STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

PROSECUTION STAFF SUMMARY REPORT MEETING DATE: MARCH 8, 2017

ITEM: 5

SUBJECT: John D. Sweeney and Point Buckler Club, LLC, Point Buckler Island, Suisun Marsh,

Solano County - Hearing to Consider Adoption of Resolution Authorizing Referral to the

Attorney General Regarding Cleanup and Abatement Order No. R2-2016-0038

CHRONOLOGY: August 2016 – Cleanup and Abatement Order No. R2-2016-0038 adopted

December 2016 - Administrative Civil Liability Order No. R2-2016-0048 adopted

DISCUSSION: The Tentative Resolution (Appendix A) would refer enforcement of non-compliance with

the Cleanup and Abatement Order No. R2-2016-0038 (CAO) to the Attorney General. Since this matter may come before the Board in the future for enforcement (for example, if the Attorney General declines referral) or for permitting, we recommend that the Board not deliberate or make a decision on potential administrative

enforcement at this time.

Point Buckler Club, LLC owns Point Buckler Island in the Suisun Marsh. John D. Sweeney is the manager of Point Buckler Club, LLC, and he formerly owned the island. Both parties are named as Dischargers in the CAO and Administrative Civil Liability Order No. R2-2016-0048 (ACL). The CAO and ACL found that unauthorized fill of waters of the State and United States were in violation of the Water Board's San Francisco Bay Basin Water Quality Control Plan Discharge Prohibition No. 9; Federal Clean Water Act section 301; and Clean Water Act section 401.

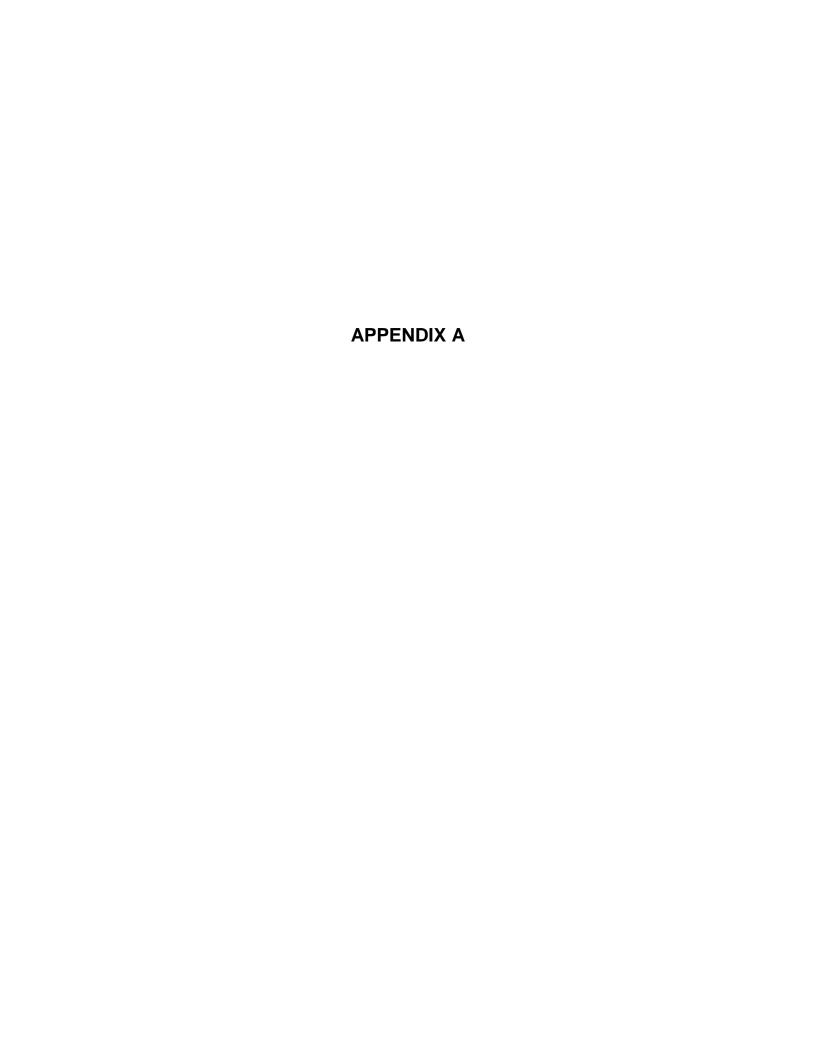
The CAO requires submittal of technical reports including an Interim Corrective Action Plan, Restoration Plan, and Mitigation and Monitoring Plan. Staff determined that the Interim Corrective Action Plan submitted on November 10, 2016, (Appendix B) is inadequate and does not meet the requirements specified in the CAO (Appendix C). Similarly, staff has determined that the Restoration Plan and Mitigation and Monitoring Plan, submitted on February 10, 2017, (Appendix D) are inadequate and do not meet the requirements specified in the CAO.

Referring this matter would enable the Attorney General to consolidate all legal proceedings concerning Point Buckler Island. Approval of the Tentative Resolution would authorize the Executive Officer to request that the Attorney General pursue judicially-imposed penalties and take other appropriate action in consultation with the Board Chair.

CIWQS PLACE ID: 816826

APPENDICES: A. Tentative Resolution

- B. Interim Corrective Action Plan, November 10, 2016
- C. Prosecution Team's Assessment of the Interim Corrective Action Plan for Point Buckler Island and Recommendations, November 18, 2016
- D. Point Buckler Restoration Plan and Mitigation and Monitoring Plan, February 10, 2017



STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

TENTATIVE RESOLUTION No. R2-2017-00XX

AUTHORIZING REFERRAL TO THE ATTORNEY GENERAL REGARDING CLEANUP AND ABATEMENT ORDER NO. R2-2016-0038

- A. WHEREAS, Point Buckler Club, LLC owns Point Buckler Island (Island), located off the western tip of Simmons Island in the Suisun Marsh, Solano County. John D. Sweeney is the manager of Point Buckler Club, LLC, and he formerly owned the Island. John D. Sweeney and Point Buckler Club, LLC, are hereinafter, collectively referred to as "Dischargers".
- B. WHEREAS, the Dischargers' unauthorized activities, including levee construction, unauthorized placement of structures, and removal and destruction of tidal marsh vegetation resulted in (1) the discharge of fill into 3.23 acres of waters of the State and United States; (2) blocking tidal action to the Island; and (3) the ongoing degradation of about 27.18 acres of the Island's interior tidal marsh.
- C. WHEREAS, at its August 10, 2016, hearing, the San Francisco Bay Regional Water Quality Control Board (Water Board) adopted Cleanup and Abatement Order No. R2-2016-0038 (CAO) and found that the Dischargers' unauthorized activities were in violation of the Water Board's San Francisco Bay Basin Water Quality Control Plan Discharge Prohibition No. 9; Federal Clean Water Act section 301 for unauthorized discharge of fill to waters of the State and United States; and Clean Water Act section 401 for failure to obtain a Water Quality Certification.
- C. WHEREAS, at its December 14, 2016, hearing, the Water Board found that the Dischargers' unauthorized activities were in violation of the San Francisco Bay Basin Water Quality Control Plan Discharge Prohibition No. 9; Clean Water Act section 301 for unauthorized discharge of fill to waters of the State and United States; and Clean Water Act section 401 for failure to obtain a Water Quality Certification, and imposed an administrative civil liability of \$2,828,000 against the Dischargers in Administrative Civil Liability Order No. R2-2016-0048.
- D. WHEREAS, CAO Provision 1 requires the Dischargers to submit an adequate Interim Corrective Action Plan (ICAP) designed to prepare the Island for tidal restoration and include measures to manage water on the Island, control the spread of perennial pepperweed, reduce soil salinity, and reverse soil acidification and peat decomposition.
- E. WHEREAS, the ICAP submitted by the Dischargers on November 10, 2016, is inadequate because (1) it does not provide sufficient technical justification to demonstrate that proposed corrective actions would be effective or implementable; (2) several of the proposed actions may result in additional harm to beneficial uses; and (3) it does not include an adequate implementation schedule including clearly necessary tasks, such as the need to obtain permits and complete consultations with the resource agencies, and a proposed schedule for meeting those tasks.

