RCHCA

RIVERSIDE COUNTY HABITAT CONSERVATION AGENCY

Stephens' Kangaroo Rat

A Success Story

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PRESENTATION OVERVIEW

HISTORY OF THE RCHCA

MEET THE STEPHENS' KANGAROO RAT

MANAGEMENT METHODS

HISTORICAL MONITORING STRATEGY

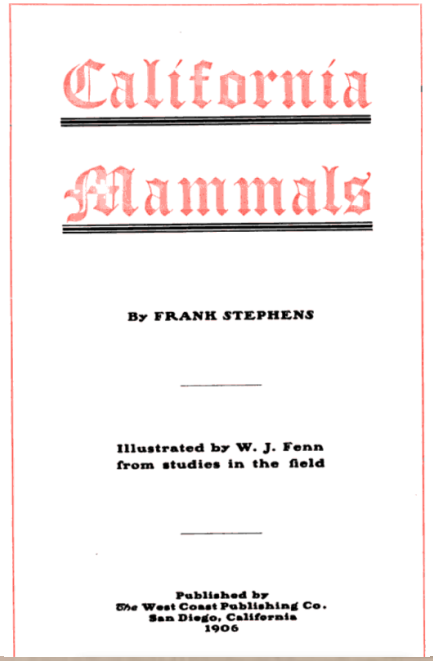
RANGEWIDE MANAGEMENT & MONITORING

STEPS TOWARDS RECOVERY

Q & A

HISTORY OF THE RCHCA

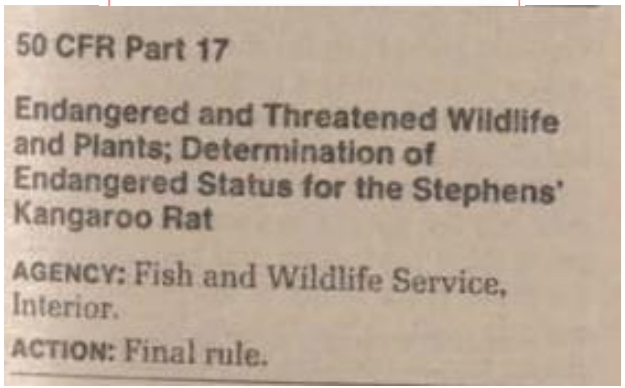
- Formed in 1991
- Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) was approved in 1996
- Joint Powers Authority (JPA)
- Provides management oversight for over 52,000 acres of SKR habitat


