

memo

[Company name]

To: Jude Lamare, Jim Pacht
From: Melinda Bradbury
CC:
Date: 3/15/2010
Re: Assessing Elk Grove SOI expansion on historical Swainson's Hawk locations and comparing it to the information provided in the Gibson and Skordal letters developed for the City of Elk Grove.

Comments: I reviewed the information available on Swainson's Hawk nesting locations in the SOI area and developed a summary.

Background

There are several documents that show in general where Swainson's Hawks are nesting in the area south of Elk Grove. Both nesting habitat and forage habitat are important in determining how Swainson's Hawks may be impacted by proposed SOI changes south of Elk Grove. Swainson's Hawk population trends are normally assessed by the number of pairs in the region, their nesting success and the number of chicks they are able to fledge. All of these indicators can change on a yearly basis depending on things such as whether prey is available and weather (did wind knock nests out of trees?). Nesting population numbers in a region can change depending on the year but urbanization has the effect of both removing foraging habitat and nest sites (if trees are removed). Urbanization can also make nest sites less suitable by increasing the distance adults have to fly to find food for young and for birds that may not be used to disturbance make nest sites less desirable because of noise and harassment.

Although the Gibson and Skordal letters only look at an additional 5,000 acres to annex, the City of Elk Grove actually is pursuing annexing 10,000 acres.

Project

The Gibson and Skordal cover letter just addresses whether 5,000 acres south of Elk Grove can be added to the planning area of the HCP, whether HCP chapters need to be updated to accommodate the larger planning area and what revisions need to occur to include the expanded area. The conclusion is that it can be done if enough mitigation land is available somewhere else in the region.

The letter that addresses the Swainson's Hawk in particular was prepared by Miriam Green and Associates. They reviewed the most recent version of CNDDDB at the time (2007) and developed a new map of locations. Based on that, they came to the conclusion that if mitigation land is available then the area should be included in the SSHCP. They identified 5 CNDDDB records that overlap with the 5,000 acres south of Kammerer road and 5 new records within the the SSHCP area, but outside the Elk Grove SOI area.

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The letters are just letters, and are not a study of the feasibility of annexing additional land. The letters do not include an impacts analysis, they only do a review of existing documents. They are not a complete picture of the proposal for several reasons:

- The consultants did not include the information gathered by Jim Estep in his reports and unduly relied on CNDDDB records as a complete picture of Swainson's Hawks in the region
- Without knowing how where mitigation land will be conserved the conclusion cannot be reached that it would be okay to include this area.
- Not only is the number of nesting pairs in the area important, but the density of nesting pairs within the area and outside of the area are key to understanding the importance of the nesting and foraging habitat.
- Acknowledgement that if nesting trees and forage are removed, the birds using that area don't just "move" somewhere else as that impacts the nesting success of surrounding pairs. No difference may be seen for several years but then as pairs die the old nest sites are not reused by young birds and populations decline. As an example of this you can site Fisherman's Lake – where pairs held on for a few years but then abandoned the historical nest site after a few years.

Specific Swainson's Hawk Information

Distribution, Abundance, and Habitat Associations of Swainson's Hawk. Results of 2006 census level surveys in South Sacramento County

- There were approximately 12 nest territories reported in the section east of I-5 and west of 99 south to Eschinger road (Figure 6)
- There were approximately 18 nest territories reported in the section east of 99 and north of the Cosumnes River.
- There were many nesting territories along the Cosumnes River and just south that would have the potential to forage north or south of the river depending on available habitat. Those birds would be impacted by loss of foraging habitat north of the Cosumnes River.
- A majority of the nesting sites in South County were concentrated within the interior portion of the study area between approximately I-5 and Clay Station Road on the east side (74.5%)
- Jim Estep remarks in the report that the "territory density is lower than in Yolo County, but is high compared with other portions of the species' range and indicated the value of the agricultural habitats within this region to Swainson's hawks and the importance of the 'core' Central Valley population."
- He also concludes, and other studies have also concluded, that rural residential does not make good habitat, and should be avoided as a conservation measure.
- The 10,000 acres is primarily the best forage type for Swainson's Hawks – Irrigated cropland/irrigated pasture
- Table 8 estimates 110,000 acres of irrigated cropland/pasture. Removal of 10,000 acres of that is almost 10% of the available habitat type. 10,000 acres of the same habitat would have to be added (not just preserved) in a suitable area in the interior area to mitigate for the loss.
- A study would have to be undertaken to determine whether there is enough acreage that could be converted to irrigated pasture to offset the impacts within the immediate interior zone that isn't already in that habitat type. Land would have to be preserved within the same zone. Soil types, water availability, willingness of land owners etc. would all have to be assessed.
- Territory density is also the highest in the interior zone, so removing habitat has a greater impact. Also the reason to add 10,000 acres of habitat and not just preserve existing habitat. Preservation would lead to a loss of 50% of the habitat at a 1:1 mitigation ratio (10,000 acres removed, 10,000 preserved is 50% of 20,000 acres lost.
- Not only would Swainson's Hawks be impacted but other nesting raptors too.

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Monitoring Swainson's Hawk (Buteo swainsoni) Nesting Activity in South Sacramento County Results of 2008 Surveys. Follow up of 2006 surveys by Jim Estep

- Areas surveyed did not include areas proposed for annexation.