

## **WRITTEN COMMENTS AND LEAD AGENCY RESPONSES TO COMMENTS**

This Response to Comments (and its Appendices) includes all written comments received by the Lead Agency regarding the Draft Supplemental EIR. Pursuant to CEQA requirements, each relevant comment is responded to following the written comments letter(s) or email(s). For the first comment, on the Jose vineyard, two letters have been included here to represent all the comments received. The other written comments received on this topic are included in Appendix A; all of these comments are covered by those made within the first two letters. Otherwise, all comment letters are included here. Each relevant comment is numbered within each letter. Responses are numbered to correspond to the comments, and follow each comment letter.

The following written comments were received on the Draft Supplemental EIR:

1. City of Oakley, March 7, 2014 Letter, and Mr. Matt Cline, March 6, 2014 email, plus 113 other similar comment letters or emails presented in Appendix A.....Page 3
2. Delta Protection Commission, March 6, 2014 letter.....Page 19
3. Contra Costa County Flood Control and Water Conservation District, March 6, 2014 letter.....Page 23
4. Delta Stewardship Council, March 7, 2014 letter.....Page 35
5. California Native Plant Society, March 7, 2014 letter.....Page 40
6. Mr. Stephen Geller on behalf of Mr. Richard and Mrs. Bernice Stephens, March 7, 2014 letter.....Page 49

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**1. City of Oakley, March 7, 2014 Letter, and Mr. Matt Cline, March 6, 2014 email (Jose Vineyard Issues)**



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March 6, 2014

*Submitted via email and regular mail*

Patricia Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office  
1416 9<sup>th</sup> Street, Suite 1623  
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[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

**RE: Comment on Dutch Slough Tidal Marsh Restoration Project  
Supplemental Environmental Impact Report**

Dear Patty:

The City of Oakley has received the Dutch Slough Tidal Marsh Restoration Project Supplemental Environmental Impact Report ("SEIR"), SCH 2006042009, dated January 2014. As you know, the City Council has made previous comments to you regarding preserving the 14-acre vineyard, referenced as the "Jose Vineyard" in the SEIR, during your update presentations of the project at regular Oakley City Council meetings. After careful review of the SEIR, specifically impact 4.3-5 and Mitigation Measure 4.3-6, DWR still plans to destroy the vineyard though with opportunities for salvaging. While potential salvaging of the vineyard may preserve some of the vines, it does not preserve the vineyard in place. Therefore, the City of Oakley has the following comment in response to "Impact 4.3-5 (New Impact) Disturbance of the Jose Vineyard" found on page 4.3-8 of the SEIR:

- The Oakley City Council has voiced strong support to preserve the historical vineyard ("Jose Vineyard") that is located within the Dutch Slough Tidal Marsh Restoration Project. The City urges DWR to *avoid*, rather than *minimize* impacts to the Jose Vineyard and preserve it onsite.

Thank you for providing the City of Oakley the opportunity to review and comment on this SEIR. We hope that our comment will be helpful in your environmental review process. If you have any further questions, you may contact me at (925) 625-7007, or by email at [Montgomery@ci.oakley.ca.us](mailto:Montgomery@ci.oakley.ca.us).

Respectfully submitted,

A handwritten signature in black ink that reads "Bryan H. Montgomery". The signature is written in a cursive style with a large, stylized initial "B".

Bryan H. Montgomery  
City Manager

cc: Oakley City Council

**From:** [Matt Cline](#)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Dutch Slough Supplemental EIR  
**Date:** Monday, March 03, 2014 3:36:29 PM  
**Attachments:** [Big Break Basin.png](#)

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Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814  
[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Dear Ms. Finfrock:

I am extremely concerned about the potential loss of an irreplaceable ancient vineyard that will be destroyed by the Dutch Slough Salt Marsh Restoration Project. I'm requesting that the Dutch Slough Project preserve this valuable ancient vineyard. To be clear, **I would like the State to not only preserve this upland habitat: I would like the vineyard to be included as an additional point of interest in the overall plan of this restoration project.** This ancient vineyard needs to remain intact as a living museum for our world-renowned California wine industry now, and to inspire our future winemakers and viticulturists. If the State of California won't do it . . . who will?

I fully support the Dutch Slough Project if it can be implemented in a manner that preserves this 14-acre vineyard on the Dutch Slough site. This more than 100-year-old vineyard produces a truly unique and valuable grape variety that is used to make premium wine. This ancient vineyard and others surrounding Oakley are world class vineyards and have played a significant role in California's viticultural history. In February of 2013, the California Legislature unanimously passed House Resolution No. 9 which was introduced by Assemblymember Daly and co-authored by Assemblymember Jim Frazier among others.

Here is the link to this amendment: [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140HR9](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140HR9).

I have learned that the Department of Water Resources (DWR) has contracted with RD 830 to obtain up to 600,000 cubic yards of borrow material for the Dutch Slough Project from the Ironhouse Sanitation District (ISD) right next to the vineyard. There is an additional 200,000 – 300,000 cubic yards available if needed. The ISD has indicated it would be willing to provide the proof of this additional fill needed for the Gilbert parcel. This significantly reduces the need to use the vineyard ground as a borrow site. The cost of saving this ancient vineyard would be the cost of the material itself since the Project will have to move the fill material anyway. Further, it seems ironic to destroy a natural pre-historic sand-dune (up-land habitat) within this wetlands restoration project when there is now plenty of dirt available. Historically, these upland habitats were also an important dominant feature in and around these wetlands.

I have met with the Ironhouse Sanitation District to discuss not only the availability of dirt but for a

trust-pass agreement so we can continue to access the vineyard. In principle, the indications are that if the only route to the vineyard was through ISD land, they could provide it. Regarding your infrastructure concerns, access with pick-up trucks and small vineyard tractors is all that is necessary. Harvest is done in half-ton bins that can be carried by trailer to a staging area for loading. I am not an engineer, but that walking bridge is extremely well built. It is posted as having a 20-ton limit. It is structurally over-built for only pedestrian traffic. Continued farming would not impact that bridge any more than the general maintenance traffic it is over-designed for. I will be contacting the East Bay Regional Park District to get their approval, as well.

DWR's concerns about the impact of a "commercial vineyard" on the Project are wrong. This historic vineyard would greatly enhance it. Local industry working with the State would be an image boost for the State, which includes preserving the economic benefits of revenue-generation through the local tax base, continued business generation through sales taxes and jobs, for example. All of this cooperation between DWR, the City of Oakley, and the local wine industry is a win-win situation. Information about the history of the vineyard and its role in California's heritage can be added in a kiosk in the same style and format as others that would be used to point out native plants and animals using the wetlands, as well as communication of important "environmental points of interest." Also, having the existing East Bay Parks Marsh Creek Regional Trail bordering the vineyard ensures its preservation by maintaining the existing buffer between the creek and the vineyard. The public will enjoy seeing this interaction between the local farming industry and wetlands restoration as they hike, jog, and ride by.

This vineyard, which is sustainably farmed and non-irrigated (dry-farmed), is significant and needs to be preserved because it is a model that can be replicated to other sites, **especially** near sensitive environmental habitats. Elemental sulfur is used to control powdery mildew if and when it may occur within this vineyard. This organic fungicide is the tenth most common element in the Universe and is required for all life forms. Sustainably farmed ag-land is much more compatible than high density housing.

It is the age of the vine, the unique micro-climate, and Delhi Sandy Loam soil that make the vineyard itself world class and it is the ability to continue making the wine from this vineyard which provides the proof that this model works. It is the "age of the roots" and not the exposed part of the vine that makes this vineyard special. The talk of transplanting these vines is not only impractical, irreparable ecological damage will occur to this incredible upland habitat.

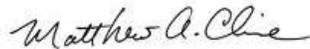
As far as the Project's impact on the vineyard itself, it was planted before the levees were built and it is safe to assume that there were greater flows of water through the San Joaquin and Sacramento Rivers both during tidal flows and winter run-off than there are now and will be in the future. Marsh Creek lies within 40 feet of the vines which indicates that the new wetlands will not impact the vineyard either. The demand for water, especially to all points south, is the biggest negative impact this restoration project will face, not this sustainably farmed 14-acre vineyard. This ancient vineyard, because of its historic and scientific value, including the ecological lessons of dry-farming, will be an interesting and educational focal point for the public to see as they wander through the restored wet lands. Locally, there is interest in providing an educational opportunity to middle and high school children which would expose them to an agricultural learning experience.

I'm sure we would lose a few berries to curious visitors but not anything near the volume we lose to various birds, raccoons, possums, and jack rabbits. All of this "natural loss" is accepted as we don't trap, bait or otherwise harass the local birds and mammals. As I've stated before, we also farm this vineyard organically, only using sulfur dust as a fungicide. Even this is done only through May because the wind not only dries out the vineyard; it lessens the effectiveness of spraying anything at all. A few well-worded signs and postings will keep the majority of visitors out of the vineyard itself which is what you would do in any other sensitive area of this Project.

The City of Oakley has been spearheading an effort to protect this and other vineyard plantings in the area. I believe that it is fortunate that we still have the opportunity to spare this historically significant, ancient vineyard and provide a model of state, local, and small farming interests working cooperatively together to help manage our current and future urban growth.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento - San Joaquin River Delta.

Sincerely,



Matthew A. Cline  
M.A.C. Wines, LLC  
*Home of Three Wine Company & SX wines*  
**P.O. Box 2069, Sonoma, CA 95476**  
Visit us at The Old Sugar Mill in Clarksburg, CA  
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AMENDED IN ASSEMBLY APRIL 15, 2013

AMENDED IN ASSEMBLY MARCH 07, 2013

CALIFORNIA LEGISLATURE— 2013–2014 REGULAR SESSION

**HOUSE RESOLUTION**

**No. 9**

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**Introduced by Assembly Member Daly**

*(Coauthors: Assembly Members Achadjian, Alejo, Allen, Ammiano, Atkins, Bigelow, Bloom, Blumenfield, Bocanegra, Bonilla, Bonta, Bradford, Brown, Buchanan, Ian Calderon, Campos, Chau, Chávez, Chesbro, Conway, Cooley, Dahle, Dickinson, Donnelly, Fong, Fox, Frazier, Beth Gaines, Garcia, Gatto, Gomez, Gordon, Gorell, Gray, Grove, Hagman, Hall, Roger Hernández, Holden, Jones, Jones-Sawyer, Levine, Linder, Logue, Maienschein, Mansoor, Medina, Melendez, Mitchell, Morrell, Mullin, Muratsuchi, Nazarian, Nestande, Olsen, Pan, Patterson, Perea, John A. Pérez, V. Manuel Pérez, Quirk, Quirk-Silva, Rendon, Salas, Skinner, Stone, Ting, Torres, Wagner, Waldron, Weber, Wieckowski, Wilk, Williams, and Yamada)*

**February 20, 2013**

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Relative to historic vineyards.

**LEGISLATIVE COUNSEL'S DIGEST**

HR 9, as amended, Daly.

## DIGEST KEY

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### BILL TEXT

WHEREAS, California's living and producing historic vineyards that were planted in the late 19th century through the mid-20th century still make a significant contribution to the state's economy and reputation as a global wine growing region; and

WHEREAS, Historic vineyards are found throughout California, east from the Sierra foothills and San Joaquin County, west to the Sonoma coast, north to Mendocino, and south to the Cucamonga Valley; and

WHEREAS, Historic vineyards are beautiful and treasured survivors that have lived through the ravages of phylloxera, economic downturns, consumer popularity fluctuations, and in many cases, prohibition and world wars; and

WHEREAS, These historic vineyards provide an important living repository for wine grape budwood and genetic material; and

WHEREAS, Historic vineyards often provide a living window on past vineyard practices including, but not limited to, head-trained vines and dry farming; and

WHEREAS, The interplanted field blends of grape varieties that were a common practice of the immigrant farmers who planted California vineyards in the past characterize an era of agricultural practice and impart wine attributes that are uniquely Californian; and

WHEREAS, Fragile older vines are often less productive than younger vines and can require special care to maintain; and

WHEREAS, Most historic vineyards are family owned and exist by virtue of the passion of their caretakers; and

WHEREAS, The wine made from California's historic vineyards continues to delight wine lovers throughout the world and imparts prestige to the state as a place to live, work, and visit; now, therefore, be it

Resolved by the Assembly of the State of California, That the Assembly recognizes the contribution of California's living historic vineyards to the agricultural and social heritage of the state as well as to the enjoyment of wine enthusiasts throughout California and the world; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the author for appropriate distribution.

***SAMPLE LETTER FORMAT***

***Address Comments through U.S. Mail or Email to:***

***U.S.MAIL [must be postmarked by March 7, 2014]***

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

***EMAIL [must be received by March 7, 2014]***

[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

***[Author may wish to refer to the Fact Sheet to choose the issues that the author believes to be important and insert those points here.]***

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

XXXXXX

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project**  
Fact Sheet – January 21, 2014  
Prepared By Matt Cline

**Reasons for Vineyard Preservation**

1. This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our winemakers and viticulturists in the future.
2. It preserves a natural pre-historic sand-dune (up-land habitat) within this wetlands restoration project as open space. This open space enhances the overall wetlands project and the Bay-Delta ecosystem. Historically, these upland habitats were also a dominant feature in and around these wetlands.
3. Provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide. This would make Oakley a more desirable location to live which might spur higher end housing and therefore a higher tax base. This may ensure that the current owners of these properties will continue to maintain a high re-sale potential use for their land. This is a very complicated issue but there already seems to be interest in preserving old vines and agriculture within our urban growth areas locally, at the state level, and nationwide.
4. Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems.
5. This ancient vineyard, because of its historic and scientific value, including the ecological lessons of dry-farming, will be an interesting and educational focal point for the public to see as they wander through the restored wet lands. There is also interest in providing an educational opportunity to middle and high school children which would expose them to an agricultural learning experience.

**Future Uses of the Vineyard**

1. This vineyard could be used to generate revenue.
2. Volunteer docents from 501(c)(3) organizations such as The American Wine Society, The Historical Vineyard Society, and others would be willing to provide pre-scheduled on-sight tours since these organizations have an educational purpose in their by-laws. These tours could coincide with either the Heart of Oakley Festival or the Harvest Festival. Local growers and winemakers that are utilizing Oakley fruit should also be willing to educate the public about the value of old vines.
3. The vineyard can be the focal point of a community park that focuses on our local agricultural roots. A "community farm" can be built on part of the property around the Emerson Dairy that will be acquired as a result of the development. The local agricultural industry and grocery store chains might be interested in corporate sponsorship of a "community farm".
4. Local 4H Chapters can conduct pruning demonstration projects teaching the art of spur pruning on head trained vines. Then conducting a fun "pruning competition" with the project attendees.

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project**  
Fact Sheet – January 21, 2014  
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5. Produce a community wine label that can be used for local events.
6. The Vineyard site could be used for charity events on a limited basis such as a catered lunch with wine tasting.

**Vineyard Site & Varietal Historical Information**

Archaeological data and discussions with Stan Emerson indicates that the vineyard located on the west edge of the Emerson parcel that is now part of the Dutch Slough Salt Marsh Restoration Project was established by Joaquin José sometime in the late 1800's and is most likely between 120 and 125 years old. Joaquin José was a Portuguese subsistence farmer from Madeira Island who had fruit trees and row crops as well. The vineyard was planted on a natural "upland habitat" which is a rare but important formation within tidal wetlands. Most all of these formations have been destroyed throughout the Sacramento Delta after the levees were built. The vineyard is planted to the Carignane varietal which itself has become quite rare here in California. At one time this grape represented about 30% of all the red-wine grapes in all growing regions of the state. The majority of the vines were planted in the Central Valley and used to make inexpensive box and jug wines. In 1974 California had only 30,700 acres of Carignane but that total has dropped to only 2,547 bearing acres in 2012 with 744 acres disappearing from the previous year (mostly from the Lodi Region-District 11). In District 6 which includes Contra Costa County there is only 87 acres left in 2012 with the Emerson parcel representing 16% of that total. Most of the surviving quality vineyards of Carignane mainly exist here in Oakley, Sonoma County, and Redwood Valley in Mendocino County. The reasons for this decline in popularity include the 12 years of Prohibition (1921-1933) which resulted in the loss of all the smaller wineries which were and are today the innovators of our industry, but it was our industries marketing strategy over the last 50 years or so of varietal labeling that had the biggest influence. Using a single grape name reduced the number of varietal options we have today. As the wine market changed, we choose to only market a hand full of French varietals such as Cabernet Sauvignon, Chardonnay, and Pinot Noir that were not part of California's original planting. These "branded varietals" will be hard to knock off their pedestals but the recent interest in blended red wines, over the last ten years, is encouraging.

The Emerson Vineyard and most of the ancient vineyards surrounding Oakley are world class vineyards and have played a significant role in California's viticultural history. In February 2013, the California Legislature unanimously passed House Resolution No. 9 which was introduced by Assembly member Daly and co-authored by Assembly member Jim Frazier among others. Here is the link to his amendment:  
[http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140HR9](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140HR9).

Carignane (and all of its various synonyms and enunciations) worldwide is number two in red wine production. It is such a dominate grape because yields of 10-15 tons per acre are easy to attain due to its vigorous growing characteristics. In general, efforts to restrain yields usually results in higher quality. This vineyard is a model for how to grow productive crops sustainably while also being dry farmed. Most of the time, this variety is blended with Mourvèdre, Syrah, and Grenache (among others). It is grown predominately dry-farmed in most countries where it grows.

**Vineyard Production**

I have leased the ancient 14-acre Carignane vineyard on the Emerson parcel either directly from Stan Emerson or sub-leased it from Brent Gilbert for the past 25 years. The vineyard is still economically productive. The last eight year harvest totals are:

<u>Vintage</u>	<u>Tons</u>
2006	30.95
2007	75.88

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project**  
Fact Sheet – January 21, 2014  
Prepared By Matt Cline

2008	47.54
2009	72.96
2010	67.06
2011	64.25
2012	53.66
2013	61.00

This is an average of 59.16 tons per year. The yearly variations in yields are consistent with the alternate bearing nature of most grape varieties. The 2006 vintage is an outlier due mainly to a poor crop set because of the weather during bloom. Overall, the yield over the past 8 years is an average of 4.2 tons per acre. The block is not uniform though. The southwest corner is not producing because of the lack of vines. The crop along the west side along Marsh Creek is particularly productive due to the heavier soil type and has been harvested early for export to Japan and for a rosé. Stylistically, the larger yielding vines work well for the Japanese export market because they can be bottled early and at lower alcohol levels. That is not to say they can't make full-throttle California style reds if left to ripen on the vine a little longer. The east half of the field produces arguably some of the best Carignane anywhere in the world. The Delhi Sand series results in reductions of the vines vigor and average yields per vine.

**Winemaking**

Juice yields for Oakley Carignane can be between 180 - 195 gallons per ton. All of the grapes are used in no less than 6 different blends including a Carignane Rosé, a traditional Oakley field blend of Zinfandel, Carignane, and Mataro (Mourvèdre) that is supported by smaller quantities of Petite Sirah, Alicante Bouschet, and Black Malvoisie (Cinsault), a traditional Old Vines (varietal) Zinfandel, two red blends that are 60%-85% produced from these grapes and exported to Japan, and even a rare varietal bottling all from this block.

**Summary**

The vineyard can co-exist with this wetlands restoration project because it was planted before the levees were installed; therefore these vines will survive the process of re-flooding the surrounding acreage. While the state is intent on converting this vineyard that stands on a natural upland environment to additional wetlands, some natural uplands are also being restored as this one should be as well. The value as a living museum and as an example of sustainable agriculture let alone 16% of the remaining Carignane vines in Contra Costa County are invaluable. The precipitous drop in planted acres is, in my opinion, one of the greatest reasons to save it and especially because this vineyard could very well be the very best example of what this grape can do that we have anywhere here in the state.

The State of California needs to offer a proposal that will preserve this ancient vineyard. This vineyard is over 100 years in the making and a proposal that preserves this historic Carignane vineyard would be a win-win for the State of California, the City of Oakley, and our world renowned California wine industry.

**Comment 1-1 in March 7, 2014 letter from the City of Oakley, March 3, 2014 letter from Mr. Matt Cline, plus 113 other comment letters on the subject of preserving the Jose vineyard on the Emerson parcel.**

*For this topic only in this Response to Comments, all comments are considered together; specific comments on the details of vineyard preservation are not numbered separately.*

**Introduction.** A total of 115 letters, emails, and web-generated emails (all from the same URL) about the historical Jose vineyard were received within the public comment period. Included above is the letter from the City of Oakley which requested that the vineyard be preserved in place as opposed to salvage of the vines for transplantation elsewhere. Also included above is an email from Mr. Matt Cline and its attached documents, plus a sample letter and supporting information about the Jose vineyard that he prepared and distributed. Mr. Cline's email requested preservation of the vineyard because of its historical, scientific, and educational values, including the following: uniqueness of the site and its vines, the vineyard's role in California's viticultural history, as an example of sustainable farming, as a demonstration farm for future agricultural practices, and because of a California House Resolution on heritage vines.

All of the other vineyard comments used language either from Mr. Cline's sample letter or supporting information; therefore we are responding to all 115 comments in this comprehensive response. Included here in full are only the City of Oakley letter; Mr. Cline's email, sample letter, and supporting information; and a summary list of the comments made in support of vineyard preservation. Copies of all other comments are included in Appendix A. Not included in Appendix A are an additional 36 web-generated emails that either had no comments included or were received after the close of the public comment period.

**Summary list of topics in support of vineyard preservation.**

Grapes/vines

- Vines are old—some planted over 100 years ago
- Vines are irreplaceable due to age and unique site conditions (microclimate, root environment, pre-phylloxera planting)
- Vines are Carignane, currently a rare grape variety in California—only 87 acres remain in Contra Costa County, with the Project site containing 16% of the County's total

Wine

- Age of vines creates a superior and more valuable wine
- Carignane grapes and wine are now rare

Education

- Living museum for California wine industry
- Inspire future winemakers and viticulturalists
- Interpretive signs, tours for site visitors, school groups
- Focal point for future City park

Agricultural values

- Example of successful dry-farmed (no irrigation) vineyard

- Model of sustainable farming
- Planted before levees were built so vineyard should persist after restoration Project is implemented
- Artifact of California and local agricultural history
- Example of local and regional vanishing agricultural landscape

#### Historical values

- Age of vineyard
- Example of local and California agricultural and viticultural history
- Possibly one of the longest-surviving vineyards in California

#### Restoration Project image

- Coordination of urban, restoration, and agricultural landscapes
- Enhance historical and educational values of restoration
- Preservation of only 14 acres out of a Project total of 1187 acres

#### California House Resolution #9;

“...Resolved by the Assembly of the State of California, that the Assembly recognizes the contribution of California’s living historic vineyards to the agricultural and social heritage of the state as well as to the enjoyment of wine enthusiasts throughout California and the world...”

**Response.** The Project design has been changed to remove the vineyard and its perimeter road from the tidal restoration area, and no excavation of soils would occur within this approximately 14-acre area. Except for about 0.6 acres of young vines that would be removed to provide habitat for native plants, the existing vines would remain intact, and commercial operation of the vineyard will continue. Therefore none of the potential impacts and other issues identified in the comments associated with removal of the vineyard would occur and no response to specific comments regarding those impacts is required.

Through the standard leasing process, the state proposes to lease the vineyard for wine grape production, but with conditions on vineyard management and operations to protect existing sensitive biological and cultural resources. Details of these conditions would be included as part of the state’s lease. Leasing of the vineyard can only occur after the Project has received its permits, which is expected to occur between December 2014 and February 2015.

In response to the California Native Plant Society comment letter (Comment 5-1, pages 39-47) about dune habitat restoration, vines in the southwest corner, an area of about 0.6 acres, would be removed, and the area planted with native dune-adapted plants. Vines in this area are young, indicating that they have been replaced in the recent past, and suggesting that this area is less suitable for grape production than the rest of the vineyard. According to Mr. Cline the older vines are the most valuable and produce the highest quality wines. Therefore, removal of 0.6 acres of low-producing, young (not heritage or ancient) vines out of 14 acres is not considered a significant impact, given that approximately 13.4 acres of older vines will be preserved.

The following text changes have been made to the Final SEIR (deleted text is struck out and new text is underlined).

In Chapter 3 Project Description, Figures 3-3 through 3-6 have been updated to show the preserved area. Also, in Section 3.2.5 Proposed Modifications to Approved Project Design, page 3-4, the following change has been made:

**3.2.5 Proposed Modifications to Approved Project Description**

Figure 3-3 illustrates the current proposed restoration plan on the Emerson, Gilbert, and Burroughs parcels. Similar to Alternative 2 in the 2010 EIR, fill material would be imported or borrowed onsite to create a mix of marsh, open water and upland habitats within the Project site. The Emerson parcel would be comprised primarily of a mix of low, mid, and high marsh habitats, with a subtidal open water area located in the low-elevation area in the northeastern portion of the parcel. The subtidal open water area would be connected to adjacent tidal channels by breaching the Emerson perimeter levee in two locations, and would be isolated from the adjacent tidal marsh by a drainage divide planted with riparian and native vegetation. A new Marsh Creek channel network would also be constructed through the Emerson parcel to discharge into Dutch Slough. Most (approximately 13.4 acres) of the vineyard on the west side of the parcel would be preserved to protect historical, prehistoric, cultural, and agricultural values. Public access would be provided by a loop trail around the perimeter of the Emerson parcel with bridges spanning all levee breaches.. The trail would be connected on the west to the Marsh Creek Regional Trail, and on the south to the future Dutch Slough Community Park (Figure 3-3).

In Section 3.2.5 Proposed Modifications to Approved Project Design, the following bullet was added to the end of the list on page 3-9:

- In response to comments on the Draft Supplemental EIR, and the presence of the prehistoric habitation site, the Jose Vineyard, its perimeter road and berm, and a buffer area to the east would be preserved. No excavation of soils would occur within this area. Approximately 13.4 acres of vines out of 14 acres would be preserved and managed as a vineyard. Two portions of this preserved area would be managed for native plants: an area of about 0.6 acre in the southwest corner of the vineyard, and about 0.6 acres along the northeast perimeter of the vineyard.

The following additions were made to Table 3-1 on page 3-11:

**Table 3-1. Summary of Project Component Revisions Considered in the Supplemental EIR**

Component	2010 EIR (Alternative 2)	Supplemental EIR	Component Detail
<b>NEW COMPONENT</b>			
<u>Preservation of Jose Vineyard</u>	<u>NA</u>	<u>The Jose Vineyard, its perimeter road and berm, and about 0.6 acre along northeast perimeter would be preserved. Vineyard would continue to be leased for commercial wine production. Two areas would be managed and enhanced for native</u>	<ul style="list-style-type: none"> <li>▪ <u>No soil would be excavated from the vineyard area.</u></li> <li>▪ <u>All but 0.6 acres of vines would be preserved. The remaining vines (about 13.4 acres) will be leased as a commercial vineyard.</u></li> <li>▪ <u>The prehistoric habitation site would be preserved.</u></li> <li>▪ <u>There would be restrictions on vineyard operations to protect sensitive cultural and biological</u></li> </ul>

Component	2010 EIR (Alternative 2)	Supplemental EIR	Component Detail
		<u>plants (see below).</u>	<u>resources.</u>
<u>Native Dune-adapted Plant Test Plots</u>	<u>NA</u>	<u>Two areas bordering the Emerson vineyard would be managed and enhanced for native plants, especially dune-adapted endemics.</u>	<ul style="list-style-type: none"> <li>▪ <u>About 0.6 acres of vines would be removed from the southwest corner. This area has young vines indicating that they were recently replaced, so are not as valuable as the heritage vines in the rest of the vineyard. This area would be managed for native dune-adapted plants.</u></li> <li>▪ <u>Along the eastern boundary of the vineyard, about 0.6 acres would be managed and enhanced for native plants, including dune-adapted plants.</u></li> </ul>

The following changes were made in Chapter 4.3 Cultural Resources on pages 4.3-8 and 4.3-9. (Though not shown here, these changes also appear in Chapter 2 Executive Summary in Tables 2-1 and 2-2, pages 2-14 and 2-23, respectively.):

**IMPACT 4.3-5 (NEW IMPACT): DISTURBANCE OF THE JOSE VINEYARD**

~~The proposed project will result in the removal of the Jose Vineyard in order to achieve proper elevation and vegetation consistent with the tidal marsh restoration, which would be considered a substantial adverse change to the property under CEQA. Project redesign in order to avoid this impact while still meeting restoration goals has been determined infeasible.~~

The Project design has been changed to minimize disturbance of the vineyard. The vineyard, its perimeter road and berm, and a buffer area on the east side would be preserved, except for an approximately 0.6 acre area in the southwest corner, where vines would be removed in favor of test plots for growing native dune plant species. There would be no excavation of soils within this entire preserved area, and the majority of the vines (approximately 13.4 out of 14 acres) and existing native plants would remain intact. The vineyard would be leased for commercial wine grape production, but with limitations to protect sensitive cultural and biological resources.

No further mitigation is required.

~~**MITIGATION 4.3-6 (NEW MITIGATION): DEVELOP AND IMPLEMENT TREATMENT PLAN FOR THE JOSE VINEYARD**~~

~~A treatment plan for documentation of the Jose Vineyard will be developed in consultation with DWR, SHPO, and USACE. The treatment plan will be implemented prior to the start and during Project construction. Treatment will include allowing private or public entities to salvage vines and propagules for transplantation to other sites.~~

~~Impact Significance~~

~~Mitigation Measure 4.3-6 would document the Jose Vineyard and allow salvage of vines and propagules; however, the plants would need to be removed to achieve proper elevations. This impact is considered significant and unavoidable.~~

## **2. Delta Protection Commission, March 6, 2014 letter**

**DELTA PROTECTION COMMISSION**  
2101 Stone Blvd., Suite 210  
West Sacramento, CA 95691  
Phone (916) 375-4800 / FAX (916) 376-3962  
Home Page: [www.delta.ca.gov](http://www.delta.ca.gov)

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MAR 10 2014

STATE CLEARING HOUSE

March 6, 2014

State Clearinghouse  
P.O. Box 3044  
Sacramento, CA 95814

Re: Dutch Slough Tidal Marsh Restoration Project  
(SCH# 2006042009)

To Whom It May Concern:

Staff of the Delta Protection Commission (Commission) have reviewed the *Dutch Slough Tidal Marsh Restoration Project Supplemental/Subsequent Environmental Impact Report (Supplemental/Subsequent EIR)*. The Project incorporates wetland and upland habitat enhancement, open space preservation, and public access on a 1,166 acre property which is owned by California Department of Water Resources (DWR). As the project falls within the Secondary Zone of the Sacramento-San Joaquin Delta it is not subject to consistency requirements with the Commission's *Land Use and Resource Management Plan for the Primary Zone (Management Plan)* and therefore these comments are advisory in nature.

The Project's 2008 Draft EIR had acknowledged the Commission's 2006 comments on the Project's Notice of Preparation, stating that the Project was consistent with the *Management Plan*, and that there would be no adverse impacts to the Delta's Primary Zone. Based on the changes made to the Project design and construction methodologies as outlined in the *Supplemental/Subsequent EIR*, Commission staff do not identify any additional potential impacts to the Delta's Primary Zone. Furthermore, Commission staff support this project's efforts to undertake habitat restoration projects on publicly owned land, consistent with *Management Plan* Natural Resources Policy 7, which encourages suitable and appropriate wildlife protection, restoration, and enhancement on publicly-owned land in the Delta.

The proposed project also includes the creation of a loop trail around the perimeter of Emerson parcel for improved shoreline access, education, and recreational activities. In 2006, SB 1556 (Torlakson) mandated the Commission to develop a plan and implementation program for a regional recreational trail system, called the Great California Delta Trail, which will extend throughout the five Delta Counties, and link to the San Francisco

Contra Costa County Board of Supervisors

Sacramento County Board of Supervisors

San Joaquin County Board of Supervisors

Solano County Board of Supervisors

Yolo County Board of Supervisors

Cities of Contra Costa and Solano Counties

Cities of Sacramento and Yolo Counties

Cities of San Joaquin County

Central Delta Reclamation Districts

North Delta Reclamation Districts

South Delta Reclamation Districts

CA State Transportation Agency

CA Department of Food and Agriculture

CA Natural Resources Agency

CA State Lands Commission

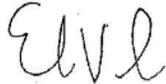
2-1

2-2

2-2 | Bay Trail and Sacramento River Trails. Commission staff are interested in further discussion with  
Con't | DWR staff on Dutch Slough's loop trail to explore the possibility of incorporating it as a future  
link of the Delta Trail.

Please call Associate Environmental Planner Alex Westhoff at (916) 375-4237 or me at the number above if you have any questions. Thank you for this opportunity to provide input.

Sincerely,



Erik Vink  
Executive Director

cc: Diane Burgis, City of Oakley Councilmember and Commission Member  
Mary Piepho, Contra Costa County Board of Supervisors and Commission Vice-Chair

**2. Response to March 6, 2014 letter from the Delta Protection Commission (Commission).**

**Comment 2-1.** The Commission's comment about the Project's consistency with the Commission's *Land Use and Resource Management Plan for the Primary Zone* is noted.

**Comment 2-2.** The Commission's comment about linking Project trails with the Delta Trail is noted. Project Manager Patty Finfrock met with Mr. Raymond Costantino of the Commission on April 30, 2014 to discuss the Project's trails.

**3. Contra Costa County Flood Control and Water Conservation District, March 6, 2014 letter**



Contra Costa County  
**Flood Control**  
& Water Conservation District

Julia R. Bueren,  
ex officio Chief Engineer  
Steve Kowalewski,  
Deputy Chief Engineer

March 6, 2014

Patricia Finfrock  
Department of Water Resources, FESSRO  
1416 9<sup>th</sup> Street, Room 1623  
Sacramento, CA 95814

RE: Dutch Slough Tidal Marsh Restoration  
Our File: 3074-06 037-191-036; 97-74; and 4001-00

Dear Mrs. Finfrock:

We have reviewed the Supplemental Environmental Impact Report (SEIR) for the Dutch Slough Tidal Marsh Restoration—approximately 1,178 acres, which encompasses the areas north of Cypress Road commonly known as the Emerson, Gilbert, and Burroughs properties, each of which is protected from flooding by separate levee systems. Our office received the document on January 23, 2014, and has the following comments:

**General Comments**

- 3- 1. The Contra Costa County Flood Control and Water Conservation District (FC District) is listed as a responsible agency and trusty agency under CEQA; however, we could not find a specific mention of the FC District's fee title ownership of Marsh Creek described in the SEIR. This should be clearly explained in the SEIR since there will be a property transfer between the FC District and Department of Water Resources (DWR), and we will need to have CEQA completed before the property transfer.
- 3- 2. Under Section 1.6, Uses of This Supplemental EIR, State permits that would be required, please specifically mention that any work proposed on FC District property will require a flood control encroachment permit. Issuance of flood control encroachment permits should be clearly mentioned in the SEIR.
- 3- 3. The SEIR should also mention that real property transactions with regards to Marsh Creek will occur between the FC District and DWR.
- 3- 4. Marsh Creek was originally constructed by the National Resource Conservation Service (NRCS), formerly the Soil Conservation Service (SCS). All technical documents pertaining to the levee breach and all major modifications to Marsh Creek will need to be approved by the NRCS. The right-of-way transfer of portions of Marsh Creek will need to be approved prior to releasing the facility to another agency. NRCS approval should be specifically mentioned in the SEIR.

---

*"Accredited by the American Public Works Association"*  
255 Glacier Drive • Martinez, CA 94553-4825  
TEL: (925) 313-2000 • FAX: (925) 313-2333  
[www.cccpublicworks.org](http://www.cccpublicworks.org)

- 3- 5. Currently, the FC District has a License Agreement with East Bay Regional Parks District (EBRPD) for the trail that runs along the Marsh Creek levee. The SEIR should mention the need to coordinate with EBRPD to implement an agreement to continue the use of the trails on top of the Marsh Creek levee. A permit may be required from EBRPD.
- 3- 6. The SEIR should mention that an agreement should be prepared between the FC District and the maintenance entity responsible for the restoration area, which outlines the flow capacity and water surface elevation that needs to be maintained through the project to ensure the proper flood control function of the Marsh Creek channel both in and upstream of the project. Provisions should be made for the maintaining agency to make periodic checks on accumulation of sediment and debris in the restoration area and removal of sediment or debris when water surface targets are exceeded. Provisions should be made for reporting to and coordinating with the FC District on certain monitoring and maintenance activities.
- 3- 7. An Operations and Maintenance Manual that addresses the overall restoration area is recommended for routine monitoring, maintenance, and potential emergency flood situations. This will ensure that all aspects of the project are coordinated in a cohesive way.

**Mitigation 4.1-1, Page 4.1-8**

- 3- 8. Monitoring of the new and existing Marsh Creek channel should be performed at least yearly for 15 years minimum post construction based on hydraulic geometry relationships of the channel systems. Breaching the levees adjacent to the Emerson Slough and Little Dutch Slough levees would increase the tidal prisms by 200 and 850 acre-feet, respectively.

**Mitigation 4.1-2, Page 4.1-8, and 4.1-9**

- 3- 9. Monitoring of the new and existing Marsh Creek channel should be performed at least every 2-3 years or soon after a large ( $>Q_{10}$ ) flow event for 15 years minimum to ensure that sedimentation is not negatively affecting the flood flow conveyance.
- 3- 10. If monitoring indicates that sedimentation in the existing Marsh Creek channel is adversely affecting flood flow conveyance, we request that DWR coordinate with the FC District, under a maintenance agreement to restore flood flow conveyance.
- 3- 11. The long-term maintenance and funding for the proposed facility and impacted portions of Marsh Creek should be addressed in the SEIR. A perpetual funding source should be identified. The FC District has no funds for increased maintenance to the Marsh Creek channel. Therefore, impacts to the Marsh Creek channel as a result of this project, which lead to increased maintenance, cannot be funded by

the FC District. We recommend that the adjacent Reclamation District be responsible for the Marsh Creek channel north of the Contra Costa Canal.

**Conclusion**

- 3- 12. The SEIR should specifically include ESA-PWA's Sediment Monitoring Results & Analysis, Final Hydraulic Memo and Hydraulic and Sediment Transport Model in the appendix of the SEIR.
- 3- 13. The hydraulic analysis of Marsh Creek in regards to the new location of the levee breach adjacent to the Emerson parcel is not addressed in the "Hydrology and Water Quality" section of SEIR. Preservation of the ultimate hydraulic flood control capacity of Marsh Creek should be adequately addressed.
- 3- 14. The new levee on the southern property line should meet DWR's Urban Levee Standards.
- 3- 15. The levee breach should be armored for mitigating erosion and providing stabilization. The impacts of armoring the breach should be included in the SEIR.
- 3- 16. The FC District's primary interest and task with regard to Marsh Creek is improving and maintaining it to provide flood protection for the citizens in East County. While we are supportive of the Dutch Slough Marsh Restoration Project, we will require that all aspects of the project that impact Marsh Creek be continued to be looked at carefully to ensure the creek's ability to provide an appropriate level of flood control in the long-term.

We appreciate DWR's long-standing coordination with our FC District regarding this project and the opportunity to review plans and documents that involve drainage matters. If you have any questions or would like to meet to discuss our comments, please call me at (925) 313-2304 or by e-mail at [hshaf@pw.cccounty.us](mailto:hshaf@pw.cccounty.us).

Sincerely,



Homira Shafaq  
Staff Engineer  
Contra Costa County Flood Control  
& Water Conservation District

HS:cw  
G:\kict\CurDev\CITIES\Oakley\Dutch Slough Restoration\EIR Folder\DEIR December 2013 Comments.docx  
c: M. Carlson, Flood Control  
P. DeJens, Flood Control  
T. Jensen, Flood Control  
T. Rie, Flood Control  
Kevin Rohani, City of Oakley

### **3. Response to March 6, 2014 letter from the Contra Costa County Flood Control and Water Conservation District (CCCFCWCD).**

*The numbering of the Comments and Responses follows the District's numbering within the letter.*

**Comment 3-1.** Include CCCFCWCD's fee title ownership of the Marsh Creek and its levee in the SEIR.

**Response.** The following narrative responds to Comments 3-1, 3-2, 3-3, 3-4, and 3-5.

The Project must coordinate with CCCFCWCD on several issues related to the Marsh Creek levee. Currently, the Marsh Creek channel and the levees on both sides are owned in fee title by CCCFCWCD (Figure RC-1). The Project plans to make two significant changes to the levee on the east side of the creek. First, the levee will be breached near the SW corner of the Project property to route Marsh Creek through the Emerson parcel. Second, a pipeline carrying Ironhouse Sanitary District (ISD) effluent to Jersey Island is located in the toe of the eastern Marsh Creek levee on the Emerson parcel (Figure RC-1). This pipeline would be replaced with a new pipeline in the crown of the Marsh Creek levee to prevent damage to the existing pipe during Project construction.



Figure RC-1. Location of Contra Costa County Flood Control and Water Conservation District Levee (in white), the Ironhouse Sanitary District pipeline in landside levee toe (in red), and the approximate location of the levee breach to route Marsh Creek onto the parcel (in blue).

