

# Habitat Restoration at Hidden Valley Wildlife Area Following Long-term Arundo Management (Riverside, California)

**2022 Cal-IPC Symposium**



## **Presenter:**

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**HANA Resources, Inc.**





# Project Partners and Roles



**Riverside County Regional  
Park and Open District (Riv  
Co Parks)**

Land manager, Project lead



**HANA Resources (HANA)**

Project development, funding, and  
implementation



**San Bernardino Valley  
Municipal District (SBVMD)**

Technical expertise and support



**Santa Ana Watershed  
Association (SAWA)**

Avian surveys and invasive plant  
management services



**Wildlife Conservation Board  
(WCB)**

Funding and project development





# Overview of Hidden Valley Wildlife Area Restoration Project

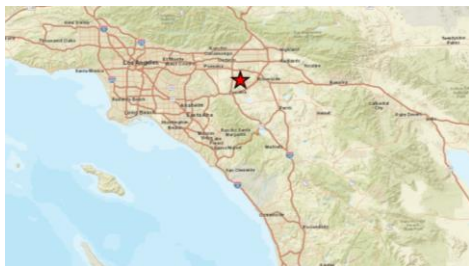
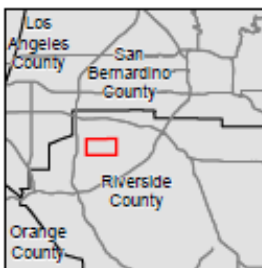
## Project goals:

- Restore 608-acres of native riparian and upland habitat
- Remove remaining *Arundo* stands and continue to treat resprouts and new infestations
- Remove high-priority invasive plants (castorbean, saltcedar, tree tobacco, poison hemlock, perennial pepperweed)
- Increase habitat connectivity along the Santa Ana River for wildlife including least Bell's vireo (*Vireo bellii pusillus*)
- Wildfire fuel reduction and creation of fuelbreaks






# Project Location



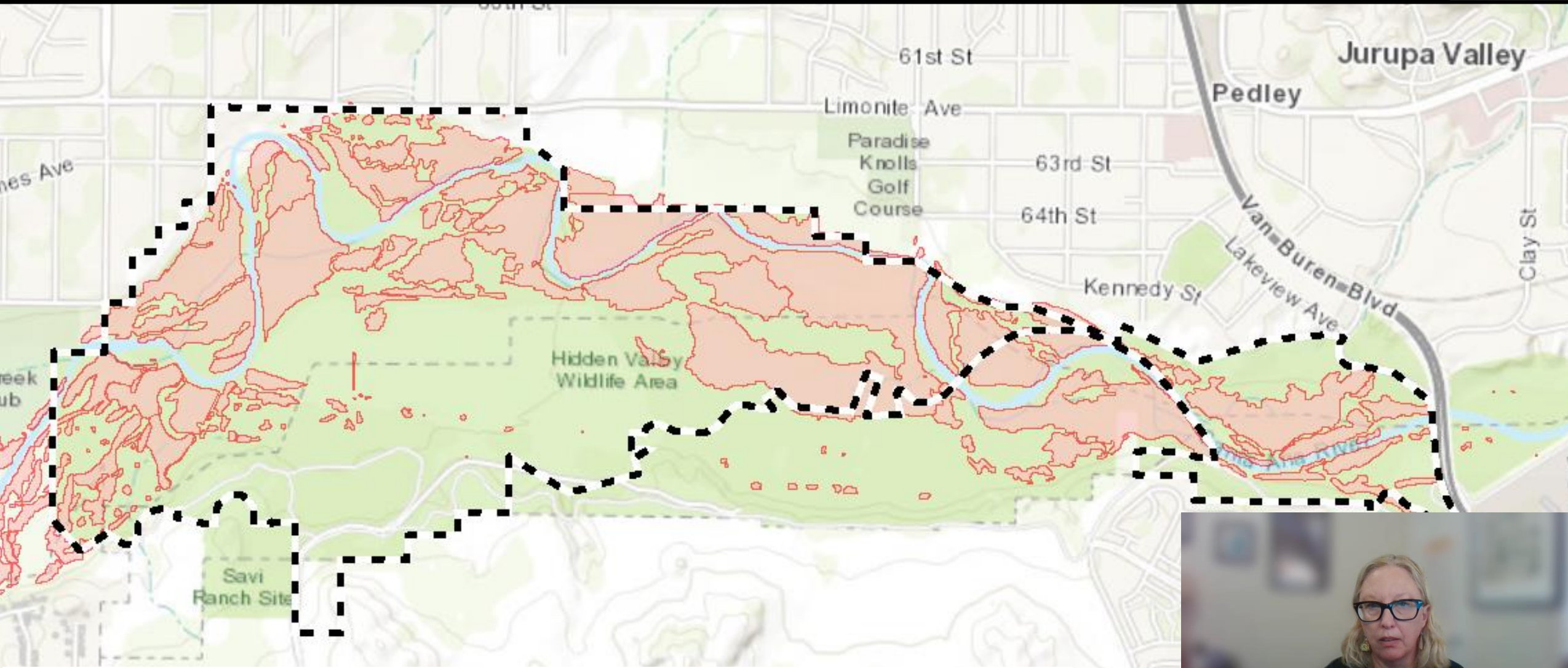
## Wildlife Conservation Board Grant Exhibit I: Hidden Valley Proposed Project Area

