Appendix 3A. Disclosing Contributions to Restoring Ecosystem Function and Providing Social Benefits

Section 1. Priority Attributes and Ecosystem Tier

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	☐ Tidal wetland	☐ Full tidal action and complex variable patterns of tidal inundation ☐ Sediment delivery, scour, and accretion ☐ Channel formation ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and peat formation ☐ Native vegetation recruitment, growth and succession, primary production, and higher trophic-level interactions
2	☐ Nontidal wetland	☐ Temporary or permanent inundation through natural hydrologic connections to surface and/or groundwater, but does not include managed wetlands ☐ Hydric soil development through organic matter accumulation and/or terrestrial sediment delivery ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and peat formation ☐ Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
3	☐ Willow thicket	☐ Temporary or seasonal floodplain inundation ☐ Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography ☐ Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils ☐ Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
4	☐ Willow riparian scrub or shrub	☐ Temporary or seasonal floodplain inundation ☐ Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography ☐ Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils ☐ 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	☐ Valley foothill riparian	☐ Temporary or seasonal floodplain inundation ☐ Floodplain sediment delivery, scour, and accretion which results in complex floodplain micro-topography ☐ Unrestrained (natural) stream channels which allow cut-bank and point-bar formation, meander migration, and the development of shaded riverine aquatic habitats ☐ Delivery of organic and nonorganic compounds which support nutrient cycling, primary productivity, plant growth, and floodplain soils ☐ Native vegetation recruitment, growth, succession, primary production, and higher trophic-level interactions
6	☐ Vernal pool complex	☐ Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water ☐ Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence ☐ Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development ☐ Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates
7	☐ Alkali seasonal wetland complex	☐ Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water ☐ Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence ☐ Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development ☐ 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	☐ Wet meadow	☐ Water inputs from precipitation, runoff, groundwater or subsurface flow that cause temporary inundation and saturation with water ☐ Morphology (surface area, volume, depth, depth to hardpan) which supports hydrology, chemical processes, and native species colonization and persistence ☐ Hydrology and hydrogeomorphic setting that supports appropriate wetland soil development ☐ Native vegetation recruitment, growth, succession, primary production, higher trophic-level interactions, and appropriate pool substrates
9	☐ Stabilized interior dune vegetation	☐ Readily draining substrates ☐ Wind-driven geomorphic processes ☐ Movement, scour, and deposition which supports recruitment, growth, and succession of native dune scrub vegetation communities
10	☐ Oak woodland	☐ Fire disturbance or fire disturbance analogue (e.g., grazing) which maintains vegetation dynamics conducive to oak recruitment and other vegetation dynamics
11	☐ Grassland	☐ 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.

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	☐ Tidal wetland	☐ > or = 500 acres (large-scale) ☐ < 500 acres
2	☐ Nontidal wetland (including managed wetland)	☐ > or = 500 acres (large-scale) ☐ < 500 acres
3	☐ Willow thicket	☐ > or = 200 acres (large-scale) ☐ < 200 acres ☐ Floodplain ratio[1] > or = 6 (large-scale) *refer to table notes for methodology* ☐ Floodplain ratio[1] < 6
4	☐ Willow riparian scrub or shrub	☐ > or = 200 acres (large-scale) ☐ < 200 acres ☐ Floodplain ratio[1] > or = 6 (large-scale) *refer to table notes for methodology* ☐ Floodplain ratio[1] < 6
5	☐ Valley foothill riparian	☐ > or = 200 acres (large-scale) ☐ < 200 acres ☐ Floodplain ratio[1] > or = 6 (large-scale) *refer to table notes for methodology* ☐ Floodplain ratio[1] < 6
6	☐ Vernal pool complex	☐ > or = 40 acres (large-scale) ☐ < 40 acres
7	☐ Alkali seasonal wetland complex	☐ > or = 40 acres (large-scale) ☐ < 40 acres
8	☐ Wet meadow	☐ > or = 40 acres (large-scale) ☐ < 40 acres
9	☐ Stabilized interior dune vegetation	☐ > or = 1.5 acres (large-scale) ☐ < 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	☐ Oak woodland	☐ > or = 40 acres (large-scale) ☐ < 40 acres
11	☐ Grassland	☐ > or = 40 acres (large-scale) ☐ < 40 acres

Notes:

[1] Method to calculate the floodplain ratio

   a. Existing bankfull channel width (use the mean of at least six cross sections): _____ 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	☐ Creates or reestablishes hydraulic and hydrologic connections to marsh or floodplain ecosystems
2	☐ Reduces distance between patches of similar ecosystem types
3	☐ Reduces distance between patches of different ecosystem types used by species for refuge or life history needs
4	☐ Protects, restores, or enhances wetland and riparian transgression/migration space
5	☐ 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.

