

Keeping dry ponds as part of wetland restoration? A summary of snowy plover recovery efforts in South Bay salt ponds



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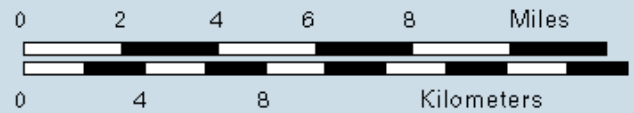
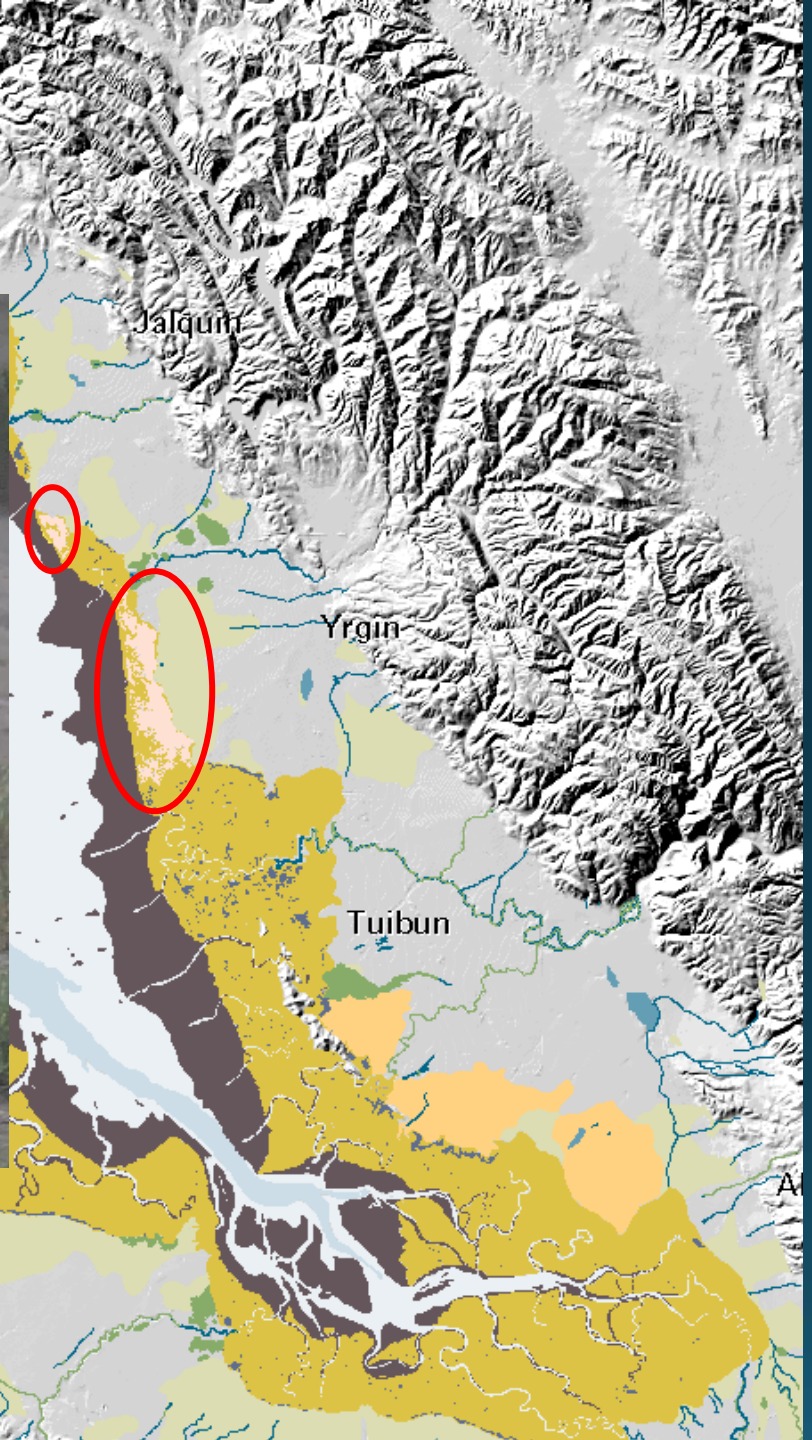
The background of the slide is a close-up photograph of three speckled eggs resting on a bed of coarse, light-colored sand. The eggs are cream-colored with numerous dark brown spots. The sand is composed of irregular, angular grains. A semi-transparent grey rectangular box is overlaid on the image, containing the text.

