

COASTAL CONSERVANCY

Staff Recommendation
September 28, 2017

**BEL MARIN KEYS WETLAND RESTORATION
PHASE 1 IMPLEMENTATION**

Project No. 99-108-04
Project Manager: Jeff Melby

RECOMMENDED ACTION: Authorize disbursement of up to \$2,500,000 for implementation of the first phase of the Bel Marin Keys Unit V component of the Hamilton Wetland Restoration Project and relocation of the Novato Sanitary District's pipeline easement across the property.

LOCATION: Southeast of downtown City of Novato, adjacent to and between the Bel Marin Keys residential community and Novato Creek to the north and the Hamilton Wetlands (former Hamilton Airfield) to the south, along the western margin of San Pablo Bay, in unincorporated Marin County.

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

- Exhibit 1: [Location and Site Maps](#)
- Exhibit 2: [Bel Marin Keys Restoration Revised Alternative 2 at Maturity](#)
- Exhibit 3: [BMKV Phase 1 Restoration Plan](#)
- Exhibit 4: [June 25, 2015 Staff Recommendation](#)
- Exhibit 5: [Bel Marin Keys Wetland Restoration Phase 1 Project Addendum to the Supplemental Environmental Impact Report Environmental Impact Statement for the Bel Marin Keys Unit V Expansion of Hamilton Wetland Restoration Project, August 2017](#)

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 State Coastal Conservancy hereby authorizes the disbursement of up to two million five hundred thousand dollars (\$2,500,000) for implementation of the first phase of restoration of the Bel Marin Keys Unit V component of the Hamilton Wetland Restoration Project and authorizes

relocation of Novato Sanitary District's pipeline easement across the Bel Marin Keys V property."

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 authorization is consistent with Chapter 4.5 of Division 21 of the Public Resources Code, regarding the San Francisco Bay Area Conservancy Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The Conservancy has reviewed the *Bel Marin Keys Wetland Restoration Phase 1 Project Addendum to the Supplemental Environmental Impact Report Environmental Impact Statement for the Bel Marin Keys Unit V Expansion of Hamilton Wetland Restoration Project*, which has been completed in compliance with CEQA and reflects the Conservancy's independent judgment and analysis, and concluded that the proposed first phase of restoration of the Bel Marin Keys Unit V component of the HWRP is substantially consistent with the restoration of BMKV as described in the *Final SEIR/S for the BMKV Expansion of the Hamilton Wetland Restoration Project*, which was certified by the Conservancy on June 16, 2005, and will not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

PROJECT SUMMARY:

Staff recommends that the Conservancy authorize the disbursement of up to \$2,500,000 for the Conservancy to construct several features of the restoration plan for the Bel Marin Keys Unit V (BMKV) component of the Hamilton Wetland Restoration Project (HWRP), located between the City of Novato and San Pablo Bay, Marin County (Exhibit 1). Staff also recommends that the Conservancy authorize relocation of the easement held by the Novato Sanitary District (NSD) on the BMKV property.

In 2005, the Conservancy approved a restoration plan for BMKV, which it owns, as an expansion of the HWRP. The restoration plan for BMKV, which is identified as Revised Alternative 2 (Exhibit 2) in the *Final Supplemental Environmental Impact Report Environmental Impact Statement for the Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project 2005* (SEIR/S) includes construction of a new outboard levee inland of the existing bayfront levee, construction of other new levees and access roads, installation of water management structures, and placement of dredged sediment on the inland and bayward side of the new flood control levee. The existing bayfront levee would then be breached to restore tidal action to the site. The restoration plan provides for the restoration of tidal (tidal marsh, tidal flat, subtidal) and nontidal (high transitional marsh, seasonal wetlands and uplands) habitat types (i.e., 899 acres of tidal wetland, 120 acres of subtidal and tidal mudflat habitat, 277 acres of seasonal wetlands, 21 acres of open water [pond], 12 acres of emergent freshwater wetlands, and 247 acres of upland). In light of the large scale of this restoration plan and its high cost, Conservancy staff proposes that the Conservancy construct several features of the restoration plan as a first

