COASTAL CONSERVANCY

Staff Recommendation May 19, 2011

MIDDLE BAIR ISLAND WETLAND RESTORATION

Project No. 98-042-02 Project Manager: Brenda Buxton

RECOMMENDED ACTION: Authorization to disburse up to \$1,850,000 to Ducks Unlimited, Inc. for the restoration of wetlands at Middle Bair Island by taking the following actions: 1) Modification of the June 4, 2009 authorization regarding the disbursement of funds from the National Oceanic and Atmospheric Administration (NOAA) for the implementation, adaptive management, and project support activities of Phase I of the South San Francisco Bay Salt Pond (SBSP) Restoration Project to allow up to \$600,000 of those funds not needed to complete SBSP projects, studies, or activities to be directed to wetland restoration at Bair Island; and 2) Authorization to accept and disburse up to \$1,250,000 from the Department of Water Resources' Integrated Regional Water Management Program, if approved, for wetland restoration at Middle Bair Island.

LOCATION: Bair Island, City of Redwood City, San Mateo County (Exhibit 1)

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: May 27, 2010 Staff Recommendation

Exhibit 3: January 21, 2011 Staff Recommendation

Exhibit 4: Bair Island Restoration and Management Plan Environmental

Impact Report/Study (CDs to Board Members only, otherwise

available at southbayrestoration.org)

Exhibit 5: Mitigation, Monitoring, and Reporting Plan

Exhibit 6: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160-31165 of the Public Resources Code:

"The Conservancy hereby modifies its June 4, 2009 authorization to accept and disburse

up to \$5,898,862 (five million eight hundred ninety eight thousand eight hundred sixty two dollars) from the National Oceanic and Atmospheric Administration (NOAA) for implementation of projects under the South Bay Salt Ponds Restoration Project by authorizing the redirection of up to \$600,000 (six hundred thousand dollars) of American Recovery and Reinvestment Act of 2009 (ARRA) funds designated for projects under the South Bay Salt Ponds Restoration Project and project management and related activities subsequently authorized by the Conservancy on May 27, 2010 and January 21, 2011, to be disbursed to Ducks Unlimited, Inc. for wetland restoration at Middle Bair Island ("the project"). Furthermore, the Conservancy hereby authorizes the acceptance of up to \$1,250,000 (one million two hundred fifty thousand dollars) from the Department of Water Resources' (DWR) Integrated Regional Water Management Program and the disbursement of those funds to Ducks Unlimited, Inc. for the project.

The disbursement of the funds shall be subject to the following conditions:

- 1. Prior to the disbursement of any Conservancy funds for the project, Ducks Unlimited, Inc. shall submit for the review and approval of the Conservancy's Executive Officer a work program for the project, including schedule and budget, and the names of any contractors it intends to use to complete the project.
- 2. In carrying out the project, Ducks Unlimited, Inc. shall:
 - a. Comply with the project description for the restoration of Middle Bair Island in the Bair Island Restoration and Management Plan Final Environmental Impact Statement/Report (EIS/R) that was certified with findings by the California Department of Fish and Game on January 22, 2008 and comply with all applicable mitigation and monitoring measures that are identified in the EIS/R.
 - b. Comply with all applicable terms and conditions that may be required by the NOAA-ARRA grant or the DWR grant to the Conservancy or that may be necessary to enable the Conservancy to comply with terms and conditions of the grants.
 - c. Implement all feasible Best Management Practices to reduce the project's greenhouse gas emissions, and shall require all contractors to do the same.
- 3. Prior to commencing the project, Ducks Unlimited, Inc. shall enter into and record an agreement pursuant to Public Resources Code Section 31116(c) sufficient to protect the public interest."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

- 1. The proposed project is consistent with the current Project Selection Criteria and Guidelines.
- 2. The proposed authorization is consistent with the purposes and objectives of Chapter 4.5 of Division 21 of the Public Resources Code, regarding the Conservancy's mandate to address the resource and recreational goals of San Francisco Bay Area.
- 3. The Conservancy has independently reviewed and considered the information contained in the Bair Island Restoration and Management Plan Environmental Impact Statement and

Environmental Impact Report (EIS/R) that was certified with findings by the California Department of Fish and Game on January 22, 2008 in order to comply with the California Environmental Quality Act (CEQA).