California Mammals

By FRANK STEPHENS

Illustrated by W. J. Fenn from studies in the field

Published by The West Coast Publishing Co. San Diego, California 1906

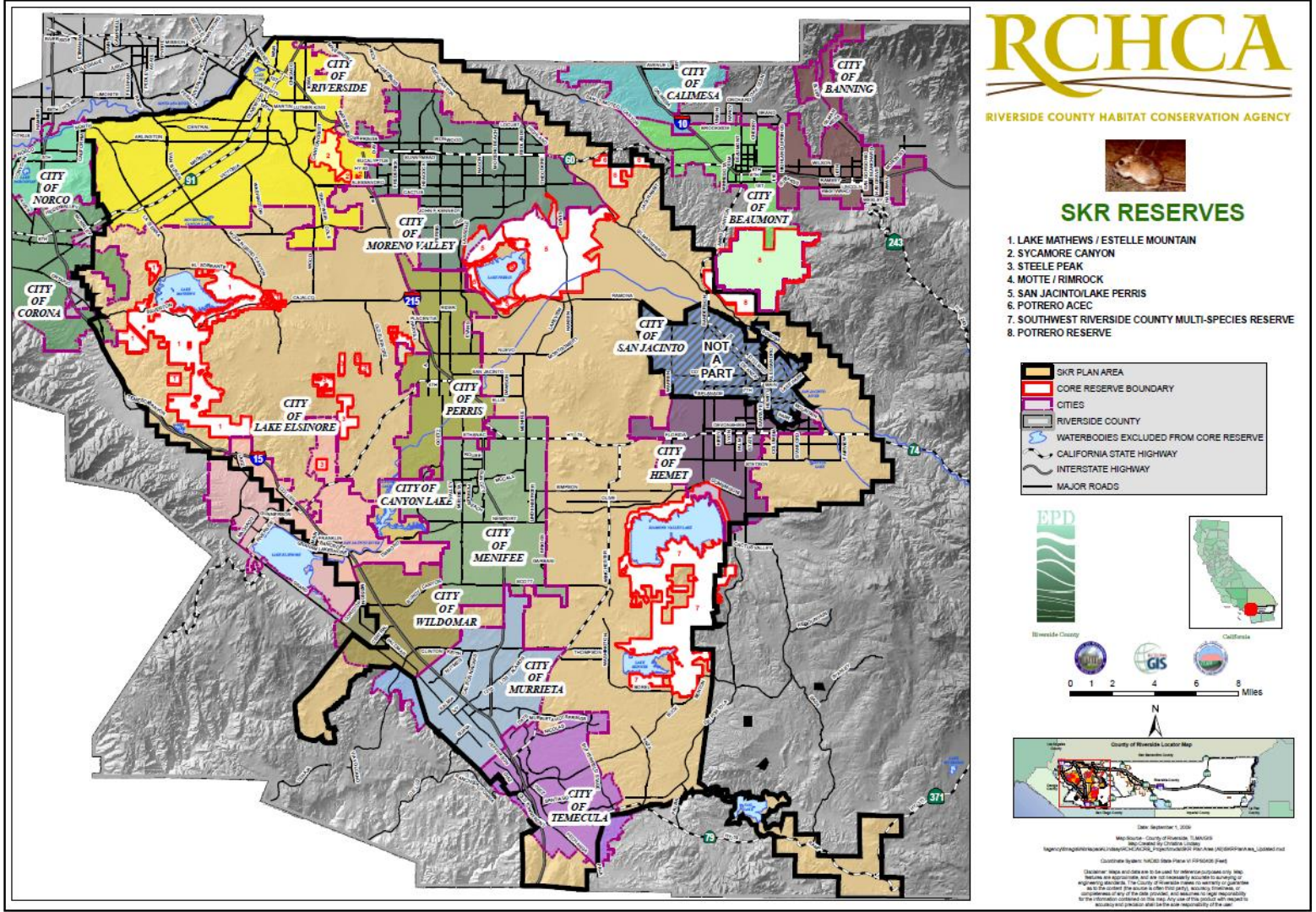

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Stephens' Kangaroo Rat

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

CORE RESERVES



Stephens' Kangaroo Rat (SKR)

- Stephens' Kangaroo Rat (SKR) was listed as endangered in 1988 due to habitat loss. It is endemic to Western Riverside County and N. San Diego and inhabits grasslands
- Downlisted to threatened in February 2022
- SKR is important for conservation because it is a keystone species. Many species in its ecosystem depend on it to survive (predators, plants).
- SKR facts:
  - Nocturnal, live in burrows
  - Seed-eaters that carry seeds in the pouches of cheeks and get all their water from their diet, never needing to drink water
  - Weighs approx. 2.4 oz
  - Can jump 6 feet at 10 feet/second

MANAGEMENT METHODS

HABITAT MANAGEMENT

Tools for improving habitat, such as grazing, mechanical treatments, fire, herbicide and soil decompaction

POPULATION MANAGEMENT

Information about dispersal improvements, translocation and reintroduction, genetic augmentation