Outline

- 1. Snowy plovers in the South Bay**
- 2. SBSPRP actions to support snowy plovers**
- 3. Current/next steps to reach population goals**



-  Deep Bay/Channel
-  Shallow Bay/Channel
-  Tidal Flat
-  Tidal Marsh
-  Tidal Marsh Pan
-  Perennial Pond
-  Salt Pond
-  Riparian Forest/Willow
-  Moist Grassland
-  Grassland/Vernal Pool
-  River or Creek



Salt ponds provide critical nesting habitat

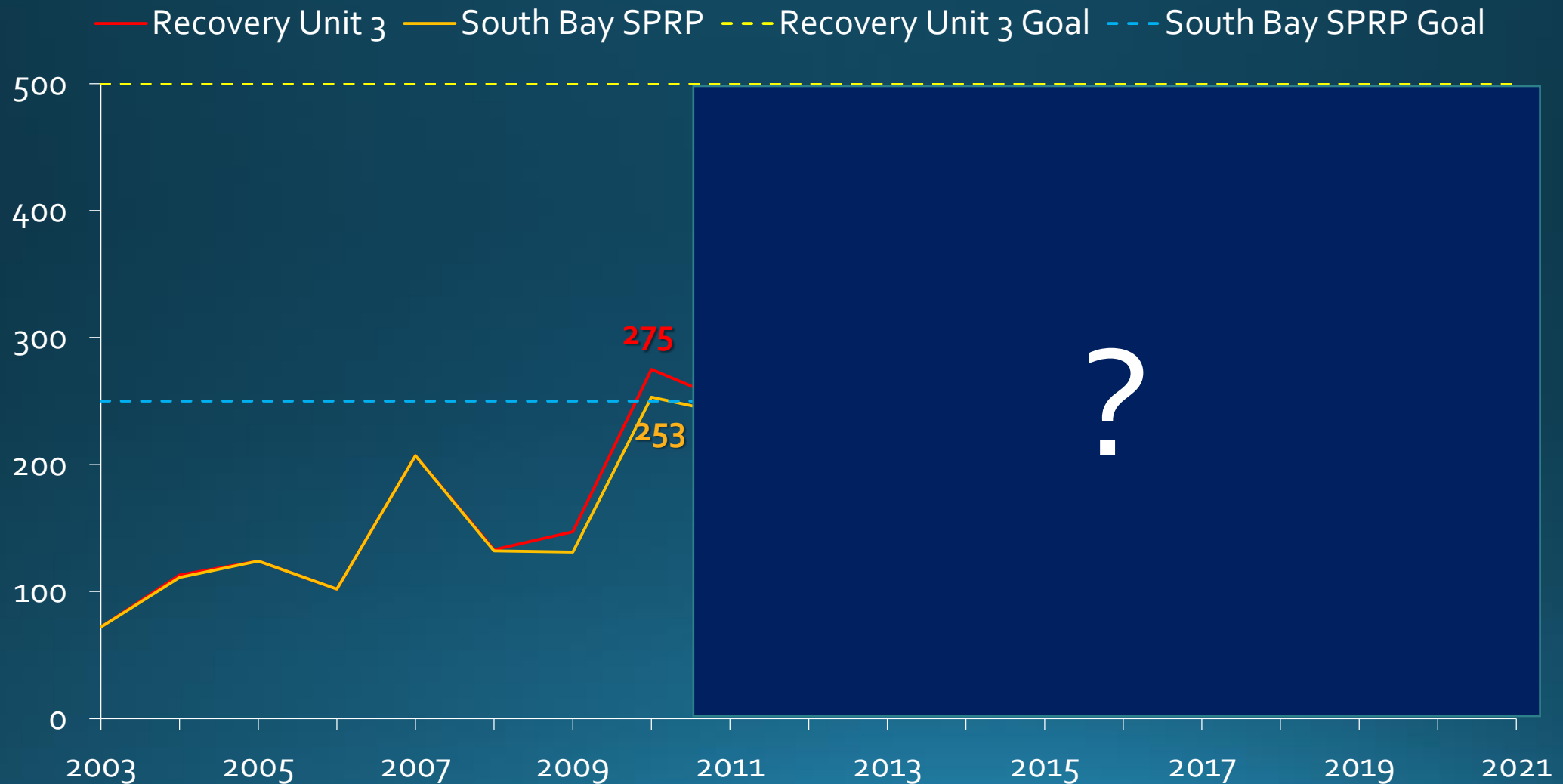
- Salt panne found across the Pacific Coast
 - Baja CA
 - San Diego Bay NWR
 - Marine Corps Base Camp Pendleton
 - Bolsa Chica Ecological Reserve
 - Moss Landing Wildlife Area
- South San Francisco Bay most extensive
- SF Bay Estuary supports $\approx 10\%$ of entire listed population
 - SBSRP footprint = $91.0 \pm 4.5\%$ of breeding plovers 2015-21
- USFWS Recovery Plan calls for SF Bay Estuary to support 16%
 - Includes bayside portions of the 9 county Bay Area except SF
 - Recovery Unit 3 (RU₃)



