

**Sacramento – San Joaquin Delta Plan Supplemental Documentation for Certification of
Consistency for Bees Lakes Habitat Restoration Project**

Prepared By:

City of West Sacramento

July 2023

CONSISTENCY WITH THE DELTA PLAN

The City of West Sacramento has determined that three Delta Plan policies are relevant to the Covered Action (Bees Lakes Habitat Restoration Project), which include the following:

1. GP P1 ((b)(1), (b)(2), (b)(3), (b)(4)) [23 CCR2 Section 5002]. Detailed Findings to Establish Consistency with the Delta Plan
2. ER P2 [23 CCR Section 5006]. Restore Habitats at Appropriate Elevations
3. DP P2 [23 CCR Section 5011]. Respect Local Land Use When Siting Water or Flood Facilities or Restoring Habitats

Substantial evidence supporting the City's consistency determinations regarding the above-listed policies is summarized below.

CONSISTENCY ANALYSIS

G P1 [23 CCR Section 5002]. Detailed Findings to Establish Consistency with the Delta Plan

“(a) This policy specifies what must be addressed in a certification of consistency filed by a State or local public agency with regard to a covered action. This policy only applies after a “proposed action” has been determined by a State or local public agency to be a covered action because it is covered by one or more of the regulatory policies contained in Article 3. Inconsistency with this policy may be the basis for an appeal.”

In summary, G P1 requires:

1. Consistency with relevant regulatory policies contained within Delta Plan Article 3, or that the action is, on whole, consistent with the coequal goals.
2. Inclusion of all applicable feasible mitigation measures adopted and incorporated into the Delta Plan from the Delta Plan's Program Environmental Impact Report, or substitute mitigation measures that are equally or more effective.
3. Use of the best available science.
4. An adaptive management plan and documentation of access to adequate resources and delineated authority by the entity responsible for implementation of the adaptive management process.

The relevant requirements are assessed sequentially below.

G P1 (b)(1) Coequal Goals

“(1) Covered actions, in order to be consistent with the Delta Plan, must be consistent with this regulatory policy and with each of the regulatory policies contained in Article 3 implicated by the covered action. The Delta Stewardship Council acknowledges that in some cases, based upon the nature of the covered action, full consistency with all relevant regulatory policies may not be feasible. In those cases, the agency that files the certification of consistency may nevertheless determine that the covered action is consistent with the Delta Plan because, on whole, that action is consistent with the coequal goals. That determination must include a clear identification of areas where consistency with relevant regulatory policies is not feasible, an explanation of the reasons why it is not feasible, and an explanation of how the covered action nevertheless, on whole, is consistent with the coequal goals. That determination is subject to review by the Delta Stewardship Council on appeal;” (Delta Plan Policy G P1(b)(1))

The City of West Sacramento has determined that the proposed project is consistent with all relevant Delta Plan policies. The Covered Action is consistent with both coequal goals: it is consistent with the restored-ecosystem goal because it includes the restoration of native ecosystem habitats and functions and it is consistent the water supply reliability goal because it will not affect water supply within the Delta.

The Covered Action includes the use of water from the existing ponds for irrigation during the native plant establishment period. However, these ponds do not supply water to any public water systems or agricultural operations and are located within a low area surrounded by levees. Therefore, no water suppliers would receive water as a result of the Covered Action. Because water does not discharge from the site during storm events or otherwise, the short-term use of irrigation water from the on-site ponds would have no effect on water reliability in the Delta or on water users within the project vicinity and would not result in a significant adverse environmental impact in the Delta. For a detailed discussion of the Covered Action's consistency with the other policies included in Article 3, see the responses below and the Certification of Consistency.

G P1 (b)(2) Mitigation Measures

“Covered actions not exempt from CEQA must include applicable feasible mitigation measures identified in the Delta Plan’s Program EIR (unless the measure(s) are within the exclusive jurisdiction of an agency other than the agency that files the certification of consistency), or substitute mitigation measures that the agency that files the certification of consistency finds are equally or more effective;” (Delta Plan Policy G P1(b)(2))

The City of West Sacramento has determined that the Covered Action is consistent with this policy because the mitigation measures adopted by the City are equal to or more effective than the applicable mitigation measures in the Delta Plan.