phase (BMKV Phase 1 Project or Project). This first phase consists of construction of a new outboard levee (“New Bayfront Levee”), creation and enhancement of approximately 35 acres of seasonal wetlands and alkali meadow on the inland side of the New Bayfront Levee, modifications to site drainage and to a segment of an existing NSD effluent outfall pipeline that crosses BMKV, construction/improvement of necessary access roads, and construction of a water pump (Exhibit 3). Following completion of this first phase, the Conservancy could work with the U.S. Army Corps of Engineers (USACE) to determine when and how to implement the remaining features of the restoration plan. The June 25, 2015 staff recommendation, attached as Exhibit 4, describes the planning of the BMKV Phase 1 Project.

Funding from this authorization is not the full amount needed to construct the BMKV Phase 1 Project. These funds will be used to finalize designs; complete environmental compliance and permitting; undertake additional necessary field studies and analytical testing; lease the Hamilton Native Plant Nursery, as necessary; undertake pre-planting/native plant nursery management; prepare bid packages for the construction work; and retain a construction project manager. The funding may also be used to purchase necessary materials, such as valves for the NSD pipeline modification, which need to be obtained in advance of retaining a construction contractor(s). Conservancy staff will seek authorization to disburse the additional funding needed to construct the BMKV Phase 1 Project after bidding the construction work and selecting a contractor in compliance with state law and contracting procedures.

To accommodate the New Bayfront Levee’s tie-in to the N1 levee (which separates the BMKV and Hamilton wetland properties), the BMKV Phase 1 Project includes modifications to a segment of an existing NSD effluent outfall pipeline. The NSD pipeline is within an easement that was granted to NSD prior to the Conservancy’s purchase of the BMKV property. The existing pipeline extends along the north side of the N1 levee and conveys secondary-treated effluent to San Pablo Bay. The modifications consist of abandoning approximately 900 feet of the existing outfall pipe within the New Bayfront Levee footprint, and installing a new bypass pipe to convey NSD effluent up and through the New Bayfront Levee. The new pipeline will follow a new alignment to the north of the existing alignment, passing through the New Bayfront Levee approximately 300-feet north of the existing pipe. This change in the location of a segment of the pipeline requires corresponding revisions to the location of the NSD easement within the BMKV property.

The Hamilton Army Airfield (HAAF) component of the HWRP (also referred to as HWRP Phase 1) converted a military base into a tidal marsh, seasonal wetlands and uplands. The HAAF bayside levee was breached in April of 2014, opening the site to the Bay for the first time in over 100 years and resulting in 648 acres (one square mile) of restored wetland habitat. The BMKV component of the HWRP (also referred to as HWRP Phase 2) entails restoration of the adjacent 1585-acre Bel Marin Keys Unit V property, owned by the Conservancy, and the 319-acre North Antennae Field (NAF) property, owned by the State Lands Commission. When completed, the entire HWRP will consist of nearly 2,600 acres of wetlands with associated uplands and 3.5 miles of new San Francisco Bay Trail. Up to 24 million cubic yards (mcy) of dredged sediment may be beneficially reused in the course of the entire HWRP.

The HAAF component of the HWRP was completed by the USACE under USACE’s ecosystem restoration authority, with the Conservancy acting as the non-federal sponsor and contributing 25% of the cost. The conceptual plan for the BMKV component is described in USACE’s 2003

General Reevaluation Report (GRR) and in the SEIR/S for HWRP. Restoration of the NAF was originally part of the HAAF component but was deferred to the BMKV component. The NAF is a relatively small parcel and is contiguous with the BMKV property; therefore, it is more cost effective to incorporate into the BMKV component.

The plan for the BMKV component is to construct a new flood management levee inland of the existing bayfront levee (Exhibit 2) on the BMKV property, and then restore tidal estuarine habitat (salt marsh, mudflats, shallow sub-tidal) on the eastern (bay) side of the new levee, while restoring seasonal (freshwater) wetlands on the western (inland) side of the levee. The restoration work entails raising the elevation of the land east of the levee with dredged sediment and breaching the existing bayfront levee to allow tidal waters from the bay to flow into and out of the site.

