



UPLAND GAME BIRD ACCOUNT

Fund Review for Fiscal Year 2025-2026 and Forecast for Fiscal Year 2026-2027

California Department of Fish and Wildlife – Upland Game Unit

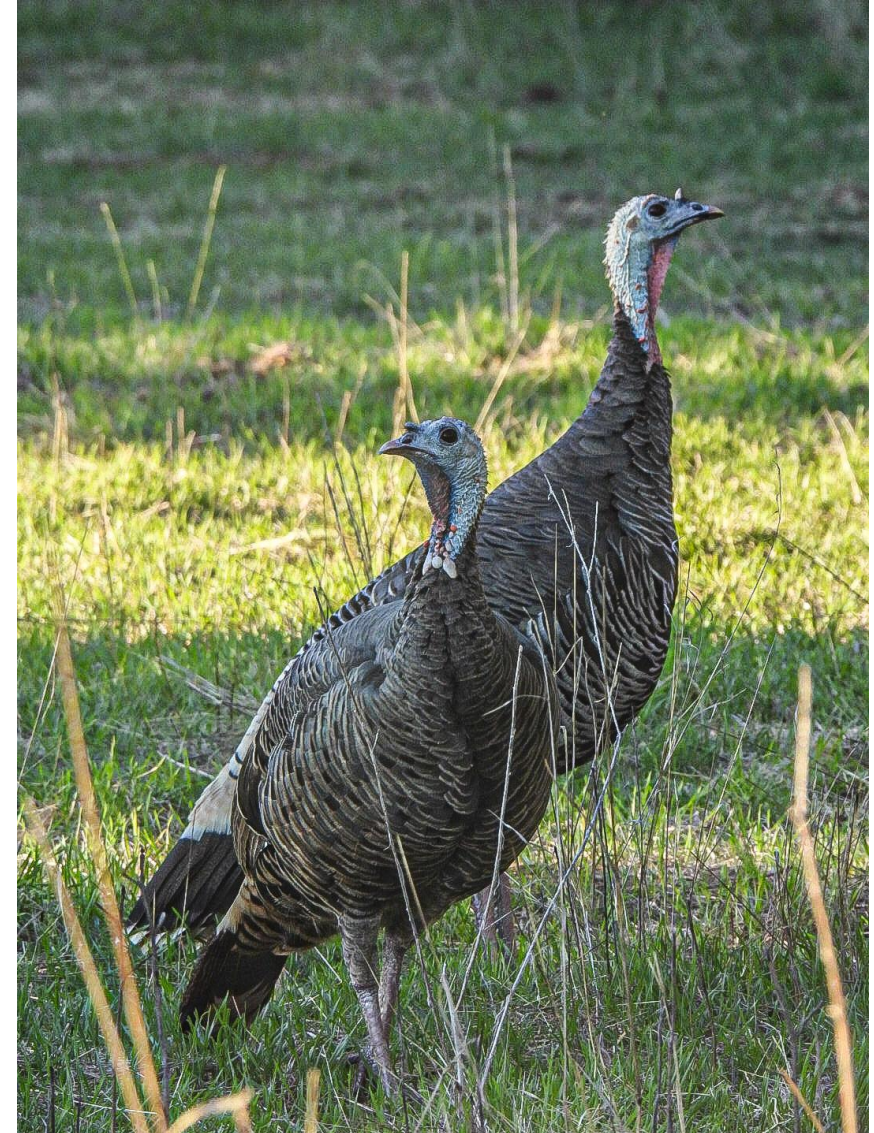
Upland Game Bird Advisory Committee Members

- Bill Gaines and Associates – *President or their designee (Bill Gaines)*
- California Bowmen Hunters – *President or their designee (Chriss Bowles)*
- California Rifle & Pistol Association – *Legislative Director or their designee (Rick Travis)*
- Safari Club International – *Western State and Local Liaison or their designee (Keely M. Hopkins)*
- California Waterfowl Association – *VP of Advocacy or their designee (Mark Hennelly)*
- National Wild Turkey Federation – *District Biologist, CA Chapter or their designee (Coralee Morgan)*
- Pheasants and Quail Forever – *West Region Director of Conservation Delivery or their designee (Al Eiden)*
- San Diego County Wildlife Federation – *President or their designee (Gary Brennan)*



Presentation Overview

- Fiscal year 2025-2026 expenditures
- Fiscal year 2026-2027 forecast
- Proposal Solicitation Notice
- 2025-2026 project updates
 - Including Pittman-Robertson fund projects supported with UGBA match



Species Overview – Upland Game Birds

Resident

- Mountain, California, and Gambel's Quail
- Sooty and Ruffed Grouse, Greater Sage-grouse

Non-natives

- Chukar
- Ring-necked pheasant
- White-tailed ptarmigan
- Wild turkey
- Eurasian collared dove

Migratory

- White-winged, mourning dove
- Band-tailed pigeon
- Wilson's snipe



CDFW Upland Game Unit

- Resource assessment
- Harvest assessment
- Management planning
- Habitat enhancement
- Regulation development
- Program funds administration
- Hunting and wildlife viewing opportunities



CDFW Upland Game Unit



Environmental Program Manager

Mario Klip

Upland Game and Waterfowl Units Supervisor

Cali Roth

Environmental Scientist

Ian Dwight

Environmental Scientist

Matt Meshriy

Environmental Scientist

Katherine Miller

Environmental Scientist

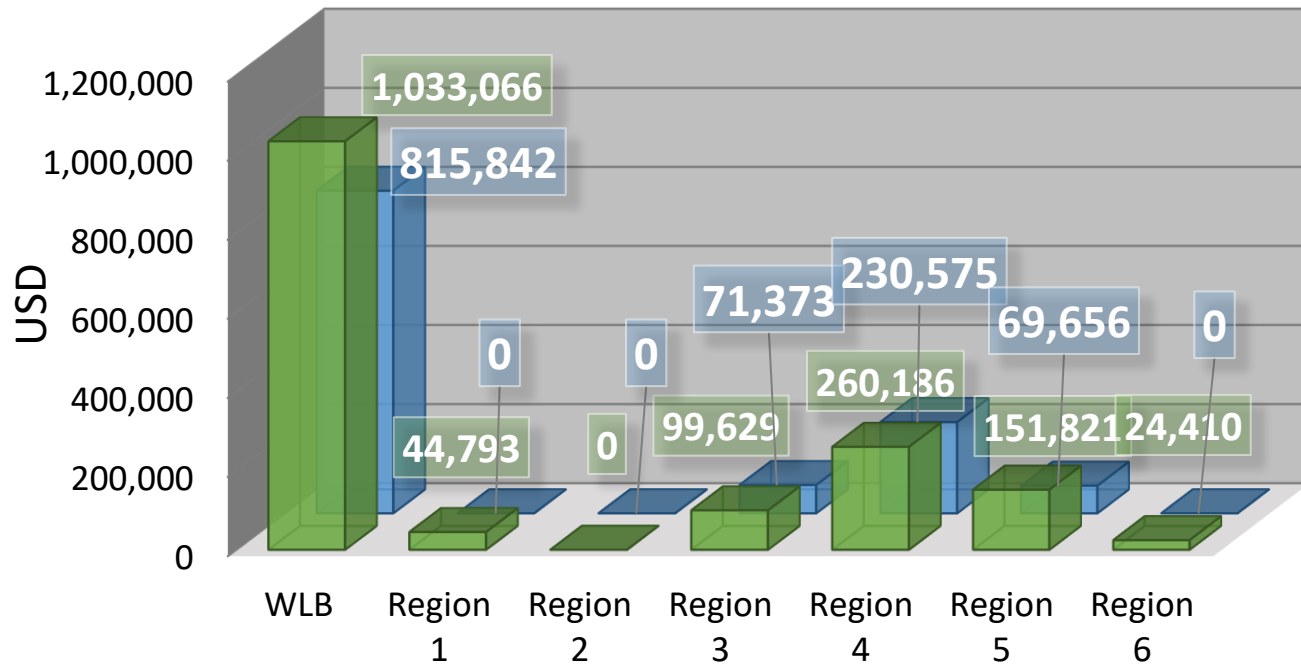
Andrea Mott

Fiscal Year 2025-2026

Upland Game Funding

1. Upland Game Bird Account
 - Funded by tag fees
 - Allocations to WLB and Regions
2. Pittman-Robertson Act
 - Federal Assistance
 - Individual Grants

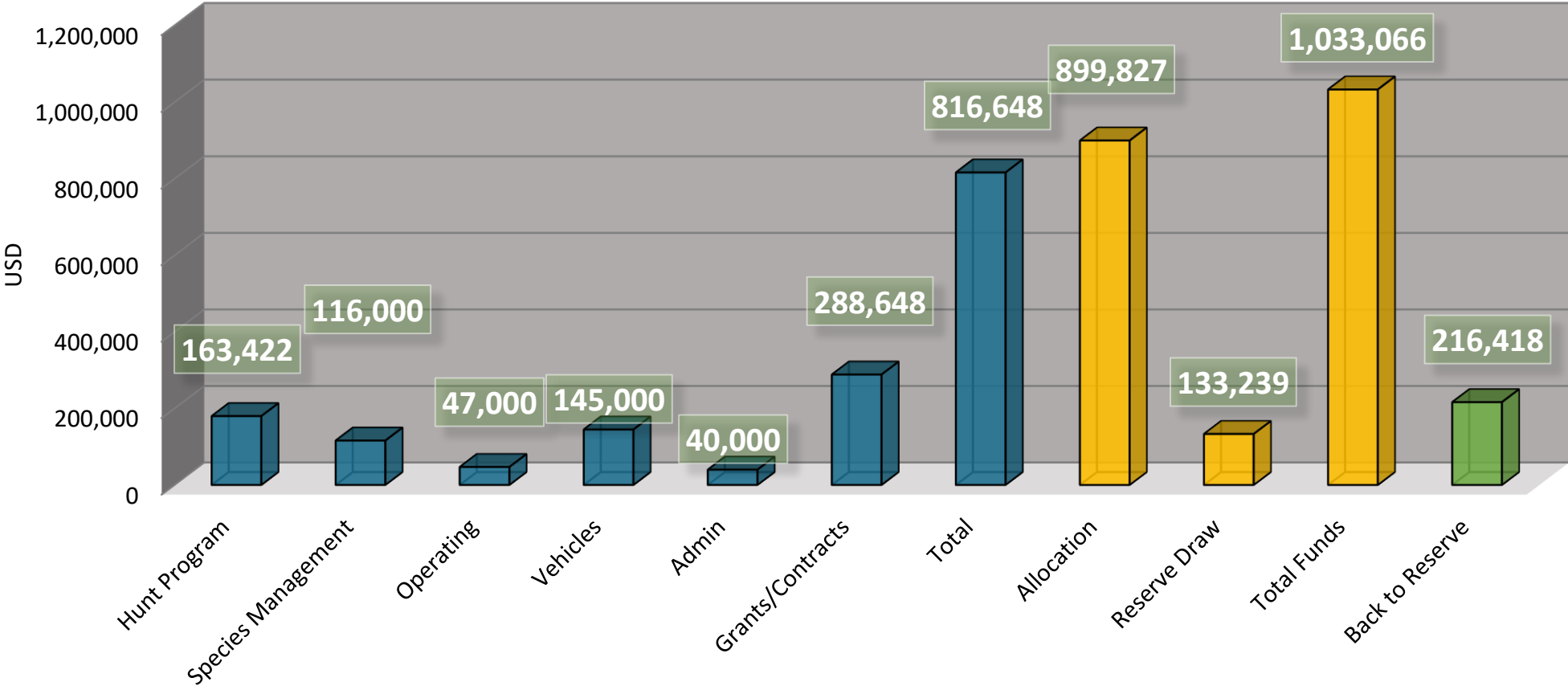
2025-2026 UGBA Allocations



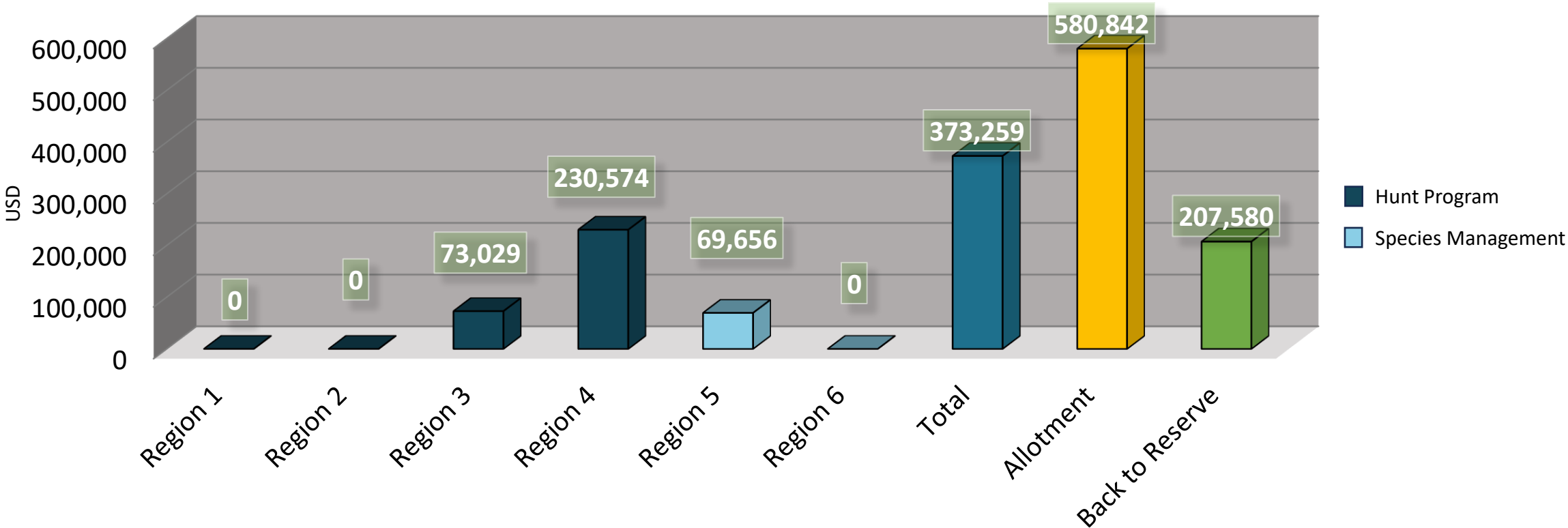
- Total allocation: \$1,615,882
- PR match: ~300K for an additional \$940,000
- Balance: \$424,000 (WLB = \$217,000; Regions = \$207,000)
- No grants or contracts awarded
- Additional \$66,400 provided to Regions from WLB to cover cost of fuel and equipment for food plots, bait for dove banding, and salaries for hunt program staff
- Additional \$35,000 spent on vehicles for WLB due to discontinuation of Ford Lightning
- Additional \$20,000 spent on tariffs placed on Canada-made transmitters

