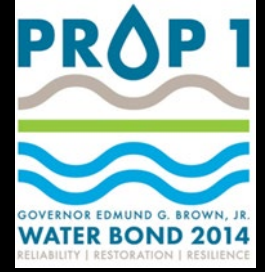


California Black Rail (*Laterallus jamaicensis coturniculus*) Response to Marsh Restoration at Bay Point Regional Shoreline



Karla Meyers – Project Coordinator

David “Doc Quack” Riensche – Wildlife Biologist II, Certified Wildlife Biologist ®



Today's Talk

- Project Background
- Black Rail Response to Habitat Restoration



Karla Meyers – Project Coordinator

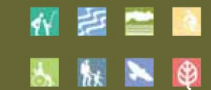
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Bay Point Restoration and Public Access Project



MASTER PLAN



2013



Health Indicators and Environmental
Factors Related to Obesity for
Antioch, Bay Point, and Pittsburg

Contra Costa Health Services

May 2013



SAN FRANCISCO
BAY AREA
WATER
TRAIL



THE Baylands AND Climate Change

WHAT WE CAN DO

BAYLANDS ECOSYSTEM HABITAT GOALS
SCIENCE UPDATE 2015



Karla Meyers – Project Coordinator

David “Doc Quack” Riensche – Wildlife Biologist II, Certified Wildlife Biologist ®

Before



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Before



After

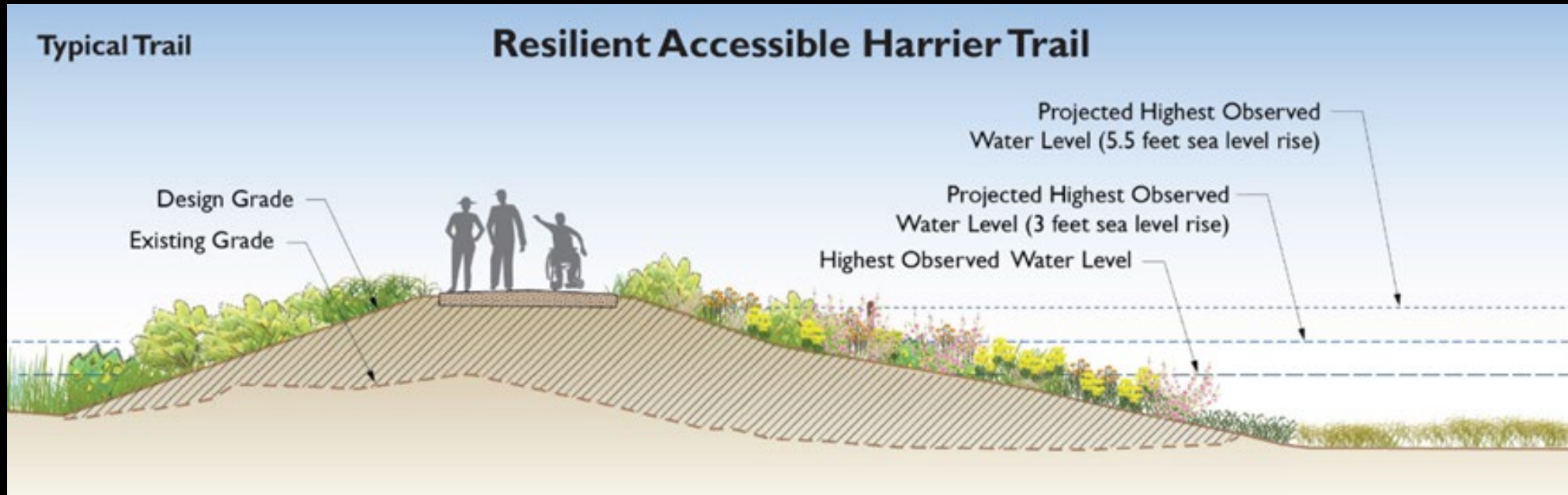


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Resilience



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Public Access

Water Access



Shoreline Access



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California Black Rail Response to Marsh Restoration at Bay Point Regional Shoreline



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Key Messages

- California Black Rail: physical descriptions, natural history, conservation status, distribution, and the current research efforts
- Tidal marsh restoration & management: USFWS Recovery Plan for Tidal Marsh Ecosystems
- Methods: site, marsh restoration efforts, survey techniques, & results
- Discussion, conclusion & next steps