The current channelized Marsh Creek was constructed by the National Resource Conservation Service (NRCS), formerly the Soil Conservation Service.

CCCFCWCD has agreed to sell to DWR the levee on Project property as well as the bed of Marsh Creek. This transfer can only take place after the following processes: review from CCCFCWCD’s County Council, Real Property Division, and Environmental Services Division; and approval from both the NRCS and the Contra Costa County Board of Supervisors. These approvals are being sought by CCCFCWCD. As part of the process of receiving approval from NRCS, DWR will provide an electronic copy of all related technical reports to CCCFCWCD, to be forwarded to NRCS. The transfer is expected to take place as soon as possible. After the property transfer, DWR (or Reclamation District 2137) will become responsible for maintaining the current level of flood protection within the Project reach, as well as assuring that the Project and its management has no deleterious effects on the flood conveyance of the creek upstream of the Project. Once the new southern flood control levee is constructed on the Emerson parcel the existing Marsh Creek levee will be breached and would no longer be part of CCCFCWCD’s flood control system on Marsh Creek.

CCCFCWCD can only transfer the levee to DWR after NRCS approval, which is being sought by CCCFCWCD. In addition, a portion of the Marsh Creek levee that is owned by CCCFCWCD is licensed to the East Bay Regional Park District (EBRPD) as part of the Marsh Creek Trail. Concurrent with the property transfer to DWR, DWR will enter a license agreement with EBRPD to continue trail operations.

A list of tasks that must be completed prior to the levee property transfer is in Table RC-1.

Table RC-1. Task list and responsible party for preparing for property transfer

<b>Task</b>	<b>Responsible party</b>
Obtain title report (this has been completed)	DWR
Appraisal of property value (this began in August 2014)	DWR
Obtain National Resource Conservation Service (NRCS) and Contra Costa Board of Supervisors approvals for transfer	CCCFCWCD
Complete CEQA process for transfer	CCCFCWCD
Prepare details of Project operations and maintenance	DWR
Complete an Agreement on all terms and conditions for the property transfer, details of Project monitoring and maintenance related to Marsh Creek flood conveyance, and assurances that the Project will not impact flood flow conveyance in Marsh Creek upstream of the Project	DWR and CCCFCWCD
License agreement with EBRPD for Marsh Creek trail segment	DWR

If any Project work will be done on CCCFCWCD property, or that may affect CCCFCWCD property, prior to completing the property transfer, an encroachment permit will be obtained from CCCFCWCD.

It is DWR’s intent is to perform the property transfer as soon as possible to facilitate construction on the Emerson parcel. It is preferable to relocate the new ISD pipeline to the levee crown prior to mass grading on the Emerson parcel. This will allow the existing pipeline to be taken out of operation prior to placing marsh fill to avoid the risk of pipe failure. CCCFCWCD does not allow such encroachments into their levee, so the levee must be purchased by DWR before the pipeline can be placed in the levee.

In addition to the Response above, the following text changes have been made to the Final SEIR (added text is underlined):

In Chapter 3 Project Description, Section 3.2.5 Proposed Modifications to the Approved Project Description, the 2<sup>nd</sup> full paragraph on page 3-7 has been revised to read:

The Project would also include a number of levee and infrastructure improvement components, including construction of new flood protection levees along the eastern and southern restoration area boundaries; relocation and replacement of outboard levee armoring adjacent to the Emerson and Gilbert parcels to improve public safety, long-term stability, and flood protection; construction of upland transition zones between flood protection levee segments and tidal marsh areas; and purchase of the Marsh Creek levee from the Contra Costa Flood Control and Water Conservation District followed by relocation of ISD's effluent pipeline from the toe of the Marsh Creek levee to beneath the crown of the levee. Non-flood protection levee segments would generally be planted with riparian and native vegetation, with plantings dependent on the function and purpose of the levee (Figure 3-3).

On page 3-21, this new paragraph has been added at the end of the Emerson Perimeter Levee and Drainage Divide Levee section:

Currently, the levee along Marsh Creek, extending north to Big Break and east to Dutch Slough, is owned in fee title by CCCFCWCD. Any modifications to Marsh Creek or its levee will need to be approved by CCCFCWCD as well as the National Resources Conservation Service (NRCS), formerly the Soil Conservation Corps, which originally constructed the Marsh Creek flood control improvements. Prior to breaching the levee (or constructing the new pipeline for ISD effluent), DWR would purchase from CCCFCWCD this segment of the Marsh Creek levee. DWR would enter into a Memorandum of Agreement (MOA) with CCCFCWCD and NRCS for the property purchase that would include transferring the License Agreement with East Bay Regional Parks District for the Marsh Creek trail to DWR, DWR's agreement to perform specific monitoring and periodic maintenance of the Marsh Creek channel as needed to maintain current levels of flood protection, and assurances that DWR would conduct future operations and maintenance of the Project. If any Project activities that may affect the levee occur prior to the property transfer, an encroachment permit will be obtained from CCCFCWCD.

The following two paragraphs on page 3-24 have been revised to read:

#### **LEVEE BREACHES**

Once the marsh plains and channels have been graded, tules established, and new flood protection levees constructed, the existing levees would be breached at the mouth of each tidal channel network to restore tidal flows to the interior of each parcel (Figure 3-3). Breaches would be sized to provide full tidal exchange between the sloughs and the restored marsh and open water areas. For the large marsh areas on the Gilbert and Burroughs parcels, breaches would be approximately 60 to 80 feet wide at MHHW and 8 feet below MHHW. Breaches on the small marsh areas on the Gilbert parcel would be 20 feet wide at MHHW and 5 feet below MHHW. The large restored tidal marsh on the Emerson parcel would have two levee breaches at both the upstream and downstream end of the realigned Marsh Creek. The upstream breach would be along the existing Marsh Creek, and the downstream breach would be connected to Dutch Slough. The levee between these breaches would be purchased from CCCFCWCD prior to breaching. The subtidal open water area on the Emerson parcel would include two additional breaches to Emerson Slough. Each of these four breaches

would be ~~approximately 100 up~~ to 200 feet wide at MHHW and 12 to 15 feet deep below MHHW. After breaching, the flood protection function of the existing perimeter levees would be replaced by the new east and south boundary levees, as described above.

### **INFRASTRUCTURE PROTECTION, RELOCATION, AND REPLACEMENT DESIGN COMPONENTS**

Utility infrastructure located on site would be protected or relocated to allow for completion of restoration and levee improvement components. After the levee is purchased from CCCFCWCD, an existing ISD effluent pipeline would be relocated to beneath the crown of the Marsh Creek levee to provide access for service and maintenance. Various PG&E power poles (and associated overhead) lines would be removed, relocated, or preserved, depending on their function. Active gas wells and pipe lines in areas that would be restored on the Gilbert and Burroughs parcels would be capped and decommissioned prior to construction. Buried pipelines would be abandoned in-place by capping the ends. Buildings, sheds, barns, fences, posts, concrete pads and any other such materials within the construction footprint would be demolished and hauled to a nearby landfill or used onsite, as appropriate.

**Comment 3-2.** Specifically mention that any work proposed on CCCFCWCD property will require a flood control encroachment permit.

**Response.** See Response to Comment 3-1, above, including the text change listed for page 3-21.

In addition to the Response above, text within Chapter 1 Introduction, Section 1.6 Uses of This Supplemental EIR, near the middle of page 1-6, has been changed as follows (added text is underlined).

In addition, local permits would be required from Contra Costa Water District CCWD and the Reclamation Districts for levee encroachment/construction. An encroachment permit from CCCFCWCD will be required for work in the Marsh Creek channel or work that affects the Marsh Creek levee (unless property transfer to DWR has occurred).

**Comment 3-3.** Real property transactions between CCCFCWCD and DWR.

**Response.** See Response to Comment 3-1.

**Comment 3-4.** Need for NRCS approval.

**Response.** See Response to Comment 3-1.

**Comment 3-5.** License between CCCFCWCD and EBRPD, and transfer to DWR.

**Response.** See Response to Comment 3-1.

**Comment 3-6.** Need for an Agreement between CCCFCWCD and DWR on maintenance.

**Response.** The following narrative responds to Comments 3-6, 3-7, 3-8, 3-9, 3-10, 3-11, 3-13, and 3-16.

The Project would prepare a monitoring plan, with the primary objective of assessing Project effects on upstream flood conveyance, including sedimentation. Any reduction in conveyance that can be attributed to the Project would result in maintenance actions, such as sediment removal, to restore upstream conveyance to pre-Project levels. Details of the monitoring plan,

management methods, and maintenance triggers and maintenance actions will be described in an Agreement between DWR and CCCFCWCD. RD 2137 and NRCS may also be a party to the Agreement.

Contents of the Agreement would include, but not be limited to, the following:

- **Monitoring Plan.** Monitoring methods and frequency to assess upstream flood conveyance, including sedimentation. Plan will include both regular monitoring and additional monitoring following storm-related high (10-year or greater) flow events. Monitoring results will be submitted to CCCFCWCD.
- **Maintenance triggers.** Results of monitoring will determine if, and what, maintenance is needed to restore upstream flood conveyance.
- **Maintenance.** DWR will conduct maintenance to retain pre-project flood flow capacity if monitoring determines that the Project has decreased the capacity.
- **Flowage easement.** DWR will accept all downstream flow including any solids, sediment, chemicals, and other constituents contained within that flow.
- **Project maintenance.** O&M of the Project, including levees, which may affect upstream portions of Marsh Creek will be conducted by DWR (or RD) in perpetuity, and CCCFCWCD will not be responsible for any O&M within Project or for any upstream effects caused by Project.

**Comment 3-7.** Routine monitoring, maintenance, and flood emergencies.

**Response.** See Responses to Comments 3-6 and 3.9

**Comment 3-8.** Monitoring.

**Response.** See Responses to Comment 3-6 and 3.9.

In addition, the following text change has been made to Mitigation 4.1-1 Erosion Monitoring and Adaptive Management of Emerson Slough, pages 4.1-12 and -13 in Chapter 4.1 Hydrology and Water Quality:

The existing perimeter levees along Emerson Slough shall be monitored for erosion by the Project for at least 5 years post-construction. This will allow for adaptive management of the Project site. If erosion is so great that it undermines levees, or causes water quality impairments, improvements such as channel armoring shall be implemented to manage and reduce erosion. Upon completion of the 5-year monitoring period, results shall be evaluated to determine if excessive erosion is occurring and to recommend whether further monitoring is needed.

**Comment 3-9.** Monitoring after large events to measure sedimentation

**Response.** See Response to Comment 3-6.

In addition, , the following text change has been made to Mitigation Measure 4.1-2, Marsh Creek Channel Monitoring, page 4.1-13 in Chapter 4.1 Hydrology and Water Quality:

Monitoring of the new Marsh Creek channel shall be performed for fifteen years at least yearly for five years minimum to ensure that sedimentation is not negatively affecting flood flow conveyance. Monitoring shall be performed annually for the first five years, and, depending upon those results, every two years for the next 10 years. In addition, supplemental monitoring would also occur after any emergency flood event (a 10-year or greater flow event) that occurs in the first fifteen years. The

monitoring shall include regularly spaced (maximum interval of 500 feet) cross-section surveys and a thalweg survey. Additionally, monitoring the original six channel cross-sections established by NHI in 1999 (NHI 2002) shall be conducted to allow for detection of sedimentation farther upstream from the new channel. If monitoring indicates that sedimentation in the Marsh Creek channel is adversely affecting flood flow conveyance, DWR shall coordinate with the Contra Costa County Flood Control and Water Conservation District (CCCFCWCD) to develop a plan to dredge the creek (and beneficially re-use dredged sediments within the Project site) in order to restore flood flow conveyance to pre-sedimentation levels. The triggers for dredging shall be agreed upon with CCCFCWCD in the Agreement between DWR and the District.

**Comment 3-10.** Maintenance and removal of accumulated sediment.

**Response.** See Responses to Comments 3-6 and 3.9.

**Comment 3-11.** Funding for maintenance.

**Response.** See Response to Comment 3-6.

**Comment 3-12.** Inclusion of reports in appendices.

**Response.** The following report has been included as Appendix B.

ESA PWA, 2013. Marsh Creek Hydraulic Modeling and Sediment Assessment. Memorandum to Mr. Paul Detjens, Contra Costa Flood Control and Water Conservation District dated September 24, 2012; revised August 27, 2013.

Any future updates or revisions to the above report will be submitted to CCCFCWCD for review.

**Comment 3-13.** Hydraulic analysis of Marsh Creek breach and effect on flood capacity of the creek.

**Response.** The following text has been added to Section 4.1.1 Affected Environment, Hydrology, after “Connection to Lands West of Marsh Creek” on page 4.1-8 of the Final Supplemental EIR.

#### CONNECTION TO MARSH CREEK

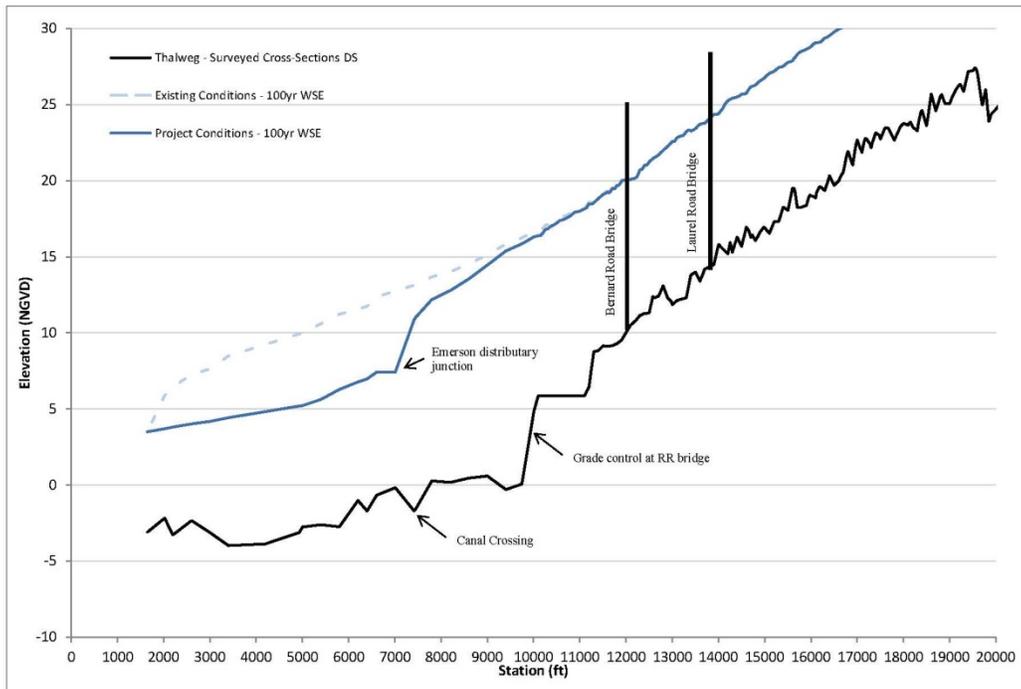
The Project site is bounded on the west side by Marsh Creek, which drains a 128-square mile watershed in eastern Contra Costa County, including the cities of Oakley and Brentwood (NHI, 2007). The mouth of Marsh Creek is at Big Break, at the northwest edge of the Dutch Slough site. Marsh Creek was improved for flood control in the 1950’s by the Soil Conservation Corps (now National Resources Conservation Service) and the Contra Costa County Flood Control and Water Conservation District (CCCFCWCD) is responsible for maintained the design level of flood protection.

ESA PWA conducted hydraulic modeling and a sediment transport assessment of Marsh Creek to evaluate the potential effects of the new Marsh Creek distributary channel through the Emerson parcel on water levels in Marsh Creek (ESA PWA, 2013). ESA PWA used the CCCFCWCD’s existing hydraulic model of Marsh Creek to estimate change in flood levels under Project conditions. Hydraulic modeling results indicate that the proposed Project would not increase flood levels in the Marsh Creek flood control channel under any of the flood scenarios evaluated (ESA PWA, 2013). The decrease in flood levels is attributed to the additional flow capacity provided by the proposed distributary channel and overbank floodplain in the Emerson parcel. Water levels in Marsh Creek

are predicted to decrease relative to existing conditions for the scenarios modeled, including complete blockage of the existing Marsh Creek channel (e.g. due to sedimentation, vegetation and/or an obstruction).

ESA PWA also evaluated the sediment supply and transport conditions in the vicinity of the Project site. Results of this evaluation indicated that the lower reach of Marsh Creek adjacent to the Project site is supply limited for both fluvial and tidal sediments. Significant sedimentation is not expected in either the Marsh Creek channel or the proposed distributary channel due to low supply. However, Marsh Creek and the new distributary channel would have excess conveyance capacity available to offset conveyance losses from sedimentation that may occur.

Figure RC-2 illustrates how the Project is predicted to reduce the estimated 100-year flood level in Marsh Creek, as compared to existing conditions. Existing conditions are based on most recent channel bathymetry surveyed by NHI in 2006, and Project conditions reflect the new distributary channel through the Emerson parcel, as well as the existing Marsh Creek channel. As shown, under Project conditions, the estimated water surface elevation decreases by approximately 4 feet from the proposed new distributary channel downstream to the mouth at Big Break. Reduced water surface elevation extends upstream to near the Bernard Road Bridge, where it converges with the existing water surface.



NOTE: Upstream extent of model truncated for this figure

Marsh Creek Flood Study, 2000.03

Figure RC-2  
100-year Water Surface Elevations for Existing and Project Conditions

## FLOODING

The existing perimeter levees along the Emerson, Gilbert and Burroughs parcels protect properties to the south from tidal flooding. At the west boundary of the site, the perimeter levee on the Emerson parcel ties into the Marsh Creek levee, which protects properties to the east of Marsh Creek from river flooding. At the east site boundary, the perimeter levee on the Burroughs parcel ties into the existing Hotchkiss Tract perimeter levee, which is maintained by Reclamation District 799.

The Project entails construction of a new flood protection levee to replace the flood protection function of perimeter levees breached as part of the Project's marsh restoration. The new flood protection levees would be constructed on the south and east Project boundaries to DWR Urban Levee standards and would maintain or improve the existing level of flood protection for properties to the south and east. As these areas are already zoned for development, any improvement of the levees would not further induce growth. The southern flood protection levee would tie into the existing Marsh Creek levee on the west end, and the existing perimeter levee on the Burroughs parcel on the east end, which continues onto the Hotchkiss Tract (Figure 3-3).

While they no longer have a flood control function, the perimeter levees along Dutch Slough would continue to be maintained in approximately their current configuration (e.g. height and width) to serve as wave breaks to reduce the potential for increased wind-waves along the Jersey Island levee to the north.

**Comment 3-14.** Southern levee needs to meet DWR's urban levee standards.

**Response.** The levee would be built to DWR's Urban Levee Design Criteria, as mentioned in Chapter 3 Project Description, Table 3.1 on page 3-11, and on page 3-23 under Southern Flood Protection Levee Segment.

**Comment 3-15.** Levee breach armoring.

**Response.** Generally the levee breaches would be sized based on tidal geometry estimates, and significant erosion is not anticipated. However, for each of the four bridges installed at the levee breaches on the Emerson parcel, rock armoring would be installed at bridge abutments to protect against local scour. Three of the four bridges on the Emerson parcel would be installed in the perimeter levee along Dutch and Emerson sloughs. In-water placement of armoring along the Emerson perimeter levee is included in the SEIR, per Section 3.2.5 Proposed Modifications to Approved Project Description, page 3-8. The fourth bridge, on the new Marsh Creek channel (where it enters the Emerson parcel), would be constructed in the parcel interior, prior to levee breaching, so no in-water impacts would occur from installation of armoring. The levee breaches on Gilbert and Burroughs are not planned to be armored.

**Comment 3-16.** Assurances that Marsh Creek will continue to provide an appropriate level of flood control in the long term.

**Response.** See Responses to Comments 3-6 and 3-9.

#### **4. Delta Stewardship Council, March 7, 2014 letter**



**DELTA STEWARDSHIP COUNCIL**  
*A California State Agency*

980 NINTH STREET, SUITE 1500  
SACRAMENTO, CALIFORNIA 95814  
WWW.DELTACOUNCIL.CA.GOV  
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March 7, 2014

Chair  
Randy Fiorini

Members  
Phil Isenberg  
Frank C. Damrell, Jr.  
Gloria Gray  
Patrick Johnston  
Hank Nordhoff  
Frank L. Ruhstaller

Patricia Finrock  
Department of Water Resources  
1416 9th Street, Room 1623  
Sacramento, CA 95814

Executive Officer  
Christopher M. Knopp

Via Email: [patricia.finrock@water.ca.gov](mailto:patricia.finrock@water.ca.gov)

**RE: Dutch Slough Supplemental EIR, SCH# 2006042009**

Dear Ms. Finrock:

Thank you for the opportunity to comment on the Supplemental Environmental Impact Report (SEIR) for the Dutch Slough Tidal Marsh Restoration Project. Habitat restoration in the Delta contributes to the Delta Stewardship Council's (DSC's) mission of promoting the co-equal goals of "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem" (Water Code Sec 85054).

As we discussed, the DSC staff is particularly pleased to see the Dutch Slough project move forward, as it is listed as an "early action" in the Delta Reform Act (Water Code Sec 85085(d)). The 1,178-acre restoration project is located within the Western Delta, one of six priority habitat restoration areas designated in the Delta Plan. The SEIR states that, once completed, the project will ultimately restore several habitat types, including 560 acres of tidal marsh, 97 acres of subtidal habitat, 76 acres of non-tidal marsh, and 26 acres of riparian forest.

As you know, the DSC sets state policy for the Delta through the Delta Plan and coordinates state and local agencies to achieve policy objectives. In addition, the Council was granted specific regulatory and appellate authority over certain actions that take place in whole or in part in the Delta. To do this, the Delta Plan contains a set of regulatory policies with which state and local agencies are required to comply. The Delta Reform Act established a certification process for covered actions to demonstrate compliance with the Delta Plan's regulatory policies. (Please refer to our website: <http://deltacouncil.ca.gov/covered-actions>.)

4-1

The DSC staff has reviewed the SEIR along with previously released documents. We do not have any specific comments on the SEIR, but would like to take this opportunity to provide information about how to ensure consistency of the project with the Delta Plan. According to the Delta Reform Act, it is the state or local agency approving, funding, or carrying out the project that must determine if that project is a covered action, and if it is, to certify consistency with the Delta Plan. This certification is subject to appeal to the DSC. We are providing comments now because the consistency certification would be filed with the DSC around the same time that the California Environmental Quality Act (CEQA) process is finalized, and the information developed through the CEQA process will likely be directly relevant to showing consistency with the Delta Plan.

*"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.*

*-CA Water Code §85054*

4-1  
Cont.

If the Department of Water Resources (DWR) determines that the Dutch Slough project is a covered action, it will need to be consistent with all applicable policies. For example, **Delta Plan Policy G P** (23 CCR Section 5002) requires that ecosystem restoration projects use best available science and implement an adaptive management plan, consistent with the framework provided in the Delta Plan (Appendix 1B). Furthermore, this policy states that certifications of consistency with the Delta Plan need to provide "documentation of access to adequate resources and delineated authority by the entity responsible for the implementation of the proposed adaptive management process." As noted in the Delta Plan, science and adaptive management are tools that provide managers and decision makers an approach for using public funds more effectively, and increase the likelihood of success for a given project.

As we discussed, the DSC staff is particularly interested in ensuring that the Dutch Slough project not only restores habitat, but also contributes to collective scientific knowledge regarding effective tidal marsh restoration in the Delta through monitoring and studies that are part of an adaptive management program. We have reviewed the *2008 Dutch Slough Adaptive Management Plan* and we understand that DWR will be revising the plan to reflect changes in the project design since 2008. The DSC staff, including both the Planning Division and the Science Program staff, would be happy to provide early consultation on the revised adaptive management plan when it is ready. The DSC staff would also like to do what we can to help DWR obtain adequate resources to implement the revised adaptive management plan. The Department of Fish and Wildlife and the State Coastal Conservancy, the two agencies supporting the Dutch Slough project, have confirmed their interest in funding the appropriate monitoring and studies.

4-2

The following policies would also be relevant to the Dutch Slough project:

- **Delta Plan Policy ER P2** (23 CCR Section 5006): Calls for restoring habitats at appropriate elevations and in a manner consistent with Appendix 3, which is Section 1, Part II of the California Department of Fish and Wildlife's *Draft Conservation Strategy for the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Region* (DFG 2011).
- **Delta Plan Policy ER PS** (23 CCR Section 5009): States that the potential for new introductions of, or improved habitat conditions for, nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a way that appropriately protects the ecosystem.
- **Delta Plan Policy DP P2** (23 CCR Section 5011): States that ecosystem restoration projects must be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible, considering comments from local agencies and the Delta Protection Commission.

4-3

The Delta Plan also contains several non-binding recommendations that may be relevant to this project, many of which are already addressed in the SEIR:

- **Wildlife-friendly farming.** Delta Plan Recommendation DP R10 calls on the Department of Fish and Wildlife, the Delta Conservancy, and other ecosystem restoration agencies to encourage habitat enhancement and wildlife-friendly farming systems on agricultural lands to benefit both the environment and agriculture.

Patricia Finfrock  
Department of Water Resources  
March 7, 2014  
Page 3

4-3  
Cont.

- **Recreation on public lands.** Delta Plan Recommendation DP R11 calls for water management and ecosystem restoration agencies to provide recreation opportunities, including visitor-serving business opportunities, at new facilities and habitat areas whenever feasible. Recommendation DP R14 calls on the Department of Fish and Wildlife, in cooperation with other public agencies, to collaborate with nonprofits, private landowners, and business partners to expand wildlife viewing, angling and hunting opportunities. Recommendation DP R16 states that public agencies owning land should increase opportunities, where feasible, for bank fishing, hunting, levee-top trails, and environmental education.
- **Water quality.** Delta Plan Recommendation WQ R1 states that water quality in the Delta should be maintained at a level that supports, enhances, and protects beneficial uses identified in the applicable State Water Resources Control Board or regional water quality control board water quality control plans. Delta Plan Recommendation WQ R2 states that covered actions should identify any significant impacts to water quality.

We look forward to working with you to ensure that the Dutch Slough project moves forward as quickly as possible while providing an opportunity to learn more about tidal marsh restoration in the Delta and addressing multiple goals for the Delta. I encourage you to contact Jessica Davenport at [jdavenport@deltacouncil.ca.gov](mailto:jdavenport@deltacouncil.ca.gov) or (916) 445-2168 with your questions, comments, or concerns.

Sincerely,

ss  
Deputy Executive Officer

Cc Paul Helliker, DWR  
Sean Bagheban, DWR  
Carl Wilcox, DFW  
Dave Zezulak, DFW  
Amy Hutzel, State Coastal Conservancy

**4. Response to March 7, 2014 letter from the Delta Stewardship Council (Council).**

**Comment 4-1.** The Council's comment about consistency with the Delta Plan is noted.

**Response.** DWR is preparing a Certification of Consistency, addressing all components in the Certification.

**Comment 4-2.** The Council's comment about Delta Plan policies is noted.

**Response.** See Response to Comment 4-1.

**Comment 4-3.** The Council's comment about non-binding recommendations in the Delta Plan is noted.

**Response.** The three listed topics have been addressed in the Final, and Supplemental EIRs for the Project.

## **5. California Native Plant Society, March 7, 2014 letter**



CALIFORNIA  
NATIVE PLANT SOCIETY

East Bay Chapter, [www.ebcnps.org](http://www.ebcnps.org)  
PO Box 5597, Elmwood Station, Berkeley, CA 94705

March 7, 2014

Submitted via email to:

Patty Finfrock  
[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Re: Dutch Slough Tidal Marsh Restoration Draft Supplemental EIR

Dear Ms. Finfrock,

The California Native Plant Society's East Bay Chapter is writing to comment on the supplemental EIR for the Dutch Slough Tidal Marsh Restoration Project.

The California Native Plant Society is a statewide non-profit organization that works to protect California's native plant heritage and preserve it for future generations. The Society's mission is to increase the understanding and appreciation of California's native plants and to preserve them in their natural habitat. We promote native plant appreciation, research, education, and conservation through our 5 statewide programs and 34 regional chapters in California. The East Bay Chapter (EBCNPS) covers Alameda and Contra Costa Counties and represents some 1000 members.

In 2010, the EBCNPS published a Guidebook to the Botanical Priority Protection Areas of the East Bay. These fifteen protection areas (BPPAs) were selected as those areas within Alameda and Contra Costa Counties that contain high value botanical resources that should be protected. The guidebook was created with the expert advice of many professional botanists to aid city and county planners in locating important native plant species and communities. The project considered by this Supplemental DEIR falls within the boundaries of our Delta BPPA. This BPPA was deemed worthy of priority protection by EBCNPS due to its alkaline soils and areas of stabilized interior dunes which provide habitat for a variety of rare plant species and communities. EBCNPS is encouraged that this restoration effort is taking place, however, we are concerned that originally proposed restoration of the rare upland habitats has been abandoned in this current plan in favor of additional marsh. Both the Emerson Parcel and the Burroughs Parcel are known to contain extant sandy soils that would be excellent candidates for restoration of stabilized interior dune habitat. The sandy soil areas of the Emerson parcel in particular are known to contain remnant dune flora, and would be well suited to restoration and enhancement. Similar remnant dune habitats likely exist in other areas of the proposed project site as

5-1

*Protecting California's native flora since 1965*

5-2 well. All parcels in this project contain areas of alkaline soils that should also be preserved and restored as upland habitat areas.

Existing dune vegetation in the Oakley area most closely conforms to the Stabilized Interior Dunes element first described by Holland in his *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986) and, based on Holland's description, continues to be recognized as a vegetation community that is rare enough to merit inclusion in the California Native Plant Society's

5-3 Inventory of Rare and Endangered Vascular Plants of California. The significance of impacts to sandy soils and associated remnant dune vegetation within the Dutch Slough Tidal Marsh Restoration Project must be analyzed giving consideration to this rare vegetation community not only on a project level but also on a regional basis, irrespective of the presence or absence of silvery legless lizard or other rare wildlife species that historically have been associated with dune habitat in the region. In the original Certified EIR (2010), loss of this habitat type was evidently intended to have been at least partly mitigated by the proposed dune restorations that have since been withdrawn as indicated by their absence in the current Supplemental DEIR.

5-1  
Con't The Certified EIR (2010) adopted restoration components including reconstructed interior dune scrub, as well as upland and lowland grassland and oak savanna. However these upland habitats have been abandoned in the current proposal (Supplemental DEIR 2014) in favor of additional marsh. No explanation is given for the omission of "reconstructed interior dune scrub" (see Figure 3-2, page 3-5) from the Supplemental DEIR as a restoration component. It is entirely unsatisfactory that the dune habitat restoration (which was an approved element of the Certified EIR) has been removed from the Draft Supplemental EIR. We are compelled to point out that the dune scrub habitat is recognized as a unique and threatened floristic assemblage characteristic of the region, much of which has been destroyed and lost in the past decade within and adjacent to the City of Oakley. The California Natural Diversity Database lists stabilized interior dunes as rarity rank G1 S1.1, classifying the community as critically imperiled throughout its global range and very threatened at a state level. This project's proposal to "restore" an area known to contain extant sandy soils and remnant dune flora without attempting to restore and enhance those areas to valuable interior dune ecosystems is seemingly contradictory.

So far as we know, the only examples of dune (or sand mound) scrub that are currently protected in Oakley are the city's Silvery Legless Lizard Preserve on Walnut Meadows Drive and very limited areas of the EBRPD's Big Break Regional Shoreline, most of which are highly degraded. Outside of Oakley, the Antioch Dunes NWR and Brown's Island also represent protected dune habitat. The former is a specialized subset under intense management by the U.S. Fish and Wildlife Service for Federally listed Endangered plant and butterfly species. The latter is somewhat unique in that it represents a relatively successful creation of rare dune flora/habitat by horticultural propagation and translocation. Due to the extreme rarity of this habitat type, it is surprising that this document fails to plan for, or even consider the restoration of stabilized interior dunes as part of overarching project goal #1: "Benefit native species by re-establishing natural ecological processes and habitats." This issue should be corrected.

Besides the issue of not restoring a rare habitat type, it should be noted that due to the extreme rarity of stabilized interior dunes characterized by sandy soils, any loss to this critical habitat type due to this project's proposed actions must be accompanied by mitigation. In the Biological Resources Chapter 4.2 on page 4.2-4 of the Supplemental EIR, it is stated that the "loss or substantial reduction in area or distribution of a unique or rare plant or animal community" should be used as a criterion for determining significant impacts to biological resources. This supplemental DEIR does not mention any

5-4 mitigations for loss of sandy soils or alkaline soils as a result of this project. Protection, restoration, enhancement, or creation of this habitat is highly desirable from a biodiversity perspective within the Project site as well as in the greater region. The potential loss of this habitat due to the proposed project without appropriate mitigation is unacceptable, and it should be addressed in the discussion of impacts and mitigation measures.

EBCNPS appreciates the consideration of these comments and will look forward to following this project in the future. Please do not hesitate to contact us with questions at [conservation@ebcnps.org](mailto:conservation@ebcnps.org) or by phone at (510) 734-0335.

Sincerely,



Mack Casterman

Conservation Analyst

California Native Plant Society, East Bay Chapter

## **5. Response to March 7, 2014 letter from the California Native Plant Society (CNPS).**

**Comment 5-1.** Dune restoration is no longer part of the Project, but should be done. Grassland and oak savannah habitats also appear to have been dropped from the current Project design.

### **Response.**

Dune restoration. The comment is correct in pointing out that dune habitat restoration was not included in the project description in the Draft Supplemental EIR. In the Final EIR, dune scrub restoration was proposed for two small areas of the Emerson parcel, though the size of these areas was not defined. The reasons that dune restoration was dropped from the project description in the Draft Supplemental EIR are summarized below.

After DWR certified the Final EIR in 2010, restoration of sustainable dune habitat was considered to be infeasible for the following reasons:

- Each area of appropriate soils (remnant dunes) is small and isolated.
- Most remnant dunes within the Project site have been heavily impacted by cattle and agricultural practices such as disking and leveling. Most significantly, decades of cattle manure inputs have added nutrients to the soil, creating conditions more favorable to invasive weeds than to dune-adapted plants which evolved to be most competitive in low-nutrient environments.
- The only dune-adapted plants on the Project site are two locally-common plants that have no regulatory status. These plants occur in only one area of the Project site.
- Keeping restored dune habitat free of weeds would be a perpetual management problem.
- Management of restored dunes requires specific expertise and management in perpetuity.

As a result of these factors, DWR concluded that restored dune habitats would not be sustainable without expert knowledge and perpetual input of funds and maintenance. These requirements could not be effectively met by DWR, and US Fish and Wildlife Service personnel from Antioch Dunes National Wildlife Refuge were unable to manage restored dunes, so this component was eliminated from the Project design in 2011.

Since receiving the CNPS comment letter on the Draft SEIR, DWR has re-examined the possibilities for dune restoration by taking the following actions:

- A new plant survey of remnant dunes and potentially alkaline soils was conducted on March 21, 2014 by DWR botanists. Results of this survey are in Appendix C.
- DWR staff met at the Project site on April 3 with US Fish and Wildlife Antioch Dunes personnel, Susan Euing and Louis Terrazas, to discuss dune restoration.
- Gail Newton, DWR FESSRO<sup>1</sup> Office Chief, who has extensive coastal dune restoration experience, visited the site on April 11 to assess restoration possibilities.

After the consultations with dune restoration experts, all the difficulties of dune restoration that were cited above remain, especially the concerns about long-term sustainability and weed control, and large-scale dune restoration is still considered to be infeasible. Successful introduction of native dune endemic plants may be feasible, though re-establishing the

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<sup>1</sup> FESSRO-FloodSAFE Environmental Stewardship and Statewide Resources Office

ecological, biotic, and geophysical conditions needed for a fully-functioning dune ecosystem is not possible at the small scale of the available sandy soils at the Project site.

An additional, recent, complicating factor, as described above in the Response to Letter 1, is that the vineyard, which was planted over a century ago on the site's largest remnant dune, now would be preserved as an operating vineyard. The majority of the vineyard area, therefore, is not available for dune restoration. The vineyard area is probably the best site for dune restoration because cattle use has been low, so the nutrient content of the soil is much less than on the other, grazed, remnant dunes. Also, the two sand-adapted native plants on the Project site, bush lupine (*Lupinus sp.*) and birdcage evening primrose (*Oenothera deltoides cognata*), are only found in and around the vineyard. These two species are locally common on sandy soils, but are not considered to be rare, threatened, or endangered, and therefore have no regulatory status.

Although the vineyard would not be restored as dune habitat, the native plants that currently exist around the vineyard perimeter would be preserved. There are many primrose plants along the south and east sides, and several large bush lupine plants on the south, east, and north sides, as well as California poppies and black walnut trees on the east side.

Another new component of the Project will be plots to test the feasibility of incorporating dune plant restoration into future Project phases. Two portions of the vineyard area would be established as plots for growing native dune-adapted plants and testing the feasibility of introducing them on a larger scale (Figure CR-3). One area is the southwest corner of the vineyard, where about 0.6 acres of vines would be removed; the other is along the east side where an approximately 50 foot wide buffer would be preserved outside the vineyard, an area of about 0.6 acres. These areas were chosen for the following reasons:

- Southwest corner of vineyard:
  - Most of the vineyard is quite weedy, but the southwest corner has almost none, so native dune plants may have a competitive advantage in this area, and weed control is likely to be less intensive.
  - Seedlings of lupine and primrose are present here, indicating that with proper management, these two dune-adapted plants, at least, can grow within this area.
  - Vines in the southwest corner are young, indicating that they have been replaced in the recent past, and suggesting that this area is less suitable for grape production than the rest of the vineyard. Removal of these young vines is not considered to be a significant impact to the cultural values of the vineyard.
- East side:
  - This is where most of the native plants (black walnut, California poppy, lupine, and primrose) around the vineyard occur. As part of the test plot management, weeds in this area would be controlled to provide opportunities for expansion of native species and introduction of other dune-adapted species.
  - The area is small enough to make weed control feasible. The efficacy of weed control measures in this area would help DWR assess the feasibility of dune restoration in future Project phases.

DWR would welcome the participation of CNPS staff or volunteers in establishing or maintaining dune vegetation in the test plots.



Figure RC-3. Vineyard on Emerson parcel showing locations of test plots for dune-adapted plants.

Grassland and oak savannah restoration. The current restoration design does include restoration of grassland, as stated in the Draft SEIR Chapter 3 Project Description under ‘Habitat Restoration and Enhancement Design Components’ on page 3-9, and ‘Native Grasses’ on page 3-25. Many levee slopes and some of the upland transition areas between levees and tidal marsh will be planted to native grasses, totaling approximately 4 acres. Some oak trees will be planted, though planted areas are unlikely to be large enough to qualify as ‘woodland’. Final revegetation plans have not been finalized, so specific areas of these vegetation types have not yet been determined.

Text within Chapter 3 Project Description in the Final SEIR has been changed as follows (added text is underlined).

In Table 3.1, page 3-11, the following has been added:

Component	2010 EIR (Alternative 2)	Supplemental EIR	Component Detail
<u>Native Dune-adapted Plant Test Plots</u>	NA	<u>In Final SEIR, two areas on the Emerson parcel, bordering the vineyard, will be managed and enhanced for native plants, especially dune-adapted endemics.</u>	<ul style="list-style-type: none"> <li>▪ <u>About 0.6 acres of vines will be removed from the southwest corner. This area has young vines indicating that they were recently replaced, so are not as valuable as the heritage vines in the rest of the vineyard. This area will be managed for native dune-adapted plants.</u></li> <li>▪ <u>Along the eastern boundary of the vineyard, about 0.6 acres will be managed and enhanced for native plants, including dune-adapted plants.</u></li> </ul>

On page 3-20 the following has been added:

**NATIVE DUNE-ADAPTED PLANTS TEST PLOTS**

Although large-scale dune restoration is not being considered at this time, test plots totaling about one acre near the Jose vineyard would be established to test its feasibility for future Project phases. Management actions such as weed control, soil disturbance, and planting would be done to encourage expansion of existing populations of native plants and successfully introduce new species. Results of test plot monitoring will be used to assess the feasibility of expanding populations of these plants to other areas within the Project site.

On page 3-25 the following has been added to the Vegetation Plan section:

**NATIVE DUNE-ADAPTED PLANTS**

Following initial weed control, native dune-adapted plants would be seeded on two areas of sandy soils near the vineyard on the Emerson parcel. Regular weed control is expected to be needed until populations become established. Different plant species and treatments will be tested within these areas.

**Comment 5-2.** Areas of alkaline soil should be restored as upland habitat.

**Response.** The site contains two small areas of common salt-tolerant plant species (see Figure 1 in Appendix C), but plant surveys of these areas have not found any of the plant species with regulatory status. These areas are both wetlands, so restoration as uplands would be inappropriate. The area on the Emerson parcel was formerly used for disposal of liquid dairy waste and is considered to be artificially saline. The area on the Gilbert parcel would become part of the managed wetland; soils will not be disturbed, though the hydrology will change. These areas are so small that active restoration of alkaline wetland is infeasible and will not be done.

