California Condor Conservation Planning in the Tehachapi Wind Resource Area

Informational Outreach Webinar

Tuesday – June 9, 2020

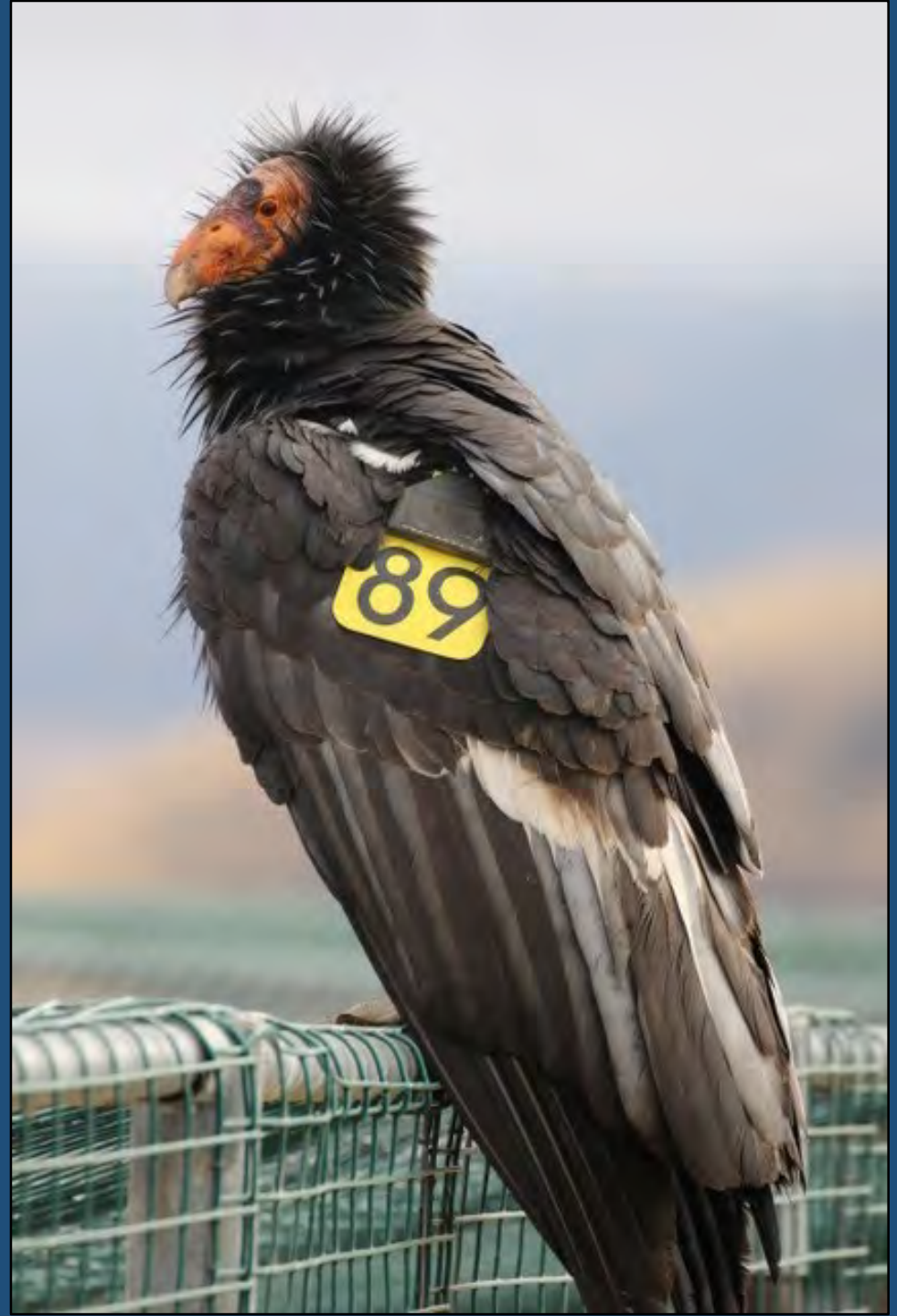
Meeting agenda

- Overview of meeting
  - Purpose and goals for this meeting
- Background on why we are working on conservation plans for California condors in the Tehachapi Mountains
- Update on the California condor and Recovery Program efforts
- Conservation plans
  - Review of section 10(a)(1)(B) of the Endangered Species Act
  - Overview of the condor conservation plans
- Questions and comments
- Wrap up and next steps

Overview of meeting

- Purpose and goals
- Format

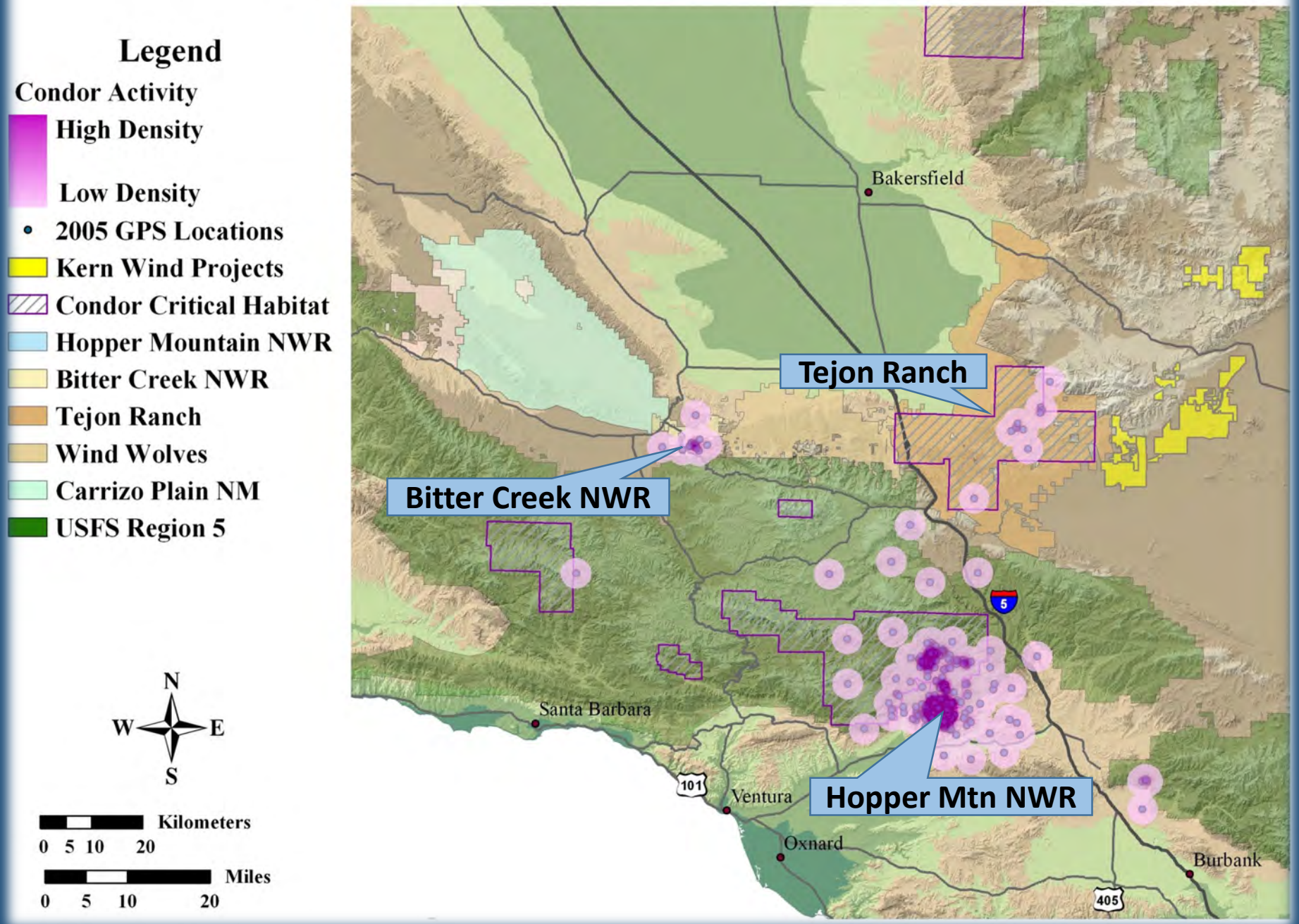
* For questions and comments during the presentation please use the WebEx ‘chat’ feature or email ray_bransfield@fws.gov



