

RESPONSE TO THE SCIENTIFIC PANEL REVIEW REPORT

Chapter 2

BOTANICAL RESOURCES

**POTRERO HILLS LANDFILL, PHASE II EXPANSION
SOLANO COUNTY, CALIFORNIA**

Submitted to:

San Francisco Bay Conservation and Development Commission

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1.0 INTRODUCTION

As part of the San Francisco Bay Conservation and Development Commission's (BCDC) review of the marsh development permit for the Phase II Potrero Hills Landfill expansion, an independent review was conducted by a panel of scientists of the biological resource impacts and mitigation for the proposed project (Airola et al., 2007). Chapter 2 of the review document provides the results of an analysis, conducted by Ayzik Solmeshch, Ph.D., D.Sc., Vegetation Ecologist, University of California, Davis, of the biological impacts of the Phase II expansion project on botanical resources at the landfill site and the proposed mitigation. In Chapter 3 of the review document, Pamela C. Muick, Ph.D., Vegetation Ecologist and Land Manager, conducted a similar analysis of the expansion project with regards to vegetation and grazing management. As some of the comments by Dr. Solmeshch and Dr. Muick overlap, responses to these comments are cross-referenced in this document and in the Chapter 3 responses.

1.1 PROJECT BACKGROUND

Figure 1 shows the layout of the Phase I (current) landfill, the footprint of the proposed Phase II landfill, and the proposed mitigation lands. The proposed landfill expansion will result in the conversion of 167.63 acres¹ of primarily non-native grassland, which includes the filling approximately 2.42 acres of Section 404 jurisdictional wetlands and other waters of the U.S., 0.076 acre of isolated waters of the State, and 0.61 acre of pond habitat. All mitigation lands proposed as part of the project will be managed for the benefit of plant and wildlife habitat in perpetuity through a conservation easement and will have a management endowment.

1.2 ORIGINAL MITIGATION PROPOSAL (MMP)

The original mitigation proposal described in the original mitigation and monitoring plan (MMP) for the project (LSA and ESP, 2006) and analyzed by the scientific review panel included the following mitigation components:

- Preservation of upland habitat totaling 517.08 acres on the Southern Hills parcel, Pond 5 Buffer, Griffith Ranch and Director's Guild parcels;

¹ The size and configuration of the Phase II landfill has changed since the preparation of BCDC's Final Scientific Review Report. In the Final Scientific Review Report, the landfill foot print and adjacent impacted area was designed to be 178.34 acres; however, the current design will only result in the conversion of 167.63 acres.

- Preservation of 0.79 acre of existing California tiger salamander (CTS) breeding habitat and 8.83 acres of potential CTS breeding habitat on the Southern Hills parcel, Pond 5 Buffer, and Director’s Guild parcel (9.62 acres total);
- Creation of an additional 0.73 acre of CTS breeding habitat on the Southern Hills (1 pond) and Griffith Ranch (1 pond) parcels, and restoration of 0.42 acre of potential CTS breeding habitat in the playa pool on the Director’s Guild parcel;
- Preservation of 5.52 acres of seasonal wetland on the Southern Hills and Griffith Ranch parcels, and 53.10 acres on the Director’s Guild parcel;
- Creation of 4.07 acres of seasonal wetlands on the Griffith Ranch parcel;
- Preservation of 1.86 acres of waters of the U.S. on the Southern Hills and Director’s Guild parcels, and;
- Creation of 1.80 acres of waters of the U.S. on the Griffith Ranch and Director’s Guild parcels.