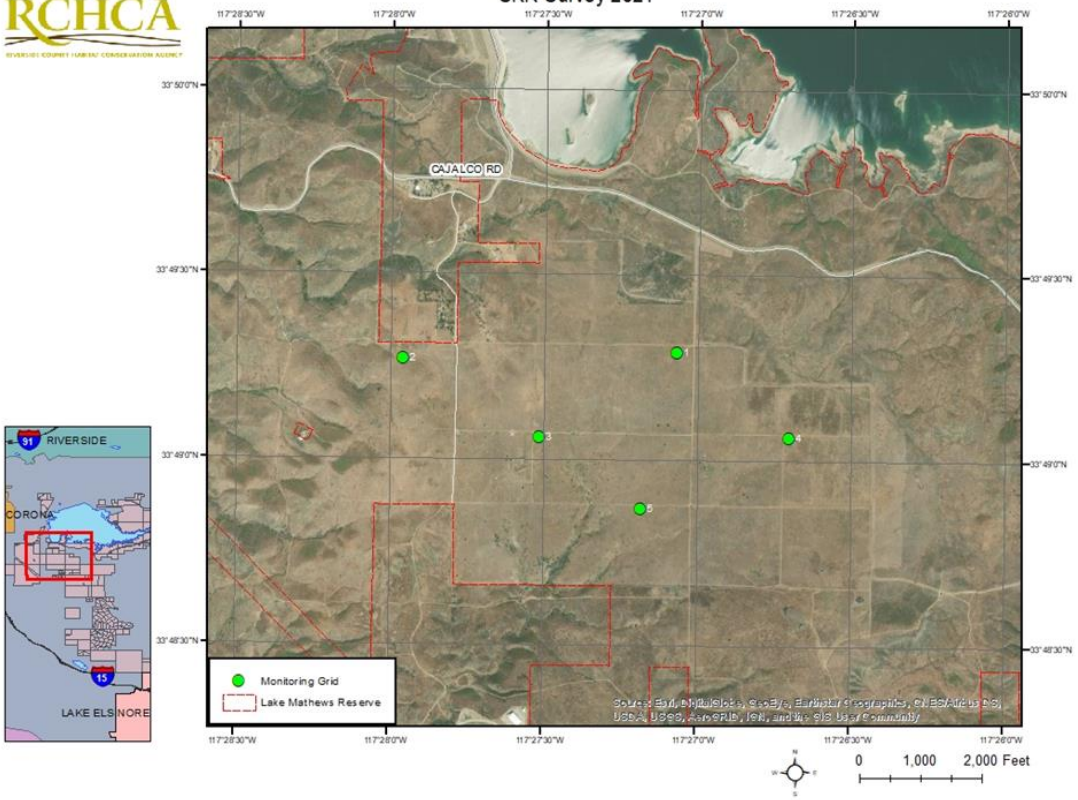
THREAT MANAGEMENT

Resources for minimizing threats such as nonnative predators, movement barriers, or excess light

Historical Monitoring Strategy was designed to:

- Track indiv. reserve changes in SKR populations
- Evaluate effects of management actions
- Guide adaptive management decisions for individual reserves
- Identify research and funding priorities

Figure 1: Lake Mathews/Estelle Mountain Reserve
SKR Survey 2021



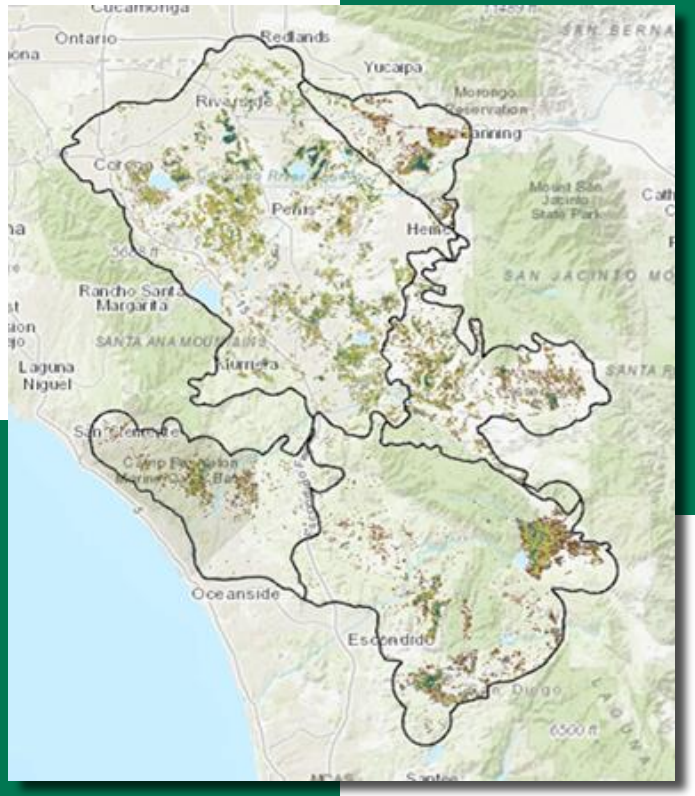
YEAR	SKR	# of grids
2010	3	10
2015	55	5
2017	62	5
2021	91	5

