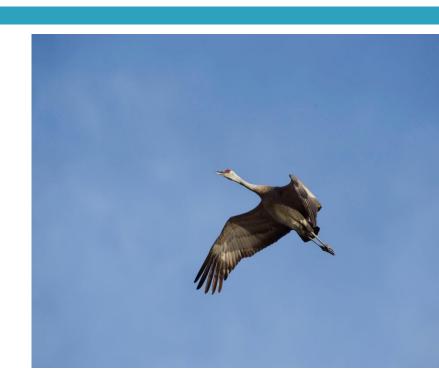


SEAN WIRTH TESTIMONY

Effects on SSHCP and Greater Sandhill Crane

Introduction

- Founding member of Save Our Sandhill Cranes
- Executive committee of ECOS
- Co-Chair Habitat 2020
- Conservation chair for the MLC Chapter of Sierra Club
- Executive Committee for the Mother Lode Chapter of Sierra Club
- Crane Technical Advisory Committee member
- Participated in stakeholder meetings for BDCP terrestrial impacts



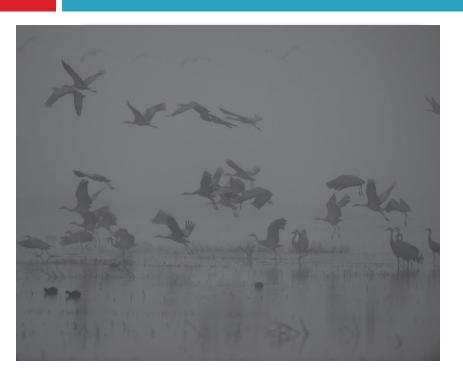
Concerns About Impacts to the South Sacramento Habitat Conservation Plan (SSHCP)

Expressed initial concerns about the impact of the Delta tunnels project on the ability of the SSHCP to successfully implement its conservation strategy.



The plan area encompasses most of Sacramento County south of highway 50, and the impacts and the "take" contemplated in the Plan occur almost completely within the Urban Development Area ("UDA"), whereas the majority of the habitat acquisition for mitigation occurs outside the UDA. The Plan area encompasses 317, 656 acres in southern Sacramento County and it will result in the creation of an interconnected preserve system totaling 36,282 acres

The Importance of preserve planning unit (PPU) 6



It is important to understand that the SSHCP is divided into Preserve Planning Units PPUs), and that those divisions were not arbitrary, and that each unit has a focus of protecting specific covered species. The construction impacts near and in Stone Lakes National Wildlife Refuge are firmly placed within PPU 6, which is an agricultural and grassland unit, as explained in the SSHCP:

"PPU 6 encompasses 95,196 acres outside the UDA in the southwestern portion of the Plan Area. PPU 6 is bisected by I-5. It is bordered on the west by the Sacramento River, on the south by the Mokelumne River, and Dry Creek. The dominant land covers in PPU 6 are Agriculture (58,458 acres) and Valley Grassland (17,633 acres)... All of the covered birds have been documented in PPU 6, including 281 (71%) occurrences for Swainson's hawk, 190 (92%) occurrences for greater sandhill crane, and 55% or more of the occurrences for northern harrier and white tailed kite."(SOSC- 16, SSHCP, p. 7-88.)



PPU6 is a population stronghold for Sandhill Crane and Swainson's Hawk

It is important to remember that Greater Sandhill Cranes forage extensively within a 2-mile radius of their roost sites (Ivey 2015), and that the vast majority of roost sites in the Plan area are within PPU 6. Since many of the impacts associated with the twin tunnels project would occur within the footprint of the SSHCP and PPU 6, it is important that they are also mitigated within PPU 6 – foraging habitat within the crane population stronghold within the SSHCP Plan Area needs to be mitigated within that same stronghold, and they would need to be mitigated within two miles of an active roost site in order to be effective. Similarly, the impacts to Swainson's Hanks, White Tailed Kite and Northern Harrier should also be mitigated as proximal to the impacts as possible