2025-2026 UGBA

Wildlife Branch – Headquarters Expenditures



2025-2026 UGBA Regional Expenditures



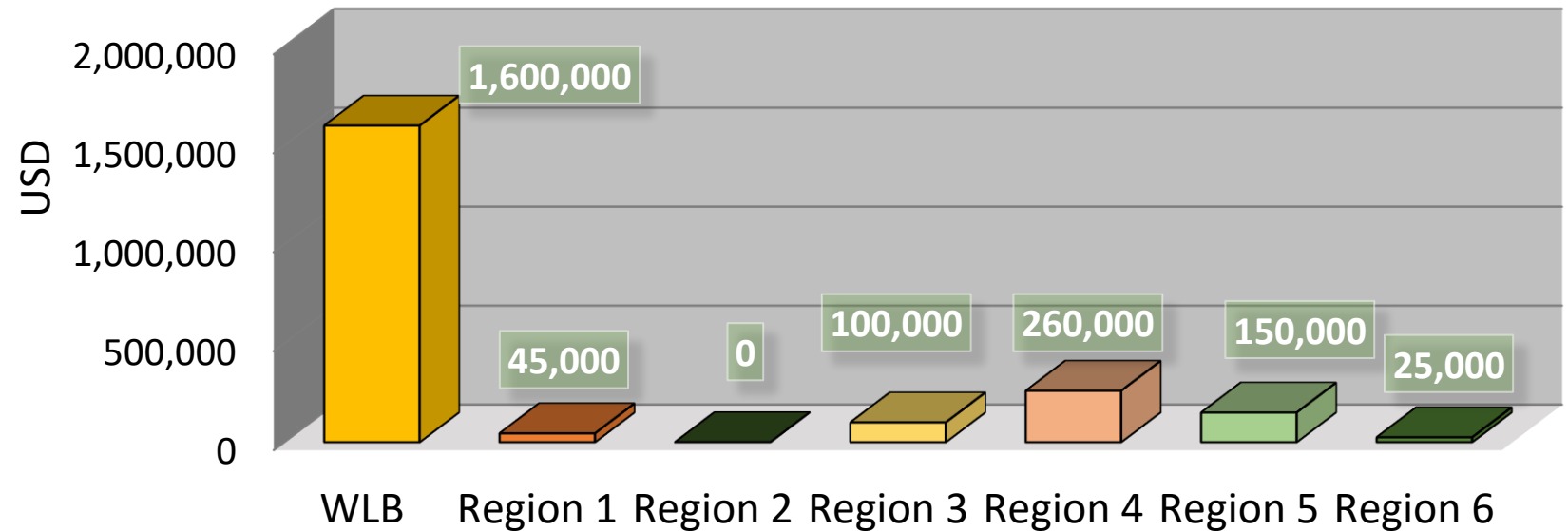
Fiscal Year 2026-2027 UGBA

Funding Projections

2026-2027 UGBA

Estimated Allocations

- Total allocation: ~\$1,600,00
- PR match: ~\$200,000 for an additional \$800,000
- WLB to regions - \$245,000
- PSN - \$300,000



Proposal Solicitation Notice

- Opened June 12, 2026
- Closes July 13, 2026
- Up to \$300,000
- Themes:
 - Quantify multi-species habitat areas
 - Integrative models for statewide occupancy and abundance
 - Multi-site telemetry studies for regional habitat selection and vital rates
 - Improve collection and summarization of harvest data
 - Improve hunter opportunity
 - Quantify management outcomes



2026-2027 PR Reductions

- Federal PR allotments reduced across WLB and Regions
 - WLB – loss of staff hours, sunseting projects
 - Regions – loss of staff hours, loss of hunt program support, inability to take on new monitoring projects
- Reduced our 2026 request to 2023 levels (~20% reduction)
 - 2025 allocation: \$941,545
 - 2026 allocation: \$789,349

2026-2027 PR Reductions - Salary

- Salaries partially covered by UGBA
 - 60% time for Environmental Scientist (Migratory Upland Game Birds)
 - 20% Time for Environmental Scientist (Special Hunts Coordination)
 - 30% Time for Senior Environmental Scientist (Supervisory)
- Reduced hours for Scientific Aids

2026-2027 PR Reductions - Projects

- Completing BTPI transmitter project
- Completing Phase II pheasant genetics
- Reduced effort for autonomous recording units (ARUs)
- Reduced/shifted effort for quail trapping



2026-2027 PR Reductions - Regions

- \$200,000 set aside to support Regions
 - Upland habitat work
 - Upland hunt programs
 - Upland monitoring projects
- Required summary report to improve documentation of benefits to upland game



Fiscal Year 2025-2026 Projects

Hunter Opportunity

Special Hunts



Statewide



\$27,000



Provide access to specially managed hunting opportunities on public and private lands for upland game birds and game mammals to anyone with a valid annual California hunting license and any required validations or applicant statuses

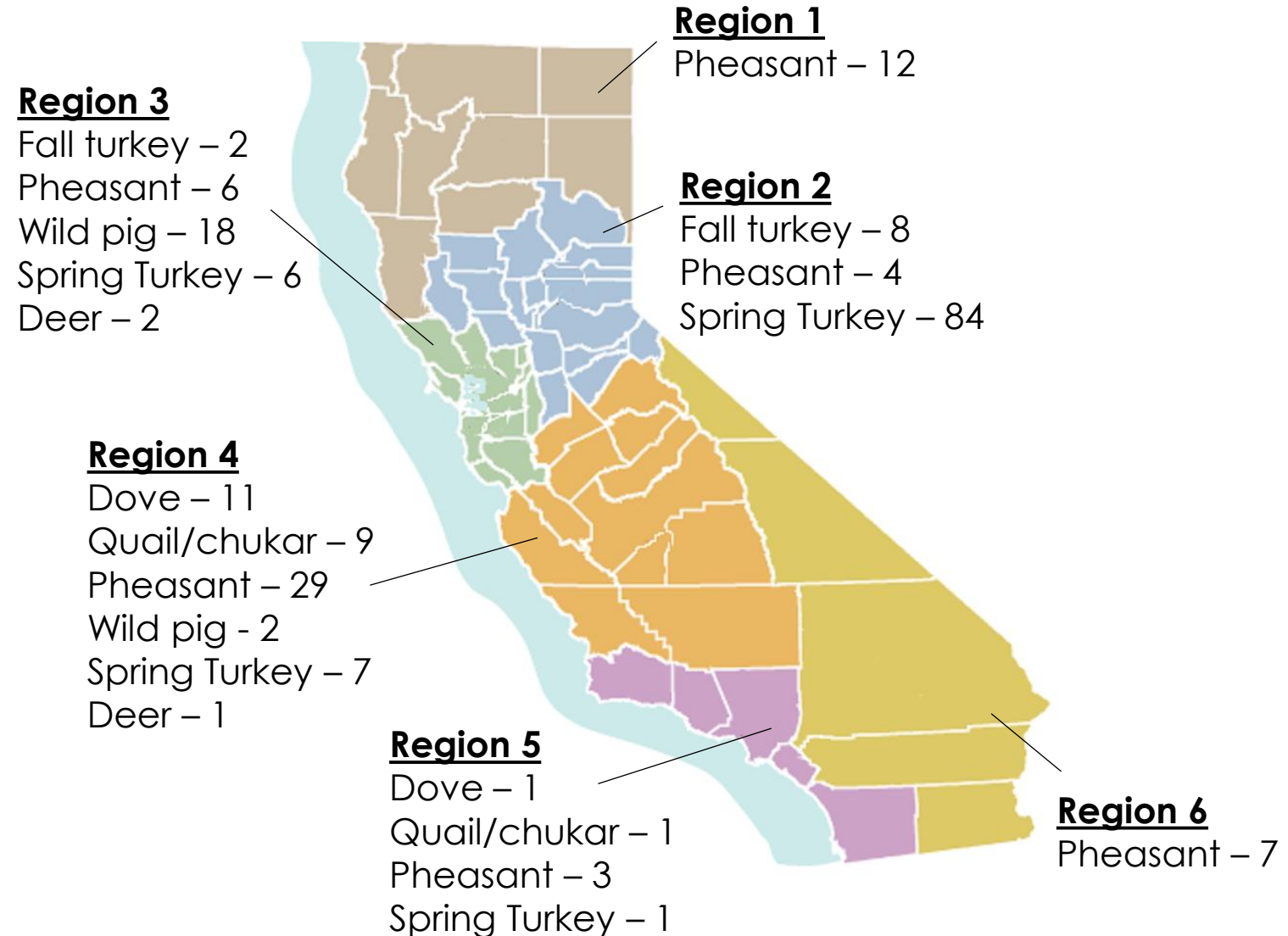
Why Special Hunts?

- Bridge the gap from classroom instruction to hunting
- Exclusive access to private lands and high-demand public lands that may occur during extended seasons
- Removing barriers to participate
- Support recruitment, retention, and reactivation (R3)
- Fund wildlife conservation and management



Special Hunts

- Managed through Automated Licensing Data System (ALDS) – fully implemented in 2024
- 214 special hunts across all regions
- 35,626 applicants



Significance of Special Hunts

- Support species management goals:
 - Regulate access to maintain opportunity;
 - Manage non-native game species (e.g. on Wildlife Refuges)
- Potential uses to control populations in areas affected by disease or where non-native species compete with native species
- Instill an appreciation and knowledge of hunting safety and ethics
 - Transfer knowledge to the next generation



Dove Fields (Contract)



Imperial County

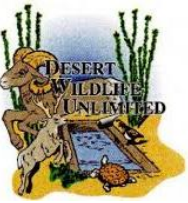


\$100,000

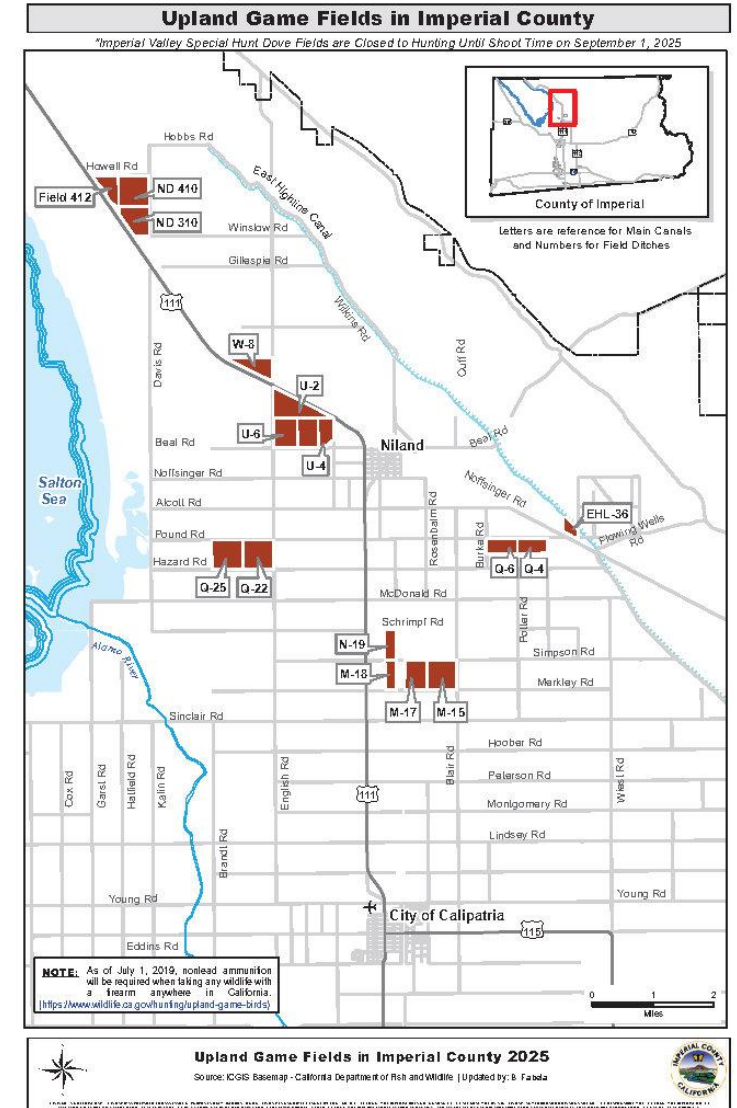


Improve access to and opportunity for dove hunts in the Imperial Valley through lease agreements with landowners and upland game bird crops