- 4. The EIS/R identifies potential significant effects from implementation of wetland restoration and public access projects at Inner, Middle and Outer Bair Island, in the areas of Cultural, Air Quality and Cumulative Impacts. With regard to these impacts, the Conservancy finds that the current proposed project, the wetland restoration of Middle Bair Island, as modified by incorporation of the mitigation measures identified in the EIS/R, avoids, reduces or mitigates all of the possible significant environmental effects of the project.
- 5. Ducks Unlimited, Inc. is a nonprofit organizations existing under Section 501(c)(3) of the U.S. Internal Revenue Code, whose purposes are consistent with Division 21 of the Public Resources Code."

PROJECT SUMMARY:

This authorization would enable the Conservancy to fund the next phase of wetland restoration at Bair Island through two actions.

NOAA-ARRA Grant

As stated in the January 21, 2011 staff recommendation, the South Bay Salt Pond Restoration Project has experienced significant project savings due to the lower than estimated construction costs. Staff negotiated with NOAA approval to use up to \$600,000 of the cost-savings for two fish-related studies to be undertaken as part of the South Bay Salt Pond Restoration Project (see the May 27, 2010 and January 21, 2011 staff recommendations for further details of the fish studies and the SBSP construction projects). Staff now anticipates that there could be up to an additional \$600,000 in savings when all the construction and fish studies are complete. Since there were no other South Bay Salt Pond Restoration Project projects, studies or activities for which funds can be spent before June 30, 2012 and that NOAA could approve as consistent with their mission to enhance fishery resources, NOAA has approved the use of the remaining funds for an additional wetland restoration project in southern San Francisco Bay: Middle Bair Island. This staff recommendation seeks Conservancy authorization to disburse these SBSP remaining funds to Ducks Unlimited, Inc. (DU) for a wetland restoration project at Middle Bair Island.

DWR's Integrated Regional Water Management Program (IRWMP) Grant

Conservancy staff also has applied for a DWR IRWMP grant for Bair Island wetland restoration. This authorization would allow the Conservancy to accept and disburse \$1,250,000 to DU for the Middle Bair Island wetland restoration project if these funds are awarded. The awards will be announced in June 2011. The IRWMP planning effort for the San Francisco Bay Area has resulted in a nine-county effort to coordinate and improve water supply reliability, protect water quality, manage flood protection, maintain public health standards, protect habitat and watershed resources, and enhance the overall health of the bay.

The restoration of Middle Bair Island is part of a larger effort to restore the 2,634-acre Bair Island complex, composed of Inner, Middle, and Outer Bair Islands. When all of Inner, Middle, and Outer Bair are complete approximately 1,086 acres of degraded, diked salt marsh will have

been restored to tidal wetlands and associated sloughs and channels. Due to different levels of degradation, subsidence, and constraints, each island's restoration is being implemented separately. Middle Bair Island is the second phase of wetland restoration and will restore tidal action to 571 acres and enhance 307 acres of wetlands, as well as enhance tidal flow to portions of Outer Bair. Proposed actions include installing ditch plugs to block circulation through the borrow ditches created during levee construction, breaching levees along historic slough alignments to restore tidal action, and installing a flow constrictor in Corkscrew Slough in order to restore historical hydrological patterns. When combined with \$931,000 in funds from the San Francisco Public Utilities Commission, the NOAA and DWR funds will complete the amount needed to construct the Middle Bair Island project.

Restoration of Bair Island culminates a many decades-long public campaign to save the wetlands from development and restore the marshes. In additional, tidal restoration helps implement the recommendations of the *San Francisco Baylands Ecosystem Habitat Goals Report* (1999), which identifies restoration of large areas of tidal marsh as the overall goal of the South Bay subregion and specifically calls for most of Bair Island to be restored to tidal marsh.