California Black Rail

Natural History

- Year-round inhabitant of suitable marsh habitat on San Francisco Bay shores, and in our delta region (CDFW, 2000)
- Listen for its courtship calls at dawn/dusk to confirm occupancy
- Extremely narrow habitat niche in wetlands and is considered an indicator of tidal-marsh health & restoration success (Evens, 2020)



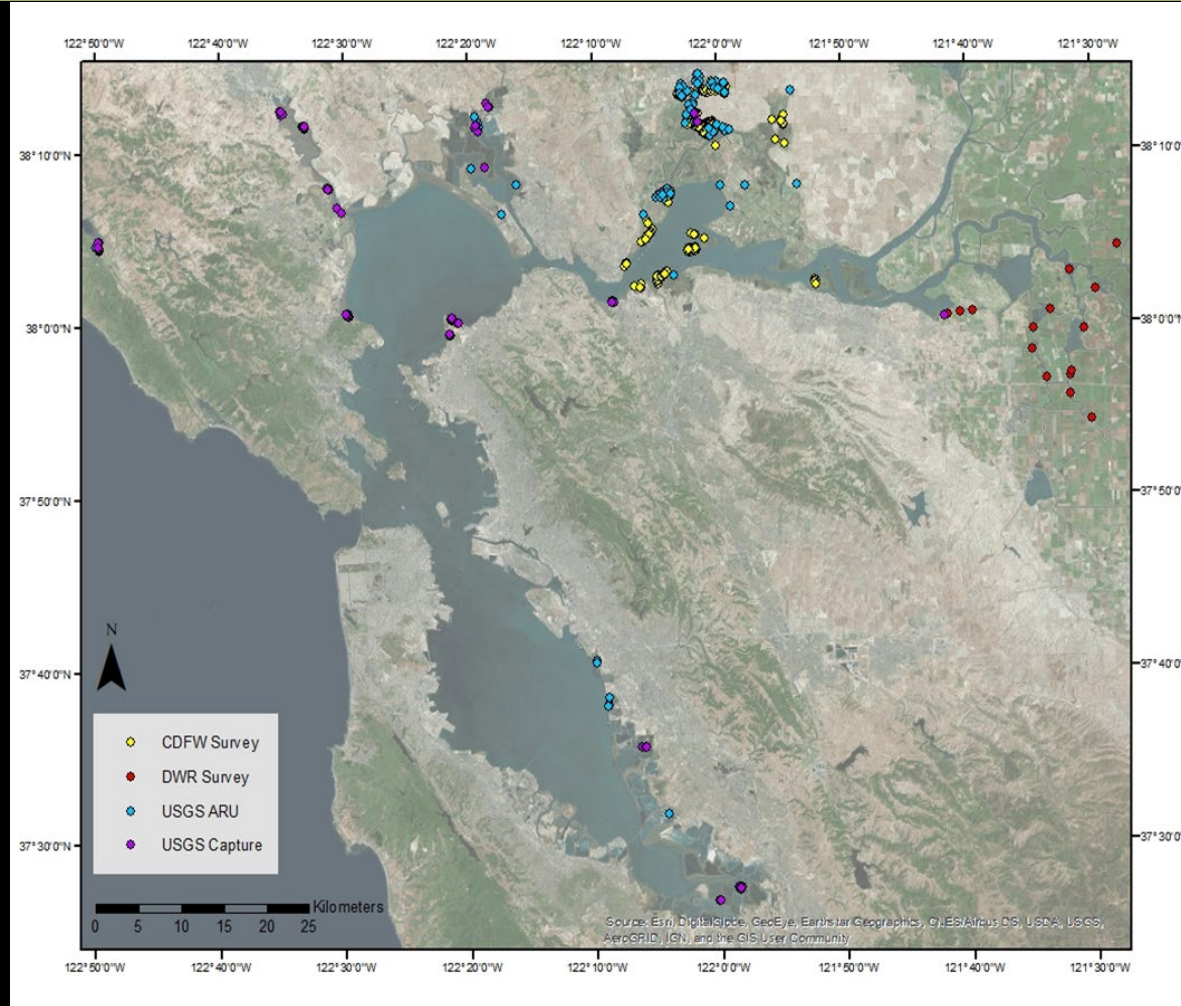
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California Black Rail

Distribution in San Francisco Bay Area



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California Black Rail

Conservation Status

- In 1971, the California Black Rail (*Laterallus jamaicensis coturniculus*) was listed as a threatened species (CDFG 1989).
- California Fully Protected Species (FGC Section 3511[Birds]).
- Threats: habitat lost & degradation, human encroachment, genetic isolation, and predation (USFWS Tidal Marsh Recovery Plan.)