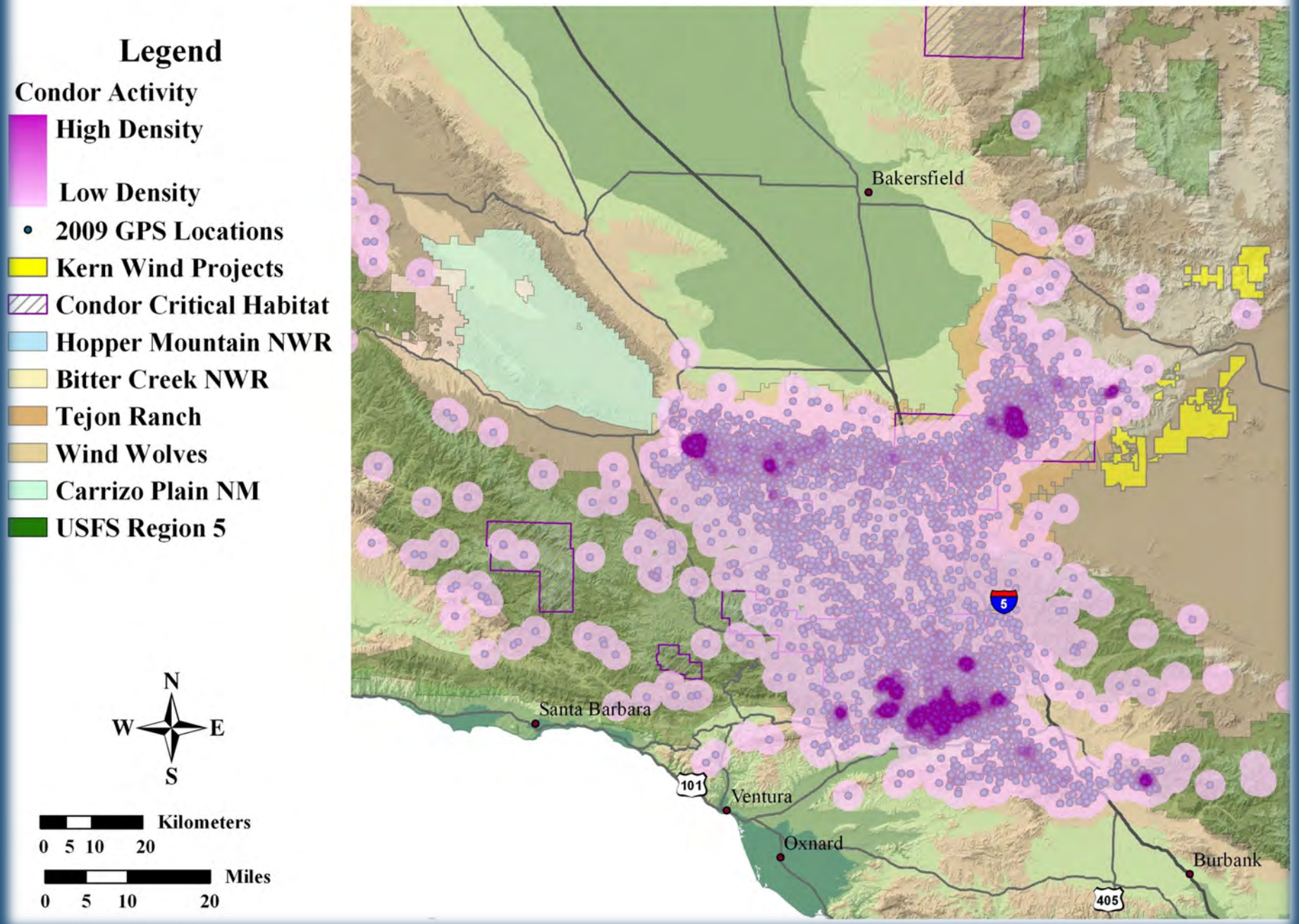
Background

- Why are we working on conservation plans for California condors in the Tehachapi Mountains?