DU was founded in 1937 and works to conserve, restore, and manage wetlands and associated habitats for North America's waterfowl, other wildlife, and people. The Conservancy has granted funds to DU for two of the SBSP wetland restoration projects as well as other wetland restoration projects in San Francisco Bay. DU received funding from the USFWS's North American Wetlands Conservation Act (NAWCA) grant program, the California Wildlife Conservation Board, and a private foundation to restore Outer Bair Island and is constructing public access improvements, including a section of the San Francisco Bay Trail, with Conservancy and Redwood City funds at Inner Bair Island. DU's experience with wetland construction and familiarity with the site make it an appropriate recipient of funding for Middle Bair Island.

Site Description: The Bair Island complex is divided into three distinct areas separated by slough channels: Inner, Middle, and Outer Bair Islands. Most of Bair Island is owned by the US Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (DFG). USFWS, however, manages and oversees the restoration project on DFG property pursuant to a Memorandum of Understanding signed in 1997 by DFG and USFWS.

Project History: Historically, Bair Island was part of a large complex of tidal marsh and mudflats within the drainages of Redwood Creek and Steinberger Slough in San Francisco Bay. Bair Island was originally diked off for agricultural purposes and subsequently converted to salt ponds like much of the South Bay. Finally, after salt production was abandoned, various development schemes were proposed for Bair Island through the 1980s and 90s. After a well-publicized campaign by Bay Area environmental groups to prevent development and restore Bair Island to tidal marsh, several privately-owned sections of Bair Island were acquired by the Peninsula Open Space Trust and transferred to USFWS and DFG. In 1998, the Conservancy authorized \$100,000 towards an Enhancement Plan for Bair Island, which was the largest wetland restoration effort in the Bay at that time, and an additional \$127,000 for technical studies in 2001. After completion of the Enhancement Plan and EIS/R in 2008, other organizations have stepped in to fund wetland implementation. DU secured grants from Wildlife Conservation Board, NAWCA, and a private foundation to complete restoration of Outer Bair Island by breaching levees and blocking interior ditches in January 2009. Inner Bair Island will be restored in cooperation with the Port of Redwood City, US Army Corps of Engineers, and a private dirt

contractor through the placement of dredged or upland-sourced material to raise the marsh plain elevation to reduce the potential for bird-strike hazards at the adjacent San Carlos Airport and to protect the South Bayside System Authority sewer line. Although the Conservancy has not previously funded implementation of wetland restoration at Bair Island, the Conservancy did authorize \$1,000,000 to DU for public access improvements on Inner Bair Island in May 2010.

PROJECT FINANCING

NOAA ARRA Grant Funds	\$600,000.00
Department of Water Resources IRWMP Grant (pending)	\$1,250,000.00
San Francisco Public Utilities Commission	\$931,000.00

Total Project Costs

\$2,781,000.00

The source of the funds for the project will be 1) the ARRA funds that have been made available through NOAA's Coastal and Marine Restoration Grant Program and 2) DWR's IRWMP funding for the San Francisco Bay Area. The San Francisco Bay Area IRWMP has resulted in a nine-county effort to coordinate and improve water supply reliability, protect water quality, manage flood protection, maintain public health standards, protect habitat and watershed resources, and enhance the overall health of the bay.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160-31165, to address resource goals in the San Francisco Bay Area.

Bair Island is within the nine-county Bay Area as required under Section 31162 of the Public Resources Code.

Under Section 31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The restoration of Middle Bair Island would restore and enhance 878 acres of degraded wetlands, and would be a habitat restoration project of regional significance.

Consistent with Section 31163(c), restoration of Bair Island meets the following criteria: (1) is supported by adopted regional plans including the *San Francisco Bay Plan, San Francisco Baylands Ecosystem Habitat Goals Report*, and the *Water Quality Control Plan* for the San Francisco Bay Basin, (2) serves a regional constituency (the restoration project is of regional significance), (3) can be implemented in a timely way (construction of the proposed projects will start fall 2011), (4) provides opportunities for benefits that could be lost if the project is not quickly implemented (the San Francisco Public Utilities Commission has specified project deadlines for completion of the project) and (5) includes matching funds (described under Project Financing).

The project is also consistent with Sections 31163(b), directing the Conservancy to participate in and support interagency actions and public/private partnerships in the San Francisco Bay Area to implement long-term resources and outdoor recreational goals.