**Comment 5-3.** Impacts to dune habitats must be analyzed both on a Project level and as a regional cumulative impact.

**Response.** Rare plant surveys of the entire Project site were done during the preparation of wetland delineations in 2004 and 2009, and results were used in analyses for the Final EIR. Because none of the dune endemic species with regulatory status were found during these surveys, it was determined that the Project site did not include any dune habitats, and the Final EIR did not include any impacts to or mitigation for dune habitat.

For this Final Supplemental EIR, an additional survey of the site's sandy soils and areas with potentially alkaline soils was done on March 21, 2014. Again, none of the sensitive dune- or alkali-endemic plant species were found. The conclusion in the Final EIR, that there would be no impacts to dune habitats, is still considered to be accurate.

The plant surveys did find two locally common dune-adapted species, bush lupine and birdcage evening primrose, but only at the perimeter of the vineyard on the Emerson parcel. Neither species has any regulatory status, and alone do not make up a dune community. The Project design has been changed to include preservation of the vineyard along with the native plants (including lupine and primrose) at the perimeter. (See Response to Comment 5-1, and Letter 1-1 concerning the Jose vineyard, above.)

Therefore, because the Project would have no impact on sensitive dune habitat, and existing dune-adapted plants will be preserved, neither Project-level nor cumulative impact analyses are required.

**Comment 5-4.** If dune restoration will not be part of the Project design, impacts to dune habitat must be mitigated.

**Response.** Although sandy soils of remnant dunes are present on the Project site, these areas are highly disturbed and no species with regulatory status are present on these remnant dunes. Therefore, the site does not contain any dune habitats or communities. The Project will have no impacts to dune habitat so no mitigation is required; this was also the conclusion reached in the Final EIR.

The test plots for dune-adapted plants that would be established on the Emerson parcel are new features of the Project design and are not proposed as a mitigation measure.

See also the Responses to Comments 5-1 and 5-3.

**6. Mr. Stephen Geller on behalf of Mr. Richard and Mrs. Bernice  
Stephens, March 7, 2014 letter**

LAW OFFICES OF STEVEN J. GELLER

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March 7, 2014

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Ms. Patricia Finrock  
Department of Water Resources  
FloodSAFE Environmental  
Stewardship and  
Statewide Resources Office  
(FESSRO)  
1416 9th Street, Room 1623  
Sacramento, CA 95814

Re: Dutch Slough Supplemental EIR Comments  
Mr. Richard Stephens  
5031 Jersey Island Road  
Oakley, CA 94561  
APN 032-081-003

Dear Ms. Brewer and Ms. Finrock

As you are aware, my office represents Mr. Richard Stephens whose residence will be severely impacted by the proposed Dutch Slough restoration project. Attached you will find the comments from Mr. Stephens as to the Supplemental EIR prepared for the proposed Dutch Slough project.

6-1 The project, as now proposed significantly deviates from the project discussions between DWR and Mr. Stephens in 2012 and 2013. It was previously represented that the levee to be constructed would run along the south boundary of the Stephens property preserving the riparian woodlands and canal and then the levee would veer to the northwest. However, that plan now appears to have been abandoned and it now appears that the location of the levee will be constructed after consultation with residential developers who will be building homes across Jersey Island Road. It also appears the course of the levee may now be directly behind the 5041 Jersey Island Road property.

6-2 It also appears that with the levee directly behind the home, there will be significant water intrusion as the Stephens property is lower than the flooded water level when the levees are complete and water is allowed into the area. There is a well on the Stephens property, there is significant concern regarding contamination in the well. The septic system servicing the home is also in the rear yard and the impact of water intrusion is not addressed in the supplemental

6-2 Cont. EIR regarding the impact of water intrusion on the septic system. These items will significantly impact on the quality of life of the owner of the property and will reduce the value of the property significantly.

6-3 Further, there are view impacts on the Stephens property should the levee be constructed behind the existing home as compared to the levee veering to the northwest. It will change the view amenity of the home from a pastoral view to a view of a levee. Further, there appears to be continued plans to utilize the area across the canal for public parking and a park and the area plan appears to now reflect the strong possibility of a walking trail being constructed on top of the levee. This will allow users of the trail to look directly down into the rear yard and rear of the home.

6-4

The comments by Mr. Stephens attached are incorporated herein and are his comments to be addressed after reading the supplemental EIR.

Hopefully, responses to the EIR comments will adequately address the concerns of Mr. Stephens. After discussion with him, the magnitude of the proposed changes from the original EIR should be addressed. There was no reference in the supplemental EIR to his specific property.

In general, as proposed this matter may be suitable for an Inverse Condemnation action should the levee be constructed directly behind the Stephens residence. We have considered the ramification of the project as proposed in the new supplemental EIR and there are two solutions that are reasonable.

- 6-5
1. Construct the project as originally proposed to Mr. Stephens by having the levee travel in a northwesterly direction away from the property.
  2. Purchase the Stephens residence. This will allow a direct and more favorable alignment with the levee without the concern of the existing home and the impacts of the levee. This may be accomplished by the developers who are going to construct the homes across the street. They can use the property as a project office.

Again, attached are the comments from Mr. Stephens as to the supplemental EIR and those comments should be directly considered as comments to the supplemental Dutch Slough EIR.

Please address all comments made to these concerns and when the responses are prepared, please send to both Mr. Stephens and myself.

Sincerely,



Steven J. Geller, Esq.  
Attorney for Richard Stephens.

Jan24, 2014

Dear Mr. Gellar,

Thank you for sending the introductory letter to DWR.

6-6

I read the Draft Supplement EIR Report of the Dutch Slough Project. There is little that in any way reflects the conversations and meeting we had last year with DWR and the new developers of the East Hotchkiss tract. Page 3-7 states the change for the project reflects that "DWR is proposing to shift the alignment of the eastern flood protection levee from the eastern Project boundary to an alignment on higher ground and in a location that reduces cost and fill volumes. The new levee alignment would follow Jersey Island Road on the southern portion of the Burrough's parcel, bisect the parcel between the enhanced irrigated pasture and the restored marsh area..." This is shown in the Supplemental EIR maps and was what the original discussions with DWR reflected; that is, the levee would run along the south boundary of our property but preserving the riparian woodlands and canal, then behind our property and they veer off to the northwest. See also the description on page 3-21. We were subsequently told that they could veer the levee away from our property earlier at the southwest corner rather than the northwest corner as shown on the map.

There is only the additional paragraph on 4.1-15 that states "The Project is currently coordinating the location and design of the southern portion of this levee with the residential developers." One would believe this refers to the portion to the south of our property, not the portion to our east and north as disclosed by DWR after our meeting. Indeed, throughout the EIR and Draft Supplement there is no explicit acknowledgement of concerns regarding our property. All of the references are only referring to the development property on the East side of Jersey Island Road. This sentence explicitly obfuscates the Supplemental EIR description of the levee placement so they can change the location based upon the developer's wishes; or do you think the EIR only allows them to change the 'southern portion' (which is actually not specifically defined).

6-7

In addition to the concerns I listed in our letter to you, the Supplement EIR does emphasize a couple of new concerns as well as supports others we presented to you. In our previous discussions with Ms. Finfrock (DWR) we raised concerns about our drinking water well and she assured us that they did not expect there would be any water intrusion and if there was they would 'connect us to the City water supply'. The Supplement EIR addresses, based now on research data, the issue of water seepage and intrusion and they are unequivocal that there will be significant intrusion. Although they only measured and plan to monitor that intrusion to the CC Canal, they conclude that filling the water to the levee **will** result in: "East of this levee, groundwater elevations are likely to increase during tule cultivation and after breaching." (pg. 4.1-15). They conclude that this will be not significant for the "adjacent properties to the East" because features (fountains, lake, etc). It does not acknowledge our water well and dependence on it. It does not acknowledge that we are not behind the development "dry levee" and, I would add too, that our property is significantly lower than the flooded water level and thus we can expect water intrusion into our property.

6-7

Con't

They also raise concerns over the "high soil permeability" and production of toxins in the water that seeps from the construction and following that will result in degradation of drinking water quality (e.g., methyl mercury, organic compounds, increased salinity, etc.). The "mitigation" of this issue (Mitigation 4.1-6 pg 4.1-15) is that someone will assess the "relative role of the Project in contributing to groundwater pumping needs." It is disturbing that they do not know what amount of intrusion there will be and that they do not take full responsibility for costs and damage to our property. It is clear that the mitigation discussed is related to the development property and not our parcel as we have no pumps or problems. Ground water monitoring (Mitigation 4.1-7; pg 4.1-16) to determine baseline groundwater levels and quality have been monitored only at sites very distant from our parcel and these wells only monitor the "shallow (within 30' of the surface) aquifer". These studies do not address any issue of potential changes to the quality of our drinking water.

6-8

The supplemental EIR describes the "Enhanced Irrigated Pasture" (pg 3-18). 1 bis is the northern portion of the Burroughs property that flanks our north property line. We were told by DWR that it would remain for cattle grazing "as it is used now". But the EIR states differently...that the intention is to let the grasses grow for the purpose to "increase the rodent and insect" populations. While great for the raptors, this means that there will be a new rodent and insect burden that was never previously revealed. There was no discussion of mitigation.

Here is the amended list of concerns at this point:

Here are some major points and questions for you as we see them:

6-9

1. Being surrounded by the levee will ruin the environment and the value of our property for us or for others...it is damaged and de facto condemned.

6-10

2. There were other assurances, such as no recreational paths on top of the levee or other dedicated uses for California State property such as parking for said trails and access. It seems OK for the developer to place their levee on State property, and they also want additional access. Previously we were assured there would be no trail, especially as this would get the public too close to the Swainson's hawk preservation site (apparently a major concern for some State agency, perhaps Fish and Game?).

6-11

We cannot imagine being surrounded on three sides with people looking down onto us; an utter loss of even a modicum of privacy. The fourth side will be Jersey Island road with thousands of additional cars per day by those living in the East Cypress Project!

6-12

The traffic impact was not documented in either EIR.

6-13

3. Can we seek mitigation for issues of concern about exposure to toxics during the earth and dirt digging and relocation? This area was a major intensive dairy farm decades previously and has consequently accumulated unknown levels (nothing was tested for the EIR) of concentrated chemicals and toxins during this period. We are directly down wind of the project; thus, we will be exposed to massive amounts of airborne dirt and pollution. THE SUPPLEMENTAL EIR NOW DESCRIBES THAT THERE ARE TOXINS AND THAT THESE WILL NOT BE CONTROLLED. AIRBORNE EXPOSURE IS NOT ADDRESSED IN EITHER EIR, ONLY CONSTRUCTION NOISE.

6-14 | 4. If they build the levee out a 1,000ft to our north as suggested in the attached email, the reason is to avoid building extra levee distances since they have to go around a gas well at that location. This will result in a swath of State land 1000 x 300ft along Jersey Island Road but inside of the dry side of the levee (7 acres of the 170 proposed for this purpose). Who will maintain this as it would be bisected by the levee? We have a bad feeling that the developers will be happy to make a park there or some other activity such as a maintenance yard for their development. Can the State contract to us the use and upkeep responsibility or can we be deeded the parcel?

6-15 | 5. If we have no choice and they build the levee surrounding our property, can we be guaranteed that the levee will be certifiable for an "urban protection levee" by FEMA Zone X standards as "promised" by the developers?

6. We are very concerned about the lack of design for seismic performance of the levees and seismic criteria were not mentioned in the EIR; thus, apparently not a consideration despite living in an earthquake-prone region with major faults nearby.

6-16 | 7. WATER INTRUSION INTO OUR PROPERTY AND INTRUSION INTO OUR WELL AND DEGRADATION OF DRINKING WATER QUALITY BY SALINITY AND TOXIN COMPOUNDS.

6-17 | 8. INCREASE IN RODENT AND INSECT POPULATIONS. NO EVALUATION NOR MITIGATION IN EITHER EIR.

As you discussed with us, the most cost-effective solution may be to buy our property and given the scenario in Ms. Finrock's last email; who would want to live in such a hole in the ground?

We suppose raising our house and property 15' is probably not an option?

Do we need to have our property independently surveyed to know where our property lines actually are located?

1bis sums it up at this stage. Let me know if there is anything else we can do, especially concerning public response to the supplemental EIR.

Best regards,

Richard and Bernice Stephens

5031 Jersey Island Rd

Oakley, CA 94561

**6. Response to March 7, 2014 letter from Mr. Steven Geller on behalf of Richard and Bernice Stephens.**

**Comment 6-1.** Location of levee on Burroughs parcel.

**Response.** As a result of the comment received, the Department reviewed the analysis within the Supplemental EIR as well as the Draft EIR (DEIR) and determined that both documents adequately identify the proposed levee alignment and also represent an appropriate level of analysis and significance determination.

The analysis within the DEIR was for the levee alignment to be located immediately west of Jersey Island Road, going north from East Cypress Road to Dutch Slough, where it would connect with the levee system owned and maintained by RD799. This alignment analyzed in the DEIR encompassed the inholding for a private house (now owned by the Stephens) on three sides (south, west, and north) and the easement for the privately-operated active gas wells along Jersey Island Road. (DEIR page 2-23; and Figures 2-10 and 2-11, pages 2-31, 2-33, respectively.)

The significance criteria relied upon in the 2010 DEIR is based on the CEQA Guidelines (Appendix G) and professional judgment. On page 3.8-2 the Draft EIR states: “These guidelines state that the project would have a significant impact on visual quality if it would:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings, or
- Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.”

The DEIR’s thresholds of significance properly address questions regarding the effect of the project on the environment. Under CEQA, the issue is whether a project will affect the environment of persons in general, not whether the project will affect particular persons. This includes a scenic vista. For purposes of the threshold of significance, a viewpoint that is accessible only from private property is not considered a scenic vista.

The Commenter is correct that the current project includes changes and refinements to project features including modifications to the construction and alignment of levees. This was identified in the Supplemental EIR.

The levee alignment analyzed in the Supplemental EIR, rather than surrounding three sides of the private property, would follow Jersey Island Road on the southern portion of the Burroughs parcel up to the ditch immediately south of the Stephens property, then go northwest to bisect the parcel and connect with the existing flood protection levee on the east side of Little Dutch Slough (SEIR, p. 2-2.). This levee will surround the restored tidal marsh and provide flood and seepage protection for the properties south, east (including the Stephens property), and north of

the restored marsh. For CEQA purposes, the aesthetic impact of this alignment is not significantly different from the alignment analyzed in the 2010 EIR and does not represent a substantive change in views compared to the Project described in the 2010 EIR.

The Draft SEIR in Chapter 4 Environmental Setting, Impacts, and Mitigation Measures included the following statement on page 4.1-19: “[t]he Project is currently coordinating the location and design of the southern portion of this levee with the residential developers.” DWR is not aware of currently active plans for urban development east of Jersey Island Road, and would not be the CEQA lead agency for such a project if proposed. As a result it is not necessary for DWR to speculate about such a project. Pursuance of a residential development project at this location is not a reasonably foreseeable consequence of DWR’s Dutch Slough project and is outside the scope of DWR’s Dutch Slough project and its CEQA documents.

For the sake of clarification, the following text change (deletion is struck out) has been made on page 4.1-19 of the Final SEIR. The significance conclusions within the Supplemental EIR and DEIR are unchanged.

**East.** To the east across Jersey Island Road are diked, subsided lands (the Hotchkiss Tract; RD 799) proposed for residential development; no tidal slough divides the Burroughs parcel from these properties. The revised design for the Project includes construction of a flood control levee extending north-south for approximately half a mile along the west side of Jersey Island Road from the Project’s southeast corner, and then trending in a southeast-northwest direction across the rest of the Burroughs parcel to Little Dutch Slough (Figure 3-3). The northern portion of this levee would protect the remaining mile of Jersey Island Road north to the Jersey Island bridge. ~~The Project is currently coordinating the location and design of the southern portion of this levee with the residential developers.~~

Also for clarification, the following text change was made in Chapter 2 Executive Summary Section 2.3 Proposed Modification to the Project, on page 2-2.

- DWR is proposing to shift the alignment of the eastern flood protection levee from the eastern Project boundary to an alignment on higher ground, and in a location that reduces cost and fill volumes. The new levee alignment would follow Jersey Island Road on the southern portion of the Burroughs parcel up to the large east-west drainage ditch, then go northwest to bisect the parcel between the enhanced irrigated pasture and the restored marsh area, and connect with the existing flood protection levee on the east side of Little Dutch Slough.

**Comment 6-2.** Groundwater intrusion into drinking water well, septic system, and property.

**Response.** As acknowledged in the SEIR (Chapter 4 Environmental Setting..., Impact 4.1-6), the Project is likely to increase levels of local groundwater, and mitigation measures are included for these impacts to neighboring properties. The private inholding has always been included in all mitigations for properties to the east of the Project, although in the Draft EIR and SEIR this was stated imprecisely as “properties east of Jersey Island Road”; this language has been clarified in the Final SEIR to make inclusion of the inholding explicit. The new Project levee that would separate the restoration project from the urban development to the east would include a toe drain or other groundwater collection system, which would be designed to maintain current

groundwater levels to all the properties to the east. Monitoring would be conducted to ensure that this collection system is adequate, and if groundwater levels affect septic systems, drinking water wells, or surface ponding or flooding, additional measures, described below, will be taken.

Septic system of private inholding. For the private inholding, increased groundwater elevations could potentially impact the functioning of the existing septic system and/or possibly onsite drainage (e.g. create ponding). Increased groundwater elevations may be partly or completely mitigated by the seepage collection system (e.g. toe drain) installed landside of the new Dutch Slough Project flood control levee, which would be located west of the private inholding. In addition, increases to groundwater elevations may be further mitigated by any new groundwater pumping system on the ECC development to the east.

Mitigation for potential groundwater intrusion would be similar to that described below for the properties east of Jersey Island Road.

Drinking water well of private inholding. There is concern that tidal inundation of the Burroughs Parcel could potentially impact water quality in the drinking water well located on the private property. Tidal sloughs and open water areas proposed for restoration as part of the Project would be hydraulically connected to the local shallow aquifer, located within roughly 30 feet of the ground surface. Deeper aquifers are typically hydraulically isolated from the shallow aquifer by overlying, low permeability geologic layers (i.e. aquitards). Most drinking wells in the region draw water from the deeper aquifer(s), which have higher water supply and better water quality than the shallow aquifer.

DWR and the current property owner do not have any information on the well construction at this time. If the well is only screened in the deeper aquifer (below 30 feet) – and therefore hydraulically isolated from the shallow aquifer – then the project is not anticipated to impact well water quality. If the well is connected to the shallow aquifer, increased groundwater elevations due to the project could potentially impact water well quality. New Mitigation Measure 4.1-14 has been added to address potential water quality impacts to the private drinking water well.

These issues are addressed in the following text changes in the Final Supplemental EIR. (Deletions are struck out and additions are underlined.)

The following changes were made to Chapter 4 Section 4.1.1. Affected Environment, Hydrology, beginning on page 4.1-5.

**CONNECTION TO LANDS EAST OF THE PROJECT SITE ~~JERSEY ISLAND ROAD~~**

ENGEO Inc (2005), which conducted a study for the adjacent Cypress Corridor Specific Plan Area (CCSPA) east of Jersey Island Road (of which the ECC development is a part), concluded that that Emerson and Little Dutch Sloughs “do not currently contribute to significant groundwater recharge in [the CCSPA] because drainage tiles and lift pumps used to dewater the lands below sea level exist adjacent to these sloughs that provide a point of hydraulic control with zero net effect. In other words, the amount of water recharges from the sloughs equals, or is less than, the amount of water being removed by the drainage tiles and drainage lift pumps.” The same study also concludes that the Contra Costa Canal recharges groundwater in the CCSPA because water surface elevations in the Canal are typically higher than groundwater elevations. ENGEO (2005) estimated the amount of

this recharge to be approximately 335 acre-feet per year. Hultgren-Tillis (2005) indicated that recharge from Dutch Slough via porous underlying sandy soils contributes to groundwater in these lands. Planned future land use changes, however, such as the Dutch Slough Project, ECC development, and encasement of the adjacent Contra Costa Canal, would affect groundwater levels east of Jersey Island Road.

The private inholding on the Burroughs parcel uses an onsite well for water supply and its own septic system for wastewater treatment and disposal. The ground surface of the property varies between approximately elevation 0 and 4 feet NGVD. The main structure and surrounding driveways are at approximately elevation 2 to 4 feet NGVD, with surrounding areas at lower elevations.

Groundwater levels near the site were measured monthly between November 2010 and December 2012 (Hydrofocus, 2012). Groundwater level measurements for three nearby wells (Table RC-2, Figure RC-4) are as follows:

**Table RC-2. Nearby Groundwater Measurements (November 2010 to December 2012) (Hydrofocus, 2012)**

<u>Well Number</u>	<u>Approximate Location Relative to Private Property</u>	<u>Groundwater Elevation (feet NGVD 29)</u>	
		<u>Minimum</u>	<u>Maximum</u>
<u>Burroughs 1</u>	<u>1500 feet to southwest</u>	<u>-1.9</u>	<u>+1.3</u>
<u>Hotchkiss 1</u>	<u>400 feet due east</u>	<u>-4.7</u>	<u>-1.9</u>
<u>Burroughs 2</u>	<u>900 feet to north (and 200 feet west)</u>	<u>-6.7</u>	<u>-3.8</u>

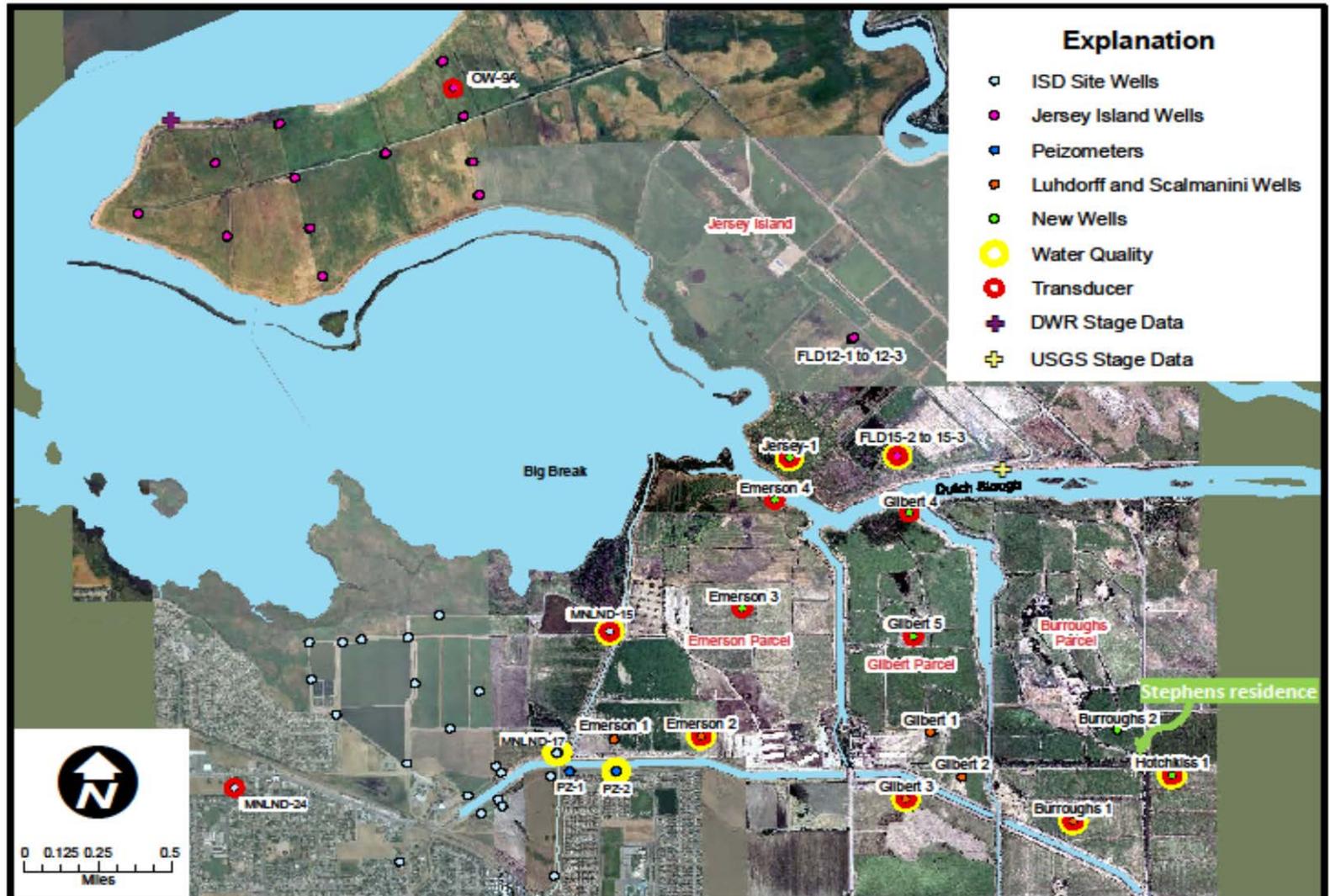


Figure RC-4. Location map showing Project parcels, groundwater monitoring wells, and Stephens residence (private inholding).

**IMPACT 4.1-6 (REPLACES 2010 EIR IMPACT 3.1.2-8) GROUNDWATER INTRUSION ONTO ADJACENT PARCELS**

As described in the 2010 EIR, connectivity of the shallow aquifer (within 30 feet of the ground surface) in the local area suggests that permanently raised Dutch Slough Restoration site groundwater levels would have some influence on groundwater flow to adjacent properties in all directions. These effects would be tempered to a great degree, however, because the tidal sloughs separating the restoration site from its adjacent parcels to the north, west, and south exert a far stronger hydraulic signal on groundwater (Hultgren-Tillis 2005). Groundwater pumping on adjacent properties steepens the hydraulic gradient, causing greater flow from the Dutch Slough site. Adjacent parcels to the east and, if the Contra Costa Canal is encased, to the south, could therefore have increased pumping volumes, especially outside the wet season when other contributing sources to groundwater diminish relative to the possible Project contribution.

**East.** There is one privately owned inholding approximately one acre in size within the Burroughs parcel just outside the Project's eastern boundary. To the east across Jersey Island Road are continuous diked, subsided lands (the Hotchkiss Tract; RD 799) proposed for residential development; no tidal slough divides these properties. The revised design for the Project includes construction of a flood control levee extending north-south for approximately half a mile along the west side of Jersey Island Road from the Project's southeast corner, and then trending in a southeast-northwest direction across the rest of the Burroughs parcel to Little Dutch Slough. This levee would protect the remaining mile of Jersey Island Road north to the Jersey Island bridge, and all properties to the east.

East of this levee, groundwater elevations are likely to increase during tule cultivation and after breaching. Except for the private inholding, increased groundwater elevations within the upland portions of the Burroughs parcel would not cause negative impacts to hydrology or water quality because these elevation increases would be consistent with the proposed management of those lands as enhanced irrigated pasture with improved wetland values. Due to the significant distances between the northern (SE-NW) portion of this levee and Jersey Island Road, restoration of the southern part of the Burroughs parcel is not expected to impact groundwater elevations within the Hotchkiss Tract east of the northern mile of Jersey Island Road. However, it is likely to significantly impact groundwater elevations in the Tract east of the southern half-mile of the Road including the private inholding. The proposed ECC development intends to use groundwater as a resource to support water feature amenities, and plans on constructing a new "dry" (internal) levee similar to the one at the nearby Summer Lake development. The proposed development includes a toe drain east of the new internal levee. If that project proceeds, then the impact on groundwater within the southern portion of the Hotchkiss Tract is likely not to be significant. If Hotchkiss development does not proceed, then the impact would remain significant and similar to that described in the 2010 EIR.

For the private inholding, increased groundwater elevations could potentially impact the functioning of the existing septic system and/or site drainage. Increased groundwater elevations may be partly or completely mitigated by the seepage collection system (e.g. toe drain) installed landside of the new Dutch Slough Project flood control levee, west of the private property. In addition, increases to groundwater elevations may be further mitigated by any new groundwater pumping system on the Hotchkiss development to the east. Mitigation for potential groundwater intrusion would be similar to that described below for CCSPA properties east of Jersey Island Road.

The following changes were made to the text in Chapter 4.1 Hydrology on page 4.1-20.

**MITIGATION 4.1-6 (SAME AS 2010 EIR MITIGATION 3.1.1-6.2): GROUNDWATER INTRUSION PROTECTION— EAST OF SITE**

If deemed necessary by the urban development to the east, the Project shall participate in a joint study with the adjacent landowners to the east to quantify the relative contributions of all possible sources of groundwater intrusion into the parcels east of the restoration site, thereby quantifying the relative role of the Project in contributing to groundwater pumping needs. This study would include the private inholding on the west side of Jersey Island Road. This study would include field monitoring to measure actual flux into the eastern parcel. If this study determines a significant contribution from the Project that would adversely affect hydrologic conditions east of the Project site that cannot be addressed with existing or planned groundwater management systems, then the technical and economic feasibility of constructing an effective means of reducing flux into the parcels shall be evaluated. Measures may include a groundwater cutoff wall, toe drain, or financial contribution to the operations and maintenance of groundwater collection systems currently in place or anticipated to be in place with new residential development, at levels commensurate with the documented percent contribution of the Project to increased groundwater levels and volumes to the south requiring abatement. If the monitoring determines that there are impacts to the functioning of the septic system for the private inholding, and the sewer infrastructure for the development to the east has been installed, an additional option would be to connect the inholding to the City sewer system.

**MITIGATION 4.1-7 (REPLACES 2010 EIR MITIGATION 3.1.1-6.1 AND 3.1.1-6.2): GROUNDWATER MONITORING**

The 2010 EIR required groundwater monitoring of the lands to the south, west, north, and east of the project site, to determine baseline groundwater levels and quality. Data will be used to determine baseline and post-project groundwater levels, hydraulic gradients, flow directions, and water quality (salinity, major ions, nitrogen species and stable isotopes). The study was to be conducted for at least one year prior to project implementation, and for at least one year after.

Groundwater monitoring began in ~~2014~~ November 2010 and continued ~~for five quarters until~~ December 2012 to establish the baseline conditions. Fifteen existing and nine new wells were monitored, as well as two control wells located over 1 mile from the project site and unlikely to be impacted by project implementation. Wells are located on Ironhouse Sanitary District (west), Jersey Island (north), Hotchkiss Tract (east), and parcels south of the Canal. Wells monitor the shallow (within 30' of the surface) aquifer, which is known to be of higher salinity than local surface water, and which shows changes in the hydraulic gradient as local water management practices change.

Data will be used to determine baseline and post-project groundwater levels, hydraulic gradients, flow directions, and water quality (salinity, major ions, nitrogen species and stable isotopes). Post project monitoring of these wells shall commence after the levee of Emerson parcel is breached.

The following new impact and mitigation were added to Chapter 2 Executive Summary in Tables 2-1 and 2-2, pages 2-9 and 2-17, respectively, and in Chapter 4 at the end of Section 4.1.2 Impacts and Mitigation, on pages 4.1-31 and -32.

**NEW IMPACT 4.1-17 DEGRADATION OF WATER QUALITY OF WATER SUPPLY WELL ON PRIVATE PROPERTY**

As described under Impact 4.1-6, groundwater elevations in the shallow aquifer (within about 30 feet of the ground surface) are likely to increase east of the site due to the Project. Increased groundwater elevations could potentially impact water well quality for the private residence on the west side of Jersey Island Road if the well is screened in the shallow aquifer. DWR and the current property owner do not have additional information on the well construction at this time. If the well is screened in the deeper aquifer (below 30 feet) – and therefore hydraulically isolated from the shallow aquifer - then the Project is not anticipated to impact well water quality.

**NEW MITIGATION 4.1-14: INVESTIGATE WATER SUPPLY SOURCE AND QUALITY**

Additional investigation shall be performed to determine the well construction and which aquifer(s) is used for water supply. If the well includes the shallow aquifer, the joint groundwater study described under Mitigation 4.1-6 shall be expanded to evaluate potential water quality impacts to the well. If significant degradation of drinking water quality is projected, impacts shall be mitigated by DWR either (a) paying for additional water quality treatment at the wellhead or (b) paying to connect the private residence to the City water supply.

**IMPACT SIGNIFICANCE**

Less than significant with mitigation

**Comment 6-3.** Levee impacts on view.

**Response.** See response to Comment 6-1, including the text changes. The proposed project as described in the both the DEIR and SEIR adequately identifies the location of the levee alignment and how it will affect the private view of the Commenter.

**Comment 6-4.** Walking trail, public use, parking, privacy issues.

**Response.** The SEIR discusses the loop trail around the Emerson parcel, but does not discuss the possibility of a walking trail on the levee near the private property on the Burroughs parcel because it is not part of the Project.

The Draft EIR states that the City of Oakley worked collaboratively with DWR and SCC to develop a Conceptual Plan for public access to both the restoration site and the community park that balances the objectives of the restoration project with the City’s recreational objectives (DEIR p. 2-47). Figure 2-15 of the Draft EIR (p. 2-51), labeled “Public Access Plan,” is reproduced from the City of Oakley’s *Dutch Slough Community Park and Public Access Conceptual Master Plan*. That figure depicts a trail on the levee along Jersey Island Road. However, this trail is part of the City’s planning, not part of the Dutch Slough Project. This trail may or may not be constructed as part of the City of Oakley’s recreational plans for the Dutch Slough Community Park, but as the City currently has no timeline for the construction of the park, a trail on the Burroughs parcel is considered speculative at this time.

If a Burroughs parcel trail were proposed in the future by the City of Oakley (or other entity), its design and usage would be coordinated with DWR. DWR would not grant approval to use the levees for trails or other recreational uses unless the City receives all its regulatory permits.

CEQA requires lead agencies to analyze a project's effect on the environment. The DEIR and the SEIR adequately analyze the proposed Project's environmental impacts. Therefore, no changes are made to the findings and conclusions of the SEIR.

**Comment 6-5.** Inverse Condemnation.

**Response.** CEQA is not an economic protection statute. CEQA directs that the economic effects of project (such as property values) not be treated as significant effects on the environment unless there is a chain of cause and effect to potential environmental effects. Intermediate economic changes need not be analyzed in any detail greater than necessary to determine if such effects are present. Landowners surrounding a proposed project site do not state a valid CEQA concern when they comment that the proposed project could adversely affect their parcel's property value. No further response is required.

**Comment 6-6.** Location of new levee on Burroughs parcel.

**Response.** See Response to Comment 6-1, including the text changes. The proposed project as described in both the DEIR and SEIR adequately identified the location of the levee alignment and how it will affect the private view of the Commenter.

**Comment 6-7.** Groundwater intrusion, effects on well and drinking water quality

**Response.** See Response to Comment 6-2.

**Comment 6-8.** Impacts of mice and insects.

**Response.** The northern portion of the Burroughs parcel would be managed to optimize foraging opportunities for Swainson's Hawks. As such, the current plan is to allow grasses to grow for a few months without disturbance to increase populations of rodents and large insects that would then become prey for hawks when the area is periodically mowed or grazed. The comment expresses concern that these disturbed rodents and insects may move onto the Stephens property. This would be taken into account when planning the details of the management of the foraging area. Possibilities such as an unmowed buffer near the Stephens property, or sequential mowing of different sections (rather than mowing the entire upland area at one time) would be incorporated into the management plan to reduce the possibility of creating a nuisance for neighboring properties.

**Comment 6-9.** Effects on property value, and "de facto condemnation".

**Response.** See Response to Comment 6-5.

**Comment 6-10.** Recreational trail, parking, access, and effects of trail on Swainson's hawks.

**Response.** See Response to Comment 6-4. Because a trail on the Burroughs levee is not part of the Dutch Slough Project, impacts of such a trail were not analyzed in the EIR or SEIR. As described in Comment 6-4, a trail on the Burroughs levee is reasonably foreseeable since it was mentioned in the Final EIR for the Dutch Slough project.

If a Burroughs parcel trail were proposed in the future by the City of Oakley (or other entity), its design and usage would be coordinated with DWR. DWR would not grant approval to use the levees for trails or other recreational uses unless CDFW and any and all other agencies with appropriate regulatory authority over fish and wildlife have determined that the trail will not have an adverse impact on wildlife, or that any such impacts have been adequately mitigated.

**Comment 6-11.** Levee location and effect on privacy.

**Response.** See Response to Comments 6-1, 6-4, 6-6, and 6-10.

**Comment 6-12.** Traffic on Jersey Island Road, and lack of documentation in Dutch Slough EIR or SEIR.

**Response.** As described in Section 3.13 of the Dutch Slough EIR, The Dutch Slough Project would have no impact on traffic on Jersey Island Road.

The proposed residential development east of Jersey Island Road is not a DWR project and DWR is not a lead agency decisionmaker or a responsible agency under CEQA. The separate development project is not a project objective of DWR's Dutch Slough Tidal Marsh Restoration Project and any traffic impacts from the separate development project are outside the scope of DWR's Project or its SEIR.

**Comment 6-13.** Toxics in graded soil.

**Response.** A Phase 1 Site Assessment of the Burroughs parcel was conducted in 2003, as reported in the Dutch Slough Final EIR (Chapter 3.15 Hazards, can be found in Appendix D). The only toxics found within soil on the Burroughs parcel occurred around active and inactive gas wells, and those soils were removed in 2003. Therefore, it is not expected that grading on any of the Project parcels would result in airborne toxics. As a Best Management Practice an enhanced dust control program would be in place during Project construction, as stated in the Final EIR Mitigation 3.6.1-2, and described in Table 3.6-6 from the Final EIR:

**Table 3.6-6: Control Measures for Construction Emissions of PM-10**

**Basic Control Measures (Required)**

*The following controls will be implemented:*

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all truck to maintain at least 2 feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.

- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

**Enhanced Control Measures (Recommended because large scale of grading)**

The following additional measures are recommended to be implemented at this construction site:

- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved surfaces to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

**Comment 6-14.** Use of land adjacent to Stephens property.

**Response.** See Responses to Comments 6-4 and 6-10.

**Comment 6-15.** Levee design criteria.

**Response.** As mentioned in SEIR Chapter 3 Project Description, Table 3.1, and on page 3-23 under Southern Flood Protection Levee Segment, the new levees that will be built for the Dutch Slough Project will be built to DWR Urban Levee Design Criteria, which includes seismic criteria. The Design Criteria may be accessed online at:

[http://www.water.ca.gov/floodsafe/leveedesign/ULDC\\_May2012.pdf](http://www.water.ca.gov/floodsafe/leveedesign/ULDC_May2012.pdf)

**Comment 6-16.** Groundwater intrusion onto property and into well.

**Response.** See Responses to Comments 6-2 and 6-7.

**Comment 6-17.** Rodents and insects.

**Response.** See Response to Comment 6-8.

**Appendix A. Comments received regarding the Jose Vineyard**

Dr. Carl Bellone, Ph.D.  
5487 Sontura Court,  
Castro Valley, CA 94552

February 26, 2014

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,



Carl Bellone



Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 958  
[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Dear Ms. Finfrock:

I am writing in response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine Carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

1. This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our winemakers and viticulturists in the future. This vineyard inspired me seven years ago when I was introduced to it by a colleague. I had been making wine in Napa Valley and buying grapes from all over the state of California and had never heard of the historic vineyards in Contra Costa County. This and other vineyards in the area excited and inspired me. Today, I produce two vineyard designated wines from this vineyard's neighbor. In addition, I use Zinfandel from a neighbor's vineyard in my award winning Zinfandel under the Artezín brand which I will gladly share with you and your colleagues.
2. It preserves a natural pre-historic sand-dune (up-land habitat) within this wetlands restoration project as open space. This open space enhances the overall wetlands project and the Bay-Delta ecosystem. The sand in which these ancient vines thrive is a key element to their longevity. Phylloxera, the vine root louse that decimated all the vineyards in Europe and California in the mid 1800's cannot live in sand because it cannot crawl from root to root. Thus, these vines have survived for 126 years! It is nearly impossible to find a single grapevine anywhere else in the entire United States that is 126 years old, much less an entire vineyard such as the one here in question. This vineyard is not only a state treasure, it is a national treasure! Please do not cause the removal of this treasure that is still produces a full crop and is very economically viable. Not only is it a historic monument, it is a working monument!

CALAFIA CELLARS • 629 FULTON LANE • ST. HELENA, CALIFORNIA 94574 • PHONE 707 963-0114

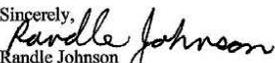
3. Provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide.

4. Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well.

5. This ancient vineyard, because of its historic and scientific value, including the ecological lessons of dry-farming, will be an interesting and educational focal point for the public to see.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,  
  
Randle Johnson  
Winegrower & Proprietor  
Calafia Cellars  
Napa Valley, CA



Andrew F. Weir  
SVP, Content Distribution  
Lieberman Broadcasting, Inc.  
711 Third Ave., 15<sup>th</sup> Floor  
New York, NY 10017

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814  
[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Dear Ms. Finfrock,

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

When I first heard about the proposal to reclaim and destroy this slice of viticulture history, I was taken aback. This vineyard is an irreplaceable, historic example of one of the longest surviving world-class vineyards in California, the United States, and certainly in the New World.

