



Agenda Item No. (4)(b)

To: Finance-Auditing Committee/Committee of the Whole
Meeting of August 24, 2023

From: Joe Wire, Auditor-Controller
John R. Eberle, Deputy District Engineer
Ewa Z. Bauer-Furbush, District Engineer
Denis J. Mulligan, General Manager

Subject: **AUTHORIZE BUDGET ADJUSTMENT(S) AND/OR TRANSFER(S)**
(b) BUDGET INCREASE IN THE FY 23/24 FERRY DIVISION
CAPITAL BUDGET FOR PROJECT #2041, CORTE MADERA
MARSH RESTORATION CONSTRUCTION

Recommendation

The Finance-Auditing Committee recommends, in concurrence with the Building and Operating Committee at its meeting on August 24, 2023, that the Board of Directors authorize an increase in the FY 22/23 Ferry Division Capital Budget, in the amount of \$165,485 for Project # 2041, *Corte Madera Marsh Restoration Construction*.

This matter will be presented to the Board of Directors at its August 25, 2023, meeting for appropriate actions.

Summary

The Golden Gate Bridge, Highway and Transportation District (District) owns a 72-acre parcel located adjacent to the Corte Madera Ecological Reserve (CMER) at the former Muzzi Marsh in Corte Madera, Marin County. The parcel was acquired as part of an original 600-acre purchase of diked former marsh lands and adjacent mudflats. The District cordoned off a 72-acre higher ground western portion of the purchase by placing a berm, and filled it with dredged sediment from the Larkspur Ferry Terminal construction in the early 1970s. As an environmental mitigation for the Terminal construction, the District restored the remaining acreage to a functioning marsh and deeded the restored area and adjacent mud flats to the State Department of Fish & Game in early 1980's. After the Terminal construction was completed, the 72-acre parcel laid fallow, and the local residents have been using the berm as a walking and biking trail. The District is responsible for maintaining the 72-acre parcel.

As a condition of a U.S. Army Corps of Engineers (USACE) permit associated with the periodic maintenance dredging of the Larkspur Ferry Terminal berths and navigation channel, and a negotiated settlement associated with the District's ferry operations at Larkspur, in 2021, the

District restored 4 acres at the northwest corner of the 72-acre parcel into tidal marsh habitat suitable for an endangered species of bird, the California Ridgeway's rail.

Under Professional Services Agreement (PSA) No. 2014-FT-3, *Wetland Restoration Design and Permitting Support Services Project*, the District retained WRA, to develop marsh restoration design alternatives, to prepare design plans and specifications and construction documents and to assist the District with securing all necessary permits for the marsh construction, and to provide engineering support services during the construction and five years of post-construction monitoring of the restored marsh.

WRA commenced the post-construction monitoring in June 2021. Two years of monitoring have been completed. The restored marsh is performing well. The channels are functioning as intended and are providing proper hydrology to the site and both planted and volunteer native plants are flourishing within the restored area. WRA is monitoring the channel action and plant growth, controlling weeds that are found within the restored area and preparing and submitting yearly monitoring reports with their findings to the appropriate regulatory agencies.

WRA has informed the District that there are large populations of invasive non-native plants, particularly *Cortaderia* spp (pampas grass) and Harding grass, on the portion of the 72-acre parcel outside of the restored marsh that, if not removed, may spread onto the restored marsh. Engineering staff reviewed the site and concurred with WRA's assessment.

In previous years, to keep pampas grass and Harding grass from becoming a fire hazard or from creating areas where unauthorized illegal and nuisance activities could take place, the District managed the vegetation at the site by a combination of hiring out goats to graze on the parcel, and by District's Bridge Division forces performing a manual weed control and cutting and grinding the vegetation using rented mechanical equipment. These methods lowered the height and size of the invasive plants but were not effective in stopping the plants from sprouting again the following year and from continuing to spread throughout the parcel. As stated above, if left untreated, the invasive plants will continue to expand within the parcel, threatening the success of the 4-acre marsh area and potentially expanding into the neighboring Baylands and surrounding open space areas.

