

Appendix 3A. Disclosing Contributions to Restoring Ecosystem Function and Providing Social Benefits (23 CCR [TBD])

A certification of consistency for any covered action that is subject to New Ecosystem Restoration (ER) Policy “A” must include a completed Appendix 3A, as well as the documentation and information required by Appendix 3A.

Section 1. Priority Attributes and Ecosystem Tier

Priority Attributes

Appendix 3A, Section 1, Subsections 1.1 through 1.5 (Priority Attributes) require the selection of criteria and the disclosure of supporting information to identify whether the covered action would have any of the following five priority attributes (a covered action may have more than one priority attribute):

- 1.1 Restoring Hydrological, Geomorphic, and Biological Processes
- 1.2 Being Large-Scale
- 1.3 Improving Connectivity
- 1.4 Increasing Native Vegetation Cover
- 1.5 Contributing to the Recovery of Special-Status Species

Appendix 3A, Section 1, Subsection 1.6 (Ecosystem Restoration Tier) requires the identification of the appropriate Ecosystem Restoration Tier for the covered action, based on the selections in Subsections 1.1 through 1.5 of Section 1.

Restoring Hydrological, Geomorphic, and Biological Processes

- 1.1.1 In **Field 1** of **Table 1-1** below, select the ecosystem type(s) that the covered action proposes to restore, if any. Select all that apply.
- 1.1.2 In **Field 2** of **Table 1-1** below, select the corresponding hydrological, geomorphic, and/or biological process(es) that the covered action proposes to restore, if any. Select all that apply.

Table 1-1. Priority Attribute 1 – Restoring Hydrological, Geomorphic, and Biological Processes Selections

Row Number	Field 1. Ecosystem Type	Field 2. Hydrological, Geomorphic, and Biological Processes
1	<input checked="" type="checkbox"/> Tidal wetland	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Full tidal action and complex variable patterns of tidal inundation <input checked="" type="checkbox"/> Sediment delivery, scour, and accretion <input checked="" type="checkbox"/> Channel formation <input checked="" type="checkbox"/> Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and peat formation <input checked="" type="checkbox"/> Native vegetation recruitment, growth and succession, primary production, and higher trophic-level interactions
2	<input type="checkbox"/> Nontidal wetland	<ul style="list-style-type: none"> <input type="checkbox"/> Temporary or permanent inundation through natural hydrologic connections to surface and/or groundwater, but does not include managed wetlands <input type="checkbox"/> Hydric soil development through organic matter accumulation and/or terrestrial sediment delivery <input type="checkbox"/> Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and peat formation <input type="checkbox"/> Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
3	<input checked="" type="checkbox"/> Willow thicket	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Temporary or seasonal floodplain inundation <input checked="" type="checkbox"/> Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography <input checked="" type="checkbox"/> Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats <input checked="" type="checkbox"/> Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils <input checked="" type="checkbox"/> Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
4	<input checked="" type="checkbox"/> Willow riparian scrub or shrub	<ul style="list-style-type: none"> <input type="checkbox"/> Temporary or seasonal floodplain inundation <input type="checkbox"/> Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography <input type="checkbox"/> Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats <input type="checkbox"/> Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils <input type="checkbox"/> Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions

Table 1-1. Priority Attribute 1 – Restoring Hydrological, Geomorphic, and Biological Processes Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Hydrological, Geomorphic, and Biological Processes
5	<input type="checkbox"/> Valley foothill riparian	<input type="checkbox"/> Temporary or seasonal floodplain inundation <input type="checkbox"/> Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography <input type="checkbox"/> Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats <input type="checkbox"/> Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils <input type="checkbox"/> Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
6	<input type="checkbox"/> Vernal pool complex	<input type="checkbox"/> Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water <input type="checkbox"/> Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence <input type="checkbox"/> Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development <input type="checkbox"/> Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates
7	<input type="checkbox"/> Alkali seasonal wetland complex	<input type="checkbox"/> Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water <input type="checkbox"/> Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence <input type="checkbox"/> Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development <input type="checkbox"/> Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates

Table 1-1. Priority Attribute 1 – Restoring Hydrological, Geomorphic, and Biological Processes Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Hydrological, Geomorphic, and Biological Processes
8	<input type="checkbox"/> Wet meadow	<input type="checkbox"/> Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water <input type="checkbox"/> Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence <input type="checkbox"/> Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development <input type="checkbox"/> Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates
9	<input type="checkbox"/> Stabilized interior dune vegetation	<input type="checkbox"/> Readily draining substrates <input type="checkbox"/> Wind-driven geomorphic processes <input type="checkbox"/> Movement, scour, and deposition which supports recruitment, growth, and succession of native dune scrub vegetation communities
10	<input type="checkbox"/> Oak woodland	<input type="checkbox"/> Fire disturbance or fire disturbance analogue (e.g., grazing) which maintains vegetation dynamics conducive to oak recruitment and other vegetation dynamics
11	<input checked="" type="checkbox"/> Grassland	<input checked="" type="checkbox"/> Fire disturbance or fire disturbance analogue (e.g., grazing) which maintains vegetation dynamics conducive to oak recruitment and other vegetation dynamics

1.1.3 In **Table 1-1**, above, each row in **Field 1** lists an ecosystem type, and in the same row in **Field 2** are the corresponding hydrological, geomorphic, and biological processes that a covered action could restore.

Based on the ecosystem type(s) selected in **Field 1**, would the proposed action restore any corresponding hydrological, geomorphic, and biological processes in **Field 2**?

- Yes
- No (continue to Section 1.2)

1.1.4 If the answer to **Section 1.1.3** is “Yes,” describe how the proposed action would restore the selected hydrological, geomorphic, and biological process(es) selected in **Table 1-1** above, and attach supporting documentation.

The proposed action will permanently expose the site to daily tidal fluctuations through a direct hydrologic connection to Cache Slough/Sacramento River. The tidal opening will be engineered to accommodate full tidal excursion and promote species access, will minimizing scour and erosion. The site will be re-contoured to create diverse and complex habitat systems including subtidal channels, shallow water emergent marsh plain, floodplain riparian, and grassland refugia along the perimeter berms. The site will be subject to natural tidal processes that will encourage vegetation recruitment and diverse channel morphology.

The restored habitat and vegetation will have biogeochemical benefits that include exports of organic carbon into the adjacent waterways; food web support for aquatic species in adjacent waterways; removal or retention of nutrient, chemical, and heavy metal pollutants through phytoremediation; and nutrient cycling that supports soil formation (i.e., accretion), wildlife habitat, and oxygen generation.

Being Large-Scale

1.2.1 In **Field 1** of **Table 1-2** below, select the ecosystem type(s) that the covered action proposes to restore. Select all that apply.

