

COASTAL CONSERVANCY

Staff Recommendation  
August 22, 2019

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

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

**RECOMMENDED ACTION:** Authorization to disburse up to \$20,000,000 of which a total of \$2,980,000 will be reimbursed by grants, including: \$2,000,000 from the Association of Bay Area Governments and \$980,000 from the United States Fish and Wildlife Service for construction and related post-construction costs of the first phase of the Bel Marin Keys Unit V component of the Hamilton Wetland Restoration Project.

**LOCATION:** North of the Hamilton Wetlands in unincorporated Marin County

**PROGRAM CATEGORY:** San Francisco Bay Area Conservancy

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EXHIBITS

- Exhibit 1: [Bel Marin Keys Location and Site Maps](#)
- Exhibit 2: [Map: Bel Marin Keys Restoration](#)
- Exhibit 3: [Map: Bel Marin Keys Restoration Phase 1](#)
- Exhibit 4: [September 28, 2017 Staff Recommendation](#)

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**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 twenty million dollars (\$20,000,000), of which two million nine hundred eighty thousand dollars (\$2,980,000) will be reimbursed from grants, comprised of two million dollars (\$2,000,000) from the Department of Water Resources through the Association of Bay Area Governments and nine hundred eighty thousand dollars (\$980,000) from the United States Fish and Wildlife Service for construction and related post-construction costs of Phase 1 of restoration of the Bel Marin Keys Unit V component of the Hamilton Wetland Restoration Project in Marin County. The Conservancy further authorizes the Executive Officer to enter into a contract with the lowest responsible

bidder to complete construction of Phase 1 of the Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project and other contracts as necessary to complete this phase of the project.”

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.

**PROJECT SUMMARY:**

Staff recommends that the Conservancy authorize the disbursement of up to \$20,000,000 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). This authorization also provides for post-construction costs associated with establishment of the seasonal wetlands and other activities necessary to complete this phase of the project.

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” (SEIR/S) includes:

- construction of a new levee inland of the existing bayfront levee
- construction of other new levees and access roads
- construction of seasonal and tidal wetlands
- construction of an additional section of the San Francisco Bay Trail
- installation of water management structures and utilities
- placement of dredged sediment on both sides of the newly constructed levee
- breach of the existing bayfront levee.

The restoration plan provides for the creation of tidal and nontidal habitat types, resulting in 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 remaining upland.

In light of the large scale of this restoration plan and its high cost, Conservancy staff proposed 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 levee (“New Bayfront Levee”)
- creation of a 44-acre seasonal pond complex and enhancement of an additional 46 acres
- modifications to site drainage and a segment of an existing Novato Sanitary District effluent outfall pipeline that crosses BMKV
- construction/improvement of necessary access roads,
- construction of a water pump system to manage surface water behind the new levee. (See Exhibit 3).

Following completion of this first phase, the Conservancy may 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 described the planning of the BMKV Phase 1 Project which resulted in the current design.

On September 28, 2017, the Conservancy authorized disbursement of funds for Project implementation, including final designs; environmental compliance and permitting; additional necessary field studies and analytical testing; seed and plant propagation at the Project site and HWRP native plant nursery; bid package development; and retention of a construction project manager. These tasks, which are further described in the September 28, 2017 staff recommendation attached as Exhibit 4, are completed. Conservancy staff is currently seeking authorization to disburse the additional funding needed to construct Phase 1 of the BMKV Project.

Specifically, funding from this authorization will be used to contract the lowest responsible bidder for Project construction, and to enter into contracts for post-construction revegetation and invasive plant management, construction experts (e.g., Engineer of Record, Geotechnical Engineer of Record) for consultation and inspection of the Project, pump system electrical design and installation, and other Project tasks (e.g., post-construction monitoring). Thus, the resolution requests authorization to enter into the Project construction contract and these ancillary contracts necessary to complete Phase 1.

Prior to expansion of the HWRP to include BMKV, the Hamilton Army Airfield component of the HWRP (also referred to as HWRP Phase 1) converted a military base into a tidal marsh, seasonal wetlands and uplands. The Hamilton Army Airfield 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. HWRP Phase 2 entails restoration of the adjacent 1,585-acre BMKV property, owned by the Conservancy, and the 319-acre North Antennae Field (NAF) property, owned by the State Lands Commission. (See Exhibit 1, p. 2). 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 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 HWRP Phase 1 but is now deferred to Phase 2. The NAF is a relatively small parcel and is contiguous with the BMKV property; therefore, it is more cost-effective to incorporate it 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. The project will also restore seasonal (freshwater) wetlands on the western (inland) side of the levee. The tidal 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 the site.

Construction of the New Bayfront Levee is the critical first step in enabling the placement 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. Like HWRP Phase 1, placement of sediment on the subsided land prior to tidal inundation will 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. However, 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 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 a new MOU that allows the Conservancy to receive in-kind credit for the construction of the New Bayfront Levee, and the associated wetlands. 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 is complete, 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 may 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 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 currently 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 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/ Environmental Impact Statement (EIR/S) for the HWRP. The EIR/S contemplated the potential restoration of Bel Marin Keys conceptually, but the site was not owned by the Conservancy at the time. The WRDA of 1999 authorized USACE to carry out the HWRP. In 2001, the Conservancy acquired BMKV for \$16 million. In 2003, the Conservancy and USACE finalized a restoration plan for BMKV. On June 16, 2005, the Conservancy certified the Supplemental EIR/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 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. In September 2017, the Conservancy authorized disbursement of \$2,500,000 for partial funding for Project implementation including finalizing designs; completing environmental compliance and permitting; undertaking additional necessary field studies and analytical testing; undertaking pre-planting/native plant nursery management; preparing bid packages for the construction work; and retaining a construction project manager. Those tasks are complete.