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	☐ Tidal wetland	☐ *Schoenoplectus* (*acutus, californicus*) Alliance (52.128.00) ☐ *Typha* (*domingensis, latifolia*) Alliance (52.050.00) ☐ *Juncus effuses* (soft rush marshes) Alliance (45.561.00) ☐ *Juncus articus* (Baltic and Mexican rush marshes) Alliance (45.562.00) ☐ *Eleocharis macrostachya* Alliance (45.230.00) ☐ *Sarcocornia pacifica* Alliance (52.215.00) ☐ *Distichlis spicata* Alliance (41.200.00) ☐ Other
2	☐ Nontidal wetland (including managed wetland)	☐ *Schoenoplectus* (*acutus, californicus*) Alliance (52.128.00) ☐ *Typha* (*domingensis, latifolia*) Alliance (52.050.00) ☐ *Juncus effuses* (soft rush marshes) Alliance (45.561.00) ☐ *Juncus articus* (Baltic and Mexican rush marshes) Alliance (45.562.00) ☐ *Eleocharis macrostachya* Alliance (45.230.00) ☐ Other
3	☐ Willow thicket	☐ *Salix gooddingii* Alliance (61.211.00) ☐ *Salix laevigata* Alliance (61.206.00) ☐ *Salix lasiolepus* Alliance (61.201.00) ☐ *Salix lucida* Alliance (61.204.00) ☐ *Salix exigua* Alliance (61.209.00) ☐ *Cornus sericea* (red osier thickets) Alliance (80.100.00) ☐ *Rosa californica* Alliance (63.907.00) ☐ *Acer negundo* (box-elder forest) Alliance (61.440.00) ☐ *Sambucus nigra* (blue elderberry stands) Alliance (63.410.01) ☐ 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	☐ Willow riparian scrub or shrub	☐ *Salix gooddingii* Alliance (61.211.00) ☐ *Salix laevigata* Alliance (61.206.00) ☐ *Salix lasiolepus* Alliance (61.201.00) ☐ *Salix lucida* Alliance (61.204.00) ☐ *Salix exigua* Alliance (61.209.00) ☐ *Cornus sericea* (red osier thickets) Alliance (80.100.00) ☐ *Rosa californica* Alliance (63.907.00) ☐ *Acer negundo* (box-elder forest) Alliance (61.440.00) ☐ *Cephalanthus occidentalis* (button willow thickets) Alliance (63.300.00) ☐ Other
5	☐ Valley foothill riparian	☐ *Quercus agrifolia* Alliance (71.060.00) ☐ *Quercus lobata* Alliance (71.040.00) ☐ *Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni)* Alliance (71.100.00) ☐ *Quercus wislizeni* Alliance (71.080.00) ☐ *Juglans hindsii* and hybrids special stands Alliance (61.810.00) ☐ *Salix gooddingii* Alliance (61.211.00) ☐ *Salix laevigata* Alliance (61.205.00) ☐ *Salix lasiolepis* Alliance (61.201.00) ☐ *Salix lucida* Alliance (61.204.00) ☐ *Salix exigua* Alliance (61.209.00) ☐ *Acer negundo* (box-elder forest) Alliance (61.440.00) ☐ *Cornus sericea* (red osier thickets) Alliance (80.100.00) ☐ *Rosa californica* Alliance (63.907.00) ☐ *Platanus racemosa* Alliance (61.310.00) ☐ *Populus fremontii* Alliance (61.130.00) ☐ *Cephalanthus occidentalis* (button willow thickets) Alliance (63.300.00) ☐ Other
6	☐ Vernal pool complex	☐ *Lasthenia fremontii – Downingia bicornuta* (Fremont's goldfields – *Downingia* vernal pools) Alliance (42.007.00) ☐ *Eryngium aristulatum* Alliance (42.004.00) ☐ 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	☐ Alkali seasonal wetland complex	☐ *Cressa truxillensis – Distichlis spicata* (alkali weed - saltgrass playas and sinks) Alliance (46.100.00) ☐ *Lasthenia fremontii – Distichlis spicata* (Fremont's goldfields – saltgrass alkaline vernal pools) Alliance (44.119.00) ☐ *Allenrolfea occidentalis* (iodine bush scrub) Alliance (36.120.00) ☐ *Sporobolus airoides* (alkali sacaton grassland) Alliance (52.060.00) ☐ *Leymus cinereus – Leymus triticoides* (creeping rye grass turfs) Alliance (41.080.00) ☐ *Frankenia salina* (alkali heath marsh) Alliance (52.500.00) ☐ Other
8	☐ Wet meadow	☐ *Lasthenia californica – Plantago erecta – Vulpia microstachys* (California goldfields – dwarf plantain – six-weeks fescue flower fields) Alliance (44.108.00) ☐ *Leymus cinereus – Leymus triticoides* (creeping rye grass turfs) Alliance (41.080.00) ☐ *Ambrosia psilostachya* (western ragweed meadows) Alliance (33.065.00) ☐ *Lotus purshianus* (Spanish clover fields) Provisional Herbaceous Alliance (52.230.00) ☐ *Juncus effusus* (soft rush marshes) Alliance (45.561.00) ☐ *Juncus articus* (Baltic and Mexican rush marshes) Alliance (45.562.00) ☐ Other
9	☐ Stabilized interior dune vegetation	☐ *Lupinus albifrons* (silver bush lupine scrub) Alliance (32.081.00) ☐ *Baccharis pilularis* (coyote brush scrub) Alliance (32.060.00) ☐ *Lotus scoparius* (deer weed scrub) Alliance (52.240.00) ☐ Other
10	☐ Oak woodland	☐ *Quercus agrifolia Alliance (71.060.00)* ☐ *Quercus lobata Alliance (71.040.00)* ☐ *Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni) Alliance (71.100.00)* ☐ *Quercus wislizeni Alliance (71.080.00)* ☐ *Quercus douglasii Alliance (71.020.00)* ☐ 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	☐ Grassland	☐ *Lasthenia californica – Plantago erecta – Vulpia microstachys* (California goldfields – Dwarf plantain –six-weeks fescue flower fields) Alliance (44.108.00) ☐ *Leymus cinereus – Leymus triticoides* (creeping rye grass turfs) Alliance (41.080.00) ☐ *Nassella pulchra* Alliance (41.150.00) ☐ *Eschscholzia californica* (California poppy fields) Alliance (43.200.00) ☐ *Amsinckia* (fiddleneck fields) Alliance (42.110.00) ☐ *Plagiobothrys nothofulvus* (popcorn flower fields) Alliance (43.300.00) ☐ 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.