1.2.2 In **Field 2** of **Table 1-2** below, select the corresponding area where the covered action proposes to restore hydrological, geomorphic, and biological processes. For every row that is selected in **Field 1**, make a corresponding selection in **Field 2**.

Table 1-2. Priority Attribute 2 – Being Large-Scale Selections

Row Number	Field 1. Ecosystem Type	Field 2. Proposed Restored Area
1	<input checked="" type="checkbox"/> Tidal wetland	<input type="checkbox"/> > or = 500 acres (large-scale) <input checked="" type="checkbox"/> < 500 acres
2	<input type="checkbox"/> Nontidal wetland (including managed wetland)	<input type="checkbox"/> > or = 500 acres (large-scale) <input type="checkbox"/> < 500 acres
3	<input checked="" type="checkbox"/> Willow thicket	<input type="checkbox"/> > or = 200 acres (large-scale) <input checked="" type="checkbox"/> < 200 acres <input type="checkbox"/> Floodplain ratio ¹ > or = 6 (large-scale) <i>refer to table notes for methodology</i> <input checked="" type="checkbox"/> Floodplain ratio ¹ < 6
4	<input type="checkbox"/> Willow riparian scrub or shrub	<input type="checkbox"/> > or = 200 acres (large-scale) <input checked="" type="checkbox"/> < 200 acres <input type="checkbox"/> Floodplain ratio ¹ > or = 6 (large-scale) <i>refer to table notes for methodology</i> <input checked="" type="checkbox"/> Floodplain ratio ¹ < 6
5	<input type="checkbox"/> Valley foothill riparian	<input type="checkbox"/> > or = 200 acres (large-scale) <input type="checkbox"/> < 200 acres <input type="checkbox"/> Floodplain ratio ¹ > or = 6 (large-scale) <i>refer to table notes for methodology</i> <input type="checkbox"/> Floodplain ratio ¹ < 6
6	<input type="checkbox"/> Vernal pool complex	<input type="checkbox"/> > or = 40 acres (large-scale) <input type="checkbox"/> < 40 acres
7	<input type="checkbox"/> Alkali seasonal wetland complex	<input type="checkbox"/> > or = 40 acres (large-scale) <input type="checkbox"/> < 40 acres
8	<input type="checkbox"/> Wet meadow	<input type="checkbox"/> > or = 40 acres (large-scale) <input type="checkbox"/> < 40 acres
9	<input type="checkbox"/> Stabilized interior dune vegetation	<input type="checkbox"/> > or = 1.5 acres (large-scale) <input type="checkbox"/> < 1.5 acres

Table 1-2. Priority Attribute 2 – Being Large-Scale Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Proposed Restored Area
10	<input type="checkbox"/> Oak woodland	<input type="checkbox"/> > or = 40 acres (large-scale) <input type="checkbox"/> < 40 acres
11	<input checked="" type="checkbox"/> Grassland	<input type="checkbox"/> > or = 40 acres (large-scale) <input checked="" type="checkbox"/> < 40 acres

Notes:

¹ Method to calculate the floodplain ratio

- a. Existing bankfull channel width (use the mean of at least six cross sections): 15 meters
- b. Protected, restored, or enhanced floodplain width: _____ meters
- c. Floodplain ratio (divide [b] by [a])

1.2.3 In **Table 1-2**, above, each row in **Field 1** lists an ecosystem type(s), and the corresponding row in **Field 2** lists the restoration area that would be considered large-scale.

Based on the selection(s) made in **Field 2**, would any selected restoration area for the covered action be large-scale?

- Yes
- No (continue to Section 1.3)

1.2.4 If the answer to **Section 1.2.3** is “Yes,” describe the area of each ecosystem type that the covered action proposes to restore, corresponding to the selections in **Table 1-2** above, and attach supporting documentation.

Improving Connectivity

1.3.1 In **Field 1** of **Table 1-3** below, select the aspect(s) of connectivity that the covered action proposes to improve. Select all that apply.

Table 1-3. Priority Attribute 3 – Improving Connectivity Selections

Row Number	Field 1. Aspects of Connectivity
1	<input checked="" type="checkbox"/> Creates or reestablishes hydraulic and hydrologic connections to marsh or floodplain ecosystems
2	<input checked="" type="checkbox"/> Reduces distance between patches of similar ecosystem types
3	<input checked="" type="checkbox"/> Reduces distance between patches of different ecosystem types used by species for refuge or life history needs
4	<input checked="" type="checkbox"/> Protects, restores, or enhances wetland and riparian transgression/migration space
5	<input checked="" type="checkbox"/> Removes or remediates barriers (dams and diversions) to fish migration

1.3.2 Selecting at least one Aspect of Connectivity in **Table 1-3** above indicates that the proposed action would improve connectivity. Based on the selection(s) in **Table 1-3**, would the covered action improve connectivity?

Yes

No (continue to Section 1.4)

1.3.3 If the answer to **Section 1.3.2** is “Yes,” describe how the covered action would improve the aspect(s) of connectivity selected in **Field 1** of **Table 1-3** above, and attach supporting documentation.

The proposed action will reconnect to Cache Slough/Sacramento River by constructing a free-span bridge under Highway 84 to restore tidal action to the project site and removing a barrier to fish access. The proposed action will restore tidal marsh habitat along Cache Slough/Sacramento River located between similar habitat at Prospect Island and Decker Island reducing the distance between patches of similar ecosystem type.

Increasing Native Vegetation Cover

1.4.1 In **Field 1** of **Table 1-4** below, select the ecosystem type(s) that the covered action proposes to restore. Select all that apply.

1.4.2 In **Field 2** of **Table 1-4** below, select the corresponding native vegetation community or communities for which the covered action would increase cover. Select all that apply.