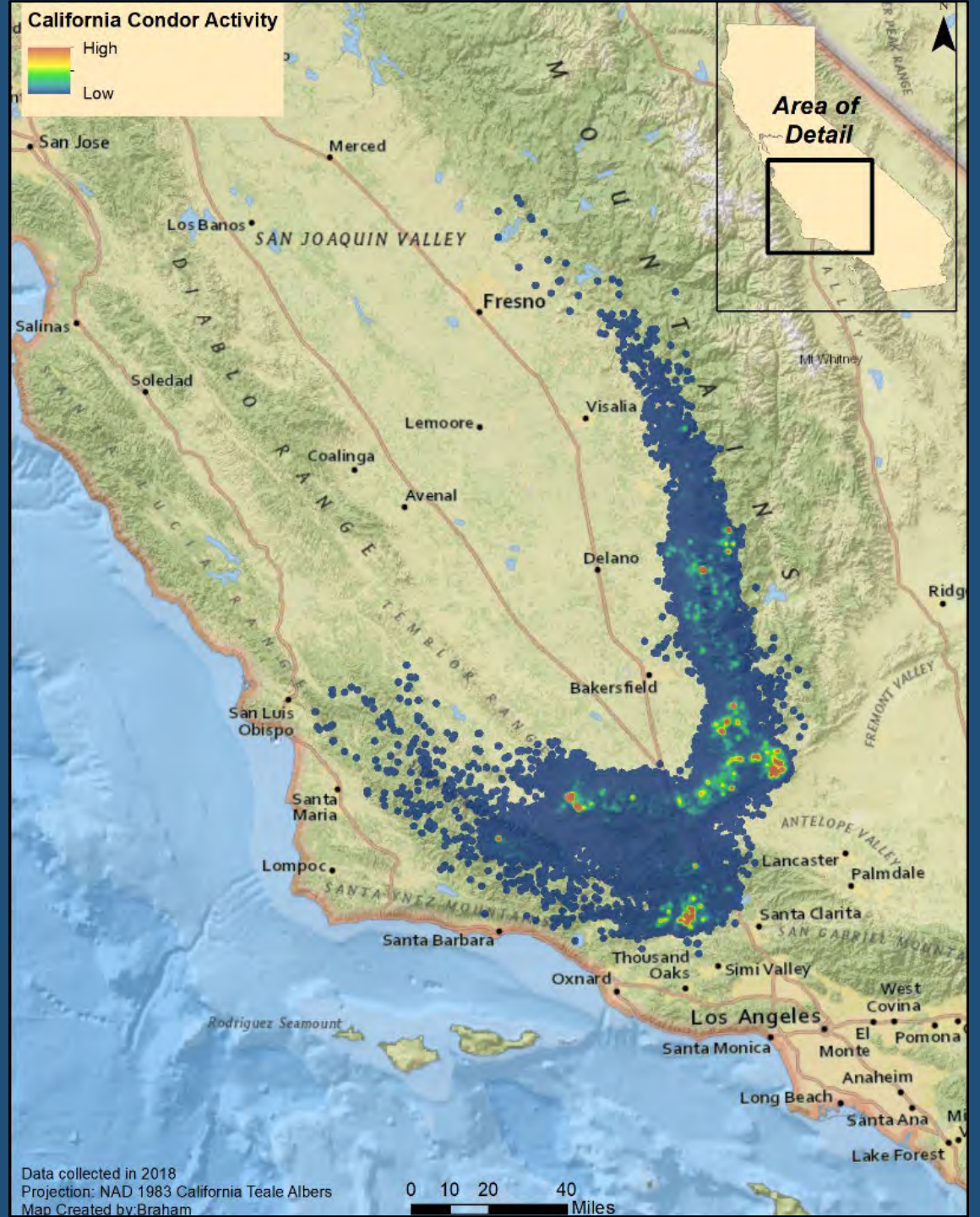
California Condor GPS Locations: 2005



California Condor GPS Locations: 2009



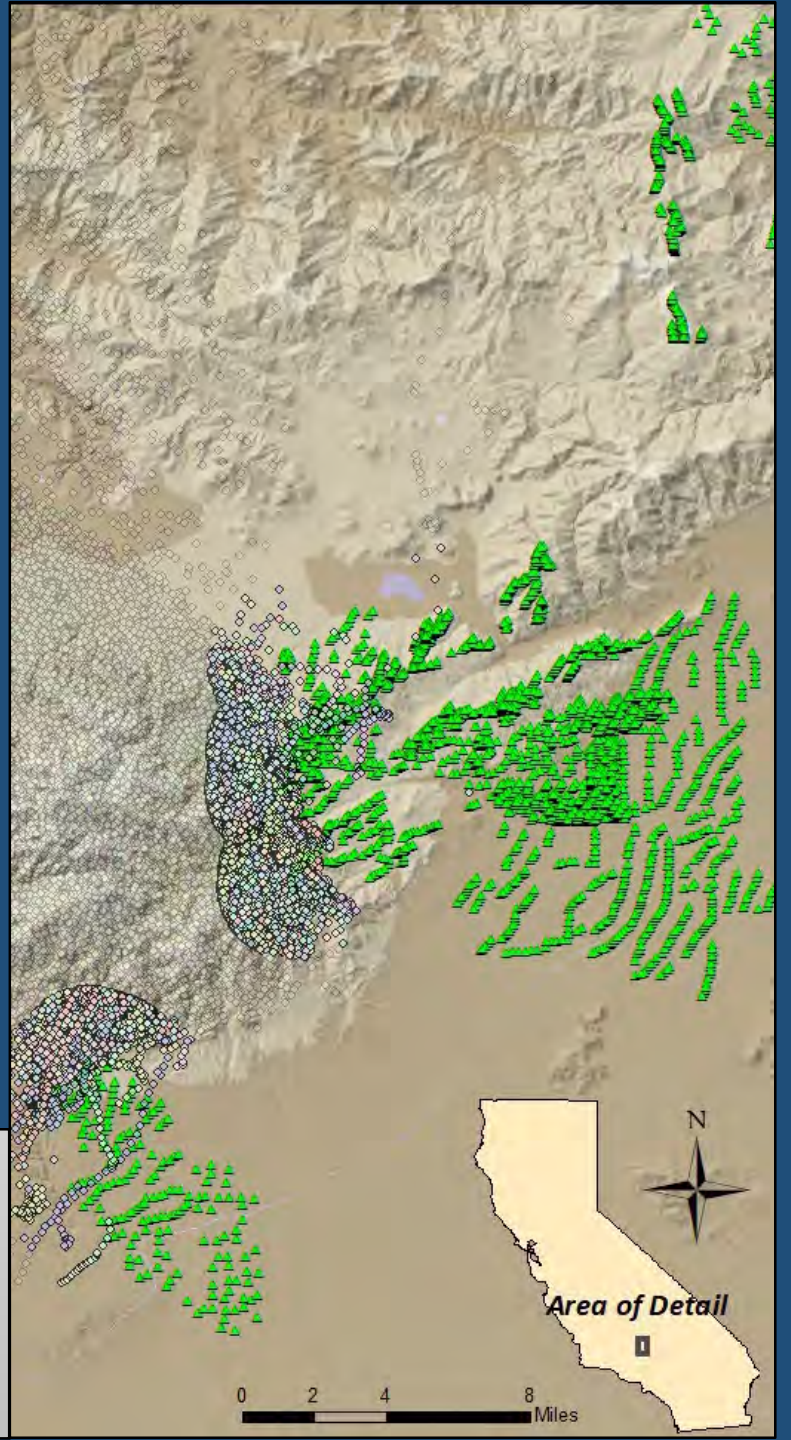
California Condor GPS Locations 2018



Tehachapi Wind Resource Area

<u>2018 condor movements</u>

- 68 of 70 birds equipped with GPS units detected perched within 2-miles of turbines (84% of population)
- Majority of these detections occurred between the months of July-October
- Greatest number of condors in a day within 2-miles of turbines was 48 on September 26, 2018