Construction of the New Bayfront Levee is the critical first step in enabling the placement onto the site of dredged sediment prior to breaching the existing bayfront levee. The conceptual plan for the BMKV and NAF properties includes placement of up to 18 mcy of dredged sediment from USACE and non-USACE dredging projects throughout the Bay Area. Similar to the restoration at HAAF, placement of sediment on the subsided land prior to tidal inundation would create tidal marsh much faster than could possibly occur due to natural sedimentation processes alone, particularly with ongoing sea-level rise.

Although Congress has authorized the USACE to implement the BMKV component of the HWRP, the Conservancy and USACE have not yet entered into the necessary cost-share agreement. If the Conservancy were to enter into the agreement, its share of the costs for the BMKV component would be 25%. Under federal law, USACE can agree to allow a nonfederal sponsor of a project to carry out design and construction work and have the costs of such work credited towards its cost-share under a subsequent cost-share agreement. In 2010, the USACE and the Conservancy entered into a memorandum of understanding (MOU) that allows the Conservancy to receive in-kind credit for the design of specific site features for the BMKV component, including the New Bayfront Levee. In March 2017, the USACE and the Conservancy entered into an MOU that allows the Conservancy to receive in-kind credit for the construction of the New Bayfront Levee, along with seasonal wetlands to be built behind the levee and tidal wetlands to be built bayside of the levee. The Conservancy can now contract directly for the necessary construction activities, avoiding some of the delay inherent in the federal funding and contracting processes, to move the project forward. The design work has been conducted and the construction would be conducted in a manner that meets USACE's requirements to ensure that the Conservancy can receive credit for its costs pursuant to the 2010 and 2017 MOUs.

Following completion of the BMKV Phase 1 Project, the Conservancy could enter into a cost-share agreement with USACE to construct subsequent phases, including delivery of dredged sediment.

Site Description:

The HWRP site consists of three properties located along the western edge of San Pablo Bay in Marin County totaling nearly 2,600 acres: the 644-acre former HAAF (including the former 18-acre Navy Ball Field), the 319-acre NAF (owned by the State Lands Commission) and the 1,585-acre BMKV property (Exhibit 1). All of these properties are historic wetlands that were part of a

larger tidal marsh system that extended from Corte Madera in Marin County to Vallejo in Solano County.

The BMKV property is partially located within the historic margins of San Pablo Bay. During the period 1853 through 1884, hydraulic mining for gold in the Sierra Nevada foothills caused substantial amounts of sediment to enter into the Bay system, resulting in shoreline accretion at BMKV. Around the turn of the last century, marsh lands at the site were diked to accommodate dry land farming. A system of levees and drainage ditches were constructed and pumps were installed to drain rainwater and the naturally high ground-water table. Over the intervening century, oxidation and consolidation of the Bay mud caused the former tidal baylands to subside to an average of five feet below mean sea level.

In the 1960s, portions of the adjacent Bel Marin Keys residential and lagoon development were constructed. Some of the fill for this development was taken from borrow pits on the BMKV site. These borrow pits have since filled with brackish water, some of which are ponds on a year-round basis and provide limited wildlife habitat.

The Bel Marin Keys Community Services District maintains the lagoons surrounding the home development. The water level in the lagoons is kept constant year-round via a system of locks along Novato Creek and a wet weather overflow onto the BMKV property. The plan for the BMKV component of the HWRP is to provide for seasonal wetlands on the inland side of the New Bayfront Levee to manage the wet weather overflow; in this way, the seasonal wetlands will provide habitat while functioning as a flood management corridor.

The Conservancy allows a farmer to grow oat hay on the BMKV property. The farmer uses about two thirds of the land at any one time to grow two crops of organically-certified hay that is of relatively low quality and quantity due to poor soil conditions and lack of irrigation. Construction of BMKV Phase 1 Project will displace some farming and ultimately, when the remaining features of BMKV restoration are constructed, farming will cease on the property.