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
1	<input checked="" type="checkbox"/> Tidal wetland	<input checked="" type="checkbox"/> <i>Schoenoplectus (acutus, californicus)</i> Alliance (52.128.00) <input checked="" type="checkbox"/> <i>Typha (domingensis, latifolia)</i> Alliance (52.050.00) <input type="checkbox"/> <i>Juncus effuses</i> (soft rush marshes) Alliance (45.561.00) <input type="checkbox"/> <i>Juncus articus</i> (Baltic and Mexican rush marshes) Alliance (45.562.00) <input type="checkbox"/> <i>Eleocharis macrostachya</i> Alliance (45.230.00) <input type="checkbox"/> <i>Sarcocornia pacifica</i> Alliance (52.215.00) <input type="checkbox"/> <i>Distichlis spicata</i> Alliance (41.200.00) <input type="checkbox"/> Other
2	<input type="checkbox"/> Nontidal wetland (including managed wetland)	<input type="checkbox"/> <i>Schoenoplectus (acutus, californicus)</i> Alliance (52.128.00) <input type="checkbox"/> <i>Typha (domingensis, latifolia)</i> Alliance (52.050.00) <input type="checkbox"/> <i>Juncus effuses</i> (soft rush marshes) Alliance (45.561.00) <input type="checkbox"/> <i>Juncus articus</i> (Baltic and Mexican rush marshes) Alliance (45.562.00) <input type="checkbox"/> <i>Eleocharis macrostachya</i> Alliance (45.230.00) <input type="checkbox"/> Other
3	<input checked="" type="checkbox"/> Willow thicket	<input checked="" type="checkbox"/> <i>Salix gooddingii</i> Alliance (61.211.00) <input checked="" type="checkbox"/> <i>Salix laevigata</i> Alliance (61.206.00) <input checked="" type="checkbox"/> <i>Salix lasiolepus</i> Alliance (61.201.00) <input checked="" type="checkbox"/> <i>Salix lucida</i> Alliance (61.204.00) <input checked="" type="checkbox"/> <i>Salix exigua</i> Alliance (61.209.00) <input checked="" type="checkbox"/> <i>Cornus sericea</i> (red osier thickets) Alliance (80.100.00) <input checked="" type="checkbox"/> <i>Rosa californica</i> Alliance (63.907.00) <input checked="" type="checkbox"/> <i>Acer negundo</i> (box-elder forest) Alliance (61.440.00) <input checked="" type="checkbox"/> <i>Sambucus nigra</i> (blue elderberry stands) Alliance (63.410.01) <input type="checkbox"/> Other

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
4	<input checked="" type="checkbox"/> Willow riparian scrub or shrub	<input checked="" type="checkbox"/> <i>Salix gooddingii</i> Alliance (61.211.00) <input checked="" type="checkbox"/> <i>Salix laevigata</i> Alliance (61.206.00) <input checked="" type="checkbox"/> <i>Salix lasiolepus</i> Alliance (61.201.00) <input checked="" type="checkbox"/> <i>Salix lucida</i> Alliance (61.204.00) <input checked="" type="checkbox"/> <i>Salix exigua</i> Alliance (61.209.00) <input checked="" type="checkbox"/> <i>Cornus sericea</i> (red osier thickets) Alliance (80.100.00) <input checked="" type="checkbox"/> <i>Rosa californica</i> Alliance (63.907.00) <input checked="" type="checkbox"/> <i>Acer negundo</i> (box-elder forest) Alliance (61.440.00) <input checked="" type="checkbox"/> <i>Cephalanthus occidentalis</i> (button willow thickets) Alliance (63.300.00) <input type="checkbox"/> Other
5	<input checked="" type="checkbox"/> Valley foothill riparian	<input type="checkbox"/> <i>Quercus agrifolia</i> Alliance (71.060.00) <input type="checkbox"/> <i>Quercus lobata</i> Alliance (71.040.00) <input type="checkbox"/> <i>Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni)</i> Alliance (71.100.00) <input type="checkbox"/> <i>Quercus wislizeni</i> Alliance (71.080.00) <input type="checkbox"/> <i>Juglans hindsii</i> and hybrids special stands Alliance (61.810.00) <input checked="" type="checkbox"/> <i>Salix gooddingii</i> Alliance (61.211.00) <input checked="" type="checkbox"/> <i>Salix laevigata</i> Alliance (61.205.00) <input checked="" type="checkbox"/> <i>Salix lasiolepis</i> Alliance (61.201.00) <input checked="" type="checkbox"/> <i>Salix lucida</i> Alliance (61.204.00) <input checked="" type="checkbox"/> <i>Salix exigua</i> Alliance (61.209.00) <input checked="" type="checkbox"/> <i>Acer negundo</i> (box-elder forest) Alliance (61.440.00) <input checked="" type="checkbox"/> <i>Cornus sericea</i> (red osier thickets) Alliance (80.100.00) <input checked="" type="checkbox"/> <i>Rosa californica</i> Alliance (63.907.00) <input checked="" type="checkbox"/> <i>Platanus racemosa</i> Alliance (61.310.00) <input checked="" type="checkbox"/> <i>Populus fremontii</i> Alliance (61.130.00) <input checked="" type="checkbox"/> <i>Cephalanthus occidentalis</i> (button willow thickets) Alliance (63.300.00) <input type="checkbox"/> Other
6	<input type="checkbox"/> Vernal pool complex	<input type="checkbox"/> <i>Lasthenia fremontii</i> – <i>Downingia bicornuta</i> (Fremont’s goldfields – <i>Downingia</i> vernal pools) Alliance (42.007.00) <input type="checkbox"/> <i>Eryngium aristulatum</i> Alliance (42.004.00) <input type="checkbox"/> Other

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
7	<input type="checkbox"/> Alkali seasonal wetland complex	<input type="checkbox"/> <i>Cressa truxillensis</i> – <i>Distichlis spicata</i> (alkali weed - saltgrass playas and sinks) Alliance (46.100.00) <input type="checkbox"/> <i>Lasthenia fremontii</i> – <i>Distichlis spicata</i> (Fremont's goldfields – saltgrass alkaline vernal pools) Alliance (44.119.00) <input type="checkbox"/> <i>Allenrolfea occidentalis</i> (iodine bush scrub) Alliance (36.120.00) <input type="checkbox"/> <i>Sporobolus airoides</i> (alkali sacaton grassland) Alliance (52.060.00) <input type="checkbox"/> <i>Leymus cinereus</i> – <i>Leymus triticoides</i> (creeping rye grass turfs) Alliance (41.080.00) <input type="checkbox"/> <i>Frankenia salina</i> (alkali heath marsh) Alliance (52.500.00) <input type="checkbox"/> Other
8	<input type="checkbox"/> Wet meadow	<input type="checkbox"/> <i>Lasthenia californica</i> – <i>Plantago erecta</i> – <i>Vulpia microstachys</i> (California goldfields – dwarf plantain – six-weeks fescue flower fields) Alliance (44.108.00) <input type="checkbox"/> <i>Leymus cinereus</i> – <i>Leymus triticoides</i> (creeping rye grass turfs) Alliance (41.080.00) <input type="checkbox"/> <i>Ambrosia psilostachya</i> (western ragweed meadows) Alliance (33.065.00) <input type="checkbox"/> <i>Lotus purshianus</i> (Spanish clover fields) Provisional Herbaceous Alliance (52.230.00) <input type="checkbox"/> <i>Juncus effusus</i> (soft rush marshes) Alliance (45.561.00) <input type="checkbox"/> <i>Juncus articus</i> (Baltic and Mexican rush marshes) Alliance (45.562.00) <input type="checkbox"/> Other
9	<input type="checkbox"/> Stabilized interior dune vegetation	<input type="checkbox"/> <i>Lupinus albifrons</i> (silver bush lupine scrub) Alliance (32.081.00) <input type="checkbox"/> <i>Baccharis pilularis</i> (coyote brush scrub) Alliance (32.060.00) <input type="checkbox"/> <i>Lotus scoparius</i> (deer weed scrub) Alliance (52.240.00) <input type="checkbox"/> Other
10	<input type="checkbox"/> Oak woodland	<input type="checkbox"/> <i>Quercus agrifolia</i> Alliance (71.060.00) <input type="checkbox"/> <i>Quercus lobata</i> Alliance (71.040.00) <input type="checkbox"/> <i>Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni)</i> Alliance (71.100.00) <input type="checkbox"/> <i>Quercus wislizeni</i> Alliance (71.080.00) <input type="checkbox"/> <i>Quercus douglasii</i> Alliance (71.020.00) <input type="checkbox"/> Other

