

4.3.13 Aesthetics and Visual Resources

Impact AES-1: Substantial Alteration in Existing Visual Quality or Character during Construction of Conveyance Facilities

NEPA Effects: The potential under Alternative 4A to create substantial alteration in visual quality or character during construction of conveyance facilities would be identical to those impacts described under Alternative 4 and would constitute an adverse effect on existing visual character because of the long-term nature of construction, combined with the proximity to sensitive receptors, effects on residences and agricultural buildings, removal of vegetation, and changes to topography through grading. The primary features that would affect the existing visual quality and character under Alternative 4A, once the facility has been constructed, would be Intakes 2, 3, and 5, the intermediate forebay and expanded Clifton Court Forebay, landscape effects from spoil/borrow and RTM areas, the operable barrier, and transmission lines. These changes would be most evident in the northern portion of the study area, which would undergo extensive changes from the permanent establishment of large industrial facilities and the supporting infrastructure along and surrounding the segment of the Sacramento River from Clarksburg to north of Courtland where the intakes would be situated. Mitigation Measures AES-1a through AES-1g are available to address visual effects resulting from construction of Alternative 4A water conveyance facilities.

CEQA Conclusion: Construction of Alternative 4A would substantially alter the existing visual quality and character present in the study area in an identical manner as described for Alternative 4. The long-term nature of construction of the intakes, pipeline/tunnel, work areas, spoil/borrow and RTM areas, shaft sites, barge unloading facilities, and operable barrier; presence and visibility of heavy construction equipment; proximity to sensitive receptors; relocation of residences and agricultural buildings; removal of riparian vegetation and other mature vegetation or landscape plantings; earthmoving and grading that result in changes to topography in areas that are predominantly flat; addition of large-scale industrial structures (intakes and related facilities); remaining presence of large-scale borrow/spoil and RTM area landscape effects; and introduction of tall, steel transmission lines would all contribute to this impact. This impact would be significant because of the substantial visual changes that would result from conveyance facility construction. Mitigation Measures AES-1a through AES-1g would partially reduce impacts, but not to a less-than-significant level because not all of the visual changes could be eliminated and permanent changes would be made to the regional landscape. Thus, Alternative 4A would result in significant and unavoidable impacts on the existing visual quality and character in the study area.

Mitigation Measure AES-1a: Locate New Transmission Lines and Access Routes to Minimize the Removal of Trees and Shrubs and Pruning Needed to Accommodate New Transmission Lines and Underground Transmission Lines Where Feasible

Please see Mitigation Measure AES-1a under Impact AES-1 in the discussion of Alternative 4 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

Mitigation Measure AES-1b: Install Visual Barriers between Construction Work Areas and Sensitive Receptors

Please see Mitigation Measure AES-1b under Impact AES-1 in the discussion of Alternative 4 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

1 **Mitigation Measure AES-1c: Develop and Implement a Spoil/Borrow and Reusable Tunnel**
2 **Material Area Management Plan**

3 Please see Mitigation Measure AES-1c under Impact AES-1 in the discussion of Alternative 4 in
4 Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

5 **Mitigation Measure AES-1d: Restore Barge Unloading Facility Sites Once Decommissioned**

6 Please see Mitigation Measure AES-1d under Impact AES-1 in the discussion of Alternative 4 in
7 Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

8 **Mitigation Measure AES-1e: Apply Aesthetic Design Treatments to All Structures to the**
9 **Extent Feasible**

10 Please see Mitigation Measure AES-1e under Impact AES-1 in the discussion of Alternative 4 in
11 Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

12 **Mitigation Measure AES-1f: Locate Concrete Batch Plants and Fuel Stations Away from**
13 **Sensitive Visual Resources and Receptors and Restore Sites upon Removal of Facilities**

14 Please see Mitigation Measure AES-1f under Impact AES-1 in the discussion of Alternative 4 in
15 Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

16 **Mitigation Measure AES-1g: Implement Best Management Practices to Implement Project**
17 **Landscaping Plan**

18 Please see Mitigation Measure AES-1g under Impact AES-1 in the discussion of Alternative 4 in
19 Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

20 **Impact AES-2: Permanent Effects on a Scenic Vista from Presence of Conveyance Facilities**