 Proposed Project Boundary (1,198.22 acres)





# Arundo extent in 2011

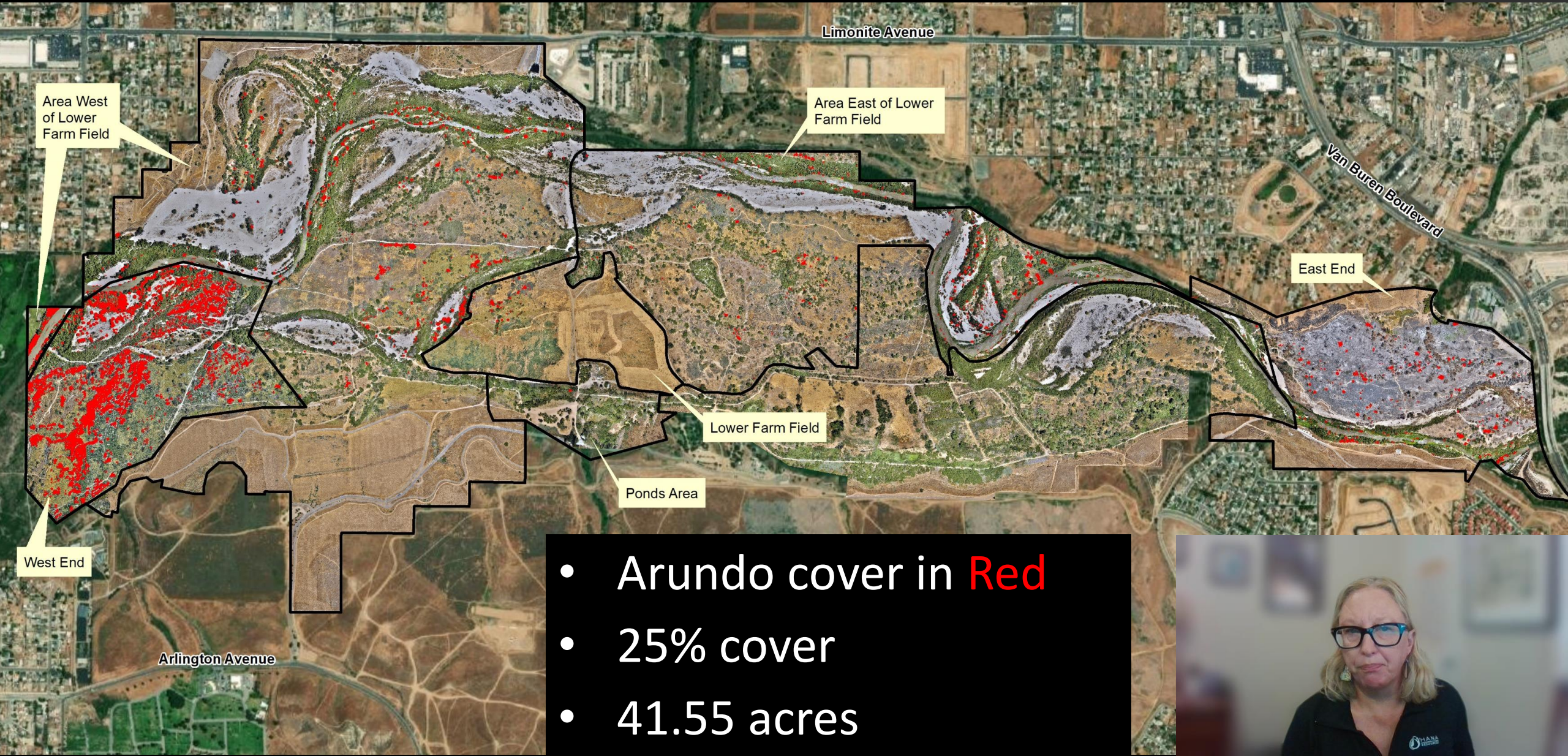


(*Arundo donax* Distribution and Impact, Cal-IPC 2011)





# Arundo extent in 2020



- Arundo cover in Red
- 25% cover
- 41.55 acres







## HVWA Project Phases

### Phase 1

Environmental Compliance & Planning

### Phase 2

Arundo Biomass Removal and Mulefat Restoration  
(207 acres)

### Phase 3

Riparian Restoration (126 acres)

### Phase 4

Shrub Restoration (156 acres)

### Phase 5

Scrub Restoration (120 acres)

