

**APPENDIX C. RESPONSES
TO BCDC COMMENTS**

Appendix C3. Birds

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April 12, 2007

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Dear Ms. Feinberg,

Attached to the accompanying email are two copies of the revised “Chapter 5, Evaluation of biological impacts and proposed mitigation for birds” submitted as part of the scientific review panel’s assessment of the proposed Phase II expansion of the Potrero Hills Landfill. One copy shows the exact changes since the previous version made in “track changes” mode, the other is a clean copy with the track changes “accepted.”

The following are my responses to specific questions posed by BCDC in a letter dated 29 September 2006 and those in a letter from Environmental Stewardship and Planning (ESP) dated 3 November 2006. Any references to specific page numbers are those in the original document to which queries and comments were addressed. I welcome the opportunity to respond to any additional questions any of the parties may have.

RESPONSE TO QUERIES FROM BCDC

Questions to be Addressed by all Panelists

(1) Items (a) to (f) that pertain to construction of a power plant and associated facilities on the Griffith Ranch parcel and vicinity.

With respect to birds, no additional fieldwork or analyses are needed on these items; they are no longer relevant to the Griffith Ranch site, given Potrero Hills Landfill’s revised plan to construct the power plant within the boundaries of the Phase I landfill. It would be valuable, though, to see the details of the footprint of the power plant within the Phase I area.

Item (g), regarding installation of a new sedimentation control basin, water well, water conveyance line, water tanks, and screening berms to hide the water tanks on the Griffith Ranch parcel.

No additional fieldwork or specific analyses are needed on this item. An unknown, but presumably limited, amount of grassland habitat would be lost to birds on the Griffith

Ranch parcel with the construction of these facilities. Conversely, depending on the design of the sediment control basin and the permanence of the water within it, this pond might provide limited benefits to waterbirds. This assumes that the water impounded in the sedimentation basin does not contain high amounts of contaminants leaching from the landfill. If there is assurance that the impoundment will meet appropriate water quality standards, it would be valuable when designing and creating the sediment control basin to incorporate features likely to benefit waterbirds (e.g., shallow edges to benefit shorebirds).

(2) Evaluation of the possible need for additional site visits and surveys in the winter and spring months.

The amount of data collected on general bird use of the expansion and mitigation areas from field surveys in summer 2006 was quite limited. Nevertheless, the combined knowledge from the 2006 surveys, prior surveys reported in environmental documents, and general knowledge of bird use in comparable habitats nearby offsite seem adequate for evaluation of most potential impacts to birds from the Phase II expansion. Any additional data gathered by conducting a few more surveys of general bird use in winter and spring likely would not result in substantial revisions to the report on the assessment of impacts to birds.

Conversely, the largest data gaps are with respect to the potential impacts on nesting birds, both onsite and offsite, from predation by subsidized predators (corvids) or nest parasitism by Brown-headed Cowbirds. The need for further information on the potential impacts of subsidized predators is emphasized in the draft report in Chapter 5, under the headings of “Impact and Mitigation Evaluation and Recommendations” (p. 5-4 in Section 2, “Methods”) and “Indirect Project Effects” (pp. 5-12 to 5-13 in Section 3, “Impact Evaluation”). The latter section (p. 5-13) also describes the lack of information on the impacts of cowbird parasitism, which also warrants further study.

(3) Identification of pieces of information, recommendations, and conclusions that are new and were not provided or identified in the certified EIR.

For birds, a number of topics were not addressed by the EIR. The main ones are presented here in bulleted format (most key topics also are included in the “Summary” section of Chapter 5):

- ***Impact of subsidized predators, specifically corvids (ravens and crows).*** An increase in predation on nesting species is likely, in both the Primary and Secondary Management Areas of Suisun Marsh, as a result of larger-than-usual populations of corvids augmented by food sources made available by the landfill. The magnitude of the potential impact is likely to increase with the increased tonnage of garbage delivered to the landfill. Potential impacts in particular to special-status species in Suisun Marsh. Cumulative effects and potential linkage and multiplying effect of impacts as a result of the proximity of the Hay Road Landfill. Need for corvid

abatement program to address the problem; need for more information to better understand the problem and then take necessary corrective actions.

- ***Impact of cowbird parasitism on nesting passerine birds in the vicinity of the landfill.*** An increase in nest parasitism is possible from an augmented population of cowbirds because of the abundant, and increasing, food source available at the landfill.
- ***Long-term effects of sea-level rise from global warming.*** The impact of subsidized predators may be greater if sea-level rise causes Suisun Marsh to migrate inland closer to the landfill or to be reduced in extent, thereby concentrating predation effects in a smaller area or on a smaller prey population. Possibility, without corrective action, that ultimately high tides will periodically inundate mitigation properties north of Potrero Hills and degrade their ecological integrity so they no longer support the plant and wildlife communities for which they are slated to be protected “in perpetuity.”
- ***Need for evaluation of potential mitigation parcels further from the landfill.*** This is needed (1) to address the possible future effects of sea-level rise on proposed mitigation parcels immediately adjacent to the landfill; and (2) to reevaluate whether the currently proposed mitigation parcels adequately qualify for mitigation. The EIR indicates that these parcels are unlikely to be affected by future development, given current zoning and other factors (need first to verify this assumption of the EIR).
- ***Need for additional evaluation of potential impacts, both direct and indirect, to special-status species.*** The EIR did not identify the potential impacts of landfill expansion on some special-status species, particularly the California Least Tern, which is found only in the Primary Management Area of Suisun Marsh; the evaluation of some other special-status species was incomplete.