- F. WHEREAS, Water Board staff detailed the deficiencies of the ICAP and recommended the Dischargers submit a revised ICAP in a November 18, 2016, memo and the Dischargers have failed to address the deficiencies with an improved plan and have not taken any actions to date.
- F. WHEREAS, CAO Provision 2 requires the Dischargers to submit an adequate Point Buckler Restoration Plan that includes corrective actions to restore the water quality functions and values of the tidal marsh, including the length of channels and area of marsh that existed prior to the Dischargers' unauthorized activities, and (1) restores tidal flow into channels and ditches; (2) restores tidal circulation throughout the interior of the Island; and (3) restores overland tidal connection to the Island's interior tidal marsh during higher tides.
- G. WHEREAS, the Point Buckler Restoration Plan submitted by the Dischargers on February 10, 2017, is inadequate because it (1) does not include a statement of qualifications or other documentation to demonstrate it was prepared under the direction of appropriately qualified professionals; (2) does not provide substantive information on what corrective actions will be taken to restore tidal flow, tidal circulation, and overland tidal connection to the Island; (3) does not include an adequate implementation schedule; (4) does not include an adequate monitoring plan such as monitoring methods and performance criteria; and (5) proposes alteration of the Island such that it will not be returned to pre-existing conditions, and does not address these alterations in the Mitigation and Monitoring Plan.
- H. WHEREAS, CAO Provision 3 requires the Dischargers to submit an adequate Mitigation and Monitoring Plan to provide compensatory mitigation for temporal and permanent impacts to wetlands and waters of the State that resulted from unauthorized activities.
- I. WHEREAS, the Mitigation and Monitoring Plan submitted by the Dischargers on February 10, 2017, is inadequate because it (1) does not propose compensatory mitigation for temporal and permanent impacts resulting from unauthorized activities; and (2) proposes alterations of the Island that may result in additional harm to beneficial uses with no proposed mitigation to address those impacts.
- J. WHEREAS, the Dischargers have failed to comply with corrective actions required by Provisions 1, 2, and 3 of the CAO, the Water Board finds it is necessary and appropriate to refer this matter to the Office of the California Attorney General to seek judicially-imposed injunctive relief and/or civil penalties, to file such other punitive causes of action, and to seek other remedies as may be permissible and appropriate.
- K. WHEREAS, the Dischargers have failed to comply with the CAO, it is appropriate to seek an injunction requiring the Dischargers to comply with the CAO pursuant to Water Code section 13304(a) and to seek civil liability for failure to comply with the CAO pursuant to Water Code sections 13328, 13350(d) and 13385.
- L. WHEREAS, Water Code section 13350(g) requires the Water Board to hold a hearing, with due notice of the hearing given to all affected persons, prior to requesting the Office of Attorney General to petition a court to impose and assess civil liability. On March 8, 2017,

the Water Board held such a hearing in compliance with section 13350(g), and considered the testimony and evidence offered at the hearing and in the record.

NOW THEREFORE BE IT RESOLVED THAT:

- 1. Subject to available resources, the Water Board hereby authorizes the Executive Officer to request that the Attorney General seek an injunction, judicially-imposed civil penalties, and to file such other punitive causes of action and to seek other relief as may be permissible and appropriate. The Executive Officer shall confer with the State Water Board Office of Chief Counsel and/or Office of Enforcement on the availability of resources to support the referral to the Attorney General prior to making the referral.
- 2. If the referral is made and accepted by the Attorney General, the Water Board hereby authorizes the Executive Officer to seek injunctive relief and judicial civil liability against the Dischargers in an amount that he deems appropriate and report it to the Regional Water Board Chair.

I, Bruce H. Wolfe, Executive Officer, hereby certify that the foregoing is a full, true, and correct copy of the Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region at its regular meeting on March 8, 2017.

BRUCE H. WOLFE
Executive Officer



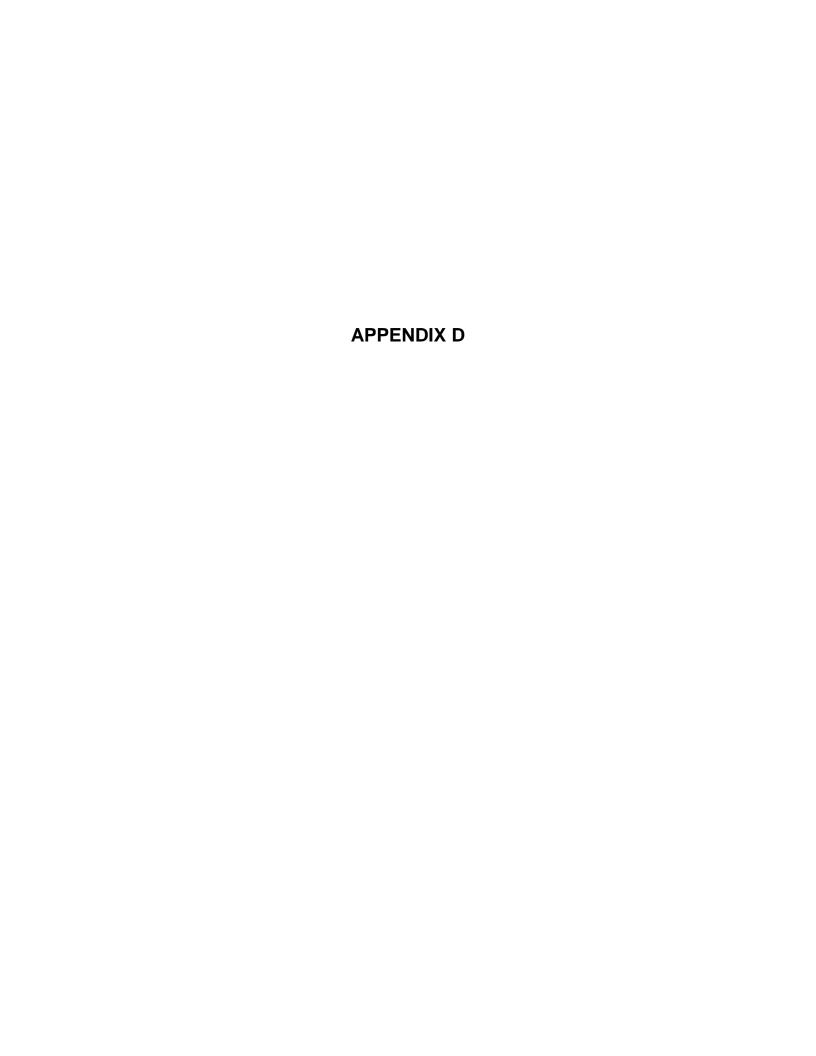
Interim Corrective Action Plan, November 10, 2016

http://www.swrcb.ca.gov/sanfranciscobay/water_issues/hot_topics/PointBuckler/Plans% 20&%20Technical%20Reports/Point_Buckler_Interim_Corrective_Action_Plan.pdf

APPENDIX C

Prosecution Team's Assessment of the Interim Corrective Action Plan for Point Buckler Island and Recommendations, November 18, 2016

http://www.swrcb.ca.gov/sanfranciscobay/water_issues/hot_topics/PointBuckler/Plans% 20&%20Technical%20Reports/P__%20ICAP_Assessment_and_Recommendations.pdf



POINT BUCKLER RESTORATION PLAN

and

MITIGATION AND MONITORING PLAN

Submitted by:

John D. Sweeney and Point Buckler Club, LLC

In accordance with:

Cleanup & Abatement Order No. R2-2016-0038,
Point Buckler Island, Solano County;
Issued by the California Regional Water Quality Control Board,
San Francisco Bay Region;
Signed on August 12, 2016

Commission Cease And Desist And Civil Penalty
Order No. CDO 2016.02;
Issued by the San Francisco Bay Conservation and Development Commission;
Signed on November 18, 2016

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I. INTRODUCTION AND SUMMARY

In August 2016, the Regional Water Quality Control Board, San Francisco Bay Region (the "Regional Board") issued Cleanup & Abatement Order No. R2-2016-0038 (the "Regional Board Order") to John D. Sweeney and Point Buckler Club, LLC (jointly "Mr. Sweeney"). In November 2016, the he San Francisco Bay Conservation and Development Commission issued Cease And Desist And Civil Penalty Order No. CDO 2016.02 (the "BCDC Order"). The Regional Board Order and BCDC Order (jointly, the "Orders") include virtually identical language requiring the submission of a restoration plan and a mitigation plan on February 10, 2017. This Point Buckler Restoration Plan And Mitigation And Monitoring Plan (the "Restoration and Mitigation Plan") is submitted in accordance with both Orders.