Why does this vineyard need to be protected?

\*120-year old vines that are still producing first-class fruit. This cannot be replicated! This is not just another parcel of Cabernet Sauvignon vines. Carignane is a critical grape and one that has diminished greatly in the area.

\*It can be used as a focal point for Oakley to show a perfect example of dry-farming techniques and can be used for education, special events, tourism and much more. Enhance its existence for the betterment of Oakley, don't bury it!

\*It is the right and best decision from an environmental standpoint.

\*It can survive the re-flooding of the surrounding acreage since it existed well before the levees were installed and exists on a natural upland habitat

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project. I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

A handwritten signature in cursive script that reads "Andrew F. Weir".

Andrew F. Weir

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,  
*Madeline Horan 2/18/14*  
Madeline Horan  
54 Bay Bridge Drive  
Brick, NJ 08724

Andy Gaudy  
Clarksburg Wine Company  
P.O. Box 123  
35265 Willow Ave  
Clarksburg, CA 95612

February 19, 2014

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

We need to protect this vineyard for a number of reasons:

- It is a historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.
- The planting of the vineyard pre-dates the levees. To "restore" the wetlands at the expense of a historical vineyard that was planted before the levee was even built is simply wrong.
- It is a great example of a sustainably farmed vineyard and as such serves as a model to all that we can co-exist with our environment.

Lastly, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,



Andy Gaudy  
Winemaker  
Clarksburg Wine Company

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THOMAS W. JOHNSON  
P.O. BOX 50  
FULTON, CA 95439  
U.S.A.

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February 20, 2014

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship  
and Statewide Resources Office (FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

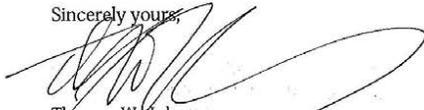
I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14- acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

This ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely yours,



Thomas W. Johnson  
(707) 528-7725  
twj@sonic.net





**Zinfandel Advocates & Producers**

P.O. Box 1487 • Rough & Ready, California 95975  
530-274-4900 • FAX 530-274-4904 • [zinfandel.org](http://zinfandel.org) • [info@zinfandel.org](mailto:info@zinfandel.org)

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*Ridge Vineyards*  
Bruce Walker-At Large  
*Starry Night Winery*

**PAST PRESIDENTS**

Doug Beckett  
Robert Biale  
Justin Boeger  
Duane Dappen  
Julie Johnson  
Joel Peterson  
Katie Quinn

February 21, 2014

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing as a request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan. This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because it needs to remain intact as a living museum for our world-renowned California wine industry now, and to inspire our winemakers and viticulturists in the future, providing a starting point for future vineyard preservation projects, which also gives a civic identity to the City of Oakley. This ancient vineyard, because of its historic and scientific value, including the ecological lessons of dry-farming, will be an educational focal point for the public.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project. I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Rebecca Robinson  
Executive Director

cc: ZAP Board of Directors

Zinfandel Advocates & Producers (ZAP) is a non-profit, educational 501(c)(3) organization. ZAP is dedicated to advancing the public knowledge of and appreciation for American Zinfandel and its unique place in our culture and history.  
Federal Tax ID #94-3151462

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Catherine Walker email with attachment  
**Date:** Wednesday, May 07, 2014 12:29:13 PM  
**Attachments:** [Oakley Vineyard Preservation Dutch Slough.doc](#)

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**From:** Catherine Walker [mailto:catherinewalker.aleph@gmail.com]  
**Sent:** Monday, February 17, 2014 1:22 PM  
**To:** Finfrock, Patricia@DWR  
**Subject:** Preserve the Historic Carignane Vineyard

Please see the attached letter.

Thank you,

Catherine Walker

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

1. It provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley.
2. Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well.
3. There is an educational opportunity for future winemakers, viticulturists, and current students that comes from the preservation of this ancient vineyard.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Catherine Walker

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Christina Turley email with attachment  
**Date:** Wednesday, May 07, 2014 12:28:18 PM  
**Attachments:** [Historic+Carignane+Vineyard+Preservation-Fact+Sheet.pdf](#)

---

**From:** Christina Turley [mailto:Christina@turleywinecellars.com]  
**Sent:** Thursday, February 20, 2014 3:37 PM  
**To:** Finfrock, Patricia@DWR  
**Subject:** Please help save this historic vineyard!

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

Please see attached for myriad reasons to protect the vineyard!

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Christina Turley  
Turley Wine Cellars  
[christina@turleywinecellars.com](mailto:christina@turleywinecellars.com)  
Office: (707) 968-2715  
Cell: (646) 372-9456  
[www.turleywinecellars.com](http://www.turleywinecellars.com)

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project Fact Sheet – January 21, 2014 Prepared By Matt Cline**

**Reasons for Vineyard Preservation**

1. This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our winemakers and viticulturists in the future.
2. It preserves a natural pre-historic sand-dune (up-land habitat) within this wetlands restoration project as open space. This open space enhances the overall wetlands project and the Bay-Delta ecosystem. Historically, these upland habitats were also a dominant feature in and around these wetlands.
3. Provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide. This would

make Oakley a more desirable location to live which might spur higher end housing and therefore a higher tax base. This may ensure that the current owners of these properties will continue to maintain a high re-sale potential use for their land. This is a very complicated issue but there already seems to be interest in preserving old vines and agriculture within our urban growth areas locally, at the state level, and nationwide.

4. Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems.

5. This ancient vineyard, because of its historic and scientific value, including the ecological lessons of dry-farming, will be an interesting and educational focal point for the public to see as they wander through the restored wet lands. There is also interest in providing an educational opportunity to middle and high school children which would expose them to an agricultural learning experience.

#### **Future Uses of the Vineyard**

1. This vineyard could be used to generate revenue.

2. Volunteer docents from 501(c)(3) organizations such as The American Wine Society, The Historical Vineyard Society, and others would be willing to provide pre-scheduled on-site tours since these organizations have an educational purpose in their by-laws. These tours could coincide with either the Heart of Oakley Festival or the Harvest Festival. Local growers and winemakers that are utilizing Oakley fruit should also be willing to educate the public about the value of old vines.

3. The vineyard can be the focal point of a community park that focuses on our local agricultural roots. A "community farm" can be built on part of the property around the Emerson Dairy that will be acquired as a result of the development. The local agricultural industry and grocery store chains might be interested in corporate sponsorship of a "community farm".

4. Local 4H Chapters can conduct pruning demonstration projects teaching the art of spur pruning on head trained vines. Then conducting a fun "pruning competition" with the project attendees.

1

#### **Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project Fact Sheet – January 21, 2014 Prepared By Matt Cline**

5. Produce a community wine label that can be used for local events.

6. The Vineyard site could be used for charity events on a limited basis such as a catered lunch with wine tasting.

#### **Vineyard Site & Varietal Historical Information**

Archaeological data and discussions with Stan Emerson indicates that the vineyard located on the west edge of the Emerson parcel that is now part of the Dutch Slough Salt Marsh Restoration Project was established by Joaquin José sometime in the late 1800's and is most likely between 120 and 125 years old. Joaquin José was a Portuguese subsistence farmer from Madeira Island who had fruit trees and row crops as well. The vineyard was planted on a natural "upland habitat" which is a rare but important formation within tidal wetlands. Most all of these formations have been destroyed throughout the Sacramento Delta after the levees were built. The vineyard is planted to the Carignane varietal which itself has become quite rare here in California. At one time this grape represented about 30% of all the red-wine grapes in all growing regions of the state. The majority of the vines were planted in the Central Valley and used to make inexpensive box and jug wines. In 1974 California had only 30,700 acres of Carignane but that total has dropped to only 2,547 bearing acres in 2012 with 744 acres disappearing from the previous year (mostly from the Lodi Region-District 11). In District 6 which includes Contra Costa County there is only 87 acres left in 2012 with the Emerson parcel representing 16% of that total. Most of the surviving quality vineyards of Carignane mainly exist here in Oakley, Sonoma County, and Redwood Valley in Mendocino County. The reasons for this decline in popularity include the 12 years of Prohibition (1921-1933) which resulted in the loss of all the smaller wineries which were and are today the innovators of our industry, but it was our industries marketing strategy over the last 50 years or so of varietal labeling that had the biggest influence. Using a single grape name reduced the number of varietal options we have today. As the wine market changed, we choose to only market a hand full of French varietals such as Cabernet Sauvignon, Chardonnay, and Pinot Noir that were not part of California's original planting. These "branded varietals" will be hard to knock off their pedestals but the recent interest in blended red wines, over the last ten years, is encouraging.

The Emerson Vineyard and most of the ancient vineyards surrounding Oakley are world class vineyards and have played a significant role in California's viticultural history. In February 2013, the California Legislature unanimously passed House Resolution No. 9 which was introduced by Assembly member Daly and co-authored by Assembly member Jim Frazier among others. Here is the link to his amendment:

[http://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140HR9](http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140HR9).

Carignane (and all of its various synonyms and enunciations) worldwide is number two in red wine production. It is such a dominate grape because yields of 10-15 tons per acre are easy to attain due to its vigorous growing characteristics. In general, efforts to restrain yields usually results in higher quality. This vineyard is a model for how to grow productive crops sustainably while also being dry farmed. Most of the time, this variety is blended with Mourvèdre, Syrah, and Grenache (among others). It is grown predominately dry-farmed in most countries where it grows.

#### **Vineyard Production**

I have leased the ancient 14-acre Carignane vineyard on the Emerson parcel either directly from Stan Emerson or sub-leased it from Brent Gilbert for the past 25 years. The vineyard is still economically productive. The last eight year harvest totals are:

Vintage Tons  
2006 30.95  
2007 75.88

2

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration**  
Project Fact Sheet – January 21, 2014 Prepared By Matt Cline

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

2008 47.54  
2009 72.96  
2010 67.06  
2011 64.25  
2012 53.66  
2013 61.00

This is an average of 59.16 tons per year. The yearly variations in yields are consistent with the alternate bearing nature of most grape varieties. The 2006 vintage is an outlier due mainly to a poor crop set because of the weather during bloom. Overall, the yield over the past 8 years is an average of 4.2 tons per acre. The block is not uniform though. The southwest corner is not producing because of the lack of vines. The crop along the west side along Marsh Creek is particularly productive due to the heavier soil type and has been harvested early for export to Japan and for a rosé. Stylistically, the larger yielding vines work well for the Japanese export market because they can be bottled early and at lower alcohol levels. That is not to say they can't make full-throttle California style reds if left to ripen on the vine a little longer. The east half of the field produces arguably some of the best Carignane anywhere in the world. The Delhi Sand series results in reductions of the vines vigor and average yields per vine.

**Winemaking**

Juice yields for Oakley Carignane can be between 180 - 195 gallons per ton. All of the grapes are used in no less than 6 different blends including a Carignane Rosé, a traditional Oakley field blend of Zinfandel, Carignane, and Mataro (Mourvèdre) that is supported by smaller quantities of Petite Sirah, Alicante Bouschet, and Black Malvoisie (Cinsault), a traditional Old Vines (varietal) Zinfandel, two red blends that are 60%-85% produced from these grapes and exported to Japan, and even a rare varietal bottling all from this block.

**Summary**

The vineyard can co-exist with this wetlands restoration project because it was planted before the levees were installed; therefore these vines will survive the process of re-flooding the surrounding acreage. While the state is intent on converting this vineyard that stands on a natural upland environment to additional wetlands, some natural uplands are also being restored as this one should be as well. The value as a living museum and as an example of sustainable agriculture let alone 16% of the remaining Carignane vines in Contra Costa County are invaluable. The precipitous drop in planted acres is, in my opinion, one of the greatest reasons to save it and especially because this vineyard could very well be the very best example of what this grape can do that we have anywhere here in the state.

The State of California needs to offer a proposal that will preserve this ancient vineyard. This vineyard is over 100 years in the making and a proposal that preserves this historic Carignane vineyard would be a win-win for the State of California, the City of Oakley, and our world renowned California wine industry.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** David Shattuck email with attachment  
**Date:** Wednesday, May 07, 2014 11:22:51 AM  
**Attachments:** [Oakley Vineyard Preservation Dutch Slough.doc](#)

---

Ms Finrock,

Please see the attached letter (below) for comments on the proposed Dutch Slough Tidal Restoration Project.

Best,  
David

David Shattuck  
Assistant Winemaker  
Clarksburg Wine Company  
916-744-1751 x8007

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

We need to protect this vineyard for the following reasons:

- This vineyard is one of the best examples of a sustainably dry-farmed vineyard. The scientific merit of preserving this vineyard cannot be overstated, as creating dry-farmed vineyards in the current water shortage is of paramount importance.
- The Carignane varietal should be considered endangered and must be protected. The recent loss of the majority of this varietal makes protecting this particular parcel of Carignane more important, as these vines have reached an age where they produce a superior product. Furthermore, there is no option for relocating these vines if the plot is destroyed that will replicate the microclimate and root environment that produces superior wine.
- Finally, because the vineyard is still economically viable, there is the potential to offset the additional cost to the project by selling the grapes at harvest. Furthermore, this vineyard could become both a symbol of urban vineyard management and an identity for the city of Oakley.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

David Shattuck

David Shattuck  
Assistant Winemaker  
Clarksburg Wine Company  
916-744-1751 x8007

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** David Southen email with attachment  
**Date:** Wednesday, May 07, 2014 12:25:16 PM  
**Attachments:** Letter re Dutch Slough Restoration Project and its impact on Jose Vineyard.pdf

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**From:** David Southen [mailto:dsouthen@execulink.com]  
**Sent:** Saturday, February 22, 2014 12:43 PM  
**To:** Finfrock, Patricia@DWR  
**Subject:** Letter re Dutch Slough Restoration Project and its impact on Jose Vineyard

Dear Ms. Finfrock:

I attach a letter in regard to the Dutch Slough Restoration Project.

I am very alarmed that the historic Jose Vineyard may be destroyed and would like to set out my views on this matter. If my letter need be physically signed please inform me of such and I will re-submit it.

**Would you also kindly acknowledge receipt of this message?**

Thank you.

Yours very truly,

David Southen

---

David Southen  
398 Piccadilly St.  
London, ON  
Canada, N6A 1S7

Feb. 22, 2014

Ms. Patricia Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9th Street, Room 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

Re: Dutch Slough Tidal Marsh Restoration Project

I am writing you today with great concern about the Dutch Slough Tidal Marsh Restoration Project, and in particular about "The Jose Vineyard".

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

In the Supplemental EIR PDF published by your Department, on Chapter 4.3 page 4 (or page 137 of the entire PDF) there is a paragraph as follows:

*Historic-era Resources- Newly Identified  
A vineyard planted with historic vines has also been identified within the Project site. The Jose Vineyard is approximately 14 acres along the western edge of the Emerson Parcel, adjacent to Marsh Creek, and was originally established as a 70 acre vineyard by a Basque or Portuguese rancher Joaquin Jose over 100 years ago. While formal evaluation to determine whether the vineyard qualifies as eligible for listing in the National Register or California Register has not been conducted, information exists to suggest that the site may qualify as historic property/historical resource. The SHPO concurred in November 2013 that Jose Vineyard is eligible for the National Register/ California Register under Criterion A/I (Roland-Nawi 2013).*

I am writing in regard to this magical 14 acre parcel of wine and the magnificent vines that are growing on the property. This vineyard is currently leased by Matt Cline of the "Three Wine Company". Matt has prepared a fact sheet about this vineyard, which I append as Appendix I to this message.

Matt Cline does not know me from the proverbial "Adam". But I know his wines. Through a wine broker I have purchased nearly 20 cases of wine over the last few years. As you have no doubt noted, I live thousands of miles away in London, Ontario Canada. After buying the wine, paying tax for Michigan (this is where I have the wines shipped), and paying for shipping I then have to drive to Michigan to pick up the wine, and then pay a duty of around 60% (yes, sixty percent - it is not a typo) to import the wine into Canada. You may not know it, but Ontario, Canada has a wine industry, and makes some outstanding wines of great character. Yet I have spent considerable time and money buying wine from the Three Wine Company. Why? Because the vines that are planted at the Jose Vineyard are unique - they truly are the last of its kind in the New World.

I am involved in historical preservation in my community for a reason: you can hardly know who you are if you have no idea who you were. I fight for the preservation of historical buildings and dig into my pocket to fund restoration projects. But architecture is not the only historical thing worth preserving: witness your glorious Smithsonian and the artifacts it curates. I am a member of the Smithsonian even though

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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I live in a different country. Their work is vital to the understanding of what it is to be an American (and in the use of the word "American" I expand the definition to "North American"). It is not a stretch to say that a hortological resource is worthy of historical preservation and conservation. Indeed ecological conservation is at the heart of what you do. So I find it shocking that FESSRO would consider ripping up a treasure like this.

If you read the attached fact sheet you will realize what an incredible resource the vineyard is. Overall, the Wine Institute calculated that the California wine industry has a +\$50 billion annual impact on the California economy (and these figures are from 2006). The reference is here: <https://www.wineinstitute.org/resources/pressroom/120720060>

Money aside though, the Jose Vineyard is a cultural resource of incredible historical importance. It's a window to the past, to the agricultural pioneers who founded the wine industry in the last couple decades of the 19th Century. What's more, the vineyard is still productive and produces wines of great character. Further, the grape varieties are rare: when is the last time that you had a bottle of Old Vine Carignane? As Matt points out, these vines provide a valuable reference to winemakers who can benchmark new plantings only by comparing them to the past.

As far as environmental stewardship goes, the Jose Vineyard is farmed sustainably: *"Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems."* (From Page 1 - Matt Cline's fact sheet)

My wife and family celebrated Christmas this year in California, and the reason why we chose to go to California was because of the wine. In Canada I am a big booster of California wines, and in my choice of places to travel, I put my money where my mouth is. We love California and I would hate to think that a State Department would wage war on such a rarity.

The wines that Matt Cline produces from Jose Vineyard are extraordinary, and I am pleased to have some in my wine cellar. I am outraged and distressed, though, that I may never again be able to enjoy the fruit of the vine that Joaquin Jose planted so many years ago, and perplexed that FESSRO would

contemplate cultural and historical "herbicide".

Please prevent this monumental error from happening and exclude the Jose Vineyard from the Dutch Slough Restoration Project.

Yours very truly,

David Southen

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project**

Fact Sheet – January 21, 2014

Prepared By Matt Cline

**Reasons for Vineyard Preservation**

1. This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our winemakers and viticulturists in the future.
2. It preserves a natural pre-historic sand-dune (up-land habitat) within this wetlands restoration project as open space. This open space enhances the overall wetlands project and the Bay-Delta ecosystem. Historically, these upland habitats were also a dominant feature in and around these wetlands.
3. Provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide. This would make Oakley a more desirable location to live which might spur higher end housing and therefore a higher tax base. This may ensure that the current owners of these properties will continue to maintain a high re-sale potential use for their land. This is a very complicated issue but there already seems be interest in preserving old vines and agriculture within our urban growth areas locally, at the state level, and nationwide.
4. Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems.
5. This ancient vineyard, because of its historic and scientific value, including the

ecological lessons of dryfarming, will be an interesting and educational focal point for the public to see as they wander through the restored wet lands. There is also interest in providing an educational opportunity to middle and high school children which would expose them to an agricultural learning experience.

**Future Uses of the Vineyard**

1. This vineyard could be used to generate revenue.
2. Volunteer docents from 501(c)(3) organizations such as The American Wine Society, The Historical Vineyard Society, and others would be willing to provide pre-scheduled on-sight tours since these organizations have an educational purpose in their by-laws. These tours could coincide with either the Heart of Oakley Festival or the Harvest Festival. Local growers and winemakers that are utilizing Oakley fruit should also be willing to educate the public about the value of old vines.
3. The vineyard can be the focal point of a community park that focuses on our local agricultural roots. A “community farm” can be built on part of the property around the Emerson Dairy that will be acquired as a result of the development. The local agricultural industry and grocery store chains might be interested in corporate sponsorship of a “community farm”.
4. Local 4H Chapters can conduct pruning demonstration projects teaching the art of spur pruning on head trained vines. Then conducting a fun “pruning competition” with the project attendees.

1  
**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project**

Fact Sheet – January 21, 2014

Prepared By Matt Cline

5. Produce a community wine label that can be used for local events.
6. The Vineyard site could be used for charity events on a limited basis such as a catered lunch with wine tasting.

**Vineyard Site & Varietal Historical Information**

Archaeological data and discussions with Stan Emerson indicates that the vineyard located on the west edge of the Emerson parcel that is now part of the Dutch Slough Salt Marsh Restoration Project was established by Joaquin José sometime in the late 1800’s and is most likely between 120 and 125 years old. Joaquin José was a Portuguese subsistence farmer from Madeira Island who had fruit trees and row crops as well. The vineyard was planted on a natural “upland habitat” which is a rare but important formation within tidal wetlands. Most all of these formations have been destroyed throughout the Sacramento Delta after the levees were built. The vineyard is planted to the Carignane varietal which itself has become quite rare here in California. At one time this grape represented about 30%

of all the red-wine grapes in all growing regions of the state. The majority of the vines were planted in the Central Valley and used to make inexpensive box and jug wines. In 1974 California had only 30,700 acres of Carignane but that total has dropped to only 2,547 bearing acres in 2012 with 744 acres disappearing from the previous year (mostly from the Lodi Region-District 11). In District 6 which includes Contra Costa County there is only 87 acres left in 2012 with the Emerson parcel representing 16% of that total. Most of the surviving quality vineyards of Carignane mainly exist here in Oakley, Sonoma County, and Redwood Valley in Mendocino County. The reasons for this decline in popularity include the 12 years of Prohibition (1921-1933) which resulted in the loss of all the smaller wineries which were and are today the innovators of our industry, but it was our industries marketing strategy over the last 50 years or so of varietal labeling that had the biggest influence. Using a single grape name reduced the number of varietal options we have today. As the wine market changed, we choose to only market a hand full of French varietals such as Cabernet Sauvignon, Chardonnay, and Pinot Noir that were not part of California's original planting. These "branded varietals" will be hard to knock off their pedestals but the recent interest in blended red wines, over the last ten years, is encouraging. The Emerson Vineyard and most of the ancient vineyards surrounding Oakley are world class vineyards and have played a significant role in California's viticultural history. In February 2013, the California Legislature unanimously passed House Resolution No. 9 which was introduced by Assembly member Daly and co-authored by Assembly member Jim Frazier among others. Here is the link to his amendment: [http://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=20132014HR9](http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=20132014HR9). Carignane (and all of its various synonyms and enunciations) worldwide is number two in red wine production. It is such a dominate grape because yields of 10-15 tons per acre are easy to attain due to its vigorous growing characteristics. In general, efforts to restrain yields usually results in higher quality. This vineyard is a model for how to grow productive crops sustainably while also being dry farmed. Most of the time, this variety is blended with Mourvèdre, Syrah, and Grenache (among others). It is grown predominately dry-farmed in most countries where it grows.

**Vineyard Production**

I have leased the ancient 14-acre Carignane vineyard on the Emerson parcel either directly from Stan Emerson or subleased it from Brent Gilbert for the past 25 years. The vineyard is still economically productive. The last eight year harvest totals are:  
Vintage Tons  
2006 30.95

2007 75.88

2

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough  
Restoration Project**

Fact Sheet – January 21, 2014

Prepared By Matt Cline

2008 47.54

2009 72.96

2010 67.06

2011 64.25

2012 53.66

2013 61.00

This is an average of 59.16 tons per year. The yearly variations in yields are consistent with the alternate bearing nature of most grape varieties. The 2006 vintage is an outlier due mainly to a poor crop set because of the weather during bloom. Overall, the yield over the past 8 years is an average of 4.2 tons per acre. The block is not uniform though. The southwest corner is not producing because of the lack of vines. The crop along the west side along Marsh Creek is particularly productive due to the heavier soil type and has been harvested early for export to Japan and for a rosé. Stylistically, the larger yielding vines work well for the Japanese export market because they can be bottled early and at lower alcohol levels. That is not to say they can't make full-throttle California style reds if left to ripen on the vine a little longer. The east half of the field produces arguably some of the best Carignane anywhere in the world. The Delhi Sand series results in reductions of the vines vigor and average yields per vine.

**Winemaking**

Juice yields for Oakley Carignane can be between 180 - 195 gallons per ton. All of the grapes are used in no less than 6 different blends including a Carignane Rosé, a traditional Oakley field blend of Zinfandel, Carignane, and Mataro (Mourvèdre) that is supported by smaller quantities of Petite Sirah, Alicante Bouschet, and Black Malvoisie (Cinsault), a traditional Old Vines (varietal) Zinfandel, two red blends that are 60%-85% produced from these grapes and exported to Japan, and even a rare varietal bottling all from this block.

**Summary**

The vineyard can co-exist with this wetlands restoration project because it was planted before the levees were installed; therefore these vines will survive the process of re-flooding the surrounding acreage. While the state is intent on converting this vineyard that stands on a natural upland environment to additional wetlands, some natural uplands are also being restored as this one should be as well. The value as a living museum and as an example of sustainable agriculture let alone 16% of the remaining Carignane vines in Contra Costa County are invaluable. The precipitous drop

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

in planted acres is, in my opinion, one of the greatest reasons to save it and especially because this vineyard could very well be the very best example of what this grape can do that we have anywhere here in the state.  
The State of California needs to offer a proposal that will preserve this ancient vineyard. This vineyard is over 100 years in the making and a proposal that preserves this historic Carignane vineyard would be a win-win for the State of California, the City of Oakley, and our world renowned California wine industry.

3

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Lind, Yancy A - BEND, OR](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Cc:** [Yancy Lind](#)  
**Subject:** Dutch Slough Tidal Marsh Restoration Project Supplemental EIR  
**Date:** Wednesday, February 12, 2014 3:00:27 PM

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February 12, 2014

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock,

I am writing to comment on Dutch Slough Tidal Marsh Restoration Project Supplemental EIR and to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

I am an environmentalist. I am currently the Upper Deschutes River Steward for the Native Fish Society, Conservation Chair of Central Oregon Flyfishers, and active in other organizations focused on restoring flows in rivers, streams, and waterways. I have been involved in legislating, funding, and staffing many habitat restoration projects and understand the need for them.

I am also a wine drinker and have been drinking wines made from the grapes grown in this vineyard for over 20 years. These grapes make rare and wonderful wines. Surely, a balance between environmental restoration and preserving unique vineyards can be accomplished.

Respectfully,

Yancy Lind  
3031 NW Shevlin Meadow Dr.  
Bend OR 97701  
[yancy\\_lind@yahoo.com](mailto:yancy_lind@yahoo.com)

Yancy Lind, CRPC®  
Lind | White Group  
Senior Financial Advisor | Vice President  
Merrill Lynch Global Wealth Management  
541-312-6821 | 888-312-6821 (toll free)  
[yancy\\_lind@ml.com](mailto:yancy_lind@ml.com) | [www.fa.ml.com/lind\\_white](http://www.fa.ml.com/lind_white) | NMLS # 590176  
"The interest of our customers must come first." - Charles E. Merrill

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Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

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Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Cindie Gillaspie](#)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Dutch Slough Tidal Marsh Restoration Project  
**Date:** Thursday, February 20, 2014 6:21:01 PM

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Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

This ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,  
Cindie Gillaspie

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [sharon.thygesen](mailto:sharon.thygesen)  
**To:** [Finfrock.Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Dutch Slough Tidal Marsh Restoration Project  
**Date:** Thursday, February 20, 2014 7:22:37 PM

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Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

Sharon Thygesen  
4053 Lambert Rd  
El Sobrante, CA 94803

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [frankspinelli@comcast.net](mailto:frankspinelli@comcast.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** DUTCH SLOUGH TIDAL RESTORATION PROJECT PRESERVATION OF 14-ACRE ANCIENT VINES  
**Date:** Thursday, March 06, 2014 5:33:20 PM

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March 6, 2014

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard, (Emerson Parcel), threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World. As I stated at our February Oakley City Council Meeting, this vineyard needs to be preserved. This vineyard has been in existence longer than any of us. We love the restoration project and what it brings, but you should not have to take history away to bring history back. This vineyard has shown over the last 100 plus years that it can survive within marsh lands.

We need to protect this vineyard because this ancient vineyard represents part of our history here in Oakley and is only 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a way that allows the preservation of this vineyard which has been proven it can co-exist with an integral part of the Sacramento-San Joaquin River Delta.

Sincerely,

Frank Spinelli  
17 Macy Lane  
Oakley California 94561

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Gary Lavaonino](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Dutch Slough  
**Date:** Thursday, February 20, 2014 5:25:51 PM

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Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office  
(FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

**It is historically unique, and its just simple farmland rows of vineyards, soil, and other components of nature.**

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity

of the Sacramento-San Joaquin River Delta.

Sincerely,

Gary Lavagnino  
131 Renee Court  
El Sobrante, CA 94803-3134

[garylavagnino@yahoo.com](mailto:garylavagnino@yahoo.com)  
(510) 222-4457

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Ed Follis](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** EIR - Emerson Parcel  
**Date:** Sunday, March 02, 2014 12:45:14 PM

---

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

Preserving this historic vineyard would show that the City of Oakley is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat is important but this vineyard is very special and unique. Because this vineyard is non-irrigated and is farmed sustainably, it is a model that will show that we can coexist within our environment and can show the public and future generations farmers how we need to live and grow.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Thank you for your consideration

Sincerely,

Ed Follis

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Beth Beaulieu](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** EIR response  
**Date:** Tuesday, March 04, 2014 10:57:58 PM

---

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World. This ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project..Please protect this vineyard.

I join many in the wine industry who are aware of the uniqueness of this land, and urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Beth Beaulieu

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Gary Cline email with attachment  
**Date:** Wednesday, May 07, 2014 12:26:18 PM  
**Attachments:** Dutch Slough Tidal Marsh Restoration Project.pdf  
image001.emz  
image002.png  
oledata.mso

---

**From:** Gary Cline [mailto:[gecline101@gmail.com](mailto:gecline101@gmail.com)]  
**Sent:** Thursday, February 20, 2014 6:11 PM  
**To:** Finfrock, Patricia@DWR  
**Subject:** Dutch Slough Tidal Marsh Restoration Project

Dear Ms. Finfrock,

Please see attached letter regarding my comments on the above referenced project.

Sincerely,  
Gary

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Baik, Barbara](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** Historic Vineyard Preservation & Dutch Slough Supplemental EIR  
**Date:** Monday, February 10, 2014 5:49:08 PM

---

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an historic example of one of the longest surviving world class vineyards in California. It is irreplaceable, and its importance to the United States and even to the New World of wines and vineyards cannot be overstated.

We need to protect this vineyard because:

1. This ancient vineyard needs to remain intact as an inspirational living museum for our world renowned California wine industry now.
2. This open space that will remain preserved enhances the overall wetlands project and the Bay-Delta ecosystem.
3. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide.
4. Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems.
5. This ancient vineyard, because of its historic and scientific value, including the ecological lessons of dry-farming, will be an interesting and educational focal point for the public to see as they wander through the restored wet lands.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project and can be used to generate future revenue.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

*Barbara*

Barbara Balik  
Director of Special Giving  
Cystic Fibrosis Foundation  
4929 Wilshire Blvd., Ste. 760  
Los Angeles, CA 90010  
Phone: 323.939.0758  
Fax: 323.939.5046  
[bbalik@cff.org](mailto:bbalik@cff.org)  
[www.californiawinemasters.org](http://www.californiawinemasters.org)  
*Join us 5/17/14 at Warner Bros. Studios*  
**25th ANNIVERSARY BASH!**  
SKYPE: Barbara.Balik

*Please think GREEN*

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Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Jason Price email with attachment  
**Date:** Wednesday, May 07, 2014 1:01:37 PM  
**Attachments:** [Historic Vineyard Preservation & Dutch Slough Supplemental EIR.pdf](#)

---

**From:** Jason Price [mailto:pricej337@gmail.com]  
**Sent:** Thursday, March 06, 2014 9:01 PM  
**To:** Finfrock, Patricia@DWR  
**Subject:** Public Comment - Historic Vineyard Preservation & Dutch Slough Supplemental EIR

Hello Patty,

Please see attached for my comments regarding this project.

Thank you,

Jason Price

March 6, 2014  
Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine Carignane vineyard (Emerson Parcel) threatened by the current proposed plan. This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

Once representing about 30 % of all red wine grape varieties planted in California, Carignane as of 2012, has dropped to only 2,547 bearing acres (87 acres in Contra Costa County – 16% represented by the Emerson parcel). Eliminating this essential Carignane source would significantly handcuff the production of some of the most unique and historically significant varietally labeled and blended red wines coming out of Contra Costa County.

This ancient vineyard serves as a living museum for California's renowned wine industry inspiring not only myself, but many in wine production and viticulture. Because of its historic, scientific, and ecological values maintaining this vineyard would continue to provide an interesting and educational focal point for the public to see as they visit the restored wet lands. Preservation of the vineyard would educate the public as an agricultural learning experience due to the dry farming practices employed on this parcel. Sustainable farming through non-irrigation models for future generations our potential to coexist with our environment while producing quality grapes.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project. I urge you to find a solution that allows the

preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.  
Sincerely,  
Jason Price

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Jason Price letter with attachment  
**Date:** Wednesday, May 07, 2014 10:56:46 AM

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March 6, 2014  
Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine Carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

Once representing about 30 % of all red wine grape varieties planted in California, Carignane as of 2012, has dropped to only 2,547 bearing acres (87 acres in Contra Costa County – 16% represented by the Emerson parcel). Eliminating this essential Carignane source would significantly handcuff the production of some of the most unique and historically significant varietally labeled and blended red wines coming out of Contra Costa County.

This ancient vineyard serves as a living museum for California's renowned wine industry inspiring not only myself, but many in wine production and viticulture. Because of its historic, scientific, and ecological values maintaining this vineyard would continue to provide an interesting and educational focal point for the public to see as they visit the restored wet lands. Preservation of the vineyard would educate the public as an agricultural learning experience due to the dry farming practices employed on this parcel. Sustainable farming through non-irrigation models for future generations our potential to coexist with our environment while producing quality grapes.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project. I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,  
Jason Price

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Keat Lexa email with attachment  
**Date:** Wednesday, May 07, 2014 12:30:18 PM  
**Attachments:** Letter Oakley Vineyard Preservation Dutch Slough.pdf

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**From:** Keat Lexa [mailto:dlexais@comcast.net]  
**Sent:** Tuesday, February 11, 2014 5:40 PM  
**To:** Finfrock, Patricia@DWR  
**Subject:** Comments: Supplemental EIR for the wetlands project in Oakley

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9th Street, Suite 1623  
Sacramento, CA 95814

**EMAIL, [must be received by March 7, 2014]**

[Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

I think if an accord was reached with the other parties rather than a taking, possibly a conservation easement might preserve both a worthwhile vineyard and a bit of California history and even serve a local history education purpose as well.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Keat Lexa  
459 Pheasant Lane  
Santa Rosa, CA 95403  
(707) 480-6213

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Mark Bologna](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Date:** Wednesday, February 26, 2014 4:18:34 PM

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Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

As the owner of a small wine shop in Connecticut, It is important to preserve this vines and area so there can still be some integrity in California wines. There is obviously a better quality wine from vines that have been around longer and that can not be replaced.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Mark Bologna

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Michele and Bill White email with attachment  
**Date:** Wednesday, May 07, 2014 12:31:18 PM  
**Attachments:** Letter Oakley Vineyard Preservation Dutch Slough.doc

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**From:** Michele or Bill White [mailto:bwshoes@yahoo.com]  
**Sent:** Monday, February 10, 2014 10:15 AM  
**To:** Finfrock, Patricia@DWR  
**Subject:** Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project

Ms. Finfrock please see that attached letter, thank you

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

February 10 2014

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World. This ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

The State of California needs to offer a proposal that will preserve this ancient vineyard. This vineyard is over 100 years in the making and a proposal that preserves this historic Carignane vineyard would be a win-win for the State of California, the City of Oakley, and our world renowned California wine industry.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Bill and Michele White

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

For more information, please contact the project manager at (916) 438-2200 or visit the project website at [www.sfwmd.gov](http://www.sfwmd.gov).

**Appendix A: Project Description**

**1. Project Location**

The project is located in Dutch Slough, a tidal marsh area in the northern part of the San Francisco Bay Area. The project area is approximately 1,000 acres in size and is situated between Dutch Slough and the San Francisco Bay.

**2. Project Description**

The project consists of the restoration of Dutch Slough tidal marsh to its natural state. This includes the removal of existing levees and dikes, the reconnection of Dutch Slough to the San Francisco Bay, and the restoration of the marsh to its natural state. The project also includes the construction of a new levee system to protect the project area from flooding.

**3. Project Objectives**

The project has several objectives, including the restoration of Dutch Slough tidal marsh to its natural state, the improvement of water quality in Dutch Slough, and the protection of the project area from flooding. The project also aims to provide habitat for wildlife and to improve the aesthetic value of the project area.

**4. Project Benefits**

The project has several benefits, including the restoration of Dutch Slough tidal marsh to its natural state, the improvement of water quality in Dutch Slough, and the protection of the project area from flooding. The project also provides habitat for wildlife and improves the aesthetic value of the project area.

**5. Project Impacts**

The project has several impacts, including the disturbance of Dutch Slough tidal marsh, the construction of a new levee system, and the potential for flooding. The project also has impacts on wildlife and on the aesthetic value of the project area.

**6. Project Mitigation**

The project has several mitigation measures, including the avoidance of Dutch Slough tidal marsh, the construction of a new levee system, and the implementation of a monitoring and maintenance program. The project also has mitigation measures for wildlife and for the aesthetic value of the project area.

**7. Project Monitoring and Maintenance**

The project has several monitoring and maintenance measures, including the implementation of a monitoring and maintenance program, the construction of a new levee system, and the implementation of a wildlife management plan. The project also has monitoring and maintenance measures for the aesthetic value of the project area.

**8. Project Funding**

The project is funded by the State of California, the United States Department of the Interior, and the United States Environmental Protection Agency. The project also has funding from the Dutch Slough Tidal Marsh Restoration Project Fund.

**9. Project Schedule**

The project is scheduled to start in 2010 and to be completed by 2015. The project has several key milestones, including the start of construction, the completion of construction, and the start of monitoring and maintenance.

**10. Project Contact Information**

For more information, please contact the project manager at (916) 438-2200 or visit the project website at [www.sfwmd.gov](http://www.sfwmd.gov).

**Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project**  
Fact Sheet – January 21, 2014  
Prepared By Matt Cline

**Reasons for Vineyard Preservation**

1. This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our winemakers and viticulturists in the future.
2. It preserves a natural pre-historic sand-dune (up-land habitat) within this wetlands restoration project as open space. This open space enhances the overall wetlands project and the Bay-Delta ecosystem. Historically, these upland habitats were also a dominant feature in and around these wetlands.
3. Provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide. This would make Oakley a more desirable location to live which might spur higher end housing and therefore a higher tax base. This may ensure that the current owners of these properties will continue to maintain a high re-sale potential use for their land. This is a very complicated issue but there already seems to be interest in preserving old vines and agriculture within our urban growth areas locally, at the state level, and nationwide.
4. Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems.
5. This ancient vineyard, because of its historic and scientific value, including the ecological lessons of dry-farming, will be an interesting and educational focal point for the public to see as they wander through the restored wetlands. There is also interest in providing an educational opportunity to middle and high school children which would expose them to an agricultural learning experience.

**Future Uses of the Vineyard**

1. This vineyard could be used to generate revenue.
2. Volunteer docents from 501(c)(3) organizations such as The American Wine Society, The Historical Vineyard Society, and others would be willing to provide pre-scheduled on-site tours since these organizations have an educational purpose in their by-laws. These tours could coincide with either the Heart of Oakley Festival or the Harvest Festival. Local growers and winemakers that are utilizing Oakley fruit should also be willing to educate the public about the value of old vines.
3. The vineyard can be the focal point of a community park that focuses on our local agricultural roots. A "community farm" can be built on part of the property around the Emerson Dairy that will be acquired as a result of the development. The local agricultural industry and grocery store chains might be interested in corporate sponsorship of a "community farm".
4. Local 4H Chapters can conduct pruning demonstration projects teaching the art of spur pruning on head trained vines. Then conducting a fun "pruning competition" with the project attendees.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**Summary**

The vineyard can co-exist with this wetlands restoration project because it was planted before the levees were installed; therefore these vines will survive the process of re-flooding the surrounding acreage. While the state is intent on covering this vineyard that stands on a natural silted environment to additional wetlands, some natural uplands are also being restored as this one should be as well. The value as a living museum and as an example of sustainable agriculture let alone 10% of the remaining Carignane vines in Contra Costa County are invaluable. The precious deep planted acres is, in my opinion, one of the greatest reasons to save it and especially because this vineyard could very well be the very best example of what this grape can do that we have anywhere here in the state.

