



Stone Lakes National Wildlife Refuge





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Refuge: located in Stone Lakes Basin & along the western edge of Elk Grove





Stone Lakes National Wildlife Refuge



WATERFOWL HUNTING
U.S. Fish and Wildlife Service/Megan Durham



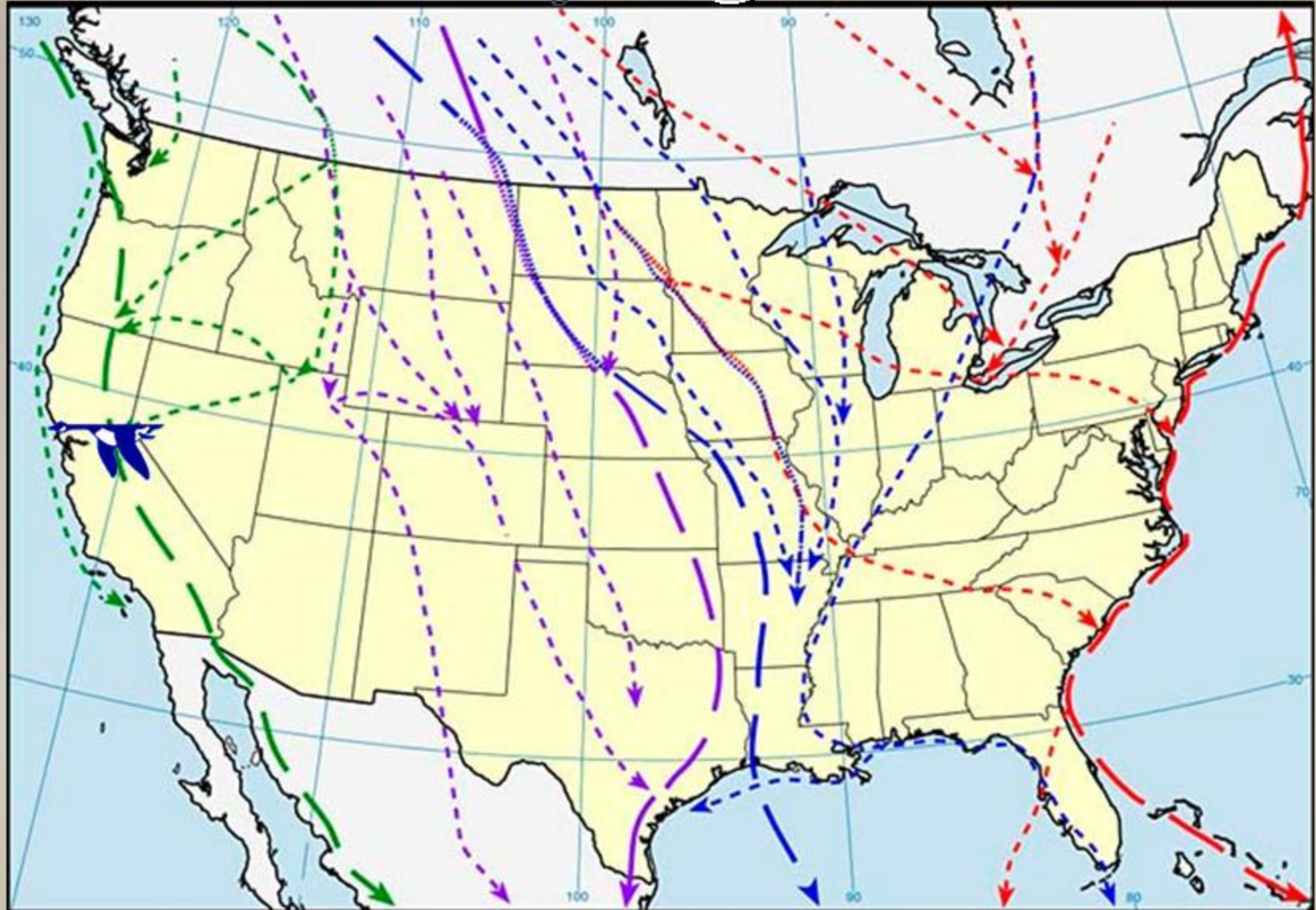
© 2011 Google

Imagery Date: 10/30/2011 1993 38° 22' 13.61" N 121° 29' 37.4"