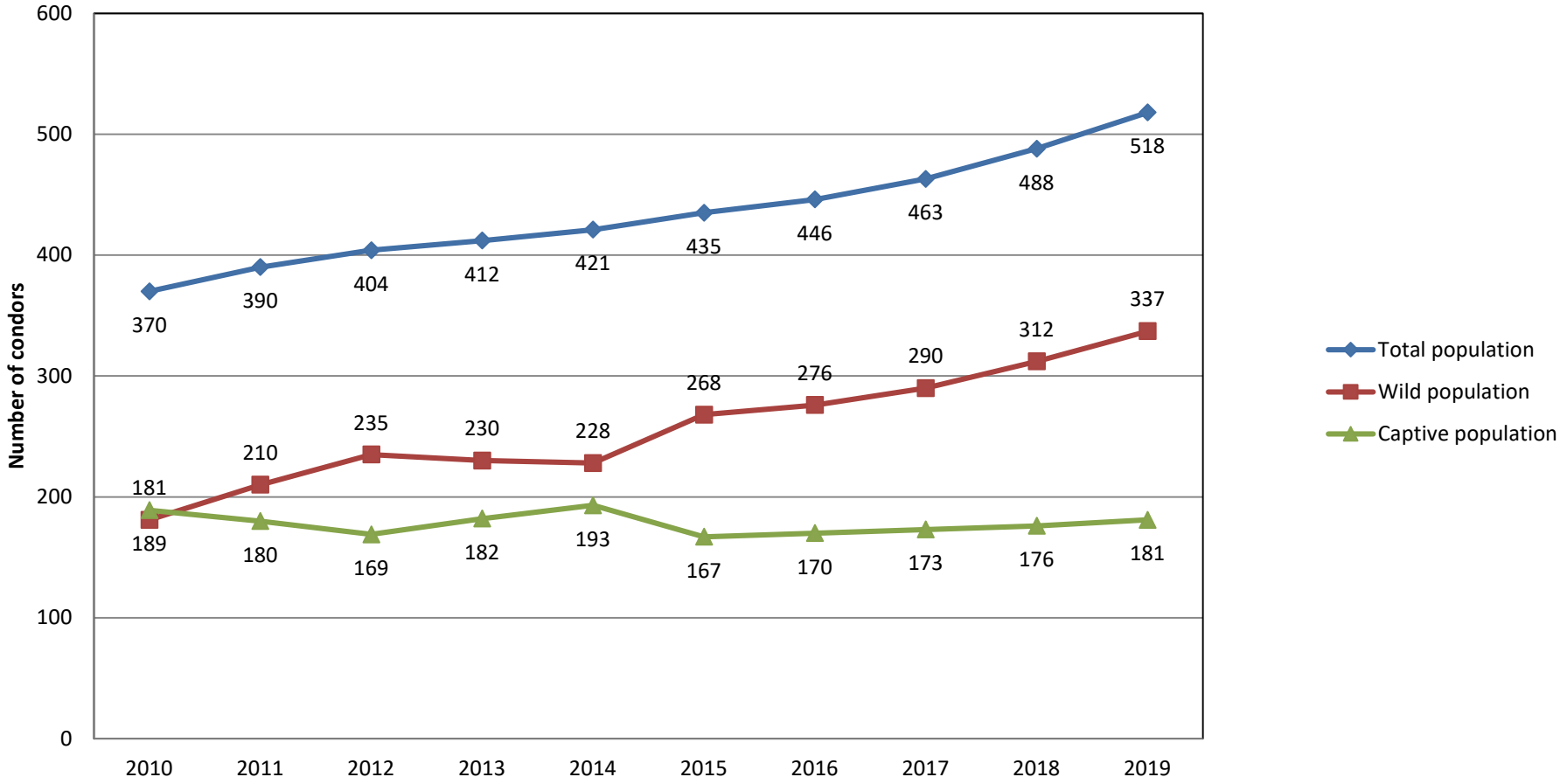


Update on the California Condor Recovery Program

California Condor Recovery Program
2019 Annual Population Status

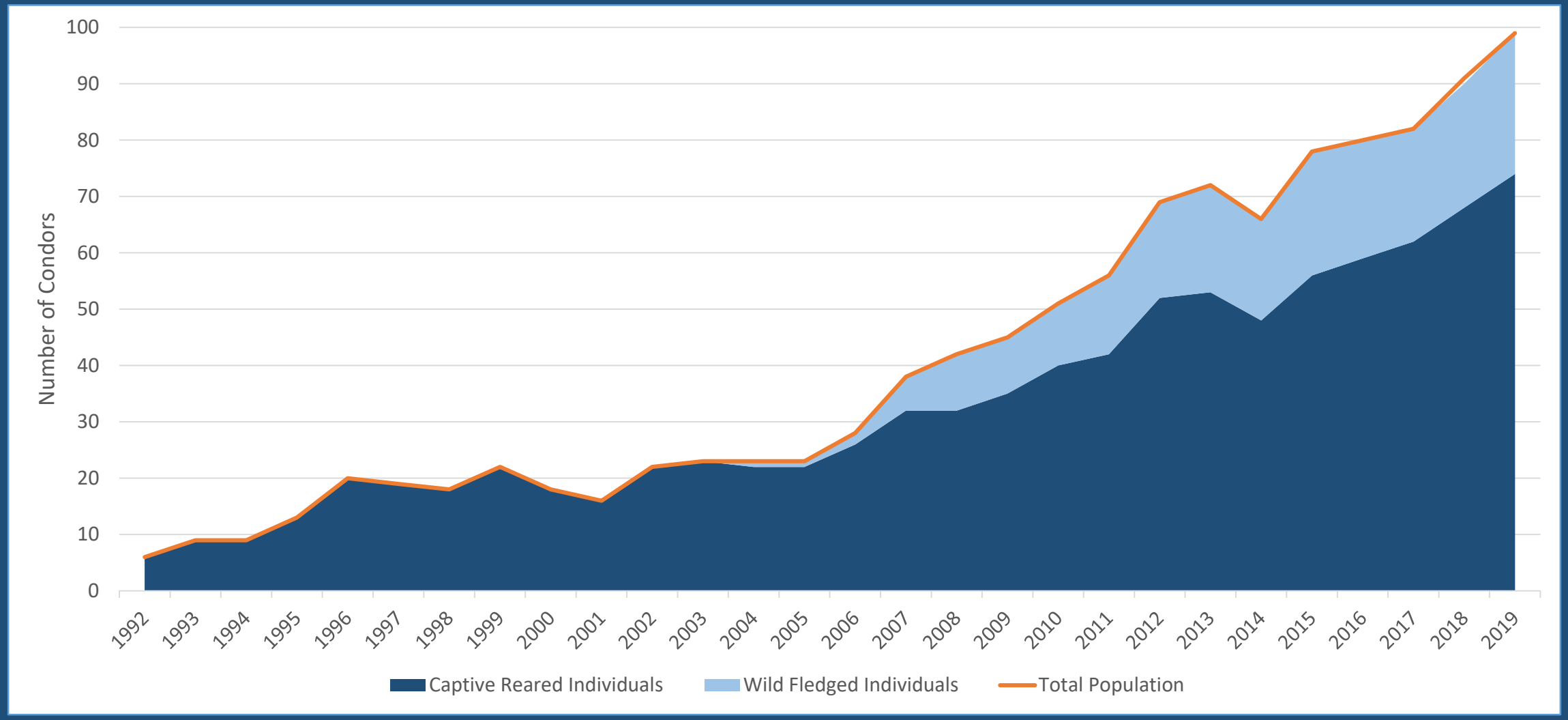
Total World Population	**518**
Wild Population	**337**
California	**200**
Arizona /Utah	**98**
Baja, Mex.	**39**
Captive Population	**181**