Table 1-4. Priority Attribute 4 – Increasing Native Vegetation Cover Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Native Vegetation Community (VegCAMP CaCode)
11	<input type="checkbox"/> Grassland	<input type="checkbox"/> <i>Lasthenia californica</i> – <i>Plantago erecta</i> – <i>Vulpia microstachys</i> (California goldfields – Dwarf plantain – six-weeks fescue flower fields) Alliance (44.108.00) <input type="checkbox"/> <i>Leymus cinereus</i> – <i>Leymus triticoides</i> (creeping rye grass turfs) Alliance (41.080.00) <input type="checkbox"/> <i>Nassella pulchra</i> Alliance (41.150.00) <input type="checkbox"/> <i>Eschscholzia californica</i> (California poppy fields) Alliance (43.200.00) <input type="checkbox"/> <i>Amsinckia</i> (fiddleneck fields) Alliance (42.110.00) <input type="checkbox"/> <i>Plagiobothrys nothofulvus</i> (popcorn flower fields) Alliance (43.300.00) <input type="checkbox"/> Other

Note:

VegCAMP is the California component of the National Vegetation Classification system, maintained by the California Department of Fish and Wildlife in collaboration with other agencies and organizations.

1.4.3 Refer to both **Table 1-2** and **Table 1-4** for this section. On what share of the aggregate area(s) selected in **Field 2** of **Table 1-2** would the covered action increase the cover of the native vegetation community or communities selected in **Field 2** of **Table 1-4**?

- At least 75% of the aggregate area (increases native vegetation cover)
- Less than 75% of the aggregate area

1.4.4 Based on the selection in **Section 1.4.3** above, would the covered action increase native vegetation cover?

- Yes
- No (continue to Section 1.5)

1.4.5 Describe how the covered action would increase cover of the native vegetation communities selected in **Table 1-4**, across the area selected in **Section 1.4.3**, and attach supporting documentation. If the selection(s) in Table 1-4 include “Other,” identify and describe those native vegetation communities here.

As depicted on Figure 5 of the Detailed Findings report, the proposed action includes restoration of approximately 258 acres of tidal freshwater wetland and 43 acres of floodplain riparian habitats. Intertidal areas will support emergent marsh habitat dominated by tule (i.e., *Schoenoplectus acutus* var. *californicus*). As the topography of the site rises, the emergent marsh will transition into willow thicket and willow scrub shrub habitats that will be similar to the composition of nearby channel islands within Cache Slough, Lindsay Slough, and Prospect Slough. Willow thicket and scrub-shrub habitats are expected to be dominated by sandbar willow (*Salix exigua*), black willow (*Salix gooddingii*), buttonbush (*Cephalanthus occidentalis*), redbud dogwood (*Cornus* sp.), and white alder (*Alnus rhombifolia*). Above the daily influence of the tides, the site will transition to floodplain riparian habitat that will be planted with box elder (*Acer negundo*), Oregon ash (*Fraxinus latifolia*), black walnut (*Juglans hindsii*), western sycamore (*Platanus racemosa*), cottonwood (*Populus fremontii*), valley oak (*Quercus lobata*), and live oak (*Quercus wislizenii* var. *wislizenii*).

Vegetation establishment would be accomplished through a variety of planting methods, including container plantings, cuttings, and seeding, as well as natural recruitment.

Contributing to the Recovery of Special-Status Species

- 1.5.1 In **Field 1** of **Table 1-5** below, select the ecosystem type(s) that the covered action proposes to restore. Select all that apply.
- 1.5.2 In **Field 2** of **Table 1-5** below, select the corresponding special-status species whose recovery would be contributed to by the proposed action. Select all that apply.