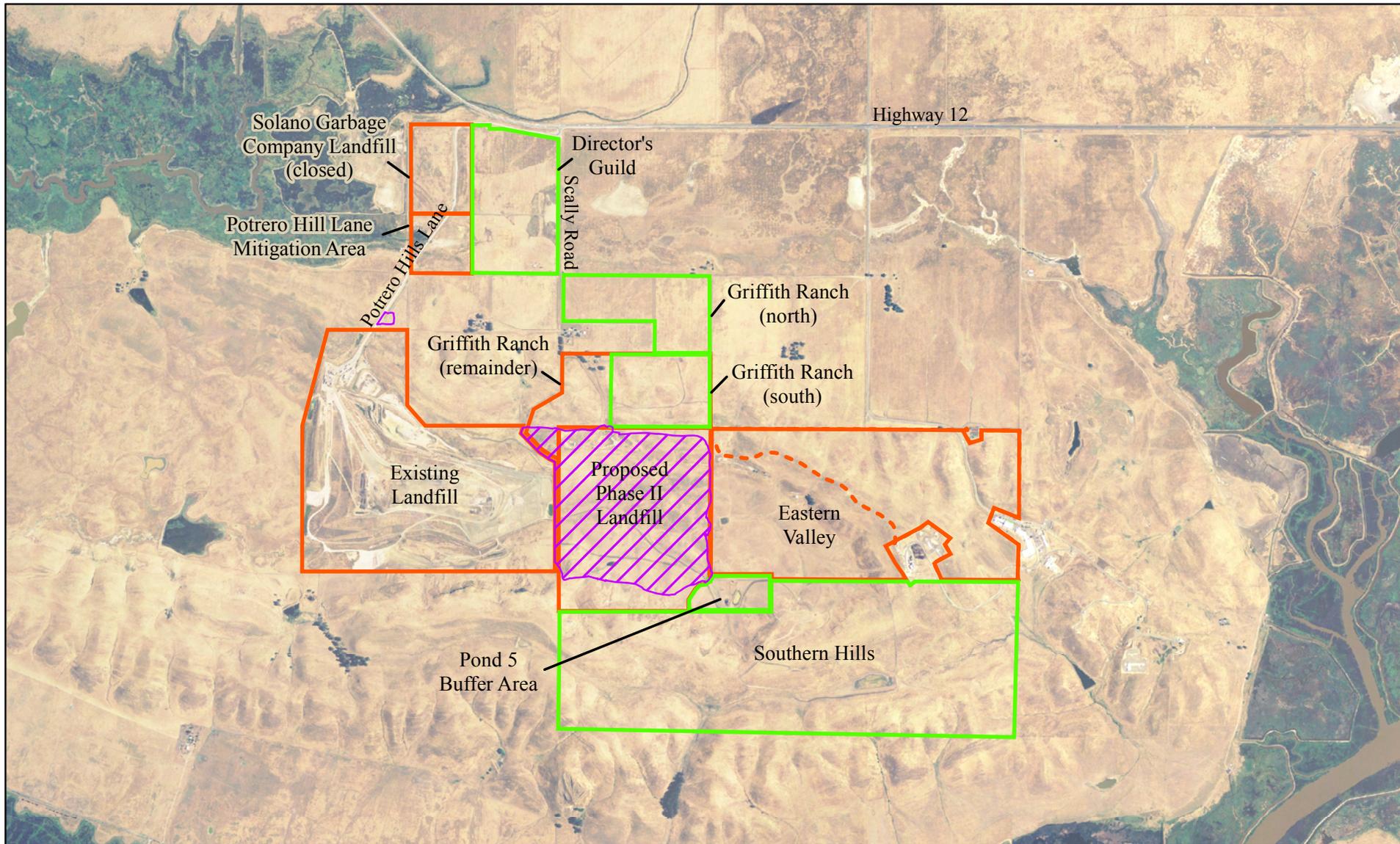
Table A summarizes the total area of upland and aquatic mitigation acreage by parcel, as outlined in the original MMP.

Table A: Mitigation Acreage and Type by Parcel – Original (2006) MMP Version

	CTS Upland Habitat		CTS Pond Habitat		Seasonal Wetlands		Waters of the U.S.		Total (acres)
	Preserve	Preserve	Create	Preserve	Create	Preserve	Create		
Southern Hills	421.11	0.34	0.35	5.25	0.00	1.65	0.00	428.70	
Pond 5 Buffer Area	17.65	0.45	0.00	0.00	0.00	0.00	0.00	18.10	
Griffith Ranch	57.85	0.00	0.38	0.27	4.07	0.00	1.03	63.60	
Director's Guild	20.47	8.83	0.42	53.10	0.00	0.21	0.77	83.80	
Total	517.08	9.62	1.15	58.62	4.07	1.86	1.80	594.20	
Mitigation Ratio*	2.1:1	15.8:1	1.9:1	28.5:1	2.0:1	4.2:1	4.1:1		

* preserved/created:impacted

Total Impact Area = 244.93 acres, Wetland Impact area = 2.42 acres, Pond Impact Area = 0.61 acres (Ponds 1 and 4), Upland Impact Area = 241.9 acres



-  PROPOSED PHASE II IMPACT AREA
-  MITIGATION AREA
-  OTHER LAND OWNED BY LANDFILL
-  SURVEYS ON THIS PARCEL LIMITED TO WEST OF DASHED LINE