Dove Fields – Fiscal Year 2025-2026



- First season: September 1st – 15th
- Second season: November 8th – December 22nd



Habitat Enhancement for Hunter Opportunity

- Continue to support food plots
- Work with Wildlife Area staff to establish a more comprehensive approach to supporting upland game populations across all seasons (e.g., avoid discing winter habitat, ensure early enough flood up)
- Work with NBHIP to improve nesting habitat



Fiscal Year 2025-2026 Projects

Monitoring and Management

Ongoing Projects

- **Monitoring:**

- Breeding Bird Survey – abundance and trends
- Dove banding – inform harvest frameworks
- Wing barrels - monitor survival and age class
- ARUs – occupancy, abundance, diversity
- Greater sage-grouse lek counts

- **Research:**

- Quail telemetry – guide habitat management with home range and vegetation selection information
- Band-tailed pigeon – inform conservation by mapping resources and identifying new breeding resources/populations
- Pheasant – inform habitat management and translocation efforts via transmitters, genetics



Gambel's Quail Habitat Use and Home Range



Mojave National Preserve



\$60,000



Assess habitat selection and home range

Gambel's Quail Habitat Selection

- Unsuccessful trapping attempt in Jan-Feb. Late winter rain brought abundant filaree. Quail were visiting bait but not keen on fighting squirrels for it.
- Spring point counts: density estimates.
- Still want to place majority of transmitters on GAQU in Mojave, Nov-Dec 2026.



California Quail Habitat Selection Phase 1

- Long-term plan: repeat GAQU project with CAQU on Carrizo plains.
- Pivot to summer trapping in Sacramento.
- Urban area, useful to know how birds use developed landscapes.
- Test the harness design following schematics from TX A&M-Kingsville / CKWRI.



Autonomous Recording Units



Regions 1-4



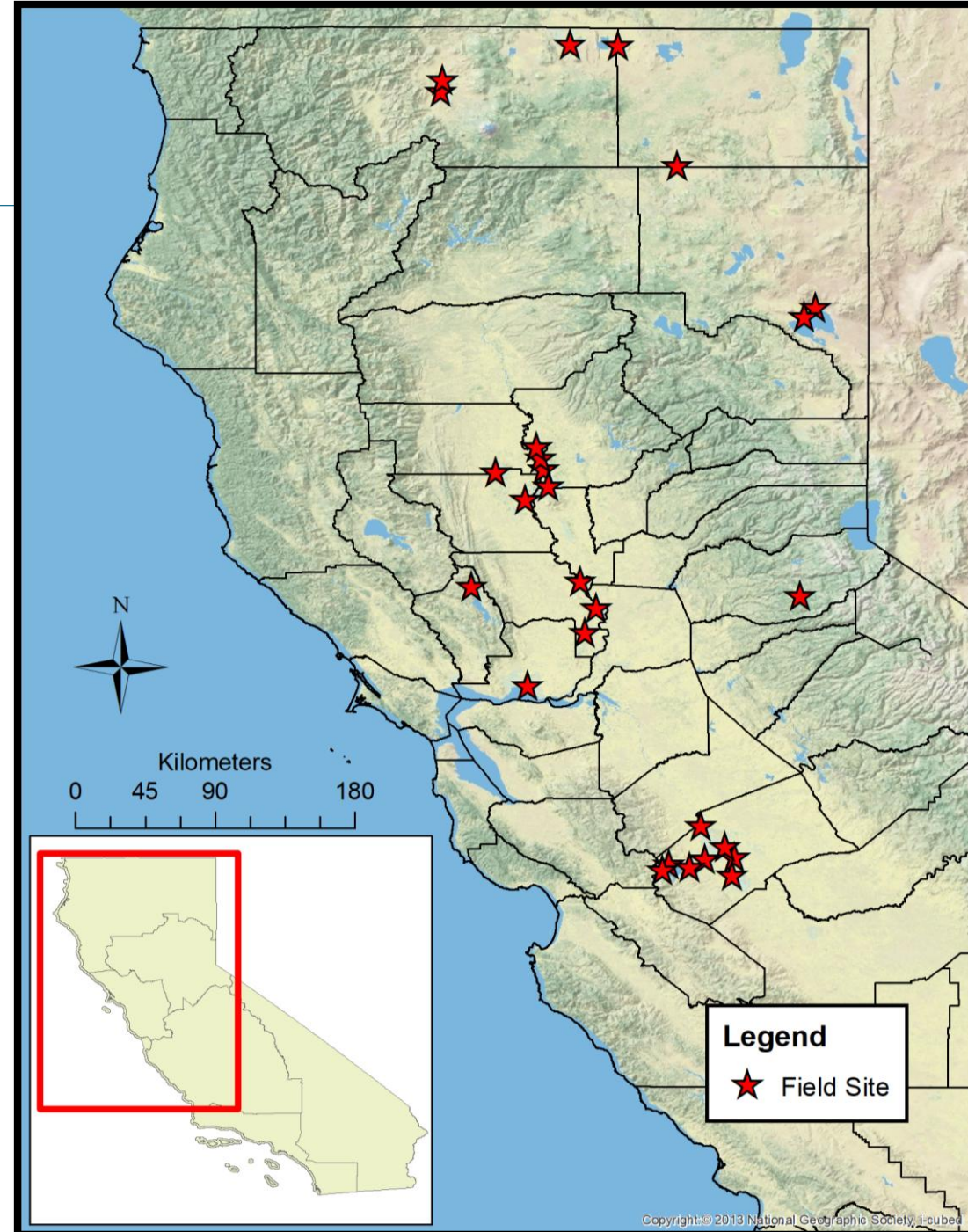
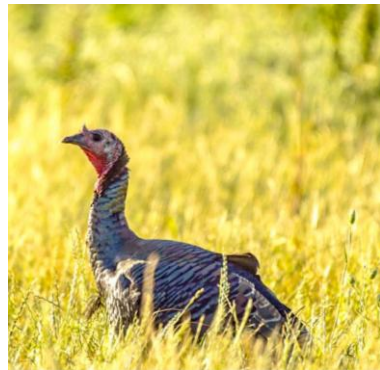
\$36,000



Monitor occupancy, abundance,
diversity

User-Friendly Innovations

Autonomous Recording Unit
Deployments 2024-2026
 $n = 1,254$



Technical Transfer

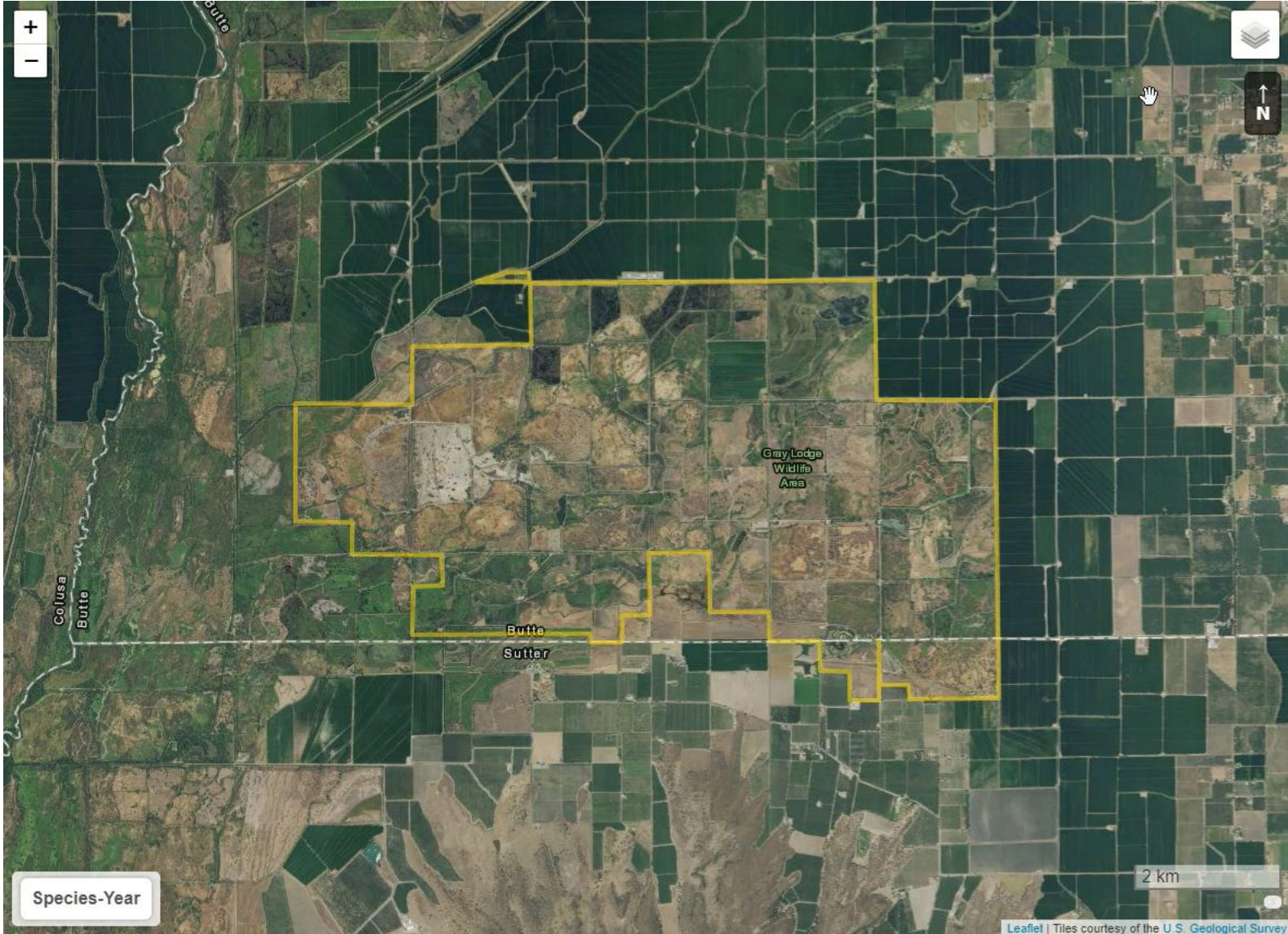
- Deployment/retrieval protocols and training
- Centralized data storage and management
- Tools for Regions to leverage data pipelines
- Reduce barrier to entry
- Empower timely and independent application of results

The screenshot shows the 'Upland Game ARU Data Processor' web application. The interface includes a navigation bar with 'Home', 'Step 1', 'Step 2', and 'Step 3'. The main content area is divided into several sections:

- Folder Selection:** A button labeled 'Select Input Folder'.
- Species List:** A search bar and a table with columns for Species, Confidence, RandomSample, and SamplesPerBin. The table contains four rows of data for different bird species.
- Navigation:** 'Showing 1 to 4 of 4 entries' with 'Previous' and 'Next' buttons, and a page number '1'.
- Actions:** 'Add Species' and 'Remove Selected Row' buttons.
- Filtering:** A checked checkbox for 'Apply time window filter?' and a 'Select Time Window (Hour)' slider with markers at 0, 4, 8, and 23.
- Buttons:** A 'Run Filter' button.

Overlaid on the bottom right of the screenshot are logos for 'R Studio' and 'Shiny', along with an illustration of a blue bird perched on a branch.