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
1	☒ Tidal wetland	<input type="checkbox"/> California least tern (<i>Sterna antillarum browni</i>) <input type="checkbox"/> Ridgway’s rail (<i>Rallus obsoletus</i>) <input checked="" type="checkbox"/> California black rail (<i>Laterallus jamaicensis coturniculus</i>) <input checked="" type="checkbox"/> Suisun song sparrow (<i>Melospiza melodia</i>) <input checked="" type="checkbox"/> Tricolored blackbird (<i>Agelaius tricolor</i>) <input checked="" type="checkbox"/> White-tailed kite (<i>Elanus leucurus</i>) <input type="checkbox"/> Salt marsh harvest mouse (<i>Reithrodontomys raviventris</i>) <input checked="" type="checkbox"/> Suisun shrew (<i>Sorex ornatus sinuosus</i>) <input type="checkbox"/> California red-legged frog (<i>Rana draytonii</i>) <input checked="" type="checkbox"/> Western pond turtle (<i>Actinemys marmorata</i>) <input checked="" type="checkbox"/> Giant garter snake (<i>Thamnophis gigas</i>) <input checked="" type="checkbox"/> Green sturgeon (<i>Acipenser medirostris</i>) <input checked="" type="checkbox"/> Delta smelt (<i>Hypomesus transpacificus</i>) <input checked="" type="checkbox"/> Longfin smelt (<i>Spirinchus thaleichthys</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley fall/late fall-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley spring-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Sacramento River winter-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Steelhead (<i>Oncorhynchus mykiss</i>) <input checked="" type="checkbox"/> Delta mudwort (<i>Limosella subulata</i>) <input checked="" type="checkbox"/> Mason’s lilaepsis (<i>Lilaeopsis masonii</i>) <input checked="" type="checkbox"/> Slough thistle (<i>Cirsium crassicaule</i>) <input checked="" type="checkbox"/> Delta tule pea (<i>Lathyrus jepsonii</i>) <input type="checkbox"/> Suisun thistle (<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i>) <input type="checkbox"/> Suisun marsh aster (<i>Symphotrichum lentum</i>) <input type="checkbox"/> Soft bird’s beak (<i>Choropyron molle</i> ssp. <i>molle</i>) <input checked="" type="checkbox"/> Side flowering skullcap (<i>Scutellaria lateriflora</i>) <input type="checkbox"/> Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
2	<input type="checkbox"/> Nontidal wetland (including managed wetland)	<input type="checkbox"/> California least tern (<i>Sterna antillarum browni</i>) <input type="checkbox"/> Ridgway’s rail (<i>Rallus obsoletus</i>) <input type="checkbox"/> California black rail (<i>Laterallus jamaicensis coturniculus</i>) <input type="checkbox"/> Suisun song sparrow (<i>Melospiza melodia</i>) <input type="checkbox"/> Tricolored blackbird (<i>Agelaius tricolor</i>) <input type="checkbox"/> White-tailed kite (<i>Elanus leucurus</i>) <input type="checkbox"/> Salt marsh harvest mouse (<i>Reithrodontomys raviventris</i>) <input type="checkbox"/> Suisun shrew (<i>Sorex ornatus sinuosus</i>) <input type="checkbox"/> California red-legged frog (<i>Rana draytonii</i>) <input type="checkbox"/> Western pond turtle (<i>Actinemys marmorata</i>) <input type="checkbox"/> Giant garter snake (<i>Thamnophis gigas</i>) <input type="checkbox"/> Delta mudwort (<i>Limosella subulata</i>) <input type="checkbox"/> Mason’s lilaepsis (<i>Lilaeopsis masonii</i>) <input type="checkbox"/> Slough thistle (<i>Cirsium crassicaule</i>) <input type="checkbox"/> Delta tule pea (<i>Lathyrus jepsonii</i>) <input type="checkbox"/> Suisun thistle (<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i>) <input type="checkbox"/> Suisun marsh aster (<i>Symphyotrichum lentum</i>) <input type="checkbox"/> Soft bird’s beak (<i>Choropyron molle</i> ssp. <i>molle</i>) <input type="checkbox"/> Side flowering skullcap (<i>Scutellaria lateriflora</i>) <input type="checkbox"/> Other special-status species
3	<input checked="" type="checkbox"/> Willow thicket	<input type="checkbox"/> Least Bell’s vireo (<i>Vireo bellii pusillus</i>) <input type="checkbox"/> Western yellow-billed cuckoo (<i>Coccyzus americanus</i>) <input checked="" type="checkbox"/> Yellow-breasted chat (<i>Icteria virens</i>) <input checked="" type="checkbox"/> Swainson’s hawk (<i>Buteo swainsoni</i>) <input type="checkbox"/> San Joaquin kit fox (<i>Vulpes macrotis mutica</i>) <input type="checkbox"/> Riparian woodrat (<i>Neotoma fuscipes riparia</i>) <input type="checkbox"/> Riparian brush rabbit (<i>Sylvilagus bachmani</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley fall/late fall-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley spring-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Sacramento River winter-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Steelhead (<i>Oncorhynchus mykiss</i>) <input checked="" type="checkbox"/> Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>) <input type="checkbox"/> Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
4	<input checked="" type="checkbox"/> Willow riparian scrub or shrub	<input type="checkbox"/> Least Bell’s vireo (<i>Vireo bellii pusillus</i>) <input type="checkbox"/> Western yellow-billed cuckoo (<i>Coccyzus americanus</i>) <input checked="" type="checkbox"/> Yellow-breasted chat (<i>Icteria virens</i>) <input type="checkbox"/> Swainson’s hawk (<i>Buteo swainsoni</i>) <input type="checkbox"/> San Joaquin kit fox (<i>Vulpes macrotis mutica</i>) <input type="checkbox"/> Riparian woodrat (<i>Neotoma fuscipes riparia</i>) <input type="checkbox"/> Riparian brush rabbit (<i>Sylvilagus bachmani</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley fall/late fall-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley spring-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Sacramento River winter-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Steelhead (<i>Oncorhynchus mykiss</i>) <input checked="" type="checkbox"/> Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>) <input type="checkbox"/> Other special-status species
5	<input checked="" type="checkbox"/> Valley foothill riparian	<input type="checkbox"/> Least Bell’s vireo (<i>Vireo bellii pusillus</i>) <input checked="" type="checkbox"/> Western yellow-billed cuckoo (<i>Coccyzus americanus</i>) <input type="checkbox"/> Yellow-breasted chat (<i>Icteria virens</i>) <input checked="" type="checkbox"/> Swainson’s hawk (<i>Buteo swainsoni</i>) <input type="checkbox"/> San Joaquin kit fox (<i>Vulpes macrotis mutica</i>) <input type="checkbox"/> Riparian woodrat (<i>Neotoma fuscipes riparia</i>) <input type="checkbox"/> Riparian brush rabbit (<i>Sylvilagus bachmani</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley fall/late fall-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Central Valley spring-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Chinook salmon (Sacramento River winter-run) (<i>Oncorhynchus tshawytscha</i>) <input checked="" type="checkbox"/> Steelhead (<i>Oncorhynchus mykiss</i>) <input type="checkbox"/> Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>) <input type="checkbox"/> Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
6	<input type="checkbox"/> Vernal pool complex	<input type="checkbox"/> Greater sandhill crane (<i>Grus canadensis</i>) <input type="checkbox"/> California red-legged frog (<i>Rana draytonii</i>) <input type="checkbox"/> California tiger salamander (<i>Ambystoma californiense</i>) <input type="checkbox"/> Giant garter snake (<i>Thamnophis gigas</i>) <input type="checkbox"/> Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>) <input type="checkbox"/> Longhorn fairy shrimp (<i>Branchinecta longiantenna</i>) <input type="checkbox"/> Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>) <input type="checkbox"/> Mid-valley fairy shrimp (<i>Branchinecta mesovallensis</i>) <input type="checkbox"/> Conservancy fairy shrimp (<i>Branchinecta conservatio</i>) <input type="checkbox"/> California linderiella (<i>Linderiella occidentalis</i>) <input type="checkbox"/> Legenere (<i>Legenere limosa</i>) <input type="checkbox"/> Boggs Lake hedge-hyssop (<i>Gratiola heterosepala</i>) <input type="checkbox"/> Dwarf downingia (<i>Downingia pusilla</i>) <input type="checkbox"/> Other special-status species
7	<input type="checkbox"/> Alkali seasonal wetland complex	<input type="checkbox"/> Greater sandhill crane (<i>Grus canadensis</i>) <input type="checkbox"/> California red-legged frog (<i>Rana draytonii</i>) <input type="checkbox"/> California tiger salamander (<i>Ambystoma californiense</i>) <input type="checkbox"/> Giant garter snake (<i>Thamnophis gigas</i>) <input type="checkbox"/> Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>) <input type="checkbox"/> Longhorn fairy shrimp (<i>Branchinecta longiantenna</i>) <input type="checkbox"/> Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>) <input type="checkbox"/> Mid-valley fairy shrimp (<i>Branchinecta mesovallensis</i>) <input type="checkbox"/> Conservancy fairy shrimp (<i>Branchinecta conservatio</i>) <input type="checkbox"/> California linderiella (<i>Linderiella occidentalis</i>) <input type="checkbox"/> Legenere (<i>Legenere limosa</i>) <input type="checkbox"/> Boggs Lake hedge-hyssop (<i>Gratiola heterosepala</i>) <input type="checkbox"/> Dwarf downingia (<i>Downingia pusilla</i>) <input type="checkbox"/> Other special-status species
8	<input type="checkbox"/> Wet meadow	<input type="checkbox"/> Carquinez goldenbush (<i>Isocoma arguta</i>) <input type="checkbox"/> Alkali milkvetch (<i>Astragalus tener</i>) <input type="checkbox"/> Heckard's peppergrass (<i>Lepidium latipes</i> var. <i>heckardii</i>) <input type="checkbox"/> Brittsescale (<i>Atriplex depressa</i>) <input type="checkbox"/> Heartscale (<i>Atriplex cordulata</i> var. <i>cordulata</i>) <input type="checkbox"/> Delta button celery (<i>Eryngium racemosum</i>) <input type="checkbox"/> San Joaquin spearscale (<i>Atriplex joaquiniana</i>) <input type="checkbox"/> Other special-status species