Engineering staff requested WRA to review the site and to develop a plan for removing the invasive pampas grass and Harding grass present within the parcel, restoring the treated areas with native plants, and monitoring the restored areas to prevent the reestablishment of the invasive plants. WRA has determined that the invasive plants are currently present over approximately 9 to 12 acres of the parcel. WRA's plan proposes to divide the site into three (3) weed management areas (see enclosed map) and to perform the following scope of work at each of these areas:

- Treatment of the pampas grass and Harding grass in the fall of 2023 through spring 2025 by cutting all the tall plant fronds in all three areas with hedge trimmers to reduce seed disbursement.
- In weed management area 1 in 2023, in weed management area 2 in 2024, and in weed management area 3 in 2025, removing, with a mid-sized excavator, the cut plants and root balls and turning the plants upside down to allow the sun to kill the roots, stockpiling the vegetation to decompose on site, and performing grading and cleanup within the disturbed area.

- Performing biological monitoring during work involving heavy equipment to ensure protection of any special status species that may be present in the area, including the salt marsh harvest mouse and Ridgway rail bird.
- Harding grass control, in the spring of each year beginning in 2024 through 2026, with mowing of any dense patches and then covering the grass areas with thick black plastic sheeting. During the subsequent warm summer months, the black plastic sheeting heats up and solarizes the plants, killing them. The Harding grass treatment will occur in the weed management area previously treated for pampas grass removal in order to prevent the Harding grass from spreading into the treated area.
- Treatment of pampas grass removal areas for resprouting between 2025 and 2027. Resprouts of pampas grass generally occur within two years following initial removal. The follow up treatment will include manual removal of smaller plants and herbicide application for larger resprouts within each management area.
- Revegetation of the management areas with native species over a period of three years beginning in 2024 through 2026. In the fall, after an area has been treated for both the pampas grass and Harding grass, the area will be replanted with a mix of small plugs of native plants including creeping wild rye in combination with a direct seeding of meadow barley. These are native perennial grasses that will serve to both re-establish ground cover and help to suppress the establishment of future infestations.
- Site monitoring and maintenance during 2027 and 2028. After removal of the invasive plants in each management area, follow up re-treatment and completion of revegetation in each area, the restored areas will be monitored and inspected to determine the success of the work and to determine if any additional treatment and cleanup of remnant invasive vegetation is necessary. This task will also include a written summary of the inspections and recommendations for any additional follow up monitoring and vegetation management, if necessary.

This approach is recommended because:

- The work will be performed under the existing environmental permits for the marsh construction and current monitoring activities, and during the environmental work windows. The use of large equipment is only allowed from September through January of each year, due to the presence of protected species in the area. After October, there is a potential that the site may be too wet to allow the use of heavy equipment. Considering a short time window, the removal of pampas grass needs to be limited to areas of up to 4 acres.
- Managing the infestation over a period of multiple years allows for better quality control of the work and the opportunity to adjust methods being used for initial treatment.
- Managing the infestation over a period of multiple years allows for follow up with herbicide treatment of any sprouts in the previous year's removal areas to minimize re-spreading of treated individual plants and minimizes the use of herbicide.

Engineering staff requested, and WRA provided, a cost proposal, in the not-to-exceed amount of \$579,985, for controlling the invasive pampas grass and Harding grass, and restoring the treated

areas as described above, using their own forces and rental equipment as necessary. Staff has reviewed the cost proposal and determined that this not-to-exceed price is reasonable based on the scope of work, cost data for similar work and cost comparison with previous treatments at the site.