The State of California needs to offer a proposal that will preserve this ancient vineyard. This vineyard is over 100 years in the making and a proposal that preserves this historic Carignane vineyard would be a win-win for the State of California, the City of Oakley, and our world renowned California wine industry.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [elseikel@gmail.com](mailto:elseikel@gmail.com) on behalf of [Ed Seikel](#)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Oakley Vineyard Preservation  
**Date:** Thursday, March 06, 2014 11:04:24 AM

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Ms. Patty Finfrock

Department of Water Resources

FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)

1416 9<sup>th</sup> Street, Suite 1623

Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

While I am an avid outdoor enthusiast and am always excited to hear about new projects providing communities with increased access to parks and other natural habitats, including the proposed Dutch Slough Project, this ancient vineyard is an irreplaceable, historic example of one of the longest surviving vineyards in the New World. It represents barely 1% of the acres included in the Dutch Slough Restoration Project, and would prove to be an incredible asset not only for historical, scientific, or educational purposes, but as an example for future vineyard preservation projects as well as to the community itself.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Thank you very much for your time, and I truly hope a compromise can be found.

Dr. Edward Seikel

Lab Manager

Clarksburg Wine Company

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Lee Benz](#)  
**To:** [Finfrock, Patricia@DMR](#)  
**Cc:** [kellytraewineco@yahoo.com](#)  
**Subject:** Petition to the EIR with Supplemental EIR Public Comments - Lee Benz  
**Date:** Sunday, March 02, 2014 3:56:51 PM  
**Attachments:** [Three Wine Company -Petition against the EIR.docx](#)

Dear Ms. Finfrock,

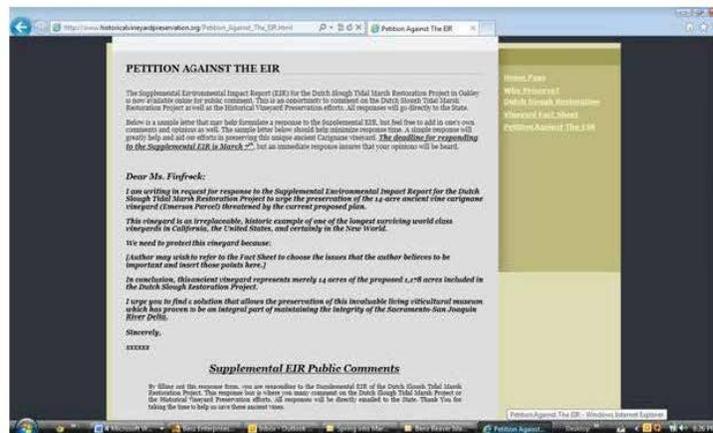
Because your website has a problem, I am submitting my comments directly and have done a screen print of the filled out petition form

[Supplemental EIR Public Comments](#)

I have long been a wine purchaser and customer of Three Wine Company and Wine Access Company who have made wonderful and unique wine from these ancient Carignane Vines and grapes. This Vineyard should absolutely not be destroyed for this project unless it is proven that they cannot co-exist.

Sincerely,

Lee E Benz



Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses



Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Land\\_Hartmut](#)  
**To:** [Finfrock\\_Patricia@DWR](#)  
**Subject:** Please save ancient vine carignane vineyard (Emerson Parcel)  
**Date:** Sunday, March 02, 2014 2:04:04 PM

---

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

This ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project and much deserves to be protected. I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Hartmut Land  
195 Hollywood Ave  
Rochester, NY 14618

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Peter Heinecke](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** Please Save Oakley Carignone Vineyard  
**Date:** Saturday, February 22, 2014 12:58:49 PM

---

Dear Ms. Finfrock:

I am writing to request that you and the State of California work to preserve the Oakley Carignone Vineyard

This letter is in response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project. I ask that you work to preserve the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World. It is a rich representative of California's agriculture Heritage.

Importantly, it is economically viable currently and its presence can only help to enhance the surrounding economy and properties.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

*Peter S. Heinecke*  
Peter Heinecke  
30 Hill St.  
San Francisco, CA 94110

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Kelley Golde](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** public comment regarding the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project  
**Date:** Tuesday, February 18, 2014 8:54:44 AM

---

Dear Ms. Finfrock,

I am writing in response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project. I fully support the preservation of this valuable and historic vineyard. It is dry-farmed, and therefore, is a great example of sustainable agriculture. It represents a significant percentage of the Carignane in Contra Costa County (14 of only 87 acres) and produces excellent wine.

It's a shame the vineyard can't be part of a community center or border the future wetlands, so that visitors could read and learn about this historic gem.

I urge you to save this 14-acre ancient vineyard on the Emerson Parcel. Thank you.

Sincerely,

Kelley Golde

[kelly3@gmail.com](mailto:kelly3@gmail.com)

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Chuck & Bobbi Gee](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Response to Supplemental EIR - Dutch Slough Tidal Marsh Restoration Project  
**Date:** Thursday, March 06, 2014 8:30:27 AM

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March 7, 2014

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

We need to protect this vineyard because:

- This vineyard was planted in the 1880's and produces one of California's most rare but historically significant grapes, Carignane.
- The vineyard on the Emerson Parcel uses very unique sustainable farming method and is dry farmed.
- These ancient vines are an historical example of sustainable agriculture.
- This vineyard was planted on a sand dune well before the levees and is above the floodplain that needs to be restored. If the DWR is only trying to restore the tidal marshland there is no reason why both cannot coexist.
- This ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living museum and protect and preserve the viticulture history that California has built.

Sincerely,

Barbara Gee  
9340 Los Lagos Circle

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

Granite Bay, CA 95746

(916) 259-1225

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [kimmarkz@comcast.net](mailto:kimmarkz@comcast.net)  
**To:** [Finfrock.Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Save Oakley Vineyard Preservation Dutch Slough  
**Date:** Tuesday, March 04, 2014 1:03:17 PM

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To: [Patricia.Finfrock@water.ca.gov](mailto:Patricia.Finfrock@water.ca.gov)

Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because preserving our California history is something we must do for the ages. These vines are the artifact of our California predecessors and hold tales of immigration, culture, prosperity and life in California. This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our winemakers and viticulturists in the future.

Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment. This vineyard represents a map for the public and our future generations of farmers and winemakers to follow which will show we can live and grow our foods together with preserving our sensitive environmental ecosystems.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

Kimberley C. Zembsch  
kimmarkz@comcast.net  
10 Hammond Place, Moraga, CA 94556

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [karen.legrand@googlemail.com](mailto:karen.legrand@googlemail.com) on behalf of [Karen LeGrand](#)  
**To:** [Finfrock.Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Save the Lucchesi Vineyard  
**Date:** Monday, March 03, 2014 8:10:53 AM

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Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

The vineyard can be the focal point of a community park that focuses on our local agricultural roots. California's rich heritage and reputation as a premier wine producing region can be promoted. A "community farm" can be built on part of the property around the Emerson Dairy that will be acquired as a result of the development. The local agricultural industry and grocery store chains might be interested in corporate sponsorship of a "community farm".

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Karen LeGrand

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Karen LeGrand  
Ph.D. Candidate  
Department of Food Science  
& Technology  
Robert Mondavi Institute for  
Wine & Food Science  
University of California, Davis

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [jennymcmahon@comcast.net](mailto:jennymcmahon@comcast.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Saving Old Vines Emerson Parcel  
**Date:** Wednesday, March 05, 2014 2:10:48 PM

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Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

Provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide. This would make Oakley a more desirable location to live which might spur higher end housing and therefore a higher tax base. This may ensure that the current owners of these properties will continue to maintain a high re-sale potential use for their land. This is a very complicated issue but there already seems to be interest in preserving old vines and agriculture within our urban growth areas locally, at the state level, and nationwide.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Jenny McMahon

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Todd Heth](#)  
**To:** [Finrock, Patricia@DWR](#)  
**Subject:** saving our heritage  
**Date:** Friday, March 07, 2014 2:16:42 PM

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Dear Ms. Finrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

It is part of our cultural and environmental heritage.

This vineyard preserves a natural pre-historic sand-dune within this wetlands restoration project as open space. This open space enhances the overall wetlands project and the Bay-Delta ecosystem. Historically, these habitats were also a dominant feature in and around the wetland regions.

Preserving this historic vineyard would show that the City of Oakley is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat is important but this vineyard is very special and unique. Because this vineyard is non-irrigated and is farmed sustainably, it is a model that will show that we can coexist within our environment and can show the public and future generations farmers how we need to live and grow.

This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our future winemakers and viticulturists.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Todd Heth

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Chris Wessendorf](#)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** SEIR for Dutch Slough Tidal Marsh Restoration Project  
**Date:** Wednesday, February 19, 2014 3:50:39 PM

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Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

The Carignane varietal has become quite rare here in California. At one time this grape represented about 30% of all the red-wine grapes in all growing regions of the state. The majority of the vines were planted in the Central Valley and used to make inexpensive box and jug wines.

In 1974 California had only 30,700 acres of Carignane but that total has dropped to only 2,547 bearing acres in 2012 with 744 acres disappearing from the previous year (mostly from the Lodi Region-District 11).

In District 6 which includes Contra Costa County there is only 87 acres left in 2012 with the Emerson parcel representing 16% of that total. Most of the surviving quality vineyards of Carignane mainly exist here in Oakley, Sonoma County, and Redwood Valley in Mendocino County. This ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Mr. Chris Wessendorf  
9272 Deddington Way  
Sacramento CA 95829  
(916) 708 2354

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Dawne Sacchetti](#)  
**To:** [Finrock\\_Patricia@DWR](mailto:Finrock_Patricia@DWR)  
**Subject:** Tidal Marsh Restoration Project - Vineyard Preservation  
**Date:** Friday, February 28, 2014 9:53:33 AM

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Dear Ms. Finrock,

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre Ancient Vine Carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States. We need to protect this vineyard because the Emerson Vineyard and most of the ancient vineyards surrounding Oakley are world class vineyards and have played a significant role in California's viticultural history.

Preserving this historic vineyard would show that the State of California and the Department of Water Resources is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat restoration is important but this vineyard is important as well. Because this vineyard is non-irrigated and farmed sustainably, it is a model that shows we can coexist within our environment.

In District 6 which includes Contra Costa County there is only 87 acres of Carignane left in 2012, with the Emerson parcel representing 16% of that total. The value as a living museum and as an example of sustainable agriculture let alone 16% of the remaining Carignane vines in Contra Costa County are invaluable. The precipitous drop in planted acres is, in my opinion, one of the greatest reasons to save it and especially because this vineyard could very well be the very best example of what this grape can do that we have anywhere here in the state.

On a personal note, I started my wine career sampling grapes in this vineyard, so it has some personal significance. I researched the Carignane grape many years ago and still possess an affinity for this grape that began in this particular property. I have also taught others about this unique grape variety, simply by exploring this special vineyard. This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our winemakers and viticulturists in the future.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Dawne Sacchetti

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

*Winemaker-Chateau Diana*  
6195 Dry Creek Road  
Healdsburg, CA 95448  
P (707) 433-6992  
F (707) 431-1740  
[dawnes@chateaud.com](mailto:dawnes@chateaud.com)  
<http://www.chateaud.com/>

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Doug Beckett](#)  
**To:** [Finrock, Patricia@DWR](#)  
**Subject:** unique ancient Carignane vineyard  
**Date:** Wednesday, February 19, 2014 12:42:40 PM

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Ms. Patty Finrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because it has no negative effect on the lands surrounding the vineyard, it is a part of the history of California winemaking and a source of revenue for a cash strapped California. To remove this vineyard, which represents less than one percent of the total acreage under consideration makes absolutely no sense what so ever. I hope the vineyard will be allowed to stay and remain a part of California history.

Sincerely,

Doug Beckett

*"Count your life by smiles not tears, count your age by friends, not years, and remember we do not quit playing because we grow old.... we grow old because we quit playing"*

Doug Beckett-Vintner  
Peachy Canyon Winery  
2025 Nacimiento Lake Dr.  
Paso Robles, CA 93446  
Phone: (805) 237-1577 Ext. 11  
Cell: (805) 431-9234  
[doug@peachycanyon.com](mailto:doug@peachycanyon.com)





**From:** [Jody Purdom](#)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Vineyard Preservation vs. Dutch Slough Tidal Marsh Restoration Project  
**Date:** Wednesday, March 05, 2014 2:36:38 PM

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**Dear Ms. Finfrock:**

***I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.***

***This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.***

***We need to protect this vineyard because in addition to being its historic, unique and sustainable, it forms part of the lifeblood of my friend's winemaking business. While this may not seem like an acceptable or important enough reason, I can assure you that their many friends and family feel quite differently. When I first met the Clines, they were one of the only winemaking families in Northern California that was producing Carignane. And fine wines the Clines have made from this incredible grape. Destroying these vines not only takes away a part of California's history, it robs a business of a large part of its potential revenue. I'm sure that you will agree that viticulture and winemaking are difficult businesses to sustain - not the glamorous pastime portrayed in the entertainment industry. Plowing this vineyard under makes it just a little bit harder for this small business to compete.***

***Again, while you may not feel that my comments are valid, think of your own business and whether it could sustain a hit of this nature. Pulling out this vineyard not only robs California of a part of its valuable root stock, it also robs a small business of a part of its livelihood.***

***With that in mind, please, I urge you, to make the right choice.***

***Thank you for your consideration of this important issue.***

***Sincerely,***

**Jody Purdom**  
**707-637-7325**  
**[jpurdom@mac.com](mailto:jpurdom@mac.com)**

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Gary Marquart](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** 14 acres.  
**Date:** Friday, March 07, 2014 10:10:04 AM

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Vines 129 years old, and still producing. Does nobody realize the historic significance of that?

Most commercial California vineyards would have ripped them out and replanted them, in the interests of volume over quality, four times or more in that period.

Cline asks for no water. No compromise in the project -- except that his 14 acres remain as is. Plant whatever you like around them. Bring back the natural wildlife and habitat. **Although, after 129 years, his vines are close to "natural" as that which nature provides.**

I am an environmentalist. Those who stripped the land of Ponderosas should be hung, at public ceremony, complete with beer, barbeque, and cotton candy for the kids.

But I am also a preservationist. The replacement of "old growth neighborhoods" with strip malls and palatial estates on miniscule lots is anathema. The very best small town governments in, say, New England see their principal duty as resisting the economic lures to change, to keep the centuries-old neighborhoods unchanged as a living history that continues to provide for our future.

The court case is today. Matt Cline's 14 acres can be set aside, as a State (and, eventually, National) historic site, and should -- no, must -- be preserved, examples of an essential part of California's heritage.

Destroying them is bureaucracy run amok, the product of those to whom "coexistence" and "cooperation" signifies failure. It isn't. It is intelligent planning, across otherwise competing interests, that achieves win-win.

Don't let those so singularly focused on one mission destroy our heritage. Prevent this. I beg of you.

Gary Marquart  
ex Oakland Hills  
now retired in Austin, TX: Social security doesn't buy much in the SF Bay area.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Laurin Beckhusen](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** Comment on Restoration Plan  
**Date:** Sunday, March 02, 2014 8:17:25 PM

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Dear Ms. Finfrock

Please spare this small but historic vineyard from inclusion in the restoration project! I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Respectively yours,

Laurin E Beckhusen  
7404 Putman Rd  
Vacaville, CA  
7077181076  
kathylaurin@msn.com

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [SUSAN ESTES](#)  
**To:** [Finrock\\_Patricia@DWR](mailto:Finrock_Patricia@DWR)  
**Cc:** [SUSAN ESTES](#); [MATT CLINE](#)  
**Subject:** CONTRA COSTA COUNTY: DUTCH SLOUGH RESTORATION  
**Date:** Wednesday, February 26, 2014 3:17:40 PM

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Dear Ms. Finrock,

Today I am forwarding my comments to you, in support of Matt Cline who is equally opposed to the demolition of the 14 acres of carignane vineyards which will be destroyed under the Dutch Slough Restoration project. For your reference is a Fact Sheet that delineates all the strong reasons to exempt this acreage from your project. See: <http://origin.library.constantcontact.com/download/get/file/1109591060245-655/Historic+Carignane+Vineyard+Preservation-Fact+Sheet.pdf>

Unlike other agriculture, vineyards have a much longer life, in this case enough to have witnessed at least five generations of humans, several replanting of fruit orchards, vineyards that themselves are possibly out-lived only by olive orchards. Just because east Contra Costa doesn't have the cachet of a Napa, Sonoma, Rhone or Tuscan origin, it doesn't mean this is not a valuable crop. Just read this article from the Contra Costa Times and you'll get a peek at what these and other vines mean to their owners: [http://www.contracostatimes.com/ci\\_21375497/vineyard-thieves-plunder-half-ton-valuable-zinfandel-grapes](http://www.contracostatimes.com/ci_21375497/vineyard-thieves-plunder-half-ton-valuable-zinfandel-grapes)

All across this state, and elsewhere in the world where biodynamic agriculture is taking hold, vineyards are one of the first industries to take up the standard and grow organic crops. It barely does tribute to the vineyards, still extant or long lost ago to the unchecked development of east Contra Costa, to describe these as 'legacy' vineyards. They've endured everything that Mother Nature has dealt them, including inundation which I have personally seen back in the winter of 1981-1982 when we thought we would lose some of the levees. The swales of vineyards were under more than a foot of water, some with a water surface area that was approximately an acre, more or less. This I know to be fact because I was boots-on-the-ground and in the thick of it.

I've taken the time to look at your website, scanned it with interest—I am one of those few individuals who actually knows what the term "adaptive management" means—I submit this excellent critique of that concept for the perusal of any intelligent person who wants more than just nomenclature to blanket the unknowns your project represents. Read this, please: <http://californiawaterblog.com/2011/07/21/adaptive-management-means-never-having-to-say-you%E2%80%99re-sorry/>

I seriously doubt that the old paisanos who planted those vineyards changed the existing ground elevation by a tenth-of-a-foot to set their vines, then never touched them after that except to prune and harvest, probably burned the canes right where they cut them and returned all that organic matter right back into the soil. I think you would have to look elsewhere to find where the natural wetlands boundaries were and

whether or not current agriculture encroaches. What I don't find on your website is anything that shows changes on the ground from 1885 to now so how do you plan to 'put back' what you never saw? I submit that if you cannot prove this vineyard ever encroached on established wetlands you cannot abate it to be what it was not, and to do so is quite a stretch for any management practice, adaptive or otherwise. This amounts to eminent domain without benefit of recourse.

Your intentions and efforts, and I grant they are worthy and noble, but they are too damn late, about 30 years by my reckoning. In the 1980s the building boom was on to build, build, build in east Contra Costa, nobody took much heed, never expecting the build-out from Antioch to Discovery Bay to eradicate agriculture to the extent that they have to post signs identifying part of State Route 4 as an 'Agricultural Preserve'. That was adaptive management, too, in its day. But today is different and today you can adapt and *not* go that same spoiled route and I, for one, only hope you do.

Hold off the Cat D6s!

--Susan Estes--

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Karen Baldwin](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** DUTCH SLOUGH ANCIENT VINEYARDS  
**Date:** Friday, January 31, 2014 3:13:08 PM

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I would hope the ancient vineyards can be transplanted somewhere else in the Oakley area. I think it would be an awesome idea to have an "agripark". Maybe even some other older vines, almond trees, and oak trees, etc. to remember Oakley's agricultural history.  
Thank you,  
Karen Baldwin  
Long time Oakley resident

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Tripo Long](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** Dutch Slough EIR  
**Date:** Monday, March 03, 2014 6:06:46 AM

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Ms. Finfrock,

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan. This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World. While many have been destroyed through time and development, the vineyards that still remain in the Delhi sands of Oakley help tell the story of the immigrants who came to California and answered its beacon of opportunity with hard work and productive lives. The unique sands of these vineyards also preserve rare grape rootstock brought with these immigrants from their homelands over a century ago. It should be noted that the vineyard represents only 14 acres of a restoration project totaling over 1,100 acres. As a land developer who has been a part of the design and construction of multiple wetland restoration efforts, I have seen entire site plans worked around areas of cultural and environmental significance. I have also seen historically significant sites fall under the blade of a bulldozer when a little design foresight could have seen them saved. I believe that this vineyard is one of these sites, I believe that it is appropriate to preserve this important piece of California's history, and I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

*Howell V. Long III*  
H & J Contracting, Inc.  
3160 Fairlane Farms Road  
Wellington, FL 33414  
o - 561-791-1953  
f - 561-795-9282  
c - 561-371-1135

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [William Green](#)  
**To:** [Finrock.Patricia@DWR](#)  
**Cc:** [mcline@sonic.net](#)  
**Subject:** Dutch Slough project  
**Date:** Saturday, February 22, 2014 9:48:17 AM

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Dear Madam,

I doubt the wisdom of destroying the historic dry farmed Carignane vineyard, site of 125 years old vines for this project.

I wish the entire vineyard could be relocated to North Carolina, where it could safe from such "planning" and "wisdom". Alas that is not possible

William R. Green MD, MBA  
Cornelius, North Carolina

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Dan Palmer](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Dutch Slough Tidal Marsh Restoration Project - Please do not rip out the historic vines  
**Date:** Saturday, February 22, 2014 11:33:09 AM

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Please find another solution. There are not many examples of 125-yearold vines in CA, and these are healthy, require no irrigation and are a cultural resource and good example of sustainable agriculture.

**Dan S. Palmer, Jr.**

*Please note this email was sent from my personal email address: [dan@palmerfamily.com](mailto:dan@palmerfamily.com).*

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Thomas Cline](#)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Dutch Slough Tidal Marsh Restoration Project  
**Date:** Sunday, March 02, 2014 1:10:43 PM

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Dear Ms. Finfrock,

I strongly urge that the ancient vine caragnane grape acreage be continued as an historic vineyard adjacent to the Dutch Slough Project. It is one of the oldest sites of this special grape. Its size and location is ideal for it to be carved out of the Project. Its preservation will enhance good land management practice.

Thank you for consideration of this preservation.

Tom Cline

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Tony Poli](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Cc:** [mcline@sonic.net](#)  
**Subject:** Dutch Slough Tidal Marsh Restoration Project  
**Date:** Wednesday, March 05, 2014 9:27:25 AM  
**Attachments:** [image001.png](#)

---

Dear Ms. Finfrock:

I am an architect living in Pittsburgh, Pennsylvania, quite a long way from the Dutch Slough site. My introduction to your restoration project is through an avocation – I drink wine. I live in a state that highly regulates wine purchases, and through an entity called WineAccess, I have been able to acquire interesting wines that do not show up in our Pennsylvania Liquor Control Board stores. Among them are Carignane wines produced by Three Wine Company.

I have not actually been to the vineyard in the Emerson Parcel that is threatened by the proposed wetlands restoration project, but my son has recently moved “back east” from Bakersfield. I have spent some time in the southern Central Valley, and in the Central Coast, Napa and Sonoma wine regions. My son and I have spent some time discussing California environmental policies, water issues and other similar topics as we would drive around his area during my visits. I have been able to gain an appreciation for the unique concerns of Californians for their environment. And as an architect, I deal with those kinds of issues every day. My preservation efforts tend to be on behalf of the built environment, but there are commonalities.

I have read, as extensively as I can from my remote location, about the issues relating to the vineyard. I have read the project statement produced by the DWR. Matt Cline, of Three Wine Company, has sent me some links, which I am sure you realize steer me to viewpoints that support his preservation of the vineyard point of view. But he also sent me information that enabled me to find the expression of other viewpoints. I have been struck by the passion and sincerity on both sides of this issue.

I have to say that I am particularly impressed by the vineyard preservationists’ suggestions that the vineyard and the proposed restoration can coexist. I understand that the design would have to be modified to accomplish this, but the preservation of this vineyard is unquestionably worth the effort. In attempting to restore the Dutch Slough to “an earlier state that the land was in at one time” I would hope you would consider the length of time the vineyard has been a part of that state. The efforts of early immigrants to California, planting grapes and farming them in ways reminiscent of their homelands, is a heritage worth preserving.

Thank you for any attention you might pay to my comments.

Tony Poli

Anthony G. Poli, AIA, NCARB | Senior Managing Consultant

Berkeley Research Group, LLC

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

Four PPG Place, Fourth Floor | Pittsburgh, PA 15222  
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Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Dayton Claudio](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** Dutch Slough Tidal Marsh Restoration Project  
**Date:** Monday, February 17, 2014 11:05:48 PM

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Ms. Patty Finfrock

Department of Water Resources

I recently attended a wine tasting at the Old Sugar Mill, having only recently "discovered" this wonderful hidden pocket of California agriculture. This entire area is a hidden gem and surprisingly close to downtown Sacramento. I was pleasantly surprised to learn that this region produces world class wines. Napa valley is well known with an established reputation but was once unknown before its wine industry rose to prominence. It is now a thriving destination for tourists worldwide.

I know that most developed countries protect their natural and cultural resources fiercely because they realize how unique and valuable they are to their identity. I think there is often a tendency here in the U.S. to take them for granted until they are lost. I would hate to see that happen here with these vineyards. I urge that they be protected. The preservation of our unique resources is part of what makes California so special.

Thank you,

Dayton Claudio

--

Dayton Claudio  
Dayton Claudio Studios, Inc.  
2606 Ceanothus Ave  
Chico, CA 95973

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Cell: (530) 570-4993

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Madeline Cline](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Subject:** Dutch Slough Tidal Marsh Restoration  
**Date:** Thursday, March 06, 2014 8:07:05 PM

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Dear Ms. Finfrock,

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine Carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

I am a senior at Sonoma Valley High School, and growing up in an area in which agriculture and the wine business are important and crucial to the fundamentals of a working society, the news that the state was planning on destroying 14 acres of a historic and educational vineyard in Contra Costa County, was confusing and upsetting.

I have been taught in school that preserving historic, agriculturally sustainable, and educational land or infrastructure is important to both the economy and culture we live in. The vineyard qualifies for all three. The vineyard was planted in the late 1800s, and continues to produce a large quantity of crops annually. The Carignane vineyard is also dry farmed, and in times of severe drought (as we are currently in), it seems almost insane and incredibly imprudent to destroy such a valuable and successful piece of land. Additionally, this vineyard can be used for education purposes in our schools and universities. Teaching students about the importance as well as possibilities of dry farming and working with the environment and natural resources, rather than supplementing them through irrigation or chemical additives, the California economy could be revolutionized, as well as provide a model for the world in a quest to improve the incredibly abused environment.

The state's decision to remove this vineyard seems illogical, and not very well thought out. Although it claims that this is a restoration to the ecosystem, there is a provision in which private people will be able to build 2400 homes alongside the project, which will be the real source of chemical and environmental disaster (run off, non-native plant species for landscaping, smog, ect).

As a student in the California school system, I think that the example the state is setting for its future leaders (the inability to compromise over 14 acres of an about 1200 acre project, close-mindedness, and a misunderstanding of the hypocrisy they are emulating) is dangerous and destructive. As a citizen of the United States of America and California, the hazards and damage the state is allowing in the name of "preservation" is terribly upsetting and concerning.

I urge the state to look at the options presented before it, and consider the future of California and its great agricultural history, influence, and possibilities, and make a decision that will benefit people in the long run, and avoid the options which merely move the project along.

Thank you for your time,  
Sincerely,  
Madeline Cline

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Greg Moore](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Dutch Slough Tidal Marsh  
**Date:** Friday, February 21, 2014 1:48:58 PM

---

Dear Ms. Finfrock:

I am alarmed to learn that the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project threatens an irreplaceable 14-acre vineyard of century-old head pruned Carignane (the Emerson Parcel).

Not only is this very great vineyard a perfect example of how sustainable agriculture can be integrated into both an urban and natural environment, with a positive effect on both, the Emerson parcel is one of few remaining vineyards with such a direct historical connection to our early California viticultural heritage, and like the Dutch Slough Tidal Marsh itself, is a resource that belongs to us all.

I urge you to find a solution that preserves this wonderful vineyard, so infused with more than a hundred years of careful human stewardship.

Very truly yours,

Gregory Moore

moore brothers  
WINE COMPANY

33 E. 20th Street  
New York, NY 10003

-----  
7200 N. Park Drive  
Pennsauken, NJ 08109

-----  
1416 N. DuPont Street  
Wilmington, DE 19806

-----  
Toll-Free: 888-686-6673  
[greg@moorebrothers.com](mailto:greg@moorebrothers.com)  
<http://moorebrothers.com/greg-moore>

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Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Village Grind](#)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Emerson (Lucchesi) Vineyard  
**Date:** Monday, March 03, 2014 1:05:20 PM

---

Dear Patricia,

I support the Emerson Vineyard being saved from any damage the The Dutch Slough Tidal Marsh Restoration Project will do. The 100+ year old vineyard is only 14 acres. There are enough people on your team to find a way to save it. Please do so.

Have a great day!

Greg Fleming

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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From: [James Newman](#)  
To: [Finfrock, Patricia@DWR](#)  
Subject: Emerson Parcel  
Date: Monday, February 24, 2014 6:16:25 AM

---

Dear Ms Finfrock,

I'm writing to encourage the Department of Water Resources to build protection of the Emerson Parcel vineyard into its Dutch Slough Tidal Marsh Restoration Project plans. My reasons are threefold -- 1) the vineyard is an important part of California's, and by extension America's, agricultural history; 2) it plays a key role in the local ecology; and 3) it has future scientific and educational value.

Sincerely,

James L. Newman  
Emeritus Professor of Geography  
Syracuse University  
Syracuse, NY

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Lorenzo-Lee, Maria@DWR](mailto:Lorenzo-Lee_Maria@DWR)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** FW: Dutch Slough Restoration Project  
**Date:** Monday, March 03, 2014 11:38:18 AM

---

Hi Patty,

As mentioned in my voicemail message to you, below is an e-mail from the Casagrandes regarding the Dutch Slough Restoration Project.

Sincerely,

Maria

----- Original message -----

From: Tom and/or Liz Casagrande <[casagrande5659@gmail.com](mailto:casagrande5659@gmail.com)>

Date:

To: DWR floodSAFE <[floodSAFE@water.ca.gov](mailto:floodSAFE@water.ca.gov)>

Cc: [info@threewinecompany.com](mailto:info@threewinecompany.com)

Subject: Dutch Slough Restoration Project

I am dismayed that, as part of the above-referenced project, you have condemned 14 acres of old vineyards in Oakley that are sustainably farmed, produced unique California wine, and embody a rich cultural and historical heritage. I have purchased the unique wines made from these vineyards from Three Wine Company for several years now and consider them utterly unique, producing a product that is unlike any other wine produced in the state. Surely the restoration project, which has admirable goals, can still be substantially achieved while sparing this unique agricultural heritage site. It seems to me like your decision was made solely with one benefit in mind, without giving adequate consideration to the agricultural, cultural, and historical value of this unique site.

Very truly yours.

Thomas L. Casagrande  
Arlington, VA

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [mark100t@comcast.net](mailto:mark100t@comcast.net)  
**To:** [DWR\\_floodSAFE](mailto:DWR_floodSAFE); [Sen\\_Sheenam@DWR](mailto:Sen_Sheenam@DWR); [Darlingo\\_Ruth@DWR](mailto:Darlingo_Ruth@DWR); [Wright\\_David@DWR](mailto:Wright_David@DWR); [ghelfic@saccounty.net](mailto:ghelfic@saccounty.net); [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Historic Carignane Vineyard Preservation Threatened By Dutch Slough Restoration Project  
**Date:** Tuesday, February 25, 2014 7:55:26 PM

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Hello,

Since I didn't know whom to address directly with reference to the above noted subject, I just copied as many addresses from your website as I could and included all of you in my correspondence. Please excuse the intrusion if you truly have no bearing on this subject and simply ignore my comments if you will. For those of you who are involved in this matter, I hope you take my comments to heart.

I'm originally a native Californian, and I'm willing to bet, go back further than many of you in that great State. Though my time there now is just a yearly visit, I plan to migrate back to the region permanently during my retirement over the next 10 years. I have been won over by the agriculture of the state and in particular, the wine industry of central and northern California. At the same time, I am a student of history, whether it be the ruins of Ephesus in Turkey, the true origins of the Liberty Bell in Philadelphia or ancient vines that are over 125 years old in Contra Costa County.

Here in South Florida, we don't have many things we can call that old, but we do have the country's largest grossing charitable wine auction year in and year out, more than tripling the take of the annual Napa Valley auction. Other than the old fortifications of St. Augustine there's nothing near 125+ years old here that can affect so many so much. The battle of past versus present is raging all around us. Here in Florida we are re-routing the path of the central state rivers and re-establishing the flow of water South down through the state thereby cleaning up the Everglades by using Federal programs and grants to close down the major polluting and high dollar contributing sugar industry. This industry goes back a long way but unlike the ancient vine wine industry, does nothing but damage the delicate ecosystem of South Florida. The ancient vines of Contra Costa County are self sustaining, and non polluting offering no downside to the ecosystem upon which they were planted over 125 years ago. As far as I know the area upon which they are planted is as it was found by those who planted in that region prior to 1885. Since I brought up the great ancient city of Ephesus, I'll enlighten you a little further. Did any of you know that when that city was at it's height of civilization with the world's largest known library outside of Constantinople, the port upon which it's goods and sailors landed was right on its shore. Today, thousands of years later, that same body of water and that port is located some 60 miles away. Man didn't change that ecosystem or cause it to change, and man can't change it back. Time and mother nature changed that city and that body of water. Would you and your state legislature propose putting that body of water back where it was thousands of years ago, if it could? I think not. Let nature run its course and adapt. Trying to stop eroding beaches through re-nourishment programs has failed miserably at every location its been tried. It's a colossal waste of money and natural resources. You can't stop Mother Nature.

In every city and state we have treasures of our past, that need to be preserved and maintained as long as possible for future generations to enjoy and to educate the public. These vines are no different. They are a living breathing piece of history. The chance to save these areas at any expense cannot be underestimated in any way. Once they are gone we have lost a piece of history we cannot get back, and we cannot use the knowledge they provide for the benefit of future generations.

I don't know what can be done at this point to spare these fields, I'm sure this is falling on deaf ears, but government needs to know when they are making a mistake and this misguided effort to restore an ecosystem that was never adulterated by man to begin with is a travesty. A travesty I hope you all can easily live with. If this were 125 years of your own family's history or a historic building about to be imploded with the loss of it's architecture and historical importance forever to be wiped off the face of the map, I'd bet you would have voted the other way if you could have. Feel free to pass this along to any of your department heads and legislators. Not that it matters much.

Sincerely,

Mark Johnson  
Barstow, CA/Naples, FL

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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From: [jwolpertgm](mailto:jawolpertgm)  
To: [Finrock, Patricia@DWR](mailto:Finrock.Patricia@DWR)  
Subject: Lucchesi Vineyard and the EIR  
Date: Monday, March 03, 2014 5:20:15 AM

---

Dear Ms Finrock,

I write on behalf of the effort to save the Lucchesi (Emerson) Vineyard. I was a faculty member and viticulture specialist at the Department of Viticulture and Enology at UC Davis for almost 30 years. I appreciate the value of old vineyards, as I was one of the originators of the Zinfandel Heritage Vineyard Project, a joint collaboration between UC and the Zinfandel Advocates and Producers (ZAP). We became involved in that project due to the risk of losing the old vine Zinfandel vineyards throughout California. Identification and increased awareness of these old vineyards was ZAP's main goal, while ours was the effort to understand whether they represented unique genetic material, that is, in terms of their wine quality. Our research showed that there were, in fact, unique characteristics that were worth saving.

Unfortunately, not all vineyards could be saved and some cases we arrived just days before the bulldozer. In fact, two of the three vineyards in our research from Southern California (Cucamonga area) were subsequently lost to development. As Don Galleano, owner of Galleano Vineyards, said well, "If these vineyards were buildings the state would slap a National Historical Landmark plaque on it and you wouldn't be able to touch it, but a vineyard of the same age has no value in their eyes."

I would argue that these old vineyards DO have value, as a link to our past as few other rural features do, with the possible exception of covered bridges. Would CalTrans remove a covered bridge like the one at the link below? I don't think they would.

[http://en.wikipedia.org/wiki/File:Knight%27s\\_Ferry\\_covered\\_bridge,\\_Stanislaus\\_River,\\_California.jpg](http://en.wikipedia.org/wiki/File:Knight%27s_Ferry_covered_bridge,_Stanislaus_River,_California.jpg)

I urge you to carve out a 1% exception to your Delta restoration plan and retain the Lucchesi Vineyard for as long as it can live. It is as vital to the history of California as the missions and with just as fascinating a story to tell.

Thank you for the opportunity to comment.

Best regards,

Jim

Jim Wolpert  
Viticulture Extension Specialist Emeritus  
University of California

Note: emails sent to [jawolpert@ucdavis.edu](mailto:jawolpert@ucdavis.edu) are automatically forwarded to [jawolpertgm@gmail.com](mailto:jawolpertgm@gmail.com)  
Please note that both emails still work.

Cell: 530-902-3478

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Tip Kindel](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Lucchesi Vineyard  
**Date:** Wednesday, March 05, 2014 5:37:00 PM

---

Dear Ms. Finfrock,

I am writing to ask that DWR save the Lucchesi Vineyard. It is a part of the Delta's history and saving it will not interfere with plans relative to the Dutch Slough Tidal Marsh Restoration Project.

Thanks

Tip Kindel

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Ed Betts](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Cc:** [mcline@sonic.net](#)  
**Subject:** Lucchesi Vineyard  
**Date:** Wednesday, February 26, 2014 10:41:52 AM

---

Ms Finfrock:

I want to express my strong objection to the destruction of the ancient Lucchesi Vineyard in Contra Costa County, under the guise of "wetlands restoration". As a member of the Sierra Club, I'm certainly in favor of the Water Resources goal of wetland preservation. However, this should be balanced against the permanent loss of these priceless vines, which were planted over 125 years ago.

Feel free to forward my comments to the appropriate persons in your agency, if you aren't directly involved in this debacle. I do expect a response from the DWR before the court date in March 7<sup>th</sup> in Sacramento.

Thank you.

Edward Betts  
141 Shadowhill Circle  
San Ramon, CA 94583  
925-899-7160  
[egbmcsd@msn.com](mailto:egbmcsd@msn.com)

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Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Ben Gillette](#)  
**To:** [Finfrock, Patricia@DWR](#)  
**Date:** Wednesday, February 26, 2014 3:37:20 PM

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Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

As a wine professional and fan of old historic vineyards in CA, you must help us save this parcel to grape growing. Carignane is such a dynamic varietal, especially with vines of this age. I am certain that one sip of a wine made from these vines would lead you to the same conclusion.

My best,

Ben

--  
Ben Gillette  
415.686.1961

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Romano Marchetti](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Oakley vines  
**Date:** Friday, January 31, 2014 1:08:36 PM

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Old vines should preserved unless they are in bad shape

R. Marchetti

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** L  
**To:** [finfrock\\_patricia@DWR](mailto:finfrock_patricia@DWR)  
**Subject:** Preservation of the 14-acre canigane vineyard: Emerson Parcel  
**Date:** Friday, February 21, 2014 12:20:28 PM

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I am writing to urge the preservation of the 14 acres vineyard mentioned above. it is threatened by the Dutch Slough Tidal Marsh Restoration Project's proposed plan.

This vineyard is irreplaceable. It is a historic example of on the longest surviving wold class vineyards in CA, the US and the worlit comprises only 14 oiut of 1178 acres included in the project. Certainly it can be spared.

Please find a solution tht allows the existence of this living viticultural museum for so long.

Leland Mote

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Michael Babel](#)  
**To:** [Finfrock, Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Cc:** [Kelly F.](#)  
**Subject:** RE: Lucchesi Vineyard  
**Date:** Sunday, March 02, 2014 2:13:23 PM

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Der Patricia, I'm writing on behalf of the Lucchesi Vineyard, in support of saving the vineyard along with the marshland project. I think they're both VALUABLE to the communities they serve and to the planet. Is there a way they can work together? I would sign a petition in favor of that.

Please contact me for any reason regarding this.  
Thanks,  
michael babel  
los angeles CA

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Greg Walter](#)  
**To:** [Finfrock.Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Request for Response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project  
**Date:** Thursday, February 27, 2014 10:13:56 AM

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Dear Ms. Finfrock:

My name is Greg Walter and I have been a writer, editor and publisher in the wine and food area for more than 35 years. For almost 15 of those years I have been writing and publishing my own newsletter, PinotReport, exclusively about Pinot Noir grown and produced on the West Coast. My newsletter is winner of a prestigious James Beard Foundation Award, and I have been and avid student of Pinot Noir and of all wines for many years. Prior to launching my newsletter, I was a writer and editorial consultant, and I also spent 15 years in various roles including senior editor and president at Wine Spectator magazine, the largest and most prestigious wine publication in the world. In all of my years writing about wine, my primary focus and interest area has been the wines and wine regions of California.

I am writing to urge the preservation of the 14-acre ancient-vine Carignane vineyard (Emerson Parcel) threatened by the current proposed Dutch Slough Tidal Marsh Restoration Project.