California Condor Global Population Trend 2010 - 2019

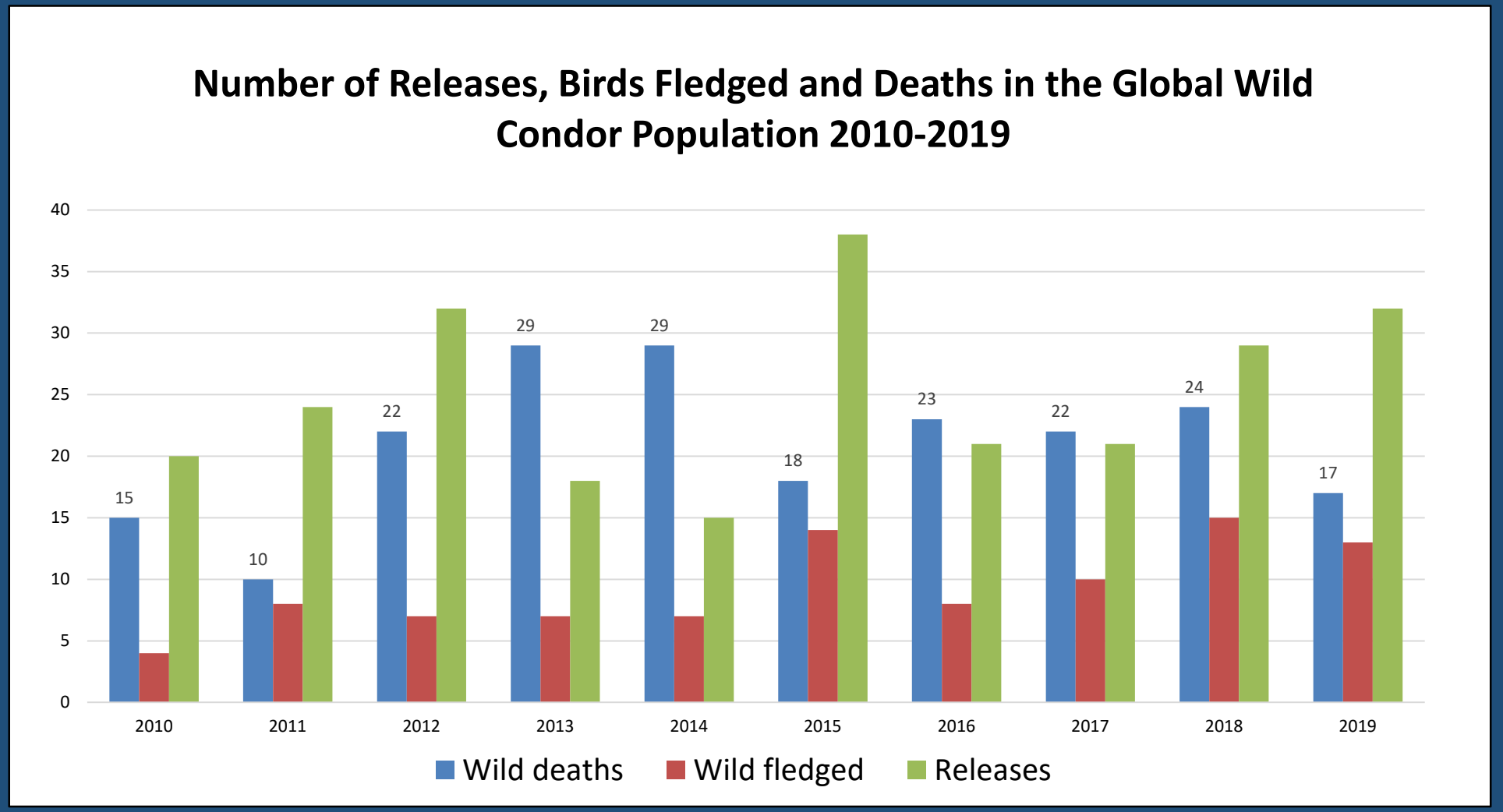


The wild population is increasing by an average of 6% per year

Southern California Condor Population Trend: 1992 - 2019

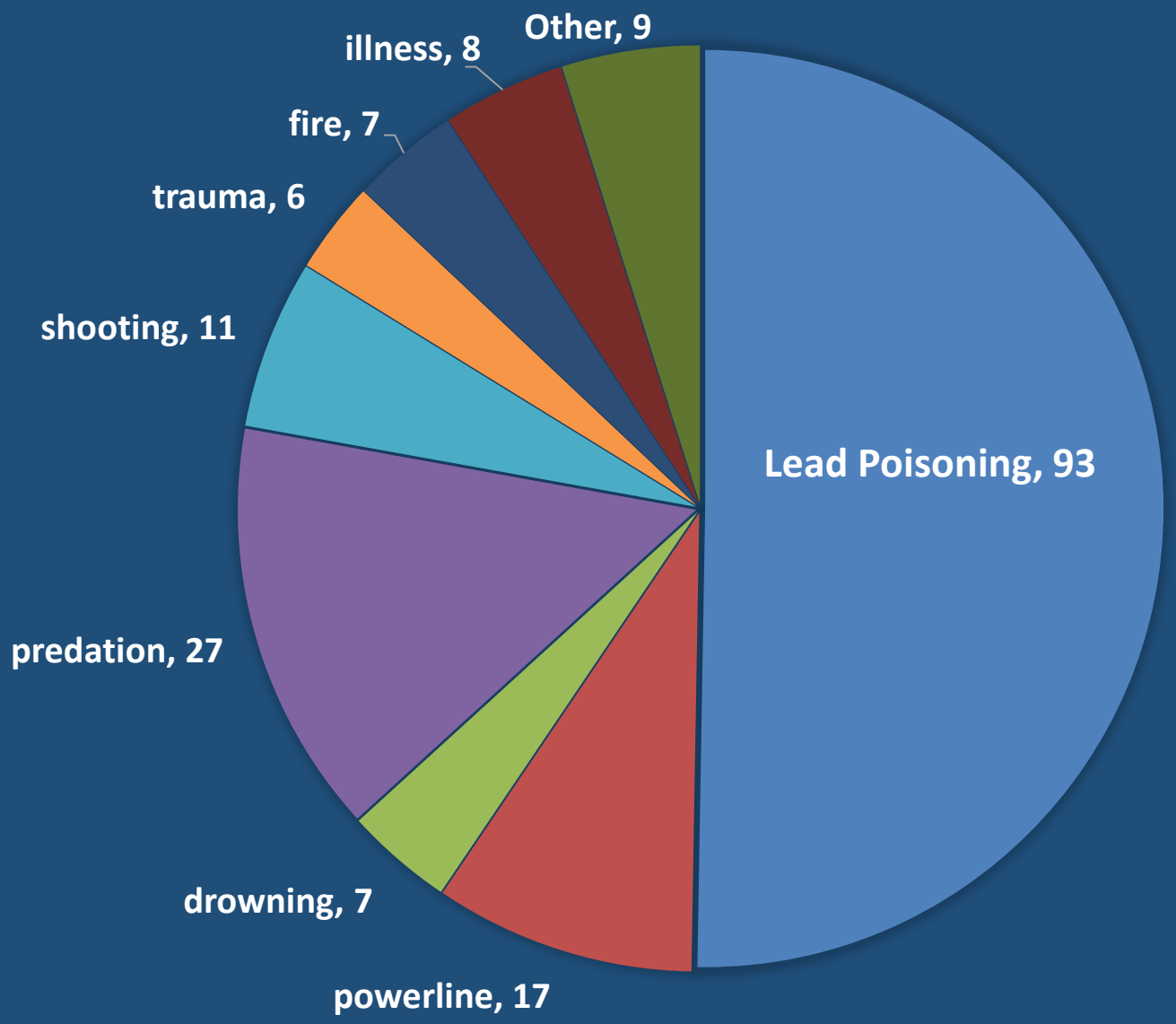


The proportion of the population comprised of wild fledged birds has been increasing the past two decades.



Deaths are still out pacing the number of wild fledged birds – population growth is dependent on the continued release of captive bred birds.

CAUSES OF MORTALITY IN THE GLOBAL FREE-FLYING CONDOR POPULATION: 1992 - 2019



Lead poisoning is responsible for 50% of all deaths with a known cause.

What we are doing about it?