The site includes about 200 acres of seasonal and farmed wetlands. Wildlife that frequent the property are typical for open space of this type and include small mammals, deer, coyote and a large number and variety of raptors.

Project History:

The Water Resources Development Act (WRDA) of 1986 authorized USACE to undertake “ecosystem restoration” projects. In 1996, the Conservancy began its role as the non-federal sponsor in developing a wetland restoration plan with USACE for the former Hamilton Airfield and adjacent properties.

In April of 1999, the Conservancy adopted the Hamilton Wetlands Restoration plan and certified the Environmental Impact Report (EIR) / Environmental Impact Statement (EIS) for the HWRP. The WRDA of 1999 authorized USACE to carry out the HWRP. The Conservancy acquired BMKV in 2001 for \$16 million. In 2003, the Conservancy and USACE finalized a restoration plan for BMKV. On June 16, 2005, the Conservancy certified the SEIR/S for the HWRP as revised to include BMKV and adopted the revised HWRP. In the WRDA of 2007, Congress authorized USACE to implement the HWRP as revised to include BMKV and authorized, in general, that non-federal sponsors may receive in-kind credit for carrying out design and construction work that is integral to authorized projects.

The HWRP Phase 1 (restoration of the HAAF) was completed in 2014. From 2006 to 2010, almost 6 mcy of sediment from USACE and non-USACE dredging projects throughout the Bay Area, primarily from the Port of Oakland, was placed on the Airfield to fill the site up to average tidal elevations. In 2014, USACE completed final grading and other construction, including 2.7 miles of the San Francisco Bay Trail, native plant installation, and breaching of the bayfront levee to allow the tides to enter the site, resulting in 648 acres (one square mile) of restored wetland habitat.

In 2014 and 2015, Conservancy staff developed a proposal for the Conservancy to construct certain features of HWRP Phase 2 as a first phase of BMKV restoration. In June 2015, the Conservancy authorized disbursement of \$800,000 for planning of this first phase, and staff subsequently contracted for the studies, plans and designs for this first phase. In 2016, pursuant to Public Contract Code section 10108.5(c), the Department of General Services authorized the Conservancy to directly carry out wetland restoration at BMKV.

PROJECT FINANCING

Coastal Conservancy	\$2,500,000
Project Total	\$2,500,000

One of the expected sources of Conservancy funds for the proposed authorization is the 2015-2016 fiscal year appropriation to the Conservancy from the Habitat Conservation Fund (“HCF”) established by the California Wildlife Protection Act of 1990 (Proposition 117), Fish and Game Code §2780 *et seq.* Pursuant to Fish and Game Code § 2786(d), HCF funds may be used for restoration and enhancement of wetlands. The BMKV Phase 1 Project is the first phase of the BMKV component of the HWRP. The BMKV component of the HWRP will restore wetlands, and therefore, the BMKV Phase 1 Project is an appropriate use of HCF funds.

The 2015-16 appropriation of HCF funds comes from the sale of bonds from the California Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50), Water Code section 79500 *et seq.* Proposition 50 funds can be used by the San Francisco Bay Conservancy Area Program for protection of coastal watersheds pursuant to Chapter 4.5 of Division 21 of the Public Resources Code. The BMKV component of the HWRP will restore a portion of the Novato Creek watershed. Accordingly, implementation of the BMKV Phase 1 Project is an appropriate use of Proposition 50 funds.