Manage ponds to support wildlife



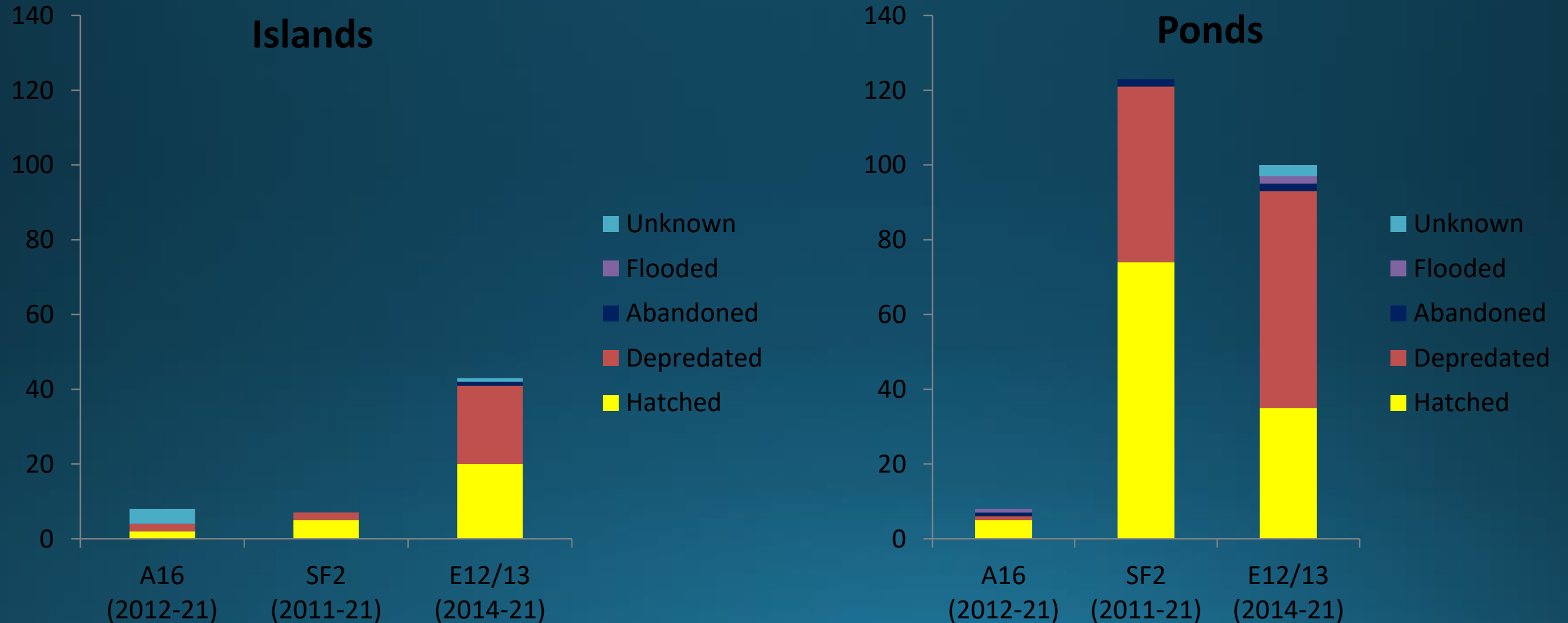
Pond management for wildlife boosts population