21 **NEPA Effects:** Effects related to scenic vistas under Alternative 4A would be identical to those
22 described for Alternative 4. During construction the introduction of construction equipment and
23 removal of vegetation would alter the scenic elements that contribute to the viewing experience
24 from scenic vistas. The intakes would introduce visually dominant and discordant features in the
25 foreground and middleground views in vistas that would be very noticeable to all viewer groups in
26 areas of low to high landscape sensitivity levels. As described for Alternative 4, the effects of
27 permanent access road effects on scenic vistas would not be adverse. The effects of shaft site pads
28 and access hatches on scenic vistas could be adverse. The large scale of intakes, the visual presence
29 of large-scale borrow/spoil and RTM area landscape effects, and transmission lines may result in
30 adverse effects on scenic vistas (see discussions under Sections 17.3.1.2, *Preparation of Visual*
31 *Simulations*, and 17.3.1.3, *Analysis of the Alternatives' Impact on Visual Resources*, of the Draft
32 EIR/EIS). Overall, effects on scenic vistas associated with Alternative 4A would be adverse because
33 some elements of the conveyance facilities would permanently change views to scenic vistas.
34 Mitigation Measures AES-1a, AES-1c, and AES-1e are available to address these effects.

35 **CEQA Conclusion:** Construction of conveyance facilities under Alternative 4A would have identical
36 effects on scenic vistas as described for Alternative 4. Because proposed permanent access roads
37 generally follow existing rights-of-way, they would have less-than-significant impacts on scenic
38 vistas. The presence of the intake structures and pumping plants, large-scale borrow/spoil and RTM
39 area landscape effects, shaft site pads and access hatches, and transmission lines would result in

1 significant impacts on scenic vistas because construction and operation would result in a reduction
2 in the visual quality in some locations and introduce dominant visual elements that would result in
3 noticeable changes in the visual character of scenic vistas in the study area. Mitigation Measure AES-
4 1a, AES-1c, and AES-1e would partially reduce these impacts but not to a less-than-significant level.
5 Thus, impacts on scenic vistas associated with Alternative 4A would be significant and unavoidable.

6 **Mitigation Measure AES-1a: Locate New Transmission Lines and Access Routes to**
7 **Minimize the Removal of Trees and Shrubs and Pruning Needed to Accommodate New**
8 **Transmission Lines and Underground Transmission Lines Where Feasible**

9 Please refer to Mitigation Measure AES-1a under Impact AES-1 in the discussion of Alternative 4
10 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

11 **Mitigation Measure AES-1c: Develop and Implement a Spoil/Borrow and Reusable Tunnel**
12 **Material Area Management Plan**

13 Please refer to Mitigation Measure AES-1c under Impact AES-1 in the discussion of Alternative 4
14 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

15 **Mitigation Measure AES-1e: Apply Aesthetic Design Treatments to All Structures to the**
16 **Extent Feasible**

17 Please refer to Mitigation Measure AES-1e under Impact AES-1 in the discussion of Alternative 4
18 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

19 **Impact AES-3: Permanent Damage to Scenic Resources along a State Scenic Highway from**
20 **Construction of Conveyance Facilities**

21 **NEPA Effects:** Effects on state scenic highways under Alternative 4A would be identical to those
22 described for Alternative 4. Intakes 2, 3, and 5, the RTM area north of Intake 2, and the intermediate
23 forebay would be immediately and prominently visible in the foreground from SR 160 and would
24 result in an overall noticeable effect on viewers relative to their current experience of the study
25 area's scenic resources along SR 160 and River Road, where the landscape sensitivity level is high.
26 As described for Alternative 4, the visual elements introduced by the intakes, RTM area north of
27 Intake 2, and intermediate forebay associated with Alternative 4A would conflict with the existing
28 forms, patterns, colors, and textures along River Road and SR 160; would dominate riverfront visible
29 from SR 160; and would alter broad views and the general nature of the visual experience presently
30 available from River Road and SR 160. These changes would reduce the visual quality near intake
31 structure locations and result in noticeable changes in the visual character of scenic vista viewsheds
32 in the study area. This effect would be adverse for the same reasons discussed for Alternative 4.
33 Mitigation Measures AES-1a, AES-1c, and AES-1e are available to address these effects.

34 **CEQA Conclusion:** Construction of conveyance facilities under Alternative 4A would have identical
35 effects on scenic highways as described for Alternative 4. Because proposed permanent access roads
36 generally follow existing rights-of-way, they would have less-than-significant impacts on scenic
37 vistas. The presence of the intake structures and pumping plants, RTM area landscape effects, shaft
38 site pads and access hatches, and transmission lines would result in significant impacts on scenic
39 vistas because construction and operation would result in a reduction in the visual quality in some
40 locations and introduce dominant visual elements that would result in noticeable changes in the
41 visual character of scenic vista viewsheds in the study area. Mitigation Measures AES-1a, AES-1c,

1 and AES-1e would partially reduce these impacts but not to a less-than-significant level for the same
2 reasons identified for Alternative 4. Thus, impacts on scenic vistas associated with Alternative 4A
3 would be significant and unavoidable.