#### **PROJECT FINANCING**

<b>Coastal Conservancy</b>	<b>\$17,020,000</b>
<b>Association of Bay Area Governments</b>	<b>\$2,000,000</b>
<b>U.S. Fish and Wildlife Service</b>	<b>\$980,000</b>
<b>Project Total</b>	<b>\$20,000,000</b>

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 anticipated source of Conservancy's funding is the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68, Public Resources Code Division 45, Chapters 1-13, Sections 80000-80173), in particular, Chapter 9, which allocates funding to the Conservancy for projects that enhance and protect coastal and ocean resources and including projects that are consistent with the San Francisco Bay Area Conservancy Program. (Pub. Res. Code Section 80120(d).) Proposition 68 defines the term "protect" to include restoration and actions to improve public access to open-space areas. (Pub. Res. Code Section 80002(l).) The proposed project will enhance and protect coastal and ocean resources because:

- 1) The project will provide public access that also protects habitat by facilitating future development of a segment of the San Francisco Bay Trail;
- 2) The project will restore wetlands consistent with the San Francisco Bay Area Conservancy Program.

Proposition 68 provides that the Conservancy give priority to projects that leverage private, federal, or local funding or produce the greatest public benefit. (Pub. Res. Code section 80001(b)(2).) \$2,980,000 in reimbursable grant funds come from the following programs: \$2,000,000 from the California Department of Water Resources' Integrated Regional Water Management Program through the Association of Bay Area Governments and \$980,000 from the U.S. Fish and Wildlife Service National Coastal Wetlands Conservation Grant Program. These grants also include an additional \$75,000 for Conservancy staff costs that is not included in this authorization amount.

The project is consistent with the funding guidelines for expenditure of Proposition 68 adopted by the Conservancy on December 6, 2018. (See Pub. Res. Code section 80010). Specifically,

- The project leverages federal and local funding or produce significant public benefits

- The project addresses critical statewide needs and priorities for public funding as discussed in section entitled “Promotion and Implementation of State Plans and Policies”, Exhibit 4.
- The project seeks to achieve the wildlife conservation objectives through projects on publicly owned land.

(See Prop. 68 Grant Guidelines, page 4).

**CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:**

This project remains consistent with the Conservancy’s enabling legislation as provided in the prior staff recommendations. (See Exhibit 5)

**CONSISTENCY WITH CONSERVANCY’S [2018-2022 STRATEGIC PLAN](#)  
GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 12, Objective D** of the Conservancy’s 2018-2022 Strategic Plan, the BMKV Phase 1 Project will enhance 90 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 proposed project remains consistent with the Conservancy’s Project Selection Criteria and Guidelines, as provided in the prior staff recommendations (Exhibit 4).

**CONSISTENCY WITH SAN FRANCISCO BAY PLAN:**

The first phase of BMKV restoration, a component of the HWRP, is consistent with the San Francisco Bay Plan as previously discussed in Exhibit 4.

**CEQA COMPLIANCE:**

The Project is within the scope of the “Final Supplemental Environmental Impact Report/Statement for the Bel Marin Keys Unit V Expansion of the Hamilton Wetland Restoration Project”, certified by the Conservancy on June 16, 2005 (SEIR) and as addressed in 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,” dated August 2017. In its prior decisions, the Conservancy has considered the SEIR and the Addendum, and adopted findings under the California Environmental Quality Act (CEQA). The attached September 28, 2017 staff



recommendation reprises the environmental documentation, review and past CEQA findings by the Conservancy.

The California Environmental Quality Act Guidelines at 14 Cal. Code Regs. section 15162 provides that where an environmental impact report has been certified, new environmental documentation is needed only if there is a substantial change in the project, or in the circumstances under which the project will be undertaken, that affects the analysis of environmental effects, or if there is new information that identifies new significant environmental effects or a substantial increase in severity of previously identified environmental effects. The project has not changed since the Conservancy's September 2017 funding authorization. A 2017 biological assessment by the U.S. Fish and Wildlife Service found potential habitat for salt marsh harvest mouse (*Reithrodontomys raviventris*), Ridgway's (California clapper) rail (*Rallus obsoletus*), and western snowy plover (*Charadrius alexandrinus nivosus*) at the site. The biological opinion concluded, however, that the project is **not** likely to adversely affect these species. Moreover, disturbances as a result of the project will be temporary in nature and the creation of wetland habitats could provide future breeding habitat for these species. Thus, the biological assessment does not identify new significant environmental effects. Staff is not aware of any other new information or changed circumstances that could result in the Phase 1 Project having new significant effects or a substantial increase in severity of previously identified effects.

Accordingly, no new environmental documentation is required for the proposed funding authorization.

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