Nesting Islands

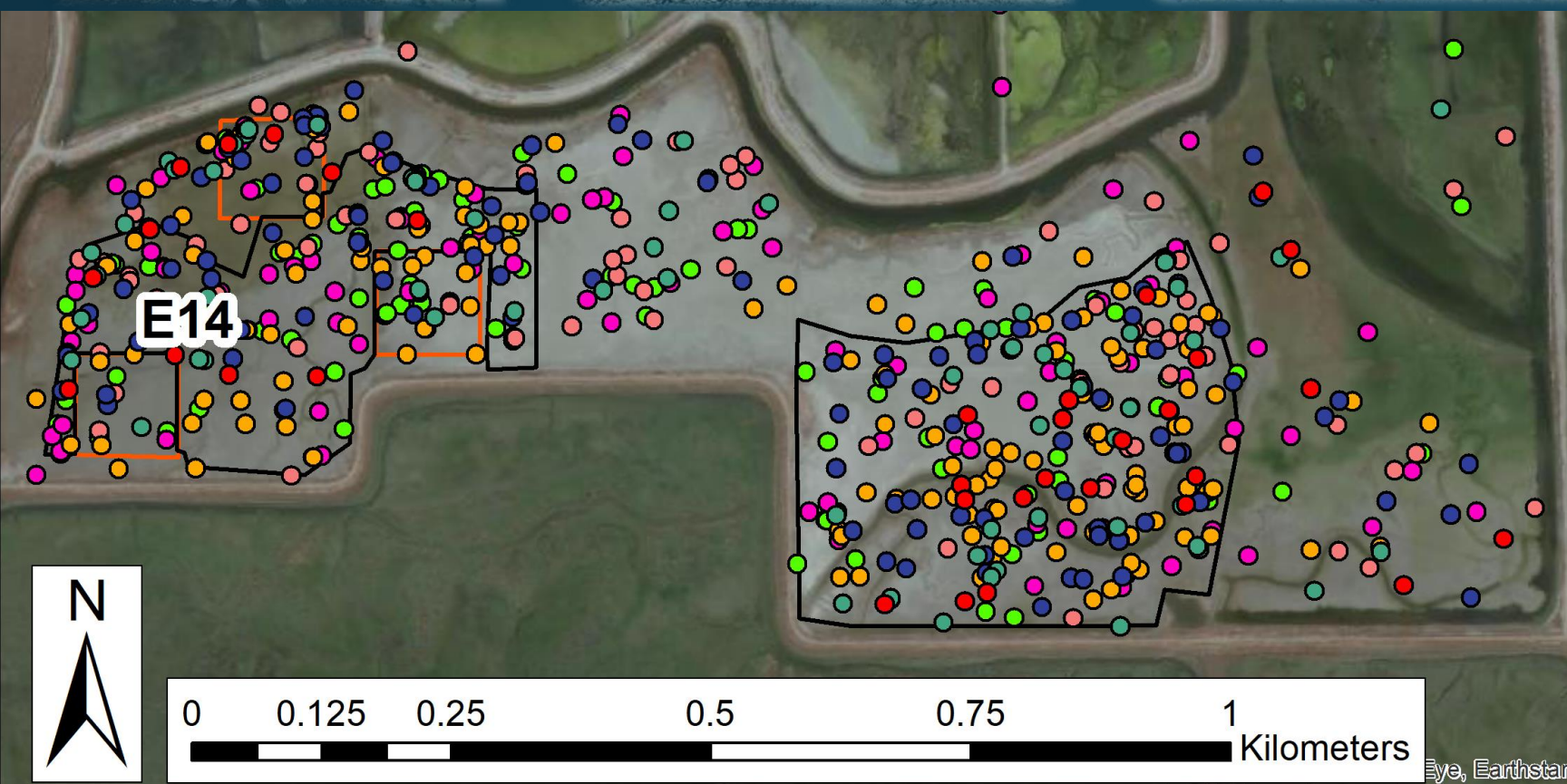
- **Alviso (A16), Eden Landing (E12-13), and Ravenswood (SF2)**
- **Nesting habitat for pond dependant species after reconfiguration**
 - **Snowy plover social attraction at A16 and SF2**
- **Initial plover interest in islands at all three sites**
 - **Not used by plovers at A16 and SF2 after 2-3 years**
 - **Nesting continues at E12/13 at low frequency**

