



ENVIRONMENTAL STEWARDSHIP & PLANNING
INCORPORATED

Memorandum

To: Jenn Feinberg, BCDC
Dan Airola, AEC

From: Steve Peterson, AICP

Date: November 3, 2006

Re: Comments on the Review Draft Scientific Panel Review of Biological Resources Impacts and Proposed Mitigation for the Potrero Hills Landfill Phase II Expansion (Third Party Review Document, Chapters 1-3 and 5)

The San Francisco Bay Conservation and Development Commission (BCDC) developed an independent panel of scientists tasked with analyzing the potential environmental impacts of the proposed expansion on habitat and associated wildlife at the project site and with reviewing the appropriateness and adequacy of the proposed mitigation. The resource specialists provided their conclusions and recommendations in the Third Party Review Document. Environmental Stewardship & Planning, Inc. (ESP) has prepared this memorandum to comment on and address concerns with the conclusions and recommendations in the Third Party Review Document.

We have reviewed administrative draft Chapter 4 (i.e., California Tiger Salamander analysis) received on September 21, 2006 and continue to attempt to replicate Dr. Shaffer's results. We have been unsuccessful in replicating the values referenced in his report and, additionally, have identified a number of modeling assumptions that require clarification and correction. We will submit a subsequent request for information on modeling protocols and subsequent comments on Chapter 4 in the near future.

Chapter 1. Introduction

It is suggested that the Third Party Review Document reference the Phase II Expansion of the Potrero Hills Landfill as "the proposed project" or "Project".

Background

The background discussion of the proposed project should be included at the beginning of the "Background" section. The following text is suggested for inclusion as the first three paragraphs of the "Background" section:

"The applicant, Potrero Hills Landfill, Inc., has proposed an expansion of its existing solid waste management facility onto its adjacent property holdings in the eastern reach of secondary management area of the Suisun Marsh. Solano County has the authority to issue a marsh development permit if the Project is consistent with the Local Plan of Protection adopted by the County and approved by BCDC in 1982. A Draft Environmental Impact Report (EIR) for the Project was issued by the County in November 2003

(EDAW 2003) to comply with the California Environmental Quality Act (CEQA). The Final EIR (EDAW 2005) was certified by the Solano County Board of Supervisors on September 13, 2005.

“On September 13, 2005, Solano County issued modified Marsh Development Permit No. MD 88-09 to authorize expansion of the existing 320-acre Potrero Hills Landfill onto an adjacent 260-acre parcel (referred to in this report as the “Phase II expansion area”) and changes in landfill operations. BCDC received 10 appeals of this County action. The Suisun Marsh Preservation Act provides that, when BCDC receives appeals on a project, it must first determine whether the appeals raise a substantial issue as to the conformity of the proposed project with the Suisun Marsh Preservation Act, the Suisun Marsh Protection Plan, and the Solano County component of the Suisun Marsh LPP. Unless the Commission determines that the County’s action does not raise a substantial conformity issue, the Commission must hold a hearing on the project.

“On December 1, 2005, the Commission determined that appeals of the Solano County’s Marsh Development Permit No. MD 88-09 raised substantial issues regarding consistency of the Project with the laws and policies that govern development in the Suisun Marsh. Therefore, the Commission will hold a hearing on the Project and determine if the Project is consistent with the Solano County LPP. The Commission determined that, before it considers the project, additional information was needed on the potential impacts of the proposed project and on the effectiveness and scope of the proposed mitigations.”

Note that the third, fourth, and fifth paragraphs (of the original text) should be deleted, as the information would be included in the first three paragraphs of the revised text.

It is suggested that the second paragraph (in the original text) read as follows:

“The Act required local agencies to develop local protection programs (LPPs) to bring county policies and ordinances into conformity with the preservation act and the protection plan. Marsh development permits for development in the secondary management area are issued by Solano County (County). Interested parties wishing to appeal permits granted by the County can be appealed to BCDC if the decision appears to be inconsistent with the LPP, the Suisun Marsh Preservation Act, or the Suisun Marsh Protection Plan. The Solano County LPP governing the review of the Project was prepared and approved by BCDC in 1982.”

The first sentence of the last paragraph of the “Background” section should read as follows:

“BCDC established an independent science panel to assist the Commission in evaluating whether the proposed project is consistent with the applicable Solano County LPP policies.”

Goals of the Review

Immediately following the bullet items, the following sentence should read:

“This written assessment is intended to provide BCDC staff and the Commission with supplemental information to facilitate the Commission’s decision regarding whether the proposed project is consistent with the applicable Solano County LPP policies.”

Methods

The requested information, which included some modification to the project description used in the project EIR (Figure 1-1), was provided to BCDC long before the end of the third party review deadline. Therefore, the final three sentences of the “Methods” section should be deleted. The final paragraph should be revised to read as follows:

“Panelists maintained ongoing communication with the Technical Manager and with BCDC and ESP, as needed, to obtain information on which to base the analysis. Although the Technical Manager and panel members agreed that the information provided was largely sufficient to conduct the evaluation, some requested information could not be provided by ESP or the Landfill within the timeframe of the review. However, the panel had sufficient information on which to base its findings and conclusions thus allowing for the development of this report.”

Chapter 2. Botanical Resources

Summary

The first sentence of the first paragraph of the “Summary” section should be deleted, so the first paragraph should begin with, “The Phase II expansion area provides . . .”

The Third Party Review Document states that, “Loss of upland habitat should be considered as a significant impact that requires mitigation. Compensation should include measures to increase the abundance of native species on mitigation lands.” Under CEQA, impacts to upland habitat, unless it provides habitat for a federally and/or state listed (plant and/or wildlife) species, is considered a less than significant impact. The upland habitat impacted by the Proposed Project will not impact federally and/or state listed botanical species. It is our view that BCDC should, in the absence of specific standards or thresholds of significance for these resources, use this CEQA standard. The two sentences referenced above should be deleted.