The other expected source of Conservancy funds for the proposed authorization is the 2015-2016 fiscal year appropriation to the Conservancy from the Fish and Wildlife Habitat Enhancement Act of 1984 (Proposition 19), Fish and Game Code sections 2600-2651. Pursuant to Fish and Game Code § 2620(c), Proposition 19 funds may be used for enhancement of marshlands and associated and adjacent lands for wildlife habitat and for improvement of biologically and hydrologically associated uplands. The BMKV component of the HWRP will enhance and restore wetlands and related uplands, and therefore, implementation of the BMKV Phase 1 Project is an appropriate use of Proposition 19 funds. For projects in San Francisco Bay, Proposition 19 requires that the San Francisco Bay Conservation and Development Commission (BCDC) have an opportunity to review and approve the restoration plan for the project. (Fish and Game Code § 2626). Since a BCDC permit is required for construction of the BMKV Phase 1

Project, the Conservancy will comply with this Proposition 19 requirement by obtaining the BCDC permit.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

This project is a component of the HWRP, which is being undertaken pursuant to Chapter 4.5 of Division 21 of the Public Resources Code (sections 31160-31165), which established the San Francisco Bay Area Conservancy Program. On June 16, 2005, the Conservancy authorized expansion of the HWRP to include restoration of BMKV. In its findings in support of this authorization, the Conservancy determined that the HWRP, as revised to include BMKV, was consistent with Chapter 4.5, the San Francisco Bay Area Conservancy Program’s resource and recreational goals. The HWRP Phase 2 remains consistent with the authority, purposes and objectives of Chapter 4.5. By restoring bayfront land to tidal wetlands, related uplands and seasonal wetlands and providing a public trail, HWRP Phase 2 will help achieve the Chapter 4.5 goals to restore and enhance natural habitats and connecting corridors, to improve public access to and around the Bay through completion of regional trail systems, including the Bay Trail, and to assist in the implementation of the San Francisco Bay Plan and the adopted plans of local governments (Public Resources Code § 31162). The HWRP Phase 2 is of high priority under Chapter 4.5 because it meets the following criteria set forth in Public Resources Code § 31163(c): (1) it is supported by adopted local and regional plans including the San Francisco Bay Plan, Hamilton Air Force Bay Re-Use Plan of the City of Novato, and the Long-Term Management Strategy (“LTMS”) for the Placement of Dredged Material in the San Francisco Bay Region; (2) it is multi-jurisdictional and serves a regional constituency, by offering opportunities for beneficial reuse of dredged material throughout San Francisco Bay and providing resource enhancement opportunity of statewide significance; (3) it can be implemented in a timely way, with design work almost completed and funding available for construction; (4) it provides benefits that could be lost with time, through the opportunity to restore wetlands before sea level rise greatly increases the cost of restoration; and (5) USACE is authorized to carry out HWRP Phase 2 and to give the Conservancy credit toward the Conservancy’s share of the costs of implementing HWRP Phase 2.

CONSISTENCY WITH CONSERVANCY’S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S), AS REVISED JUNE 25, 2015:

Consistent with **Goal 11, Objective D** of the Conservancy’s 2013-2018 Strategic Plan, the BMKV Phase 1 Project will enhance 35 acres of seasonal wetlands and upland habitat, while providing for enhanced flood protection for adjacent properties.

CONSISTENCY WITH CONSERVANCY’S PROJECT SELECTION CRITERIA & GUIDELINES:

The BMKV Phase 1 Project is consistent with the Conservancy’s Project Selection Criteria and Guidelines, last updated on October 2, 2014, 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. **Promotion and implementation of state plans and policies:** The proposed project promotes implementation of the following state plans and policies:
 - San Francisco Baylands Ecosystem Habitat Goals Report (San Francisco Bay Area Wetlands Ecosystem Goals Project, U.S. Environmental Protection Agency, San Francisco, CA/S.F. Bay Regional Water Quality Control Board, 1999) and Science Update 2015. The report recommends the restoration and enhancement of tidal marsh in San Francisco Bay and provides recommendations to enhance the resiliency of marshes to climate change.
 - San Francisco Estuary Comprehensive Conservation and Management Plan (approved by the Governor and U.S. EPA Administrator in 1993, updated in 2016). Restoration of the project site will carry out objectives and actions identified in the CCMP to protect, create, and restore habitat critical for special status wildlife, specifically through enhancement and restoration of marsh and transitional upland habitat.
 - 2014 Safeguarding California: Reducing Climate Risk update to the 2009 California Climate Adaptation Strategy which seeks to support hazard mitigation by “investing in green infrastructure and other protective structure to address sea level rise,” and recommends the state “restore and create wetlands”
 - California Water Action Plan (approved by the Governor in 2014), which recommends restoration of coastal wetlands.
4. **Support of the public:** The HWRP has the support of the partnering public agencies, USACE, City of Novato, and Marin County Flood Control and Water Conservation District, as well as local environmental and conservation groups.
5. **Location:** The proposed project is in Marin County, which is within the jurisdiction of the San Francisco Bay Area Conservancy Program.
6. **Need:** The project will not occur without Conservancy participation. The proposed activities are needed in order to construct the project.
7. **Greater-than-local interest:** The HWRP is one of the largest wetland restoration projects in the United States to beneficially reuse dredged sediment and is contributing to a regional goal of more than doubling the amount of tidal marsh in San Francisco Bay.
8. **Sea level rise vulnerability:** The HWRP involves restoration of tidal marshes, which are known to buffer wave action adding an additional measure of protection to inland communities. It is assumed that the tidal wetlands will adjust and respond to changing sea level, though this phenomenon is dependent on the supply of suspended sediment in San Pablo Bay and the rate of sea-level rise. BMKV Phase 1 Project plans account for 4.2 feet of sea level rise by 2080. The April 2017 report entitled, *Rising Seas in CA – An Update on Sea-Level Rise Science* prepared by the CA Ocean Science Trust and CA Ocean Protection

Council Science Advisory Team, indicates that there is 67% probability sea level in San Francisco Bay will rise between 1.6 and 3.4 feet by 2100 (assuming Representative Concentration Pathway 8.5, which is consistent with a future in which there are no significant global efforts to limit or reduce emissions).

Additional Criteria

9. **Realization of prior Conservancy goals:** See “Project History” above.

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The HWRP helps implement BCDC’s San Francisco Bay Plan (Bay Plan), dated January 2008 (reprinted 2012), which contains policies to protect and restore marshes and mudflats: “to the greatest extent feasible, the Bay’s tidal marshes, tidal flats, and subtidal habitat should be conserved, restored and increased.” [page 16, Policy No. 1]; “Marshes and mudflats should be maintained to the fullest possible extent to conserve fish and wildlife and to abate air and water pollution.” [page 19, Policy No. 1]; “where and whenever possible, former tidal marshes and tidal flats that have been diked from the Bay should be restored to tidal action in order to replace lost historic wetlands [page 23 Policy No. 4]; and, “Dredged materials should, if feasible, be reused or disposed outside the Bay...”; and further, “dredging projects should maximize use of dredged material as a resource consistent with protecting and enhancing Bay natural resources, such as creating, enhancing, or restoring tidal and managed wetlands [Page 38, Policies No.3 and 5, respectively].

Therefore, disbursing funds for implementation of the first phase of BMKV restoration, a component of the HWRP, is consistent with the San Francisco Bay Plan.

COMPLIANCE WITH CEQA:

On April 22, 1999, the Conservancy certified the *Hamilton Wetland Restoration Plan Final EIR/EIS* and approved the HWRP. On June 16, 2005, the Conservancy certified the *Final SEIR/S for the BMKV Expansion of the Hamilton Wetland Restoration Project* (SEIR/S) and approved modifications to the HWRP to incorporate restoration of BMKV in the form identified as Revised Alternative 2 (Approved Project) in the SEIR/S. Since certification of the SEIR/S, the Conservancy has conducted additional site investigations and engineering feasibility studies and prepared more detailed designs for those features of the Approved Project that make up the BMKV Phase 1 Project. In preparing the detailed designs, the features that make up the BMKV Phase 1 Project have been slightly modified from the description of these features in the Approved Project. Modifications that could potentially result in impacts different from those identified in the SEIR/S include: access road improvements, more detailed levee design, NSD pipeline modification, a new PG&E access road, and modified construction duration and workforce estimates. These are described in greater detail below.

