS: **AREAS A,B,C1-2, D1-4**
- FIELD TRIAL TREE PLANTING
- PRUNING AND LIMBING NEAR TRAILS: **AREAS H, J1-2**



AREA A: ±41 EUCS
 • Arborist #: 1-13, 261-328

AREA B: ±72 EUCS
 • Arborist #: 329-356, 357-388

AREA C1: ±6 EUCS
 • Arborist #: 9, 12, 81, 85, 128, 129

AREA C2: ±26 EUCS
 • Arborist #: 64, 102-124

AREA D1-4: ±12 EUCS
 • Arborist #: 48-67, 125-127, 176-197

ACTIONS

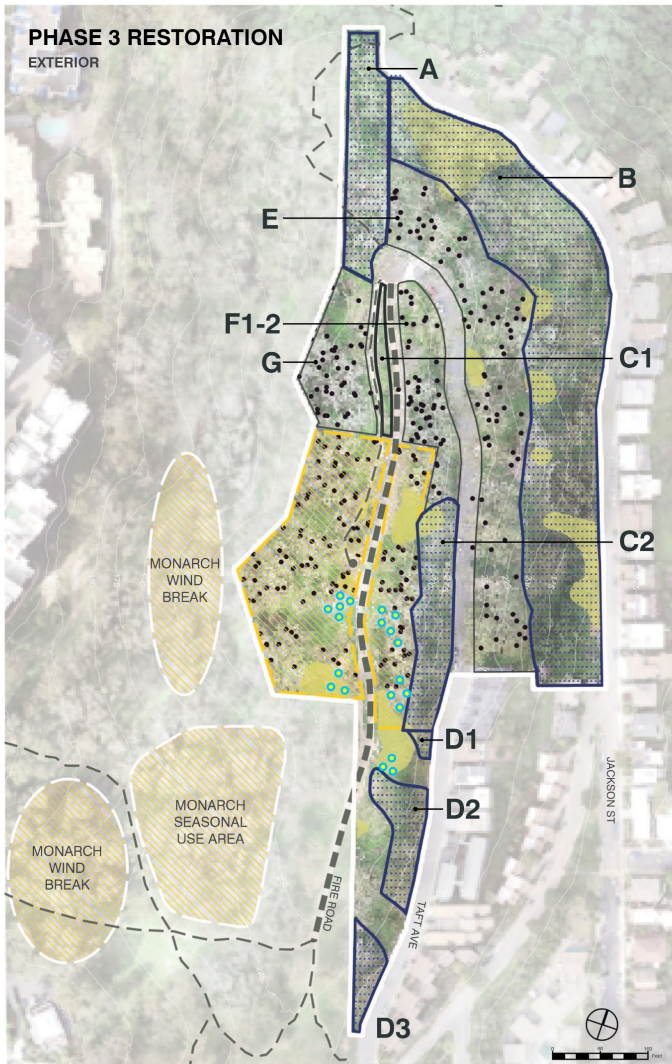
- Contractor to confirm designated drag routes indicated as a result of Restoration Phase 1.
- Trees may be cut at field grade or left with up to 4' of trunk as needed to protect adjacent vegetation.
- All eucalyptus stumps to be treated per specifications.
- See legend sheet L-3.2-3.4 for mulch distribution guidelines.

LEGEND

- Monarch Management Areas
- PNPS
- Field Trial Tree Locations

Phase 2 Removals

- REMOVALS AT PERIPHERY OF SITE: **AREAS A,B,C1-2 AND D1-4**
- LOG INSTALLATION



AREA A, B, C2, D1-3

- Mulch for invasive control
- Reinstall salvaged plants to original areas
- Fascines on slope to help with erosion control
- Native plant patches
- Oak tree planting