Both Orders were issued principally in response to the repair of a levee around Point Buckler Island in 2014. The levee was typical of those at duck clubs on islands in the Suisun Marsh. It ringed the entire island. It had been built in the usual manner—dirt was taken from a borrow ditch inside the levee and placed on top of the levee—as demonstrated by the existence of a remnant borrow ditch that had partly silted up. Over the years, the levee had failed in several places, allowing tidal flows into and out of the remnant borrow ditch and three apparently natural channels that had been formed many years earlier. The levee repair cut off tidal flow into those channels. Before the agencies stopped work at the island, Mr. Sweeney was in the process of replacing previously existing water control structures that could be operated to allow tidal inflow and outflow.

The Orders call for the submission of a restoration plan "describing corrective actions designed to restore...the water quality functions and values of the tidal marsh", including "(1) restoring tidal flow into channels and ditches; (2) restoring tidal circulation throughout the interior of the Site; and (3) restoring overland tidal connection to the Site's interior marsh during higher tides." This Restoration and Mitigation Plan proposes to achieve these three specified goals by creating openings in the levee. These openings would restore tidal flow into channels and ditches, thereby meeting the first goal. The openings would allow incoming tidal flows to enter the new borrow ditch, which circles the island inside the levee, which would meet the second goal by allowing water to circulate within the interior of the island, flow into the natural channels and artificial ditches, and more than restoring the circulation that existed before the levee repair. When tides and storm flows reached elevations higher than the banks of the channels and ditches, water would flow across the normally dry land, thereby meeting the third goal. Although there has been some dispute about how often water would leave the channels and flow across the land, that dispute need not be resolved in order to achieve the goals of the Orders. The openings would allow high tides and storm flows to inundate the normally dry land as they did before the levee repair. During exceptionally high stormwater-driven events like the ones occurring now, the island may be almost entirely inundated. The restoration of tidal flow is expected to return the interior's water quality functions and values to their pre-repair condition.

There are six principal elements of the restoration portion of the Restoration and Mitigation Plan. They can be summarized as follows:

1. Restoration of levee openings. Openings in the levee would be installed and sized to allow the habitat restoration of the same amount of water to flow into the channels (and, depending on the water level, over the land) that flowed in before the levee repair (or more in order provide mitigation and improved marsh function as described below). The number of openings is expected to be in the range of 2-4, but could differ. The size and number of the openings would be determined after collecting data about previous openings and tidal elevations at Point Buckler, and after hydraulic calculations of the size that would be needed to provide restorative flows. The levee openings would at minimum allow for tidal flow into

the interior of the island to the extent that existed before the levee repair. The openings would be sized so that they would also accommodate additional mitigation flows into interior channels, as part of the mitigation program described below.

- 2. Restoration of crescent ponds. Conditions at the four small crescent ponds would be restored by filling the ponds with dirt and re-vegetating the area in accordance with the vegetation management plan. If convenient, the ponds may be altered or incorporated into the mitigation program.
- 3. Vegetation management plan. After consultation with the agencies, a vegetation management plan would be prepared. The plan would incorporate vegetation management goals related both to restoration and to mitigation. The principal goal of the restoration portion would be to remove pepperweed stands that resulted from the levee repair. Vegetation would also be managed as part of the mitigation program.
- 4. Restoration monitoring plan. The restoration would be monitored for five years, or longer if each of the goals (agency approved performance standards) has not been achieved by that time. The performance standard of restoring tidal flows would be monitored visually, by observing whether water is flowing into the existing interior channels of the island at high tide, and leaving at low tide. Additional inspections may be performed to observe the behavior of the incoming flows during spring high tides. Water quality monitoring using field equipment would be performed to ascertain whether there are substantial differences between water quality inside and outside the island. The goal would be to achieve no significant differences other than those expected from the marshy nature of the inland channels and ditches. For example, the water in marshy areas may be less turbid than ambient waters (the vegetation may remove turbidity) and contain more organic matter than ambient waters (marsh vegetation provides organic matter). Vegetation composition would be monitored, using aerial photographs and ground-level observations, to ascertain that the extent of pepperweed has been restored to pre-repair concentrations. Soil conditions, in particular pH and salinity, would be monitored to ascertain that they are within acceptable ranges for the pre-repair or mitigation vegetation.
- 5. Workplan. Implementation of this Restoration and Mitigation Plan would incorporate the raising of money to pay for consultants and construction, the collection of data and calculations on the size of the openings and the expected flows through the opening, approvals (and if needed a zoning change) from Solano County, a section 404 permit from the U.S. Army Corps of Engineers, a 401 certification from the Regional Board, a BCDC permit, and a modification of the individual management plan "Club Plan" for Point Buckler.
- 6. *Implementation time schedule*. Initiation of this Restoration and Mitigation Plan would begin immediately on written approval by the Regional Board and BCDC. The initial step, which is expected to six to twelve months, would be to raise money to implement the plan. Within sixty days of written approval, the data collection process would be initiated, and it would be completed within six months. Permit applications would be submitted to Solano County, the U.S. Army Corps of Engineers, and the Regional Board within three months after that. Courtesy copies of the applications would also be provided to BCDC. Because of BCDC's statutory requirement to grant or deny an application within 90 days, a formal application would be submitted only when it was possible to file a

complete application, i.e. after receiving approvals from Solano County, the Corps, and the Regional Board. During this time, however, the process for modifying the individual management plan applicable to Point Buckler Island would be initiated. Following receipt of all approvals, construction would be initiated within six months. Restoration monitoring reports would be submitted annually.

The Orders allow for proposals that would not return the property to pre-repair conditions, as long as those proposals are covered by the mitigation plan. The Restoration and Mitigation Plan proposes the following:

• *Clubhouse and related facilities*. Approximately one acre would be used for clubhouse and other recreational facilities. This area would be filled with earthen material.

The Orders call for a "proposal to provide compensatory mitigation to compensate for any temporal and permanent impacts to wetlands and other waters of the State". The proposal should "(1) describe existing site conditions at the proposed mitigation site; (2) describe implementation methods used to provide compensatory mitigation; (3) include monitoring that will be implemented and performance criteria that will be used to evaluate the success of the compensatory mitigation; and (4) include an implementation schedule", and should comply with the no net loss policy.

There are nine principal elements of the mitigation portion of the Restoration and Mitigation Plan. They can be summarized as follows:

- 1. Description of existing site conditions at proposed mitigation site. The proposed mitigation site is Point Buckler Island. Site conditions at the island are described in many documents that have previously been prepared for the agencies and submitted to them, including agency site visit notes and reports from November 2014, October 2015, and February 2016; the Technical Report dated May 2016 prepared by consultants to the Regional Board; the declarations and exhibits Mr. Sweeney, Dr. David Mayer, and Dr. Terry Huffman submitted to the Regional Board; and the reports prepared by the Regional Board's consultants in response to those declarations and exhibits.
- 2. Mitigation by creation of four kinds of channels and waters to enhance value to endangered fish. According to the agencies consultants, the island is especially rare and valuable because its channels and ditches provide important habitat, food, and shelter to endangered fish, and because there are very few of these channels in the area. There is some disagreement among fisheries biologists, however, about which type of channel or ditch is most valuable—narrow shallow channels versus wide and deep channels—and about which tends to attract predators or protect against them. To help resolve this issue, four kinds of channels and waters would be implemented: (1) natural channels, (2) narrow shallow channels, (3) deeper relatively wider channels (although these might still be considered "small"), and (4) ponds. Each of these channels and waters would be of much greater value to endangered fish and other beneficial uses than the previously existing land, which was dry (or usually dry). In addition to the three natural channels that already exist, at least two of each type of artificial channel would be implemented. Two channels of each type would be advantageous to the study of endangered fish because repeatability could be assessed as well as differentiation of effects if conditions in the pairs of channels were varied. Six