I believe that this Carignane vineyard is a unique, irreplaceable piece of the strong legacy and history of viticulture in the Oakley area and in California. It is in fact one of the longest surviving examples of a world-class ancient-vine vineyard in the state and certainly in the New World as well. This alone should be reason enough to preserve this vineyard, but please also consider the following:

1. Carignane, while very widely planted around the world, is relatively scarce in California.
2. It is very rare to find Carignane planted in such an optimal site as is represented by the Emerson Parcel, and infinitely rarer to find an ancient vineyard in such an optimal site in California.
3. This vineyard represents literally an outdoor case study in how and where to grow Carignane in California. Add to this the educational value of being able to observe and interact with a vineyard of this age and you have an irreplaceable viticultural resource.

In addition to the reasons above, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project, and in no way jeopardizes the efficacy or effectiveness of the restoration project.

In conclusion, please find a solution that preserves this incredible resource. If it is lost it will be sorely missed.

Thank you for your time. I would be happy to discuss my concerns with you further should you wish it.

Sincerely,

**Greg Walter**  
Editor and Publisher | **PinotReport**  
**FOR PEOPLE PASSIONATE ABOUT WESTERN PINOT NOIR**  
PO Box 2051, Sonoma, CA 95476  
T: 707-696-7553 | F: 707-581-1794  
E: [gswalter@pinotreport.com](mailto:gswalter@pinotreport.com) W: [www.pinotreport.com](http://www.pinotreport.com)

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Facebook: <https://www.facebook.com/pinotreport>

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Allen Balik](#)  
**To:** [Finfrock.Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project  
**Date:** Thursday, February 13, 2014 5:13:10 PM

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Ms. Patty Finfrock  
Department of Water Resources  
FloodSAFE Environmental Stewardship and Statewide Resources Office (FESSRO)  
1416 9<sup>th</sup> Street, Suite 1623  
Sacramento, CA 95814

Dear Ms. Finfrock:

I am writing to communicate my strong feelings regarding the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project and urging the preservation of the 14-acre ancient vine Carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

I have spent the past 35 years deeply involved in many aspects of the wine industry as a collector, author, educator, consultant and a passionate lover of wine. I am a true believer that the greatness of wine begins in the vineyard and only those wines that speak of their place can be considered great. I have enjoyed many Carignane based wines from several different producers using fruit from the Emerson Parcel over the years and can only say these wines fit into the rarefied category of greatness due to the intrinsic character of the vineyard.

Too many great vineyards are uprooted and destroyed forever by forces other than nature and we should all endeavor to stop this unnecessary destruction of precious vineyard land. This land is irreplaceable and will be sorely missed not only by the vineyard owners and community but also those wineries purchasing fruit and the thousands of consumers who've become followers of the wines.

This vineyard is truly irreplaceable. It is an historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

There are countless reasons necessitating the preservation of this priceless 14 acre

old-vine vineyard that is but a small fraction (about 1%) of the 1,178 acres included in the Dutch Slough Restoration project. Aside from the very important topographical elements such as the preservation of the pre-historic sand dune within the wetlands restoration for open space to enhance the entire project; there is the needed preservation of the vineyard itself.

The vineyard is a unique piece of the Oakley image and can be helpful in enhancing the personality of the city itself. Many other wine growing communities have experienced a more desirable atmosphere spurring higher end housing and new residents with the preservation of vineyard land helping to raise the tax base and enhancing other intangible assets. This vineyard is a virtual viticultural museum for existing winemakers and lays the foundation for the future of others entering the profession. As a sustainably dry-farmed (not irrigated) vineyard Emerson Parcel is a model to show we can co-exist with nature and this is an important ecological model for all to admire.

I urge you to find a solution that allows the preservation of this invaluable property which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Thank you for your consideration.

Allen Balik

**Club Essence** - Savor Life Through Wine

President and Founder

---

**Allen R. Balik**  
707-252-1001 Office  
818-590-9455 Cell  
707-253-9119 Fax  
[allenbalik@gmail.com](mailto:allenbalik@gmail.com)  
[www.savorlifethroughwine.com](http://www.savorlifethroughwine.com)

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [Nadia Croft](#)  
**To:** [Pompei Olive Oil](#); [Finfrock, Patricia@DWR](#)  
**Subject:** This is an atrocity!  
**Date:** Saturday, February 22, 2014 4:11:15 PM

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Talk about environmental restoration! THIS WOULD BE ENVIRONMENTAL RESTORATION!  
Instead  
it is an incredible heritage DESTRUCTION!

**A Death Sentence to 129-  
Year-Old Lucchesi Vineyard?** 129-Year-Old Lucchesi Vineyard & 4.38 out of 5 stars!

Today, we're getting on our soapboxes. Enough already. We're registered neither Republican nor Democrat. We vote for the candidate, not the party. We're sick and tired of the federal government's inefficiency and back-channel pork. **On one hand, Washington can slurp up every Gig of private digital communication coming out of Mae West. On the other, it can't keep the healthcare.gov website up and running.** Enough.



But as anyone in the state-regulated wine business will tell you, the Feds are choirboys compared to their local counterparts. Over the years, we've been told hundreds of stories of backroom deals that squeeze out little guys to the benefit of the empowered. But rarely have we heard one as outrageous as this one.

Biologists and engineers from the EPA and the California Department of Water Resources tell us that their wetlands projects are dedicated to protecting one of the world's most important ecosystems. Wetlands protect water quality, fish and wildlife habitats while maintaining surface water during periods of drought. **Whether you're an NPR contributor, a tree-hugger, or a Tea Partier, it's hard to take issue with their research. But, as we learned a few months ago from Matt Cline, a little bit of scientific knowledge can be a very dangerous thing in the hands of local bureaucrats with a pre-determined agenda.**

On March 7th, in a courtroom in Sacramento and under the guise of wetland restoration, one of the most historic ancient-vine parcels in California will likely be given a death sentence. Fourteen acres of 129-year-old vines will be scrubbed off the white sands of Contra Costa. **And if we didn't write what we're now writing, no one would ever know. And no one would understand the reason for the making of Cline's absolutely magnificent 2010 "1885."**

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The first time we tasted the components of what would come to be called "1885" was in February 2011. For 25 years, Cline had been working with the fruit drawn off gnarly, head-trained plants set right up against the water where the Sacramento River meets the San Joaquin at the eastern edge of the San Francisco Bay. But on that cold morning in Napa, the typically unflappable winemaker was agitated. He could already see the writing on the wall.

**"They're going to rip it out," Cline told us as he sipped black coffee from a mug, trying his best to maintain his cool.** "Those vines were planted over 125 years ago and they're still incredibly healthy. They ask for nothing. No protection from the sun or the wind. Not a drop of water." We've known Matt for almost 30 years. Up until that moment, we'd never seen him express anger, never heard him raise his voice. **"I'm all for wetlands preservation, but this has nothing to do with wetlands!" Cline shouted, before flinging the mug against the kitchen wall, shattering it into a dozen pieces.**

The 2010 growing season in Contra Costa County was one of the coolest on record, allowing the old-vine clusters of Lucchesi Vineyard extended hang-time. Harvest came late. Natural concentration was sensational, even as acids remained firm.

**Drawn ONLY from vines planted in or before 1885, Cline's 2010 is comprised of each of the five varieties selected for those first vineyard plantings.** Brilliant purple/black to the rim with luscious aromas of blackberry preserves, violets, graphite and sweet herbs. The attack is wildly concentrated, compact, and voluminous, a richly textured gumbo of mountain blueberries and crushed black fruit jam, high-toned and vibrant. **Drink now for its youthful hedonism or do as Matt's doing: Lay this one down for a decade or two** — if only to remind yourself of what might have been had the bureaucrats not gotten their way.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [Dan Gonsalves](#)  
**To:** [Finfrock.Patricia@DWR](mailto:Finfrock.Patricia@DWR)  
**Subject:** Threatened Oakley Vineyards  
**Date:** Friday, March 07, 2014 4:25:21 PM

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Dear Ms. Finfrock,

I am writing to you in regard of the historic 14 acre vineyard that has been slated to be scrubbed to create a man made wetland. I am disagree with this act of destroying the vineyard especially since there is plenty of dirt elsewhere that could be used to complete the project. There is much pressure in the Oakley area by "Progress" to develop our vineyard by contractors and other entities. I know first hand as I grew up in a farming family that farms grapes here in Oakley.

We used to farm the land that is now the Vintage Park Way houses (Big Break Area). I am pleased to see that the area closest to the river is now a park, but miss that vineyard. A small area within the houses was preserved for Legless Lizards which my father did not know existed. We also farmed a vineyard that used to be located at the corner of Cypress Rd and HWY 4, which is a 1 minute crow's fly SW from where proposed wetland project is located. That vineyard is too now houses. It was developed when I went away to college. That vineyard is where I found the last 2 Horned Toad Lizards in Oakley 30 years ago. We used to catch Horned Toad Lizards in Oakley everywhere. I often wonder what happened to them

I still farm a vineyard in the upland Bridgehead area. The old man that owned it, sold it to a developer before he died. The vineyard is very old and a bit ran down, but it makes some of the best wine in the world. Just two days ago I stopped in to see his son and he said he was going to be sad to see it go. I agreed with him. We then stepped out of the garage. We looked out at the vineyard and there was a Great Blue Herring stocking the grounds. The son said that's our friend. He's been hunting gophers here for years. I am also a Watershed Recourse Resource Specialist and all the times that I have seen that Blue Herring, I did not realize that it was feeding on gophers in my vineyard. It too will also probably be sad to see the vineyard go too.

Vineyards in Oakley are threatened by "progress" and I see the 14 acre vineyard that is slated to be scrubbed as the one that could be the first to be preserved. Vines and wildlife can coexists. It could be preserved without threat of development and even be an area to reintroduce the Horded Toad Lizard. The Blue Herons could hunt the gophers forever.

Sincerely,

Dan Gonsalves  
3rd generation Oakley Farmer/Watershed Resource Specialist

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [secnr@aol.com](mailto:secnr@aol.com)  
**To:** [finfrock.Patricia@DWR](mailto:finfrock.Patricia@DWR)  
**Subject:** vines  
**Date:** Friday, January 31, 2014 8:51:55 PM

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I am tired of the way they are destroying the Brentwood - Oakley areas. STOP taking away our grapevines and orchards. The natural beauty that we once enjoyed is just about gone. If we wanted to live in WALNUT CREEK, OR WHATEVER THEY ARE TRYING TO CHANGE US INTO---WE WOULD MOVE THERE. Just stop it!!!!

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Tuesday, March 04, 2014 10:06:05 PM

---

First Name : Kellie  
Last Name : Anderson  
Address Street 1 : 445 Lloyd Lane  
Address Street 2 :  
City : Angwin  
Zip Code : 94508  
State : AL  
Daytime Phone : 707-227-2585  
Evening Phone : 707-965-9344  
Email Address : kelliagato@gmail.com

Comments : Protection of the environment and restoration of healthy delta ecosystem is critical, but not to the point of destroying a historic, genetically important vineyard. These vines represent a component of a vanishing historical agricultural landscape. Contra Costa County was (and continues to produce) excellent wines, but this 100 year old vineyard is visual, cultural and agricultural part of Contra Costa County's history. This vineyard with its knee high, gnarled, stressed vines, rooted in unique sandy soils is a viticultural treasure. Every effort should be made to protect this resource for the benefit and enjoyment of those who will indeed protect the other 1,164 acres and need a good glass of wine with which to celebrate their success. Please consider incorporating this classically beautiful, vineyard into the wonderful restoration proposal.

Kellie Anderson  
Napa County  
formally of Martinez

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 8:42:01 AM

---

First Name : Don  
Last Name : Neel  
Address Street 1 : 15 Grande Paseo  
Address Street 2 :  
City : San Rafael  
Zip Code : 94903  
State : CA  
Daytime Phone : 415-444-6695  
Evening Phone : 415-491-1927  
Email Address : don@practicalwinery.com  
Comments : Enter comments here! I believe that preservation of the 14-acre Carignan vineyard is more important than ReDevelopment. RETAIN the existing vineyard, Please.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 8:44:42 AM

---

First Name : Cel  
Last Name : Tustin  
Address Street 1 : 2425 Golden Hill rd  
Address Street 2 : suite 106 296  
City : paso robles  
Zip Code : 93446  
State : CA  
Daytime Phone : 805-286-8582  
Evening Phone :  
Email Address :  
Comments : Stop this nonsense

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 7:55:18 AM

---

First Name : Ami Cheri  
Last Name : Hower  
Address Street 1 : P. O. Box 2029  
Address Street 2 : 19888 7th Street East  
City : Sonoma  
Zip Code : 95476  
State : HI  
Daytime Phone : 7079530162  
Evening Phone : 7079530162  
Email Address : amicheri@comcast.net  
Comments : Yes it is VERY IMPORTANT to save this vineyard NOT ONLY for his historical reasons but for scientific research.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [finfrock.Patricia@DWR](mailto:finfrock.Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 7:39:42 AM

---

First Name : Robert  
Last Name : Rex  
Address Street 1 : 1310 Warm Springs Rd.  
Address Street 2 :  
City : Glen Ellen  
Zip Code : 95442  
State : CA  
Daytime Phone : 7078335214  
Evening Phone : 7078335214  
Email Address : robert.rex@deerfieldranch.com  
Comments : Historic vineyards are as important as historic buildings, especially around Oakley, which was covered with historic vineyards before housing moved in. It is very sad to see the land lost forever. We grow organic grapes within 25 feet of a wetlands we own and restore in Kenwood, Sonoma Valley. The wetlands is happy and healthy and thriving. There is no reason to lose this valuable historic asset.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 9:04:42 AM

---

First Name : michael  
Last Name : Haddox  
Address Street 1 : 3014 Sweetwood drive  
Address Street 2 :  
City : lodi  
Zip Code : 95242  
State : CA  
Daytime Phone : (209) 625-6759  
Evening Phone :  
Email Address : michael.haddox@ejgallo.com  
Comments : Dont pull the vineyard!!!!

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 9:18:33 AM

---

First Name : Cheryl  
Last Name : Quist  
Address Street 1 : 33121 Navarro Ridge Rd  
Address Street 2 :  
City : Albion  
Zip Code : 95410  
State : CA  
Daytime Phone : 7079373609  
Evening Phone : 7079373609  
Email Address : cquist@ix.netcom.com  
Comments : Please save this historic Carignan vineyard. It's a vital part of California history.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 9:20:16 AM

---

First Name : Tim  
Last Name : McDonald  
Address Street 1 : 2105 W. Lincoln Ave.  
Address Street 2 :  
City : Napa  
Zip Code : 94558  
State : CA  
Daytime Phone : 707-363-0174  
Evening Phone : 707-259-0204  
Email Address : tim@winespokenhere.com  
Comments : Save old vines please

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 9:31:51 AM

---

First Name : Don  
Last Name : Ward  
Address Street 1 : 6501 Olcott St.  
Address Street 2 :  
City : Los Angeles  
Zip Code : 91042  
State : CA  
Daytime Phone : 626-253-5114  
Evening Phone : same  
Email Address : donlonward@gmail.com  
Comments : I support the Historical Vineyard Preservation efforts.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@securserver.net](mailto:submission@securserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 10:09:13 AM

---

First Name : Karen  
Last Name : Hannah  
Address Street 1 : 1025 Post St. Apt. 46  
Address Street 2 :  
City :  
Zip Code :  
State : AL  
Daytime Phone :  
Evening Phone :  
Email Address :  
Comments : I believe we can accomplish both goals here and want the EIR to work to conserve the vineyard acres; to not do this would seem to contradict the overall mission of what the EIR stands for.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 10:39:27 AM

---

First Name : Cheryl  
Last Name : Zammataro  
Address Street 1 : 9 White Tail Drive  
Address Street 2 :  
City : Napa  
Zip Code : 94558  
State : CA  
Daytime Phone : 707 948-2422  
Evening Phone : 707 252-6357  
Email Address : czammo@interx.net  
Comments : Enter comments here! Please preserve such a historic piece of agricultural history.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Tuesday, March 04, 2014 2:02:19 PM

---

First Name : Bill  
Last Name : Leone  
Address Street 1 : 836 Avalon Ave  
Address Street 2 :  
City : Lafayette  
Zip Code : 94549  
State : CA  
Daytime Phone : 925-260-7877  
Evening Phone :  
Email Address : wml Leone@gmail.com  
Comments : I can't believe that you can be considering destroying this great  
historical vineyard when there are ways to save it and still accomplish your project.  
Shame on you!

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 11:03:39 AM

---

First Name : AMY  
Last Name : LUTCHEN  
Address Street 1 : 300 N. Canal Street  
Address Street 2 : APT 1605  
City : CHICAGO  
Zip Code : 60606  
State : IL  
Daytime Phone : 7088216041  
Evening Phone : 7088216041  
Email Address : ALutchen@gmail.com  
Comments : Please save the ancient Carignane vines! They are the only vines left  
alive from our past!

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 12:48:14 PM

---

First Name : Mary  
Last Name : Krone  
Address Street 1 : 910 Edna Ct.  
Address Street 2 :  
City : Rohnert Park  
Zip Code : 94928  
State : CA  
Daytime Phone : 707-823-0149  
Evening Phone :  
Email Address : blackberries35@gmail.com  
Comments : Please consider saving this historic vineyard. Thank you.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [finfrock\\_patricia@DWR](mailto:finfrock_patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 1:47:18 PM

---

First Name : Sabrina  
Last Name : Compagno  
Address Street 1 : 990 Cavedale Rd  
Address Street 2 :  
City : Sonoma  
Zip Code : 95476  
State : CA  
Daytime Phone : 707-935-8311  
Evening Phone : 707-935-5972  
Email Address : sdcrcw@comcast.net  
Comments : Please consider saving this bit of history!

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 1:52:59 PM

---

First Name : Brendan  
Last Name : Tierney  
Address Street 1 : 814 Oxford St.  
Address Street 2 :  
City : Berkeley  
Zip Code : 94707  
State : CA  
Daytime Phone : 707-823-7466  
Evening Phone :  
Email Address : [brendan@merryedwards.com](mailto:brendan@merryedwards.com)  
Comments : Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:

[Author may wish to refer to the Fact Sheet to choose the issues that the author believes to be important and insert those points here.]

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Brendan Tierney

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 2:03:54 PM

---

First Name : Judy  
Last Name : Reavis  
Address Street 1 : 134 Incline Place  
Address Street 2 :  
City : Benicia  
Zip Code : 94510  
State : CA  
Daytime Phone : 7077455666  
Evening Phone :  
Email Address : jreavis@scronline.com  
Comments : Please save this historical vineyard. This varietal is becoming increasingly rare. Consider this important to the regional ecology.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 5:29:57 PM

---

First Name : Ronald  
Last Name : Long  
Address Street 1 : 1695 Sylvaner Ave.  
Address Street 2 :  
City : St. Helena  
Zip Code : 94574  
State : CA  
Daytime Phone : 707-963-8092  
Evening Phone :  
Email Address : STHRon9282@hotmail.com  
Comments : Please save the historic vinyard

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 8:08:17 PM

---

First Name: : A Cory  
Last Name: : Sawyer Sr  
Address Street 1: : 1322 Barely Ct  
Address Street 2: :  
City: : Jacksonville  
Zip Code: : 32225  
Daytime Phone: : 904 234-3695  
Evening Phone: : same  
Email: : gmcsawyer@gmail.com  
Comments: : In the grand scheme of things the intended objective can still be accomplished. Here in Florida wooded hammocks and fresh/salt marshes work together and complement each other. The vines are now and should remain a part of the area history. French and spanish settlers planted native and European vines along the marshes in St Augustine, the nation's oldest city. These old sites still remain and offer additional watershed basins and habitats. 14 acres is a small price to preserve the rich history of the area, especially if it only amplifies the end result.  
State: : AL

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 4:04:08 PM

---

First Name : Mike  
Last Name : Schieffer  
Address Street 1 : 1428 Maxwell Ave  
Address Street 2 :  
City : Napa  
Zip Code : 94559  
State : CA

Daytime Phone : 7076892997

Evening Phone :

Email Address :

Comments : The Lucchesi vineyard truly is invaluable and worthy of preservation. It would be severely disappointing, especially in this day and age, if we couldn't find a way to save it while also saving a precious habitat.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Wednesday, March 05, 2014 2:15:58 PM

---

First Name : Valerie  
Last Name : Patterson  
Address Street 1 : 214 E Napa Street  
Address Street 2 :  
City : Sonoma  
Zip Code : 95476  
State : CA  
Daytime Phone : 707-933-8558  
Evening Phone : 707-933-8558  
Email Address : vepatt@vom.com  
Comments : Dear Ms. Finfrock:

I am writing in request for response to the Supplemental Environmental Impact Report for the Dutch Slough Tidal Marsh Restoration Project to urge the preservation of the 14-acre ancient vine carignane vineyard (Emerson Parcel) threatened by the current proposed plan.

This vineyard is an irreplaceable, historic example of one of the longest surviving world class vineyards in California, the United States, and certainly in the New World.

We need to protect this vineyard because:  
the vineyard can co-exist with this wetlands restoration project. This vineyard is a great example of a living historic vineyard and produces outstanding Carignane.

In conclusion, this ancient vineyard represents merely 14 acres of the proposed 1,178 acres included in the Dutch Slough Restoration Project.

I urge you to find a solution that allows the preservation of this invaluable living viticultural museum which has proven to be an integral part of maintaining the integrity of the Sacramento-San Joaquin River Delta.

Sincerely,

Valerie Patterson

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Thursday, March 06, 2014 2:04:20 AM

---

First Name : Erika  
Last Name : Szymanski  
Address Street 1 : 305 NW IRVING ST  
Address Street 2 : apt C  
City : PULLMAN  
Zip Code : 99163  
State : WA  
Daytime Phone : 5859448762  
Evening Phone : 5859448762  
Email Address : szymanskia@hotmail.com  
Comments : The point has been made and is worth making again; historic vineyards are as important and worthy of protection as historic buildings and other monuments. Historic vineyards preserve an irreplaceable part of America's cultural development and, moreover, serve as an equally irreplaceable reservoir of past grape genetic material. The cost of preserving this vineyard is insignificant in comparison with the benefit of doing so. Please, conserve this site.

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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 7:31:39 AM

---

First Name : Joe  
Last Name : Jensen  
Address Street 1 : 2456 W Coyle Ave  
Address Street 2 :  
City : Chicago  
Zip Code : 60645  
State : IL  
Daytime Phone :  
Evening Phone :  
Email Address :  
Comments : Preserving an Old Vine Carignan Dry Farmed vineyard is worth the exception!

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 8:09:25 AM

---

First Name: : Robert  
Last Name: : Lateiner  
Address Street 1: : 57 Henry St  
Address Street 2: :  
City: : San Francisco  
Zip Code: : 94114  
Daytime Phone: : 9176841385  
Evening Phone: :  
Email: : rob.lateiner@gmail.com  
Comments: : Save the vineyard!  
State: : CA

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 8:12:33 AM

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First Name : Tanya  
Last Name : Hinson  
Address Street 1 : 7402 Ponderosa Trl  
Address Street 2 :  
City : Montgomery  
Zip Code : 77316  
State : TX  
Daytime Phone : 281-203-5611  
Evening Phone :  
Email Address : almondeve@yahoo.com  
Comments : Pre pholoxera vineyards are rare and should be preserved. I think the vineyard and the conservation project could go hand in hand.

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
Appendices to Comments and Responses

**From:** [submission@securserver.net](mailto:submission@securserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 8:37:08 AM

---

First Name : David  
Last Name : Rutledge  
Address Street 1 : 9 Gardenia  
Address Street 2 :  
City : Irvine  
Zip Code : 92620  
State : CA

Daytime Phone : 7147304806  
Evening Phone : 7147304806  
Email Address : davidwrutledge@cox.net

Comments : Reasons for Vineyard Preservation

This ancient vineyard needs to remain intact as a living museum for our world renowned California wine industry now, and to inspire our future winemakers and vinticulturists.

This vineyard preserves a natural pre-historic sand-dune within this wetlands restoration project as open space. This open space enhances the overall wetlands project and the Bay-Delta ecosystem. Historically, these habitats were also a dominant feature in and around the wetland regions.

The Emerson Vineyard provides a starting point for future vineyard preservation projects and gives a civic identity to the City of Oakley. Development in and around other ancient vineyards in the future could be done in a way that preserves the vines and rural character that they provide. This could make Oakley a more desirable location to live, which may spur higher end housing and therefore higher tax base.

Preserving this historic vineyard would show that the City of Oakley is interested in the quality of life not only for its citizens, but for the environment as well. The DWR's focus on habitat is important but this vineyard is very special and unique. Because this vineyard is non-irrigated and is farmed sustainably, it is a model that will show that we can coexist within our environment and can show the public and future generations farmers how we need to live and grow.

This ancient vineyard, because of its historic and scientific value, will be and interesting and educational focal point for the public to see as they wander through the restored wet lands. There is also interest in providing an education opportunity to middle and high school children, this would expose them to an agricultural experience.

Future Uses of the Vineyard

This vineyard could be used to generate revenue.

Volunteer docents from 501(c)(3) organizations such as The American Wine Society, The Historical Vineyard Society, and others should be willing to provide pre-scheduled on-sight tours since these organizations have an educational purpose in their by-laws. These tours could coincide with either the Heart of Oakley Festival or the harvest Festival. Local growers and winemakers that are utilizing Oakley fruit should also be willing to educate the public about the value of old vines

The vineyard can be the focal point of a community park that focuses on our local agricultural roots. A "community farm" can be built on part of the property around the Emerson Dairy that will be acquired as a result of the development. The local agricultural industry and grocery store chains might be interested in corporate sponsorship of a "community farm".

Local 4H Chapters can conduct pruning demonstration projects teaching the art of spur pruning on head trained vines. Then conducting a fun "pruning competition" with the project attendees.  
Produce a community wine label that can be used for local events.  
The Vineyard site could be used for charity events on a limited basis such as a catered lunch with wine tasting.

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**From:** [submission@securserver.net](mailto:submission@securserver.net)  
**To:** [finfrock\\_patricia@DWR](mailto:finfrock_patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Friday, March 07, 2014 8:38:00 AM

---

First Name : Connie  
Last Name : Tyson  
Address Street 1 : 16940 Greentree Avenue  
Address Street 2 :  
City : Lake Oswego  
Zip Code : 97034  
State : OR  
Daytime Phone : 503 327 5967  
Evening Phone : 503 327 5967  
Email Address : connietyson@comcast.net  
Comments : Enter comments here!Our centurion vineyards are our history, We can learn a lot from them, as well as their being a destination plae. Please keep this part of the design fro restoration intact, or stop the project and re-think its boundaries.  
Connie Tyson, Owner, Osage Springs Vineyard

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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**From:** [submission@secureserver.net](mailto:submission@secureserver.net)  
**To:** [Finfrock\\_Patricia@DWR](mailto:Finfrock_Patricia@DWR)  
**Subject:** Contact Form.  
**Date:** Wednesday, March 05, 2014 7:57:59 AM

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First Name : Roger  
Last Name : King  
Address Street 1 : 2546 Mankas Corner Road  
Address Street 2 :  
City : Fairfield  
Zip Code : 94534  
State : CA  
Daytime Phone : 707-425-9076  
Evening Phone :  
Email Address : r.king@appellationamerica.com  
Comments : All efforts should be undertaken to preserve the Emerson Vineyard inside the Dutch Slough Tidal Marsh Restoration Project. Appellation America strong supports preservation of ancient historic old vine vineyards as legacy to CA number one finished agricultural product. These cannot simply be replanted.

## **Appendix B. Marsh Creek Hydraulic Modeling and Sediment Assessment**



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## memorandum

date September 24, 2012

to Mr. Paul Detjens  
Contra Costa Flood Control and Water Conservation District

cc Patty Finfrock, Nate Hershey  
Reclamation District 2137

from James Gregory, Christie Beeman

subject Project #: 2000.03: Marsh Creek Hydraulic Modeling and Sediment Assessment

The conceptual design for the proposed Dutch Slough tidal marsh restoration in Contra Costa County includes a distributary channel on the Emerson parcel to introduce fresh water flows from Marsh Creek into the restored tidal wetland, adding habitat diversity (Figure 1). The proposed distributary channel would connect Marsh Creek to the restoration area at the southwest corner of the parcel. Further details on the conceptual restoration plan can be found in PWA (2010).

ESA PWA has conducted hydraulic modeling of Marsh Creek and the planned distributary channel to evaluate the potential effects of the proposed project on water levels in Marsh Creek using the Contra Costa County Flood Control District's (CCCFC) existing HEC-RAS hydraulic model as a basis. Hydraulic modeling results indicate that the proposed project will not increase flood levels in the Marsh Creek flood control channel under any of the flood scenarios simulated for this analysis. This memorandum describes the hydraulic modeling setup and results in more detail.

ESA PWA has also evaluated the sediment supply and transport conditions in the vicinity of the project site and the results of this evaluation are described in a separate memorandum.

### 1. HYDRAULIC MODEL SETUP

All topographic data in the model and reported model results are vertically referenced to the National Geodetic Vertical Datum of 1929 (NGVD29).

#### 1.1 Existing Conditions Geometry

The existing CCCFC HEC-RAS model covers approximately 6.6 miles of Marsh Creek extending from the mouth to approximately 1,500 feet upstream of Balfour Road and 1,000 feet upstream of the confluence with Dry Creek. The base model contains several tributaries as described in Table 1.

TABLE 1. MARSH CREEK HEC-RAS BASE MODEL REACHES

River	Reach	Extent
	I	River mouth to confluence with Sand Creek
Marsh Creek	II	Confluence with Sand Creek to confluence with Deer Creek
	III	Confluence with Deer Creek to confluence with Dry Creek
	IIIa	Confluence with Dry Creek to approximately 1,000 feet upstream of Balfour Rd.
Sand Creek	-	Confluence with Marsh Creek to approximately 1,300 feet upstream
Dry Creek	-	Confluence with Marsh Creek to approximately 500 feet upstream
Deer Creek	-	Confluence with Marsh Creek to approximately 1,600 feet upstream

The proposed project site is within Reach I of Marsh Creek. Updates were made to this portion of the existing conditions model to incorporate new information on the geometric configuration of Marsh Creek. Updates to the model include the following:

1. Adjustments to the alignment of Marsh Creek channel mouth
2. Incorporation of surveyed cross-sectional data for lower 10,000 feet of Marsh Creek

The alignment of the Marsh Creek channel mouth was changed to reflect the new dominant channel outlet which, over time, has shifted such that it now continues on its northward trajectory to discharge into Big Break, rather than turning east and discharging into Dutch Slough. The impact of this modification on the predicted water surface elevations is minor. The original and updated alignments are shown in Figure 2.

In addition to updating the alignment of the channel mouth, the cross-sections on the downstream-most reach of Marsh Creek were replaced with more accurate data collected by topographic survey. The survey was conducted by the National Heritage Institute in 2007 (NHI 2007) and includes 24 cross-sections on Marsh Creek relevant for this model. The new cross-sections reflect a significantly deeper channel with a larger cross-sectional area relative to the sections in the existing HEC RAS model. To verify the cross-sections surveyed by NHI in 2007, 6 representative cross-sections were resurveyed by MBK in 2012 (MBK 2012). The resurveyed sections compare well with the 2007 survey as shown in Figure 3. The verification sections surveyed by MBK were not incorporated into the model.

#### 1.2 Project Conditions Geometry

ESA PWA modified the hydraulic model geometry to reflect the proposed project conditions. The distributary channel was added to the model by creating a split flow path for Marsh Creek at approximately station 7000. As part of the conceptual plan, berms are proposed along the banks of the distributary channel for approximately 2500 feet downstream of the junction. This configuration will isolate the channel from this portion of the tidal wetland during low flows, allowing tidal water to flood the wetland but not projecting fluvial flows onto the wetland until the water level in the channel reaches the top of the berms. To reflect this configuration, the cross sections in this reach were modeled as three separate flowpaths connected by lateral weirs that represent the berms and permit the exchange of flow between the main channel and the overbank areas. The overbank wetland area was modeled with a

roughness value of 0.075 representing the vegetation expected to colonize over the life of the project, and elevations corresponding to the conceptual plan for wetland restoration.

The inlet of the distributary channel (from Marsh Creek to the restoration area) has been designed to have the same dimensions as the Marsh Creek channel where the two intersect. This design was selected to provide equivalent conveyance capacity for Marsh Creek in the distributary channel should it become the primary flow path for Marsh Creek over time. The outlet (from the restoration area to Dutch Slough) was designed using equilibrium geometry characteristics estimated as a function of the expected restoration area tidal prism (described below). This design was selected to reflect the fact that the daily tidal flushing of the restoration area will be the primary driver for channel morphology at the downstream end. The channel has been designed to transition linearly between the inlet and outlet.

The distributary channel mouth design may be modified in the final design to accommodate a bridge crossing; in this case we will update the hydraulic model to reflect the bridge structure and submit revised results for County review.

**1.2.1 Tidal Channel Hydraulic Geometry**

The relationship between tidal channel dimensions and tidal prism in tidal marshes is well documented in the literature (Williams et al 2002). These hydraulic geometry relationships can be used to estimate equilibrium tidal channel dimensions based on the volume of water exchanged over a typical tidal cycle (tidal prism). ESA PWA estimated equilibrium channel dimensions for the distributary channel mouth using the hydraulic geometry relationships documented in Williams et al 2002 (Table 2). For comparison, Table 2 also shows the approximate dimensions of the existing Marsh Creek channel at the location of the proposed distributary channel and the channel mouth at Big Break. Further discussion of the hydraulic geometry analysis is provided in Attachment A.

**TABLE 2. CHANNEL DIMENSIONS**

	Depth Feet (below MHHW)	Top Width Feet (at MHHW)	Area Square Feet
Marsh Creek (existing) and distributary channel (design) - at confluence	3.4	35	98
Distributary Channel (design) - at mouth	14.8	299	2610
Marsh Creek (existing) - at mouth	6.2	74	304

**1.3 Boundary Conditions**

This section describes the upstream and downstream boundary conditions applied to the model for existing and project conditions.

**1.3.1 Upstream Boundary**

CCCCFD has developed a hydrologic model using the USACE’s HEC-HMS modeling software to simulate design flow rates in Marsh Creek. The hydrologic model contains the same extent of Marsh

Creek and its tributaries as the HEC-RAS model. The hydrologic output from the HEC-HMS model for the flood event corresponding to a 6-hour, 100-year rainfall event is directly linked to the HEC-RAS model. This represents the 100-year design flood in Marsh Creek including all major sources of flow throughout the model domain.

Additional inflow hydrographs were obtained from the HEC-HMS model developed by the CCCFCD for the 10-year 6-hour rainfall event. The CCCFCD HEC-RAS hydraulic model applies the results of the HMS model at several locations along Marsh Creek with the exception of the confluence of Sand Creek. Sand Creek inflows are read from a separate data storage file which does not match the flows estimated in the HMS model. The source of these data is unknown. To derive a  $Q_{10}$  hydrograph for Sand Creek that matches the shape of the  $Q_{100}$  hydrograph and the ratio between the peak flows from HMS and the peak flows from the Sand Creek data storage file, the 100-year hydrograph from the data storage file was scaled by the ratio of  $Q_{10}$  and  $Q_{100}$  peak flows estimated at this junction in the HMS model.

### *1.3.2 Downstream Boundary*

The downstream model boundary represents a tidal boundary condition. The CCCFCD model applied a constant tide level of 3.5 feet NGVD to the mouth of Marsh Creek, which reflects the estimate of mean higher-high water (MHHW) at the city of Antioch presented in the effective Flood Insurance Study (FIS) produced by FEMA (FEMA 2009). PWA (2006) estimated local tidal datums for Dutch Slough and Marsh Creek including MHHW of 3.2 feet NGVD which has been used in other analyses related to the proposed project. To maintain consistency with the CCCFCD hydraulic modeling, the tidal boundary condition of 3.5-feet NGVD was applied for this analysis. The slightly higher estimate of MHHW used in the hydraulic model represents a more conservative boundary condition than the PWA (2006) estimate. For project conditions, the outlet of the distributary channel meets Dutch Slough near Big Break and was assumed to have the same tidal boundary condition as the Marsh Creek outlet.

To estimate the extreme tidal boundary conditions, a tide level frequency analysis was conducted using data from a USGS water level record<sup>1</sup> at Dutch Slough from Jan 15, 1997-Feb 28, 2003. Tide level recordings were fit to a generalized extreme value (GEV) probability distribution using the method of linear moments (l-moments). Several studies have shown that extreme value distributions are well suited to fitting tide level data and estimating storm surge elevation probabilities (Tawn 1990, Zervas 2005). The l-moment method is a useful tool for estimating the shape parameters of probability distribution functions and has been widely used in hydrologic applications (Ahmad et al, 2011). The monthly maximum water levels were fit using the GEV l-moment method and the 100-year water level (that is the water level that, probabilistically, will occur 1 out of every 100 years, or 1% of the time) was estimated to be 6.0-feet NGVD. The probabilistic fitting curve is shown compared to the measured data in Figure 4. It should be noted that this estimate is approximate, as detailed water level measurements were only available for approximately 6 years of data.

The tidal boundary was adjusted to reflect various sea level rise (SLR) scenarios expected to impact California over the 21<sup>st</sup> century. The USACE has developed national guidelines for estimating SLR under various projected climate conditions (USACE 2011). The guidance provides methods for estimating low,

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<sup>1</sup> USGS 11313433 / DUTCH SLOUGH BL JERSEY ISLAND RD A JERSEY ISLAND

medium, and high SLR conditions using local historic SLR for low conditions, and mathematical curves developed by the National Research Council for medium and high conditions (NRC 1987). Sea level rise estimates, developed using the corps guidance, are summarized in Table 3. These estimates were developed assuming the levee breaching proposed to restore the Emerson parcel takes place in 2013.

TABLE 3. PROJECTED HIGH, MEDIUM, AND LOW SEA LEVEL RISE FOR MARSH CREEK

Sea Level	Sea Level Rise (2013 Breaching)		
	Y0 (ft)	Y50 (ft)	Y100 (ft)
Low	-	0.28	0.56
Mid	-	0.68	1.75
High	-	1.99	5.84

The downstream model boundary was adjusted to reflect medium and high sea level rise estimates. The projected sea level rise was added to the existing tidal boundary of 3.5 feet, resulting in tidal boundaries of 5.25 for medium and 9.14 for high SLR conditions.

**2. RESULTS AND DISCUSSION**

Results and discussion of the base case (100-year storm event combined with MHHW tidal boundary) and other scenarios simulated to evaluate water levels in Marsh Creek under existing and post-project conditions are presented in this section.

**2.1 Base Case Flood Scenario**

A 100-year storm event combined with MHHW tidal conditions was selected as the base case for evaluating pre- and post-project hydraulic conditions.

**2.1.1 Existing Conditions**

As described above, ESA PWA updated the model geometry using surveyed cross sections of the downstream-most project reach. The surveyed cross sections reflect a significantly deeper channel with more conveyance capacity than the previous existing conditions geometry that was included in the original model. As a result, the updated existing conditions model results show lower water levels for the 100-year flood downstream of the bridge at Bernard Road relative to the original version of the model. A comparison of the simulated 100-year water surface elevations for the original and updated existing conditions models is shown in Figure 5. All subsequent modeling scenarios used the updated model geometry to represent existing conditions.

**2.1.2 Project Conditions**

Under existing conditions, Marsh Creek flows are confined to the leveed area of the creek until it reaches Big Break. Under the proposed project condition, Marsh Creek flood flows would be split between the main channel and the distributary channel that would allow flows to spread out over the restored wetland area as described above. The additional flow area provided by the distributary channel and restored wetland significantly reduces the simulated water levels in Marsh Creek downstream of Bernard Road.

The modeled 100-year water levels for existing and project conditions are shown in Figure 6. As shown in the figure, water levels are reduced by an average of 4.2 feet between the mouth of the creek and the proposed distributary channel. The reduction in the simulated water surface elevation continues upstream with an average reduction of 1 foot between the proposed channel inlet and the Union Pacific Railroad (UPRR) Bridge. Reductions in water levels attenuate upstream of UPRR and converge with existing conditions near the Bernard Road Bridge.

## 2.2 10-year flood with 100-year tides

A comparison of the water surface profiles for existing and project conditions for simultaneous  $Q_{10}$  and 100-year tide level event is shown in Figure 7. As shown in the plot, simulated water levels under project conditions are lower than existing conditions between the channel mouth and the UPRR Bridge. Under project conditions, the modeled water level is dominated by the 100-year tide level of 6.0 feet downstream of the proposed distributary channel.

## 2.3 Downstream Boundary Sensitivity

Additional model runs were conducted to evaluate the sensitivity of the water surface profile to the downstream model boundary. Two scenarios were evaluated to test downstream sensitivity 1)  $Q_{100}$  with MHHW plus 1 foot (4.5-foot NGVD), and 2)  $Q_{100}$  with MHHW plus 2 feet (5.5-foot NGVD). Using the GEV curve fitting method these water level have exceedance probabilities of roughly 20%, and 2% respectively. A plot of the resultant water levels for the 100-year event with the boundary condition sensitivity parameters is shown in Figure 8.