AREA C1

- Mulch for invasive control
- Oak tree planting

AREA E, F1-2, G

- Pre-removal plant salvage

LEGEND

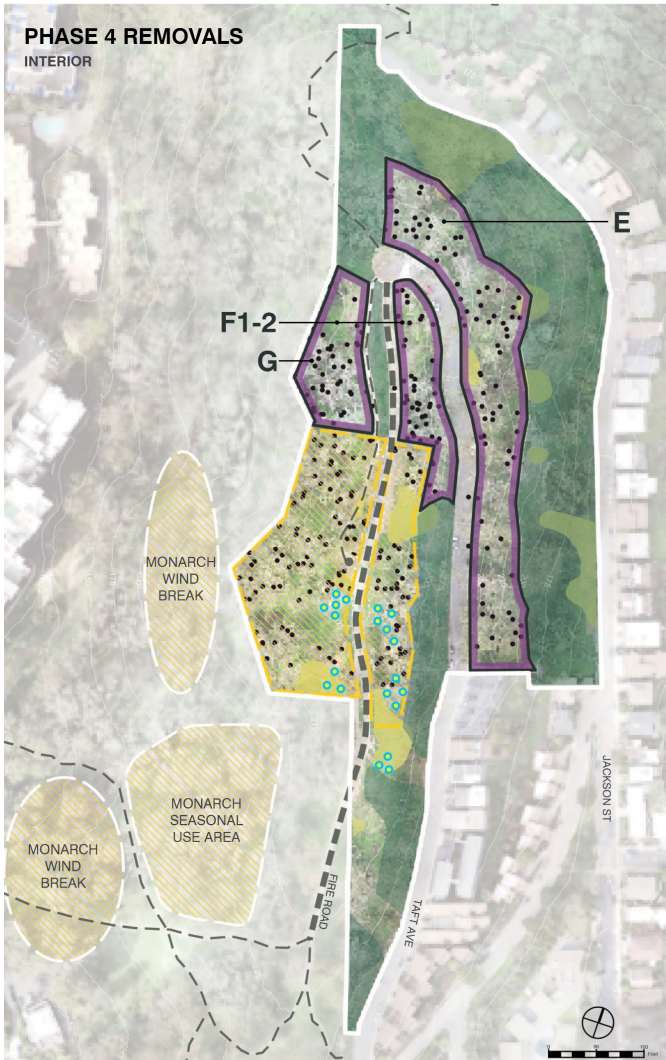
- Monarch Management Areas
- Priority Native Plant Stand (PNPS)
- Field Trial Tree Locations

TARGET HABITATS

- Open Oak + Herbaceous

Phase 3 Restoration

- RESTORATION ACTIVITIES:
AREAS A,B,C1-2, D1-3
 - MULCH FOR CONTROL OF INVASIVE PLANT SPECIES
 - NATIVE PLANT PATCH AREAS
 - REINSTALL SALVAGED PLANTS
 - INSTALLATION OF FASCINES
- PRE-REMOVAL PLANT SALVAGE
PRIOR TO PHASE 4: **AREAS E, F1-2, G**



AREA E: ± 81 EUCS
• Arborist #: 14-47

AREA F:1-2 ± 45 EUCS
• Arborist #: 68-101,
128-139

AREA G: ± 33 EUCS
• Arborist #: 198-220

ACTIONS

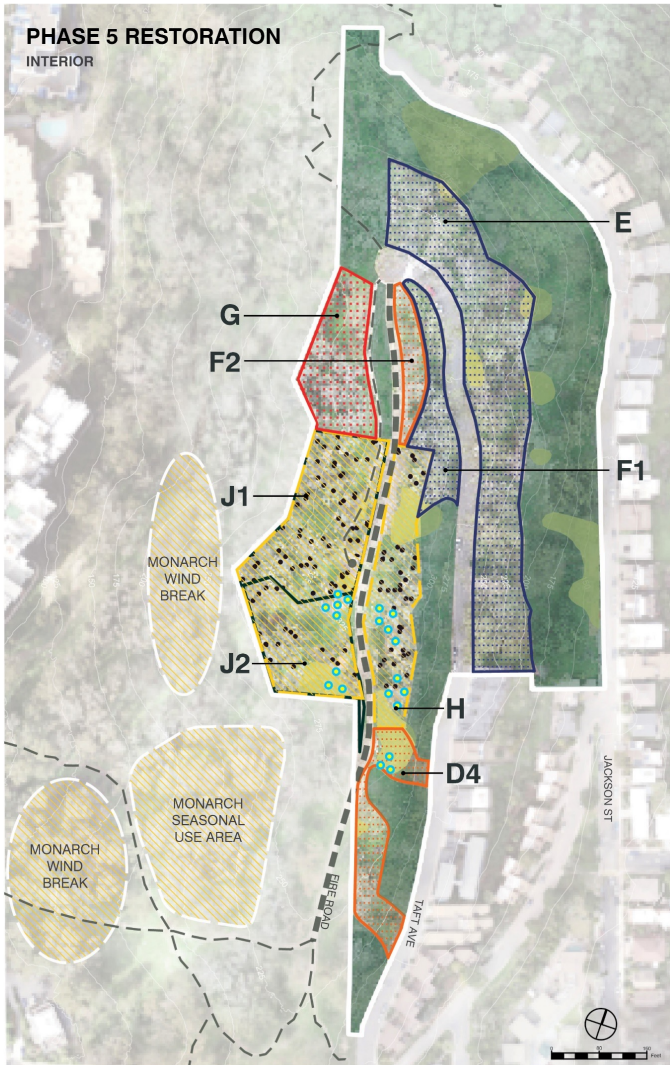
- Contractor to confirm designated drag routes indicated as a result of Restoration Phases 1 and 3.
- Trees may be cut at field grade or left with up to 4' of trunk as needed to protect adjacent vegetation.
- All eucalyptus stumps to be treated per specifications.
- See sheet L-5.2 to 5.4 for mulch distribution guidelines.
- Lengths of trunk and branches to be used on site for bioengineering installations. See sheet L-4.0 for log installation locations overview for this phase, and sheets L-5.2 to 5.4 for more details.
- See specifications for other requirements.