- acres of artificial channels (i.e. not including the three existing natural channels) would be implemented.
- 3. Study of endangered fish. A study of endangered fish would be conducted to assess whether they benefit from some of the four types of channels over others. The study details would be developed after consultation with the agencies and their consultants. The study is expected to last five years. Water control structures are expected to be installed in at least one of the ponds, so that the use of isolated waters in conjunction with a management program can be evaluated to assess whether they provide additional benefits to endangered fish, including protection from predation, compared with other types of channels and waters.
- 4. *Erosion protection*. The island is being lost to erosion. It was originally reported to be more than 51 acres, but is now only about 39 acres. The rate of loss would be exacerbated by rising sea levels. To protect the channels and waters for the benefit of endangered fish, the levee should be maintained for the specific purpose of protecting the island against loss to erosion. An erosion-protection plan would be submitted to the agencies.
- 5. Vegetation management plan. After consultation with the agencies and their consultants, a vegetation management plan would be prepared. This vegetation management plan would provide mitigation by improving vegetation beyond prerepair conditions. It would include the removal of at least one acre of pepperweed that was present before the levee repair, followed by revegetation with non-invasive plants typical of pre-repair conditions. It is also expected to include the planting of at least three acres with preferred waterfowl food plants, thereby improving the island's support for the beneficial use of wildlife habitat.
- 6. *Mitigation monitoring and performance criteria*. For the six acres of artificial channels and waters, performance would be monitoring and assessed by calculating acreage from an aerial photograph, using computer software. For the study of endangered fish, performance would be monitored and assessed by the submission of annual reports providing the data collected, evaluating and interpreting those data, explaining conclusions about the relative value of the four types of channels and waters to endangered fish, and identifying any changes in data collection and evaluation. For erosion protection, performance would be assessed by implementation of the erosion protection plan. Monitoring and reporting would be performed as necessary. For the vegetation management plan, performance would be monitored and assessed calculating acreage from an aerial photograph or ground-level measurements.
- 7. *Mitigation ratio*. One acre of the island is to be used for recreational facilities that benefit the owner. The six acres of endangered-fish-friendly channels provide a six-to-one mitigation ratio of habitat rehabilitation to aquatic function that was lost when the island was originally brought under management. If the four acres of vegetation improvement (one acre of pepperweed removal and three acres of waterfowl food plants) are added in, that brings the mitigation ratio to ten-to-one. If the levee is considered part of the development—it should not be, because the levee would no longer perform its intended function of maintaining water levels in duck ponds, and because the remaining levee serves an important mitigation function by minimizing the loss of rare tidally influenced island habitat within Suisun Marsh—then roughly 2.5 acres of levee would be added to the roughly one acre of recreational facilities, for a total development of about 3.5 acres. The levee and recreational facilities would not exceed four acres. In that case, the six

acres of endangered-fish-friendly channels would provide a 1.5 to one mitigation ratio, and with the additional four acres of vegetation improvement a 2.5 to one ratio. These ratios would cover both permanent and temporary losses.

- 8. *Implementation time schedule.* Initiation of the mitigation portion of this Restoration and Mitigation Plan would begin immediately on written approval by the Regional Board and BCDC. The initial step, which is expected to take three to six months, would be to raise money to implement the plan. Within sixty days of written approval, the data collection process would be initiated, and it would be completed within six months. Permit applications would be submitted to Solano County, the U.S. Army Corps of Engineers, and the Regional Board within three months after that. Courtesy copies of the applications would also be provided to BCDC. Because of BCDC's statutory requirement to grant or deny an application within 90 days, a formal application would be submitted only when it was possible to file a complete application, i.e. after receiving approvals from Solano County, the Corps, and the Regional Board. During this time, however, the process for modifying the individual management plan applicable to Point Buckler Island would be initiated. Following receipt of all approvals, construction would be initiated within six months. Compliance monitoring reports would be submitted annually for five years.
- 9. Compliance with no net loss policy. The no net loss policy specifies, among other things, the goal of no net loss in "quantity, quality, and permanence of wetlands acreage and values in a manner that fosters...respect for private property." It also calls for the reduction of procedural complexity of wetlands conservation programs, and the encouragement of partnerships to make "cooperative planning efforts the primary focus of wetlands conservation." This Restoration and Mitigation Plan complies with the no net loss policy by providing a gain in the quantity of the acreage that can be flooded through ordinary tidal action (as compared with pre-repair conditions, where the interior plain was flooded only occasionally if at all), a gain in the quality of the acreage (through the creation of endangered-fish-friendly channels), as well as a gain in the permanence of the acreage (through protection against erosion). This plan may also provide some respect for private property, as well as the potential for cooperative planning efforts.

Although Mr. Sweeney has filed suit in Solano Superior Court challenging both Orders, Mr. Sweeney has not filed motions to stay the provisions calling for restoration and mitigation plans. Approval and implementation of this plan could moot some of the issues in the litigation, and lead to settlement of the remainder.

But, by submitting this Restoration and Mitigation Plan, Mr. Sweeney is not waiving any rights he may have. The prosecution of his suit against the Regional Board and BCDC will continue, and may affect obligations and schedules proposed in this plan. For example, Mr. Sweeney may prevail on his argument about Public Resources Code § 29508, which reads as follows:

Notwithstanding any provision of this division to the contrary, no marsh development permit shall be required pursuant to this chapter for the following types of development[:]...(b) Repair, replacement, reconstruction, or maintenance that does not result in an addition to, or enlargement or expansion of, the object of such repair, replacement, reconstruction, or maintenance.

Mr. Sweeney argues that the levee repair at issue here is undoubtedly a "[r]epair, replacement, reconstruction, or maintenance", and that it is not an "addition to, enlargement or expansion" of the pre-repair levee. If he prevails on this argument, then he did not and does not need a permit from BCDC for the levee repair, and the Restoration and Mitigation Plan would be modified accordingly.

Mr. Sweeney does not have the cash to pay the penalties imposed by the Regional Board and BCDC, and to implement the restoration of Point Buckler. Protecting the environment—in this case, *improving* the environment at Point Buckler—should take precedence over payment of any penalties. By approving this plan, the Regional Board and BCDC will give Mr. Sweeney an opportunity to raise money to implement the proposed improvements.

This Restoration and Mitigation Plan should be approved.

II. BACKGROUND

Point Buckler has had a levee around its perimeter since at least 1948, when the levee is visible on an aerial photograph. Conversations with previous owners confirm that the island has been used as a duck club since the 1920s. Duck clubs use levees to control the water level in their duck ponds—to keep them full of water. Without a levee, the water in the duck ponds would drain away at low tide. There are more than 150 duck clubs in the Suisun Marsh.

The Suisun Marsh Protection Plan, which was updated by BCDC in 2007 and provides the bible for environmental protection in the marsh, emphasizes the importance of duck clubs, which "encourage production of preferred waterfowl food plants" and "are a vital component of the wintering habitat for waterfowl migrating south":

In the Suisun Marsh, about 50,700 acres of managed wetlands are currently maintained as private waterfowl hunting clubs and on publicly-owned wildlife management areas and refuges. Because of their extent, location and the use of management techniques to encourage production of preferred waterfowl food plants, managed wetlands of the Suisun Marsh are a vital component of the wintering habitat for waterfowl migrating south on the Pacific Flyway, and also provide cover, foraging and nesting opportunities for resident waterfowl. Managed wetlands also provide habitat for a diversity of other resident and migratory species, including other waterbirds, shorebirds, raptors, amphibians, and mammals. Managed wetlands can protect upland areas by retaining flood waters and also provide an opportunity for needed space for adjacent wetlands to migrate landward as sea level rises.

(Suisun Marsh Protection Plan at 12 (Environment Finding 5).)

By 2011, when Mr. Sweeney bought Point Buckler, the levee had fallen into disrepair. Consultants to the Regional Board identified seven breaches in the levee. (Point Buckler Technical Assessment [Etc.], dated May 12, 2016, prepared for the Regional Board, fig. G-20.) The previous owner told Mr. Sweeney that the California Department of Water Resources was requiring that the levee be repaired.

Since then, document review has established that DWR had committed to the installation and maintenance of a pump on the island as mitigation for water diverted south from the Delta. DWR was refusing to install the pump unless the levee was repaired, no doubt on the grounds

that the pump was intended to provide water for duck ponds and would be useless unless the levee was repaired because the pumped water would drain off the island as the tide went out.

The levee repair at issue took place in 2014. His purpose in repairing the levee was to restore the duck ponds. The levee repair was not needed for kiteboarding, which had been going on since 2012 outside the levee.

Mr. Sweeney excavated dirt from the borrow ditch and placed it on the remnant levee. On the parts of the island where the remnant levee had been eroded away, he reconstructed the levee inland of the remnant levee. He stayed inside the debris line, which for much of the island is an obvious collection of whitened wood and debris that has been left by the high tide.