Refuge Location

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*North American Migration Flyways
(with Principal Routes)*

- Atlantic Flyway 
- Mississippi Flyway 
- Central Flyway 
- Pacific Flyway 



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Central Valley provides 60% of the
wintering habitat for migratory birds
within the Pacific Flyway





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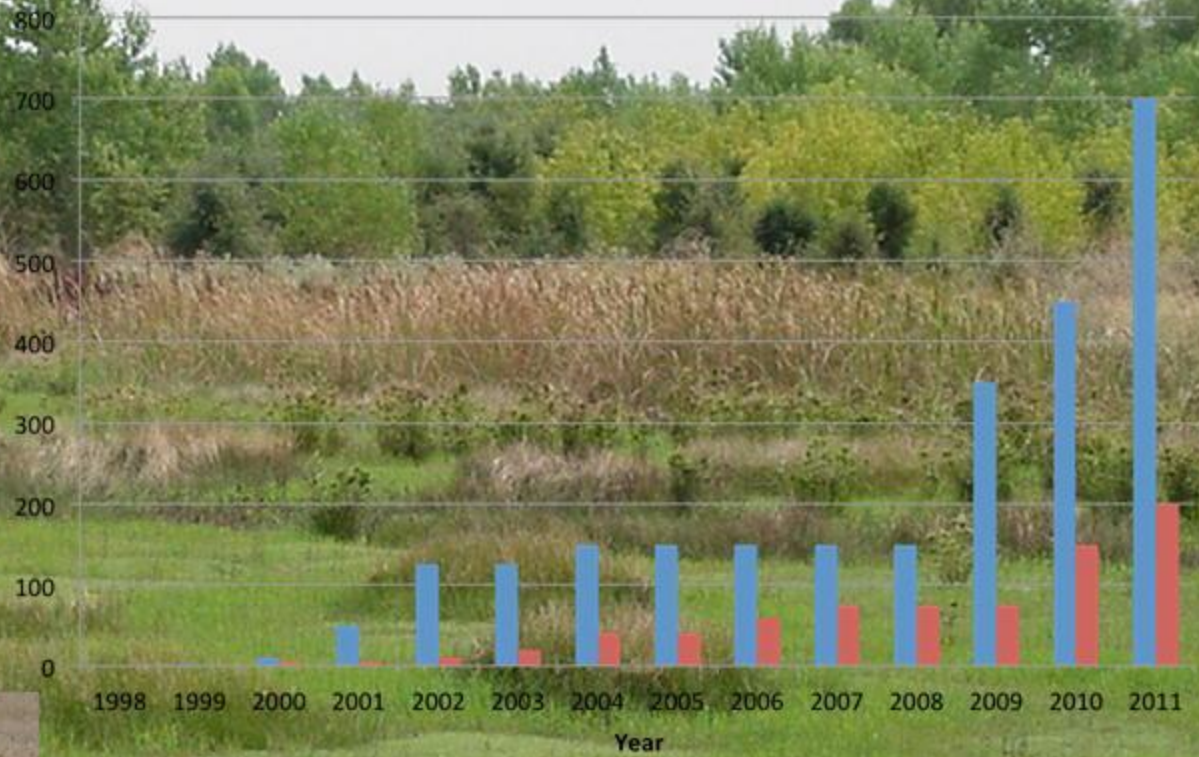