Table 1-5. Priority Attribute 5 – Contributing to the Recovery of Special-Status Species Selections (contd.)

Row Number	Field 1. Ecosystem Type	Field 2. Special-Status Species
9	<input type="checkbox"/> Stabilized interior dune vegetation	<input type="checkbox"/> Lange’s metalmark butterfly (<i>Apodemia mormo langei</i>) <input type="checkbox"/> Antioch Dunes evening primrose (<i>Oenothera deltoides howellii</i>) <input type="checkbox"/> Contra Costa wallflower (<i>Erysimum capitatum</i>) <input type="checkbox"/> Other special-status species
10	<input type="checkbox"/> Oak woodland	<input type="checkbox"/> Swainson’s hawk (<i>Buteo swainsonii</i>) <input type="checkbox"/> California red-legged frog (<i>Rana draytonii</i>) <input type="checkbox"/> California tiger salamander (<i>Ambystoma californiense</i>) <input type="checkbox"/> Western pond turtle (<i>Actinemys marmorata</i>) <input type="checkbox"/> Other special-status species
11	<input checked="" type="checkbox"/> Grassland	<input type="checkbox"/> Greater sandhill crane (<i>Grus canadensis</i>) <input type="checkbox"/> White-tailed kite (<i>Elanus leucurus</i>) <input type="checkbox"/> Yellow-breasted chat (<i>Icteria virens</i>) <input checked="" type="checkbox"/> Swainson’s hawk (<i>Buteo swainsonii</i>) <input type="checkbox"/> Western burrowing owl (<i>Athene cunicularia</i>) <input type="checkbox"/> California red-legged frog (<i>Rana draytonii</i>) <input type="checkbox"/> California tiger salamander (<i>Ambystoma californiense</i>) <input checked="" type="checkbox"/> Western pond turtle (<i>Actinemys marmorata</i>) <input checked="" type="checkbox"/> Giant garter snake (<i>Thamnophis gigas</i>) <input type="checkbox"/> Other special-status species

1.5.3 In **Table 1-5** above, each row in **Field 1** lists ecosystem type(s), and the corresponding row in Field 2 lists the special-status species for which a covered action could contribute to their recovery.

Based on the selection(s) made in **Field 2**, would the covered action contribute to the recovery of special-status species?

- Yes
 No (continue to Section 1.6)

1.5.4 If the answer to **Section 1.5.3** is “Yes,” describe how the covered action would contribute to the recovery of the special-status species corresponding to the selections in **Table 1-5** above, and attach supporting documentation. If the selection(s) in Table 1-5 include “Other,” identify and describe those special-status species in the area provided below.

The proposed action would contribute to recovery actions for Central Valley spring-run and Sacramento River winter-run chinook salmon and Central Valley steelhead by: 1) restoring, improving, and maintaining salmonid rearing and migratory habitats in the Delta and Yolo Bypass to improve juvenile salmonid survival and promote population diversity; and 2) restoring floodplain habitat.

Restoration of tidal freshwater wetlands on the site would support recovery objectives for giant garter snake by restoring and conserving Central Valley wetland ecosystems that function to support giant garter snake. The proposed action will also create upland refugia and basking areas for giant garter snakes on refugia islands established within the floodplain riparian habitat and along a new habitat berm that will border the restoration site.

The proposed action would also establish and preserve aquatic habitat for western pond turtle (emergent marsh), nesting habitat for Swainson’s hawk and other bird species (riparian trees and shrubs) and stop-over habitat (riparian) for western yellow billed cuckoo migrating to known breeding areas upstream on the Sacramento River.

Ecosystem Restoration Tier

1.6.1 **Field 1** of **Table 1-6.1**, below, lists Priority Attributes 1 through 5. The corresponding row in **Field 2** of **Table 1-6.1** lists the selection in this **Appendix 3A** made in Sections 1.1 through 1.5, above, on whether the covered action would have the applicable Priority Attribute.

Complete **Field 3** of **Table 1-6.1**, by copying the responses from the corresponding sections in Sections 1.1. through 1.5 of this **Appendix 3A** form, as indicated in **Field 2**.

Table 1-6.1. Summary of Responses

Row Number	Field 1. Priority Attribute	Field 2. Section Number	Field 3. Response to Section
1	Restoring Hydrological, Geomorphic, and Biological Processes	1.1.3	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	Being Large-Scale	1.2.3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3	Improving Connectivity	1.3.2	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4	Increasing Native Vegetation	1.4.4	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	Contributing to the Recovery of Special-Status Species	1.5.3	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1.6.2 Add the number of “Yes” responses in **Table 1-6.1** Field 3, and then select the corresponding number in **Field 1** of **Table 1-6.2**, below. The corresponding value in **Field 2** of **Table 1-6.2** is the covered action’s ecosystem restoration tier.