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Tidal Marsh Restoration and Management

- Restoration is ongoing, including one of the largest tidal marsh restoration efforts in the country (South Bay Salt Pond Restoration).
- Informed by USFWS' "Recovery Plan for the Tidal Marsh Ecosystems of Northern and Central California".
- Recovery plan recommendations typically target endangered species and assume that other species like California Black Rail will also benefit.



Study Area

Bay Point Regional Shoreline

- Contains ~24 HA of San Francisco Bay-Delta tidal wetlands in Bay Point, California.
- This area is managed by the East Bay Regional Park District.
- Vegetation here is characteristic of central California's Delta tidal wetlands.
- The park provides habitat for six special status wildlife species.



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Methods

Survey

1. **Call count surveys** from 2018 through 2024 using standardized protocols for monitoring marsh birds.
2. **San Francisco Estuary Marsh Bird Survey Protocol** (Version 2013.1), which is based on the **North American Marsh Bird Monitoring Protocols** by Conway (2011), **Don Edwards San Francisco Bay and San Pablo Bay National Wildlife Refuges** developed by Wood et al. (2016).



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Results

Historical Records

During systemic breeding surveys for the status BLRA pre-restoration (2018 & 2020) NO BLRA detected



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Results

Current Records

Following the restoration action of 2021 – One BLRA was detected in 2022



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Results

Current Records

Following the restoration action of 2021 – Two BLRA were detected in 2023



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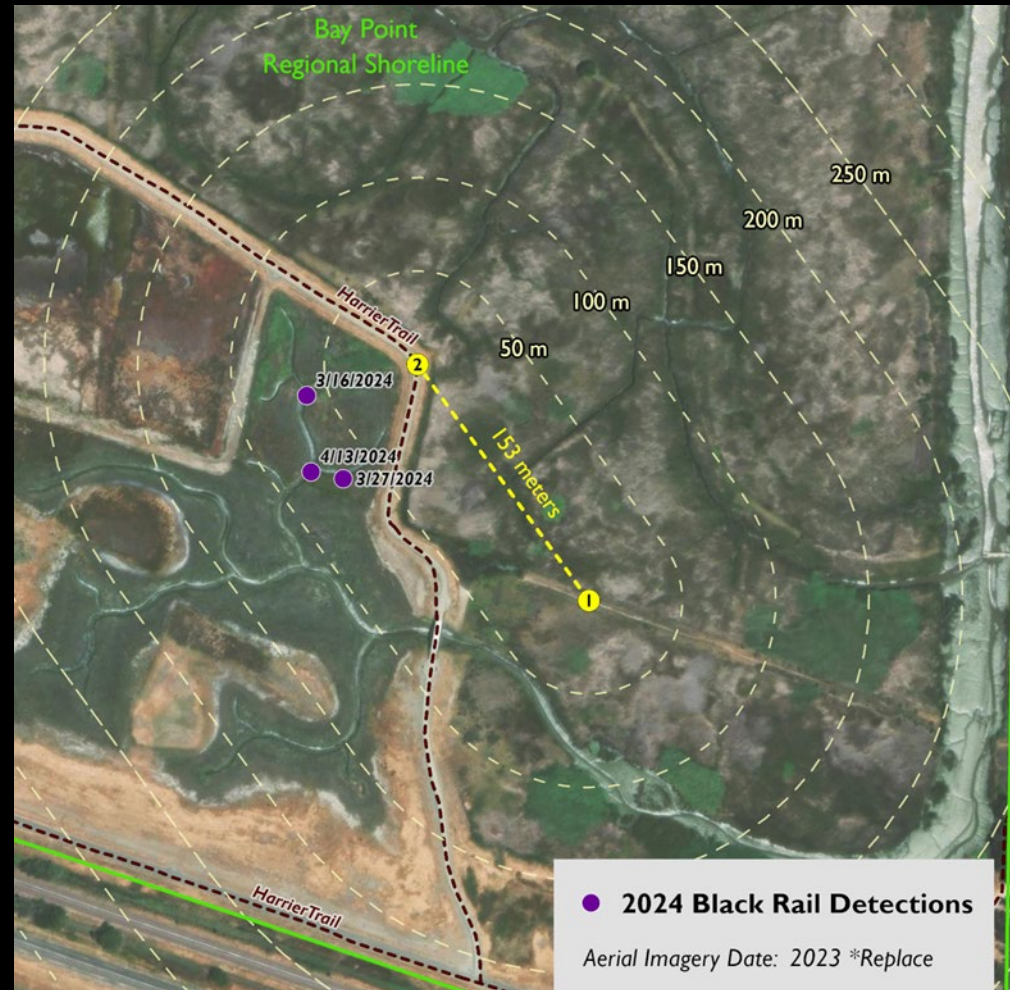
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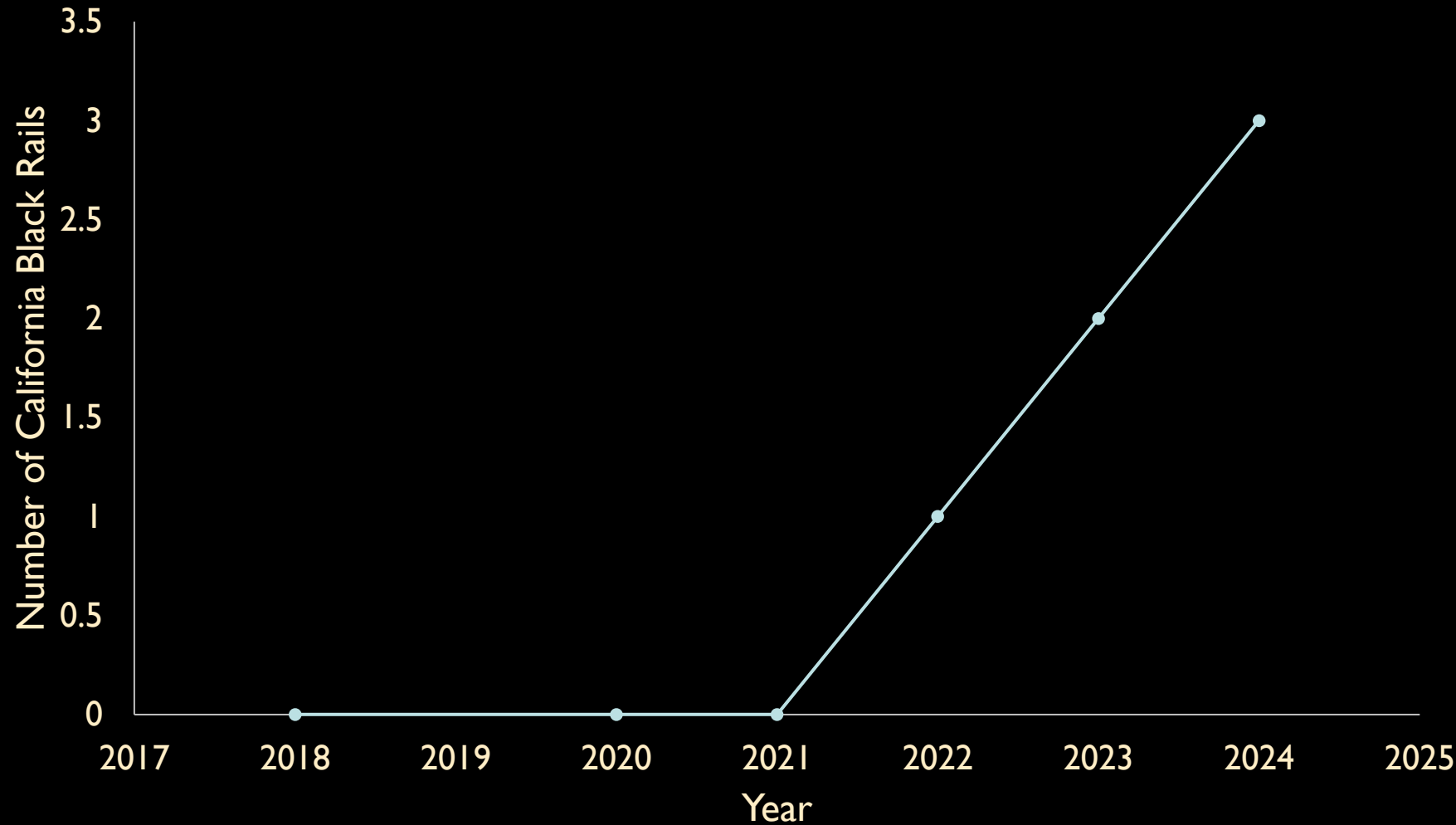
Results