CONSISTENCY WITH CONSERVANCY'S 2007 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 10, Objective C** of the Conservancy's 2007 Strategic Plan, the proposed project will restore and enhance 878 acres of Bay Area wetland habitat.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on June 4, 2009, in the following respects:

Required Criteria

- 1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
- 2. Consistency with purposes of the funding source: See the "Project Financing" section above.
- 3. **Support of the public:** The restoration of Bair Island has been a public campaign for many decades. Letters of support are attached in Exhibit 6.
- 4. **Location:** Bair Island in the nine-county San Francisco Bay Area consistent with Section 31162 of the Public Resources Code.
- 5. **Need:** Approximately 85 percent of the tidal marsh in San Francisco Bay has been lost since the Gold Rush, leading to dramatic losses of fish and wildlife, decreased water quality and increased turbidity in the Bay, and changes to physical processes as the size of the Estuary shrank, increasing the need for dredging and the local hazards of flooding. The need for restoration of tidal marsh in San Francisco Bay in order to aid in the recovery of at-risk species, and improve water quality and the physical health of the Bay, is well recognized among scientists and resource managers.
- 6. Greater-than-local interest: Bair Island is one of the largest wetland restoration efforts in San Francisco Bay and has been the subject of a multi-decade public campaign to restore the degraded habitat. Restoration of the Bair Island will recover the Bay's tidal wetlands aid in the recovery of several threatened or endangered species, including the California clapper rail and salt marsh harvest mouse.
- 7. **Sea level rise vulnerability:** Due to their location, all tidal wetland restoration projects can be vulnerable to sea-level rise impacts. However, once the marsh plain of a restored wetland is colonized by vegetation, marshes become efficient sediment traps. Hydrological modeling done as part of Bair Island restoration planning and the geomorphological analysis completed as part of the South Bay Salt Ponds Restoration Project indicates that Bair Island and the south Bay's wetlands are likely to keep up with an accelerated pace of sea-level rise. If sealevel rise rates are higher than predicted, it could take longer for marsh vegetation to develop or, in more extreme scenarios, may mean that the restoration sites do not evolve past the intertidal mudflat or shallow open water stage. However, Middle Bair Island is likely to withstand the impacts from sea-level rise for several reasons. It is located in the sediment-

rich South Bay and will have an improved connection with the Bay through Corkscrew, Steinberger, and Smith Sloughs which will enhance sedimentation. Furthermore, Middle Bair Island has only subsided 2.2 to 3.4 feet. Higher elevations post-construction would vegetate within one year following construction completion, and the remainder of the site would likely vegetate within a few decades. Once vegetated, the site will be more resilient to impacts of sea-level rise.

Additional Criteria

- 8. **Urgency:** NOAA-ARRA funding must be spent by June 30, 2012 so construction at Bair Island must start September 2011 in order to meet this deadline.
- 10. **Leverage**: See the "Project Financing" section above. The authorization is for funding secured from other grant programs.
- 13. **Readiness**: Project design is complete and Ducks Unlimited anticipates starting work fall of 2011.
- 14. **Realization of prior Conservancy goals**: "See "Project History" above."
- 16. **Cooperation**: The Conservancy is working closely with DFG and USFWS on this project. The Conservancy, Wildlife Conservation Board, and private foundations funded the restoration planning and, with DU and the Army Corps of Engineers, also funded the restoration and public access improvements.

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The South Bay Salt Ponds are within the permit jurisdiction of the San Francisco Bay Conservation and Development Commission (BCDC).

The project is consistent with the following policies of BCDC's San Francisco Bay Plan:

Part III: The Bay as a Resource

Water Quality

• To the greatest extent feasible, the Bay marshes, mudflats, and water surface area and volume should be maintained and, whenever possible, increased.

Water Surface Area and Volume

• Water circulation in the Bay should be maintained, and improved as much as possible.

Marshes and Mudflats

• To offset possible additional losses of marshes due to necessary filling and to augment the present marshes: (a) former marshes should be restored when possible through removal of existing dikes; (b) in areas selected on the basis of competent ecological study, some new marshes should be created through carefully placed lifts of dredged spoils; and (c) the quality of existing marshes should be improved by appropriate measures whenever possible.