The overall goal for recovery is a wild population that is self sustaining

Two phased approach:

1) Reduce mortality from lead poisoning (non-lead outreach)

2) Continuing to grow the wild population through captive breeding and release of additional birds

Monitoring California condors in the wild

Efforts to trap the entire southern California wild population twice each year

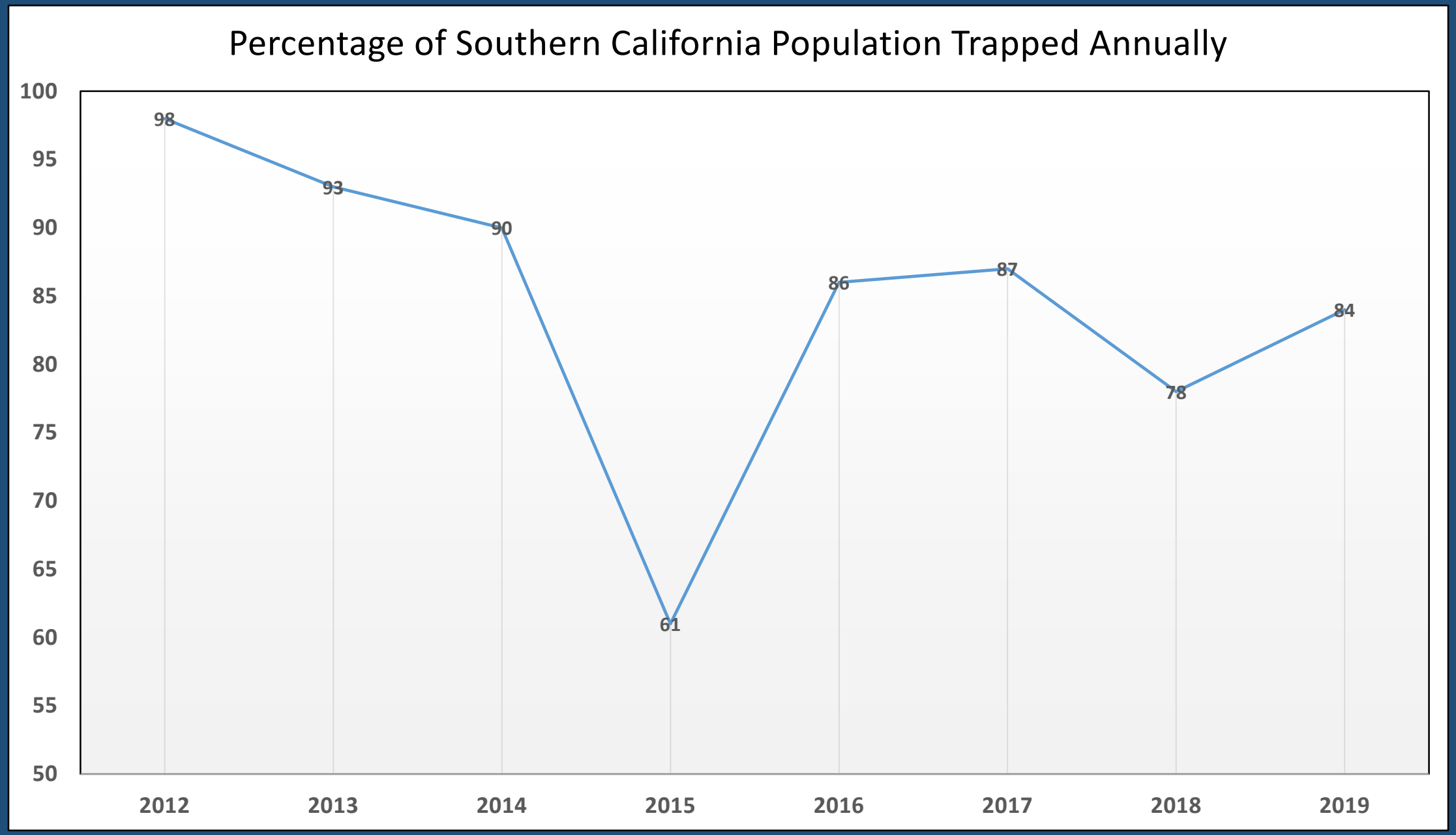
- Attach transmitters and tags
  - Two types: GPS and VHF
  - Goal of two tracking units on each bird when possible
- Conduct health checks
- Take blood and feather samples

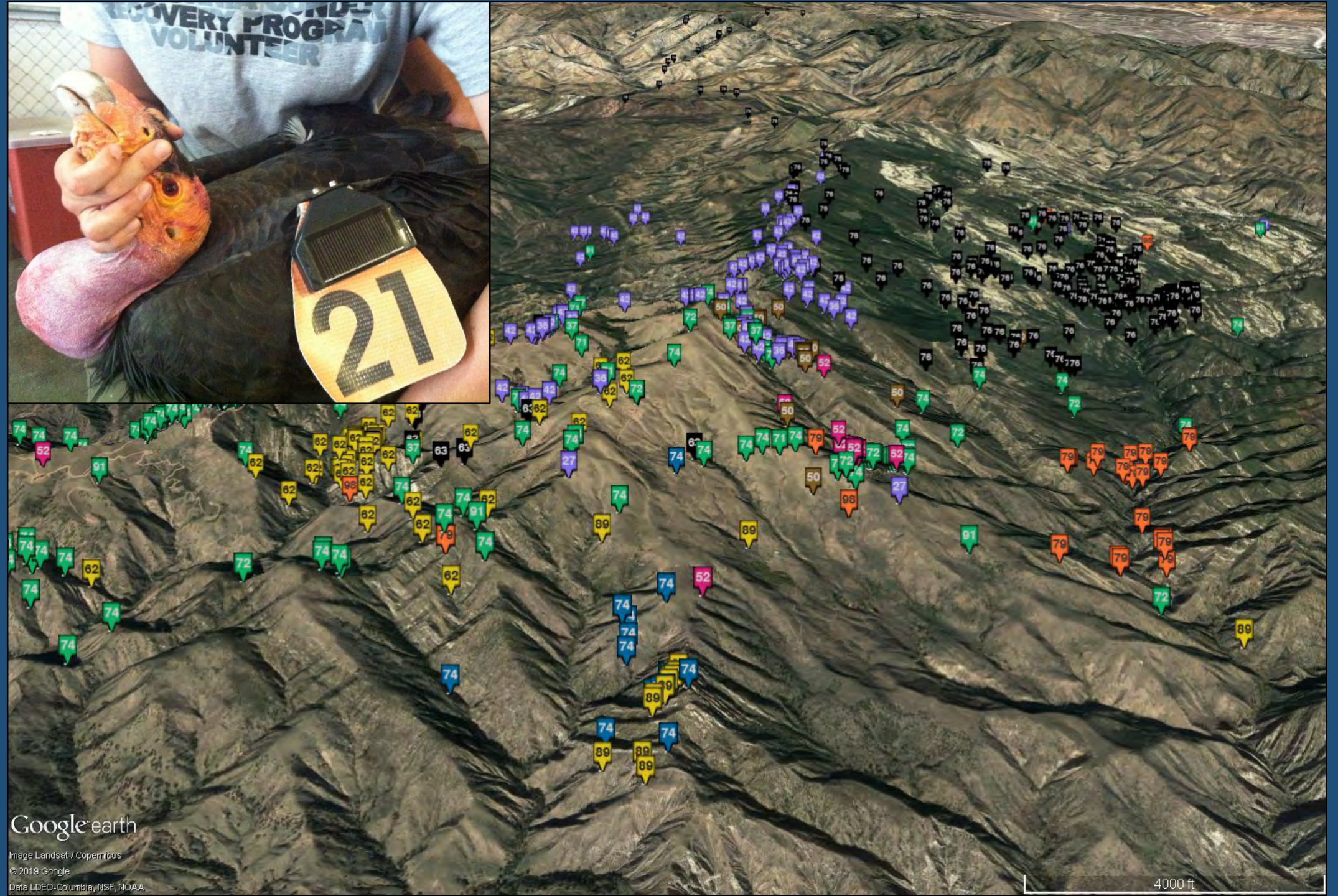
Southern California condor trapping and tagging efforts