The 2020 Initial Study prepared for the Covered Action identified potentially significant impacts that would be reduced to less-than-significant levels with the implementation of identified mitigation measures. Potentially significant impacts would be short-term due to construction-related activities. These include impacts to biological resources, cultural resources, geology and soils, hazardous and hazardous materials, and hydrology and water quality. All of these short-term impacts would be reduced to a less-than-significant level with implementation of the identified mitigation measures. In the long-term, the Covered Action would have beneficial effects on biological resources, water quality, and hazards due to the proposed restoration of native habitat, water quality improvements within the pond, and removal of rubbish from the site. Based on a detailed review, the mitigation measures included in the Mitigation Monitoring and Reporting Plan would be equal to or more effective than those in the Delta Plan. The mitigation measures adopted by the City are included in the Covered Action's Initial Study and Mitigation Monitoring and Reporting Program.

G P1 (b)(3) Best Available Science

"As relevant to the purpose and nature of the project, all covered actions must document use of best available science;" (Delta Plan Policy G P1 (b)(3))

The City of West Sacramento has determined that the Covered Action's design, environmental impact analysis, and Adaptive Management Monitoring Plan are based on the best available science. In developing the Restoration Plan, the City relied heavily on the historical data, conceptual models and landscape tools included in the three reports prepared by the San Francisco Estuary Institute including: "Sacramento-San Joaquin Delta Historical Ecological Investigation: Exploring Pattern and Process", "A Delta Transformed: Ecological Functions, Spatial Metrics, and Landscape Change in the Sacramento-San Joaquin Delta," and "A Delta Renewed: A Guide to Science-Based Ecological Restoration in the Sacramento-San Joaquin Delta." These documents clearly articulate the ecological harm done to the Delta through the introduction of invasive species and the need to restore native vegetation to provide the habitats to which native species are adapted. In addition, the Conservation Strategy of the Central Valley Flood Protection Plan references invasive species as a stressor on the Delta ecosystem and recommends reducing these stressors to help listed species recovery. Finally, the Delta Stewardship Council identifies Delta Plan policies that prioritize actions to control nonnative invasive species and restore habitat. These documents support the scientific merit of removing nonnative invasive species and revegetating with native plant species when trying to recovery ecosystem function.

G P1 (b)(4) Adaptive Management and Monitoring Program

“Ecosystem restoration and water management covered actions must include adequate provisions, appropriate to the scope of the covered action, to assure continued implementation of adaptive management. This requirement shall be satisfied through both of the following: An adaptive management plan that describes the approach to be taken consistent with the adaptive management framework in Appendix 1B, and Documentation of access to adequate resources and delineated authority by the entity responsible for the implementation of the proposed adaptive management process.” (Delta Plan Policy G P1(b)(4))

Adaptive management is defined in the Delta Plan (see Chapter 2, pages 27 and 37, as well as 23 CCR Appendix 1B Adaptive Management) as: “a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvements in management planning and implementation of a project to achieve specified objectives”. The City has determined that the Covered Action is consistent with Delta Plan Policy G P1 (b)(4)’s requirements. For the Covered Action, adaptive management will primarily be achieved through implementation of an Adaptive Management Plan and a Performance Monitoring Plan. As discussed further below, these plans will be implemented to follow the established guidelines within 23 CCR Appendix 1B Adaptive Management.

Adaptive Management Plan

The Adaptive Management Plan includes the following components to ensure ecosystem function is optimized on the project site following site restoration:

Define/redefine problem: The riparian habitat within the Bees Lakes area has been substantially disturbed by human activities. In addition, the ponds have been used as a dumping site for residential and commercial refuse, and for discarded vehicles and boats. Based on water quality sampling, the water quality within the ponds has been substantially degraded.

Establish goals and objectives: The project’s two environmental goals include enhancing ecosystem function at the Bees Lakes site and improving water quality within the two site ponds. These goals are proposed to be achieved by implementing the following project objectives: 1) Removing and controlling target invasive species, 2) Reestablishing native vegetation within the disturbed areas, and 3) Installing pond aeration devices and floating streambeds/islands to facilitate the uptake and removal of water quality contaminants.

Link goals and objectives with proposed actions using conceptual models: The existing conceptual model for the site assumes that historical disturbance provided an opportunity for invasive species to push out native species, and that as the presence of native species decreased at the site, opportunities for invasive species increased, which further decreased the viability of native species. Additionally, the lack of any site management and oversight created

an opportunity for trespassing and vandalism. Because there were only limited repercussions for this activity, more destructive activities occurred including illegal garbage dumping. In effect, as the site's ecological conditions deteriorated, they contributed to human disturbance at the site, which further diminished the site's ecological and recreational values.