Access road improvements: Approximately 9,500 linear feet of existing access roads, ranging from 12 to 15 feet wide, will be topped with 6 inches of gravel, which was not included in the SEIR/S.

More detailed levee design: The new outboard levee (New Bayfront Levee) will be 11,800 linear feet in length instead of 10,294 feet as specified in the SEIR/S.

NSD pipeline modification: The Approved Project assumed that the existing approximately 13,000 linear-foot pipeline would be replaced or retrofitted as part of the HWRP. Instead, an approximately 900 linear-foot segment of the existing pipeline will be abandoned in place, and a new 63-inch High Density Polyethylene bypass pipe will be routed through the New Bayfront Levee to convey NSD treated effluent to San Pablo Bay. This new pipeline segment pipe will follow a new alignment, approximately 300-feet north of the existing pipe. The new alignment accommodates connecting the New Bayfront Levee into the existing levee between the BMKV and former HAAF properties. The rest of the existing pipeline will not be replaced.

New PG&E access road: A permanent aggregate base access road that was not specified in the SEIR/S will be constructed within the existing PG&E easement. The access road will be 1,500 feet long and up to 40 feet wide. A culvert, measuring 30-ft long and 18-in in diameter will be installed beneath the access road to convey surface water runoff north, beneath the road, to the seasonal wetlands complex.

Modified duration and workforce estimates: The BMKV Phase 1 project estimates 17 to 48 construction-worker vehicles per day (instead of 17 estimated in the SEIR/S) will be required during site preparation and earthwork phases. Including construction-worker vehicle activity, this could result in up to approximately 152 vehicle trips (instead of 72 estimated in the SEIR/S) to and from the site on a daily basis during construction of BMKV Phase 1 (approximately 2 years, instead of 3 years estimated in the SEIR/S).

Because the project has been modified after SEIR/S certification, the Conservancy prepared the *Addendum to the Supplemental Environmental Impact Report Environmental Impact Statement for the Bel Marin Keys Unit V Expansion of Hamilton Wetland Restoration Project*, August 2017 (Addendum) to evaluate the potential effects of the project as modified (Exhibit 5).

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15164, an addendum may be used when there are changes or additions to a project but the criteria for a subsequent or supplemental EIR are not met (Cal. Code Regs. title 14, section 15164(a)). A subsequent or supplemental EIR is required if there are substantial changes that will require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects (Cal. Code Regs. title 14, section 15162).

The addendum evaluates the potential impacts of the BMKV Phase 1 Project, including those aspects that are modifications of the Approved Project, and concludes that the potential impacts are the same as those of the Approved Project as described in the SEIR/S. As with the Approved Project, the Phase 1 Project will have the same types of significant but mitigable effects related to Public Health, Biological Resources, Hazardous Substances, Air Quality, Noise, and Cultural Resources. As with the Approved Project, such potential effects will be reduced to less than significant through implementation of SEIR/S mitigation measures. The modifications of the Approved Project will not result in new significant effects or a substantial increase in severity of identified potential impacts because: 1) they are minor relative to the overall scope and scale of the restoration; 2) their effects will be of the type and within the range of those identified in the SEIR/S; and 3) mitigation measures from the SEIR/S will continue to apply and will effectively

mitigate to less-than-significant levels the impacts that are expected to result from implementation of the Approved Project as modified. The Phase 1 Project will not result in any new significant impacts beyond those identified for the Approved Project in the SEIR/S and will not increase the severity of the potentially significant impacts identified in the SEIR/S. As a result, no modifications to previously recommended mitigation measures and no new mitigation measures are required to address potential environmental effects of the BMKV Phase 1 Project. Further, the Conservancy is not aware of any changed circumstances since certification of the SEIR/S that could result in the Phase 1 Project having new significant effects or a substantial increase in severity of previously identified effects. The Conservancy is not aware of new information of substantial importance that was not known at the time the SEIR/S and would affect the impacts of the Phase 1 Project. For all of the above reasons, no subsequent or supplemental EIR is required.

Upon approval, staff will file a Notice of Determination for this project.