Provide Goals and Targets for Upland Restoration and Management

The resource specialist recommended “additional study to identify historical vegetation that may have been eliminated from [upland habitats]”. Though it is possible that mitigation lands once sustained trees and shrubs, CEQA, the State and Federal Endangered Species Acts and the Clean Water Act do not require the proposed project to provide compensation for pre-historic or pre-project historic conditions. The landfill will preserve the upland habitat on the mitigation lands and create more ecologically diverse habitats on the mitigation lands. The proposed additional study would not assess an impact of the Project, and should therefore be deleted from the document.

Develop Numerical Methods to Describe and Measure Mitigation Success

The resource specialist recommended developing “a method to quantify both impacts to native grassland species and resulting mitigation goals to offset losses”; however, loss of native grasslands, unless it provides habitat for a federally and/or state listed (plant and/or wildlife) species, does not require compensation “by increasing the cover of native species on mitigation properties”. The grassland habitat impacted by the Proposed Project will not impact federally and/or state listed species.

Provide Mitigation for Two Special-Status Species

The agreement and understanding between the Landfill and BCDC indicated that the Third Party Review Document would not malign and/or challenge the EIR, but would provide an assessment of the Project’s consistency with applicable Solano County LPP policies. The text stating that, “The Project EIR conclusions that mitigation for the loss of potential habitat for two special-status species (*Atriplex joaquiniana* and *Atriplex coronata* var. *coronata*) is not required is not supportable” should be deleted as it is contrary to the agreement and understanding.

San Joaquin saltbush (*Atriplex joaquiniana*), a CNPS List 1B species was originally recorded in the Phase II expansion area in June 1998 by Eva Buxton. Eva mapped the populations and she estimated that there were between 300 to 400 plants on the site in two locations on the site. These areas are shown on Figure 4 of the *Special-Status Plants and Sensitive Communities/Habitats Survey Results* report prepared by LSA dated January 11, 2006.

Additional surveys were conducted in the spring to summer of 2000 by Jane Valerius and Dianne Lake of the Phase II Expansion Area. Our team was not able to find any of the San Joaquin saltbush plants in 2001, even after an exhaustive search using Ms. Buxton's map as a reference. I went back again in 2001 with Eva to look for the plants and we did not find them in 2001. We have consulted (correspondence via email) with Dean Taylor, botanist and expert on saltbush species, inquiring about why these plants might have disappeared. Dean's only explanation was that: "*Atriplex joaquiniana* does persist in very heavily grazed pastures, so a relaxation of grazing combined with competition may correlate with its absence." However, there was no change in the grazing regime. The Phase II area has been and continues to be heavily grazed and the grass never gets very tall.

A different species of saltbush, called crownscale (*Atriplex coronata* var. *coronata*) was found by Jane Valerius and Dianne Lake in 2000 in the Eastern Valley. This is a CNPS List 4 species. This occurrence was reported. It is an extremely small population and CNPS List 4 species are not protected. This is a species "watch list".

We also found San Joaquin saltbush and crownscale on the Director's Guild parcel. The populations on the Phase II parcel for San Joaquin saltbush are small and isolated. The populations of San Joaquin saltbush and crownscale on the Director's Guild parcel are widespread and numerous. These species were found in 2005 and 2006 so this seems to be a viable and healthy population.

The California Department of Fish and Game (CDFG) emphasizes avoiding impacting populations of special status plants if at all possible. If it is not possible to avoid impacts, then CDFG typically requires that the applicant provide mitigation/compensation by purchasing a parcel where that species has a healthy and viable population. The preservation parcel will be preserved in perpetuity and protected through a conservation easement or other restrictions for development. It is reasonable to recommend that the loss of the small, isolated populations of San Joaquin saltbush could be mitigated by protecting the populations on the Director's Guild parcel.

The saltbush populations coverage of the Phase II parcel was approximately 0.4 acre within the overall parcel. The population of San Joaquin saltbush and crownscale on the Director's Guild parcel is 3 or 4 times larger so that the compensation would be at 3:1 or 4:1 preservation to loss. The 2006 surveys of the Director's Guild site found more plants than what was originally documented in the 2004 surveys.

Regardless of the conclusions of the EIR, the Potrero Hills Landfill proposes to amend the proposed Mitigation Plan to include two mitigation measures that address these *Atriplex* issues. The first measure would be the preservation and enhancement of the extant San Joaquin saltbush and crownscale populations within the Director's Guild parcel in accordance with the conservation protocols of the CDFG.

The proposal is to conduct pre-construction surveys for *Atriplex* species on the Phase II parcel and seed any plant materials found into areas on the Southern Hills mitigation parcel. Both of these plants require alkaline soil conditions and alkaline areas within the Southern Hills parcel could provide potential habitat for these species. It is not recommended that we take the seeds from the Parcel II site and plant them on

Director's Guild site because of the possibility of affecting the gene pool of the existing plants at that location. We did not find either of these plants on the Southern Hills site in suitable areas where these species could be established. Therefore, the second addendum to the mitigation plan would specify protocols for pre-construction *Atriplex* surveys, seed collection and transplantation of these species to the new sites on the Southern Hills mitigation parcel.

Mitigate for Adverse Impact on Sensitive Plant Communities

The reviewer notes that species typical of sensitive plant communities Wildflower Field, Valley Needlegrass grassland, and Elderberry shrub were noted on the Phase II site. Elderberry shrubs are located outside the project area and would not be impacted by the proposed project, so no mitigation is required for this community. Further, the US Fish and Wildlife Service has recently recommended delisting of the Valley elderberry longhorn beetle (http://www.fws.gov/sacramento/ea/news_releases/2006%20News%20Releases/5yr_reviews-complete_NR.htm).