Current Records

Following the restoration action of 2021 – Three BLRA were detected in 2024



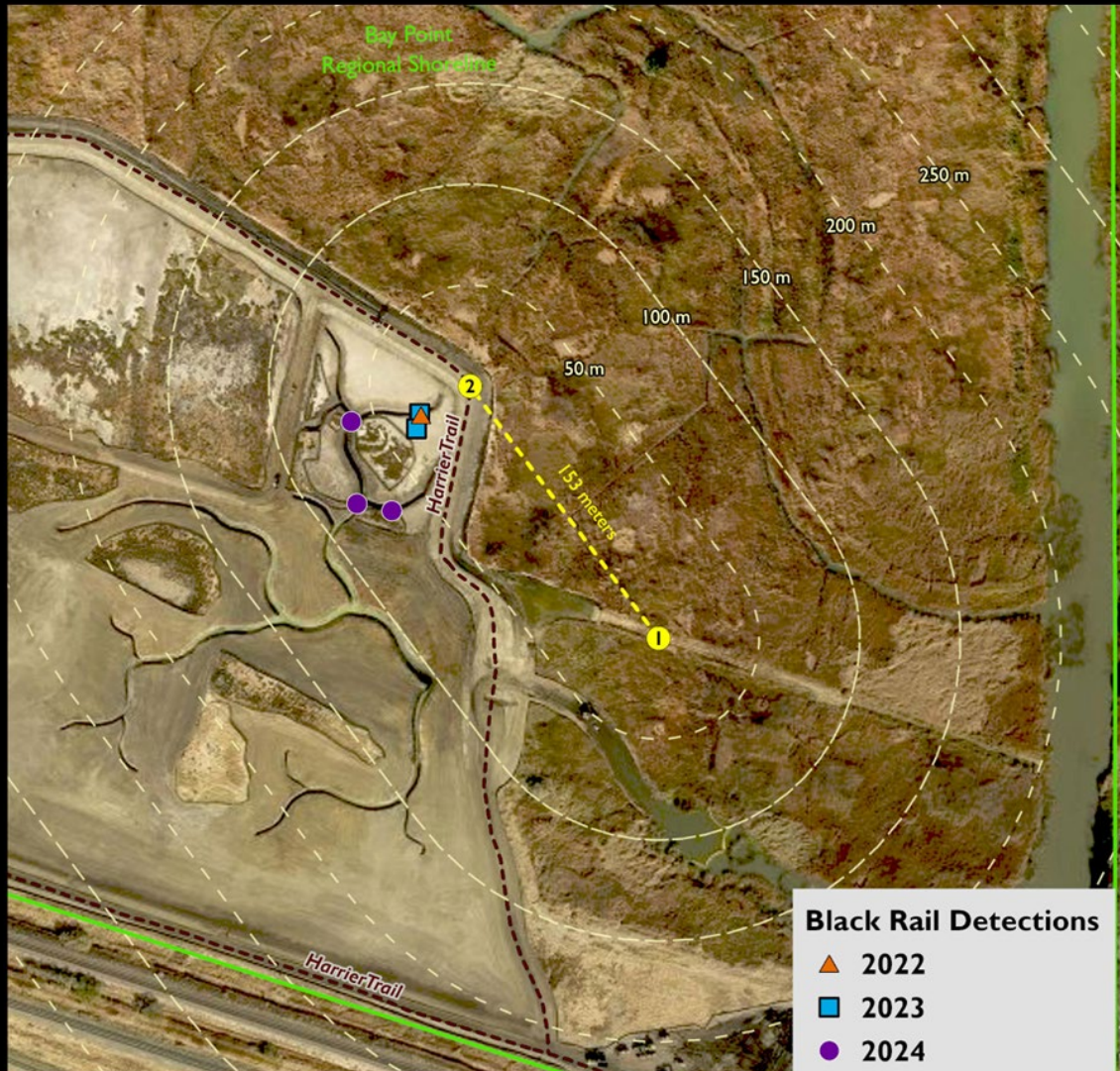
Results



Since the restoration efforts, the BLRA population at Bay Point has increased threefold ($R^2 = 0.7714$).



Results



All BLRA detected are mapped by year, and they are currently confined to the northeastern corner of the restoration area.



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Discussion

Marsh restoration

Restoration of tidal wetland, especially along the upper edge of current high tides, may ameliorate the effects of increased inundation on marshes' biota.



- The marsh restoration efforts at Bay Point Regional Shoreline are demonstrating that with time the desired listed species can respond positively.
- BLRA population is now 3X higher.



Closing Comments

Next Steps

- Continued monitoring the BLRA population.
- Continued monitoring and managing of tidal marsh habitat.



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Questions?



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