Salt Ponds and Other Managed Wetlands Around the Bay

• As long as is economically feasible, the salt ponds should be maintained in salt production and the wetlands should be maintained in their present use. Property tax policy should assure

that rising property taxes do not force conversion of the ponds and other wetlands to urban development. In addition, the integrity of the salt production system should be respected (i.e., public agencies should not take for other projects any pond or portion of a pond that is a vital part of the production system).

• If, despite these provisions, the owner of the salt ponds or the owner of any managed wetland desires to withdraw any of the ponds or marshes from their present uses, the public should make every effort to buy these lands, breach the existing dikes, and reopen these areas to the Bay. This type of purchase should have a high priority for any public funds available, because opening ponds and managed wetlands to the Bay represents man's last substantial opportunity to enlarge the Bay rather than shrink it. (In some cases, if salt ponds are opened to the Bay, new dikes will have to be built on the landward side of the ponds to provide the flood protection now being provided by the salt pond dikes.)

COMPLIANCE WITH CEQA:

In order to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), DFG and USFWS prepared a joint EIS/R to evaluate the potential environmental impacts of the Bair Island Restoration and Management Plan (the Plan). The EIS/R (Exhibit 4) was certified by DFG on January 22, 2008 pursuant to CEQA.

The EIS/R evaluated a No Action and four restoration alternatives: Alternative A: Tidal Marsh Restoration and Intermediate Public Access, Alternative B: Tidal Marsh Restoration and Restricted Public Access, Alternative C: Tidal and Managed Marsh Restoration and Moderate Public Access, and Alternative D: Tidal and Managed Marsh Restoration and Restricted Public Access. Alternative A: Tidal Marsh Restoration and Intermediate Public Access was selected as the Preferred Alternative and includes the subject of this authorization: tidal wetland restoration of Middle Bair Island.

In connection with approval of the Plan, DFG adopted a CEQA "Findings" document which concluded that the Bair Island Restoration and Management Plan's Preferred Alternative would not result in any significant unavoidable impacts on the environment with the incorporation of appropriate mitigation measures. The project mitigation measures are described in the attached Mitigation, Monitoring, and Reporting Program (Exhibit 5).

As described in the EIR/S, the careful design of the Preferred Alternative avoids many potentially significant project impacts to air and water quality, biological resources, vessel traffic, noise, and cultural, historic, and archaeological resources. For example, in order to avoid increasing the sedimentation rates in Redwood Creek Shipping Channel and increasing the current velocities at Pete's Outer Harbor (a nearby small boat harbor), Smith Slough will be returned to its historic meander through Inner Bair Island and a flow restrictor will be installed in Corkscrew Slough to the east of the Middle Bair Island breaches to reduce the tidal flow velocities. Other potential impacts were considered less-than-significant because the impact was small and localized and would result in a much larger benefit to the environment. For example, the Preferred Alternative will cause the loss of five acres of existing pickleweed marsh and Salt Marsh Harvest Mouse habitat by breaching levees and allowing the natural scouring of tidal channels. However, the breaching will create approximately 1400 acres of high-quality tidal marsh which will ultimately be much more beneficial to these species.

Those impacts in the area of Cultural Resources, Air Quality, and Cumulative Impacts that require mitigation measures to reduce the impacts to a less than significant level are identified in the Mitigation and Monitoring and Reporting Program as follows:

Cultural Resources

Any of the restoration project alternatives could have potential significant impacts on buried cultural resources. To reduce this potential impact to a less-than-significant level, construction contractors will be required to stop work and appropriately assess the resources if any cultural deposits are encountered during construction.

Air Quality

The construction activities could increase dust downwind of construction activities. This impact would mostly be associated with the placement of dredge material on Inner Bair Island which is not part of this authorization. However, this could be an impact for any earthmoving activities, particularly if working during the dry summer months. The Bay Area Air Quality Management District (BAAQMD) has a list of construction dust control measures (sweeping, watering, etc.) that the project has adopted for all construction phases in order to reduce these impacts to a less-than-significant level.

Cumulative Impacts

All of the alternatives (including No Action Alternative), along with other tidal restoration projects, could contribute to the spread of non-native *Spartina* species. All of the Alternatives including the No Action include controls for non-native *Spartina* species within the Bair Island restoration site and follow many of the suggestions and methods contained within the Conservancy's Invasive *Spartina* Program (ISP). If necessary, the control methods in the Bair Island Restoration and Management Plan would include close coordination between the ISP project and the FWS and controlling any patches of invasive *Spartina* found outside of the project site before breaching.