Interactive Maps



Pheasant Genetics



Statewide



\$130,000



Explore genetic structure, divergence,
and quality of CA pheasant populations

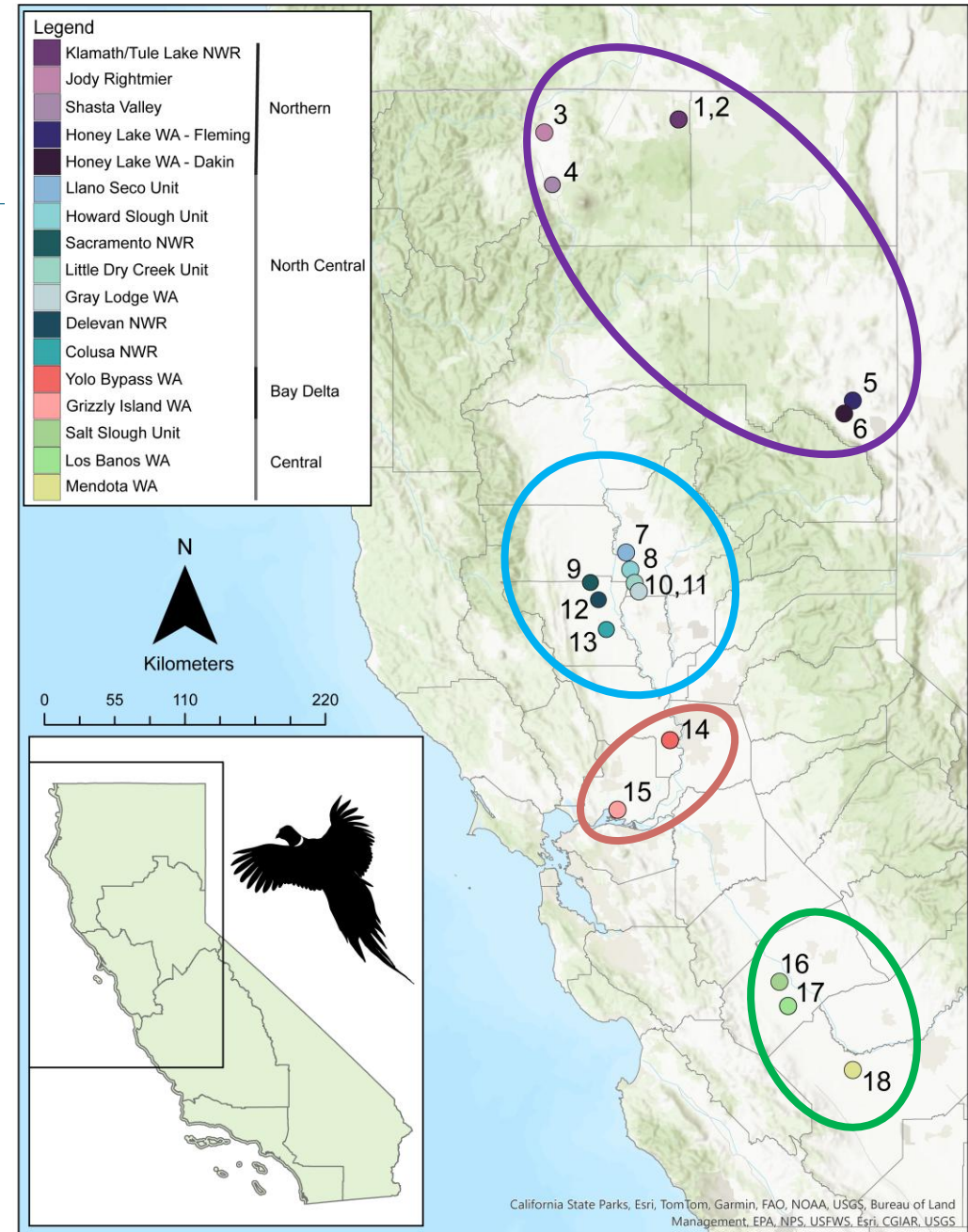
Sample Distribution

18 sampling locations

- 17 public and one private hunting area

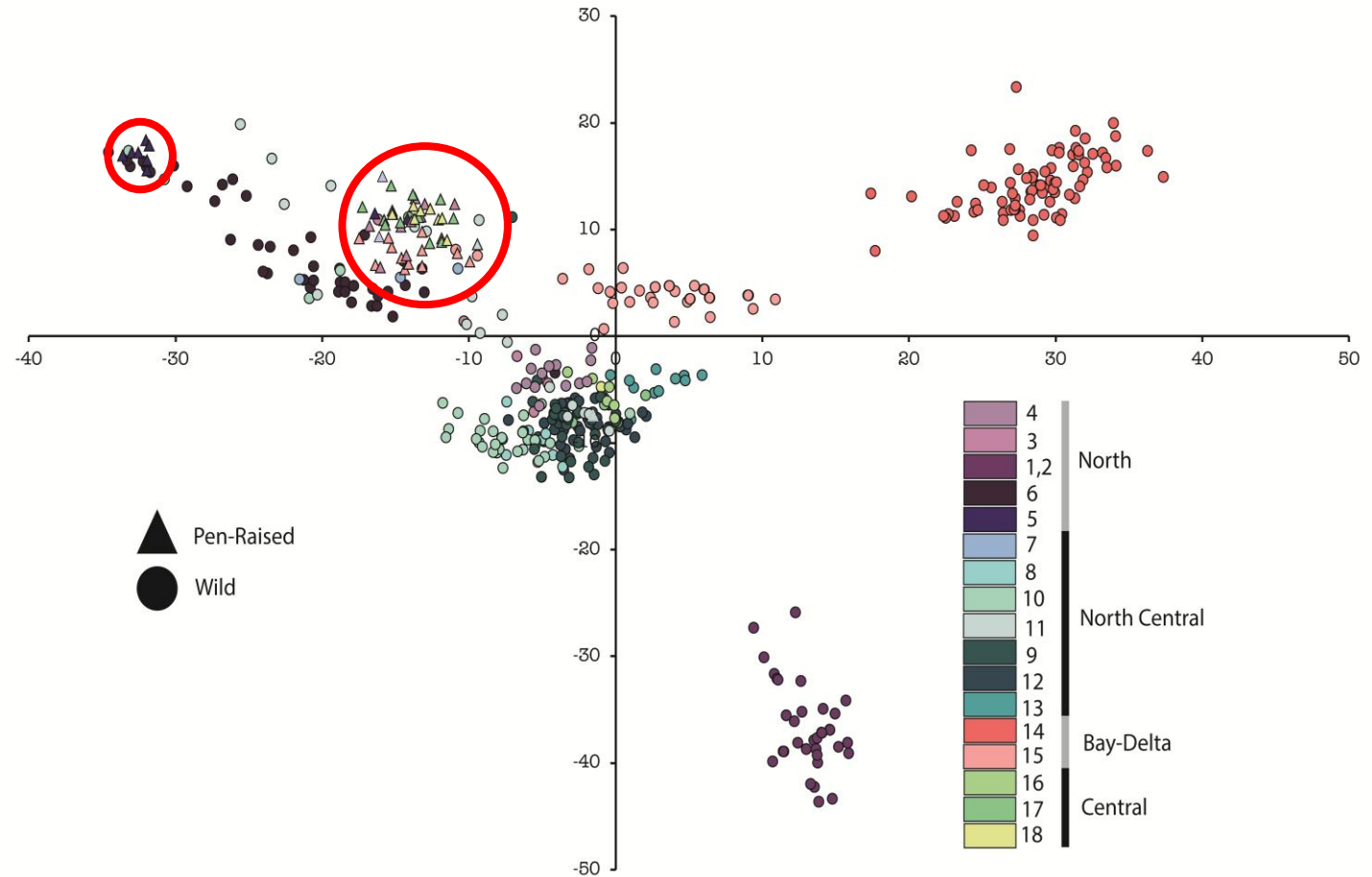
Four sampling regions

- CDFW Regions 1-4



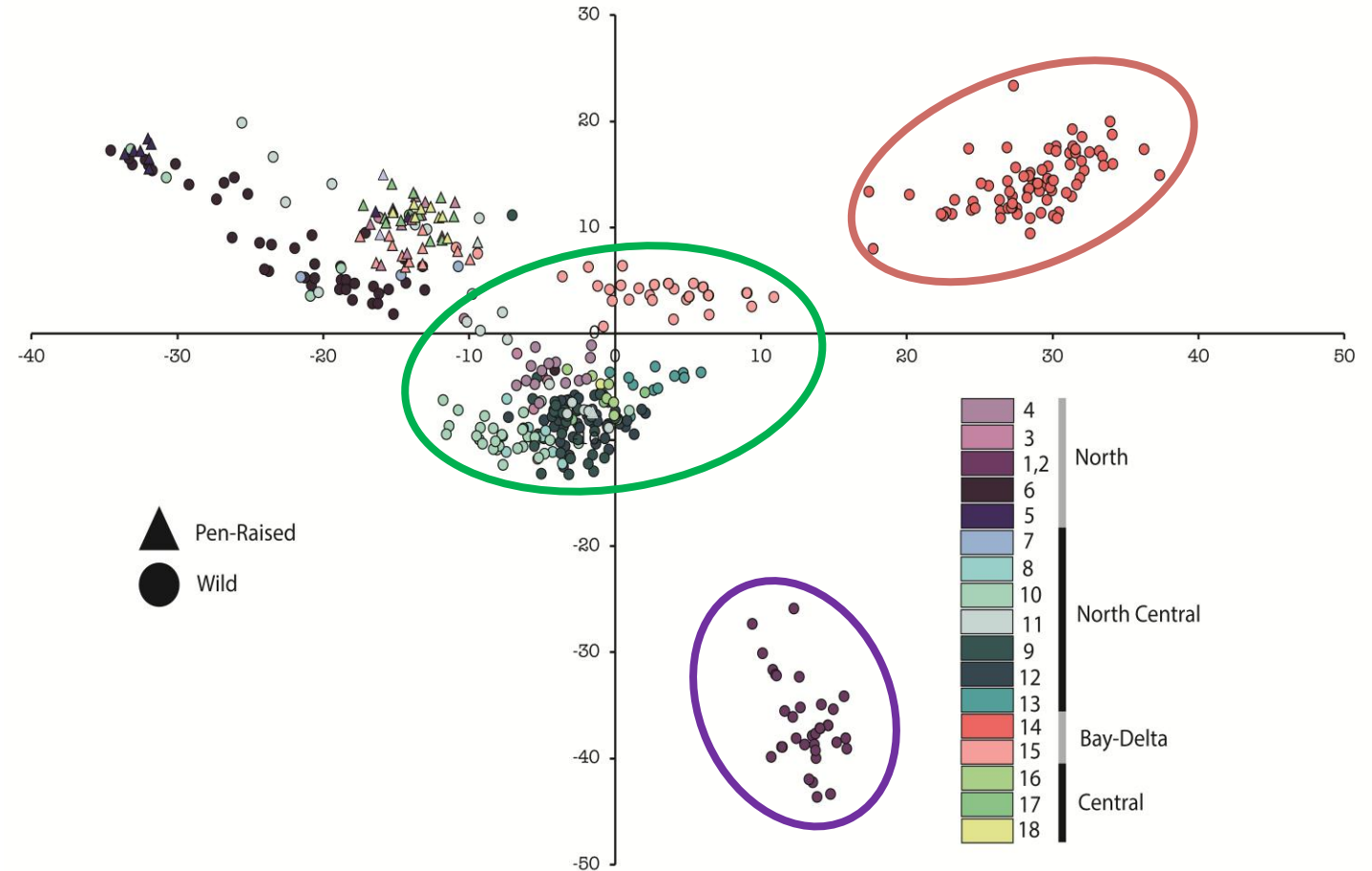
Genetic Structure – Pen-reared Pheasants

- A mixture of sites and regions share similar genetic structure with pen-reared samples
- Suggests that pen-reared pheasants are surviving to reproduce with wild pheasants

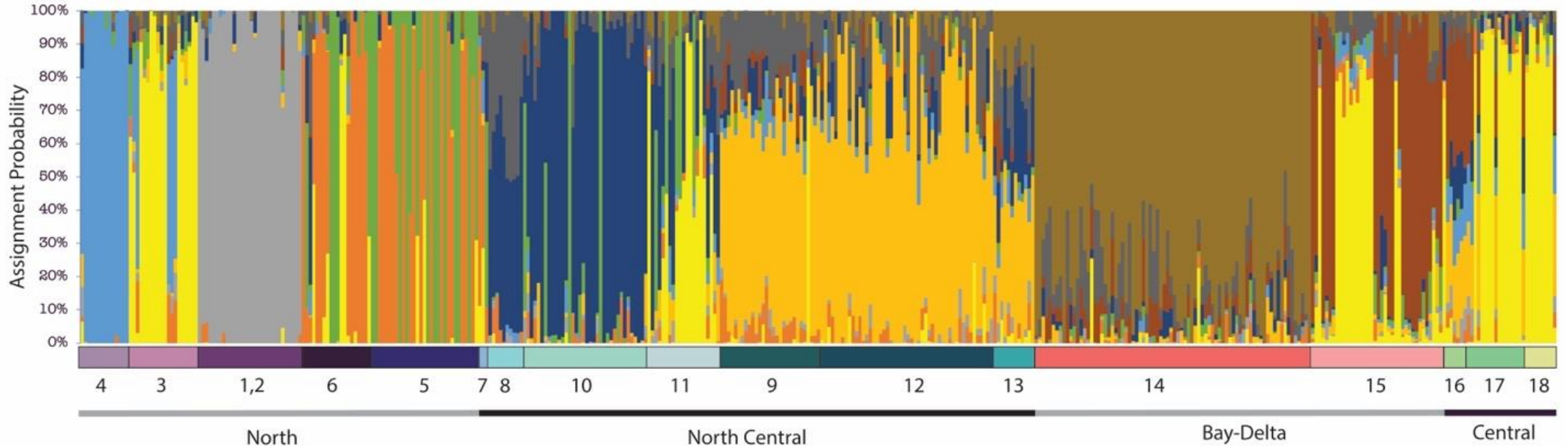


Genetic Structure – Wild Pheasants

- Genetic structure separates by region and sampling location
- North Central sites are similar but still have distinct genetic structure
- Yolo Bypass WA and Klamath NWR are the most distinct