Table 1-6.2. Calculated Ecosystem Restoration Tier

Row Number	Field 1. Number of “Yes” Responses in Table 1-6.1, Field 3, Rows 1 through 5	Field 2. Ecosystem Restoration Tier
1	<input type="checkbox"/> 1	<input type="checkbox"/> Tier 5
2	<input type="checkbox"/> 2	<input type="checkbox"/> Tier 4
3	<input type="checkbox"/> 3	<input type="checkbox"/> Tier 3
4	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> Tier 2
5	<input type="checkbox"/> 5	<input type="checkbox"/> Tier 1

Section 2. Social Benefits and Delta as Place

Social Benefits

Appendix 3A, Section 2, Subsections 2.1 through 2.4 (Social Benefits) require the identification of the social benefits that would be provided by the covered action, and the disclosure of supporting information, in each of the following four categories:

- 2.1 Cultural Benefits
- 2.2 Recreational Benefits
- 2.3 Agricultural Benefits
- 2.4 Natural Resource Benefits

Cultural Benefits

- 2.1.1 In **Field 1** of **Table 2-1** below, select the types of cultural benefits that the covered action would provide. Select all that apply.
- 2.1.2 In **Field 2** of **Table 2-1** below, select the specific cultural benefits that the covered action would provide. Select all that apply.

Table 2-1. Cultural Benefits Selections

Row Number	Field 1. Types of Cultural Benefits	Field 2. Specific Cultural Benefits
1	<input checked="" type="checkbox"/> Ecocultural resources	<input checked="" type="checkbox"/> Supports long-term resilience of tribal ecocultural resource species <input checked="" type="checkbox"/> Engages tribes in a way that respects sovereignty and protects or enhances access to natural resources <input type="checkbox"/> Provides education on ecocultural resources through interpretive signage, facilities, or funding for interpretive personnel/events <input type="checkbox"/> Supports responsible ecotourism, agritourism, sportfishing, hunting, or other cultural activities <input type="checkbox"/> Involves the public in stewardship of ecocultural resources during project implementation or monitoring
2	<input checked="" type="checkbox"/> Human health and well-being	<input checked="" type="checkbox"/> Improves air quality, water quality, or environmental quality in a manner that is expected to protect or enhance human health and well-being <input type="checkbox"/> Provides public access to lands for exercise, relaxation, and/or appreciation of natural beauty
3	<input type="checkbox"/> Environmental justice	<input type="checkbox"/> Redresses existing environmental inequities by targeting action and resources for disadvantaged and disproportionately impacted communities <input type="checkbox"/> Engaged and co-planned with disadvantaged communities <input type="checkbox"/> Improves access for safe subsistence fishing <input type="checkbox"/> Improves environmental conditions (e.g., air quality or water quality) for at-risk groups

2.1.3 Based on the types of cultural benefits selected in **Field 1** of **Table 2-1**, and the specific cultural benefits selected in **Field 2**, would implementation of the covered action result in cultural benefits?

Yes

No

2.1.4 If the answer to **Section 2.1.3** is “Yes,” describe how the covered action would provide the types of cultural benefits and specific cultural benefits selected in **Table 2-1**, and then attach supporting documentation. Cite any relevant literature or consultations with tribes, local communities, or experts.

The proposed action would create additional juvenile rearing habitat for salmonids, which will support long-term resilience of fish species that are a tribal ecocultural resource. The proposed action was developed in coordination with local Tribes to identify co-steward opportunities on the property. The Tribes will have long-term access to the property for cultural use, including ceremony, education, and plant collection.

2.1.5 If the answer to **Section 2.1.3** is “No,” but the proposed action would provide cultural benefits not listed in the table above, describe the cultural benefits that the action would provide, and attach supporting documentation. Cite any relevant literature or consultations with tribes, local communities, or experts.

Recreational Benefits

2.2.1 In **Field 1** of **Table 2-2** below, select the specific recreational benefits that the covered action would provide. Select all that apply.

Table 2-2. Recreational Benefits Selections

Row Number	Field 1. Specific Recreational Benefits
1	<input type="checkbox"/> Provides opportunities for land-based recreational activities such as hiking and wildlife observation
2	<input type="checkbox"/> Provides opportunities for water-based recreational activities such as nonmotorized and motorized boating
3	<input type="checkbox"/> Connects users to the Great California Delta Trail System
4	<input type="checkbox"/> Includes public facilities such as restrooms
5	<input checked="" type="checkbox"/> Contributes to species populations in a way that benefits recreational fishing (e.g., salmon, sturgeon), nature study, and wildlife observation (e.g., birdwatching)
6	<input type="checkbox"/> Enhances public access to recreation (e.g., provides parking) while mitigating traffic impacts on neighboring agricultural and private lands

2.2.2 Based on the specific recreational benefits selected in **Field 1** of **Table 2-2**, would implementation of the covered action result in recreational benefits?

Yes

No

2.2.3 If the answer to **Section 2.2.2** is “Yes,” describe how the covered action would provide the specific recreational benefits selected in **Table 2-2** and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

The proposed action will restore important rearing habitat for salmonid species along Cache Slough/Sacramento River to aid in the recovery of Chinook salmon and steelhead in the Delta. The Project will also contribute to population benefits for other fish species in the Delta that benefit recreation fish in Cache Slough and the Sacramento River.

2.2.4 If the answer to **Section 2.2.2** is “No,” but the proposed action would provide recreational benefits not listed in the table above, describe the recreational benefits that the proposed action would provide, and attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Agricultural Benefits

2.3.1 In **Field 1** of **Table 2-3** below, select the specific agricultural benefits that the covered action would provide. Select all that apply.

Table 2-3. Agricultural Benefits Selections

Row Number	Field 1. Specific Agricultural Benefits
1	<input checked="" type="checkbox"/> Protects or enhances ecological systems supportive of agriculture such as supporting pollination or natural pest control
2	<input type="checkbox"/> Conserves or improves soils in a manner that benefits agricultural land use
3	<input type="checkbox"/> Restores natural processes and communities that would reduce flood risk to neighboring agricultural lands
4	<input type="checkbox"/> Improves local water quality
5	<input type="checkbox"/> Recharges groundwater, increasing the water supply available in an aquifer, in locations that do not have high water tables
6	<input type="checkbox"/> Prevents increases in subsurface water levels, in locations with high water tables that interfere with agricultural activities

2.3.2 Based on the specific agricultural benefits selected in **Field 1** of **Table 2-3**, would implementation of the proposed action result in agricultural benefits?

- Yes
- No

2.3.3 If the answer to **Section 2.3.2** is “Yes,” describe how the covered action would provide the specific agricultural benefits selected in **Table 2-3**, and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

The proposed action is located within a largely agricultural setting with limited riparian habitat. The proposed action will restore approximately 43 acres of floodplain riparian habitat, which, once mature, will provide roosting sites for native bat species. Bats provide a number of ecosystem services in agricultural areas, including the predation of night-flying insects.