The project's goals and objectives are intended to flip this conceptual model by creating a virtuous circle. By controlling invasive species at the site, opportunities for native species will increase and as these species are planted and become established, the opportunities for invasive species to thrive at the site will be diminished. Also, as the site's ecological conditions improve, the appearance of the ponds improves, the dumped garbage is removed, and the site is regularly maintained, the site will become less appealing to unwanted human disturbance and will attract more local support for the ongoing maintenance and restoration activities.

Select action(s) and develop performance measures: The actions included in the proposed scope of work include preparing the 100% design plans, conducting all required project permitting, soliciting a restoration contractor, implementing the identified restoration and water quality improvements, and monitoring and maintaining the improvements over the long term. The project's specific performance measures are identified in the Performance Monitoring and Assessment section below.

Design and implement action(s): The proposed restoration activities will be designed and implemented consistent with well understood ecological processes and the specific habitat conditions of the project site. The planting palette will be selected by restoration ecologists with specific experience restoring habitat within the project vicinity. The team that prepared the planting plan for the Southport Project has learned extensively from the success of that large-scale restoration project and will use that knowledge to ensure that plants with the highest potential to thrive on the site will be selected. The project will also include readjustment of the planting plans if determined necessary during ongoing observation and monitoring.

Design and implement monitoring plan: The project includes a three- to five-year establishment period for all planted areas and regular monthly to quarterly site inspections (as deemed appropriate) conducted by an experienced restoration ecologist. During these inspections, the ecologist will record observations on plant establishment success, including trends and patterns in plant survival and health, new native vegetation recruitment, observable beaver or human disturbance damage, any site erosion problems, and trash dumping or vandalism. The ecologist will visit and track all invasive species removal sites and temporary disturbance reseeding sites and will map target invasive plant populations for treatment.

Analyze, synthesize, and evaluate: The monitoring conducted by the ecologist during the regular monthly to quarterly site inspections will be recorded and used by the City to determine

whether the project is achieving its performance measures. This will include determining whether changes in the planting palette and maintenance activities will be necessary to ensure successful site restoration. The success of the restoration will be compared to baseline conditions at the site prior to project implementation.

Communicate current understanding: The results included in the regular monthly to quarterly site inspections will be used to communicate the project's status to decision-makers and to interested stakeholders. In addition, the Parks and Recreation Department will regularly communicate to elected leaders and community members the status of the restoration activities through regular updates to the City's Parks, Recreation and Inter-generational Commission and the City Council regarding the Department's activities.

Adapt: Because the City has control of the site, the City will have the flexibility to adapt and modify the restoration activities at the site to best achieve the project's performance measures. This includes the ability to manage the site's vegetation over the long-term and in response to potential changes caused by climate change. The City has clear goals and objectives that have been established for the project site and has the financial ability to support these goals and objectives long after the funding provided by the Delta Conservancy has been expended.

Performance Monitoring Plan

The Performance Monitoring Plan includes the following components to ensure restored areas perform consistent with the ecosystem enhancement objectives of the restoration plan:

Monitoring Objectives: The project's monitoring objectives are focused on ensuring the project's two goals of enhancing ecosystem function at the Bees Lakes site and improving water quality within the two site ponds are achieved. This includes specifically achieving the output performance measures described in the Performance Measures Table below.

Monitoring Team: The monitoring team includes GEI and the City Parks and Recreation Department staff. GEI is under contract with WSAFCA to conduct the long-term monitoring of the Southport Project restoration planting effort. The restoration ecologists working on that project will also be responsible for monitoring the Bees Lakes site. In addition, City Parks and Recreation Department staff will work with the GEI restoration ecologists to assist in these monitoring efforts.

Monitoring Methods: During habitat restoration project implementation and the three-year vegetation establishment period for all planted areas, regular monthly to quarterly site inspections (as deemed appropriate) would be conducted by an experienced restoration ecologist. During these inspections, the ecologist would record observations on plant establishment success, including trends and patterns in plant survival and health, new native

vegetation recruitment, observable beaver or human disturbance damage, any site erosion problems, trash dumping or vandalism, visit and track all invasive species removal sites, temporary disturbance reseeding sites, and map target invasive plant populations for treatment. Field visit observations and associated maintenance recommendations would be summarized and shared with the City and the restoration contractor. As necessary, planted container plants that die within the first three years after planting would be replaced with suitable replacement plants. Replacements may be of the same or a different species if the ecologist’s review of plant health and survival patterns indicates that species substitutions may be appropriate. Maintenance actions conducted during the three-year establishment phase will include vegetation management and invasive species control, minor erosion repairs or additional erosion protective measures if needed, addition of beaver exclusion measures (e.g., plant caging) if needed, and/or supplemental seedings and plantings as deemed appropriate in areas with poor vegetation establishment.