Feasibility of Acquisition

The SSHCP is only planning to acquire properties to satisfy its habitat mitigation requirements from wiling sellers and the reality is that some landowners may wish to sell, and some may not. This uncertainty is encompassed in the concept of "feasibility of acquisition." Given the need for willing sellers, "feasibility of acquisition" represents how much habitat is available compared to how much habitat is needed for mitigation

The lower the feasibility for acquisition ratio, the more likely that enough willing sellers will be found to satisfy the acquisition requirements of the Conservation Strategy of an HCP. The California Department of Fish and Wildlife ("CDFW") maintained during the preparation of the SSHCP that the Plan should strive for a ratio of 15% or less. Beyond increasing the likelihood that enough willing sellers would be available to successfully implement the Conservation Strategy, such a low ratio would go a long way to avoiding what has happened in the Natomas Basin Habitat Conservation Plan where the ratio is much higher and has resulted in exorbitant prices being paid for rice fields

Calculating the Impact on the "Feasibility of Acquisition"

The conservation target for PPU 6 is 9,750 acres, and there are 63,657 acres available, though not all suitable for mitigation because of elevation (all Swainson's hawk mitigation must be above sea level), after deducting the lands already preserved and developed from the figure for the total number of acres in the unit (95,196 acres). Simple division reveals that the gross feasibility for acquisition for PPU 6 is 15.3%, just over the ratio that CDFW maintained was acceptable in the preparation of the SSHCP, and not accounting for acquisition criteria, sea level or floodplain. (SOSC-16, SSHCP, pp.7-63 and 7-88)

Considering a range of possible mitigation needs in PPU 6 by the tunnels project would be illustrative of the impact it would have on the feasibility for acquisition for the SSHCP, and thus on the probability for the SSHCP to successfully implement its conservation strategy. Assuming a range of between 2,000 acres and 4,000 acres, the potential effect on the feasibility for acquisition would be to raise it to between 18.4% and 21.6%, well above what the California Fish and Wildlife considered realistic for success for the SSHCP. This increase does not factor in floodplain or sea level, which means the actual available inventory could in the end be closer to the situation in the Natomas Basin resulting in the same inventory issues they have there.

Chilling Effect of Eminent Domain on Willing Sellers for the SSHCP



This concern and many others were brought up in the stakeholder process created to deal with the impact to terrestrial species during the preparation of the BDCP. Beyond the disastrous impact to the feasibility of acquisition, we consistently warned that since the BDCP was reserving the right to use eminent domain to condemn properties that it might need for mitigation, it would have a substantial chilling effect on the willingness of sellers to participate in the SSHCP as it would be prone to being painted in the same negative light, by some prospective sellers, as a competing Plan willing to take their land away forcibly. The potential level of this type of paranoia cannot be overstated and it would be a grave mistake to discount it.



<u>The Petitioned Project is Incompatible with and would Interfere with Successful Implementation of the SSHCP</u>

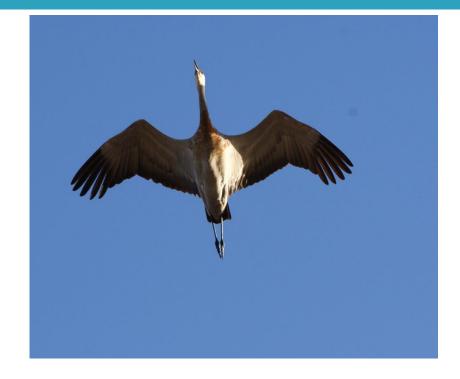
During the stakeholder process, we pushed for Swainson's Hawk and Greater Sandhill Crane mitigation to be done in the footprint of Elk Grove's Sphere of Influence Amendment application that was rejected by LAFCo (Local Area Formation Commission) in 2013. The reasoning was that it would be extraordinarily difficult for the SSHCP to acquire mitigation in that footprint because of the inflated land prices there from built up speculative pressure, and this land was prime habitat for Swainson's Hawk, Greater Sandhill Crane, White Tailed Kite, and Northern Harrier, and it was in immediate threat of being lost in the near future to urbanization.