- 2019: 84% of population trapped at least once (600 trapping hours)

- Dec 31st, 2019
  - 90% with VHF transmitters
  - 76% with GPS transmitters

- Jun 1st, 2020
  - 84% with VHF transmitters
  - 66% with GPS transmitters


Percentage of Southern California Population Trapped Annually
100
95
90
85
80
75
70
65
60
55
50
98
93
90
61
86
87
78
84
2012
2013
2014
2015
2016
2017
2018
2019


VOLUNTEER
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Google earth
Image Landsat / Copernicus
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Data LDEO-Columbia, NSF, NOAA
4000 ft

ESA Section 10(a)(1)(B)

Applicants for an incidental take permit must submit a "conservation plan" that specifies:

- the impact likely to result from the incidental take
- measures to minimize and mitigate the impact and the available funding to implement these measures
- Alternatives to taking the listed species

Other Components of the Process

Notice in the Federal Register

NEPA - We are preparing an environmental assessment to start NEPA

- informed decisions, transparency, public involvement

Internal section 7(a)(2) consultation

Findings to document our decision on whether to issue the incidental take permit.

HCP Handbook, FWS and NOAA, December 2016

We recommend that proponents apply for an incidental take permit if "their activity or activities are reasonably certain to result in incidental take."

We do not issue incidental take permits as "insurance."

FWS can assist in developing the conservation plan, if the applicant requests it.

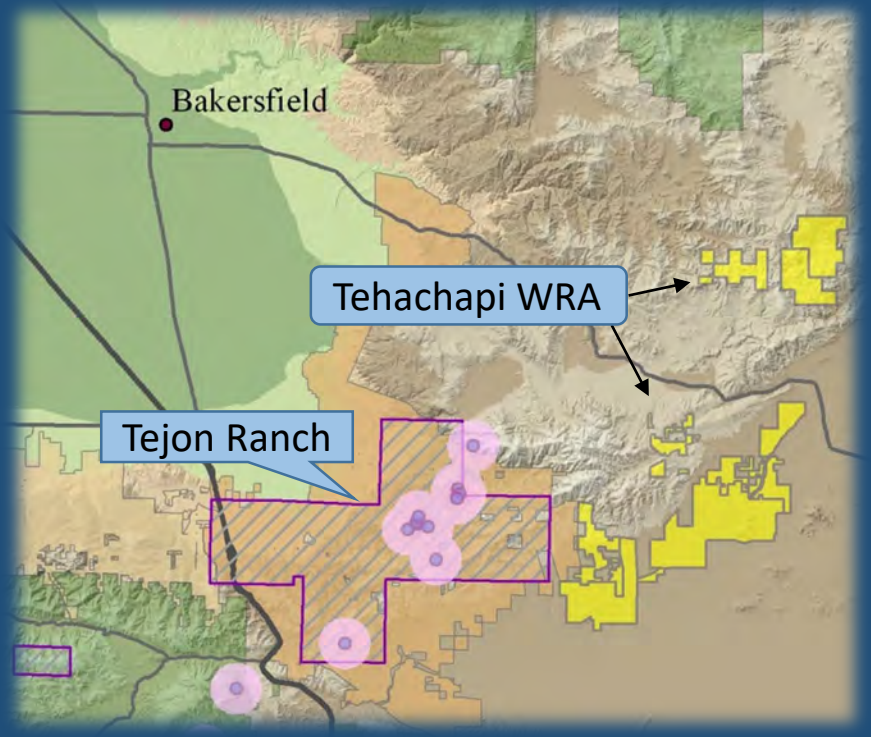
Overview of the conservation plans

Permit structure

- individual vs. group

Permit duration

Permit area



Covered species

- single species – California condor
- other species considered but not included
  (e.g., southwestern willow flycatcher, desert tortoise, etc.)

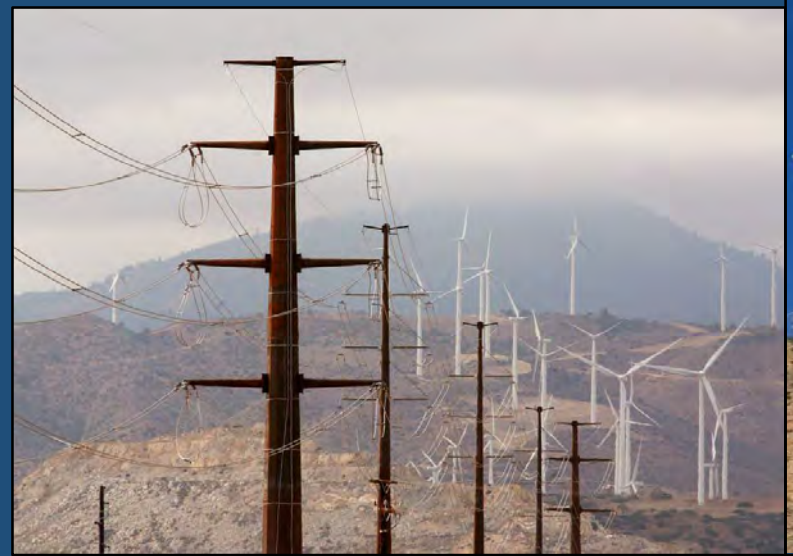
Covered activities

Turbine operations and maintenance

Operations and maintenance of other facility components

- e.g., collection and transmission line systems; Operations & Maintenance buildings; electrical substations; meteorological towers; access roads

Repowering



Assessing risk and anticipated take

Summary of condor activity at/near wind projects

- leverage data from condors with telemetry gear

Risk from covered activities

- collision with operational turbines and overhead power lines the primary sources of potential take