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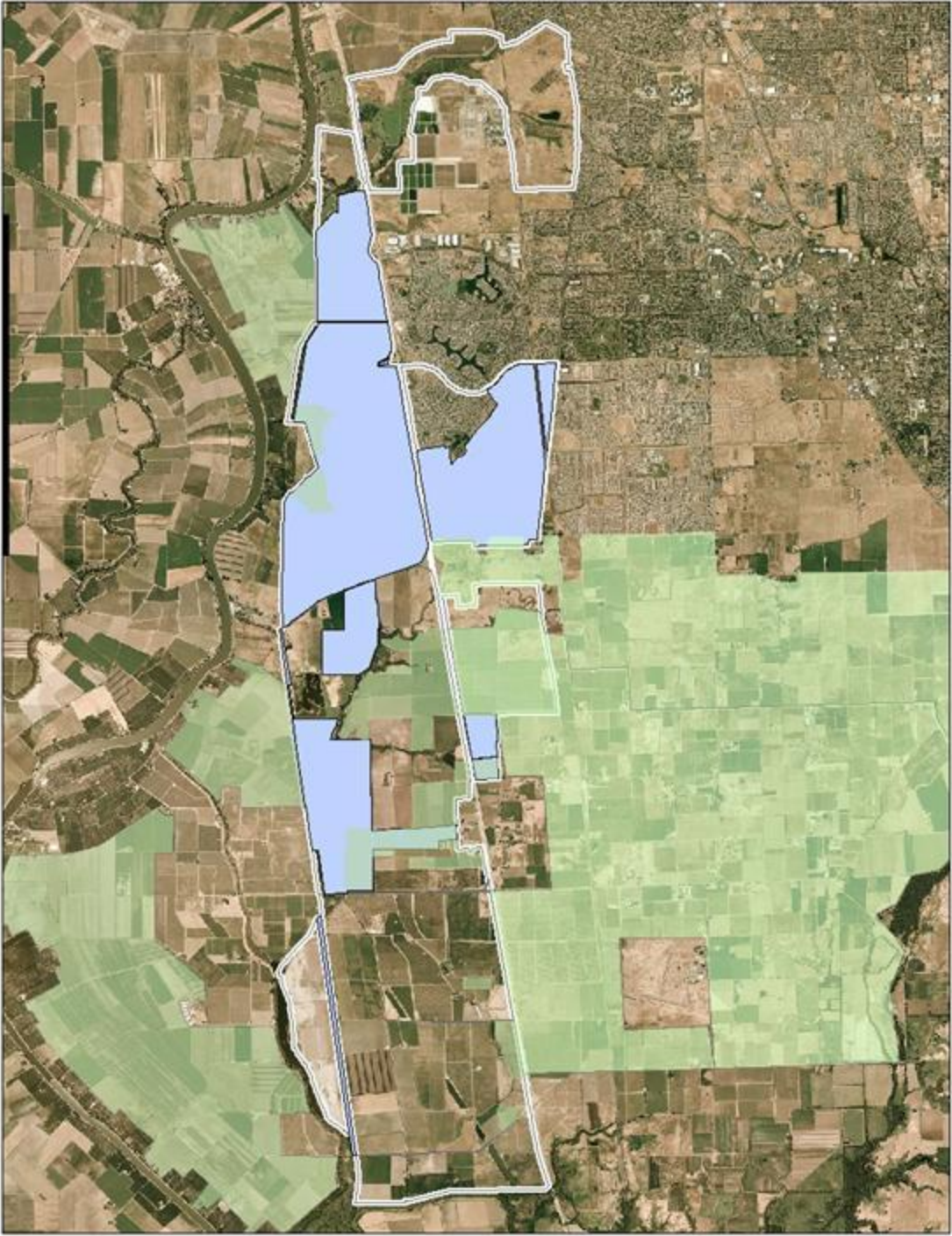
5 wetland units comprising 1000 acres of seasonal wetlands - intensively managed to provide roosting and foraging habitat for wintering birds.