The results of the sensitivity analysis demonstrate that the reach of Marsh Creek downstream of the distributary channel is entirely dependent on the tidal boundary while upstream of the proposed channel inlet water levels are dominated by the incoming flow and are not sensitive to the tide level. Under existing conditions, the tidal boundary range tested does not influence water levels upstream of the most downstream cross-section. This suggests that, under existing conditions, the water level in the channel is primarily dominated by fluvial conditions under high flows.

### 2.3.1 Sea Level Rise

Hydraulic model runs were conducted for medium and high sea level rise scenarios. The projected sea level rise was added to the existing tidal boundary of 3.5 feet, resulting in tidal boundaries of 9.14 for high SLR conditions, and 5.25 for medium SLR conditions. The results of the  $Q_{100}$  event with high and medium SLR for existing and project conditions are shown in Figure 9.

The medium SLR scenario does not affect simulated water levels in Marsh Creek upstream of the project site for either existing or project conditions. Under existing conditions, fluvial conditions dominate the hydraulics of the Marsh Creek channel and the influence of the increased tidal boundary condition extends only a few hundred feet upstream of the mouth. Under project conditions, the fluvial flow in Marsh Creek is significantly lower due to the distribution of flow into the restoration site. The influence of the tidal boundary condition extends from the channel mouth to the inlet of the proposed channel, yet the simulated water level for this scenario remains an average of 3.5 feet lower than existing conditions through this reach.

Model results for the high SLR scenario show elevated water levels from the channel mouth approximately 2.5 miles upstream to the Bernard Road Bridge under existing conditions. Under project conditions, the influence of the tidal boundary extends only to the location of the proposed distributary channel. Similar to the results for the medium SLR scenario, simulated water levels in Marsh Creek are well below existing conditions for the high SLR scenario under project conditions.

#### **2.4 Alternate Channel Configuration**

An additional model run was conducted to evaluate the potential effect on Marsh Creek water levels if the distributary channel were to become the dominant flow path for lower Marsh Creek. To evaluate this scenario, we modeled the distributary channel as the only available flow path and assumed the original Marsh Creek channel was completely blocked. As shown in Figure 10, the increased conveyance capacity provided by the proposed distributary channel and overbank areas would more than offset any loss of conveyance that might result from a loss of capacity in the primary Marsh Creek channel downstream of the distributary inlet.

#### **2.5 Sediment Supply and Transport**

ESA PWA evaluated existing data and previous evaluations of the sediment supply and transport environment in both Marsh Creek and Dutch Slough/Big Break in the vicinity of the proposed project. This evaluation is summarized in Attachment A (Marsh Creek Sediment Assessment). The results of the evaluation indicate that the reach of Marsh Creek adjacent to the proposed project site is supply limited for both fluvial and tidal sediments.

### **3. CONCLUSION**

The results of hydraulic modeling conducted by ESA PWA show decreased water levels in Marsh Creek relative to existing conditions for all of the scenarios modeled, including the scenario where the existing Marsh Creek channel was eliminated and all flood flows were routed through the proposed distributary channel. The decrease in flood levels can be attributed to the additional flow capacity provided by the proposed distributary channel and overbank floodplain. Although significant sedimentation is not expected in either the Marsh Creek channel or the proposed distributary channel, these results indicate that the system would have significant excess conveyance capacity available to offset conveyance losses should sedimentation occur under post-project conditions.

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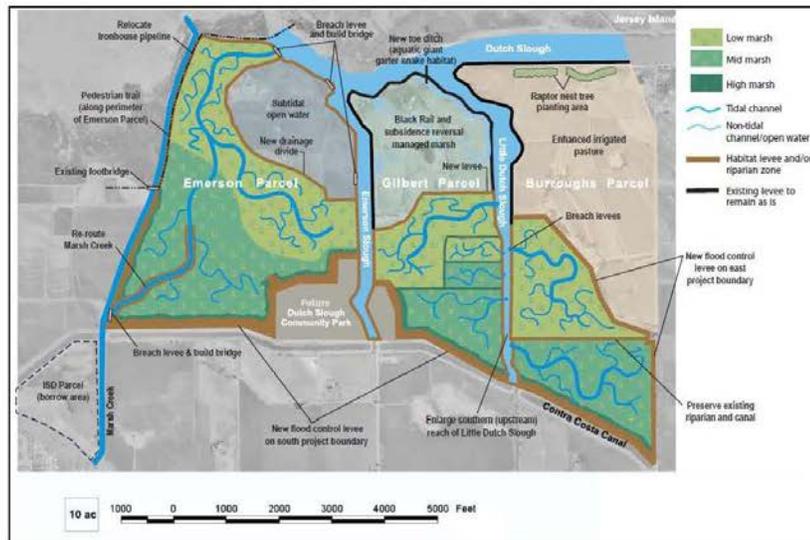
**LIST OF FIGURES**

- Figure 1 Dutch Slough Conceptual Restoration Plan
- Figure 2 Marsh Creek HEC-RAS Model Overview
- Figure 3 Comparisons of Cross-Sections Surveyed on Marsh Creek by NHI in 2007 and by MBK in 2012
- Figure 4 Probabilistic Curve Fitted to Measured Water Levels in Dutch Slough
- Figure 5 100-year Water Surface Elevations for Original and Updated Existing Conditions Model
- Figure 6 100-year Water Surface Elevations for Existing and Project Conditions
- Figure 7 Water Surface Elevations Under 10-year Flood and 100-year Tide Level for Existing and Project Conditions
- Figure 8 Downstream Boundary Sensitivity in 100-year Water Surface Elevations for Existing and Project Condition
- Figure 9 100-year Water Surface Elevations with Sea Level Rise for Existing and Project Conditions
- Figure 10 100-year Water Surface Elevations on the Emerson Distributary Channel

**LIST OF ATTACHMENTS**

- Attachment A MARSH CREEK SEDIMENT ANALYSIS
- Attachment B HYDRAULIC MODEL RUN CATALOG

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SOURCE: Reproduced from Figure 1 of PVA 200

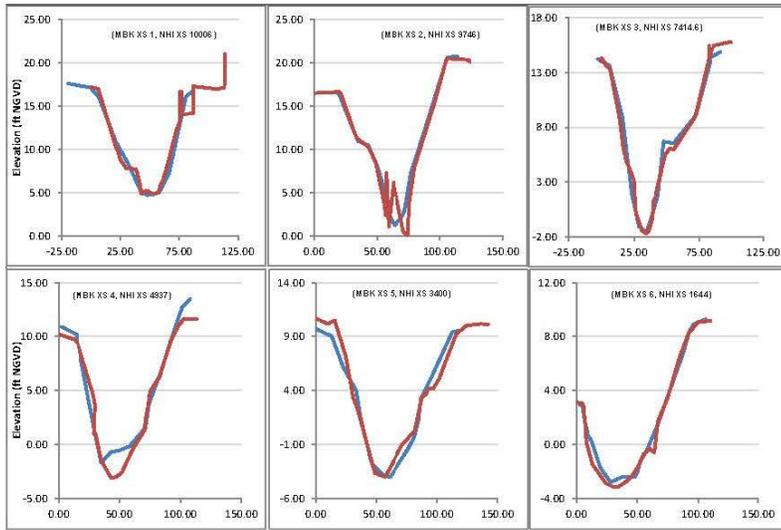
Marsh Creek Flood Study - 2000.03  
**Figure 1**  
 Dutch Slough Conceptual Restoration Plan



SOURCE: ESRI World Imagery (USGS 2008), CCCFCD HEC-RAS model

Marsh Creek Flood Study .2000 03  
**Figure 2**  
Marsh Creek HEC-RAS Model Overview

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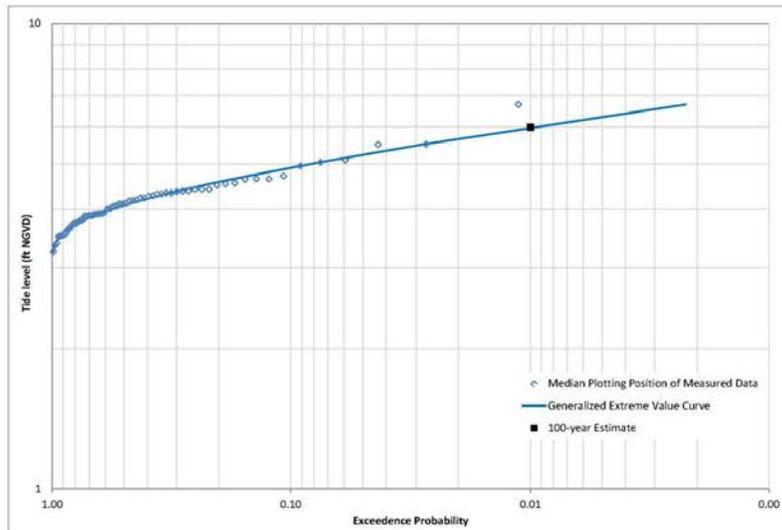
SOURCE: NHI 2007, MBK 2012

Marsh Creek Flood Analysis: 2000.03

**Figure 3**

Comparison of Cross-Sections Surveyed on Marsh Creek by NHI in 2007 and by MBK in 2012

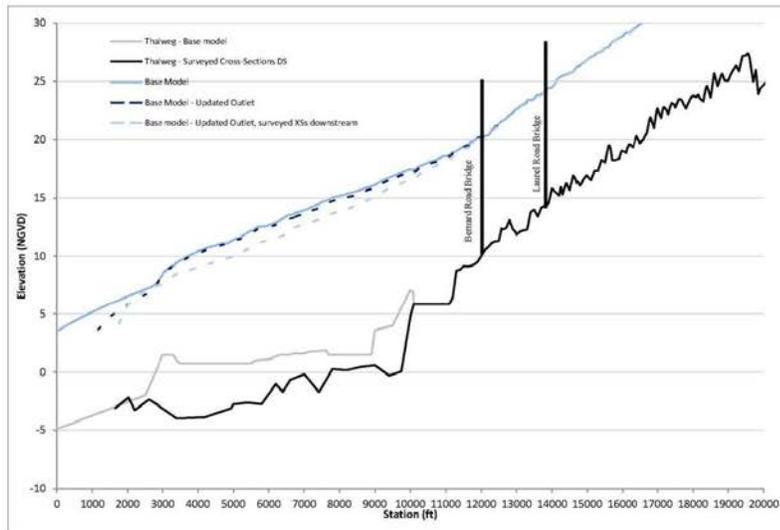
— MBK Survey 2012  
 — NHI Survey 2007



SOURCE: USGS Dutch Slough at Jersey Island  
NOTE: Measured data sorted by monthly maximum values

Marsh Creek Flood Study 2000.03  
**Figure 4**  
Probabilistic Curve Fitted to Measured  
Water Levels in Dutch Slough

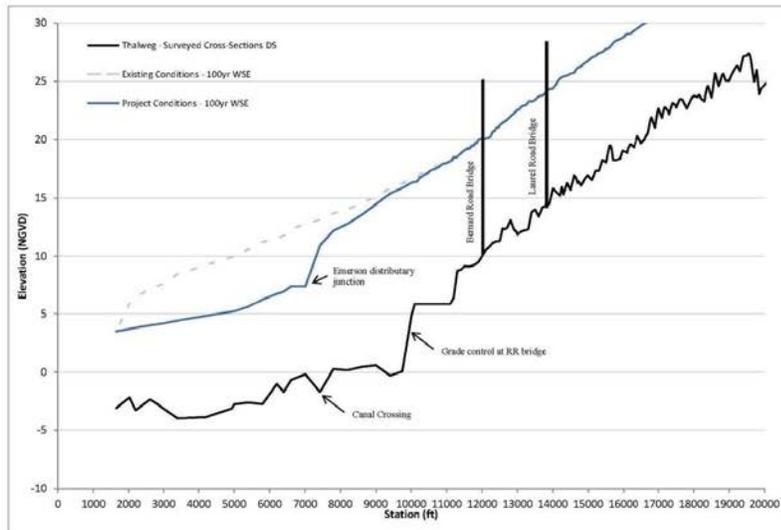
Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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NOTE: Upstream extent of model truncated for this figure

Marsh Creek Flood Study, 2000.03  
**Figure 5**  
 100-year Water Surface Elevations for Original and Updated Existing Conditions Model

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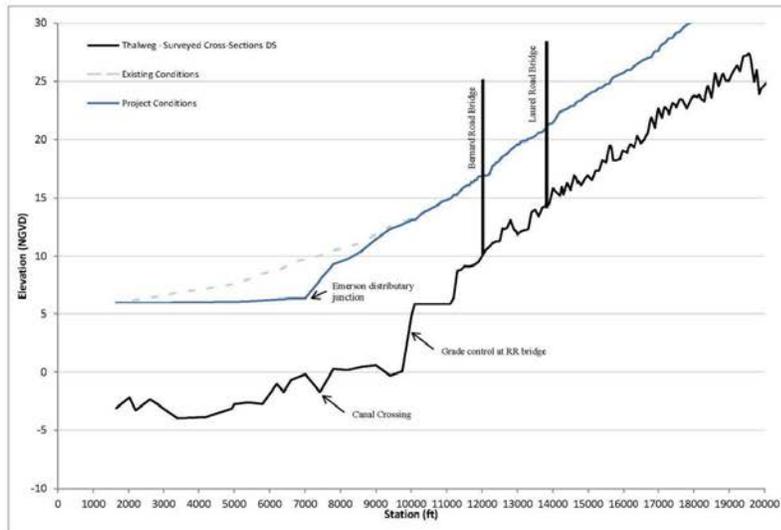


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Marsh Creek Flood Study, 2000.03

**Figure 6**  
 100-year Water Surface Elevations for Existing and Project Conditions

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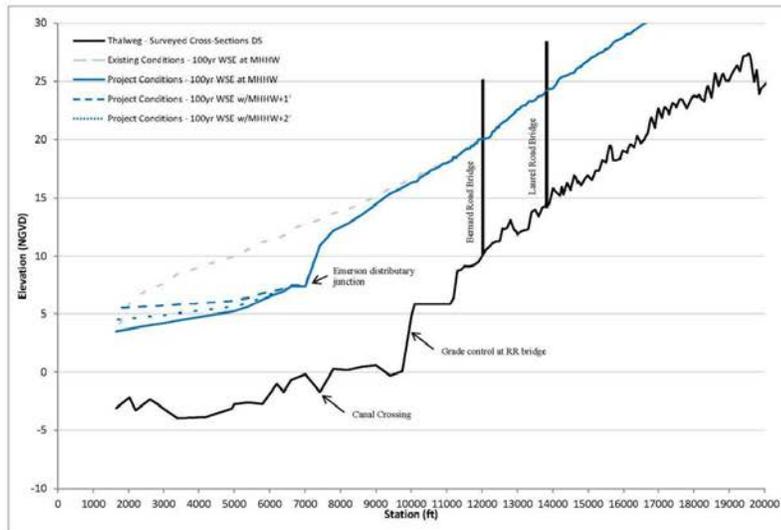


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Marsh Creek Flood Study, 2000.03

**Figure 7**  
 Water Surface Elevations Under 10-year Flood and  
 100-year Tide Level for Existing and Project Conditions

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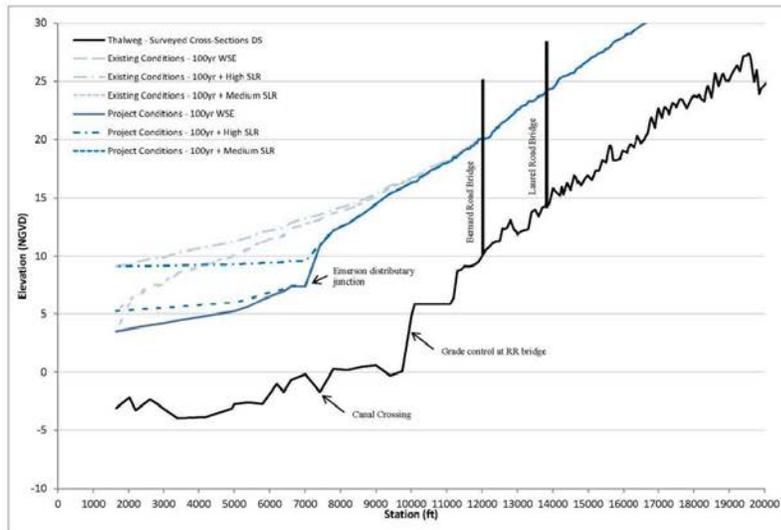


NOTE: Upstream extent of model truncated for this figure

Marsh Creek Flood Study, 2000.03

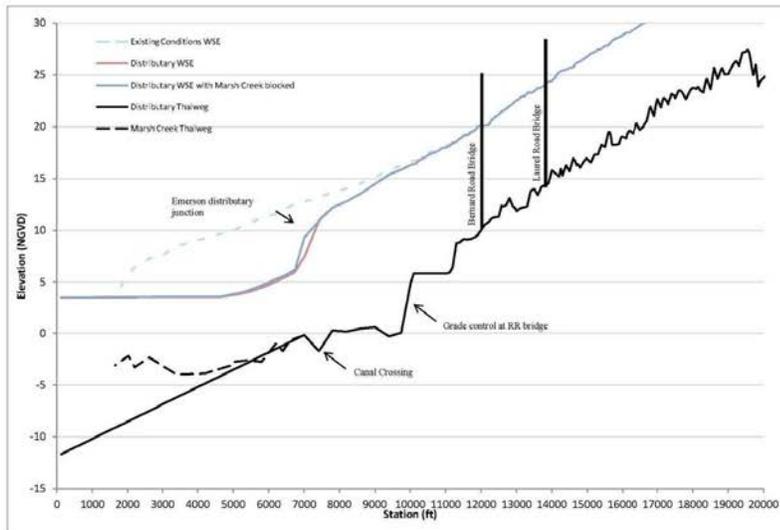
**Figure 8**  
 Downstream Boundary Sensitivity in 100-year Water Surface  
 Elevations for Existing and Project Conditions

Dutch Slough Tidal Marsh Restoration Project Final Supplemental EIR  
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NOTE: High SLR boundary at 8.14 feet, medium SLR boundary at 5.25 feet

Marsh Creek Flood Study, 2000.03  
**Figure 9**  
 100-year Water Surface Elevations with Sea Level  
 Rise for Existing and Project Conditions



Marsh Creek Flood Study, 2000.03  
**Figure 10**  
100-year Water Surface Elevations on the Emmerson  
Distributary Channel

ATTACHMENT A  
MARSH CREEK SEDIMENT ASSESSMENT



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## MARSH CREEK SEDIMENT ASSESSMENT

The proposed Dutch Slough tidal marsh restoration plan includes a distributary channel on the Emerson parcel that will introduce fresh water flows from Marsh Creek into the restored tidal wetland, adding habitat diversity. This channel will connect Marsh Creek to the restoration area at the southwest corner of the parcel. Further details on the conceptual restoration plan can be found in ESA PWA (2011). The proposed distributary channel has the potential to reduce flow velocities in lower Marsh Creek by splitting creek flows between the Marsh Creek and distributary channel. Reduced velocities and shear stresses would decrease the sediment transport capacity of the channel, increasing the potential for sediment deposition. We reviewed available information and analyses related to the existing sediment supply and sediment transport environment in light of the proposed project to evaluate the potential for sedimentation in lower Marsh Creek.

### 1. SEDIMENT SUPPLY

#### 1.1. Fluvial Sediment Supply

In the vicinity of the proposed project, Marsh Creek is an earthen, trapezoidal flood control channel bounded by levees on both sides. Since the channel was constructed, the sedimentation regime of Marsh Creek has been altered due to watershed development and the construction of detention basins on Marsh Creek and its tributaries. Detention basins trap sediments from a significant portion of the watershed that might otherwise serve as sediment supply to the lower reaches of the creek.

A study conducted by NHI compared the channel profile from cross-section and thalweg surveys over the period 1960-2007 (NHI 2010). The resulting series of longitudinal profiles (Figure A1) show that the channel bottom eroded between 1960 and 1986, by as much as 5 feet in some areas. Between 1986 and 2007 the channel profile is generally stable, with local variations and individual sections but very little overall change in the channel depth or slope.

A study by Far West Engineering of the Contra Costa County Flood Control District's (CCCFCD) sedimentation surveys from 1978 and 1986 also showed scouring conditions in the project area, between the Contra Costa Canal crossing to approximately 2200 feet upstream of the mouth (Table 1). The sediment survey suggest the downstream-most 2200 feet of Marsh Creek (directly adjacent to Big Break) may have aggraded somewhat; however, since this study was conducted the downstream outlet has moved approximately 1500 feet upstream due to a breach in the levee toward Big Break, eliminating much of the potentially aggradational reach.

TABLE 1. MARSH CREEK SEDIMENTATION RATES BETWEEN 1978 AND 1986  
 (ADAPTED FROM FARWEST ENGINEERING)

Station No.	Calculated Sedimentation Rate (in/yr)	Station No.	Calculated Sedimentation Rate (in/yr)
200	3.8	4200	-1.5
600	2.7	4600	-2.3
1019	2.7	5000	-3.8
1369	7.5	5400	0.0
1800	1.5	5800	-4.5
2200	0.0	6200	-1.5
2600	-3.0	6600	-6
3000	-2.3	7000	-3.8
3400	-1.5	7397	0.0
3800	-2.3	7800	-3.0

Based on the studies described above, approximately 74,000 cubic yards of sediment have been eroded from the channel relative to 1960s design conditions, or approximately 1600 cubic yards per year on average. Approximately 45% of this degradation occurred between the 1960s design channel conditions and the 1976 survey, with another 52% occurring between the 1976 and 1986 channel surveys. The remaining two percent occurred between 1986 and 2007, again indicating that the channel has remained relatively stable over the past two decades.

**1.2. Tidal Sediment Supply**

The US Geological Survey has studied sediment dynamics in the Sacramento-San Joaquin River delta (Delta) extensively and published numerous papers on the subject. Wright and Schoellhamer (2005) synthesizes data collected since 1998 to describe an overall sediment budget for the system. One of the suspended sediment monitoring locations used in this study was in Dutch Slough in the vicinity of the project site. The study concludes that approximately 13% of the suspended sediment entering the Delta comes from the San Joaquin River. Of this sediment, very little is associated with the complex network of channels that connects Dutch Slough with the San Joaquin system. As a result, the annual suspended sediment flux through Dutch Slough is estimated to be approximately equal to zero. By comparison, the annual sediment flux at Mallard Island, downstream of the Sacramento-San Joaquin confluence near Pittsburg, is estimated to be approximately 560 metric tons per year (Wright and Schoellhamer, 2005).

**2. DISTRIBUTARY CHANNEL GEOMORPHOLOGY**

Equilibrium dimensions for tidal channels are correlated with the volume of water that flows through the channel over a typical tidal cycle (tidal prism). The relationship between Bay Area tidal channel dimensions and tidal prism has been observed and is well documented in the literature (Williams et al 2002). These hydraulic geometry relationships can be used to estimate tidal channel dimensions and have been used extensively as a design tool for tidal wetland restoration.

The proposed project will create approximately 316 acres of tidal marsh in the Emerson parcel with an estimated tidal prism of 925 acre-feet. This number represents the volume of water that will flow in and out of the parcel via the mouth of the distributary channel over a typical tidal cycle. ESA PWA designed the distributary channel mouth using estimated equilibrium channel dimensions from the hydraulic geometry relationships documented in Williams et al 2002 (Table 2). This design was selected to reflect the fact that the daily tidal flushing of the restoration area will be the primary driver for channel morphology at the downstream end. At the upstream end, the distributary channel dimensions were designed to match the dimensions of Marsh Creek at the confluence, to provide redundant fluvial channel capacity. The upstream end of the distributary channel is near the upstream limit of tidal influence and channel morphology is not expected to be significantly influenced by tidal flushing. The distributary channel has been designed to transition linearly between the inlet and outlet.

Table 2 shows the approximate dimensions of the existing Marsh Creek channel at the location of the proposed distributary channel and at the channel mouth at Big Break. Tidal prism for Marsh Creek at the channel mouth is also provided for comparison purposes. This number represents the volume of water that moves in and out of the tidally-influenced reach of Marsh Creek over a typical tide cycle, which will not be impacted by the proposed project. It is interesting to note that the equilibrium channel dimensions predicted based on tidal prism are similar to those actually observed. Many other Bay Area flood control channels are designed with a channel cross section much larger than the tidal prism can maintain via tidal scour. For example on Alameda Creek, ESA PWA has observed significant sediment accumulation in the tidal zone, with a smaller, tidal channel forming within the accumulated sediment to accommodate daily tidal flows.

TABLE 2. CHANNEL DIMENSIONS

	Tidal Prism Acre-Feet	Depth - Feet (below MHHW)	Top Width - Feet (at MHHW)	Area - Square Feet
Marsh Creek (at Distributary confluence) - actual (= Distributary Channel design dimension)	0	3.4	35	98
Distributary Channel (at mouth) - equilibrium*	925	15	299	2610
Marsh Creek (at mouth) - equilibrium*	32	8	63	293
Marsh Creek (at mouth) - actual	32	6	74	304

\*Equilibrium dimensions estimated based on hydraulic geometry relationships from Williams et al 2002.

### 3. SHEAR STRESS

A 2-year flow event was simulated using the HEC-RAS hydraulic model to evaluate the potential project impacts to sediment transport capacity during smaller magnitude, more frequent events. The existing hydraulic and hydrologic models developed by the CCCFCD do not include the 2-year event; therefore, for this analysis, rainfall depths for the 2-year, 6-hour storm were evaluated using the NOAA Atlas 14 database for California (NOAA 2011). Geospatial grids were obtained from the NOAA database and used to estimate average rainfall depth in the Marsh Creek subbasins for the 2-year, 6-hour storm. The rainfall does not vary significantly over the watershed thus average rainfall depths of 1.4 and 1.0 inches were applied for the low and high elevation drainage basins respectively. The flows estimated from this rainfall event were input into the HEC-RAS model to evaluate the hydraulic behavior of the system for the 2-year event.

The 2-year event was modeled for existing and project conditions to evaluate shear stresses upstream and downstream of the distributary inlet for pre and post-project conditions under 2-year flow (Table 3).

TABLE 3. SHEAR STRESS IN MARSH CREEK UNDER EXISTING AND PROJECT CONDITIONS FOR THE PEAK 2-YEAR FLOW

	Upstream of Distributary Inlet		Downstream of Distributary Inlet	
	Pre-Project	Post-Project	Pre-Project	Post-Project
Reach Averaged Shear Stress (lb/ft <sup>2</sup> )	0.51	0.51	0.27	0.08

The results of the Q<sub>2</sub> analysis indicate that reach-averaged shear stresses are significantly lower downstream of the proposed distributary inlet under existing conditions. Downstream shear stresses (and, therefore, sediment transport capacity) would be further reduced under post-project conditions. Modeling results do not show any change in shear stresses upstream of the distributary inlet under post-project conditions.

4. SEDIMENT SAMPLING

ESA PWA will collect suspended and bed-load sediment samples for rainfall-runoff events occurring during the rainy season of the 2013 water year (October 2012 – May 2013). Sediment samples will be tested for net mass transported for each of the measured flow events. Additionally, bed-load samples will be tested for grain size distribution to capture the composition of the sediment transported by the creek. The samples will be used to characterize sediment supply over a range of flow conditions in Marsh Creek and to construct sediment rating curves for the supply reach upstream of the proposed restoration project.

The sediment samples and rating curves will be used to characterize sediment delivery under a range of flows in Marsh Creek. We will evaluate the grain size composition of the sediment delivered to the project reach relative to the sediment transport capacity estimated from hydraulic modeling results to further inform our understanding of the sediment transport environment under project conditions. Additionally, we will use the rating curves to estimate sediment loading over an extended period of time.

Hydraulic modeling results suggest that the influence of the restoration project extends to the downstream side of the Union Pacific Railroad Tracks and does not continue upstream. Thus, the reach supplying sediment to the project reach can be characterized as the segment of the creek between the railroad tracks and the inlet of the proposed channel. Discharge measurements will be taken simultaneously with the suspended sediment and bedload samples in order to develop a rating curves relating sediment delivery to streamflow magnitude. The target of this effort will be to collect sediment samples and discharge measurements for a minimum of three storm events to define the rating curves. The number of actual measurements will depend on the occurrence and timing of flow events during the season.

5. CONCLUSIONS

Our review of channel survey data and sedimentation rates indicates that the downstream reach of the Marsh Creek channel has eroded in response to the loss of upstream sediment supply over the period

between 1960 and 1986. The channel profile was relatively stable between 1986 and 2007, showing minor variations at individual sections but maintaining a consistent profile and slope. Recent re-surveys of selected sections from the 2007 survey indicate very little change between 2007 and 2012. These observations are consistent with patterns of watershed development including the construction of detention basins which trap sediment from a significant portion of the upstream watershed. In addition, the fact that the tidally-influenced reach of Marsh Creek does not show signs of significant sediment accumulation is consistent with observed sediment supply limitations in Dutch Slough.

The channel depth and area for the constructed distributary channel have been designed based on documented hydraulic geometry relationships for tidal channels. The design channel dimensions therefore are expected to be maintained over time as a result of tidal flushing in the restoration area. At its mouth, the cross-sectional area of the proposed distributary channel is approximate 2,286 square feet larger than the existing Marsh Creek mouth.

An evaluation of pre- and post-project channel shear stress suggests that sediment transport capacity in the project reach of Marsh Creek is significantly less than that in the next upstream reach. This suggests that, to the extent that fluvial sediments are being delivered to the lower Marsh Creek Channel, an increase in deposition would be expected in the project reach relative to the next upstream reach. However, as noted above, this reach is not depositional under existing conditions. The results also indicate that the project would result in further reduced shear stresses in the project reach of Marsh Creek, further reducing sediment transport capacity. This change may increase the likelihood of sediment deposition in post-project conditions to the extent fluvial sediment supply is available. Modeling results do not show any reduction in shear stresses upstream of the distributary inlet.

ESA PWA will monitor sediment delivery to the project reach of Marsh Creek during the 2012-2013 water year and evaluate the resulting sediment data relative to sediment transport capacity under existing and post-project conditions. ESA PWA will consider modifications to the project design if the results of this effort indicate the potential for sediment deposition to compromise the flood flow conveyance of Marsh Creek under post-project conditions.

ATTACHMENT B  
HYDRAULIC MODEL RUN CATALOG

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Marsh Creek Run Catalogue				
Plan	Geometry	Flow file		
ID	ID	ID	Description	Results figure
.p01	.g30	.u09	Base case (existing conditions) unmodified from original CCCFCD model setup. 100-year 6-hour flow from HMS model with constant 3.5-foot downstream tailwater.	Figure 5
.p02	.g02	.u09	Base case with outlet realigned to match current conditions. 100-yr 6-hr, 3.5-foot tailwater.	
.p08	.g06	.u05	Base case with outlet realigned and resurveyed NHI cross-sections downstream of station 100.06. 100-yr 6-hr, 3.5-foot tailwater.	
.p07	.g14	.u12	Emerson project conditions with realigned and resurveyed downstream MC reach. 100-yr 6-hr, 3.5-foot tailwater.	Figure 6
.p09	.g14	.u13	Emerson project conditions with realigned and resurveyed downstream MC reach. 10-yr HMS flow with 100-year estimated water level of 6-feet.	Figure 7
.p11	.g06	.u15	Base case with outlet realigned and resurveyed NHI cross-sections downstream of station 100.06. 10-yr 6-hr, 100-year tailwater at 6-feet.	
.p03	.g14	.u16	Emerson project conditions with realigned and resurveyed downstream MC reach. 100-yr 6-hr, tailwater sensitivity testing.	Figure 8
.p10	.g06	.u17	Base case with outlet realigned and resurveyed NHI cross-sections downstream of station 100.06. 100-yr 6-hr, tailwater sensitivity testing.	
.p12	.g06	.u18	Base case with outlet realigned and resurveyed NHI cross-sections downstream of station 100.06. 100-yr 6-hr, tailwater at 3.5-feet plus high sea level rise scenario.	Figure 9
.p13	.g06	.u19	Base case with outlet realigned and resurveyed NHI cross-sections downstream of station 100.06. 100-yr 6-hr, tailwater at 3.5-feet plus medium sea level rise scenario.	
.p14	.g14	.u20	Emerson project conditions with realigned and resurveyed downstream MC reach. 100-yr 6-hr, tailwater at 3.5-feet plus high sea level rise scenario.	
.p15	.g14	.u21	Emerson project conditions with realigned and resurveyed downstream MC reach. 100-yr 6-hr, tailwater at 3.5-feet plus medium sea level rise scenario.	
.p16	.g15	.u07	Emerson project conditions assuming marsh creek is fully blocked. 100-yr 6-hr, 3.5-foot tailwater.	Figure 10

**Appendix C. Results of Survey for Rare Plants**  
**3/21/14**

**Results of survey for rare plants on sand mounds and areas with potentially alkaline soils at the Dutch Slough Tidal Marsh Restoration Project site**

**March 21, 2014**

**Introduction**

The Dutch Slough Tidal Marsh Restoration Project released a Supplemental EIR for public review in February 2014. A comment letter from the California Native Plant Society (CNPS) expressed concerns about the lack of restoration or mitigation for impacts to remnant dune and alkaline soil communities. Previous rare plant surveys of the entire site had been done in conjunction with wetland delineations conducted in 2004 and 2009; none of the listed plants associated with dunes or alkaline soils were found. In response to the CNPS letter, remnant dunes within the site, as well as areas known to have salt-tolerant plants, were surveyed, to determine current plants present within these areas.

**Methods**

Pedestrian plant surveys were conducted by DWR botanists Jean Witzman and Harry Spanglet. Dutch Slough project manager Patty Finrock recorded all findings. Each area was fully traversed on foot, and all plant species identified and recorded, though some weedy species were identified only to genus. Dominant plant species are noted below, as well as general estimates of total plant cover for each area. Percent cover for individual species was not estimated. Tree species were not recorded.

Two sand mounds and one saline area on the Emerson parcel, one saline area on the Gilbert parcel, and one sand mound on the Burroughs parcel were surveyed (Figure 1).

**Results**

Emerson sand mound #1 (EM-Sand 1, Fig. 1) is primarily a vineyard. A short sandy berm (approximately 2 feet high) bounds the vineyard on the south, east, and north. To the east, sandy soils continue for approximately 40 meters, though there is a significant portion of imported gravel fill mixed with the sand throughout much of this area. The area immediately adjacent to the vineyard, primarily on the berm to the south and east, was the only area surveyed that had native dune vegetation.

Percent cover in the vineyard, not counting the vines, was about 20%, most of which was filaree. (On April 11, 2014, filaree cover was about 50%.) Outside the vineyard berm, percent cover is close to 100%, dominated by nonnative grasses.

The Project design has been changed from that in the Draft Supplemental EIR. The vineyard, its perimeter road, boundary berm, and native plants to the east will be preserved as part of the final Project. To the east of the vineyard, the area preserved will extend out to the dripline of the existing black walnut trees, about 50 feet from the perimeter berm. Beyond the dripline, the land will be graded at a shallow slope (about 5:1) to low marsh elevation. Within the

area to be preserved, there are three large bush lupine plants, CA poppies, and several birdcage evening primrose plants. In addition, vines within an area approximately 0.6 acres in the southwest corner will be removed, and test plots for growing native dune plants will be planted.

**Table 1. Results of plant survey at EM-Sand 1**

Species	Common name	Occurrence
<i>Amsinckia intermedia</i>	Common fiddleneck	Common east of vineyard
<i>Avena fatua</i>	Wild oat	Minor presence outside of vineyard
<i>Brassica rapa</i>	Mustard	Minor
<i>Bromus diandrus</i>	Ripgut brome	Dominant east of vineyard
<i>Conium maculatum</i>	Poison hemlock	Minor
<i>Erodium cicutarium</i>	Redstem filaree	Common, especially in vineyard
<i>Erodium moschatum</i>	Whitestem filaree	Minor in vineyard
<i>Eschscholzia californica</i>	California poppy	Minor
<i>Heterotheca grandiflora</i>	Telegraphweed	Minor in vineyard
<i>Hordeum murinum</i>	Foxtail barley	Dominant east of vineyard
<i>Lotus sp.</i>	Clover	Minor
<i>Lupinus sp. (albifrons or chamissonis)</i>	Bush lupine	Several (~10) large plants on vineyard perimeter
<i>Oenothera deltoides cognata</i>	Birdcage evening primrose	Moderately common at edges of vineyard on south and east
<i>Raphanus raphanistrum</i>	Wild radish	Minor
<i>Vulpia sp.</i>	Fescue	Minor

Emerson sand mound #2 (EM-Sand 2, Fig. 1) is located about 800 feet south east of the vineyard. The entire area is fenced as a cattle corral, and has apparently been used for cattle for many decades. Almost no native plants were found. Percent cover is approximately 40%.

**Table 2. Results of plant survey at EM-Sand 2**

Species	Common name	Occurrence
<i>Amsinckia intermedia</i>	Common fiddleneck	Common
<i>Bromus diandrus</i>	Ripgut brome	Minor
<i>Distichlis spicata</i>	Saltgrass	Minor
<i>Erodium cicutarium</i>	Redstem filaree	Dominant
<i>Hordeum murinum</i>	Foxtail barley	Dominant
<i>Poa sp.</i>	Meadow grass	Minor
<i>Sisymbrio irio</i>	London rocket	Common
<i>Urtica urens</i>	Dwarf nettle	Dominant
<i>Vulpia sp.</i>	Fescue	Minor

Emerson saline area #1 (EM-Saline 1, Fig. 1) is located in the south-central portion of the Emerson parcel. This area had formerly been the site where liquid effluent from the nearby dairy barn had been contained. The

botanists considered this area to be artificially saline. Percent cover is approximately 75%. Most of the pickleweed appeared dead, though it had started to resprout.

**Table 3. Results of plant survey at EM-Saline 1**

Species	Common name	Occurrence
<i>Atriplex triangularis</i>	Fat hen	Minor
<i>Cressa truxillensis</i>	Alkaliweed	Common
<i>Halogeton sp.</i>		Common
<i>Salicornia virginica</i>	Pickleweed	Dominant

Gilbert saline area #1 (GIL-Saline 1, Fig. 1) is near the center of the parcel. Most of this part of the parcel is a patchwork of nonnative grasses and wetland plants, with the dominant species changing from patch to patch; in the table below no species are called out as dominants due to this changing nature of the area's flora. This area of the parcel will become managed marsh to expand the wetlands and provide more habitat for resident California Black Rails. Percent cover is 100%. Due to the dense plant cover, some nonnative grass species were not recorded.

**Table 4. Results of plant survey at GIL-Saline 1**

Species	Common name	Occurrence
<i>Anemopsis californica</i>	Yerba mansa	Minor
<i>Atriplex triangularis</i>	Fat hen	Common
<i>Carex praegracilis</i>	Field sedge	Minor
<i>Distichlis spicata</i>	Saltgrass	Common
<i>Halogeton sp.</i>		Minor
<i>Hordeum murinum</i>	Foxtail barley	Common
<i>Lepidium latifolia</i>	Pepperweed	Common
<i>Schoenoplectus acutus</i>	Tule	Minor

Burroughs sand mound #1 (Burr-Sand 1, Fig 1) is located near the northeast corner of the parcel, adjacent to Jersey Island Road. This area is within a cattle corral, though it did not appear to have been used for holding or grazing cattle for some time. Percent cover was estimated at 75%.

**Table 5. Results of plant survey at BURR-Sand 1**

Species	Common name	Occurrence
<i>Amsinckia intermedia</i>	Common fiddleneck	Common
<i>Atriplex triangularis</i>	Fat hen	Minor
<i>Brassica rapa</i>	Mustard	Minor
<i>Hordeum murinum</i>	Foxtail barley	Common
<i>Lepidium latifolia</i>	Pepperweed	Common
<i>Malva sp.</i>	Cheeseweed	Minor
<i>Poa sp.</i>	Meadow grass	Minor
<i>Sisymbrio irio</i>	London rocket	Common
<i>Urtica urens</i>	Dwarf nettle	Dominant

**Conclusions**

No listed plant species were found during the surveys. None of the sand mounds have any dune endemic species. EM-Sand 1 has two species which are common in the Oakley area on sandy soils, birdcage evening primrose and bush lupine. These will be preserved with new changes to the project design. Most of the sand mounds have been heavily affected by cattle grazing or other agricultural uses and are vegetated primarily with weedy nonnative species.

Two potentially alkaline/saline areas were surveyed, and salt-tolerant plants were found in each area, though no listed plant species were present. Both areas are wetlands. On Emerson parcel, the area surveyed is considered to be artificially saline due to the long-term use of the area for storage of liquid waste from dairy cows. The potentially saline area on the Gilbert parcel is a mix of wetland and upland plants, many of which are salt-tolerant (e.g. *Distichlis*, *Halogeton*). As this area is too subsided to make tidal marsh restoration feasible, it will be separated from the tidal marsh by a new levee/berm, and be managed as marsh habitat for the resident California Black Rail. Wetland plants, especially tule and cattail, are expected to become dominants in this area, eventually reversing subsidence to the point where it can be connected to the tidal portion of the site.