Anticipated take

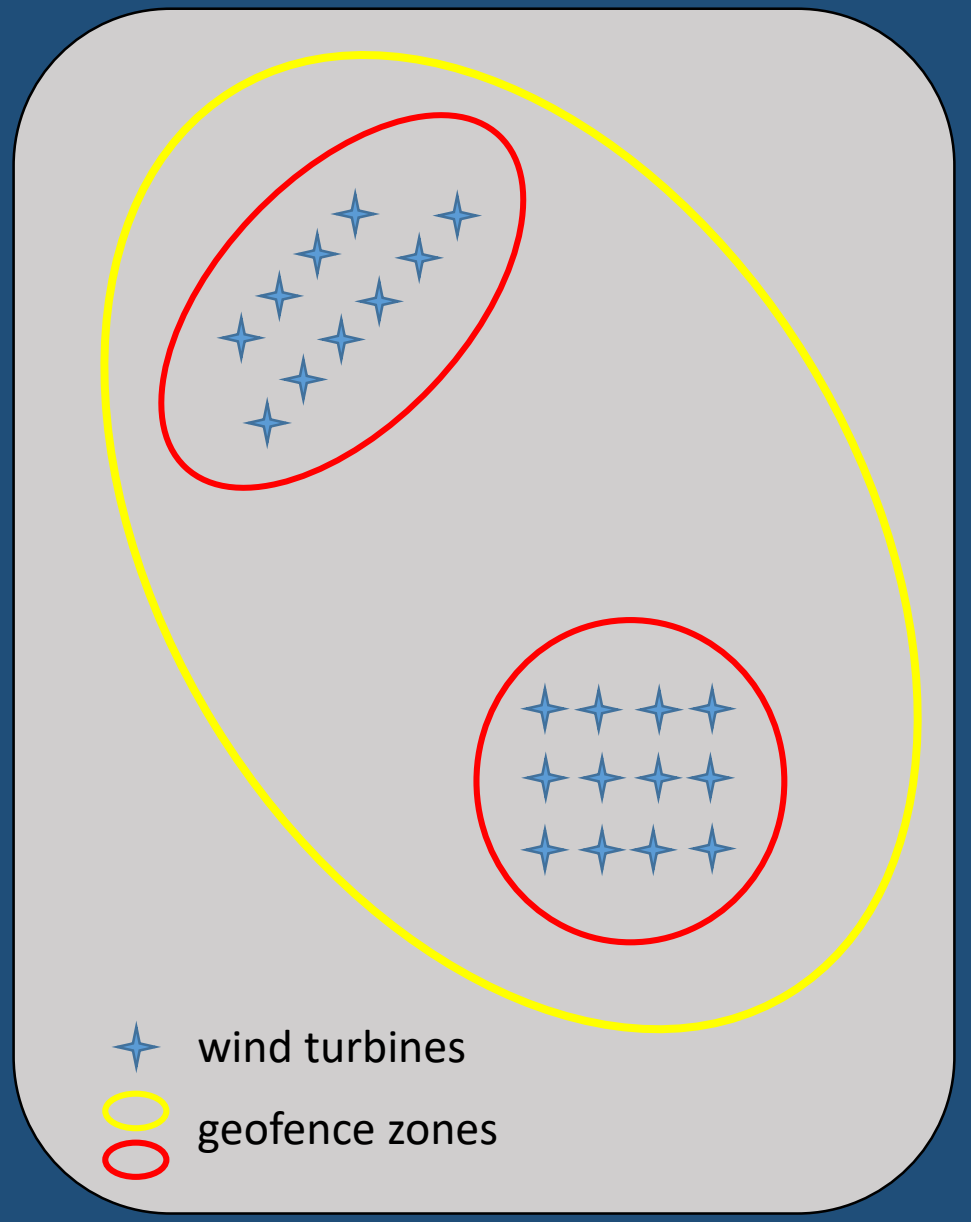
- no quantitative model to predict take
- individual projects requesting permits for incidental take of 2 adult condors and 2 eggs or chicks

Conservation strategy – minimization

Systems to detect condors and curtail turbines

- geofence operational now
  - dependent on transmittered birds
- adaptive management plan to transition to other minimization approaches as needed

https://www.audubon.org/magazine/spring-2018/how-new-technology-making-wind-farms-safer-birds



Geofence example

Conservation strategy – mitigation

A Population Viability Analysis (PVA) was conducted by a team of independent academic researchers

- Drs. Myra Finkelstein and Vickie Bakker

Main goals

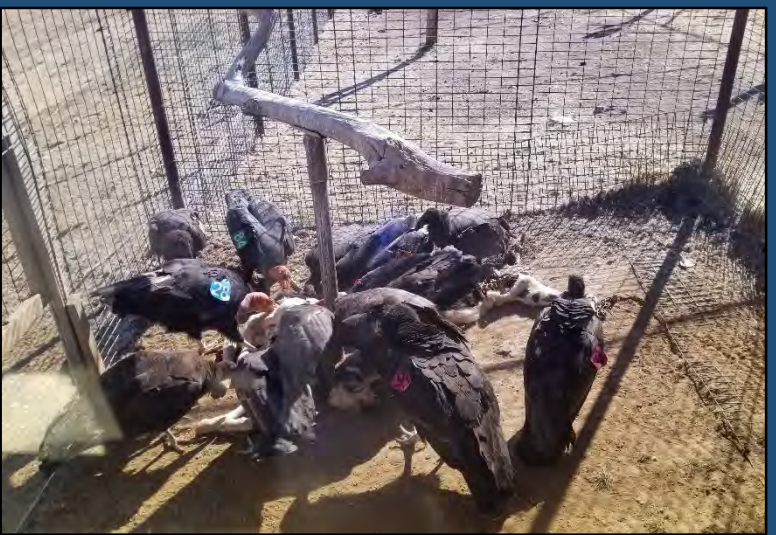
1. evaluate the amount of mitigation required to offset the fatality of an adult condor

2. evaluate the effects of take on the population in the absence of mitigation

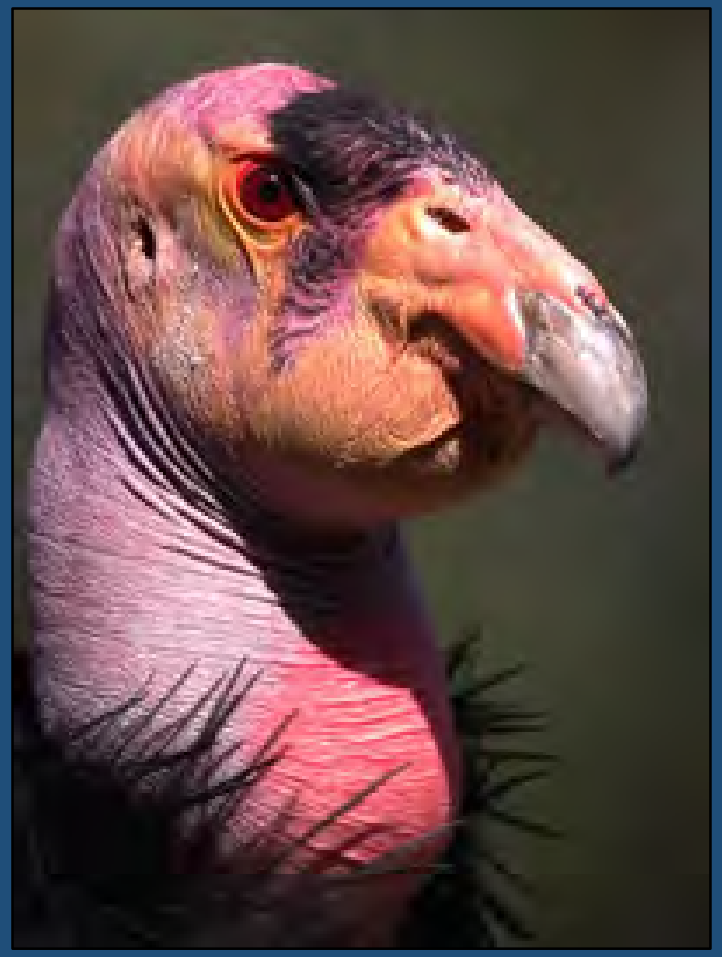
Conservation strategy – mitigation

Wind companies working with condor breeding facilities to increase production of captive-reared condors for release into the wild

- e.g., construction of new facilities, increasing staffing, etc.
- a quantifiable and measurable approach to mitigation
- fits with recovery program goals



Question and comments



Wrap up and next steps