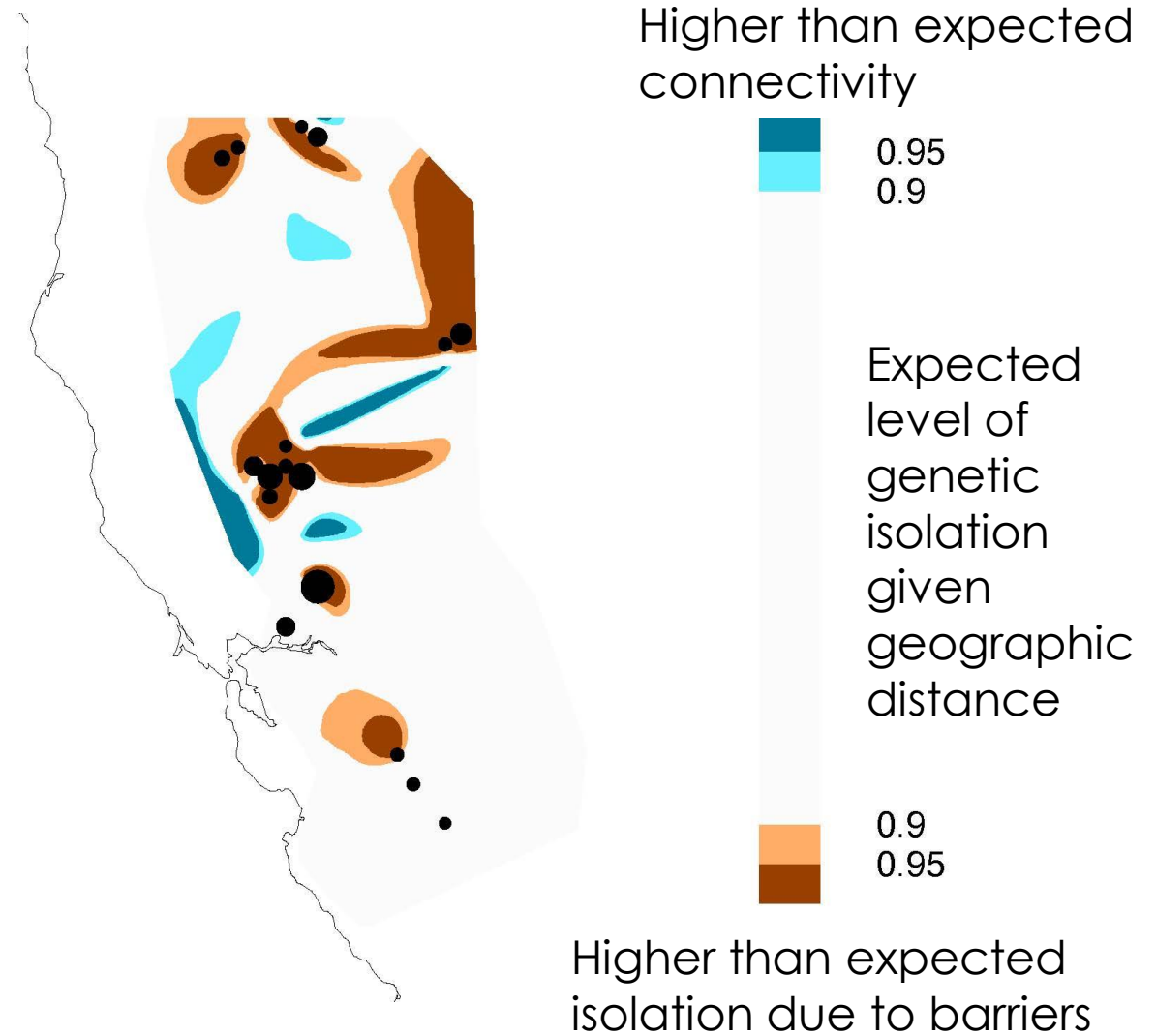
Pheasant Genetics



- Model predicts ~10 (range: 8-12) genetically distinct populations
- Pen-reared birds (Yellow bars) are a distinct genetic population

Genetic Isolation

- Connectivity likely due to pen-reared pheasants among sites
- Barriers and small home ranges prevent gene flow between sites
- Case study for connectivity in agricultural landscapes?

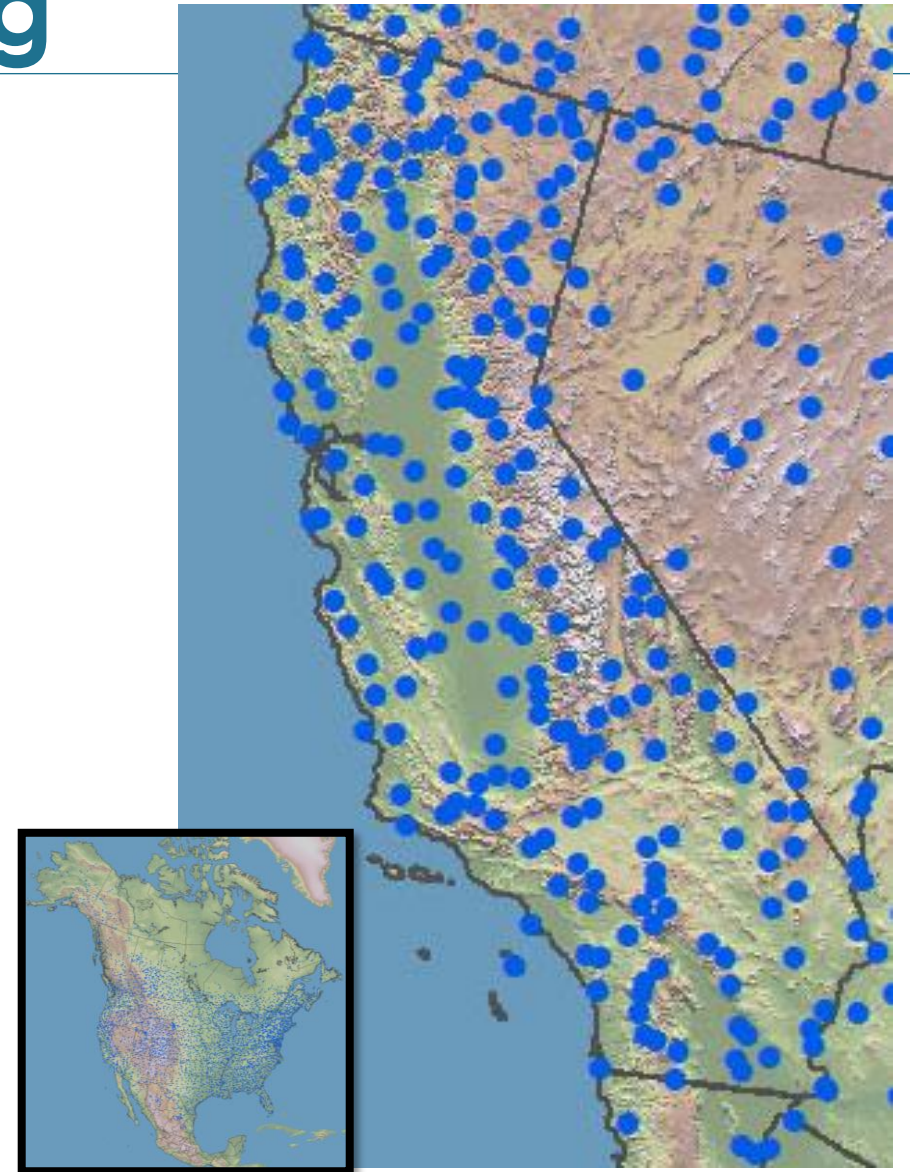


Fiscal Year 2026-2027 Projects

Continuing and New

Ongoing Projects - Monitoring

- Breeding Bird Survey – abundance and trends
- Dove banding – inform harvest frameworks
- Wing barrels - monitor survival and age class
- ARUs – occupancy, abundance, diversity
- Greater sage-grouse lek counts



Breeding Bird Survey Routes,
USGS

Ongoing Projects - Research

- Quail telemetry – guide habitat management with home range and vegetation selection information
- Band-tailed pigeon – inform conservation by mapping resources and identifying new breeding resources/populations
- Pheasant – inform habitat management and translocation efforts via transmitters, genetics

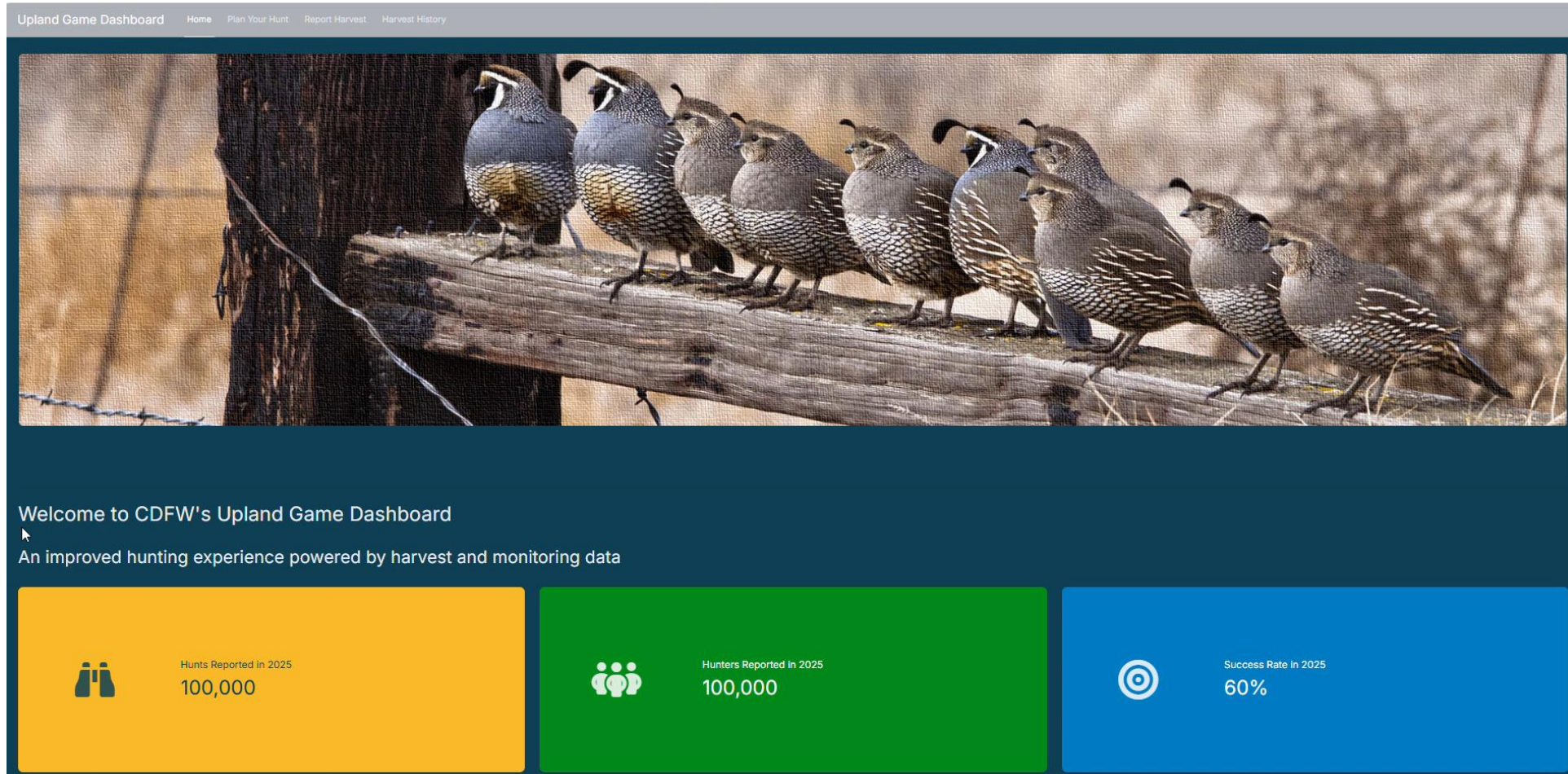


Ongoing Projects – Hunter opportunity

- Imperial Valley dove fields
- Special hunts
- Continued collaboration with hunter education and R3 (Recruit, Retain, Reactivate) for planted pheasant hunts



