

# Center for Natural Lands Management

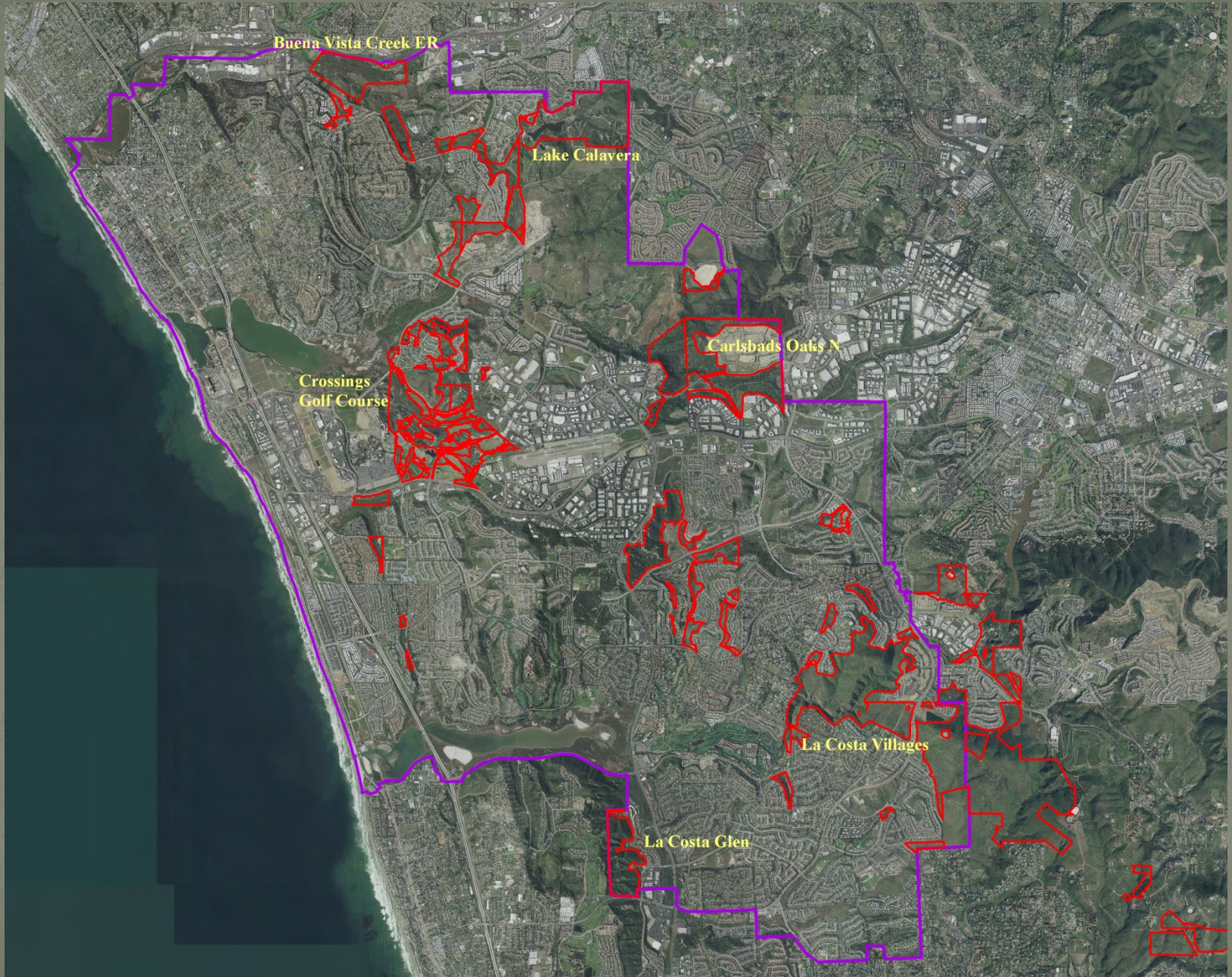
## City of Carlsbad 2018 Annual Summary

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3-13-2019

*CNLM is a 501(c)3 nonprofit corporation created to protect and preserve biological resources through the long-term stewardship of mitigation and conservation lands.*

# Basics about CNLM

- Main office in Temecula, satellite offices throughout California and in Washington State.
- We protect over 75,000 acres state wide.
- Carlsbad:
  - Kelly Ranch
  - Encinas Creek
  - Carlsbad Oaks N
  - Calavera Hills/Roberston Ranch
  - Villages of La Costa/Cassia
  - Buena Vista Ecological Reserve (CDFW)
  - La Costa Glen
  - City of Carlsbad Preserve
  - (Copper Creek, Core Area purchase)
- Three Preserve Managers, One Assistant PM, one Environmental Technician, and a Ranger in San Diego



Buena Vista Creek ER

Lake Calavera

Crossings  
Golf Course

Carlsbad Oaks N

La Costa Villages

La Costa Glen

# Biological Monitoring Summary (2018)



- Sensitive Plant Species Monitoring
  - Thread-leaved brodiaea
  - San Diego thornmint
  - Orcutt's hazardia
  - Blochman's dudleya
  - Cliff spurge
  - Box thorn



- CSS Plots + Arg. ants
- Poinsettia Post-fire Plots
  - Oaks
- Adopt-a-Pinch-point
  - Wildlife Cameras/maintenance
- Wildlife Movement
  - Mule Deer Scat Collection
- PSHB surveys

# Management



- 1000's of nonnative species treated
  - Ward's weed; Veldt grass, etc
- Removed 1000's of crayfish from the CON Pond
- Poinsettia Fire-Burn Area Maintenance
- Copper Creek Eucalyptus removal project
- Village H Restoration
  - Oxalis Removal/Seed Collection
- Gibraltar Street Restoration with PC
- 100's of hours of patrols
- Cowbird trapping (GC)
- Tree Removal Crossings for SHB

# New Projects

- Habitat and Species Monitoring
  - Sensitive Plants Monitoring
    - New Studies:
      - Closer Look at effect of Climate Change on Native Shrubs
    - Increase Population #'s of select species
      - San Diego Thornmint
        - 2017 Seed Collection
        - 2018 site analysis/soil studies
        - Distributed seed in new locations at CON and RLC
        - Seed collection in 2019
  - Sensitive Wildlife
    - Mule Deer
      - Collected scat for movement and relatedness study

# New Projects

- Habitat Enhancement
  - Enhance Coastal Sage Scrub?
    - Data analysis-strategy
  - Enhance Nonnative Grassland/Native Forb Area
    - Identified locations for enhancement/Reviewed data
    - Collected seed of native grasses; developing container stock for winter 2019-2020 planting; bulk seeding
  - Prep Habitat for WPT (crayfish removal)
- Wildlife Movement
  - Continue to work with Regional Monitoring Efforts
    - Joined the Regional Movement Group; Gave a presentation at a wildlife cam conference; noticed that SDMMP/EMP is now taking a more bottoms up approach
  - Develop Focused Studies
    - Mule Deer-radio collaring-waiting for existing researchers to learn method



Thank You!!!!