LEGEND

- Monarch Management Area
- Priority Native Plant Stand (PNPS)
- Phase 1 & 3 Restoration
- Field Trial Tree Locations

Phase 4 Removals

- INTERIOR REMOVALS ADJACENT TO TAFT ST. - **AREA E**
- WESTERN REMOVALS SOUTH OF TAFT CIRCLE - **AREAS F1-2 & G**
- LOG INSTALLATION



Phase 5 Restoration

- RESTORATION ACTIVITIES:
 - AREAS D4, E, F1-2, G**
 - MULCH FOR CONTROL OF INVASIVE PLANT SPECIES
 - NATIVE PLANT PATCH AREAS
 - REINSTALL SALVAGED PLANTS
 - INSTALL FASCINES
- PLANT SALVAGE IN AREAS H, J1-2



Phase 6 Removals

- TREES IN THE **MONARCH BUFFER ZONE** ASSESSED FOR REMOVAL
- TREE REMOVAL FOR THE **CRITICAL MONARCH ZONE** IS NOT IN THE SCOPE OF WORK FOR THE REMOVALS CONTRACTOR. STATUS OF THE TREES IN THIS AREA WILL BE CLOSELY MONITORED BY CITY OF ALBANY.



AREA H, J1-2

- Mulch for invasive control
- Native plant patches
- Replacement tree planting
- J1 only: Oak tree planting

REPLACEMENT TREE PLANTING

- Replacement tree species selected from field trials to be planted in groves at spacing to provide monarch habitat at maturity. Locations to be assessed after Phase 6 Removals and reviewed by City of Albany staff prior to installation.
- Trees shown in this phase assume stand survival at the start of Phase 7. Assessment in Phase 7 Removals may result in trees removed from Monarch Management Area (J1-2 and H).

Phase 7 Monarch Management Area

• RESTORATION ACTIVITIES:
AREAS J1-2 & H

- MONARCH SUPPORT PLANT PATCHES
- REINSTALL SALVAGED PLANTS

• REPLACEMENT TREE PLANTING:

- SPECIES SELECTED DURING PHASE 6 ASSESSMENT
- LOCATION AND ARRANGEMENT OF REPLACEMENT TREES TO BE VERIFIED IN CONSULTATION WITH MONARCH EXPERTS



What do we plant for the future?

- Replacement trees need to:
 - Reduce ground fuels and ladders
 - Be drought tolerant and adapted to rocky, coastal soil
 - Provide the morphology needed for monarch use (leaf shape and general structure)
 - Be non-invasive – don't plant a future problem!

Eucalyptus diversicolor
Karri
(non-native)



Pinus canariensis
Canary Island Pine
(non-native)



Pinus sabiniana
Foothill Pine
(native)



Lyonothamnus spp
Catalina Ironwood
(native)



95% DESIGN - COST ESTIMATES

Phase 1 (Pilot):	\$186,000
Phase 2 (Removal):	\$641,000
Phase 3 (Restoration):	\$346,000
Phase 4 (Removal):	\$523,000
Phase 5 (Restoration):	\$324,000
Phase 6 (Removal):	\$195,000
Phase 7 (Restoration):	\$419,000

PROJECT UPDATES

- ALBANY HILL WEBSITE: <https://www.albanyca.org/albany-hill/>
- PUBLIC INPUT Will be solicited at each meeting – please reach out with your comments!
AlbanyHillEucProj@albanyca.org