4 **Mitigation Measure AES-1a: Locate New Transmission Lines and Access Routes to**
5 **Minimize the Removal of Trees and Shrubs and Pruning Needed to Accommodate New**
6 **Transmission Lines and Underground Transmission Lines Where Feasible**

7 Please refer to Mitigation Measure AES-1a under Impact AES-1 in the discussion of Alternative 4
8 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

9 **Mitigation Measure AES-1c: Develop and Implement a Spoil/Borrow and Reusable Tunnel**
10 **Material Area Management Plan**

11 Please refer to Mitigation Measure AES-1c under Impact AES-1 in the discussion of Alternative 4
12 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

13 **Mitigation Measure AES-1e: Apply Aesthetic Design Treatments to All Structures to the**
14 **Extent Feasible**

15 Please refer to Mitigation Measure AES-1e under Impact AES-1 in the discussion of Alternative 4
16 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

17 **Impact AES-4: Creation of a New Source of Light or Glare That Would Adversely Affect Views**
18 **in the Area as a Result of Construction and Operation of Conveyance Facilities**

19 **NEPA Effects:** Effects resulting from light and glare under Alternative 4A would be identical to those
20 described for Alternative 4. Intakes 2, 3, and 5 and their associated pumping plants, surge towers,
21 and facilities and the pumping plant at the intermediate forebay would create noticeable effects
22 relating to light and glare (Figures 17-76 through 17-78 in the Draft EIR/EIS). Overall, because the
23 study area currently experiences low levels of light and because there are a larger number of
24 viewers in and around the waterways, intake structures, and forebay that would be affected by these
25 noticeable changes contrasting with the existing rural character, effects associated with new sources
26 of daytime and nighttime light and glare are considered adverse. Mitigation Measures AES-4a
27 through AES-4c are available to address these effects.

28 **CEQA Conclusion:** Construction of conveyance facilities under Alternative 4A would have identical
29 effects, related to light and glare, as described for Alternative 4. The impacts associated with light
30 and glare under Alternative 4A are significant because there are a larger number of viewers in and
31 around the waterways, intake structures, and intermediate forebay; project facilities would increase
32 the amount of nighttime lighting in the Delta above existing ambient light levels; and the study area
33 currently experiences low levels of light because there are fewer light/glare producers than are
34 typical in urban areas. Mitigation Measures AES-4a through AES-4c would partially reduce these
35 impacts but not to a less-than-significant level because all instances of light and glare impacts would
36 not be reduced by the available mitigation measures. Thus, the new sources of daytime and
37 nighttime light and glare associated with Alternative 4A would result in significant and unavoidable
38 impacts on public views in the project vicinity.

1 **Mitigation Measure AES-4a: Limit Construction to Daylight Hours within 0.25 Mile of**
2 **Residents**

3 Please refer to Mitigation Measure AES-4a under Impact AES-4 in the discussion of Alternative 4
4 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

5 **Mitigation Measure AES-4b: Minimize Fugitive Light from Portable Sources Used for**
6 **Construction**

7 Please refer to Mitigation Measure AES-4b under Impact AES-4 in the discussion of Alternative 4
8 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

9 **Mitigation Measure AES-4c: Install Visual Barriers along Access Routes, Where Necessary,**
10 **to Prevent Light Spill from Truck Headlights toward Residences**

11 Please refer to Mitigation Measure AES-4c under Impact AES-4 in the discussion of Alternative 4
12 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

13 **Impact AES-5: Substantial Alteration in Existing Visual Quality or Character during Operation**

14 **NEPA Effects:** Effects on the visual environment through operations and maintenance of the water
15 conveyance facilities under Alternative 4A would be identical to those described for Alternative 4.
16 The greatest visual effects resulting from operations would be maintenance of the intakes and
17 dredging the forebays. However, all activities would maintain the visual character of the facilities,
18 once built, and would not act to further change the visual quality or character of the facilities or
19 surrounding visual landscape during operation. These effects on the existing visual quality and
20 character during operation would not be adverse because the activities would not result in further
21 substantial changes to the existing natural viewshed or terrain, alter existing visual quality of the
22 region or eliminate visual resources, or obstruct or permanently reduce visually important features.

