



Santa Cruz Bird Club

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Pajaro Valley Water Management Agency
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Re: Response to College Lake Draft Environmental Impact Report

College Lake is considered one of the most important locations for wintering and migratory waterbirds in central coastal California. The lake has historically supported high numbers and diversity of waterbirds, as well as songbirds and raptors that use the seasonal wetland and riparian habitat in and around the lake. An incredible 234 bird species have been found at College Lake and the Cornell Lab of Ornithology ranks College Lake among the top five on the western United States for waterfowl counts in eBird.

While the Santa Cruz Bird Club recognizes there are benefits to enlarging the water storage capacity of College Lake, the value of College Lake as a seasonal wetland will be significantly reduced due to water impoundment. The loss of mud flat and emergent vegetation around the lake supports a great number of migratory species that rely on these ephemeral habitats to provide forage for during migration. Critical habitat for foraging would be significantly reduced or absent during the peak of migration, when the lake is typically pumped dry in April and May.

Great importance must be placed on preserving the critical habitat at College Lake. There is also concern that the proposed changes to how College Lake is managed will not take into account the effect on birds, and that there are no detailed objectives, dedicated funding, or accountability outlined in the adaptive management plan in the Draft Environmental Impact Report.

The following pages includes questions of concern regarding impacts from this project.

Respectfully submitted,

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The Santa Cruz Bird Club is a local non-profit organization comprised of over 500 members who have a common interest in the study and conservation of wild birds.

1. The DEIR lacks specific details regarding the mitigation of seasonal wetlands and how successful mitigation will be evaluated in terms of birds.
2. The DEIR does not address how the replacement of mudflats present in April and May that support tens of thousands of migrating shorebirds will be mitigated.
3. The DEIR does not include a timeframe for mitigation.
4. What agency and Management plans will be use for those replacement habitat systems?
5. Table 3.4-1 lists the 2014-2018 College Lake Study Waterfowl Totals. Why are there no totals for other waterbirds, especially wading birds included in the table? Why are there no monthly totals included in the table? Why are there no high counts from previous years mentioned?
6. In Biological Resources & Impacts of Mitigation Measures Table S-1Pg.S-16, why are the impacts to birds and other wildlife not accounted for once there is a rise in water due to the impoundment? The tables only represent impacts from construction.
7. What are the funding sources for an Adaptive Management Plan?
8. Regarding Elevations 57 Feet and Lower on pg. 3.4-55, as shown in Table 3.4-4, areas below 57 feet NAVD88 would remain inundated three to four months longer than under baseline conditions, with inundation from approximately November through August or September, depending on the timing of water supply withdrawals. In addition, the water level would decrease at a slower rate during the summer months, based on agricultural demand, in contrast with the rapid pumping that takes place in April under existing RD 2049 operations. What criteria were used to determine the significance of this loss of four months of avian feeding in these mudflats? Has this been evaluated in terms of number of birds impacted?
9. Has the DEIR concluded that the approximate 90 acres of submerged habitat will or will not have a significant impact on wading birds and shorebirds?
10. Page 3.4-25 Paragraph 6 states:
 - a. “The shorebird and wading bird abundance at College Lake from 2014 to 2018 also reflects the wide variability in water year type, but shows a regular peak in April and May during the lake’s rapid drawdown. Two wading bird species, great blue heron (*Ardea herodias*) and great egret (*Ardea alba*), nest locally at Pinto Lake and can be found in relatively large numbers during and after the drawdown period feeding on abundant small fish and Louisiana swamp crayfish (*Procambarus clarkia*) that are stranded in low-lying mudflat areas, flooded furrows, and ditch lines.
11. The close proximity of the Great Blue Heron and Egret colony-nesting site at Pinto Lake

- is significant because of its close proximity to College Lake. What impacts will the loss of mudflats have on these roosting birds?
12. The paragraph above only mentions “large numbers” of Egrets and Herons. What are the approximate numbers of feeding birds on the mud flats during the drawdown periods? Are these same numbers expected to return and when? Or at what replacement locations?
 13. **Page 3.4-27 paragraph 2 states:**
 - a. Factors besides water level that have been shown to annually affect waterfowl and shorebird abundance and distribution include: crop choice; type and timing of active farming in the agricultural wetlands; vegetation types in active and fallowed fields; slope-side farming and orchard activity; and amount and duration of mudflat habitat.
 14. Wouldn't the details of the abundance and distribution be relevant in determining what is needed for the replacement of submerged lands?
 15. Are these areas mapped?
 16. **Santa Cruz County General Plan. Policy 5.1.12:**
 - a. Require as a condition of development approval, restoration of any areas of the subject property which is identified as degraded sensitive habitat, with the magnitude of restoration to be commensurate with the scope of the project. Such conditions may include erosion control measures, removal of non-native or invasive species, planting with characteristic native species, and diversion of polluting run-off, water impoundment, and other appropriate means. The object of habitat restoration activities will be to enhance the functional capacity and biological productivity of the habitat(s) and whenever feasible, to restore them to a condition which can be sustained by natural occurrences, such as tidal flushing of lagoons.
 17. Policy 5.1.12 emphasizes that “the magnitude of restoration to be commensurate with the scope of the project” Yet the DEIR does not identify exactly what is being lost and what will be gained in Avian habitat and food resources. Unless the habitat value is defined how can success be measured for replacement value?
 18. What is the significance of the Agency's Basin Management Plan FEIR to College Lake and in relationship to the AMP? This is confusing. Are these plans going to be integrated into one management plan or are there two separate but related plans regarding College Lake?
 19. Have the objectives and goals of the AMP been defined? What agency will be defining these objectives and goals? How will an AMP be funded?
 20. **Policy 5.2.2:**
 - a. Implement the protection of Riparian Corridors and Wetlands through the Riparian Corridor and Wetland Protection ordinance. The ordinance identifies and defines riparian corridors and wetlands, determines the uses, which are allowed in and adjacent to these habitats, and specifies required buffer setbacks and performance standards for land in and adjacent to these areas. Any amendments to this ordinance will require a finding that riparian corridors and wetlands will be afforded equal or greater protection by the amended language.
 21. With the increase of water what areas been identified which will now need protective setbacks and buffer areas around the lake for birds and wildlife?

22. Which of the following criteria was given to describe the loss of four months of avian feeding in these mudflats by wading birds or waterfowl species? SUM = Significant and Unavoidable with Mitigation, LSM = Less than Significant with Mitigation LS = Less than Significant S-8 NI = No Impact
23. "Waterfowl typically number in the hundreds to thousands during winter depending on flooding conditions. ... their numbers are impressive if exposed mud and shallow waters are available during the peak of migration in April and May." (David Sudjjian 7-15-03 *The Importance of College Lake for Birds*) Why has this information not been included in the DEIR?