BCDC and the Suisun Resources Conservation District became aware of the levee repair in March 2014, when the repair was just beginning. Although BCDC and SRCD knew Mr. Sweeney from contacts related to another island, neither agency contacted Mr. Sweeney or warned him that he was doing anything wrong. In October 2014, BCDC called Mr. Sweeney and asked for a site visit. BCDC invited Regional Board staff to join in the site visit. That visit took place in November 2014. Regional Board staff did not attend, apparently because there was not enough room in Mr. Sweeney's boat for everyone, and because the agencies did not obtain another boat. During the November 2014 visit, BCDC staff provided Mr. Sweeney with a copy of the individual management plan for Point Bucker (the "Club Plan"), and told him that if his work was done in accordance with the Club Plan it was OK.

On January 30, 2015, BCDC staff wrote Mr. Sweeney and, for the first time, asserted that the levee repair was not covered by the Club Plan. It took BCDC staff nine months, from March 2014 to January 2015, to decide that there was a violation.

In February 2015, Corps staff visited the island and informed Mr. Sweeney that he could obtain "after the fact" permitting approval through the Corps' Regional General Permit 3 ("RGP3"). Corps staff assisted Mr. Sweeney in filling out the form, which he signed and gave to Corps staff.

During 2015 and Mr. Sweeney and his former and current counsel met with BCDC and the Regional Board, but were unable to reach a resolution. The Regional Board issued a cleanup and abatement order in September 2015, but rescinded it after court proceedings.

In March 2016, the Corps, which had not made any additional requests of Mr. Sweeney or accuse him of any violations since he filed his RGP3 paperwork more than a year earlier, wrote Mr. Sweeney that the case was being transferred to EPA for possible enforcement.

In May 2016, BCDC issued a cease and desist order, but it has since expired.

During 2016, Mr. Sweeney and his counsel continued to meet with the Regional Board, BCDC, and the U.S. Environmental Protection Agency, but were unable to resolve the dispute.

In August 2016, the Regional Board issued the Regional Board Order. It includes the following provisions related to the submission of a restoration plan and monitoring plan:

- 2. No later than February 10, 2017, the Dischargers shall submit a Point Buckler Restoration Plan, acceptable to the Water Board Executive Officer, that includes the following:
 - a. A Restoration Plan describing corrective actions

designed to restore, at a minimum, the water quality functions and values of the tidal marsh, including the length of channel and area of marsh, existing prior to the Dischargers' unauthorized activities, including (1) restoring tidal flow into channels and ditches; (2) restoring tidal circulation throughout the interior of the Site; and (3) restoring overland tidal connection to the Site's interior marsh during higher tides. The Restoration Plan shall include a workplan and implementation time schedule. The workplan shall identify all necessary permits and approvals and a process to obtain them. The Dischargers shall initiate implementation in accordance with the approved implementation time schedule within 60 days of written acceptance of the Point Buckler Restoration Plan by the Executive Officer. If the Plan proposes any alteration of the Site such that it is not returned to pre-existing conditions, such alterations must be addressed in the Mitigation and Monitoring Plan.

- b. A Restoration Monitoring Plan (RMP) shall include monitoring methods and performance criteria designed to monitor and evaluate the success of the implemented restoration actions. Performance criteria shall include targets for water quality, soil and hydrologic conditions, and vegetation composition including invasive species control. The RMP shall monitor the success of the restoration actions until performance criteria have been successfully achieved, and for at least five years following completion of the restoration actions.
- 3. No later than February 10, 2017, the Dischargers shall submit a Mitigation and Monitoring Plan, acceptable to the Water Board Executive Officer, that includes the following:
 - a. A proposal to provide compensatory mitigation to compensate for any temporal and permanent impacts to wetlands and other waters of the State that resulted from unauthorized activities at the Site. The Mitigation and Monitoring Plan (MMP) shall (1) describe existing site conditions at the proposed mitigation site; (2) describe implementation methods used to provide compensatory mitigation; (3) include monitoring that will be implemented and performance criteria that will be used to evaluate the success of the compensatory mitigation; and (4) include an implementation schedule. The Dischargers shall initiate implementation in accordance with the accepted implementation time schedule within 60 days of written acceptance of the MMP by the Executive Officer.

Compensatory mitigation shall comply with the State's No Net Loss Policy, which has been incorporated into the Basin Plan. The primary goal of this policy is to ensure no overall net loss and to achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values.

When wetlands are lost, compensatory mitigation for that loss is determined, in part, based on the functions and areal extent of the lost wetlands. Each site is reviewed on a case-by-case basis, and no predetermined set of ratios is used to determine mitigation, though a minimum of 1 acre gained for each acre lost is typically required when that mitigation is in-kind, on-site, complete, and fully established at the time the impact occurs. For mitigation that is in-kind and on-site, and constructed at the same time as impacts occur, a typical amount of mitigation is approximately twice the amount of wetlands impacted (e.g., a minimum of 2 acres of compensatory mitigation for each acre of fill) due to the limited temporal loss. Factors leading to requirements for additional mitigation include:

- Temporal losses, which are defined as functions lost due to the passage of time between loss of the impacted wetland and creation/restoration of the full-functioning mitigation wetland;
- Indirect impacts to wetlands, including loss of or impacts to adjacent lands that influence the beneficial uses of the wetlands. Such impacts can include, but are not limited to, loss of upland buffers and adjacent supporting habitats, and the introduction of other activities, such as regular human disturbance, in adjacent areas;
- Loss of or impacts to medium to high quality habitat;
- Loss of or impacts to special status species and their associated habitats;
- The period of time required for full development of created/restored tidal marsh;
- Delays in the construction/restoration of mitigation wetlands, relative to when tidal marsh at the Site was filled (e.g. fill impacts began in 2012, but compensatory mitigation for the fill has not yet been provided);

- Uncertainty associated with the construction/restoration of tidal marsh; and
- Mitigation located off-site or the creation/restoration of out-of-kind wetlands (e.g. creation/restoration of wetlands other than tidal marsh, when impacts are to tidal marsh). Typically, the further off-site, and the more out-of-kind the mitigation is, the greater the amount of mitigation required.
- 4. No later than January 31 of each year following initiation of the corrective actions and continuing until the corrective actions are successfully achieved, the Dischargers shall submit annual monitoring reports, acceptable to the Executive Officer, describing the progress reached toward achieving the restoration activities' approved performance criteria.

(RB Order at 15-17.)

In November 2016, BCDC issued the BCDC Order. It includes the following provisions related to the submission of a restoration plan and monitoring plan:

- A. No later than February 10, 2017, the Respondents shall submit a Point Buckler Restoration Plan, acceptable to the Executive Director, that includes the following:
 - 1. A Restoration Plan describing corrective actions designed to restore, at a minimum, the water quality functions and values of the tidal marsh, including the length of channel and area of marsh, existing prior to the Respondents' unauthorized activities, including:
 - a. Restoring tidal flow into the channels and ditches:
 - b. Restoring tidal circulation throughout the interior of the Site; and
 - c. Restoring overland tidal connection to the Site's interior marsh during higher tides.

The Restoration Plan shall include a workplan and implementation time schedule. The workplan shall identify all necessary permits and approvals and a process to obtain them. The Respondents shall initiate implementation in accordance with the approved implementation time schedule within 60 days of written acceptance of the Point Buckler Restoration Plan by the Executive Director. If the Plan proposes any alteration of the Site such that it is not returned to pre-existing conditions, such alterations must be addressed in the Mitigation and Monitoring Plan.

- 2. A Restoration Monitoring Plan (RMP) shall include monitoring methods and performance criteria designed to monitor and evaluate the success of the implemented restoration actions. Performance criteria shall include targets for water quality, soil and hydrologic conditions, and vegetation composition including invasive species control. The RMP shall monitor the success of the restoration actions until performance criteria have been successfully achieved, and for at least five years following completion of the restoration actions.
 - B. No later than February 10, 2017, the Respondents shall submit a Mitigation and Monitoring Plan, acceptable to the Executive Director, that includes the following:
 - 1. A proposal to provide compensatory mitigation to compensate for any temporal and permanent impacts to wetlands and other waters of the State that resulted from unauthorized activities at the Site. The Mitigation and Monitoring Plan (MMP) shall:
 - a. Describe existing site conditions at the proposed mitigation site;
 - b. Describe implementation methods used to provide compensatory mitigation;
 - c. Include monitoring that will be implemented and performance criteria that will be used to evaluate the success of the compensatory mitigation; and
 - d. Include an implementation schedule. The Respondents shall initiate implementation in accordance with the accepted implementation time schedule within 60 days of written acceptance of the MMP by the Executive Director.