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	☐ California least tern (*Sterna antillarum browni*) ☐ Ridgway's rail (*Rallus obsoletus*) ☐ California black rail (*Laterallus jamaicensis coturniculus*) ☐ Suisun song sparrow (*Melospiza melodia*) ☐ Tricolored blackbird (*Agelaius tricolor*) ☐ White-tailed kite (*Elanus leucurus*) ☐ Salt marsh harvest mouse (*Reithrodontomys raviventris*) ☐ Suisun shrew (*Sorex ornatus sinuosus*) ☐ California red-legged frog (*Rana draytonii*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Green sturgeon (*Acipenser medirostris*) ☐ Delta smelt (*Hypomesus transpacificus*) ☐ Longfin smelt (*Spirinchus thaleichthys*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Delta mudwort (*Limosella subulata*) ☐ Mason's lilaeopsis (*Lilaeopsis masonii*) ☐ Slough thistle (*Cirsium crassicaule*) ☐ Delta tule pea (*Lathyrus jepsonii*) ☐ Suisun thistle (*Cirsium hydrophilum* var. *hydrophilum*) ☐ Suisun marsh aster (*Symphyotrichum lentum*) ☐ Soft bird's beak (*Choropyron molle* ssp. *molle*) ☐ Side flowering skullcap (*Scutellaria lateriflora*) ☐ 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	☐ Nontidal wetland (including managed wetland)	☐ California least tern (*Sterna antillarum browni*) ☐ Ridgway's rail (*Rallus obsoletus*) ☐ California black rail (*Laterallus jamaicensis coturniculus*) ☐ Suisun song sparrow (*Melospiza melodia*) ☐ Tricolored blackbird (*Agelaius tricolor*) ☐ White-tailed kite (*Elanus leucurus*) ☐ Salt marsh harvest mouse (*Reithrodontomys raviventris*) ☐ Suisun shrew (*Sorex ornatus sinuosus*) ☐ California red-legged frog (*Rana draytonii*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Delta mudwort (*Limosella subulata*) ☐ Mason's lilaeopsis (*Lilaeopsis masonii*) ☐ Slough thistle (*Cirsium crassicaule*) ☐ Delta tule pea (*Lathyrus jepsonii*) ☐ Suisun thistle (*Cirsium hydrophilum* var. *hydrophilum*) ☐ Suisun marsh aster (*Symphyotrichum lentum*) ☐ Soft bird's beak (*Choropyron molle* ssp. *molle*) ☐ Side flowering skullcap (*Scutellaria lateriflora*) ☐ Other special-status species
3	☐ Willow thicket	☐ Least Bell's vireo (*Vireo bellii pusillus*) ☐ Western yellow-billed cuckoo (*Coccyzus americanus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsoni*) ☐ San Joaquin kit fox (*Vulpes macrotis mutica*) ☐ Riparian woodrat (Neotoma fuscipes riparia) ☐ Riparian brush rabbit (*Sylvilagus bachmani*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) ☐ 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	☐ Willow riparian scrub or shrub	☐ Least Bell's vireo (*Vireo bellii pusillus*) ☐ Western yellow-billed cuckoo (*Coccyzus americanus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsoni*) ☐ San Joaquin kit fox (*Vulpes macrotis mutica*) ☐ Riparian woodrat (*Neotoma fuscipes riparia*) ☐ Riparian brush rabbit (*Sylvilagus bachmani*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) ☐ Other special-status species
5	☐ Valley foothill riparian	☐ Least Bell's vireo (*Vireo bellii pusillus*) ☐ Western yellow-billed cuckoo (*Coccyzus americanus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsoni*) ☐ San Joaquin kit fox (*Vulpes macrotis mutica*) ☐ Riparian woodrat (*Neotoma* fuscipes riparia) ☐ Riparian brush rabbit (*Sylvilagus bachmani*) ☐ Chinook salmon (Central Valley fall/late fall-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Central Valley spring-run) (*Oncorhynchus tshawytscha*) ☐ Chinook salmon (Sacramento River winter-run) (*Oncorhynchus tshawytscha*) ☐ Steelhead (*Oncorhynchus mykiss*) ☐ Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) ☐ 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	☐ Vernal pool complex	☐ Greater sandhill crane (*Grus canadensis*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma californiense*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Vernal pool tadpole shrimp (*Lepidurus packardi*) ☐ Longhorn fairy shrimp (*Branchinecta longiantenna*) ☐ Vernal pool fairy shrimp (*Branchinecta lynchi*) ☐ Mid-valley fairy shrimp (*Branchinecta mesovallensis*) ☐ Conservancy fairy shrimp (*Branchinecta conservatio*) ☐ California linderiella (*Linderiella occidentalis*) ☐ Legenere (*Legenere limosa*) ☐ Boggs Lake hedge-hyssop (*Gratiola heterosepala*) ☐ Dwarf downingia (*Downingia pusilla*) ☐ Other special-status species
7	☐ Alkali seasonal wetland complex	☐ Greater sandhill crane (*Grus canadensis*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma californiense*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ Vernal pool tadpole shrimp (*Lepidurus packardi*) ☐ Longhorn fairy shrimp (*Branchinecta longiantenna*) ☐ Vernal pool fairy shrimp (*Branchinecta lynchi*) ☐ Mid-valley fairy shrimp (*Branchinecta mesovallensis*) ☐ Conservancy fairy shrimp (*Branchinecta conservatio*) ☐ California linderiella (*Linderiella occidentalis*) ☐ Legenere (*Legenere limosa*) ☐ Boggs Lake hedge-hyssop (*Gratiola heterosepala*) ☐ Dwarf downingia (*Downingia pusilla*) ☐ Other special-status species
8	☐ Wet meadow	☐ Carquinez goldenbush (*Isocoma arguta*) ☐ Alkali milkvetch (*Astragalus tener*) ☐ Heckard's peppergrass (*Lepidium latipes* var. *heckardii*) ☐ Brittlescale (*Atriplex depressa*) ☐ Heartscale (*Atriplex cordulata* var. *cordulata*) ☐ Delta button celery (*Eryngium racemosum*) ☐ San Joaquin spearscale (*Atriplex joaquiniana*) ☐ 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	☐ Stabilized interior dune vegetation	☐ Lange's metalmark butterfly (*Apodemia mormo langei*) ☐ Antioch Dunes evening primrose (*Oenothera deltoides howellii*) ☐ Contra Costa wallflower (*Erysimum capitatum*) ☐ Other special-status species
10	☐ Oak woodland	☐ Swainson's hawk (*Buteo swainsonii*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma califonriense*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Other special-status species
11	☐ Grassland	☐ Greater sandhill crane (*Grus canadensis*) ☐ White-tailed kite (*Elanus leucurus*) ☐ Yellow-breasted chat (*Icteria virens*) ☐ Swainson's hawk (*Buteo swainsonii*) ☐ Western burrowing owl (*Athene cunicularia*) ☐ California red-legged frog (*Rana draytonii*) ☐ California tiger salamander (*Ambystoma californiense*) ☐ Western pond turtle (*Actinemys marmorata*) ☐ Giant garter snake (*Thamnophis gigas*) ☐ 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.