Project Objective	Outcome	Output	Metrics
Invasive Plant Removal	Hand weeding; woody material removal; herbicide application	Year 1: create 100-foot buffers along walking paths free of invasive species; Year 2: return to treatment areas and remove invasive species	Measure area to be treated and restored; Measure amount of invasive species removed in years one and two.
Foster Native Riparian Growth	Scarify buffer areas and prep for native seed; Plant new riparian plant stock in designated areas	Define areas for improved riparian habitat; implement adaptive management to encourage native species and reduce competition with invasive species.	Measure new native plant growth by area and plant vigor for three years
Improve Water Quality of Bees Lakes	Install floating islands/stream with removable plant material and install aeration devices	Use plant material to absorb contaminants from Bees Lakes. Replace plant material after one or two years.	Measure changes in water quality as compared to baseline condition.

Monitoring timing, frequency and duration. Monitoring will commence within one month following the completion of the planting activities. The monitoring will include regular monthly

to quarterly site inspections (as deemed appropriate) conducted by an experienced restoration ecologist and will continue through the three-year establishment period for all planted areas. If necessary, the City will continue monitoring beyond the Grant Funding Term if deemed necessary to ensure plant survival. Funding for this extended monitoring would be provided by the City Parks and Recreation Department.

Monitoring area. The monitoring area will include all disturbance and planting areas on the project site. This includes areas of invasive species removal and new planting areas.

Monitoring data management plan. GEI will be responsible for preparing the regular monitoring reports that will document whether the project is achieving the project's output performance measures. GEI has extensive experience conducting this type of monitoring and reporting on projects throughout California included on the Southport Project in the City. All monitoring reports will be available at the City for public review.

Data Types. As described above, during regular site inspections, the restoration ecologist would record observations on plant establishment success, including trends and patterns in plant survival and health, new native vegetation recruitment, observable beaver or human disturbance damage, any site erosion problems, trash dumping or vandalism, visit and track all invasive species removal sites, temporary disturbance reseeding sites, and map target invasive plant populations for treatment.

Data Analysis. The monitoring reports will be regularly reviewed to determine if adjustments in the planting or invasive species management are required. Adjustments would typically occur on an annual basis, specifically during the appropriate planting season if any new planting is required. The data related to the pond water quality will also be used to assess whether the project components are appropriately addressing pond water quality concerns.

Data Accessibility. The monitoring reports will be available at the City's offices for public review.

Data Reporting. As discussed above, the monitoring will include regular monthly to quarterly site inspections (as deemed appropriate) conducted by an experienced restoration ecologist and will continue through the three-year establishment period for all planted areas. This monitoring will be documented in regular reports that will be provided to the City.

ER P2 [23 CCR Section 5006]. Restore Habitats at Appropriate Elevations

“(a) Habitat restoration must be carried out consistent with Appendix 3, which is Section II of the Draft Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Regions (California Department

of Fish and Wildlife 2011). The elevation map attached as Appendix 4 should be used as a guide for determining appropriate habitat restoration actions based on an area's elevation. If a proposed habitat restoration action is not consistent with Appendix 4, the proposal shall provide rationale for the deviation based on best available science. (b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that includes habitat restoration."

The City of West Sacramento has determined that the Covered Action is consistent with this policy. The Covered Action is consistent with Strategy 3.2 included in Appendix 3, which focuses on establishing migratory corridors for fish, birds, and other animals along selected Delta river channels. The Covered Action will increase native vegetation cover and contribute to the recovery of special-status species along the Sacramento River, as documented in the Bees Lakes Initial Study. The planned habitat restoration will improve habitat conditions for migratory birds and other animals within this river corridor.

In addition, the elevation map included in Appendix 4 identifies the site as a developed area, which is consistent with the site's location within the boundaries of the City of West Sacramento. Locating the proposed restoration within this developed area would be consistent with the Appendix 4 elevation map.