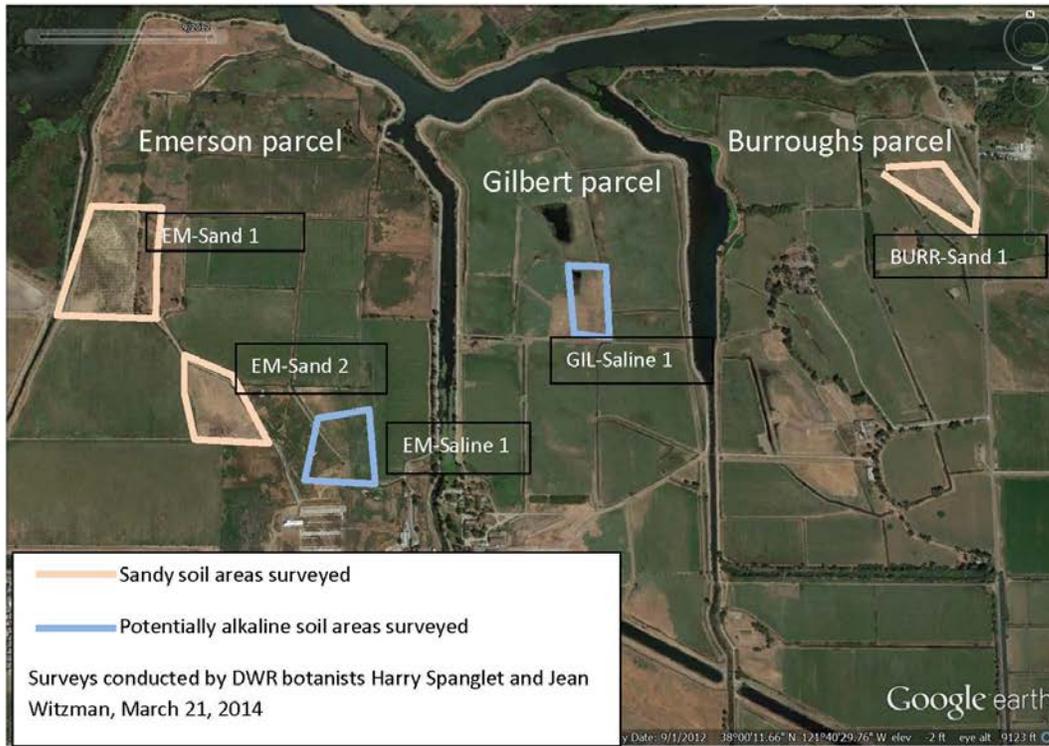


Figure 1. Areas of the Dutch Slough Tidal Marsh Restoration Project site where plant surveys were conducted March 21, 2014.

**Appendix D. Dutch Slough Tidal Marsh Restoration Project Final EIR  
Chapter 3.15 Hazards and Hazardous Materials**

### 3.15 HAZARDS AND HAZARDOUS MATERIALS

This section describes known soil contamination on the Dutch Slough Restoration Project and Related Projects sites as a result of past agricultural uses. It is based on Phase I and II Environmental Site Assessments (ESAs) for the Burroughs, Gilbert, and State-owned portions of the Emerson parcels and on soil sampling performed on the adjacent Ironhouse parcel. The Ironhouse parcel is the potential source for imported soils to be used as fill if Alternatives 2 or 3 are carried out. It should be noted that no ESA has been conducted for the City Community Park Project site due to access limitations. Issues associated with groundwater quality and groundwater contamination are addressed in Section 3.2, Water Quality.

#### 3.15.1 Affected Environment

##### Phase I Environmental Site Assessments (Phase I ESAs) for the Emerson, Gilbert and Burroughs Parcels

Phase I Environmental Site Assessments (Phase I ESA) were performed in January 2003, for the Emerson, Gilbert and Burroughs Parcels. The Site Assessments included a review of historical records and aerial photographs for each property and of the regulatory databases maintained by county, state and federal agencies, in a search for potential hazards. In addition, a follow-up, Phase I/II study was performed of the soil and groundwater in and around the six inactive and one active gas well on the Burroughs Property, and another follow-up soil and groundwater testing report was conducted in July 2003 for the State-owned portions of the Emerson properties. The Department of Water Resources (DWR) reviewed these documents in various memoranda in 2003 and concluded that the landowners had complied with their recommendations.

##### EMERSON PARCEL

The Phase I ESA, dated January 29, 2003, was performed by ENGEO Inc. on behalf of Mr. Stan Emerson (ENGEO, Inc. 2003a). Contra Costa County Building Inspection Department, Community Development Department and Assessors Office were contacted for information about the property. Historical aerial photographs dating back to 1953 were reviewed. The ESA noted that the property was used for cattle grazing as part of the Emerson Dairy operations. The only developments on the property were livestock pens. There was also a small vineyard.

The Phase I ESA included a search for records pertaining to the property in the following agency databases: Contra Costa County Hazardous Materials Division; California Environmental Protection Agency (CAL-EPA) Department of Toxic Substances Control (DTSC); State Regional Water Resources Control Board (SRWCB); California Regional Water Quality Control Board (RWQCB); State Division of Oil and Gas (DOG); Environmental Protection Agency (Region IX). Maps of the geologic, hydrologic and topographic characteristics of the site also were reviewed. The site also was observed for visible signs of contamination and past owners and occupants were interviewed.

County, state and federal records and databases were checked to see if there were any National Priority List (NPL) sites, Resource Conservation and Recovery Act (RCRA) treatment/storage/disposal facilities, or state NPL/CERCLIS equivalent sites within one mile of the property. No registered hazardous waste generators were documented within a quarter mile of the

property. Four registered underground storage tank facilities (UST) were listed within a quarter mile of the property and two of these were listed as active. One leaking underground storage tank site at Food and Liquor #86 at 101 Cypress Road is within a half mile of the property but the consultants concluded this was unlikely to have impacted the property (ENGEO, Inc. 2003a).

Follow-up soil and groundwater testing of portions of the site to evaluate nitrate/nitrite contamination was conducted in June 2003. That assessment included testing of eight soil samples and seven groundwater samples. That study found nitrite and nitrate levels well below the USEPA's residential and aquatic toxicity criteria (ENGEO, Inc. 2003d).

#### **GILBERT PARCEL**

The Phase I ESA, dated January 15, 2003 was performed by Sequoia Environmental Consulting Services on behalf of Mr. Brent Gilbert (Sequoia Environmental Consulting Services, 2003). The Phase I for the Gilbert Parcel was similar to that performed by ENGEO Inc. on the two parcels to the west and east, but also included an asbestos and lead-based paint survey. The California Environmental Protection Agency (CalEPA) performed air sampling to determine the presence of radon gas. Depth to groundwater was determined to be approximately five feet below surface.

The ESA noted that the property was used for cattle grazing and included some related structures such as a horse and feeding barn and an abandoned shed. Two gas wells managed by Tonka Energy Corp. were located in the east and southeast corners of the property.

#### **BURROUGHS PARCEL**

The Phase I ESA, dated January 29, 2003, was performed by ENGEO Inc. on behalf of Mr. Robert Burroughs (ENGEO, Inc. 2003b). The Phase I ESA for the Burroughs Parcel (ENGEO, Inc. 2003b) used the same methodology as for the Emerson Parcel. The ESA noted that most of the property was undeveloped open space. There was a residential/ranch complex and abandoned dairy. Seven gas wells, of which only one was still active, four were idle and two were plugged, and associated structures including storage tanks, were also found on the property.

A additional investigation of the soil and groundwater around the six inactive and one active natural gas wells was also performed by ENGEO Inc. for Mr. Robert Burroughs and is dated July 30, 2003 (ENGEO, Inc. 2003c). The Phase II Natural Gas Well Site Assessment (ENGEO, Inc. 2003b) was performed to follow up on possible areas of concern found in the Phase I. This work included the following field and laboratory investigations:

- Excavation of 53 exploratory test pits 24 to 30 inches in depth across the gas well sites
- Recovery of 14 composite soil samples from the exploratory trenches
- Recovery of four, four-point composite soil samples from the area of the four remaining meter sheds
- Seven *Geoprobe* borings at the well site with groundwater sampling
- Laboratory analysis of the soil and groundwater samples for the following:
  - Test Pits: Total Petroleum Hydrocarbons (TPH) as gas, diesel, motor oil, benzene/toluene/ethylbenzene/xylenes (BTEX); barium and mercury

- Meter Sheds: mercury
- Groundwater Samples from Test Pits: Total Petroleum Hydrocarbons (TPH) as gas, diesel, motor oil, benzene/toluene, ethylbenzene, xylenes (BTEX)

### Results and Potential Concerns

#### EMERSON PARCEL

The Phase I ESA for the Emerson Parcel (ENGEO, Inc. 2003b) did not find any mention of the property or of nearby properties in any agency records consulted, with one exception: the Emerson Dairy was listed on the Contra Costa County Hazardous Substances Database and a request for a Hazardous Material Business Plan was found in a review of the facility file. No other information was available. ENGEO, Inc. found no areas of concern other than the possibility of elevated levels of nitrate in soil and groundwater, given the past use of the property for cattle-raising.

Further testing was carried out of groundwater and soil (ENGEO, 2003d). Results showed nitrate levels higher than established drinking water guidelines, but DWR (2003h) concluded that groundwater beneath the property would not be used for drinking, was anyway unlikely to come into contact with surface water and would be diluted by tidal water on inundation of the site.

DWR (2003c) recommended that ENGEO, on behalf of the site owners, provide additional information on: an abandoned gas well; a water well (and its proper decommissioning); railroad ties and telephone poles that could have been treated with a wood preservative containing arsenic, copper, chromium and zinc; if the pole-mounted transformers ever contained PCBs; characterize the debris piles and recommend methods for their disposal; and perform a cultural resources records search.

The landowners were found to have substantially complied with DWR when DWR (2003d) and Department of General Services (DGS 2003) performed further site inspections in 2003. DWR and DGS concluded that: two sites for gas wells had been drilled but no pipes installed and the locations would be noted on a topographic map; PCBs that were formally present in the pole-mounted transformers had been removed; the solid waste and debris piles had been removed. In-ground fence posts with pressure-treated wood would remain in the ground and would be removed with the other structures when restoration proceeded. DWR made their final inspection of the Emerson parcel on August 26, 2003 (DWR 2003e).

#### GILBERT PARCEL

The Phase I ESA for the Gilbert Parcel (Sequoia Environmental Consulting Services 2003) did not find any mention of the property or of nearby properties in any agency records consulted with one exception: the California Oil and Gas Well Report listed two gas wells on the property.

Inspection of the gas wells indicated some leaks around joints in the pipes and noted the potential for subsurface contamination. The asbestos and lead-based paint inspection showed that asbestos-containing materials were present in the shed but lead-based paint was not detected. Air sampling did not show any excessive exposure to radon.

DWR (DWR 2003a) recommended Sequoia, on behalf of the site owners, provide additional information on: the gas wells; water well (and its proper decommissioning); chemicals used in the treatment of the wood posts; sewage system used at the single-family residence; historic use and storage

of hazardous materials at the site, in particular 55-gallon drums and pole-mounted transformers that could have contained PCBs; abandoned vehicles and machines and debris piles; onsite treatment and disposal of effluent from cattle-grazing activities; and perform a cultural resources records search.

The landowners were found to have substantially complied with DWR when DWR (2003d) and Department of General Services (DGS, 2003) performed further site inspections in 2003. DWR and DGS concluded that: the three idle gas wells would be plugged and abandoned by the end of 2003; the above-ground fuel tank and all 55-gallon drums had been removed as had any surface residue; the pole-mounted transformers formerly PCBs but the PCBs had been removed; the solid waste and debris piles had been removed; the manure separation area east of the barn and the barn itself had not been used for dairy operations for some time and did not pose any threats to the environment. DWR made their final inspection of the Gilbert parcel on August 26, 2003 (DWR 2003e).

#### **BURROUGHS PARCEL**

The Phase I ESA for the Burroughs Parcel (ENGEO, Inc. 2003b) noted the following concerns:

- Soil or groundwater around the structures associated with the natural gas wells might be impacted by hydrocarbons, mercury or barium. A Phase II investigation was recommended (see below).
- Soil near the above-ground fuel tanks might be impacted due to past use of these tanks and this should be investigated further if the tanks were removed.
- Soil near the carport/garage might be impacted due to possible discharges of motor oil, fuels or solvents and this should be investigated further if the structures were removed.
- Asbestos-containing materials and lead-based paint could be contained in the structures and that this should be assessed prior to demolition.
- Septic systems/water wells should be removed in accordance with current regulations.

The Phase II Natural Gas Well Site Assessment (ENGEO, Inc. 2003c) concluded the following:

- There were did no significant petroleum hydrocarbon impacts for near surface soil at the well sites, with the exception of around the active Well #5 (Tonka 6-1). There were visible impacts to soil around the compressor unit at that well site.
- There were no significant barium or mercury impacts with the exception of the meter shed area of Well #7 (Tonka 3-2). The mercury concentration of 40 ppm exceeded both State hazardous waste criteria and the USEPA Preliminary Remediation Goal (23 ppm).
- Detectable petroleum hydrocarbons were reported in groundwater at four of the seven well sites. No BTEX was reported for the seven well sites. The reported diesel/gas concentrations at the well sites of five and seven exceeded the water quality goals established by the Central Valley Regional Water Quality Control Board. According to ENGEO, Inc, because the shallow aquifer underneath the Burroughs site was unlikely to be considered a municipal water source, the hydrocarbon contamination in groundwater was not a significant environmental concern.

DWR (2003b) recommended ENGEO provide, on behalf of the site owners, additional information on: the gas wells; water wells (and their proper decommissioning); septic systems from the single-

family residence and an asbestos and lead-based paint survey if they are demolished; historic and current use of hazardous materials at the site (such as the 55-gallon drums of petroleum products); an inventory made of the vehicles and abandoned farm equipment and characterization of the composition of the waste piles be characterized; onsite treatment and disposal of the effluent from the dairy and cattle-grazing activities; a complete inventory of all material stored at the dairy farm and related structures; and a cultural resources records search.

The landowners were found to have substantially complied with DWR when DWR (2003d) and Department of General Services (DGS 2003) performed further site inspections in 2003. DWR and DGS found that: the idle gas wells on the property would be plugged and abandoned within five years and the mercury and petroleum contamination identified at two of the drilling pads would be removed prior to the close of escrow; the chemicals used in the ongoing farming operation would be removed on termination of the lease and other chemicals had already been removed; surface-contaminated soil beneath the above-ground fuel tanks had been removed but further remediation was planned; abandoned vehicles and machinery had been removed and those in active use could remain for the time being; wood debris piles had been removed; there was no evidence of animal waste concentrations because the site had not been used as a dairy for years; the 30-gallon drum had been removed from the dairy farm and all of the buildings had been emptied and cleaned.

The landowners contracted with ENGEO to remove the petroleum-contaminated soil at the above-ground tank site and the petroleum/mercury-contaminated soil at the well site (DWR 2003f). Phase II remediation activities on the Burroughs property were completed and a final inspection made October 10, 2003 (DWR 2003e). The petroleum and petroleum/mercury-contamination soil was excavated and removed at the above-ground fuel tank and gas well site. Residual petroleum from beneath the tank was considered to be at levels too low to be of significant concern.

#### **Soil Sampling of the Ironhouse Parcel**

Soils from the Ironhouse parcel were analyzed by Stellar Environmental Solutions, Inc. (SES) in August 2006. Samples were taken from above two feet above mean sea level to obtain information about the soil that would be used to fill areas of open water if Alternatives 2 or 3 are carried out in restoration of the main part of the site. Three vertical sample sets were collected at five locations for a total of 15 samples analyzed. The locations for sampling included areas known by the Sanitary District to have received proportionately more, or less, wastewater. As results were relatively similar (despite the different lithologies of the samples), it was concluded by SES that the samples were representative of the site in general and no further sampling was necessary.

Samples were analyzed for CA Title 22 (CAM 17) Metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc) semi-volatile organic compounds (SVOCs) and polynuclear aromatic hydrocarbons (PAHs); chlorinated herbicides; ammonia (as nitrogen) and chloride; and total petroleum hydrocarbons (motor oil range). No SVOCs, PAHs or herbicides were detected above the reporting limits. Petroleum hydrocarbons (diesel and motor oil grade) were reported at low concentrations (averaged 18.5 mg/kg), dominantly in the near surface (upper one foot) of soil. Petroleum hydrocarbons were found at low concentrations near to the ground surface. Metals were present at concentrations too low to be of concern according to criteria for reuse of dredged materials established by San Francisco Regional Water Quality Control Board (SFRWQCB, 2000).

A fuller discussion of the analyses of Ironhouse parcel soil is included in Section 3.2 on Water Quality because the Ironhouse soils may be used as fill for the main part of the site and may therefore affect water quality at that location.

### Vectors

The Dutch Slough Restoration Project and Related Project sites support extensive seasonal and freshwater perennial wetlands similar to those of managed wetlands in the Central Valley and Suisun Marsh. They are also substantially similar in terms of potential mosquito breeding habitat. Mosquito production in wetland habitats in the Dutch Slough setting, however, differs in being directly adjacent to proposed extensive residential development (sensitive human receptors) on adjacent parcels, and being integrated with a recreational community park surrounded by tidal wetlands or managed wetlands (depending on alternatives and design options). Mosquito species differ in their potential to act as vectors for human diseases known to occur or have occurred in California, such as West Nile Virus, malaria, encephalitis viruses, and other pathogens.

Depending on seasonal and environmental conditions and the particular mosquito species involved, it generally takes from three to twelve days for a mosquito to complete its life from developed egg to early adult stage. In general, as temperature increases, the number of days required from hatching to emergence as an adult decreases. The potentially rapid life-cycle of mosquitoes can result in rapid, eruptive mosquito populations related to relatively short-term variations in marsh flooding and emergence, or seasonal tidal cycles.

There are four principal pest mosquitoes (*Ochlerotatus melanimon*, *Culex tarsalis*, *Culex erythrorhax*, *Anopheles freeborni*) that can be produced in freshwater (or fresh-brackish) perennial and seasonal marshes, and which been the subjects of control efforts by Mosquito Vector Control Districts (MVCDs) in the Central Valley. These four species can be categorized by life history and associated wetland habitats.

#### FLOODWATER MOSQUITOES (*OCHLEROTATUS MELANIMON*)

Floodwater mosquitoes have been identified as a primary nuisance species and as secondary or "bridge" vectors for California encephalitis virus and western equine encephalitis, and are considered moderately effective as vectors of West Nile Virus. The life cycle of the floodwater mosquito begins with flooding of ground that has undergone a dry period. Females lay their eggs singly on drying soil of seasonal wetlands, in leaf litter, in cracks in the soil, or at the bases of grasses and other plants in areas that have been flooded previously. Once flooded, eggs that were laid during the previous dry cycle hatch, pupate, and emerge as adults. Eggs are very drought resistant. Within the project site, floodwater mosquitoes are likely to be risks associated with seasonal wetlands that undergo seasonal or periodic wetting/flooding/drying cycles, such as irrigated pasture, alkali-meadow, freshwater marshes in drought years, or ruderal areas.

#### STANDING WATER MOSQUITOES (*CULEX TARSALIS*, *CULEX ERYTHROTHORAX*, *ANOPHELES FREEBORNI*)

*Culex tarsalis* is considered the primary vector for western equine encephalomyelitis virus to humans and horses. It is the primary vector for St. Louis encephalitis virus in humans. *Culex tarsalis* has also been identified as a primary vector of West Nile virus in the western United States. Females lay their eggs on the water surface in rafts of 100-150 eggs. Eggs hatch within one day after deposition.

The larval stages can be found in almost any source of standing, sheltered water in marshes. During the summer, development from egg to adult takes about seven to nine days. Peak populations of *C. tarsalis* occur in late June or early July, but may continue into late summer. Adults can emerge throughout the summer and fall in marshes that have been flooded for more than two or three weeks. Within the existing project area, *C. tarsalis* may be associated with seasonal ponds (freshwater marsh). Within proposed restoration habitats, *C. tarsalis* could be associated with managed open water areas or isolated, marginal ponded habitats within restored freshwater tidal marsh.

*Culex erythronox* is highly susceptible to West Nile Virus infection and may act as a bridge vector of this virus in California. These mosquitoes prefer to deposit their egg rafts within thick aquatic or marsh vegetation in ponds, often over relatively deep water. The larvae can be difficult to sample because they are extremely sensitive to physical disturbances (e.g. vibrations from the collector's footsteps or dipper), and tend to remain submerged longer than other mosquito species after being disturbed. They tend to remain sheltered among dense shoots and foliage of wetland plants, making detection and treatment difficult. There they remain relatively inaccessible to mosquito predator fish. Within the existing project area, *C. erythronox* may be associated with seasonal ponds (freshwater marsh). Within proposed restoration habitats, *C. erythronox* could be associated with margins of managed open water areas, isolated, marginal ponded habitats, or poorly drained areas within restored freshwater tidal marsh.

*Anopheles freeborni* is a potential vector of malaria in the western United States, where three major outbreaks occurred in the last 40 years. This species also occurs in the Central Valley and is numerous during the summer, peaking in late July or August. Ricefields, and semi-permanent and permanent wetlands are the primary production areas for this species, although the immature stages are also found in ditches, seepages, and sloughs. Females lay their eggs singly on the surface of the water where they hatch approximately 24 hours later. In autumn, females enter a semi-dormant or resting state (diapause). In winter, warm day temperatures may cause them to become active and seek blood meals. After obtaining a blood meal, many females resume their over-wintering state until April or May when they begin laying eggs once more. The females will readily bite humans and livestock. Within the existing project area, *Anopheles freeborni* may be associated with seasonal ponds (freshwater marsh). Within proposed restoration habitats, *Anopheles freeborni* could be associated with margins of managed open water areas, isolated, marginal ponded habitats, or poorly drained areas within restored freshwater tidal marsh.

### 3.15.2 Impacts and Mitigations

#### Significance Criteria

Criteria for determining significant impacts are based upon the CEQA Guidelines (Appendix G) and professional judgment. These guidelines state that a project would have a significant impact on to public health and safety if it:

- Creates a significant health or safety hazard to workers associated with the construction of the proposed park and wetlands.
- Creates a significant health hazard to the public or sensitive sub-populations (e.g., children) through the routine use or transport of hazardous materials.

- Creates a significant hazard to workers or the public through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

As noted in the introduction to this section, water quality impacts associated with soil contamination are addressed in that section of the EIR.

Criteria for significance of mosquito vector impacts would include:

- Changes in the demand for MVCD activities within the project area that would consistently exceed normal (long-term average) costs for managing the Dutch Slough wetlands, adjusted for residential population (receptor) increases beyond the control of the project.
- Substantial changes in the type or frequency of MVCD activities (monitoring or treatment) or equipment needed to maintain existing levels of mosquito production.
- Epidemiologically substantial changes in the frequency of mosquito-born illnesses that correspond with proximity of residence to the project site, or frequency of visits to the site.

#### Alternative 1: Minimum Fill

##### IMPACT 3.15.1-1: EFFECTS OF DUTCH SLOUGH RESTORATION PROJECT AREA SOILS CONTAMINATION (ALL OPTIONS)

Workers on the Dutch Slough Restoration Project site could be exposed to hazardous conditions associated with natural gas wells on the property. In addition, as described above, some higher levels of soils contamination were found in association with those wells on the Burroughs parcel; a detailed assessment of the natural gas well sites on the Gilbert parcel has not yet been performed, but preliminary assessment indicated that some contamination may occur near those wells. Exposure to high nitrate levels on the former cattle waste pond area on the Emerson parcel would not have any human health effects.

##### MITIGATION 3.15.1-1: EFFECTS OF SOILS CONTAMINATION (ALL OPTIONS)

- A. The Dutch Slough Restoration Project shall comply with the ESA recommendations regarding the natural gas well sites. Specifically, the remaining appurtenances at the plugged and abandoned wells shall be removed, mercury impacted soils at Well Site #7 shall be excavated and removed for disposal and hazardous materials management practices at active Well Site #5 shall be reviewed; Petroleum impacted soils should be excavated and removed for disposal. The status of the remaining idle well sites (#3, #8, #11, #16) shall be determined and if they are not to be retained for future operation they shall be properly plugged and abandoned.
- B. Prior to development of the Dutch Slough Restoration Project, a Phase II ESA shall be performed to identify any hazardous materials issues associated with natural gas wells on the Gilbert parcel, and any remediation recommendations in that report shall be implemented.
- C. Prior to development of the City Community Park, Phase II ESA shall be performed to identify any hazardous materials issues associated with the former cattle waste pit on the Emerson parcel, and any remediation recommendations in that report shall be implemented.

##### SIGNIFICANCE AFTER MITIGATION

Implementation of mitigation 3.15.1-1, above, would reduce this impact to a less than significant level.

**IMPACT 3.15.1-2: HEALTH RISKS ASSOCIATED WITH DEMOLITION ACTIVITIES (ALL OPTIONS)**

As noted in the Phase I and Phase II environmental studies prepared for various site parcels, asbestos-containing materials and lead-based paint could be contained in the structures proposed for demolition to clear the site for Dutch Slough Restoration Project and City Community Park development. Most of these structures would be associated with the City Park property. There are no structures on the Ironhouse Project site.

**MITIGATION 3.15.1-2: HEALTH RISKS ASSOCIATED WITH DEMOLITION ACTIVITIES (ALL OPTIONS)**

All structures proposed for demolition shall be assessed for asbestos and lead-based paints, and all recommendations of those evaluations shall be implemented. Details of these evaluations for the City Community Park property shall be included in the subsequent CEQA documentation for the park.

**SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation 3.15.1-2, above, would reduce this impact to a less than significant level.

**IMPACT 3.15.1-3: HEALTH EFFECTS TO WORKERS ASSOCIATED WITH DISTURBANCE OF SOILS FROM IRONHOUSE PARCEL (ALL OPTIONS)**

Under Alternative 1, no additional fill material would be imported to the Dutch Slough Restoration Project site, although the soils would be disturbed in the Ironhouse parcel from the restoration of the Ironhouse Project. Based on the preliminary soil sampling results from the Ironhouse parcel, this impact is considered insignificant.

**IMPACT 3.15.1-4: HEALTH EFFECTS FROM MOSQUITOES**

The specific design or habitat features of wetland restoration alternatives, including specific design options, that are most relevant to human health relate to (a) mosquito production (frequency, type, abundance and location of mosquitoes produced), and (b) human exposure to mosquitoes by either dispersal of mosquitoes from source areas, or entry of source areas (marshes, sloughs) by humans.

Specific marsh habitat features that are most likely to be risks for excessive production of mosquitoes include:

- (a) Poorly drained, flat to gently sloping sheltered marsh areas with gradually fluctuating water levels, low turbulence, and rich organic matter from decomposition. Marsh plains edged by artificial berms that obstruct sheetflow drainage across marshes are likely to be associated with this mosquito subhabitat.
- (b) Areas of dense marsh vegetation with minimal access to fish predators, strong surface currents, or exposure to wind-generated waves.

(c) Areas of gradual seasonal fluctuation in water levels, alternating between wetted and desiccated ground.

Conversely, marsh habitat features that are inherently likely to constrain mosquito production are associated with strong daily tidal fluctuation and currents, exposure to surface turbulence (wind-waves, currents) of open water surfaces, and exposure to fish predators that are widespread in tidal sloughs. Unlike managed marshes with artificial engineering designs, the basic purpose of tidal restoration is to replicate as much of the ecological structure, composition, and patterns of natural or historic tidal marshes to the greatest extent feasible. This may limit the range of compatible marsh design features (or Best Management Practices) for mosquito management and that are traditionally applied to managed marshes in the Central Valley and Suisun Marsh.

Dutch Slough Restoration Project alternatives and options differ in the extent to which they contribute to potential increases or decreases of mosquito production relative to existing conditions. Generally, deep (over 2 ft) open water areas are likely to be unproductive of mosquitoes. Low intertidal marshes (tule marshes with bed elevations near Mean Low Water) with full tidal range are also unlikely to produce mosquitoes. Marsh types or options that have variably higher risk of mosquito production would include: (a) interior areas of mid-intertidal or high intertidal marsh, remote from tidal channels; (b) zones of wrack (tidal debris) accumulation within the marsh plain or marsh edge, particularly at downwind ends (corners) marshes or near topographic high areas; (c) channel reaches that develop obstructed circulation (e.g., blockage by debris jams); (d) marsh areas that are exposed to flood deposits of sediment leaving variable topography, drainage, and debris; (e) any constructed seasonal wetlands or isolated ponds.

Alternative 1 includes the greatest areas of open water and terrestrial habitat, and thus the least potential for mosquito production. Alternative 1 is likely to reduce levels of mosquito production below those of existing conditions because it significantly reduces seasonal wetland areas and unmanaged (slow seasonal drawdown) nontidal freshwater marsh. Some mosquito production would occur along gently sloped margins of tidal marsh (essential to restoration of native species diversity in restored tidal marsh), and marsh plains edged by berms. Some mosquito production (possibly above existing conditions) may be caused by non-tidal open water management options. Alternative 1 would increase exposure of humans to mosquito production compared with existing conditions by increasing public access and exposure time to wetland habitats. The exposure would vary with time of day, temperature, humidity, and wind conditions (generally greatest around dusk in summer).

The Ironhouse Project would create a narrow, slender tidal marsh unit that would tend to trap flood debris and sediment, and has a high perimeter:area ratio compared with the main Dutch Slough Restoration Project area. It is designed to maximize marsh plain area, and it is drained by a single elongated channel. This unit would have a substantially higher potential for mosquito production overall and per unit area compared with the main units. It is also directly adjacent to and downwind (thermal Bay-Delta breezes) of a newly developed residential area.

#### MARSH CREEK DELTA RELOCATION OPTIONS

The Marsh Creek Delta relocation options (see Figure 2-13) vary in the degree to which new flood deposits (coarse sediment, debris jams) across marsh plains with pre-existing tidal channels may cut off isolated channel segments (creating channel pools). Option 3 has the greatest potential to create coarse sediment/debris obstructions or dams in front of the greatest total length of constructed

channels, thus creating the greatest amount of poorly circulating, sheltered vegetated pool habitat for mosquito breeding. Option 1 has the least potential to impound tidal channel flows, but has high potential to create high deltaic marsh plains (effectively seasonal marsh) near the limits of tide (low tidal energy). Option 2 has intermediate but high potential for channel obstruction and impoundment by deposition of coarse flood sediment and debris.

#### OPEN WATER MANAGEMENT OPTIONS

Options for open water management based on tidal flows (skeletal marsh channels, deep subtidal, shallow subtidal with native SAV planting) all have low potential for mosquito production, because all include extensive, turbulent, unsheltered open water surfaces with significant daily tidal range. Managed nontidal options (managed pond, subsidence reversal/managed tule marsh) have substantial potential to produce mosquitoes if they are not managed according to regional Best Management Practices for mosquito abatement.

#### MITIGATION 3.15.1-4.1: ADAPT AND APPLY REGIONAL (CENTRAL VALLEY/SUISUN) BEST MANAGEMENT PRACTICES (BMPs) FOR MANAGED MARSHES TO TIDAL MARSHES

Adapt BMPs for managed marsh to be compatible with basic ecological restoration objectives of freshwater tidal marsh restoration in the western Delta, following applicable precedents from San Pablo Bay (Petaluma, Napa-Sonoma) and Suisun and Grizzly Bay marshes, in consultation with Contra Costa, Solano, and Marin-Sonoma MVCDs, the California Department of Fish and Game, and the U.S. Fish and Wildlife Service. Add tidal marsh MVCD activities to regional permits for MVCD activities in wetlands in the Central Valley.

#### MITIGATION 3.15.1-4.2: ADAPT AND APPLY REGIONAL (CENTRAL VALLEY/SUISUN) BEST MANAGEMENT PRACTICES (BMPs) FOR MANAGED MARSHES TO OPEN WATER MARSHES

BMPs are habitat-based strategies that can be implemented when needed for mosquito control in managed wetlands. These strategies represent a range of practices that wetland managers can incorporate into existing habitat management plans or in the design of new wetland restoration or enhancement projects. Ideally, BMPs can be used to decrease the production of mosquitoes and reduce the need for chemical treatment without significantly disrupting the ecological character, habitat function, or wildlife use in managed wetlands. Not all BMPs would be appropriate for a given wetland location or set of circumstances.

**TIMING OF MANAGED MARSH FLOODING AND DRAWDOWN (NONTIDAL MANAGED OPEN WATER OPTIONS).** Timing of flooding and drawdown shall be coordinated with local MVCD, adapted to current-year temperature, rainfall patterns, and mosquito vector risks, to minimize mosquito production and vector risks.

**RAPID FLOODING AND DRAWDOWN OF MANAGED MARSH.** Marshes shall be flooded and drawn down (emerged bed) as quickly as operational controls allow.

**WATER CONTROL.** Once wetlands have been flooded, water surface elevations shall minimally fluctuate prior to drawdown, except during winter periods of low mosquito production. Minimal fluctuation is based on the need to circulate water (maximize turnover). Marsh submergence depths shall be managed to maximize areas with minimal initial flooding depths of two feet (twenty four inches).

**WETLAND DESIGN FEATURES TO REDUCE MOSQUITO PRODUCTION.** Managed wetland edges shall be constructed to enable efficient access by MCVD field crews for monitoring and treatment. Edge slopes of managed nontidal marsh areas shall be steeper than to 4:1 (horizontal:vertical). Open water areas with sufficient fetch and wind-wave turbulence to minimize mosquito production shall be interspersed within managed marsh, at least 20% of total area. Floating aquatic vegetation shall be actively suppressed in open water areas within managed marsh.

**MITIGATION 3.15.1-4.3: MODIFY DESIGN OF IRONHOUSE RESTORATION PROJECT (IRONHOUSE PROJECT ONLY)**

Modify design of Ironhouse Project to minimize trapping of coarse sediment and debris (reduction or elimination of overflow zones), and to minimize recurrent creation of complex backwater marsh areas with poor drainage and difficult access for MCVD field crews. Enlarge channel cross-section area to improve tidal drainage and circulation. Install coarse debris screens at the single channel mouth at Marsh Creek to minimize debris jams that may create backwater marsh areas or channel pools (standing water mosquito habitat). Pre-install coarse woody debris in this marsh unit to compensate for wildlife habitat loss due to reduction in variable-size debris.

**IMPACT SIGNIFICANCE AFTER MITIGATION:** Less than significant

**Alternative 2: Moderate Fill Alternative**

**IMPACT 3.15.2-1: EFFECTS OF DUTCH SLOUGH RESTORATION PROJECT AREA SOILS CONTAMINATION (ALL OPTIONS)**

This impact would be similar to that of Alternative 1.

**MITIGATION 3.15.2-1: EFFECTS OF DUTCH SLOUGH RESTORATION PROJECT AREA SOILS CONTAMINATION (ALL OPTIONS)**

Same as for Alternative 1

**SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation 3.15.1-1, above, would reduce this impact to a less-than-significant level.

**IMPACT 3.15.2-2: HEALTH RISKS ASSOCIATED WITH DEMOLITION ACTIVITIES (ALL OPTIONS)**

This impact would be similar to that of Alternative 1.

**MITIGATION 3.15.2-2: HEALTH RISKS ASSOCIATED WITH DUTCH SLOUGH RESTORATION PROJECT AREA DEMOLITION ACTIVITIES (ALL OPTIONS)**

Same as for Alternative 1

**SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation 3.15.1-2, above, would reduce this impact to a less than significant level.

**IMPACT 3.15.2-3: HEALTH EFFECTS TO WORKERS ASSOCIATED WITH DISTURBANCE OF SOILS FROM IRONHOUSE PARCEL (ALL OPTIONS)**

Under Alternative 2, some fill material would be imported from the Ironhouse site to the Dutch Slough site. However, as no contaminants of concern have been found in excess of criteria levels, this is not considered significant.

**IMPACT 3.15.2-4: HEALTH EFFECTS FROM MOSQUITOES**

This alternative includes extensive open water areas with minimal mosquito production, but it also includes extensive marsh plains filled to mid-intertidal to upper intertidal elevations. Much of the marsh plain in Gilbert and Burroughs parcels is intersected by berms that are designed to act as drainage divides for short-term adaptive management experiments related to fish habitat quality. Berm edges may restrict marsh sheetflow and produce areas of poorly drained marsh surface that would increase risks of mosquito production, especially after unusually high tides. The interaction between the extensive constructed marsh plain and channel system of the Emerson Parcel, and Marsh Creek delta relocation options, also distinguishes Alternative 2 in elevating mosquito impact potential. (See discussion of Marsh Creek Relocation option, above).

**MITIGATION 3.15.2-4: HEALTH EFFECTS FROM MOSQUITOES**

Same as for Alternative 1, but with the following additions: (a) minimize or eliminate artificial berms within middle or high marsh plains; replace their drainage divide functions with temporary structures that restrict fish movement without impounding water on the marsh surface, such as mesh or geotextile fabric fences; (b) adaptively modify marsh plain drainage patterns with amphibious excavation/dredging equipment to expose poorly drained backwater marsh areas to adequate tidal circulation and mosquito predator fish access; (c) Orient the Marsh Creek delta so that flood sediment deposition does not obstruct, occlude, or cut off tidal flows from channels and create standing water mosquito habitat.

**SIGNIFICANCE AFTER MITIGATION**

Less than significant.

**Alternative 3: Maximum Fill**

**IMPACT 3.15.3-1: EFFECTS OF DUTCH SLOUGH RESTORATION PROJECT AREA SOILS CONTAMINATION (ALL OPTIONS)**

This impact would be similar to that of Alternative 1.

**MITIGATION 3.15.3-1: EFFECT OF DUTCH SLOUGH RESTORATION PROJECT AREA SOILS CONTAMINATION (ALL OPTIONS)**

Same as for Alternative 1

**SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation 3.15.1-1, above, would reduce this impact to a less-than-significant level.

**IMPACT 3.15.3-2: HEALTH RISKS ASSOCIATED WITH DEMOLITION ACTIVITIES (ALL OPTIONS)**

This impact would be similar to that of Alternative 1.

**MITIGATION 3.15.3-2: EFFECTS OF DUTCH SLOUGH RESTORATION PROJECT AREA SOILS CONTAMINATION (ALL OPTIONS)**

Same as for Alternative 1

**SIGNIFICANCE AFTER MITIGATION**

Implementation of mitigation 3.15.1-2, above, would reduce this impact to a less than significant level.

**IMPACT 3.15.3-3: HEALTH EFFECTS TO WORKERS ASSOCIATED WITH DISTURBANCE OF SOILS FROM IRONHOUSE PARCEL (ALL OPTIONS)**

Under Alternative 3, some fill material would be imported from the Ironhouse site to the Dutch Slough Restoration Project site. However, as no contaminants of concern have been found in excess of criteria levels, this is not considered significant.

**IMPACT 3.15.3-4: HEALTH EFFECTS FROM MOSQUITOES**

This alternative includes extensive open water areas with minimal mosquito production only on the Emerson Parcel. It supports extensive marsh plains filled to mid-intertidal to upper intertidal elevations (relatively high mosquito production risk or potential) throughout the Gilbert Parcel, adjacent to the City Community Park. Much of the marsh plain in Gilbert and Burroughs parcels is also intersected by berms that are designed to act as drainage divides for short-term adaptive management experiments related to fish habitat quality. Berm edges may restrict marsh sheetflow and produce areas of poorly drained marsh surface that would increase risks of mosquito production, especially after unusually high tides. The interaction between the extensive constructed marsh plain and channel system of the Emerson Parcel, and Marsh Creek delta relocation options, also distinguishes Alternative 3, like Alternative 2 in, elevating mosquito impact potential. (See discussion of Marsh Creek Relocation option, above)

**MITIGATION 3.15.2-4: HEALTH EFFECTS FROM MOSQUITOES**

Same as Alternative 2.

**SIGNIFICANCE AFTER MITIGATION**

Less than significant.

**Alternative 4: No Project**

**IMPACT 3.15.4-1: EFFECTS OF EXISTING CONTAMINATED SOILS**

Soils contamination would remain as present, and may continue to be transported into the groundwater. No exposure to construction workers or site users is likely because no excavation of materials or public use of the site is proposed. Therefore this impact would be less than significant, and no mitigations would be required.

**IMPACT 3.15.4-2: HEALTH RISKS ASSOCIATED WITH DEMOLITION ACTIVITIES (ALL OPTIONS)**

No demolition would occur under this alternative, so no demolition-related health risks would occur.

**IMPACT 3.15.4-3: HEALTH EFFECTS TO WORKERS ASSOCIATED WITH DISTURBANCE OF SOILS FROM IRONHOUSE PROJECT SITE (ALL OPTIONS)**

No soils disturbance would occur under this alternative, so no soil-disturbance health risks would occur.

**IMPACT 3.15.4-4: HEALTH EFFECTS FROM MOSQUITOES**

There would be no change in mosquito production and associated health risks compared with existing conditions.