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	☐ Yes ☐ No
2	Being Large-Scale	1.2.3	☐ Yes ☐ No
3	Improving Connectivity	1.3.2	☐ Yes ☐ No
4	Increasing Native Vegetation	1.4.4	☐ Yes ☐ No
5	Contributing to the Recovery of Special-Status Species	1.5.3	☐ Yes ☐ 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	☐ 1	☐ Tier 5
2	☐ 2	☐ Tier 4
3	☐ 3	☐ Tier 3
4	☐ 4	☐ Tier 2
5	☐ 5	☐ 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	☐ Ecocultural resources	☐ Supports long-term resilience of tribal ecocultural resource species ☐ Engages tribes in a way that respects sovereignty and protects or enhances access to natural resources ☐ Provides education on ecocultural resources through interpretive signage, facilities, or funding for interpretive personnel/events ☐ Supports responsible ecotourism, agritourism, sportfishing, hunting, or other cultural activities ☐ Involves the public in stewardship of ecocultural resources during project implementation or monitoring
2	☐ Human health and well-being	☐ Improves air quality, water quality, or environmental quality in a manner that is expected to protect or enhance human health and well-being ☐ Provides public access to lands for exercise, relaxation, and/or appreciation of natural beauty
3	☐ Environmental justice	☐ Redresses existing environmental inequities by targeting action and resources for disadvantaged and disproportionately impacted communities ☐ Engaged and co-planned with disadvantaged communities ☐ Improves access for safe subsistence fishing ☐ 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.