DP P2 [23 CCR Section 5011]. Respect Local Land Use When Siting Water or Flood Facilities or Restoring Habitats

"(a) Water management facilities, ecosystem restoration, and flood management infrastructure must be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible, considering comments from local agencies and the Delta Protection Commission. Plans for ecosystem restoration must consider sites on existing public lands, when feasible and consistent with a project's purpose, before privately owned sites are purchased. Measures to mitigate conflicts with adjacent uses may include, but are not limited to, buffers to prevent adverse effects on adjacent farmland. (b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers proposed actions that involve the siting of water management facilities, ecosystem restoration, and flood management infrastructure."

The City of West Sacramento has determined that the Covered Action is consistent with this policy. The Covered Action is being proposed by the City of West Sacramento consistent with the City's desire to improve public access, reduce illegal dumping, and enhance ecosystem function within an underutilized area of the City. The proposed restoration is consistent with the site's Open Space (OS) land use designation and Public Open Space (POS) zoning

designation. The restoration is also consistent with the City's Parks, Recreation, and Open Space Master Plan and is proposed on public lands.

The Covered Action is consistent with policies in the City of West Sacramento General Plan 2035 Policy Document (City of West Sacramento 2016) that support habitat conservation and native species preservation (Policies NCR-2.3, NCR-2.4, NCR-2.8, NCR-2.9, NCR-2.10, NCR-2.12, NCR-2.14, NCR-2.15), and the establishment of recreational corridors and continuous access along the Sacramento River (Policies PR-2.1, PR-3.1, PR-3.4, PR-3.5). The Covered Action includes an existing topographic setback between sensitive habitats and adjacent development due to its location within a levee setback area that ensures adverse land use conflicts do not occur. The project has also received significant local agency support, as represented by multiple support letters.

LITERATURE CITED

The following literature was used to prepare the consistency analysis.

Beagle, J. et al. 2016 (November). *A Delta Renewed, A Guide to Science-Based Ecological Restoration in the Sacramento-San Joaquin Delta*. San Francisco Estuary Institute - Aquatic Science Center.

California Landscape Conservation Cooperative. 2017. *Climate Commons*. Accessed at: <http://climate.calcommons.org/>. Accessed November 19, 2017.

California Natural Resources Agency. 2017 (May). *Draft Report Safeguarding California Plan: 2017 Update, California's Climate Adaptation Strategy*.

City of West Sacramento. 2016. *General Plan 2035 Policy Document*. Approved November 2016.

Environmental Defense Fund. 2017. *Habitat Quantification Tool, A Path to Recovery for the Species in California's Central Valley*. Accessed at: https://www.edf.org/sites/default/files/hqt_california-central-valley.pdf. Accessed on November 20, 2017.

Flood Protect. 2014 (July). *Lower Sacramento River/Delta North Regional Flood Management Plan*. Lower Sacramento/Delta North Region.

Griggs, G. et al. 2014 (April). *Rising Seas in California, An Update on Sea-Level Rise Science*. California Ocean Protection Council Science Advisory Team Working Group.

ICF International. 2014 (August). *Southport Sacramento River Early Implementation Project Final Environmental Impact Report, Volume I: Environmental Effects Analysis*. Prepared for

West Sacramento Area Flood Control Agency.

Milligan, B. et al. 2016. *Human Use of Restored and Naturalized Delta Landscapes*. U.C. Davis Department of Human Ecology, Landscape Architecture Unit.

Point Blue. 2017. *Climate-Smart Restoration Toolkit*. Accessed at: <http://www.pointblue.org/our-science-and-services/conservation-science/habitat-restoration/climate-smart-restorationtoolkit/>. Accessed on November 19, 2017.

San Francisco Estuary Institute - Aquatic Science Center. 2016 (November). *A Delta Renewed, A Guide to Science-Based Ecological Restoration in the Sacramento-San Joaquin Delta*.

San Francisco Estuary Institute - Aquatic Science Center. 2014 (October). *A Delta Transformed, Ecological Functions, Spatial Metrics, and Landscape Change in the Sacramento-San Joaquin Delta*.

San Francisco Estuary Institute - Aquatic Science Center. 2012. *Sacramento-San Joaquin Delta Historical Ecological Investigation: Exploring Pattern and Process*.

University of California Berkeley Geospatial Innovation Facility. 2017. Cal-Adapt. Accessed at: <http://cal-adapt.org/>. Accessed on November 19, 2017.

Whipple, A. et al. 2012. *Sacramento-San Joaquin Delta Historical Ecological Investigation: Exploring Pattern and Process*. SFEI Contribution No. 672. SFEI: Richmond.