Upland Game Application

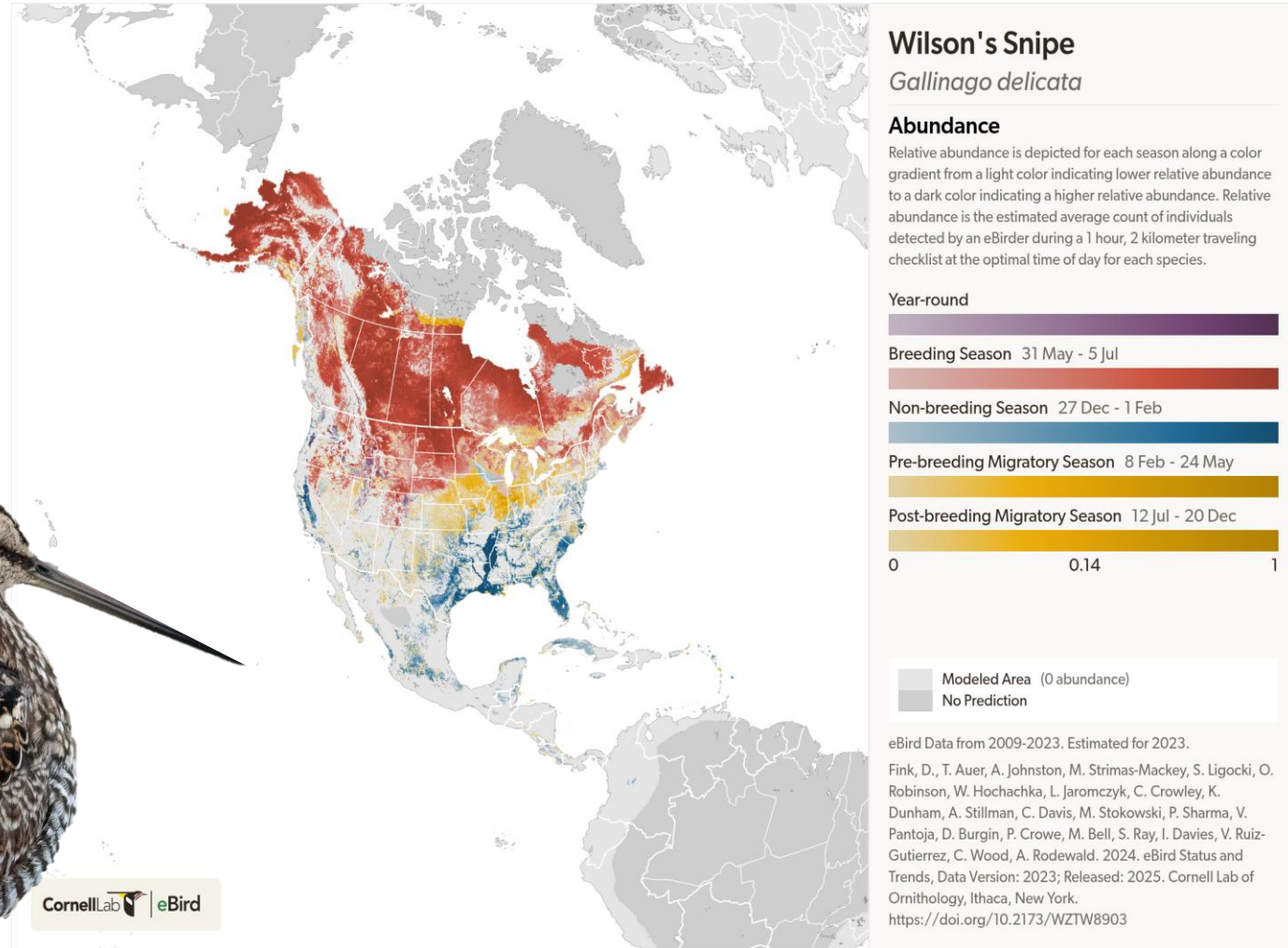


eBird Framework

Science Gap: Assessing range, abundance, and trends of upland game birds and informing priority management areas

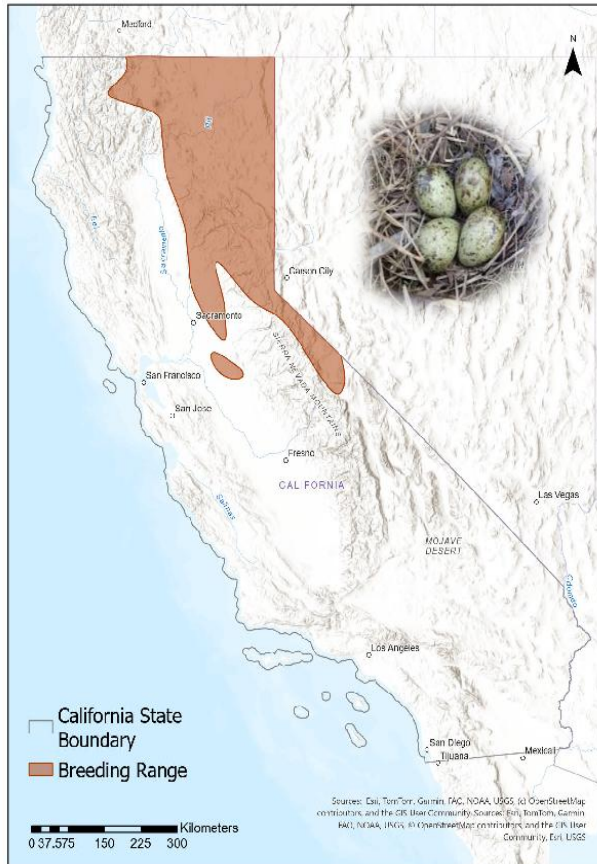
Objective: Categorize management actions by abundance and trends

Product: Priority Management Areas with management action recommendations



Status and Trends

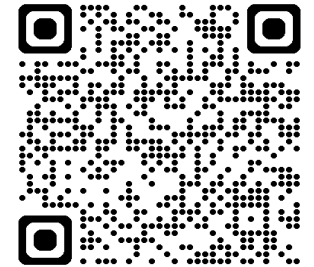
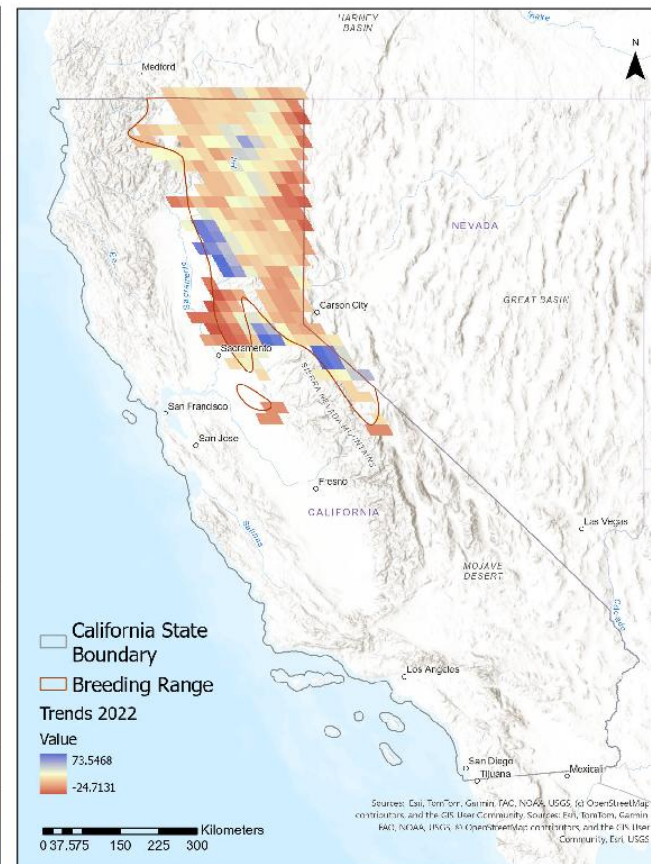
Range



Relative Abundance



Trends (2012-2022)



Prioritizing Management

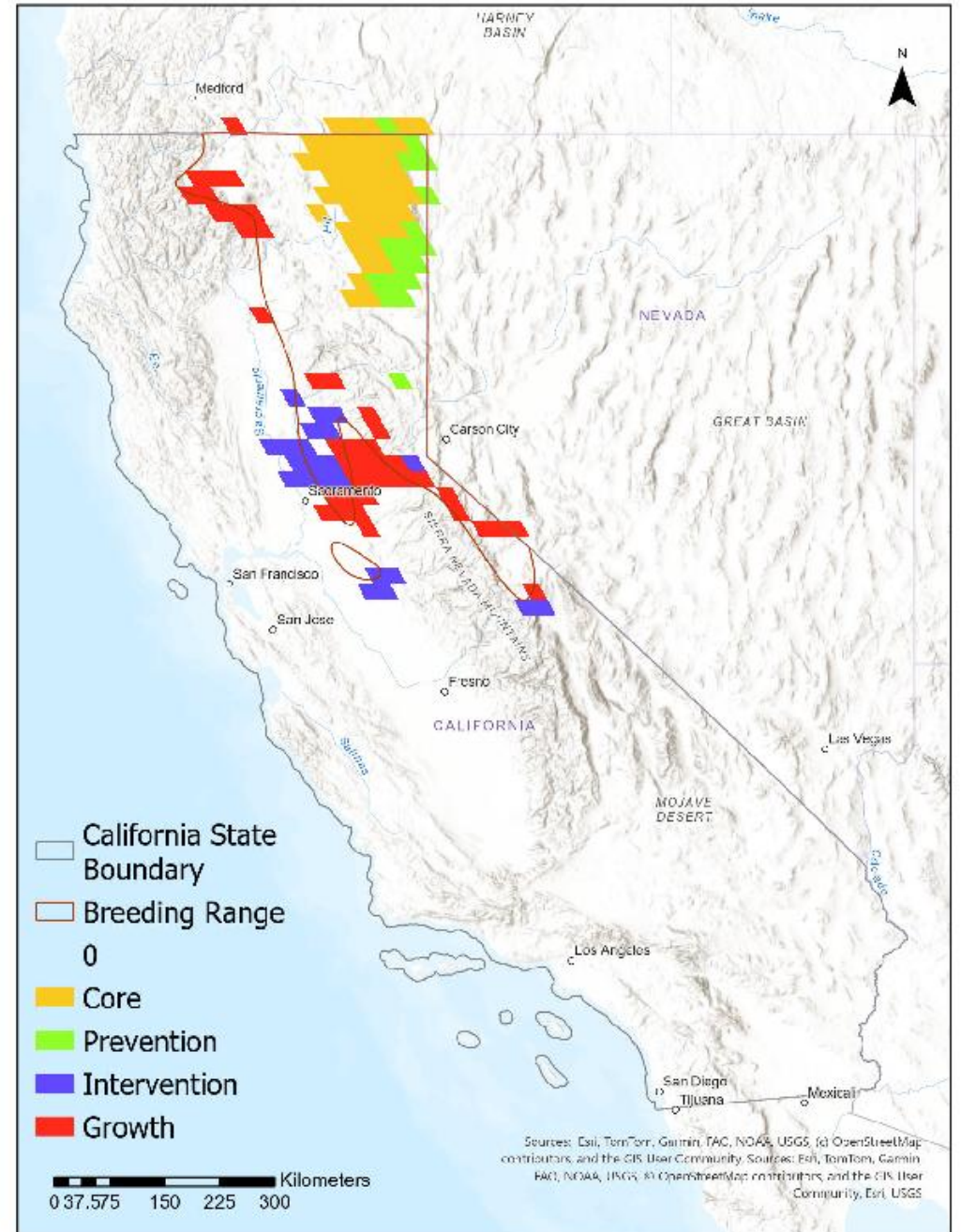
Relative Abundance × Trends

Core = support relatively high abundance (75th percentile) and have stable or growing (≥ 0) trends

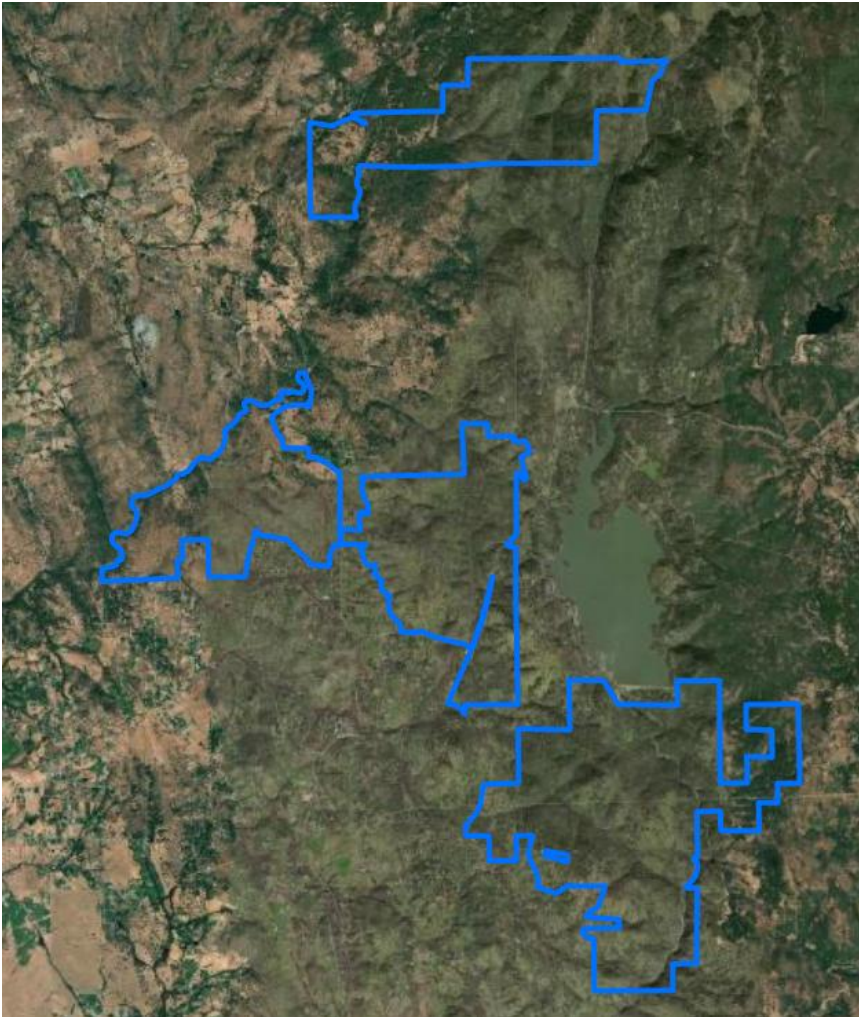
Prevention = high abundance but declining

Intervention = low abundance (25th percentile) and declining (< 0)

Growth = low abundance but increasing



Example: Daugherty Hill Wildlife Area



Example Priorities:

- Supports snipe during pre-breeding migration and breeding
- Intervention category
 - Abundance is low
 - Prevent further declines

Example Actions:

- Predator mitigation
 - Survival
 - Recruitment
- Hunt management
 - Close zones
- Habitat improvement
 - Early season flood up
 - Nesting
 - Brood rearing



Benefits and Considerations

Benefits:

Prioritizing Multi-Species Management:

- Upland Game
- Other wetland/upland species

Prioritizing Management Actions:

- Level, science-based playing field
- Reduce active monitoring as appropriate
- Targeted actions (spatial and temporal)
- Quantify management outcomes
- Supplement with local data



Greater Sage-Grouse Threats Analysis (Contract)



GRSG range in CA



\$75,000



Assess relative threats to sage-grouse populations to inform CESA listing decision

Inform CESA Status Review for GRSG

Populations

How are GRSG doing?