23 **CEQA Conclusion:** Operation of Alternative 4A would have identical visual quality effects as those
24 described for Alternative 4. Maintenance of the conveyance facilities (i.e., intakes, tunnels, forebays
25 and transmission lines) would be required periodically and would involve painting, cleaning, and
26 repair of structures; dredging at forebays (at approximately 50-year intervals); vegetation removal
27 and care along embankments; tunnel inspection; and vegetation removal within transmission line
28 rights-of-way. These activities could be visible from the water or land by sensitive viewers in
29 proximity to these features. All activities would maintain the visual character of the facilities, once
30 built, and would not act to further change the visual quality or character of the facilities or
31 surrounding visual landscape during operation. Maintenance and operation of Alternative 4A once
32 constructed, would not result in further substantial changes to the existing natural viewshed or
33 terrain, alter existing visual quality of the region or eliminate visual resources, or obstruct or
34 permanently reduce visually important features. Thus, overall, operation and maintenance of
35 Alternative 4A would have a less-than-significant impact on existing visual quality and character in
36 the study area because operations would not change the visual quality of the environment and
37 maintenance activities would be minor and intermittent. No mitigation is required.

1 **Impact AES-6: Substantial Alteration in Existing Visual Quality or Character during**
2 **Implementation of Environmental Commitments 3, 4, 6-12, 15, and 16**

3 Effects of Alternative 4A related to the potential for alteration of existing visual quality or character
4 from implementing these environmental commitments would be similar to those described for
5 Alternative 4. However, as described under Section 4.1, *Introduction*, of this RDEIR/SDEIS,
6 Alternative 4A would restore up to 15,548 acres of habitat under Environmental Commitments 3, 4,
7 6, 7, 8 and 9-11 as compared with 83,800 acres under Alternative 4. Similarly, Environmental
8 Commitments 11, 12, 15, and 16 would be implemented only at limited locations. Conservation
9 Measures 2, 5, 13, 14, and 17-21 would not be implemented as part of this alternative. Therefore,
10 the magnitude of effects under Alternative 4A would likely be smaller than those associated with
11 Alternative 4.

12 **NEPA Effects:** Effects on the existing visual character, scenic vistas, scenic highways, and light and
13 glare would be similar to those under Alternative 4 because restored/enhanced lands would result
14 in incremental and site-specific changes to the landscape in a similar manner. Because only portions
15 of the restoration environmental commitments and fewer of the other stressor reduction
16 environmental commitments would be implemented under Alternative 4A, it is likely that the visual
17 and aesthetic effects would be less than those presented for Alternative 4. However, these visual and
18 aesthetic impacts are considered to be adverse because site-specific, localized adverse visual effects
19 could occur at the sites of projects implemented under the Alternative 4A environmental
20 commitments. Mitigation Measures AES-1a through AES-1g and Mitigation Measures AES-4a
21 through AES-4c are available to address effects from habitat restoration and enhancement actions.

22 In addition, Mitigation Measures AES-6a and AES-6b are available to help reduce adverse visual
23 effects. Upon development of site-specific design information and plans, additional mitigation
24 measures may be identified to address action-specific adverse effects. Mitigation Measure AES-6c is
25 also available to help inventory, classify, and protect the unique visual landscape of the Delta.

26 **CEQA Conclusion:** Implementation of environmental commitments under Alternative 4A would
27 have similar but less impacts than identified for Alternative 4. Alternative 4A has the potential to
28 affect existing visual quality and character, views of scenic vistas, views from scenic highways, and
29 introduce new sources of light and glare in the study area. These potential impacts are considered to
30 be significant because construction of environmental commitments could potentially change views
31 from public areas, negatively affect sensitive receptors and require multiple year construction at
32 specific locations that are currently unknown.

33 Implementing mitigation measures AES-1a through AES-1g would partially reduce the impacts of
34 Alternative 4A on aesthetic and visual resources but not to a less-than-significant level because
35 restoration and other actions implemented under this alternative could create considerable changes
36 to the visual character of sensitive receptors that may not be fully mitigated by these mitigation
37 measures. Thus, implementation of environmental commitments under Alternative 4A would result
38 in significant and unavoidable impacts on the existing visual quality and character in the study area.