Although some species characteristic of the Wildflower Field and Valley Needlegrass grassland communities were noted in the Phase II area, the mere presence of representative species does not typically require mitigation. Sensitive communities are typically composed of numerous individual plants forming an identifiable assemblage on the landscape. No wildflower field or valley needlegrass grassland habitats were identified in the Phase II area; no impacts to these communities were identified and mitigation was not proposed.

Mitigate at Director's Guild Property, but Refine Mitigation Assessment and Success Criteria

The agreement and understanding between the Landfill and BCDC indicated that the Third Party Review Document would not malign and/or challenge the EIR, but would provide an assessment of the Project's consistency with applicable Solano County LPP policies. The final sentence of this section (starting with "These issues are not clearly addressed . . .") should be deleted as it is contrary to the agreement and understanding.

"Impact Evaluation" Section

The "Impact Evaluation" section should be renamed the "Evaluation" section as "impact" is a CEQA term and such reference may be confusing to the reader.

The first sentence of the second paragraph under this heading should read: "The total number of species at the landfill expansion area is higher *than* at three other areas proposed for mitigation purposes."

Characterization of Plant Conditions

Botanical surveys were conducted by Eva Buxton of LSA Associates, Dianne Lane and Jane Valerius.

In this section, it should be noted that the reviewer refers to the Eastern Valley as a mitigation site. The Eastern Valley is not one of the four mitigation sites listed in the MMP (Southern Hills, Griffith Ranch, Pond 5 Buffer, and Director's Guild). The Eastern Valley will continue to serve as grazing land but has not been proposed as a mitigation site, since sufficient mitigation areas are on other landfill-owned properties adjacent to the proposed project.

In this section, the author analyzes and summarizes data from previous studies. In the second paragraph, he asserts that the total number of species on the Phase II area is higher than the three proposed mitigation sites. Although no direct conclusion is drawn regarding this information, it should be noted that the Phase II site is the second largest of the sites included in the study. As noted later in the paragraph, the Southern Hills site, which forms the largest block of the mitigation area at about 428 acres, has an even higher number of species than the Phase II area. At 241 acres, the Phase II area is over 100 acres larger than the Griffith Ranch and Director's Guild mitigation areas combined and supports a much more diverse array of habitats, from valley bottom to ephemeral creek, to stock and quarry ponds, to eucalyptus groves. The Griffith Ranch site is the most homogeneous of the mitigation sites, encompassing primarily grassland, with some eucalyptus and a small shallow stock pond and small wetlands. No drainages or large ponds occur on this parcel and the overall plant diversity is low. The greater diversity of habitats in the Phase II area contributes to the greater diversity observed.

In comparing the Phase II site to the Southern Hills site that is roughly 1.7 times the size of the Phase II site, we see that diversity is even greater in the Southern Hills than on the Phase II site. Again, the size of this site and the diversity of habitats encompassed by the site result in a greater overall diversity of plants than found on the Phase II site. The Southern Hills site encompasses grasslands, a stock pond, seeps, a large wet meadow, as well as the upper drainage area of Spring Branch Creek and a number of smaller drainages. By preserving this large block of habitat, the project will preserve a site with total plant diversity higher than the Phase II site.

Continuing with the comparisons of plant diversity among the project and mitigation sites, the reviewer later notes that the percentage of native and introduced species may be a better estimate of the degree of human mediated transformation, and he states that the total number of native species on the Phase II site is high as shown in Figures 2-6 (A and B) as compared to 5 other preserved grassland areas. Again, although the Phase II site is high (46 percent native, composed of 68 species) compared with these preserved areas, the percentage of native species for two of the mitigation sites, Director's Guild and Southern Hills is even higher (54 percent native composed of 73 species for the Director's Guild site and 51 percent native composed of 83 species at the Southern Hills site). Although the Phase II site may compare favorably with these preserves, the majority of the mitigation area has even higher values than the Phase II area. Only the Griffith Ranch is lower with 34 percent native composed of 26 species. Again, the homogeneity of the habitats contributes to the overall lower diversity. The Griffith Ranch makes up only about 61 acres of the overall 594 acres of mitigation area that support higher total number of native species; the proposed mitigation would protect and enhance a higher percentage of natives than the Phase II area.

The fourth paragraph of this section seems speculative as it is based entirely on unpublished observations of grasslands in other areas, including other counties. The use of this data as an analog for the Potrero Hills setting may or may not be appropriate, given a number of variables that are not explored.

Grassland Habitat Losses

This section should be renamed "Grassland Habitat Effects".

The reviewer notes the loss of 238 acres of grasslands and notes that this should be compensated by increasing the native species cover on other parcels. No mitigation was provided for this impact, as the loss of annual grasslands is not typically considered a significant impact under CEQA. Mitigation in the EIR focuses on those special-status species and sensitive habitats that exceed the thresholds of significance as defined in the EIR. The MMP is focused on mitigating impacts to jurisdictional wetlands and endangered species habitat. Additional mitigation can be provided for grassland species, but is not typically the focus of the MMP.

PHLF has carefully reconsidered the size of the project's footprint and has determined that the actual impact area will be reduced from 238 acres to 179 acres; the proposed project would include a 136.9-acre landfill footprint, a perimeter road area of 26.3-acres, 6-acre sedimentation basin located north of the valley area, a 9.5-acre power station area.