Stone Lakes NWR Greater Sandhill Crane and Long-billed Curlew Populations







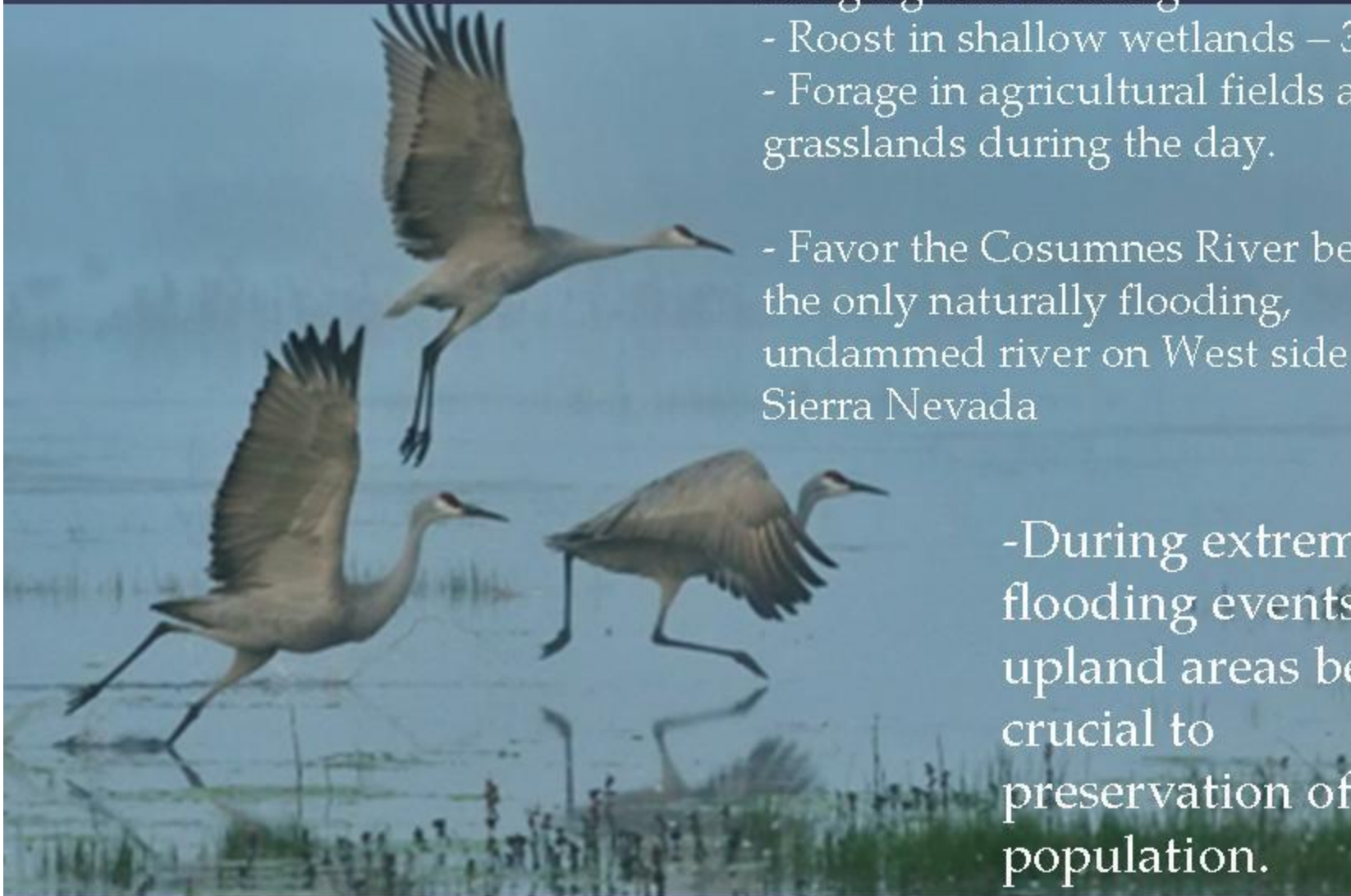


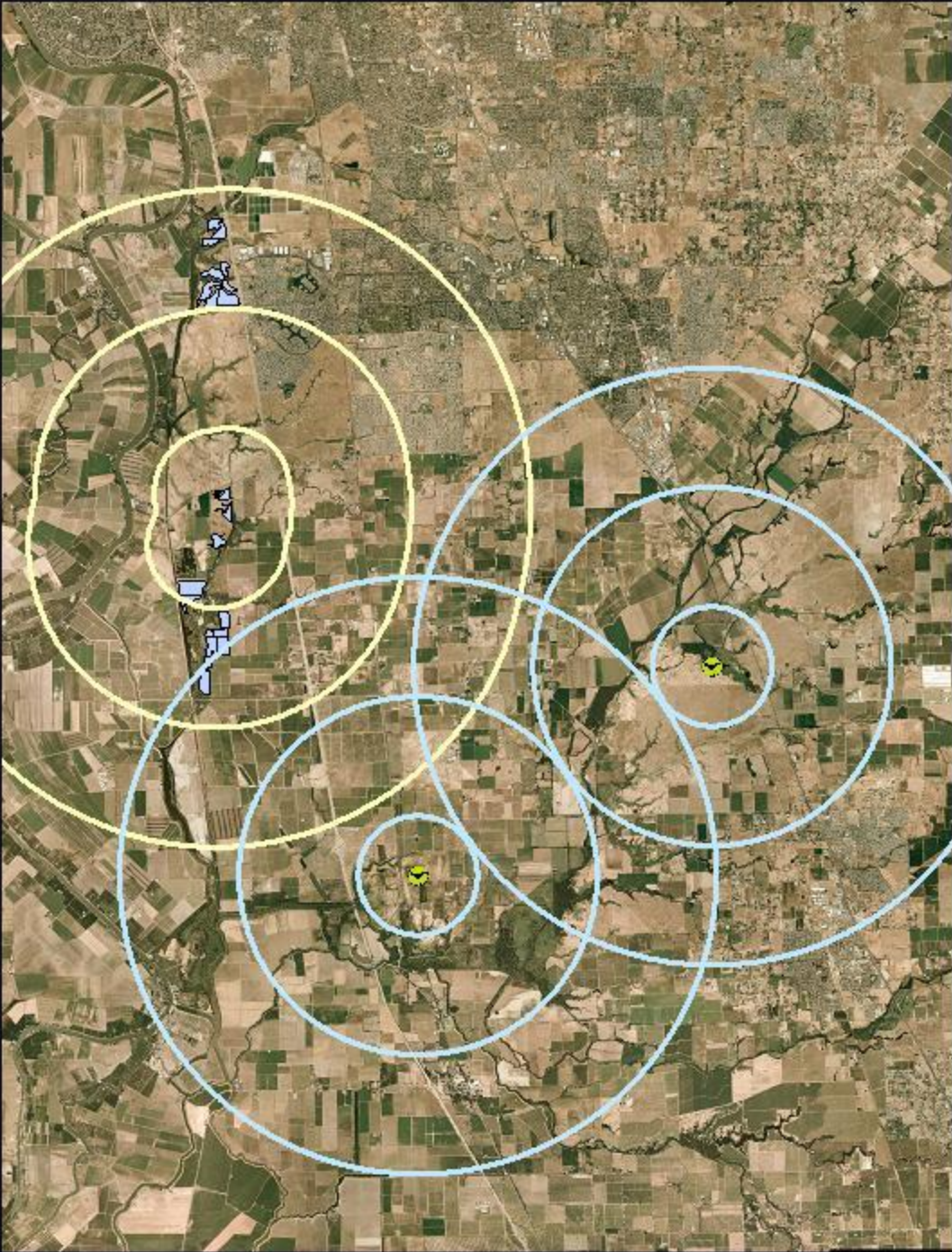
Greater Sandhill Crane:

- 5,000 - 7,000 individuals frequent CA
- Exhibit very high site fidelity for foraging and roosting
- Roost in shallow wetlands – 3" to 6"
- Forage in agricultural fields and open grasslands during the day.

- Favor the Cosumnes River because is the only naturally flooding, undammed river on West side of the Sierra Nevada

-During extreme flooding events, the upland areas become crucial to preservation of the population.





Swainson's Hawk:

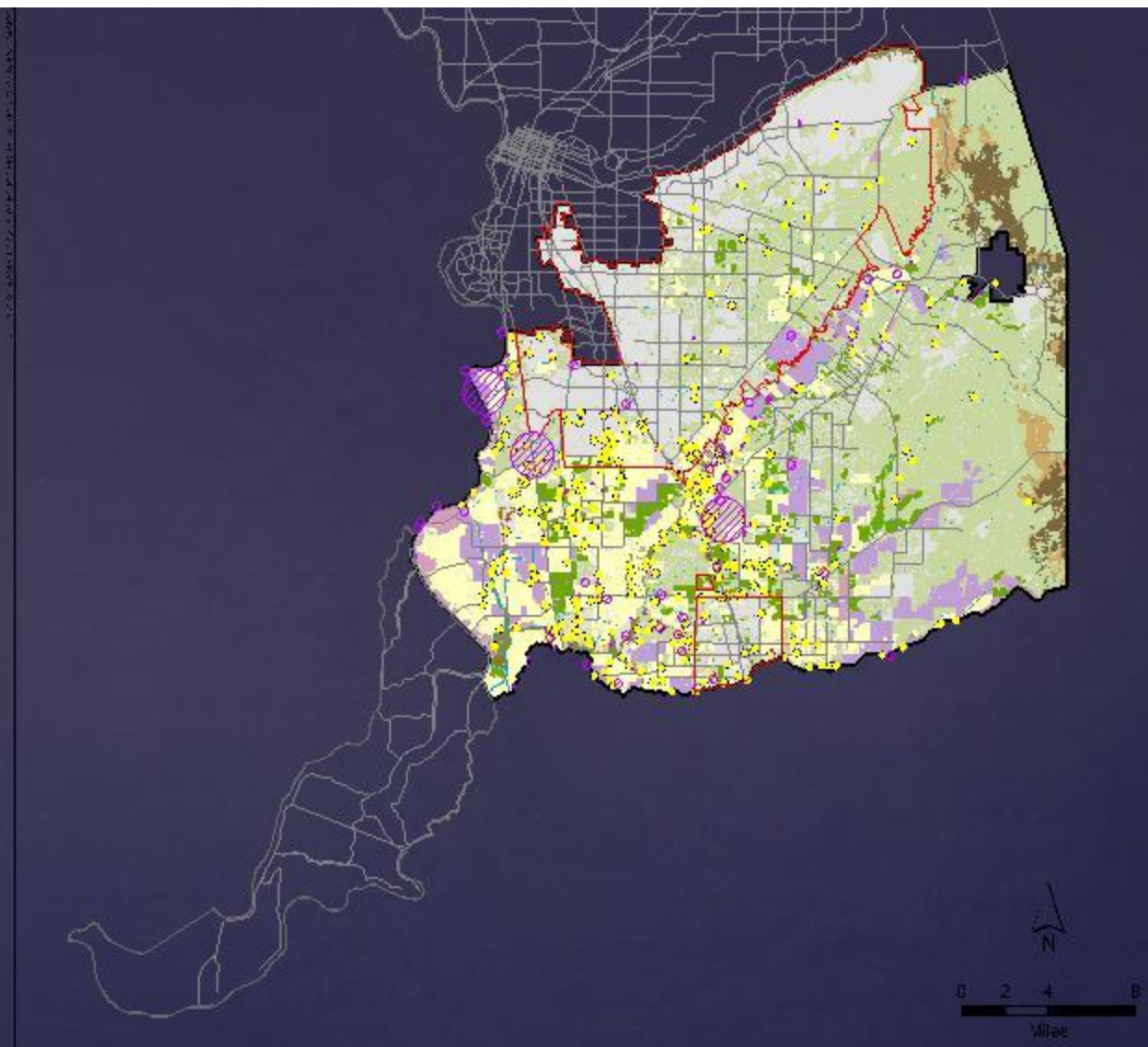
- Breeds and forages in prairie and row crops of Western N. America
- Winter migration to central Mexico
- Estimated 2,080 CA breeding pairs in 2005
- 90% in Central Valley
- Listed as a threatened under CA ESA



- Reproductive activity and survival of young is directly dependent on availability of small rodent food supply reasonably close to nests during breeding period.
- Undernourished birds, particularly in first year, are unlikely to survive rigors of migration.