- Past trends
- Current risk
- Future loss

Habitat

How much quality habitat remains?

- Selection
- Survival
- Use

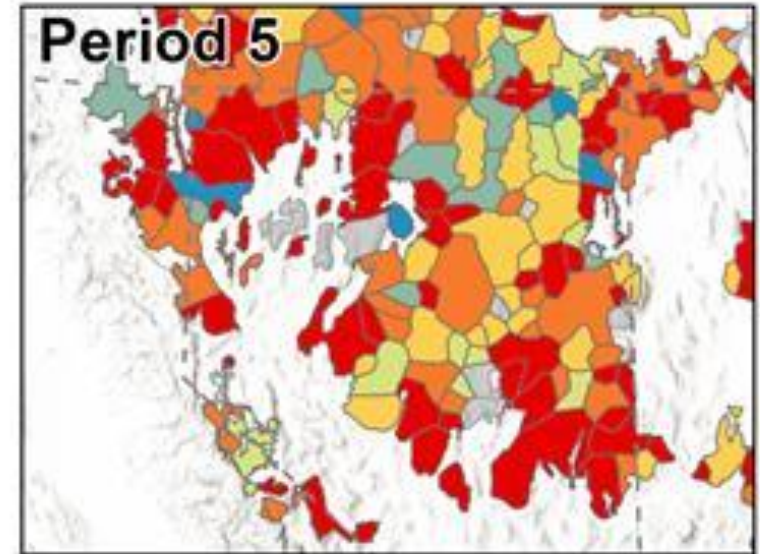
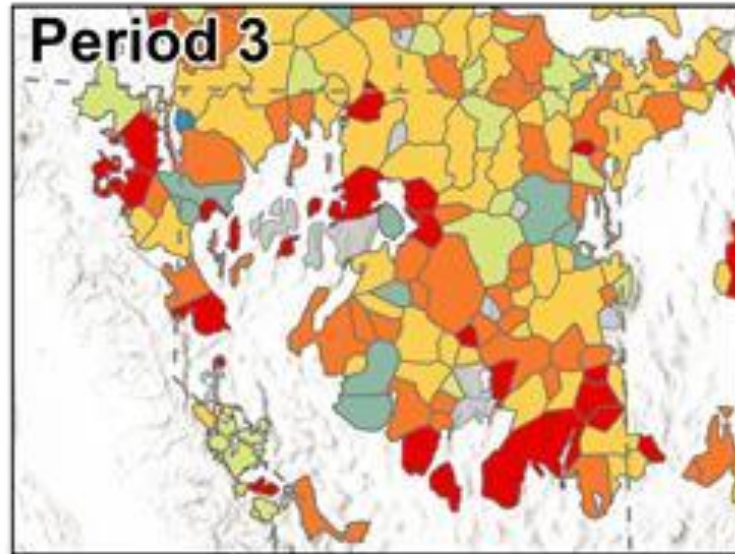
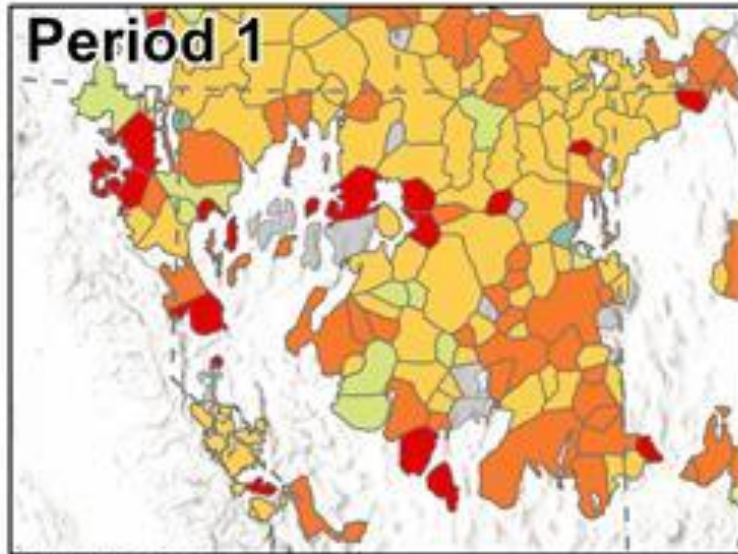
Threats

What is limiting population growth?

- Type
- Location
- Magnitude

Trends

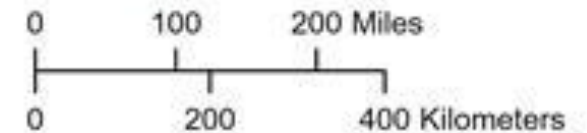
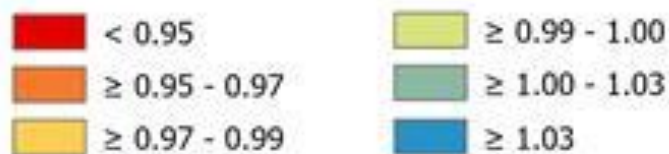
Record of past performance



Spatial Reference
Name: NAD 1983 UTM Zone 11N
Datum: North American 1983
Projection: Transverse Mercator
Central Meridian: -117.0000
False Easting: 500,000.0000
False Northing: 0.0000
Standard Parallel: 0.0000
Standard Parallel 2: 0.0000
Map Units: Meter

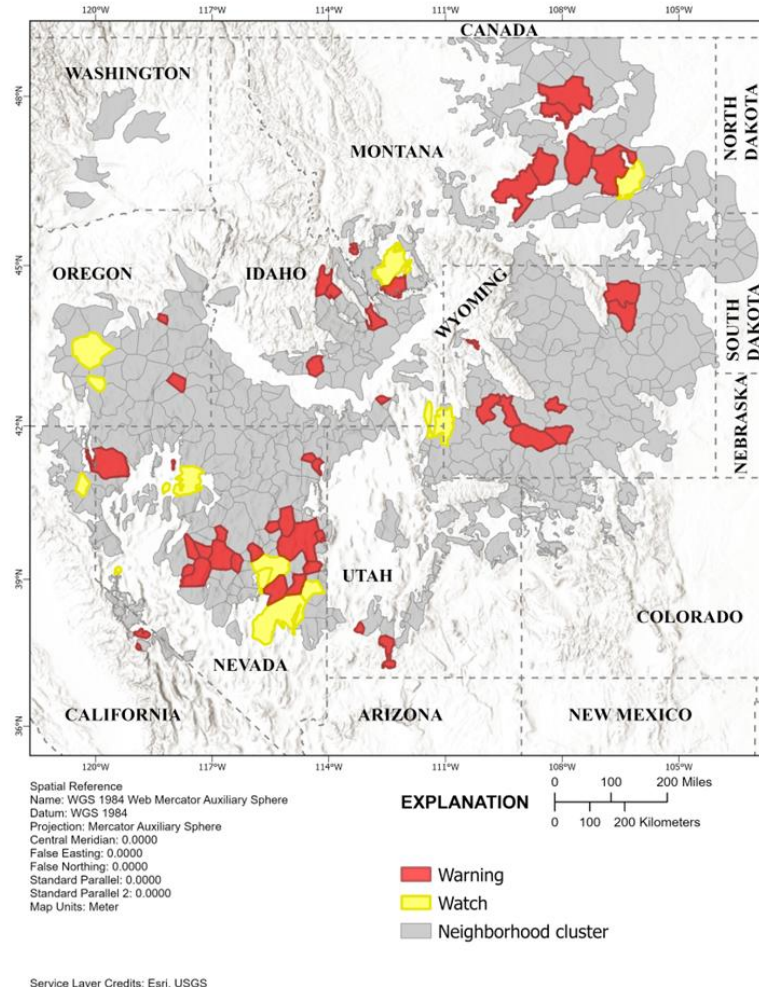
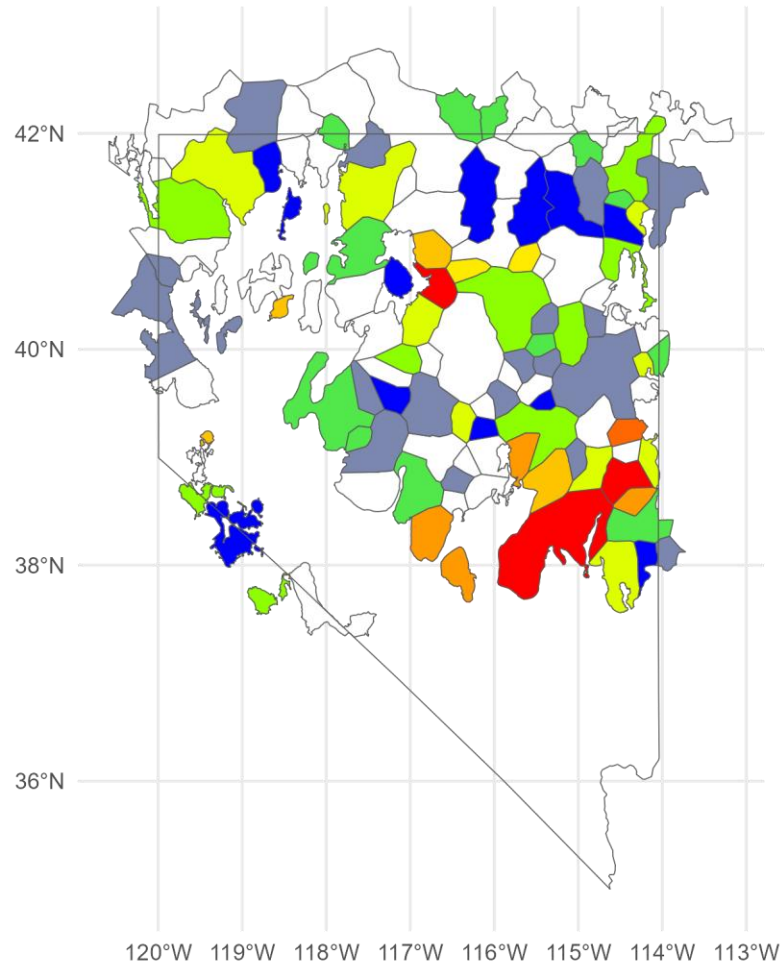
Service Layer Credits: Esri, USGS

EXPLANATION
Average lambda ($\hat{\lambda}$)