Accordingly, the first paragraph under the "Grassland Habitat Effects" heading should read, "Landfill expansion will result in 179 acres of grasslands being affected by Project uses. However, because the landfill area will not disturb eastern portions of the expansion area for many years and vegetation re-establishes interim grassland features will be established as erosion control features on areas under construction, completed landfill areas will re-vegetated immediately after cells are closed. Therefore, project impacts to grasslands would be a temporary, not permanent, impact."

Vegetation sampling during spring and summer 2006 showed that cover of native species in grasslands of Phase II area varies from 8 to 20 percent. If the average cover of natives is 14 percent, the loss of this grassland will be equivalent to the loss of 33.3 acres of area covered by pure stand of native species. The temporal loss should be compensated by increasing the native species cover on other parcels (see "Mitigation Evaluation and Recommendations" below)."

Impacts to Special-Status Plant Species

This section should be renamed "Effects on Special-Status Plant Species".

Please refer to the discussion of *Atriplex joaquiniana* and *A. coronata* var. *coronata*, above.

Impacts of Landfill Expansion on Stock Pond Flora

This section should be renamed "Effects of Landfill Expansion on Stock Pond Flora".

In the third paragraph of this section, the reviewer states that the only native plant abundant at Pond 1 is willow. It should be noted that the statement of abundance is based on percent cover. There is only a single willow tree at the pond. This old tree has a large canopy that contributes to the high percent cover by this species. The three other natives plants observed around Pond 1 were all grasses.

We largely concur with the conclusions of this section. The stock ponds on the site have not been categorized by our technical team, the U.S. Army Corps of Engineers or the County of Solano as vernal pools because of the lack of native vernal pool vegetation.

Mitigation Evaluation and Recommendations

The agreement and understanding between the Landfill and BCDC indicated that the Third Party Review Document would not malign and/or challenge the EIR, but would provide an assessment of the Project's consistency with applicable Solano County LPP policies. The second sentence of the second paragraph, which states, "The impact to uplands, which encompass the vast majority of the impacted area, was not specified and sufficiently measured" should be deleted as it is contrary to the agreement and understanding.

The final sentence of the second paragraph should read: "The following sections suggest a number of supplemental mitigation measures for impacts to grassland habitats."

Mitigation for Adverse Impacts on Special-Status Plants

This section should be renamed "Mitigation for Effects on Special-Status Plants".

The paragraph under this heading is contrary to the agreement and understanding between the Landfill and BCDC that the Third Party Review Document would not discuss the sufficiency of the EIR, but would provide an assessment of the Project's consistency with applicable Solano County LPP policies. The text should simply state: "San Joaquin saltbush (*Atriplex joaquiniana*) and crownscale (*Atriplex coronata* var. *coronata*)"

Recommendation under Mitigation for Effects on Special-Status Plants

The text should read: "*Supplemental* mitigation or *Enhancement Measures* . . ."

The recommendation for monitoring the relationship between abundance and weather would also be instructive, but perhaps should be pursued as a research questions rather than a monitoring requirement. Though this study may produce interesting results, the landfill does not intend to directly fund such as study. If BCDC believes that this primary research would have value in its resource management mission, we recommend that it could be conducted as a collaborative program with the assistance of the Solano Resource Conservation District (SRCD). This program could be funded as an element of PHLF's 40¢/ton (of waste placed at PHLF) contribution to the SRCD.

Mitigation for Adverse Impacts on Sensitive Plant Communities/Habitats

This section should be renamed "Mitigation for Effects on Sensitive Plant Communities/Habitats".

The fourth sentence of the paragraph under this heading should be revised to read: "Landfill expansion will result in a temporal loss of 179 acres of grassland habitats, which are potentially appropriate for sensitive plant communities." The final sentence of this paragraph should be deleted.

The reviewer notes that species typical of sensitive plant communities Wildflower Field, Valley Needlegrass grassland, and elderberry shrub were noted on the Phase II site. Elderberry shrubs are located outside the project area, are proposed for "delisting" and would not be impacted by the proposed project, so no mitigation is required for this community. Although some species characteristic of the Wildflower Field and Valley Needlegrass grassland communities were noted in the Phase II area, the mere presence of representative species does not typically require mitigation. Sensitive communities are typically composed of numerous individual plants forming an identifiable assemblage on the landscape. No areas identified as Wildflower field or Valley Needlegrass grassland were identified in the Phase II area. Accordingly, no mitigation for impacts to these communities was proposed and the report should acknowledge the occurrence of individual species instead of communities within the project footprint.

Impacts to grassland species as discussed earlier are not typically considered to reach the threshold of significance requiring mitigation under CEQA or any other applicable regulatory program for which the documents were prepared. Grassland mitigation measures are incorporated into the grazing and mitigation requirements for the project in order to restore and improve native vegetation on the mitigation sites. These measures offset project impacts to grasslands.

Recommendation under Mitigation for Effects on Sensitive Plant Communities/Habitats

The second sentence of the second paragraph should be revised to read: "The protocols described in Sections 6.1.2, 6.2.1, and 6.2.2 of the MMP should be *enhanced to be* more specific and clear."

Grazing Management Plan

The reviewer does not believe that grazing alone is an adequate tool for promoting native species on the mitigation sites.

Section 7.1.2 of the MMP notes that exotic weeds infestations will be assessed and controlled through appropriate means including herbicide treatments, mowing, etc. Additional detail on this topic is being developed in response to Ms. Muick section will be included in the final grazing plan that will be provided to BCDC on November 15, 2006.

Impacts of Habitat Conversion for Mitigation Uses

This section should be renamed "Effects of Habitat Conversion for Mitigation Uses".

The reviewer states that the location of uplands to be converted to wetlands has not been clearly shown in the MMP. Figure 14 of the MMP shows the location of the 3.78-acre wetland area in the northeast corner of the Griffith Ranch site. The only existing "jurisdictional" features are the existing seasonal wetlands denoted by black hatch marks; all features depicted in gray line work would be created as part of the mitigation program.