Recommended Condition of Approval sosc-8



Recommended Condition of Approval

We recommend requiring that a substantial portion of the mitigation required for impacts in PPU 6 be acquired south of Elk Grove in the area that has already seen inflated property values due to speculative pressure based on potential urbanization. This will greatly reduce the impact on the inventory of the SSHCP as well as helping ensure stable acquisition costs for the rest of PPU 6.





SPECIES SPECIFIC COMMENTS FOR GREATER SANDHILL CRANE

In my opinion, the avoidance and minimization measures in AMM-20 to avoid the loss of roosting and foraging sites for Greater Sandhill Crane due to construction related activities by the creation of new temporary roost site/s one mile away from original impacted site/s, and by enhancing forage opportunities, are experimental and therefore there is no way to know if they will work.

Roost abandonment in the North Stone Lakes wetland complex due to construction activities was a concern that was contemplated in the stakeholder process of the BDCP, and was addressed, at the suggestion of stakeholders, by providing for nearby alternative roost sites with greatly increased foraging opportunities to entice the Greater Sandhill Crane to not abandon their northern most roost site in Sacramento county.



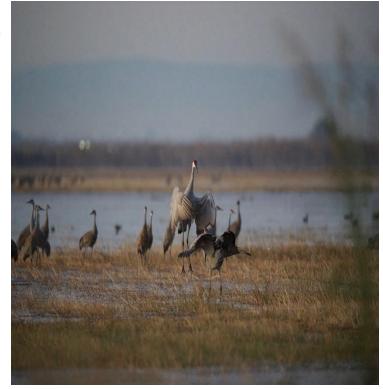
Greater Sandhill Cranes may abandon the North Stone Lakes wetlands SOSC-8 complex due to construction related disturbance.

This was the concern that resulted in the added measures in AMM20 to address impacts on roost and forage sites from construction related activities. (LAND-111, MMRP, pp. 3B-138 -140.) As stakeholders, we were initially told that there was no risk of abandonment of the North Stone Lakes wetland complex because noise and other construction related disturbances would be avoided within 0.75 of the roost site. It was pointed out during those stakeholder meetings that the proposed AMM20 language at that time did not prohibit such disturbances within 0.75 miles of a roost site. But rather the draft language stated that such disturbances would be avoided if feasible. We also pointed out there was no past project that we were aware of that was anywhere near the scale of that proposed for the Delta Tunnels construction, either in expense, footprint, potential impacts, or duration. And because of that and the proposed language in AMM20 that relied upon "if feasible" type language, there was great concern that given the lack of past project examples of this magnitude and the lack of evidence in the scientific literature of the same, that there was indeed a risk that the North Stone Lakes wetland roost site might be abandoned.

SOSC-8

It is important to understand that the north Stone Lakes wetlands complex would be in close proximity to a construction area where pile driving would occur.

- We argued that, though Greater Sandhill cranes could be said to have acclimated to some human caused noises in our region such as traffic from highway 5 for the Cosumnes River Visitor Center pond roost site, that the nature of the sound from pile driving was appreciably different in nature and could not reasonably be compared to the "white noise" of freeway traffic or other consistent noises. The closest comparison would be to a hunting area, and Greater Sandhill Cranes clearly avoid those (Ivey 2014).
- We pointed out that the North Stone Lakes wetland roost site was already the most constrained roost site in our region with substantial urbanization to the north and the east. We argued that abandonment of this site would constitute a reduction in range. It was our suggestion that a temporary roost site should be installed within a mile of the North Stone Lakes roost site and that enhanced foraging opportunities should be provided nearby to entice Greater Sandhill Cranes to remain in the area.