Targeted Annual Warning System

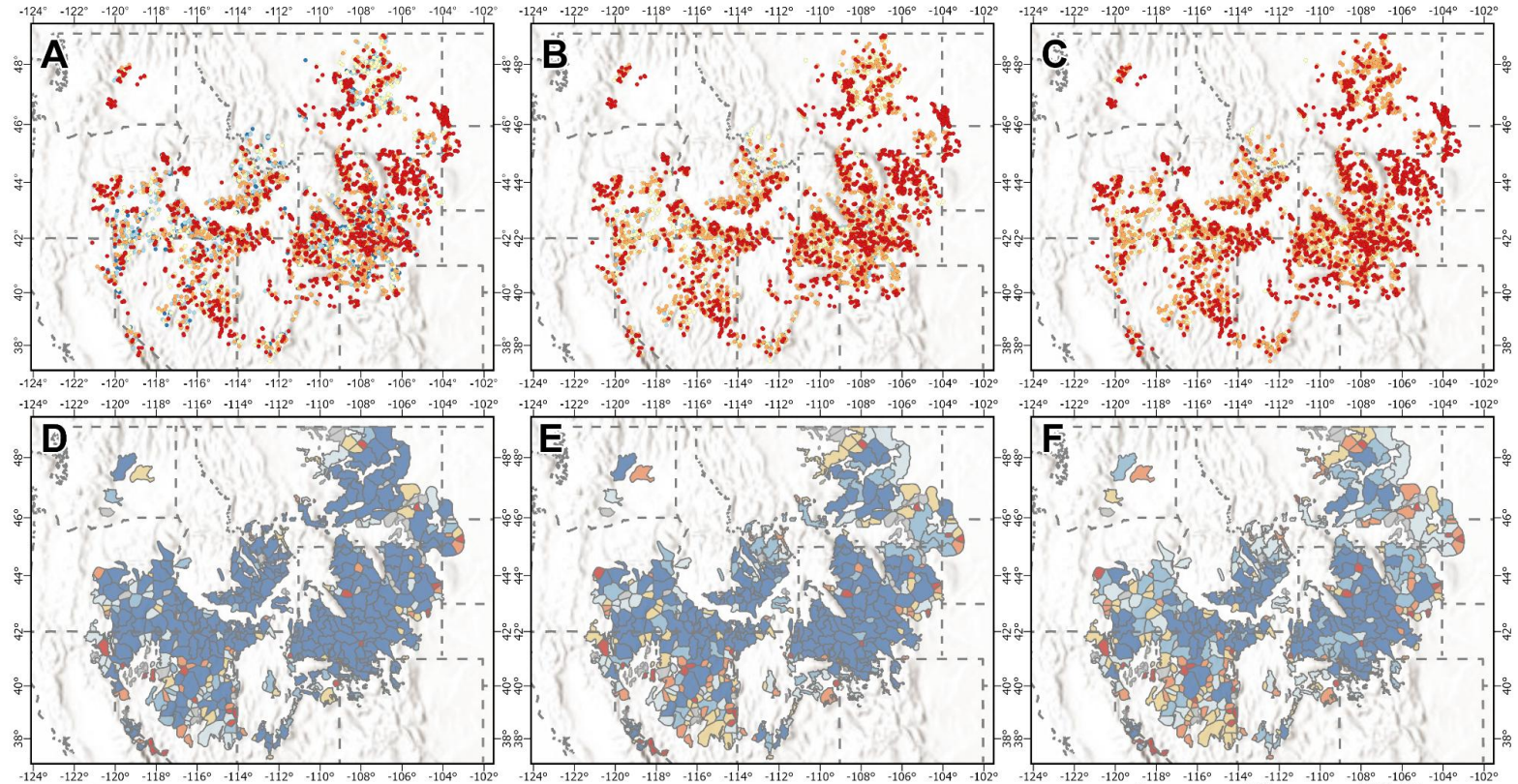
TAWS (1990-2024)



Current at-risk populations

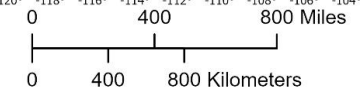
Extirpation Probability

Predictions of future losses

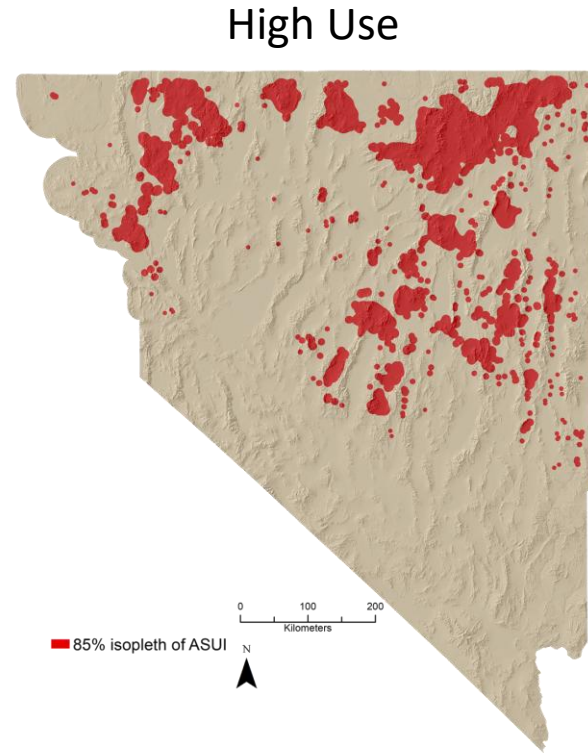
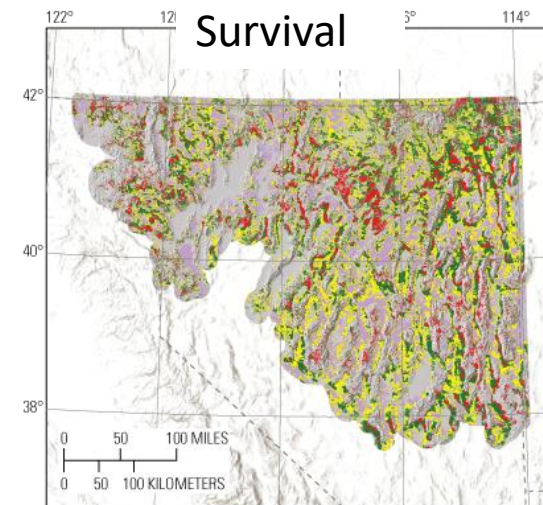
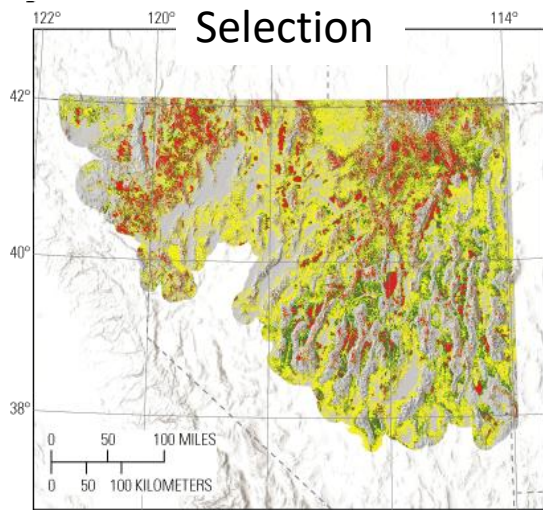


Spatial Reference
 Name: WGS 1984 Web Mercator Auxiliary Sphere
 Datum: WGS 1984
 Projection: Mercator Auxiliary Sphere
 Central Meridian: 0.0000
 False Easting: 0.0000
 False Northing: 0.0000
 Standard Parallel: 0.0000
 Standard Parallel 2: 0.0000
 Map Units: Meter
 Service Layer Credits: Esri, USGS

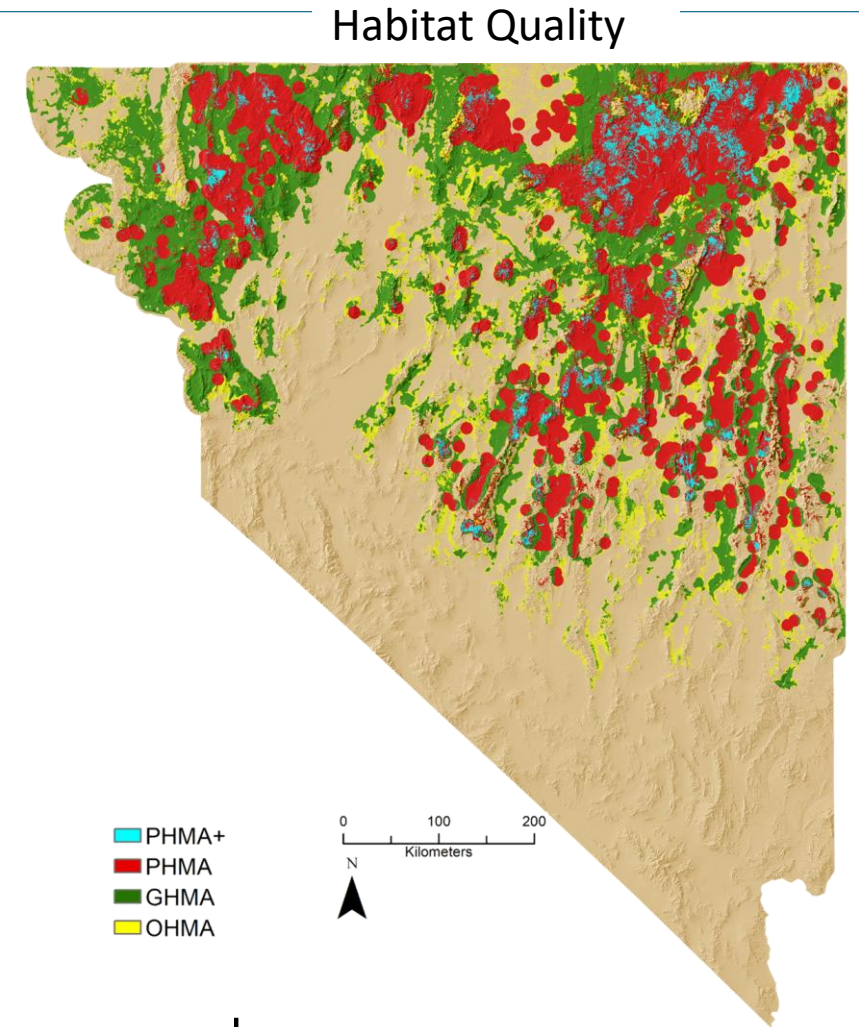
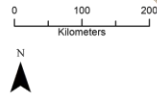
EXPLANATION Probability of Extirpation



Habitat quality



85% isopleth of ASUI



PHMA+
PHMA
GHMA
OHMA

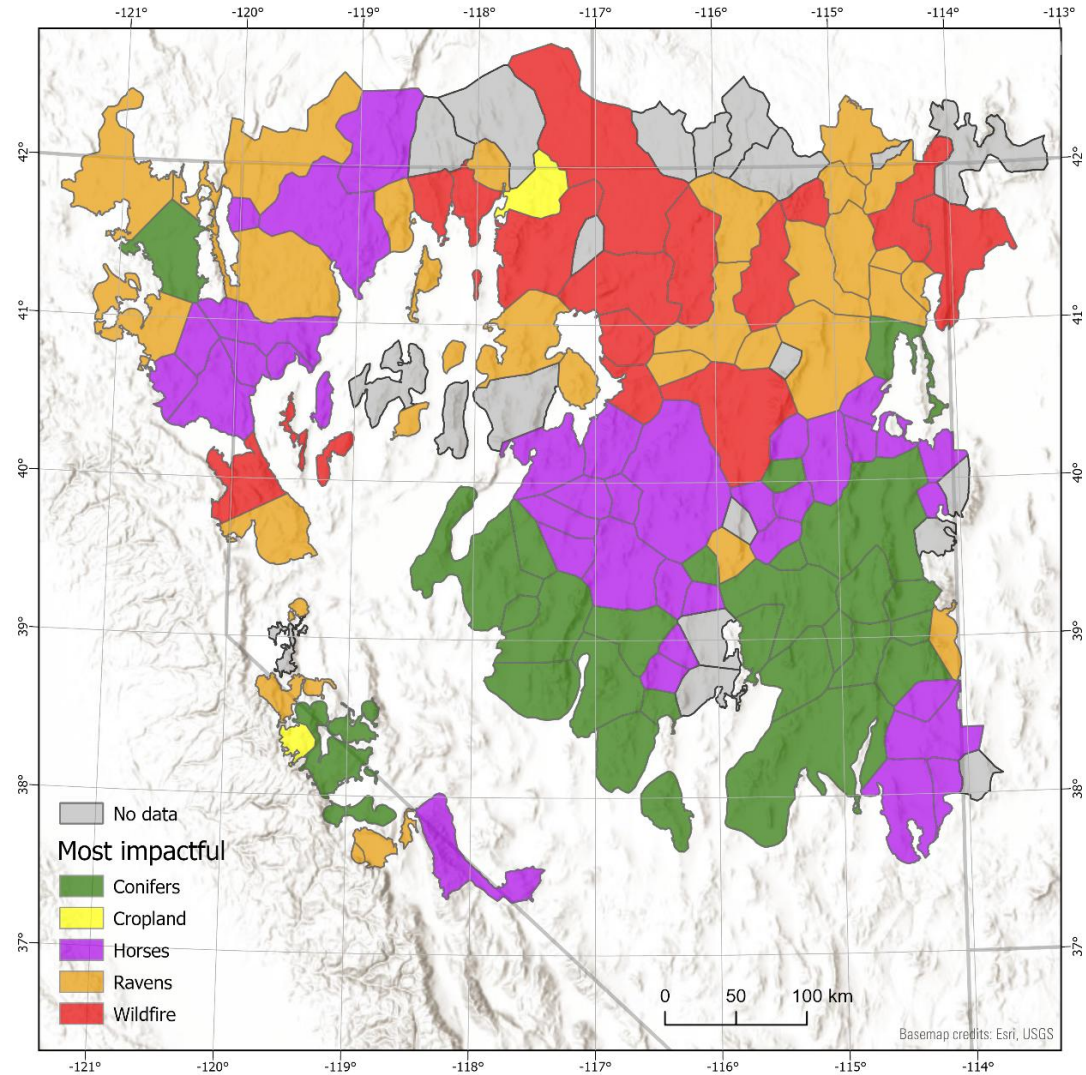
Areas selected by birds that promote survival and are actively used

Threats

Identifying primary threats to each population

Plan management and mitigation

Understand recovery capability



Thank You



Diane Ford, Upland Game Bird
Stamp Contest Winner