The reviewer is also somewhat confused about the proposed excavation of material in Seasonal Wetland 4/Pond 7 Complex. Figure 13 shows the proposed location of excavation within Pond. In this case, the depth of this wetland area would be increased to enhance breeding habitat for California tiger salamander and no upland to wetland habitat conversion would occur. The second sentence of the paragraph under this heading should be revised to read: "It is not clear from the description in the MMP where the 3.78-acre seasonal wetland 4 will be excavated." The final sentence of this paragraph should be deleted.

Recommendation under Effects of Habitat Conversion for Mitigation Uses

As noted by the reviewer, inoculation of created pools with soil excavated from Pond 7 complex would provide a source of cysts for *linderiella* rather than a good wetland seed source. The final sentence of the second paragraph should be deleted.

Mitigation at Director's Guild

The reviewer is under the impression that the wetlands at the Director's Guild are proposed as mitigation for impacts to upland habitat. This is not the case. Wetlands at the Director's Guild will mitigate seasonal wetland and pond impacts in the landfill expansion area. The small upland area on the Director's Guild would be considered for use as mitigation for uplands, but the largest portion of this site is for wetland mitigation. It is therefore not out of kind. Wetland mitigation at the Director's Guild will result in restoration and preservation of higher quality wetland habitats than currently exist on the Phase II area. The recommendation that a detailed analysis to support the out-of-kind mitigation is therefore not warranted and the recommendation for such should be removed.

The two paragraphs under this heading should be revised as follows:

"The proposed restoration and enhancement activities at the Director's Guild property (MMP, Section 6.1.2.) likely will improve habitat conditions for vernal pool species. However, the habitats at the Director's guild parcel are very different from the Phase II parcel, and thus the mitigation can be considered out-of-kind rather than in-kind. These differences highlight the trade-off in evaluating vernal pool habitat on the Director's Guild as suitable mitigation for the loss of upland habitat.

"I believe that, to a considerable degree, this tradeoff is appropriate and thus adequate for mitigation because of the relative scarcity and importance of botanical resources on the Director's Guild property (i.e., a

substantial and healthy population of the federally endangered, CNPS List 1B Contra Costa goldfields [*Lasthenia conjugens*]).”

Recommendation under Mitigation at Director’s Guild

The third sentence of this paragraph should begin: “Functional value should be *discussed* on . . .”. The final sentence of this paragraph should be deleted.

Mitigation at Southern Hills Parcel

The second “paragraph” under this heading should be deleted.

Recommendation under Mitigation at Southern Hills Parcel

The large wet meadow on in the center of the site has been called out by the reviewer for special attention. We concur that additional measures can be implemented here to increase the habitat value of this area. No ponds have been planned here.

The first sentence of the paragraph under this heading should read: “The maintenance of this wetland should be *included as a supplement to the* Mitigation and Monitoring Plan and Grazing Plan.” The latter portion of the fourth sentence should read: “. . . loss on *the* Phase II parcel.”

The resource specialist suggested introducing regionally uncommon orchid species such as *Spiranthes porrifolia* to the wet meadow on the Southern Hills Parcel. No uncommon orchid species have been observed within the project area, therefore, the landfill does not intend to introduce uncommon orchid species at the mitigation site.

Control of Noxious Weeds

The final sentence of the paragraph under this heading should read: “Weed control measures were *addressed* in the MMP, but specific protocols *and* implementation plans *are also necessary*.”

Additional non-grazing measures for weed control, per our discussions with Ms. Muick, are provided in the revised grazing plan that has been prepared and will be provided to BCDC on November 15, 2006.

Recommendation under Goals and Targets for Restoration and Management

The plan will be revised to address issues on a finer scale and specially incorporate more measures to promote native species.

The paragraph under this heading should read: “The management plan should *elaborate* on the target ecosystems toward which the management is oriented, and should broaden its consideration of potential and desirable vegetation conditions. Mitigation should consider reintroduction of species that can be documented to have occurred formerly (or are reasonably certain to have occurred), but for which seed sources are now absent.” The assumption that seed sources are absent is speculative and not resultant from an impact of the Project. This proposed measure could be implemented as an enhancement activity funded by other entities, such as the Solano RCD.

The statement that “Loss of habitats for natural plant communities is an unavoidable result of the landfill expansion” is inconsistent with the proposed project’s design: the sequential use and revegetation of landfill areas will occur throughout the life of the landfill. The loss of habitats is temporal, not permanent. This statement should be deleted.

The resource specialist recognizes that grazing has occurred over the last 130 years and recommends that the proposed grazing management program will maintain the land’s existing condition and will not return the lands to its pre-grazing (i.e., probably the 1890 to 1900 timeframe) condition. The landfill was developed over 20 years ago and does not have an obligation to restore lands to its pre-grazing (“natural”) condition. AS noted in the MMP, grazing will be used as a tool to management and enhance protected and restored habitats.

Chapter 3. Vegetation Resources and Grazing Management

Summary

The third paragraph, starting with “Although valued and protected . . .” should be moved to immediately follow the first sentence of the first paragraph under this heading. After this discussion start a new paragraph with the existing discussion.

The new second paragraph should begin with: “The primary effects of the landfill expansion are *the temporal* loss of upland grassland habitat and *loss of a small amount of* wetlands, . . .”

The portion of the upper drainage of Spring Branch Creek that runs through the project area does not have a defined bed and/or bank. From the specialist’s reference to “Spring Branch Creek headwaters”, it appears that Ms. Muick did not read Mitchell Swanson’s evaluation in the Final EIR.