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	☐ Provides opportunities for land-based recreational activities such as hiking and wildlife observation
2	☐ Provides opportunities for water-based recreational activities such as nonmotorized and motorized boating
3	☐ Connects users to the Great California Delta Trail System
4	☐ Includes public facilities such as restrooms
5	☐ Contributes to species populations in a way that benefits recreational fishing (e.g., salmon, sturgeon), nature study, and wildlife observation (e.g., birdwatching)
6	☐ 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.

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	☐ Protects or enhances ecological systems supportive of agriculture such as supporting pollination or natural pest control
2	☐ Conserves or improves soils in a manner that benefits agricultural land use
3	☐ Restores natural processes and communities that would reduce flood risk to neighboring agricultural lands
4	☐ Improves local water quality
5	☐ Recharges groundwater, increasing the water supply available in an aquifer, in locations that do not have high water tables
6	☐ 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.

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	☐ Reduces flood risk by reducing peak water elevations
2	☐ Reduces flood risk by reducing operations and maintenance requirements on flood control works
3	☐ Reduces flood risk by reversing subsidence
4	☐ Reduces carbon emissions by reversing subsidence
5	☐ Mitigates climate change by sequestering carbon or other greenhouse gases
6	☐ Reduces heat island effects
7	☐ Increases native species habitat
8	☐ 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.

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.

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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.

Appendix 4A. Protecting, Restoring, and Enhancing Habitats at Appropriate Elevations

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	☐ Upland elevation band	Protection, restoration, or enhancement of: ☐ Oak woodland ☐ Grassland ☐ Seasonal wetlands ☐ Upland and lowland river floodplain
2	☐ Floodplain elevation band	Protection, restoration, or enhancement of: ☐ Upland and lowland river floodplain ☐ Nontidal wetlands ☐ Annual flooding regimes ☐ Geomorphic processes
3	☐ Sea level rise accommodation band	Protection, restoration, or enhancement of: ☐ Oak woodland ☐ Grassland ☐ Seasonal wetlands ☐ Upland and lowland river floodplain ☐ Annual flooding regimes ☐ Geomorphic processes ☐ Emergent wetlands ☐ Migration space

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

Row Number	Field 1. Elevation Bands	Field 2. Conservation Actions
4	☐ Intertidal elevation band	Protection, restoration, or enhancement of: ☐ Tidal wetlands ☐ Tidal inundation regimes ☐ Migration space
5	☐ Shallow subtidal elevation band	☐ Subsidence halting[1] ☐ Subsidence reversal[1]
6	☐ Deep subtidal elevation band	☐ Subsidence halting[1] ☐ Subsidence reversal[1] ☐ 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.

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.