New language gets added to AMM 20



These suggestions led to additional AMM20 language as seen in the Final EIR/S (2016) in 3B 140 on lines 7 to 8 and 13 -23, as well as 3B 139 on lines 26-37. These suggestions were based upon the knowledge that Greater Sandhill Cranes forage extensively within 1.9 km of their roost site (Ivey, 2015) and the fact that in New Mexico un-harvested corn is provided for cranes on National Wildlife Management Areas and National Wildlife Refuges (Mitchusson 2003), which they use heavily. It was not based on any scientific literature or past example that indicated that this would work, because no such source was available.

The fact that Greater Sandhill Crane forage extensively within about two miles of their current roost sites would suggest that Cranes would likely discover the new roosting site the first season that it was created. But there is no equivalent certainty that they necessarily would use it in lieu of their original roost site when it became impacted. Cranes could still abandon the North Stone Lakes wetland complex roost site and head south to another roost site, thereby reducing their range.

SOSC-8

Creating new temporary wetlands one season before an impact may be inadequate time for the Greater Sandhill Cranes to decide to use them.

There was no past example or scientific literature that could be relied upon to indicate how long a created roost site should be in place to enhance the likelihood that it would be used while a current roost site was being impacted. Given the experimental nature of the effort, it would make sense to provide the increased likelihood of success by increasing the time that the new roosting resource was available and part of the immediate Greater Sandhill Crane landscape to more than one year.





Enhanced foraging opportunities would also be more likely to prove successful if they were provided sooner than one year before impact to current foraging and or roosting sites.

There was no past example or scientific literature that could be relied upon to indicate how long an enhanced foraging site should be in place to improve the likelihood that it would be an effective incentive to keep Greater Sandhill Cranes in their current foraging landscape despite construction related disturbances. Given the experimental nature of the effort, it would make sense to provide the increased likelihood of success by increasing the time that the enhanced foraging opportunities were available and part of the immediate Greater Sandhill Crane landscape to at least 2 years in advance of construction related impacts.



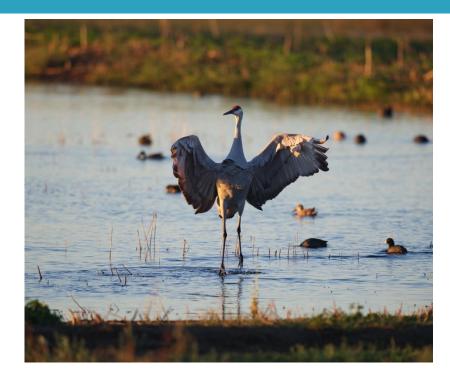
RECOMMENDED CONDITIONS OF APPROVAL

To reduce the risk of abandonment of the North Stone Lakes wetlands complex: Avoid construction related activities in the vicinity of the North Stone Lakes wetland complex from September 1 through March 15 with no exceptions.

Further recommended Conditions for approval

To increase the likelihood that created roost sites will be effective in addressing impacts of construction related disturbances: roost sites should be created as soon as possible, but at least two years in advance of the impacts. This would allow at least two seasons to gauge if they seem likely to be used/

To increase the likelihood that enhanced foraging opportunities will be effective in addressing impacts of construction related disturbances: the enhancement of foraging opportunities should be begun as soon as possible, but at least two years in advance of the impacts. This will allow two seasons of enticement for the cranes before impacts. As well, if for some reason the cranes do not gravitate towards this enhanced feeding opportunity, there are two seasons to refine the approach.





Though these conditions could lessen the impacts, I believe the Delta Tunnels project would impose unreasonable impacts on wildlife and would not be in the public interest from a regional conservation perspective.



Project Impacts to Wetlands

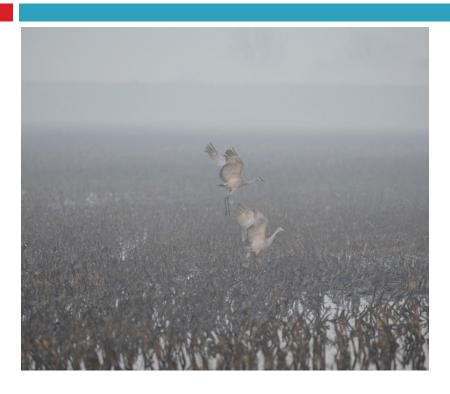
The project impacts to wetland habitats are at a massive scale and largely concentrated in an area of critical wildlife concern, as identified above. "The proposed project will result in permanent impact to approximately 774 acres of waters of the United States and temporary impact to approximately 1,931 acres of waters.