Introduction

Background

The second, third and fourth sentences of the paragraph under this heading should read:”

“BCDC will determine whether to grant a permit to the Landfill for this purpose *based on the Project’s consistency with LPP standards and policies applicable to the Project*. BCDC *and the Project applicant* agreed to establish an independent review panel to *provide information to BCDC staff and* the Commission concerning certain effects of the proposed *Project*. As a panel member, the scope of my review was to evaluate the *effects* of the *Project* on grasslands, vernal pools, and wetland habitats; to review the appropriateness and adequacy of the proposed mitigation; and to make recommendations for improvements.”

It appears that the purview of “Vegetation Resources and Grazing Management” specialist overlaps considerably with the purview of the “Botanical Resources” specialist as both specialists provided evaluations of grasslands.

Scope of Review

The paragraph under this heading should read:

“The scope of my review included: (1) identifying and analyzing existing grasslands, wetlands, vernal pools, and livestock grazing resources at the site; (2) evaluating whether the proposed project and mitigation *measures* would adversely *affect* the existing habitat and, if *so*, analyzing *the* significance *of such impacts*; (3) proposing recommendations on potential modifications to the project or mitigation measures that could more effectively reduce the *effects* of the landfill expansion on the site’s natural resources.” The third item in the list should be deleted as it indicates that the determinations of the EIR are to be second guessed, contrary to the agreement and understanding between the Landfill and BCDC that the Third Party Review Document would not discuss the sufficiency of the EIR, but would provide an assessment of the Project’s consistency with applicable Solano County LPP policies.

Review Limitations

List item 3 states that the reviewer did not receive “precise information about the actual area and extent of use around the Phase II landfill” and that this information was provided about 1 week prior to draft due date. As discussed under comments in the “Methods” section of Chapter 2, the Landfill provided BCDC staff with supplemental project information many months ago.

Methods

Pre-Field Review

The reviewer refers to “local land experts”. Such experts need to be identified and the nature of their expertise needs to be stated.

Acquisition of Additional Background Information

The reviewer references “meetings with Solano County Land Trust staff”. The reviewer should indicate all meeting dates and provide lists of attendees for such meetings.

Impact Evaluation and Recommendations

This section should be renamed “Evaluation and Recommendations”, and the first sentence under this heading should begin: “The *effects* of the proposed project . . .”.

Mitigation Evaluation and Recommendations

The reviewer refers to “local land managers”. Who are the “local land managers”?

Impact Evaluation

This section should be renamed “Evaluation”.

Direct Habitat Loss for Project Facilities

The fourth bullet item references a different acreage than Chapter 2. (Chapter 2 references 238.8 acres, while Chapter 3 references 241.9 acres.) As noted above, the proposed project’s disturbance area has been reduced to 179 acres.

The statement infers permanent loss of habitat; however, the loss is temporal until closure when the site is revegetated. This point should be clarified when the statement is updated.

Elimination of Spring Branch Creek Headwaters and Reduction of Ecological Value within Lower Watershed

In this section, the reviewer has made some assertions that have not been substantiated by the identification of data. It is unclear if these assertions are correct or to what extent they could occur. As such, these statements are highly speculative and not appropriate for this analysis.

The specialist's reference to "Spring Branch Creek headwaters" is misleading to an uninformed reader and suggests that Ms. Muick did not read Mitchell Swanson's evaluation in the EIR. Please note, as discussed above in the comments on the Chapter 3 Summary, the portion of the Spring Branch Creek drainage that runs through the project area do not have a defined bed and/or bank and was evaluated in the EIR.

Elimination of San Joaquin Spearscale

See discussion of mitigation for this species above.

Habitat Fragmentation

Although habitat fragmentation is a result of the landfill development, the assertion that 100s of acres of bare land will be present is not correct. Limited areas of the landfill will be disturbed and unvegetated at any one time.

The reviewer's "Habitat Fragmentation" discussion is highly speculative and unsupported and should be deleted.

Reduction of the Biodiversity of the Grassland Vegetation

The reviewer states that "For long periods of time (decades), there will be no vegetation on acres of the landfill surface". This statement is not accurate as there will be interim cover and extensive areas of vegetation for erosion control to comply with the landfill permit requirements.

Cumulative Effects, Potential for Future Landfill Expansion

PHLF has repeatedly rebutted the claim that there is an expansion beyond that currently proposed. Any expansion beyond the proposed project is pure speculation and conjecture by the author. This discussion should be deleted.

Potential Degradation to Suisun Marsh Hydrology from Combined Effects of the Landfill and Quarrying Operations

See comments above (Summary and Elimination of Spring Branch Creek Headwaters and Reduction of Ecological Value within Lower Watershed) regarding this drainage.

The reviewer notes that there may be encumbrances on the proposed mitigation lands, such as the former quarry sites. We have assumed that, per standard Corps of Engineers, U.S. Fish and Wildlife Service and other resource agency protocols, all lands proposed for mitigation would have uses specified in the conservation easements and that those uses would be based primarily on the benefit to wildlife and plant habitat. Please provide specific information of the areas of concern addressed in these comments.

What is the statement contained within list item 2 (“unpermitted concrete rubble is stored on-site”) based on? PHLF currently does receive and is allowed to receive concrete for re-use and recycling purposes. Please provide specific information regarding this claim to ensure that the reviewer is referring to lands owned or controlled by PHLF.

Mitigation Evaluation

The first sentence under this heading should read: “The following section identifies *supplements and recommended* changes to the proposed mitigation program.”

Overarching Concerns

The first bullet item “Project scale” should be deleted as the project will not permanently affect the secondary management area. Any loss in habitat is temporary until closure when the site is completely revegetated.

The “Habitat Fragmentation” bullet is speculative and unsupported and should be deleted.