Questions for Individual Panelists

4. David Shuford: Birds

a. *Potential adverse effects on native raptors by non-native falcons used for gull control.*

I have discussed this potential problem with Steve Vasconcellos of Wingmaster Falconry Services, who currently is contracted to control gull numbers at Potrero Hills Landfill. His experience suggests that this is not a substantial issue. The falcons used for gull control generally stay at or in the immediate vicinity of the landfill and are under the immediate control of their handler. Although these falcons occasionally may chase another raptor passing through the air space above the landfill, this is an infrequent occurrence. If any problems arise, the handler can signal the falcon to return.

b. *Potential effect of an “island” of light, from night lighting at the landfill, on the movement of birds between wetlands on either side of Potrero Hills.*

As noted in the draft report, the proposed increased lighting for nighttime operation at the landfill could cause (1) disorientation of passerines attracted to the lights when

descending to land after nocturnal migration; and (2) disorientation of waterfowl or other waterbirds moving locally at night in winter, particularly during foggy weather. Most of the literature on this issue pertains to mortality of migrant passerine birds from collisions with lighted buildings, towers, and lighthouses, particularly during overcast or foggy weather. Because passerines are migrating at considerable heights over a broad front, it is unclear whether potential impacts to passerine birds might be greater in a scenario where they are attracted to an “island of light” at the landfill, surrounded by a relatively dark landscape, or whether the problem would be greater in the case of the much more extensive and continuous nighttime lighting in the urbanized Suisun City-Fairfield-Travis Air Force Base area nearby.

Disorientation by landfill lights might have a greater effect on waterfowl and other waterbirds moving locally at night between wetlands to the north and south of the landfill. These birds generally would be flying relatively low, and they may already tend to avoid flight paths toward urban areas nearby lacking wetland habitat in the immediate vicinity. Thus, their flight paths may naturally be concentrated close to the landfill, where disorientation from lights might cause confusion and collision with structures. This may be particularly the case during foggy weather, which is prevalent in winter when overall numbers of waterfowl and waterbirds reach their annual peak abundance locally. As the height of most structures at the landfill currently is relatively low, potential collisions by birds may be a negligible problem. In this regard, it would be valuable to know the height and location of any buildings (including the power plant), wires, or other structures that would be added as part of the proposed landfill expansion.

c. Potential impact to birds from noise, dust, and movement of equipment in the course of landfill operation.

It seems unlikely that noise, dust, or movement of equipment on and around the working face of the landfill would cause a substantial adverse impact on birds in the immediate vicinity. Noise in the immediate vicinity of the working face of the landfill likely has a limited adverse impact on birds in the area. Some additional noise in the form of pyrotechnics (blank pistols, propane canisters) used, in combination with other methods, to control gulls numbers may result in a beneficial effect by reducing the numbers of gulls and perhaps other undesirable species such as ravens and crows.

With adequate dust control measures around the working face of the landfill, which presumably are already in place, it seems unlikely that dust would substantially affect birds in the vicinity. It is possible that wind-blown dust might degrade the quality of some grassland habitat downwind, although this potential effect likely would be negligible if adequate dust control measures are consistently implemented.

Bird collisions with equipment in the immediate vicinity of the working face of the landfill would likely be minimal because of the slow speeds at which vehicles are operating in this area. Vehicle collisions with birds would likely be more frequent on Highway 12 and the paved access road to the dump, where vehicle speeds are greater, although the magnitude of such mortality is unknown. Nevertheless, bird collisions

likely would increase with the increased truck traffic anticipated with the Phase II expansion and projected increase in tonnage of garbage delivered to the landfill. With increased truck traffic after dark during nighttime operation at the landfill, mortality from collisions might increase for owls foraging along roadsides.

d. Potential “take” of any state “fully protected” species as a result of landfill expansion.

Of the six species of “fully protected” birds listed in Table 5-2 of Chapter 5 that potentially are of concern with respect to the proposed landfill expansion, three are known to occur (one species) or may occur (two species) in the Phase II expansion area. The Golden Eagle is known to occur in the Phase II expansion area and is the “fully protected” species most likely to be affected by the proposed expansion. As noted on p.5-7 of Chapter 5 of the Final Report, the landfill expansion “likely would reduce the core area of the resident pair, though it is unclear if this would degrade the home range enough to either eliminate the nesting territory or cause the pair to relocate elsewhere.” Also, the expansion might reduce ground squirrel prey for the eagles or increase eagle collisions with any added wires, fences, or other structures.

The three other “fully protected” bird species potentially of concern with respect to the proposed landfill expansion also occur only in the Primary Management Area of Suisun Marsh. Of these species, the California Least Tern is most likely to be adversely affected by predation as a secondary effect of the landfill’s augmentation of populations of subsidized predators, specifically Common Ravens and American Crows.

As this may be a matter of interpretation, I would defer judgment to the California Department of Fish and Game as to whether these potential impacts to the Golden Eagle and California Least Tern would be considered “take” under the state statutes regulating “fully protected” species. If so, I understand that, unlike state threatened and endangered species, incidental take permits are not issued for “fully protected” species.

As indicated, I would be glad to respond to additional questions about bird issues with respect to the proposed landfill expansion.

Respectfully submitted,

W. David Shuford