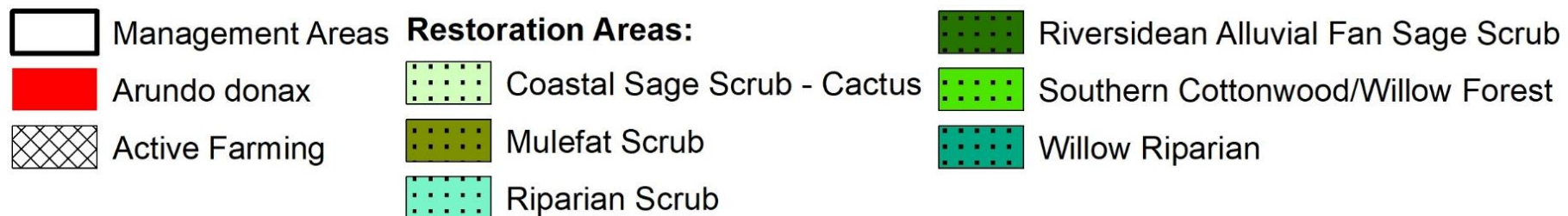
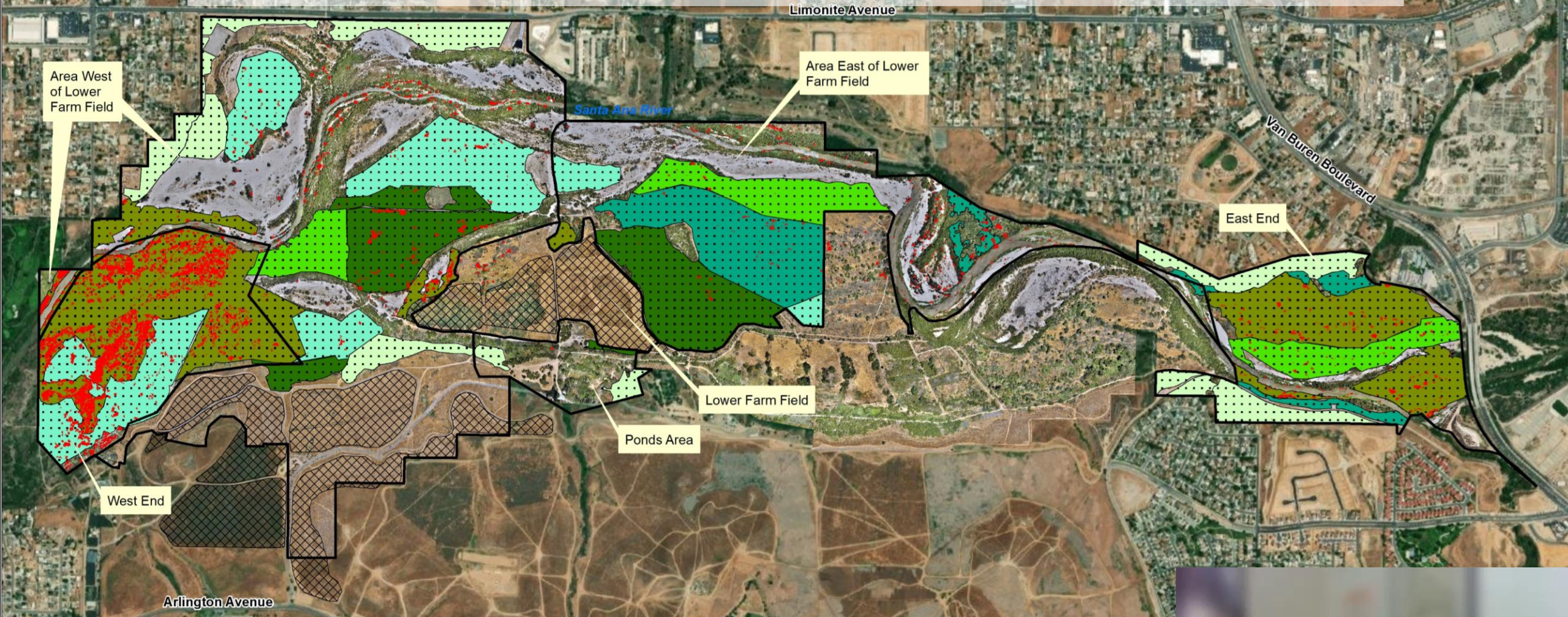
### Phases 3-5

Arundo Maintenance





# Phases 2–5: Project Implementation





# Conclusions

- Large areas where Arundo was removed are not recovering and remain devoid of vegetation
- Disturbance in these areas will facilitate re-invasion of Arundo or other invasive plants
- Riparian and upland habitat restoration and enhancement is needed at HVWA and other sites on the SAR
  - Active restoration is required to reestablish native vegetation in “Arundo scars”
  - Passive restoration (enhancement) is appropriate in areas where smaller, less dense stands of Arundo were removed





# HVWA Restoration Project Contact Info:

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