(BCDC Order at 17-18.) The BCDC permit also imposed a penalty. In December 2016 the Regional Board issued a penalty order.

In December 2016 Mr. Sweeney filed suit in Solano Superior Court challenging the Regional Board Order and the BCDC Order. That suit remains pending. Mr. Sweeney also filed a petition with the State Board challenging the Regional Board penalty order. If that petition is denied, Mr. Sweeney expects to challenge that penalty order in Solano Superior Court.

In January 2017, the United States filed suit against Mr. Sweeney in the Eastern District of California. That suit remains pending.

III. RESTORATION PLAN

There are six principal elements of the restoration portion of the Restoration and Mitigation Plan:

- 1. Restoration of levee openings.
- 2. Restoration of crescent ponds.
- 3. Vegetation management plan.
- 4. Restoration monitoring plan.
- 5. Workplan.
- 6. Implementation time schedule.

The following sections explain how these elements satisfy the provisions of the Orders.

A. Restoration of levee openings.

The two Orders call for "corrective actions designed to restore...the water quality functions and values of the tidal marsh" and included three numbered provisions:

- (1) restoring tidal flow into channels and ditches;
- (2) restoring tidal circulation throughout the interior of the Site; and
- (3) restoring overland tidal connection to the Site's interior marsh during higher tides.

The principal concern expressed by the agencies and their consultants it that the levee repair cut off tidal flow into the channels and ditches inside the levee. This proposal would restore tidal flow by the creation of openings in the levee.

Openings in the levee would be installed and sized to allow at least as much water to flow into the channels (and, depending on the water level, over the land) that flowed in before the levee repairs in 2014. The openings would be sized so that they would also accommodate additional mitigation flows into interior channels, as part of the mitigation program described below. The number of openings is expected to be in the range of 2-4, but could differ. The technical specifications of those openings would be determined after a process of data collection and hydrologic calculation. If there are questions about the need for additional data on tidal elevations at Point Buckler, an explanation can be provided. Correct information about tidal elevations and land elevations is important because the calculations for the openings depend on these data.

As part of this proposal, a temporary tide gage would be installed at Point Buckler and left in place long enough so that a relationship can be developed between tide data at Point Buckler and tide data at Port Chicago. An interval of two to four weeks is expected. If those data are insufficient, a longer interval can be implemented.

The openings would restore water quality functions and values by re-creating the tidal flows that existed before the levee repair.

As the tide rises and water flows through the openings into the interior of the island, it would enter the borrow ditch, which forms a circle inside the levee. Once it enters the borrow ditch it can flow throughout the interior of the island. Rising tidal waters would enter the three natural channels on the island, because all are connected to the borrow ditch. If the tide rises high enough, it would overflow the channels and the borrow ditch, and spread out over the interior plain. The interior plain is relatively flat, and once water overflows the channels and ditch it can spread across almost all of the interior. In this way, the proposal would restore tidal circulation into the channels and ditches, and throughout the interior of the island.

For this proposal, it is not necessary to determine whether the tide would actually be high enough to flood the interior plain during normal conditions or even during conditions in which water levels are unusually high. The restoration of pre-repair conditions would allow for overflows to the same extent the existed before the repairs. That is enough for a restoration plan.

Nevertheless, during exceptionally high storm flows like the ones occurring now, the island may be almost entirely inundated.

B. Filling in crescent ponds.

Filling in the crescent ponds would restore the land to its condition before the levee was repaired. The fill would increase the amount of dry (or normally dry) land available for growth of the vegetation that dominates Point Buckler. Because filling in the excavations would not provide much benefit endangered fish, it may be more appropriate to convert the crescent ponds into waters that could benefit the fish and can be used in the study of endangered fish, as described below.

C. Vegetation management plan.

Developing a vegetation management plan would help restore pre-repair conditions at the site by removing pepperweed stands that resulted from the levee repair. Vegetation management and improvement would also be used to provide mitigation, as described below.

By restoring the levee openings and the island's vegetation, the proposal would restore the island to virtually the same condition it was in before the levee repair. Because it would be restored—physically, hydrologically, and vegetally—it would provide the same habitat, the same functions, and the same benefits to endangered fish, waterfowl or other birds, or any other wildlife that it provided before the levee repair. Once the island was restored to its pre-repair condition, any harm that may have resulted from the levee repair would be eliminated. This Restoration and Mitigation Plan, however, does not stop at restoration. It would mitigate any harm to any resources by improving the island, especially for endangered species, as discussed below.

D. Workplan.

The Orders call for a workplan that identifies all necessary permits and a process to obtain them.

Implementation of this Restoration and Mitigation Plan would incorporate the raising of money to pay for consultants and construction, the collection of data and calculations on the size of the openings and the expected flows through the opening, approvals (and if needed a zoning

change) from Solano County, a section 404 permit from the U.S. Army Corps of Engineers, a 401 certification from the Regional Board, a BCDC permit, and a modification of the individual management plan "Club Plan" for Point Buckler.

The process for obtaining these permits consists of preparing and filing applications with the issuing agencies. meeting with the agencies to answer questions, resolve their concerns, and modify the application so that meets their requirements, and coordinating among the agencies so that they are all informed of the modifications and do not impose inconsistent requirements.

E. Implementation time schedule.

The Orders call for an implementation time schedule and for initiation within sixty days of acceptance.

Initiation of this plan would begin immediately on written approval by the Regional Board and BCDC. The initial step, which is expected to take six to twelve months, would be to raise money to hire consultants, collect data, and implement the plan. In order to raise money, Mr. Sweeney may need, and the agencies would be expected to provide, assurances that persons investing in the implementation of this plan will not be penalized. Within sixty days of written approval, the data collection process would be initiated, and it would be completed within six months. Permit applications would be submitted to Solano County, the U.S. Army Corps of Engineers, and the Regional Board within three months after that. Courtesy copies of the applications would also be provided to BCDC. Because of BCDC's statutory requirement to grant or deny an application within 90 days, a formal application would be submitted only when it was possible to file a complete application, i.e. after receiving approvals from Solano County, the Corps, and the Regional Board. During this time, however, the process for modifying the individual management plan applicable to Point Buckler Island would be initiated. Following receipt of all approvals, construction would be initiated within six months. Restoration monitoring reports would be submitted annually.

F. Restoration monitoring plan.

The Orders call for a restoration monitoring plan that includes monitoring methods and performance criteria designed to monitor and evaluate the success of the implemented restoration actions, which in turn includes targets for water quality, soil and hydrologic conditions, and vegetation composition including invasive species control, and which would extend for at least five years following completion of the restoration.

Restoration monitoring would be conducted for five years, or longer if each of the goals has not been achieved by that time. The action of restoring tidal flows would be monitored visually, by observing whether water is flowing into the interior of the island at high tide, and leaving at low tide. Additional inspections may be performed to observe the behavior of the incoming flows during spring high tides. Water quality monitoring using field equipment would be performed to ascertain whether there are substantial differences between water quality inside and outside the island. The goal would be to achieve no significant differences other than those expected from the marshy nature of the inland channels and ditches. For example, the water in marshy areas may be less turbid than ambient waters (the vegetation may remove turbidity) and contain more organic matter than ambient waters (marsh vegetation provides organic matter). Vegetation composition would be monitored, using aerial photographs and ground-level observations, to ascertain that the extent of pepperweed has been restored to pre-repair concentrations. Soil conditions, in particular pH and salinity, would be monitored to ascertain that they are within acceptable ranges for the pre-repair or mitigation vegetation.

IV. MITIGATION PLAN

There are nine principal elements of the mitigation portion of the Restoration and Mitigation Plan:

- 1. Description of existing site conditions at proposed mitigation site.
- 2. Mitigation by creation of four kinds of channels and waters to enhance value to endangered fish.
- 3. Study of endangered fish.
- 4. Erosion protection.
- 5. Vegetation management plan.
- 6. Mitigation monitoring and performance criteria.
- 7. Mitigation ratio.
- 8. Implementation time schedule.
- 9. Compliance with no net loss policy.

The following sections explain how these elements satisfy the provisions of the Orders.

A. Description of existing site conditions at proposed mitigation site.

The Orders call for a description of "existing site conditions at the proposed mitigation site". The proposed mitigation site is Point Buckler Island. Site conditions at the island have been described in many documents previously prepared for the agencies or submitted to them, including agency site visit notes and reports from November 2014, October 2015, and February 2016; the Technical Report dated May 2016 prepared by consultants to the Regional Board; the declarations and exhibits Mr. Sweeney, Dr. David Mayer, and Dr. Terry Huffman submitted to the Regional Board; and the reports prepared by the Regional Board's consultants in response to those declarations and exhibits.