Staff recommends that the Finance Committee recommend that the Board of Directors authorize the execution of the Sixth Amendment to PSA No. 2014-FT-13 with WRA in the not-to-exceed amount of \$579,985 for the invasive species removal and treatments, re-vegetation, and monitoring, over the approximately 9-12 acres outside and adjacent to the marsh restoration area, as presented in this report. WRA will be compensated for actual time expended and expenses incurred plus a fixed fee, up to the authorized not-to-exceed amount. Staff also recommends that a contingency for this PSA Amendment in the amount of \$58,000, or 10% of the amendment amount, be established to provide a budget for any additional or changed work scope that may develop while work progresses.

The District's Disadvantaged Business Enterprise (DBE) Program Administrator has determined Small Business Enterprise (SBE) participation is expected for this Sixth Amendment. WRA, Inc., is certified as an SBE by the California Department of General Services.

Fiscal Impact

Project #2041, *Corte Madera Marsh Restoration Construction*, is included in the FY 23/24 Ferry Division Capital Budget in the amount of \$3,040,000 and is 100% District-funded.

The proposed \$579,985 cost of the Sixth Amendment to PSA No. 2014-B-13 and the \$58,000 contingency, for a total amount of \$637,985, is proposed to be financed by reallocating a total of \$472,500 from various project budget items, under which the work has been completed to date, and by increasing the project budget by \$165,485, which is proposed to be financed from the District reserves.

The revised total Project #2041 budget of \$3,205,485 would be 100% District-funded.

TABLE 1: PROJECT BUDGET – #2041, Corte Madera Marsh Restoration Construction

DESCRIPTION	CURRENT PROJECT BUDGET	PROPOSED BUDGET REALLOCATIONS	PROPOSED BUDGET INCREASE	PROPOSED PROJECT BUDGET
District Staff Labor/Fringe	\$490,000	-		\$490,000
Indirect Costs	\$313,000	-		\$313,000
General Project Expenditures (District furnished plants and materials) (Completed)	\$245,637	(\$102,263)		\$143,374
Printing & Advertising	\$5,000	-		\$5,000
Construction Contract (Completed)	\$988,142	(\$1,660)		\$986,482
Construction Contract Contingency (Completed)	\$148,221	(\$121,077)		\$27,144
Construction Engineering and Post-Construction Monitoring (WRA)	\$550,000	-		\$550,000
Construction Engineering Contingency (Completed)	\$82,500	(\$60,000)		\$22,500
Environmental Compliance (Water Board, Regulatory Permits) (Ongoing)	\$160,000	(\$130,000)		\$30,000
Material Testing Services (Completed)	\$57,500	(\$57,500)		\$0

<i>Proposed Sixth Amendment to PSA No. 2014-FT-13</i>	-	\$472,500	\$107,485	\$579,985
<i>Proposed Contingency of Sixth Amendment</i>	-	\$0	\$58,000	\$58,000
TOTAL	\$3,040,000	\$0	\$165,485	\$3,205,485

The history of PSA No. 2014-FT-13 is as follows:

ACTION	AMOUNT	FINANCING SOURCE
Award PSA No. 2014-FT-03, Wetland Restoration Design and Permitting Support Services; Resolution No. 2014-025	\$1,096,395.30	100% District
First Amendment Soil sampling and characterization, no cost, and time extension	\$0	
Second Amendment no cost time extension	\$0	
Third Amendment Additional design and permitting services	\$72,579.69 (from contingency)	100% District
Fourth Amendment engineering support services during construction Resolution No. 2020-075	\$150,000.00	100% District
1 st Addendum to Fourth Amendment Additional engineering support services during construction	\$22,499.83 (from contingency)	
Fifth Amendment Post-construction biological and restoration monitoring services Resolution No. 2020-075	\$395,390.12	100% District
<i>Proposed Sixth Amendment Invasive Weed Control</i>	<i>\$579,985.00</i>	100% District
<i>PROPOSED TOTAL PSA AMOUNT</i>	<i>\$2,316,849.94</i>	100% District