39 **Mitigation Measure AES-1a: Locate New Transmission Lines and Access Routes to**
40 **Minimize the Removal of Trees and Shrubs and Pruning Needed to Accommodate New**
41 **Transmission Lines and Underground Transmission Lines Where Feasible**

42 Please refer to Mitigation Measure AES-1a under Impact AES-1 in the discussion of
43 Alternative 1A in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

1 **Mitigation Measure AES-1b: Install Visual Barriers between Construction Work Areas and**
2 **Sensitive Receptors**

3 Please refer to Mitigation Measure AES-1b under Impact AES-1 in the discussion of Alternative 4
4 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

5 **Mitigation Measure AES-1c: Develop and Implement a Spoil/Borrow and Reusable Tunnel**
6 **Material Area Management Plan**

7 Please refer to Mitigation Measure AES-1c under Impact AES-1 in the discussion of Alternative 4
8 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

9 **Mitigation Measure AES-1d: Restore Barge Unloading Facility Sites Once Decommissioned**

10 Please refer to Mitigation Measure AES-1d under Impact AES-1 in the discussion of Alternative 4
11 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

12 **Mitigation Measure AES-1e: Apply Aesthetic Design Treatments to All Structures to the**
13 **Extent Feasible**

14 Please refer to Mitigation Measure AES-1e under Impact AES-1 in the discussion of Alternative 4
15 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

16 **Mitigation Measure AES-1f: Locate Concrete Batch Plants and Fuel Stations Away from**
17 **Sensitive Visual Resources and Receptors and Restore Sites upon Removal of Facilities**

18 Please refer to Mitigation Measure AES-1f under Impact AES-1 in the discussion of Alternative 4
19 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

20 **Mitigation Measure AES-1g: Implement Best Management Practices to Implement Project**
21 **Landscaping Plan**

22 Please refer to Mitigation Measure AES-1g under Impact AES-1 in the discussion of Alternative 4
23 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

24 **Mitigation Measure AES-4a: Limit Construction to Daylight Hours Within 0.25 Mile of**
25 **Residents**

26 Please refer to Mitigation Measure AES-4a under Impact AES-4 in the discussion of Alternative 4
27 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

28 **Mitigation Measure AES-4b: Minimize Fugitive Light from Portable Sources Used for**
29 **Construction**

30 Please refer to Mitigation Measure AES-4b under Impact AES-4 in the discussion of Alternative 4
31 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

32 **Mitigation Measure AES-4c: Install Visual Barriers along Access Routes, Where Necessary,**
33 **to Prevent Light Spill from Truck Headlights toward Residences**

34 Please refer to Mitigation Measure AES-4c under Impact AES-4 in the discussion of Alternative 4
35 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

1 **Mitigation Measure AES-6a: Underground New or Relocated Utility Lines Where Feasible**

2 Please refer to Mitigation Measure AES-6a under Impact AES-6 in the discussion of
3 Alternative 1A in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

4 **Mitigation Measure AES-6b: Develop and Implement an Afterhours Low-Intensity and**
5 **Lights Off Policy**

6 Please refer to Mitigation Measure AES-6b under Impact AES-6 in the discussion of
7 Alternative 1A in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

8 **Mitigation Measure AES-6c: Implement a Comprehensive Visual Resources Management**
9 **Plan for the Delta and Study Area**

10 Please refer to Mitigation Measure AES-6c under Impact AES-6 in the discussion of Alternative 4
11 in Chapter 17, *Aesthetics and Visual Resources*, of the Draft EIR/EIS.

12 **Impact AES-7: Compatibility of the Proposed Water Conveyance Facilities and Other**
13 **Environmental Commitments with Federal, State, or Local Plans, Policies, or Regulations**
14 **Addressing Aesthetics and Visual Resources**

15 **NEPA Effects:** Constructing water conveyance facilities and implementing other environmental
16 commitments under Alternative 4A would generally have the same potential for incompatibilities
17 with one or more plans and policies related to preserving the visual quality and character of the
18 Delta as described for Alternative 4. As described for Alternative 4, potential incompatibility with
19 plans and policies could exist related to preserving the visual quality and character of the Delta (i.e.,
20 The Johnston-Baker-Andal-Boatwright Delta Protection Act of 1992, Delta Protection Commission
21 Land Use and Resource Management Plan for the Primary Zone of the Delta, Delta Plan, Brannan
22 Island and Franks Tract State Recreation Areas General Plan). In addition, with the exception of
23 Solano County, the alternative may be incompatible with county general plan policies that protect
24 visual resources in the study area.

25 **CEQA Conclusion:** The potential incompatibilities with plans and policies listed above indicate the
26 potential for a physical consequence to the environment. The physical effects they suggest are
27 discussed in impacts AES-1 through AES-6, above, and no additional CEQA conclusion is required
28 related to the compatibility of Alternative 4A with relevant plans and policies.