2.3.4 If the answer to **Section 2.3.2** is “No,” but the covered action would provide agricultural benefits not listed in the table above, describe the agricultural benefits that the action would provide, and attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Natural Resource Benefits

2.4.1 In **Field 1** of **Table 2-4** below, select the specific natural resource benefits that the covered action would provide. Select all that apply.

Table 2-4. Natural Resource Benefits Selections

Row Number	Field 1. Specific Natural Resource Benefits
1	<input type="checkbox"/> Reduces flood risk by reducing peak water elevations
2	<input type="checkbox"/> Reduces flood risk by reducing operations and maintenance requirements on flood control works
3	<input type="checkbox"/> Reduces flood risk by reversing subsidence
4	<input type="checkbox"/> Reduces carbon emissions by reversing subsidence
5	<input checked="" type="checkbox"/> Mitigates climate change by sequestering carbon or other greenhouse gases
6	<input type="checkbox"/> Reduces heat island effects
7	<input checked="" type="checkbox"/> Increases native species habitat
8	<input checked="" type="checkbox"/> Enhances biodiversity of native species

2.4.2 Based on the specific natural resource benefits selected in **Field 1** of **Table 2-4**, would implementation of the covered action result in natural resource benefits?

- Yes
- No

2.4.3 If the answer to **Section 2.4.2** is “Yes,” describe how the covered action would provide the specific natural resource benefits selected in **Table 2-4**, and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Tidal marshes in the Sacramento-San Joaquin Delta are recognized as important ecosystems that remove carbon from the atmosphere and provide critical habitat and food resources for a diversity of Delta species. The proposed action will restore approximately 300 acres of tidal freshwater wetland and floodplain riparian habitat that will provide a diversity of habitats for local and migrating species.

2.4.4 If the answer to **Section 2.4.2** is “No,” but the proposed action would provide natural resource benefits not listed in the table above, describe the natural resource benefits that the action would provide, and attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

Delta as Place

2.4.5 If the answers to **Section 2.1.3**, **Section 2.2.2**, **Section 2.3.2**, and **Section 2.4.2** are “No,” explain how the proposed action would protect and enhance the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place (California Water Code section 85054), and then attach supporting documentation. Cite any relevant literature or consultations with local communities or experts.

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Appendix 4A. Protecting, Restoring, and Enhancing Habitats at Appropriate Elevations (23 CCR 5006)

A certification of consistency for any covered action that is subject to Section 5006 of Title 23 of the California Code of Regulations must include a completed Appendix 4A as well as the documentation and information required by Appendix 4A.

1.1.1 In **Field 1** of **Table 1-1** below, select the elevation band in which the project is located. If the project is located in more than one elevation band, select all applicable elevation bands.

1.1.2 In **Field 2** of **Table 1-1** below, select the type of conservation action that would be implemented by the project or a portion of the project. If more than one type of conservation action would be implemented by the project, or a portion of the project, select all applicable conservation actions.

Table 1-1. Elevation Bands and Conservation Actions

Row Number	Field 1. Elevation Bands	Field 2. Conservation Actions
1	<input type="checkbox"/> Upland elevation band	Protection, restoration, or enhancement of: <input type="checkbox"/> Oak woodland <input type="checkbox"/> Grassland <input type="checkbox"/> Seasonal wetlands <input type="checkbox"/> Upland and lowland river floodplain
2	<input type="checkbox"/> Floodplain elevation band	Protection, restoration, or enhancement of: <input type="checkbox"/> Upland and lowland river floodplain <input type="checkbox"/> Nontidal wetlands <input type="checkbox"/> Annual flooding regimes <input type="checkbox"/> Geomorphic processes
3	<input checked="" type="checkbox"/> Sea level rise accommodation band	Protection, restoration, or enhancement of: <input type="checkbox"/> Oak woodland <input checked="" type="checkbox"/> Grassland <input type="checkbox"/> Seasonal wetlands <input checked="" type="checkbox"/> Upland and lowland river floodplain <input type="checkbox"/> Annual flooding regimes <input checked="" type="checkbox"/> Geomorphic processes <input checked="" type="checkbox"/> Emergent wetlands <input checked="" type="checkbox"/> Migration space

Table 1-1. Elevation Bands and Conservation Actions (contd.)

Row Number	Field 1. Elevation Bands	Field 2. Conservation Actions
4	<input checked="" type="checkbox"/> Intertidal elevation band	Protection, restoration, or enhancement of: <input checked="" type="checkbox"/> Tidal wetlands <input checked="" type="checkbox"/> Tidal inundation regimes <input checked="" type="checkbox"/> Migration space
5	<input type="checkbox"/> Shallow subtidal elevation band	<input type="checkbox"/> Subsidence halting ¹ <input type="checkbox"/> Subsidence reversal ¹
6	<input type="checkbox"/> Deep subtidal elevation band	<input type="checkbox"/> Subsidence halting ¹ <input type="checkbox"/> Subsidence reversal ¹ <input type="checkbox"/> Agricultural practices that support wildlife

Note:

¹ This is an outcome-based activity. Please see the regulatory definitions of *subsidence halting* and *subsidence reversal* in 23 CCR 5001. If this activity is selected, explain in Section 1.1.4 how the covered action would result in this outcome.

1.1.3 In **Table 1-1**, above, each row in **Field 1** lists the elevation band that is appropriate for the corresponding conservation actions listed in the same row in **Field 2**.

Based on the selected elevation band(s) in **Field 1** and the selected corresponding appropriate conservation action(s) in **Field 2**, is (are) the proposed conservation action(s) selected in **Field 2** appropriate for the selected elevation band(s) selected in **Field 1**? Do not select “Yes” if there is no selection in **Field 2** corresponding to each selected elevation band in **Field 1**.

Yes

No

1.1.4 If the answer to **Section 1.1.3** is “Yes,” provide supporting evidence to demonstrate that the selections are accurate and describe such evidence below.

The proposed action is located entirely within the sea level rise accommodation band with some areas also residing within the intertidal elevation band (-2 to 6.5 ft NAVD 88). Proposed conservation actions within these areas include restoring tidal inundation regimes by excavating tidal channels onsite and constructing a sufficiently sized bridge to allow full tidal excursion, recontouring the site to support restoration of tidal wetlands within the intertidal elevation band, and construction of an elevated habitat berm and habitat islands within the riparian floodplain above the 2 year flood stage. Re-establishment of tidal freshwater wetlands will aid in restoring geomorphic processes that promote accretion of organic material that promote sea level rise (SLR) resiliency. The proposed action includes 43 acres of habitat above the mean higher high water (MHHW) to allow for habitat migration resulting from SLR.

1.1.5 If the answer to **Section 1.1.3** is “No,” based on best available science, provide a rationale for the inconsistency and explain how the conservation action is nonetheless at an appropriate elevation, and therefore consistent with this policy.