The “Off-site mitigation” bullet is not accurate. The applicant’s proposed mitigation is within the secondary management area. The EIR identified the Elsie Gridley Preserve as a contingency site as mitigation for CTS during the Section 7 consultation. All mitigation is currently proposed to be conducted in the secondary marsh zone.

The “Conservation easements” bullet should be deleted.

Scale of Phase II Landfill Expansion and Its Effects on Adjacent Lands in the Secondary Marsh

The reviewer states that “the landfill expansion will permanently change almost a square mile (600+ acres) of the Potrero Hills by converting grassland-dominated valley habitat to disturbed soils and ruderal, weedy upland grasslands”. The project will not convert upland valley habitat to ruderal weedy upland grasslands. Such a statement is an aggressive assumption and is more biased than scientific. The expansion will alter 179 acres of land, which will be continually revegetated and ultimately returned to managed grasslands.

The Grazing Management Plan (GMP) does not currently cover the Phase I or II areas or deal with revegetation of the landfill. A Revegetation/Restoration Plan will be developed for the Phase I and II areas at the time of final expansion design. This is a more effective strategy than trying to adapt the GMP to address these operations. Weed control measures will be included as recommended in the GMP and the Revegetation/Restoration Plan.

The discussion in the two paragraphs starting with “During field surveys . . .” should state clearly that these observed conditions are not caused by the Project. The recommendations are not resulting from identified effects of the Project; these are observations about extant conditions that are not part of the proposed project.

Power Station Location

The first two bullet items (regarding facility development on Griffith Ranch) seems an inappropriate stray from the author’s expertise and the specific charge for the panel’s work.

Habitat Fragmentation and Habitat Loss

This section is weak and unsupported and seems to be result-oriented. The recommendation for permanent protection is unwarranted and beyond the scope of the review for the panel's work.

Spring Branch Creek Watershed

This is an issue of scale since all the drainages in the Potrero Hills eventually flow to Suisun Marsh. If we look at the marsh as a whole and not one particular slough, then preservation of lands within the secondary management zone has a benefit to the marsh. We believe that mitigation in the secondary marsh is appropriate to ensure the health of the marsh.

Based on the Landfill's review of several analyses coupled with site observations by project resource specialists, no discernible "creek" exists. Continued references to the Phase II landfill expansion area as a creek are misleading.

The resource specialist recognizes that the proposed mitigation for disturbance of this portion of the Spring Branch Creek watershed meets and exceeds the U.S. Army Corps of Engineers mitigation requirements; she recommends enlisting the services of the Solano Land Trust to protect and enhance the watershed. The resource specialist states that "while most of the Spring Branch watershed is lacking riparian vegetation, it serves as habitat for winter-run chinook salmon via Spring Branch Slough in the Suisun Marsh". The portion of the Spring Branch Creek upgradient drainage that "flows" through the project area does not sustain enough water flow to provide habitat for salmon and three existing dams preclude anadromous fish reaching the project area. Please provide the data of the assertion regarding Chinook salmon runs; salmon have not been observed in or adjacent to the PHLF.

Recommendation under Spring Branch Creek Watershed

The Landfill would like to learn more about the reviewer-initiated meeting with Solano Land Trust Mitigation Coordinator Rob Goldstein and why that should be a topic in this report. Such a meeting falls outside the scope of what was intended as part of the third party review.

Offsite Mitigation

No mitigation is currently proposed for the Gridley site. It is a contingency site only. It may be important as mitigation for California Tiger Salamander during the Section 7 consultation. We believe that mitigation can be accomplished in the secondary marsh.

Table 3-1

Comments are made only if there is some disagreement with the recommendation.

Evaluation and Comments for Impact 4.2-1, Effects on Special-Status Plants should be deleted.

Mitigation Measure 4.2-3. The recommendation that elderberry shrubs be mitigated could be avoided if the limits of the earthmoving and ground disturbance can be clearly defined and the avoidance of the shrubs can be assured. As noted above, the elderberry shrubs are located outside the project area and would not be impacted by the proposed project, so no mitigation is required for this community. Further, the US Fish and Wildlife Service has recently recommended delisting of the Valley elderberry longhorn beetle.

Evaluation and Comments for Mitigation Measure 4.2-3, Effects on Other Invertebrates is conjecture and should be deleted.

The second set of Evaluation and Comments for Mitigation Measure 4.2-9, Effects on Sensitive Habitats, should be deleted.

Evaluation and Comments for Impact 4.4-1, Increased Erosion Potential should read:

“There is no reference to the types of vegetation and natural habitat being restored on the landfill.

“**Recommendation:** Prepare a *more refined* revegetation and management plan for the capped landfill and other disturbed areas.”

Note that native grasses will be used for restoration.

No restoration/revegetation plan has been prepared for the Phase I or II areas. The revegetation plan is required by landfill permits and it will be implemented as part of the landfill’s ongoing operations and ultimate closure plan.

Recommendation under Evaluation and Comments for Impact 4.10-3, Visual Changes Associated with the Construction of Ancillary Facilities should simply read: “: Revegetate the berm using the mix of species found at the site.”

Delete “Characterization of the vegetation is cursory” from the Evaluation and Comments for 3.3.1. Southern Hills Parcel of the Mitigation and Monitoring Plan 2006, as this comment does not provide substantive information.

4.3.2 Stream Channel. Weeds will be monitored, managed and controlled as part of the MMP and GMP.

Change “inoculum” to “inoculums” under Mitigation and Monitoring Plan 2006 for 4.6 Vegetation.