Because conditions at Point Buckler are well known to the Regional Board and BCDC, no additional information is being provided here. Additional information can be submitted if requested.

B. Mitigation by creation of four kinds of channels and waters to enhance value to endangered fish.

The Orders call for a description of "implementation methods used to provide compensatory mitigation".

According to the agencies consultants, the island is especially rare and valuable because its channels and ditches provide important habitat, food, and shelter to endangered fish, and because there are very few of these channels in the area. They say that Point Buckler "represented approximately 5% of all the smaller tidal marsh channels in Suisun Marsh along the margins of Suisun, Grizzly, and Honker bays". (Experts' Response To July 11, 2016 Evidence Package at 35.) Although 5% may seem like a small number, they apparently meant it to be understood as a relatively large number in support of the point that even though Point Buckler is

a very small island it can provide a significant portion of important habitat for the entire Suisun Marsh. If so, then additional small channels would be very valuable for the endangered fish.

There is some disagreement among fisheries biologists, however, about whether small channels may attract predators, and thereby do more harm than good.

To help resolve this issue, four kinds of channels and waters would be implemented at Point Buckler Island: (1) natural channels, (2) narrow shallow channels, (3) deeper relatively wider channels (which may still be considered "small" when compared to some of the much larger channels in the marsh and Delta), and (4) ponds. Each of these channels and waters would be of much greater value to endangered fish and other beneficial uses than the previously existing land, which was dry (or usually dry). In addition to the three natural channels that already exist, at least two of each type of artificial channel would be implemented. Two channels of each type would be advantageous to the study of endangered fish because repeatability could be assessed as well as differentiation of effects if conditions in the pairs of channels were varied. Six acres of artificial channels (i.e. not including the three existing natural channels) would be implemented. Material excavated from these channels and waters would be retained and used onsite in areas of approved fill.

C. Study of endangered fish.

In support of the four kinds of channels and waters, a fish study would be conducted to assess whether endangered fish benefit from some of the four types of channels over others. The study details would be developed after consultation with the agencies and their consultants. The study is expected to last five years. Water control structures are expected to be installed in at least one of the ponds, so that the use of isolated waters in conjunction with a management program can be evaluated to assess whether they provide additional benefits to endangered fish, including protection from predation, compared with other types of channels and waters.

D. Erosion protection.

Once the openings are installed, the levee would no longer be able to perform its original purpose, which was to maintain water levels in duck ponds and prevent the tides from draining away waters on the island. As a result, it is no longer part of the development project. If restoration were the only goal, then the levee might be bulldozed back into the borrow ditch. That would make no sense, however, because the levee performs a valuable mitigation function for wetlands and endangered species. It protects the island, and its rare and valuable channels and waters, from being lost forever to erosion.

The island was originally reported to be more than 51 acres, but is now only about 39 acres. A comparison of aerial photographs taken over the years shows that there are areas where bites have been taken out of the island, and that there has been a general shrinkage around the edges. Smaller islands that were adjacent or attached to Point Buckler are long gone. These losses may occur when the available energy is high, for example when high stormwater flows and high winds coincide with high lunar tides. Unless the levee is retained and maintained, high energy conditions will continue to erode the island until nothing is left.

This problem is likely to be exacerbated by rising sea levels, which by increasing water levels could increase the energy applied to the island, especially if rising sea levels are accompanied by increases in the intensity of rainfall and magnitude of stormwater flows during extreme events.

To protect the channels and waters in the interior plain, the levee should be maintained for the specific purpose of preventing loss from erosion. An erosion-protection plan would be submitted to the agencies.

E. Vegetation management plan.

Although the levee repair appears to have allowed pepperweed to spread to some new areas, aerial photographs and ground level observations show that there have been substantial growths that long preceded the levee repair. Any removal of pepperweed beyond those levels that existed at the time of the levee repair is not restoration, but mitigation.

After consultation with the agencies and their consultants, a vegetation management plan would be prepared. This vegetation management plan would provide mitigation by improving vegetation beyond pre-repair conditions. It would include the removal of at least one acre of pepperweed that was present before the levee repair, followed by revegetation with non-invasive plants typical of pre-repair conditions.

It is also expected to include the planting of at least three acres with preferred waterfowl food plants, thereby improving the island's support for the beneficial use of wildlife habitat.

F. Mitigation monitoring and performance criteria.

The Orders call for a description of "monitoring that will be implemented and performance criteria that will be used to evaluate the success of the compensatory mitigation". Monitoring would be implemented for the six acres of artificial channels and waters, for the study of endangered fish, for erosion protection, and for vegetation management.

For the implementation of artificial channels and waters, the performance criterion is the implementation of six acres of artificial channels and waters. Performance would be assessed by calculating acreage from an aerial photograph, using a computer application to determine area.

For the study of endangered fish, performance would be assessed by the submission of annual reports. These reports would include the data collected, an interpretation or evaluation of those data, conclusions as warranted about the relative value of the four types of channels and waters to endangered fish, and identification of any changes in data collection and evaluation. The study investigations may include enhancement or modification of channels to assess whether there is a potential for greater use or success.

For erosion protection, performance would be assessed by implementation of the erosion protection plan. The levee edges should be adjusted to provide recommended slopes, and should be inspected and maintained when subjected to high energy situations. Monitoring and reporting would be performed as necessary.

For the vegetation management plan, performance would be assessed by calculating acreage from an aerial photograph, using a computer application to determine area, or from ground-level measurements.

G. Mitigation ratio.

Under this proposal, only about one acre of the island would be developed. The remainder would be left as it was before the levee repair, or enhanced for the protection of endangered fish and beneficial uses.

The six acres of endangered-fish-friendly channels provide a six-to-one mitigation ratio of habitat rehabilitation to aquatic function that was lost when the island was originally brought

under management. If the four acres of vegetation improvement (one acre of pepperweed removal and three acres of waterfowl food plants) are added in, that brings the mitigation ratio to ten-to-one.

The levee should not be considered part of the development. It would no longer perform its intended function of maintaining water levels in duck ponds, and preventing the water from draining off the island at low tide. The remaining levee would also serve an important mitigation function by minimizing the loss of rare tidally influenced island habitat within Suisun Marsh. But if the levee is considered part of the development, then roughly 2.5 acres of levee would be added to the roughly one acre of recreational facilities, for a total development of about 3.5 acres. The levee and recreational facilities would not exceed four acres. In that case, the six acres of endangered-fish-friendly channels would provide a 1.5 to one mitigation ratio, and with the additional four acres of vegetation improvement a 2.5 to one ratio. These ratios would cover both permanent and temporary losses.

The Regional Board Order notes that mitigation should comply with the no net loss policy. This proposal does, as explained below. The Regional Board Order reports that "[e]ach site is reviewed on a case-by-case basis, and no pre-determined set of ratios is used to determine mitigation, though a minimum of 1 acre gained for each acre lost is typically required...." The proposal here exceeds the minimum of one acre per acre.

The Regional Board Order identifies other factors that are used to assess mitigation: temporal losses, indirect effects, effects on medium to high quality habitat, effects to special status species, time required for restoration, delays in restoration, uncertainty associated with restoration, whether the mitigation is off-site and out-of-kind. Here the mitigation is onsite and in kind, only better. The proposed mitigation improves the habitat for special species, which will be able to inhabit new channels that did not previously exist, and which we be able to benefit from the functions the new channels provide.

The order reports that "[f]or mitigation that is in-kind and on-site, and constructed at the same time as impacts occur, a typical amount of mitigation is approximately twice the amount of wetlands impacted (e.g., a minimum of 2 acres of compensatory mitigation for each acre of fill) due to the limited temporal loss." In other words, the Regional Board prefers to charge, for the filling of an acre, one acre in mitigation for the permanent loss *plus a full additional acre* for the temporary loss of the use of that acre. This charge of a full additional acre violates the "rough proportionality" requirement that applies when a government requires a landowner to relinquish property. This requirement arises principally from two cases of the U.S. Supreme Court, *Nollan* and *Dolan*:

Our decisions in *Nollan v. California Coastal Comm'n*, 483 U. S. 825, 107 S. Ct. 3141, 97 L. Ed. 2d 677 (1987), and *Dolan v. City of Tigard*, 512 U. S. 374, 114 S. Ct. 2309, 129 L. Ed. 2d 304 (1994), provide important protection against the misuse of the power of land-use regulation. In those cases, we held that a unit of government may not condition the approval of a land-use permit on the owner's relinquishment of a portion of his property unless there is a "nexus" and "rough proportionality" between the government's demand and the effects of the proposed land use.