Global Climate Change

In March 2010, new CEQA regulations went into effect requiring an analysis of a project's potential to generate greenhouse gases (which contribute to climate change). See Guideline 15064.4. The Bair Island EIR/S does not address greenhouse gas emissions (GHGs) because the EIR/S was completed in 2008, prior to this requirement. In order to fulfill the Conservancy's duties as a responsible agency taking a discretionary action to fund the Middle Bair Island wetland restoration, Conservancy staff have conducted an analysis of the GHGs estimated to be generated by the Middle Bair Island wetland restoration. Based on the analysis described below, the Middle Bair Island wetland restoration project will not have a significant GHG impact; therefore, the EIR/S does not lack discussion of any significant impacts, at least with respect to the Middle Bair Island wetland restoration project.

Conservancy staff have conducted, in concert with DU, this analysis of the project's potential to contribute towards the production of GHGs. As the project will not have any ongoing direct emissions and will not allow public access (therefore will not induce vehicle-miles-traveled), the

potential effects on greenhouse gas emissions are limited to (1) temporary emissions due to construction and (2) sequestration due to land use change.

The emissions generated by the project are expected to be approximately 856 metric tons of carbon dioxide (CO₂) over the approximately six months of construction. This estimate is based on upon DU's previous project experience and consultation with a local marine contractor in order to estimate the equipment to be used and numbers of days of operation of each piece of equipment. The estimated emissions from each piece of equipment were then determined using the California Emissions Estimator Model.

When evaluating the impact of the project on GHGs, it is important to also consider the carbon sequestration that will result from the proposed tidal restoration project. Using estimates of potential carbon sequestration as a range between 150 to 250 g $C/m^2/yr^1$ or .61 and 1.01 metric tons per acre per year, Conservancy staff estimate that the 571 acres of tidal marsh restored by the project will result in a potential sequestration of CO_2 ranging from 348 to 577 metric tons per year. In addition, there will be additional sequestration of CO_2 from the enhancement of the currently degraded 307 acres of tidal wetlands at Middle Bair. However, there is less data on the sequestration rates in this type of wetland so the sequestration from marsh enhancement has not been included. The construction emissions would be completely offset after less than 2.5 years using the more conservative sequestration figure and in approximately 1.5 years using the higher figure.

In addition to quantitative methods, CEQA allows for GHG impact analysis to be based on performance standards. The Bay Area Air Quality Management District recommends the use of best management practices as a performance standard against which construction emissions can be measured. See Bay Area Air Quality Management District CEQA Guidelines June 2010 Section 8.2. As a condition of the Conservancy's grant, in order to further reduce the generation of GHGs during construction the project will incorporate all feasible Best Management Practices (BMPs) created as part of the Conservancy's Guidance for Addressing Climate Change in California Coastal Conservancy Projects. For example, it is anticipated that the grantee will incorporate to the maximum extent feasible the following BMPs into the project's construction plans and specifications: BMP 2.2 -- Give preference to contractors using equipment less than 10 years old; BMP 2.4 -- Reduce unnecessary idling; BMP 2.5 -- Require good maintenance of equipment and properly trained staff using equipment; and BMP 2.6 -- Encourage engine electrification.

Since the amount of GHGs generated by this project is offset by the carbon sequestration potential of restoring tidal wetlands and because implementation of the Best Management Practices will be required during construction, Conservancy staff concludes that this project has little potential to create direct or cumulative significant environmental impacts related to GHG emissions.

Based on the above, Conservancy staff concludes that the Conservancy's project poses no potential for significant environmental impacts. Accordingly, staff recommends that the

¹ Lynne Trulio, Ph.D., John Callaway, Ph.D., Steve Crooks, Ph.D., "White Paper on Carbon Sequestration and Tidal Salt Marsh Restoration," December 20, 2007.

Conservancy find that there is no substantial evidence that the Conservancy project, as mitigated, may have a significant effect on the environment. Staff will file a Notice of Determination upon the Conservancy's approval of the project.