Evaluation and Comments for 4.7.2 Wildlife Habitat and 5.3 Hydrologic Monitoring on Griffith Ranch of the Mitigation and Monitoring Plan seems speculative and based on assumptions made by the author. No “trial artificial swales” have been dug on the Griffith Ranch site. PHLF’s technical team has conducted soil and vegetative analyses of the Griffith Ranch area and has built acres of seasonal wetlands at other Solano County locations under similar conditions. It is our professional judgment that that the Griffith Ranch site is suitable for restoration of seasonal wetlands. Please delete this recommendation.

6.1 Site Preparation. This type of measure is sometimes employed on projects and would require washing of vehicles. The logistics of this measure will be evaluated by the PHLF team in consultation with the Corps of Engineers and the U.S. Fish and Wildlife Service.

Recommendations for the Grazing Management Plan

The second sentence of the first paragraph under this heading should read: “The grassland vegetation, which appears to primarily support non-native annual species, actually includes a variety of native species, such as annual forbs, perennial grasses and bulbs, and a few woody shrubs (see the Project EIR, Appendix B, Exhibit 1, plant species list).”

Table 3-2

Measures in the comments section of the table have been developed by Richard Nichols in a revision to the GMP.

Develop Separate Pastures for Sensitive Habitat Areas

A number of wetland pasture areas have been called out in the review for special management. These recommendations have been incorporated into the GMP. This will likely increase the fencing and grazing rotation schedules, but not have other significant effects on the plan.

Remove Debris from Parcels

Debris such as wire rolls or refrigerators can be removed with little to no effect on wildlife; however, the large wooden structures on the site provide important habitat for California Tiger Salamander as they move to and from the breeding ponds in the winter. This woody debris should not be removed from the site. In addition, barns provide roost sites for owls and other birds and will not be removed.

Address the Following Site-Specific Management Actions

The first sentence of the “Director’s Guild” bullet should read: “To improve grazing management, *consider and incorporate, if feasible*, applicable management practices and research findings from Jepson Prairie Management Committee (a consortium of landowners and managers, including the grazing lessees, University of California Davis, university researchers, and regulatory agencies, DFG, and U. S. Fish and Wildlife Service).”

Recommendations for Conservation Easements for Mitigation Lands

Easement Holder

The policy discussion and recommendations in this section seem inappropriate for a panel member to be facilitating based on the scope of services for which the reviewer was contracted.

Parcel Specific Easement Recommendations

Director’s Guild. The project team hydrologist is studying the flow through the ditches and will be gathering additional design data and design details in the coming rainy season.

Southern Hills Parcel. We are unaware of an 80-acre easement on this parcel. The nature of the easement is likely related to an abandoned wind power development project or the former USAF Nike missile base. The easement will be investigated.

Barns and woody debris should not be removed from the sites as it provides cover for California Tiger Salamander and other herpetological species.

Chapter 5. Birds

Overview of Potentially Affected Species, White-Tailed Kite (Elanus leucurus)

The resource specialist recommends that because the Phase II expansion area provides potential nesting and foraging habitat for white-tailed kites, the introduction of vole populations would likely benefit white-tailed kite populations. This recommendation would be appropriate for mitigation areas but not for the Phase II landfill expansion site.

Overview of Potentially Affected Species, Loggerhead Shrike (Lanius ludovicianus)

The resource specialist is concerned that development of the proposed power station on the Griffith Ranch Parcel adjacent to a eucalyptus grove would result in increased mortality rates resulting from avian collisions with vehicles accessing the power plant. Vehicular speeds along the power plant access road would minimal (approximately 15 miles per hour on graveled roads) and the low frequency of vehicular travel along the access road (i.e., 2 or 3 vehicles round trips per day) is not anticipated to significantly increase the mortality rate of the loggerhead shrike.

Overview of Potentially Affected Species, Grasshopper Sparrow (Ammodramus savannarum)

The resource specialist notes that the grasshopper sparrow “is not known to occur in the Potrero Hills based on recent surveys”. The grasshopper sparrow has not been observed within the project area, therefore, the landfill does not intend to create suitable habitat for this species.

Overview of Potentially Affected Species, Additional Special-Status Species in Suisun Marsh Potentially Affected by Landfill Activities

The report’s prior references to corvid activities in proximity to the landfill and other areas of the region cite there is an absence of substantive information with which to make meaningful determinations. Accordingly, the last sentence of this paragraph should be revised to remove the words “known and”.

Indirect Project Effects, Impacts of Subsidized Predators.

The reviewer identified this issue as one of the main concerns for this project. Although reasonable, the problem would appear to occur in any setting in which the landfill is placed in the County. The presence of the recently discovered colonies of listed species makes the proximity of the landfill of greater concern, but both landfills in the county are located in proximity to the colonies. Absence of a landfill in the Potrero Hills may cause a slight reduction in the number of corvids in the region, but given their long flight distances, the colonies will be at risk from any landfill placed in the southern portion of the county.

The reviewer describes a proposal to conduct scientific studies of the subsidized corvids region-wide, but such as study is beyond the scope of this project.

Indirect Project Effects, Cowbird Parasitism

The resource specialist notes that “of potential special-status species in question, only the Song Sparrow and Grasshopper Sparrow are particularly susceptible to cowbird parasitism”. According to information provided by the resource specialist the Song Sparrow is restricted to tidal marshes in the Suisun March area. The nearest tidal marshes are located one mile away, while the Song Sparrow is known to travel only a short distance from its nest. As the resource specialist mentioned in an earlier section of the Third Party Review Document, the grasshopper sparrow “is not known to occur in the Potrero Hills based on recent surveys”. Based on the lack of suitable habitat in the vicinity of the project area, cowbird parasitism is not anticipated to affect special-status avian species.

Evaluation of the Mitigation Program, Effects of Sea Level Rise

BCDC has not, to our knowledge, defined climatological projections regarding sea level rise within this the secondary marsh zone.