THE FUTURE - A RANGEWIDE APPROACH

Multi-agency, cross-boundary, conservation collaboration

STANDARDIZE POPULATION MONITORING

Ability to compare data across the range



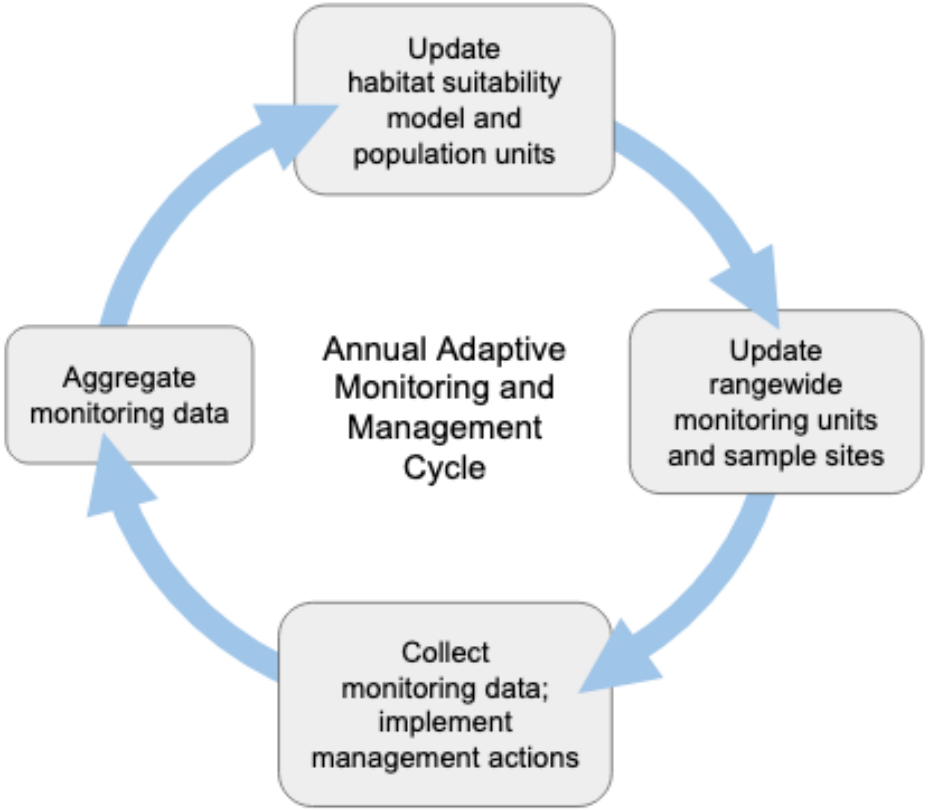
FACILITATE BETTER MANAGEMENT

- Focus resources where they are needed
- Adaptive Management

ASSIST WITH FUTURE STATUS ASSESSMENTS

ADVANCE RANGEWIDE SKR CONSERVATION AND RECOVERY GOALS

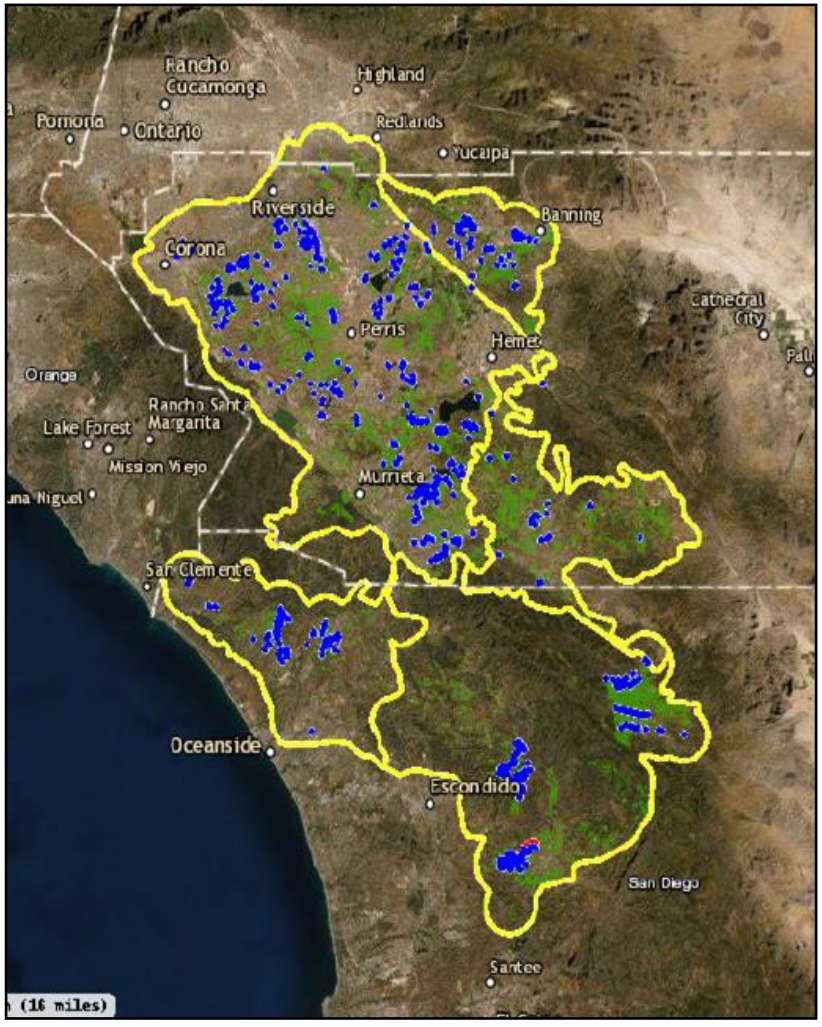
The SKR Adaptive Management Cycle



Updateable SKR Habitat and Biogeography Working Map

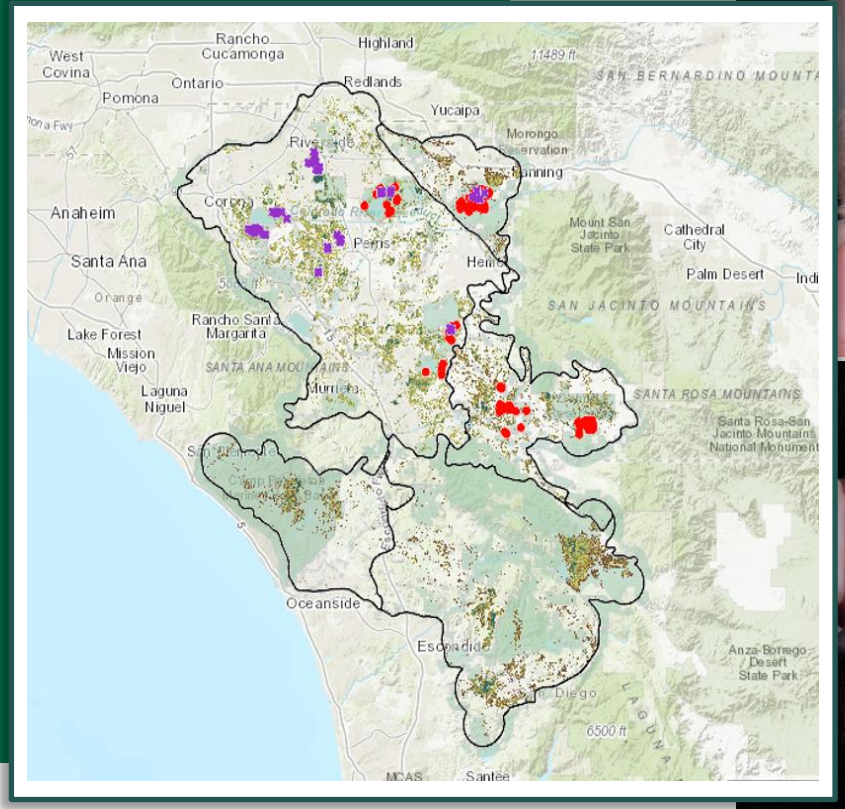
An updatable SKR Biogeography Working Map (on databasin.org)

- To aid understanding and tracking of spatial information:
  - SKR distribution
  - Habitat value
  - Fragmentation and connectivity
  - Environmental conditions