Nest success and abundance



Oyster Shell Enhancement at E14



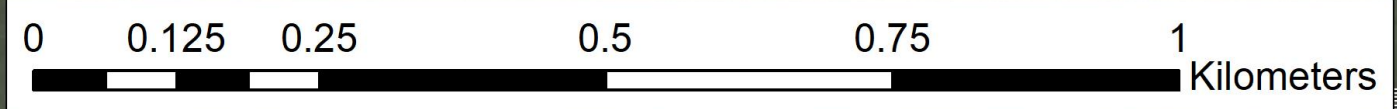


Pond E14 Snowy Plover Nests

Year

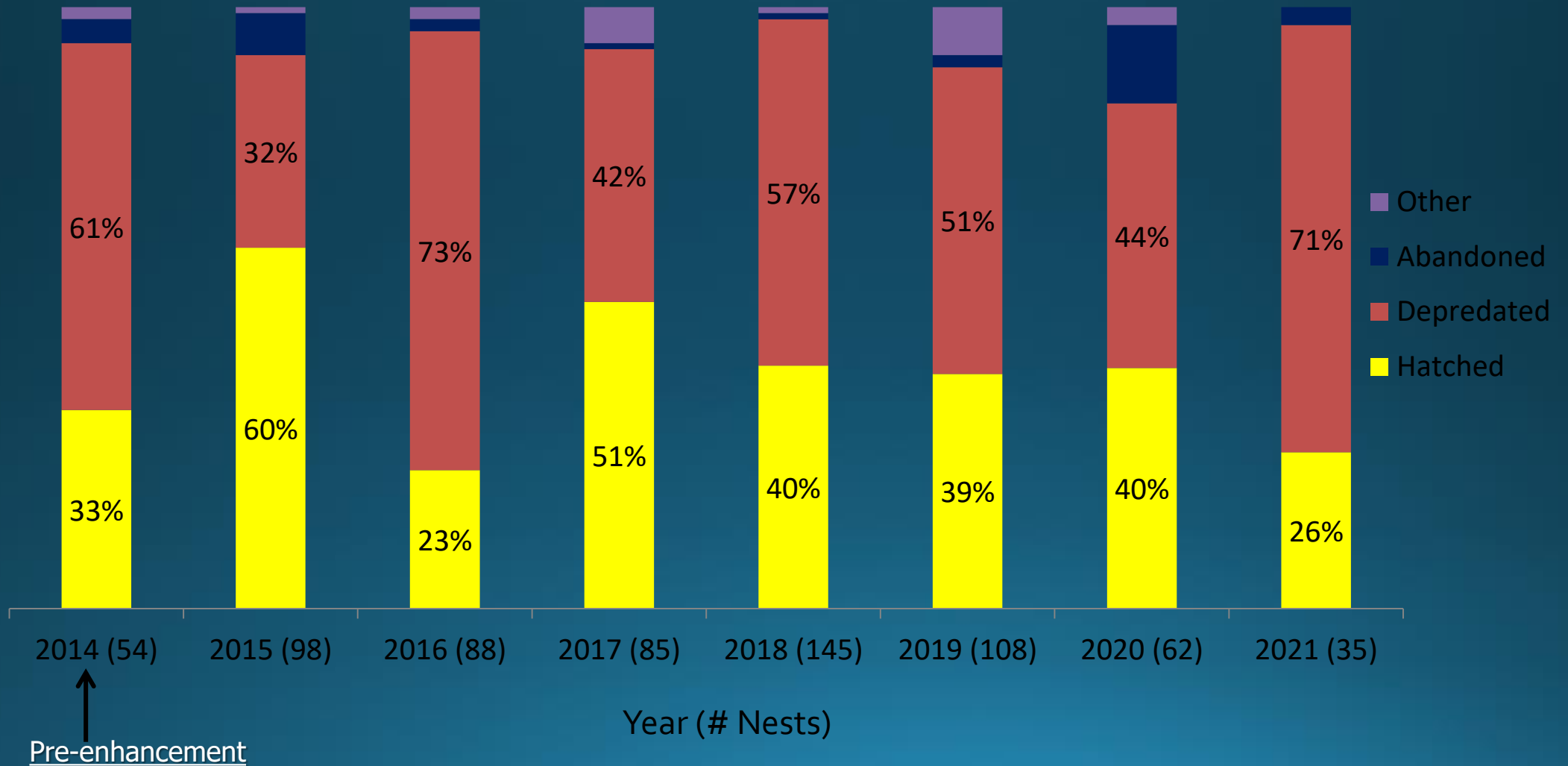
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021