FIGURE 1

*Potrero Hills Landfill
Phase II Expansion*

Potrero Hills
Landfill Parcels

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1.3 REVISED MITIGATION PROPOSAL

Since the preparation of the 2006 MMP, PHLF has made modifications to the location of the power plant and sedimentation basins on Griffith Ranch (*i.e.*, the proposed relocation of a landfill gas-powered electrical generation facility and sedimentation basin from the Griffith Ranch to the existing and proposed landfill areas). As a result of these modifications, additional areas will be incorporated into the mitigation lands for this project, namely additional upland habitat in the southern portion of the Griffith Ranch parcel and creation of an additional CTS breeding pond at the former power plant site. The revised project description and mitigation plan will be detailed in a revised mitigation and monitoring plan (to be developed in response with PHLF's formal consultation with USFWS).

This revised plan has not been reviewed by the scientific review panel. Based on this revised project description and mitigation plan, the mitigation components would be as follows:

- Preservation of upland habitat totaling 565.29 acres on the Southern Hills parcel, Pond 5 Buffer, Griffith Ranch and Director's Guild parcels;
- Preservation of 0.79 acre of existing CTS breeding pond and 8.83 acres of potential breeding pond habitat on the Southern Hills parcel, Pond 5 Buffer, and Director's Guild parcel (9.62 acres total);
- Creation of an additional 1.08 acres of breeding pond on the Southern Hills (1 pond) and Griffith Ranch (2 ponds) parcels, and restoration of 0.42 acre of potential breeding pond in the playa pool on the Director's Guild parcel;
- Preservation of 5.52 acres of seasonal wetland on the Southern Hills and Griffith Ranch parcels, and 53.10 acres on the Director's Guild parcel;
- Creation of 4.07 acres of seasonal wetlands on the Griffith Ranch parcel;
- Preservation of 1.86 acres of waters of the U.S. on the Southern Hills and Director's Guild parcels, and;
- Creation of 1.80 acres of waters of the U.S. on the Griffith Ranch and Director's Guild parcels.

Table B summarizes the total area of upland and aquatic mitigation acreage by parcel for the revised mitigation plan.

Table B: Revised Mitigation Acreage and Type by Parcel – Increased Griffith Ranch Plan
(Highlighted cells reflect changes from the values in Table A. Note that the highlighted cells reflect increased mitigation areas/mitigation ratios.)

	CTS Upland Habitat		CTS Pond Habitat		Seasonal Wetlands		Waters of the U.S.		Total (acres)
	Preserve	Preserve	Create	Preserve	Create	Preserve	Create		
Southern Hills	421.11	0.34	0.35	5.25	0.00	1.65	0.00	428.70	
Pond 5 Buffer Area	17.65	0.45	0.00	0.00	0.00	0.00	0.00	18.10	
Griffith Ranch	106.06	0.00	0.73	0.27	4.07	0.00	1.03	112.16	
Director's Guild	20.47	8.83	0.42	53.10	0.00	0.21	0.77	83.80	
Total	565.29	9.62	1.50	58.62	4.07	1.86	1.80	642.76	
Mitigation Ratio*	3.4:1	15.8:1	2.5:1	28.5:1	2.0:1	4.2:1	4.1:1		

*preserved/created:impacted

Total Impact Area = 167.63 acres, Wetland Impact area = 2.42 acres, Pond Impact Area = 0.61 acres (Ponds 1 and 4), Upland Impact Area = 164.60 acres

2.0 METHODS

Dr. Solmeshch's introductory comments and recommendations were carefully considered by Eva Buxton, Senior Botanist at LSA Associates, Inc. (LSA). The introductory comments, i.e., background information, impacts to and evaluation of mitigation for botanical resources, as outlined by Dr. Ayzik Solmeshch, were summarized by Ms. Buxton and presented as *Reviewer's statement*. Responses to each recommendation (also summarized) were prepared by reviewing documents and other pertinent information, including Ms. Buxton's field notes. Ms. Buxton has conducted numerous surveys on the landfill lands since 1998 and is extremely familiar with the vegetation, including sensitive communities and special-status species, on the Phase II expansion and mitigation parcels.

Richard Nichols also reviewed comments in Chapter 2 of the scientific review panel report (Airola et al., 2007), particularly those comments that overlapped with the grazing issues. Mr. Nichols is licensed by the State Board of Forestry as Certified Rangeland Manager #45 and developed the grassland management plan for the mitigation parcels (LSA, 2007).

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