(Koontz v. St. Johns River Water Mgmt. Dist. (2013) 133 S.Ct. 2586, 2591.) The Koontz case arose over a dispute about how much mitigation was roughly proportional to the filling of wetlands. In Koontz, the Supreme Court pointed out that land-use permits are especially vulnerable to extortionate demands that are prohibited by the "unconstitutional conditions doctrine":

... land-use permit applicants are especially vulnerable to the type of coercion that the unconstitutional conditions doctrine prohibits because the government often has broad discretion to deny a permit that is worth far more than property it would like to take. ... By conditioning a building permit on the owner's deeding over a public right-of-way, for example, the government can pressure an owner into voluntarily giving up property for which the Fifth Amendment would otherwise require just compensation. Extortionate demands of this sort frustrate the Fifth Amendment right to just compensation, and the unconstitutional conditions doctrine prohibits them.

(*Id.* at 2594-2595.) In *Koontz*, the U.S. Supreme Court concluded that *Nollan* and *Dolan* apply regardless of whether a permit is granted or denied, and regardless of whether the demand is for an interest in land or for a payment of money.

Because there must be a "rough proportionality' between the government's demand and the effects of the proposed land use", mitigation for temporal loss must be roughly proportional to the temporal loss. The dedication of one acre of wetlands provides wetland services in perpetuity. For practical purposes, we might say that it provides services for 100 years. If a one-acre wetland is taken out of service for only one year, a landowner should not have to pay a whole additional acre, which will provide 100 years of wetlands services. That would not be roughly proportional. The landowner should have to pay only one year of lost services: in other words, 1/100 acre per year of loss of use.

Here, the proposed mitigation would more than cover any temporal loss attributable to the levee repair, in addition to the permanent loss.

H. Implementation schedule.

The Orders call for an implementation schedule, and for initiation within sixty days of written acceptance.

Initiation of the mitigation portion of this Restoration and Mitigation Plan would begin immediately on written approval by the Regional Board and BCDC. The initial step, which is expected to take three to six months, would be to raise money to implement the plan. Within sixty days of written approval, the data collection process would be initiated, and it would be completed within six months.

Permit applications would be submitted to Solano County, the U.S. Army Corps of Engineers, and the Regional Board within three months after that. Courtesy copies of the applications would also be provided to BCDC. Because of BCDC's statutory requirement to grant or deny an application within 90 days, a formal application would be submitted only when it was possible to file a complete application, i.e. after receiving approvals from Solano County, the Corps, and the Regional Board. During this time, however, the process for modifying the individual management plan applicable to Point Buckler Island would be initiated. Following receipt of all approvals, construction would be initiated within six months. Reports would be submitted annually for five years.

I. Compliance with no net loss policy.

The Regional Board Order calls for compliance with the no net loss policy. That policy is found in Executive Order W-59-93 issued by Governor Pete Wilson in 1993. The pertinent part reads as follows:

It is hereby declared to be the policy of the State of California that its Comprehensive Wetlands Policy rests on three primary objectives:

- 1) To ensure no overall net loss and long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property.
- 2) To reduce procedural complexity in the administration of State and Federal wetlands conservation programs.
- 3) To encourage partnerships to make restoration, landowner incentive programs, and cooperative planning the primary focus of wetlands conservation.

This Restoration and Mitigation Plan complies with the no net loss policy by providing a gain in the quantity of the acreage that can be flooded through ordinary tidal action, a gain in the quality of the acreage, as well as a gain in the permanence of the acreage. The gain in quantity of acreage results from the implementation of channels, which would create habitat that may be used by fish from dry land (or, according to the Regional Board's consultants, land that is usually dry but may be inundated for a short time, to a shallow depth, once every few weeks or months). There would remain enough vegetation around each of the channels to provide the services that vegetation growing along channels provide.

The gain in quality comes from the implementation of the artificial channels and waters, as well as from the implementation of the vegetation management plan. The Regional Board's consultants believe that the island was rare and valuable because its channels and ditches provide important services to endangered fish. The additional channels and waters would provide more of these important services, and would thereby increase the quality of the island. The quality of the island vegetation would be improved by removing pepperweed and planting preferred waterfowl food plants.

The gain in permanence comes from the maintenance of the levee and the erosion-protection plan. If the island is not protected against erosion, it will erode away to nothing. The channels and waters and beneficial vegetation will be lost.

According to the policy, each of these goals is to be implemented "in a manner that fosters creativity, stewardship, and respect for private property." This proposed Restoration and Mitigation Plan may foster some respect for private property by allowing the development of one acre out of about 39 acres on the island, without imposing any off-island conditions. Any imposition of additional conditions would foster disrespect for private property.

This proposed Restoration and Mitigation Plan may reduce procedural complexity in the administration of State and Federal wetlands conservation programs. Although the plan would include permitting by several agencies with overlapping jurisdiction, the acceptance of a unified plan by the Regional Board and BCDC, as well as by EPA, may reduce the procedural complexity that might otherwise arise.

To that extent that this proposed plan can be seen as cooperative planning, it in a small way helps make cooperative planning the primary focus of wetlands conservation.

V. COMPLIANCE WITH THE ORDERS

This proposed Restoration and Mitigation Plan complies with all objective requirements in the Orders. The provisions in the Orders requiring submission of plans for restoration and mitigation have now been satisfied.

If the Regional Board or BCDC would like to impose additional requirements, it should initiate a new proceeding and hold a new hearing. "Due process principles require reasonable notice and opportunity to be heard before governmental deprivation of a significant property interest." (*Horn v. County of Ventura* (1979) 24 Cal.3d 605, 612.) Here any additional requirement, other than the most minor request, will cause a governmental deprivation of a significant property interests, if only because Mr. Sweeney and Point Buckler Club are being deprived of the use and enjoyment of real property, as well as substantial amounts of money. Money is a property interest protected by due process. (*See Mathews v. Eldridge* (1976) 424 U.S. 319, 332 (due process applies to terminations of Social Security disability benefits).)

State Board Order No. WQ 86-13, In *the Matter of the Petition of BKK Corporation*, acknowledges that a hearing must be held, but concludes that the hearing can be held after an order is issued:

The Porter-Cologne Water Quality Control Act...does not require notice and an opportunity to be heard before issuance of a cleanup and abatement order. Due process is provided by an opportunity for a hearing after the order is issued.

(*Id.* at 4.) That State Board admits, however, that a post-deprivation hearing may be held only when there is a sufficiently compelling interest:

Where a state's interest is sufficiently compelling, the requirements of procedural due process may be satisfied by a hearing provided after issuance of an administrative order....

(*Id.* at 6.) Here there is no interest sufficiently compelling to delay a hearing until after a new order—that is, any requirement for an additional submission not called for by the Orders.

To the extent that the Regional Board or BCDC believes that this submission does not comply with some subjective requirement in the Orders, or that it does not satisfy their executive officer or executive director for any reason not objectively ascertainable from the face of the Orders, then that subjective requirement is void because it violates the "void for vagueness" doctrine.

[T]he void-for-vagueness doctrine requires that a penal statute define the criminal offense with sufficient definiteness that ordinary people can understand what conduct is prohibited and in a manner that does not encourage arbitrary and discriminatory enforcement.

(*Kolender v. Lawson* (1983) 461 U.S. 352, 357.) Here the Orders are issued under penal statutes because they authorize criminal penalties for violations, as well as quasi-criminal penalties such as the extreme penalties imposed in this case.

Nevertheless, this proposed Restoration and Mitigation Plan specifically envisions meetings with the Regional Board and BCDC and their consultants, as well as with other agencies. In these meetings, the Regional Board and BCDC can express their preferences about like specific details of the proposals to be handled, and—more to the point—can make demands about what must be delivered before they issue the permits identified in this proposal. As the permitting agencies, they will have broad authority to make appropriate demands and to refuse to issue the requested permits if their conditions are not met. Between that broad authority, and the specific proposals in this plan, the Regional Board and BCDC should have no trouble achieving their legitimate goals.

VI. CONCLUSION

This Restoration and Mitigation Plan should be approved.