  - Etc.
- To support conservation planning and implementation



RANGEWIDE MONITORING STRATEGY

- Track rangewide population status and trends in SKR populations
- Evaluate effects of conservation measures
- Guide adaptive management decisions over entire range



Potential SKR Trapping Grid Locations

GENETICS RESEARCH

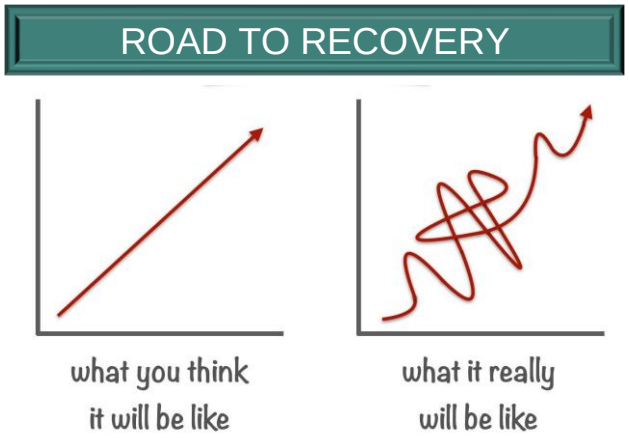
Genetics research by

San Diego Zoo Wildlife Alliance

- How fragmentation affects SKR
- Where improved connectivity is needed
- Where translocations or reintroductions are advised
- Improved population monitoring

NEXT STEPS: FULL RECOVERY

- Implementation of Rangewide management and monitoring plan
- Collaboration with land owners and partners
- Collect SKR population/trend data over entire range over time



QUESTIONS?