The project deliberately mischaracterizes the impacts on wetlands to the public and to the U.S. Army Corps of Engineers ("COSCOSC—8 To start with, it is difficult to understand the sheer scale of the impact, over a square mile of lost wetlands, and the utter devastation that will be focused on one of the last remaining areas of concentrated wetlands and riparian wetlands in further, this part of the Delta.

To fully appreciate the enormous scale of these impacts to wetlands, it would be instructive to compare it to the proposed SSHCP and its companion Aquatic Resources Plan ("ARP"), which is a massive regional effort to look at all of the impacts from urban development mining, highways, and other large scale projects to wetland habitat and to Waters of the United States (and wetlands) under the Clean Water Act ("CWA") and to carefully plan for those impacts. The projects in many cases need permits to fill wetlands and the SSHCP, through the ARP permitting process, has a series of provisions to compensate for those impacts. The SSHCP is the first HCP in the nation to integrate 404 permitting. It plans to do so through a tiered structure of permits. For projects up to two acres of impact, a project applicant can use a Programmatic General Permit ("PGP"). For a project that is between two and ten acres, a Process using a Letter of Permission ("LOP") is available. And, for projects with impacts greater than ten acres, an "abbreviated" general permit process is available (ARP, pp 176-179). The ARP anticipates that the vast majority of applicants would utilize the PGP "The SSHCP Plan Permittees anticipate that the USACE would develop programmatic approaches to processing individual CWA 404 permits for the relatively small amount of SSHCP Covered Activity projects proposed to impact waters of the U.S. that would not fit under the terms and conditions of the PGP.



Comparing wetland impacts to those in SSHCP



- "The SSHCP Plan Permittees anticipate that the USACE would develop programmatic approaches to processing individual CWA 404 permits for the relatively small amount of SSHCP Covered Activity projects proposed to impact waters of the U.S. that would not fit under the terms and conditions of the PGP (ARP p 176)."
- The SSHCP's COE draft Programmatic General Permit states: "The total loss of waters of the U.S. authorized under this PGP may not exceed 120 acres of waters of the U.S., including wetlands, within the Plan Area." (SOSC-59.) Since the Programmatic General Permit is being considered for sequential five year terms, the amount of wetlands impacts associated with the Delta Tunnels project represents more than 30 years worth of PGP impacts in the SSHCP.

SSHCP's COE draft Programmatic General Permit

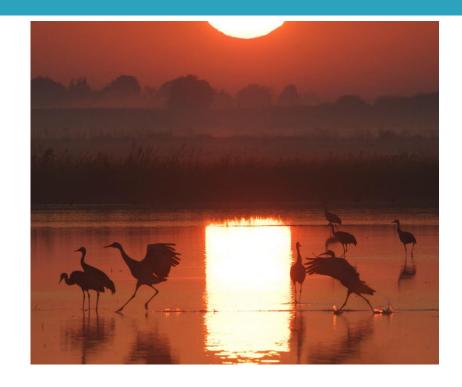
The SSHCP's COE draft Programmatic General Permit states: "The total loss of waters of the U.S. authorized under this PGP may not exceed 120 acres of waters of the U.S., including weltands, within the Plan Area." (SOSC-59.) Since the Programmatic General Permit is being considered for sequential five year terms, the amount of weltands impacts associated with the Delta Tunnels project represents more than 30 years worth of PGP impacts in the SSHCP.