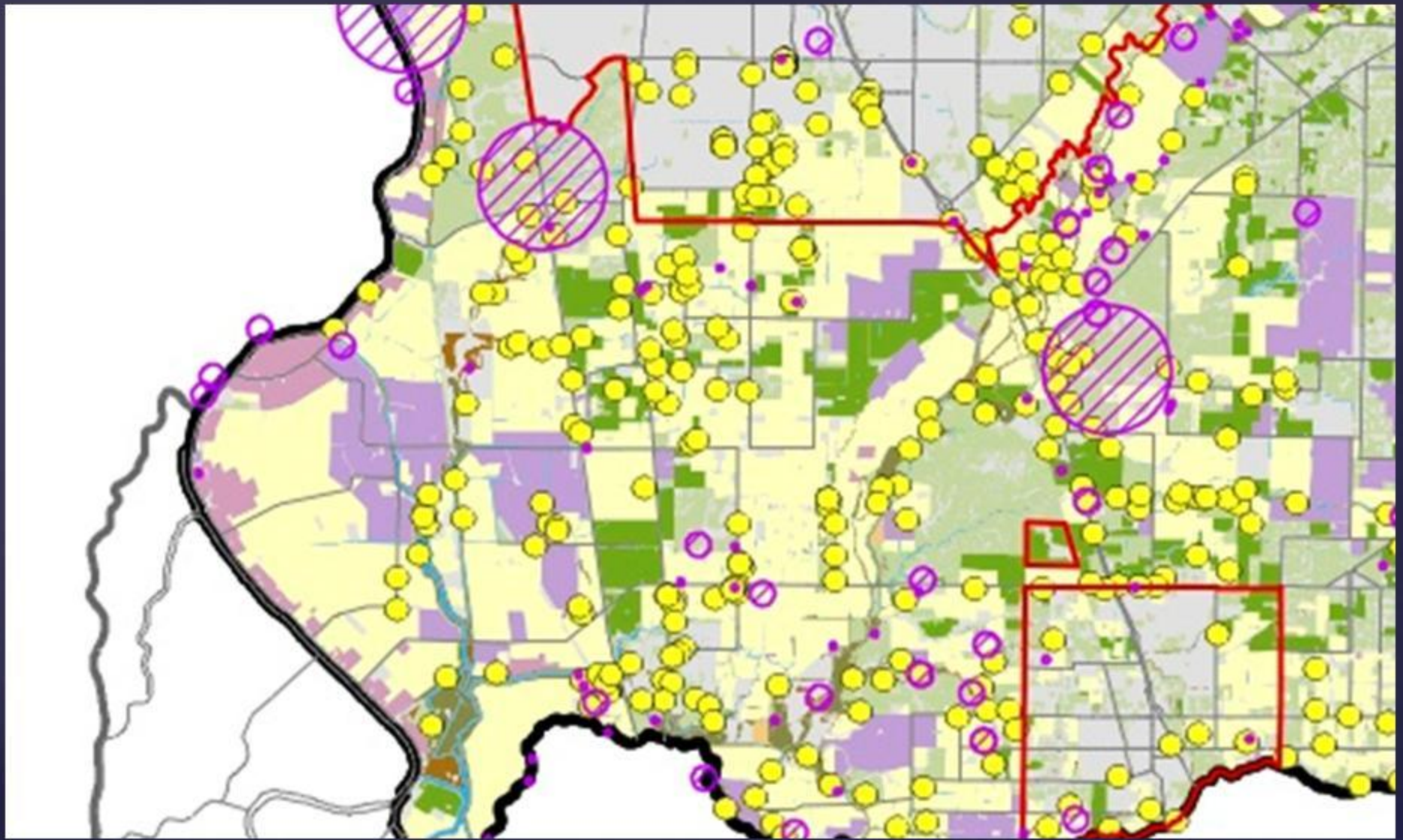
Irrigated cropland and irrigated pasture are the best foraging habitat.



Range of Swainson's Hawk in the SSHCP Plan Area

| | | |
|---|---|-----------------------------|
| <p>Consolidated Species Occurrences*</p> <p>Swainson's Hawk (CNDGB)</p> <p>Urban Development Area</p> <p>Plan Area</p> <p>Crop Land</p> <p>Irrigated Pasture Grassland</p> <p>Orchards</p> <p>Streams/Creeks</p> | <p>Wetland</p> <p>Vineyards</p> <p>Blue Oak Savanna</p> <p>Blue Oak Woodland</p> <p>Mixed Riparian Scrub</p> <p>Mixed Riparian Woodland</p> <p>Valley Oak Riparian Woodland</p> <p>Woodland Restoration</p> | <p>Figure SWHA-1</p> |
|---|---|-----------------------------|

*Consolidated Species Occurrences are based on the following sources:
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2010
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2011
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2012
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2013
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2014
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2015
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2016
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2017
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2018
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2019
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2020
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2021
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2022
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2023
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2024
 - California Department of Fish and Wildlife (CDFW) - Swainson's Hawk (CNDGB) - 2025



Cosumnes River Preserve Property Map