- Pilot Shell Plot
- 2015 Shell Enhancement

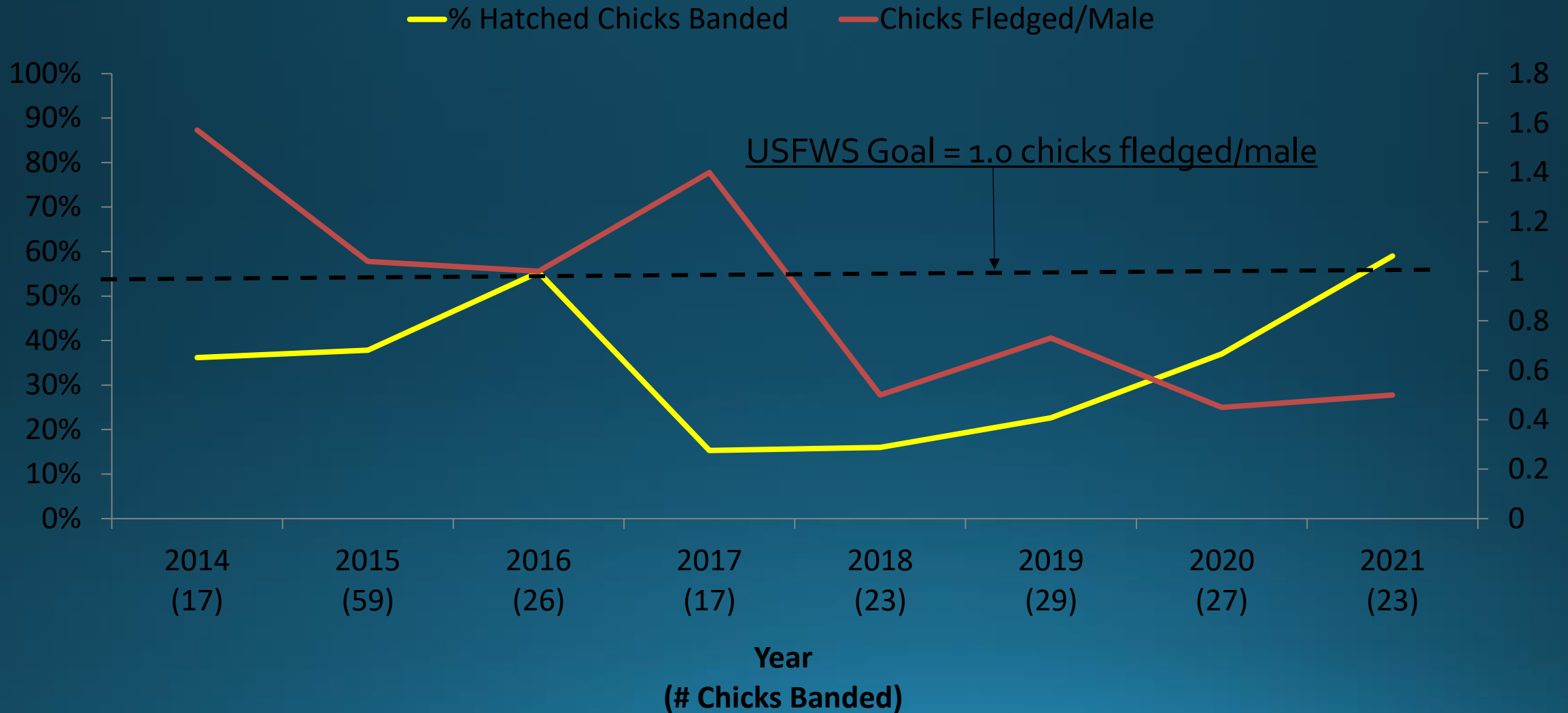




Poor hatching success most years



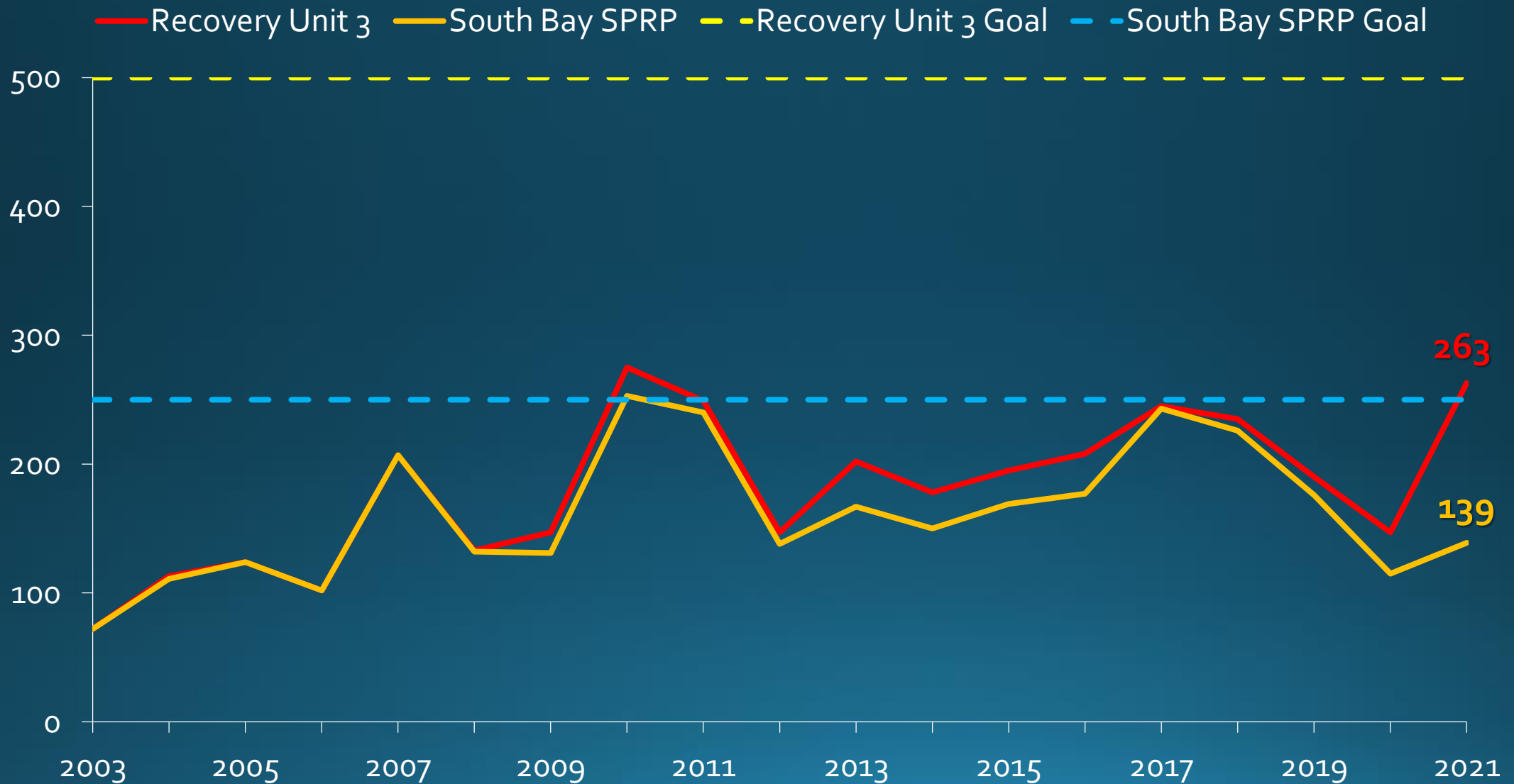
Recovery goal not met most years



Predators know where to get an easy meal



Population fluctuates, stable overall



Nest Steps: Physical barriers



Next Steps: More pond enhancement!



Thanks to everyone who made this work possible!

- SFBBO staff and volunteers
- USFWS
- CDFW
- South Bay Salt Pond Restoration Project
- Funders and donors
- Everyone else I forgot to mention 😊