The COE completed an analysis of the CWA 404 wetland permits that it issued nationwide, a total average of 13,338 acres per year from 2007-2014. (Page 26.) For that same 7-year time-period, the average yearly projects greater than 50 acres was 42 Individual Permits authorized for the entire U.S. (Page 35.) The national annual average for non-tidal wetlands (the COE analysis combines many wetlands into this category) fill for that period is 1,750 acres. (Page 48.) The Delta Tunnels project proposes to fill as many total wetland acres as the entire United States loses for non-tidal wetlands in a year! And, those are just the permanent impacts.



Historically destructive project to wetlands

- This is a historically destructive project that devastates a huge portion of what little remains of California's increasingly critical wetlands. How critical is described in the EIR: "The loss of riparian vegetation throughout California, estimated to be 85%—95%, was caused by human activities, such as river and stream channelization, levee building, vegetation removal to stabilize levees, and extensive agricultural and urban development (Riparian Habitat Joint Venture 2004)." (Chapter 12, p. 12-45.)
- The EIR on one hand attempts to say that the Delta is largely in agriculture, and on the other hand that its tunnel impacts on those same habitats are minimal on a percentage basis. Its own analysis identifies that cultivated lands total 481,909 acres, and that developed lands total 90,278 acres for a sum totaling 572,187 acres of the Delta that is either developed or in production, leaving natural lands of 290,453 acres remaining in area. (Chapter 12, p. 12–41.)



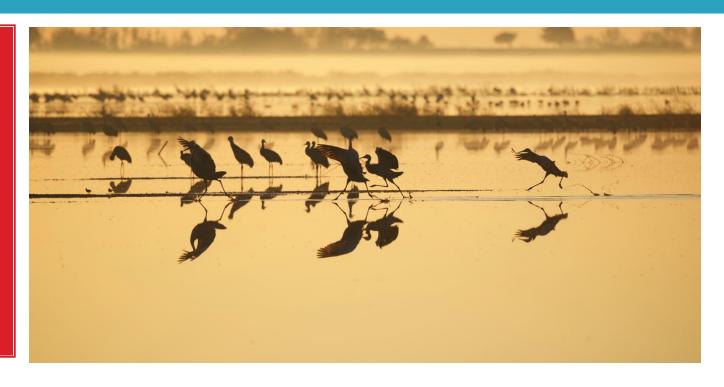


Mitigation for Impacts to Wetlands can occur anywhere in the Delta

The EIR analysis assumes that the mitigation fully compensates for all the losses, which looks good on paper. But the obvious truth is that the impacts are concentrated in the Northeastern Delta, and the mitigation for those regionally concentrated impacts will happen at locations to be determined later at some undetermined point in the future. Where the mitigation will happen is described in Chapter 12 (p. 12-36): "These geographic areas have been characterized as conservation zones (CZs) that encompass the entire Plan Area, and, for tidal marsh and floodplain restoration, as restoration opportunity areas (ROAs) that focus on smaller regions of the Plan Area (see Figure 12-1)."

404 Permit application is inaccurate

Finally, the permit application to fill these important wetlands is simply wrong, it says on (Item #18) of the Application: The Nature of the Activity, it identifies a project purpose or feature as "habitat creation, restoration and enhancement." (LAND-121, pp. 2-3.) The opposite is true. The only habitat creation, restoration or enhancement is from the mitigation of the destruction of wetland and Waters of the United States. These are features from the prior Habitat Conservation Plan/Natural Communities Conservation Plan ("HCP/NCCP") proposal (Alternative 4). Alternative 4A in the RDEIR/S does not include any habitat creation, restoration and enhancement beyond the legal minimum required for mitigation of project impacts. Item 18 describes the wrong alternative. Even the mitigation for project impacts is misleading since it is only a 1:1 ratio and makes no adjustment for timina of the loss of the habitat, restoration failures, or the scope or location of the impacts.





Conclusion to Wetlands Impacts

The massive impacts to wetlands and the waters of the United States in the Northeastern Delta, and the ill-defined mitigations and incorrect permit application represent unreasonable impacts and would not be in the public interest from a regional conservation perspective.

