

## Aesthetics and Visual Resources

### 17.1 Summary Comparison of Proposed Project

A summary comparison of a number of important aesthetic impacts is provided in Figure 17-0. This figure provides information on the magnitude of aesthetic impacts that are expected to result from the proposed project compared with impacts of the approved project. An important impact to consider is the permanent impact on visual resources after the completion of construction of water conveyance features. The incremental values indicate the change in very noticeable effects attributable to the proposed project. These incremental differences in impact between the approved project and the proposed project, together with consideration of the severity of the underlying impacts as set forth in the Final EIR/EIS, are the basis for making both NEPA and CEQA impact significance findings. The incremental analysis addresses whether the proposed project, compared with the approved project, would lead to any new significant environmental effects or to any substantial increase in the severity of previously identified significant effects. The incremental difference between the original impacts and the newly anticipated impacts is then considered against the backdrop of the original significance determinations for the original underlying impacts as described in the Final EIR/EIS. As depicted in Figure 17-0, construction of the water conveyance features would result in the same overall effects on viewers under both the approved project and proposed project. Incremental changes would not be noticeable in relation to the overall visual impacts associated with the approved and proposed projects.

**Figure 17-0. Comparison of Impacts on Aesthetics and Visual Resources**

Chapter 17 – Aesthetics and Visual Resources		Approved Project	Proposed Project (Total)	Proposed Project (Increment)
Impacts AES-2, 3, and 4: Permanent impacts after construction is complete	Overall number of Very Noticeable effects on viewers	10	10	0
	Overall number of Noticeable effects on viewers	0	0	0
	Overall number of Moderately Noticeable effects on viewers	2	2	0
	Overall number of Minimally Noticeable effects on viewers	0	0	0
		Significant and unavoidable/ adverse	Remains significant and unavoidable/ adverse. No change to findings for the proposed project.	

1 As depicted in Figure 17-0, the proposed project would not result in new significant impacts or a  
2 substantial increase in the severity of previously identified significant visual impacts. This chapter  
3 contains the information necessary to make the Final EIR/EIS<sup>1</sup>adequate for the approved project as  
4 revised.

## 5 **17.2 Environmental Setting/Affected Environment**

### 6 **17.2.1 Affected Environment**

7 The environmental setting for aesthetic and visual resources that would be affected by construction  
8 of the proposed project would be similar to what is described for the approved project in Final  
9 EIR/EIS Chapter 17, *Aesthetic and Visual Resources*, Section 17.1 *Environmental Setting/Affected*  
10 *Environment*. The Final EIR/EIS provides a discussion of concepts and terminology, visual character  
11 of the study area, visual character of the areas upstream of the Delta, and characterization of  
12 viewers. The modifications to the project would be located entirely within the previously analyzed  
13 project area. A site visit conducted on January 26, 2018 confirmed that the Affected Environment  
14 remains visually consistent with the conditions described for the approved project. Further,  
15 evaluation of key observation points (KOPs) 256, 34, and 257 (Figures 17-85, 17-86b, and 17-87,  
16 respectively, in the Final EIR/EIS), indicate that the Existing Conditions used for the simulations also  
17 remain visually consistent with the Existing Conditions identified in the Final EIR/EIS, and the  
18 existing photos of these KOPs do not require update.

19 There are no changes to the regional and local regulatory setting since the Final EIR/EIS that apply  
20 to aesthetic and visual resources except that small segments of Byron Bethany Road and Mountain  
21 House Road, within Alameda County, may have foreground or middleground (i.e., within 3 miles of  
22 the proposed project) views of the proposed project. The Scenic Route Element of the Alameda  
23 County General Plan includes policies and development standards for scenic routes and the scenic  
24 values of areas that are visible from scenic routes and identifies that these two roadways are Scenic  
25 Rural-Recreation Routes (Alameda County 1994).

26 As identified for the approved project, the discussion of visual resource impacts in this chapter is  
27 limited to effects on the landscape that affect the human quality of life. Light or glare from  
28 construction of infrastructure elements of the proposed project could have an indirect effect on  
29 wildlife in the vicinity of the project and in nearby wildlife preserve areas. The proposed project's  
30 effects on wildlife in the vicinity of the project and in nearby wildlife preserve areas are discussed in  
31 Appendix 5J-D of the Bay Delta Conservation Plan (ICF International 2013:5J-D-1) and Chapter 12,  
32 *Terrestrial Biological Resources*.

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<sup>1</sup> The July 2017 document titled *Developments after Publication of the Proposed Final Environmental Impact Report* included modifications and additions to the proposed Final EIR/EIS. In this chapter, references to “the Final EIR/EIS” should be understood to include changes made to the December 2016 document as set forth in the July 2017 document.

## 17.3 Environmental Consequences

This section describes the potential effects of the modifications to the approved project on aesthetic and visual resources within the plan area. Effects are evaluated for severity and, where appropriate, mitigation measures are identified. This section describes potential direct and reasonably foreseeable indirect effects on aesthetics and visual resources that would result from implementation of the proposed project. Potential visual effects associated with operation of conveyance facilities are not addressed because operation of the approved and proposed projects would be identical. Similarly, effects related to Environmental Commitments are not addressed because they would be approximately the same for the approved and proposed projects and the potential visual effects would be similar.

### 17.3.1 Methods for Analysis

Except as described in Section 17.1, *Summary Comparison of Proposed Project*, the methods applied to the analysis of impacts on aesthetics and visual resources are the same as indicated under the approved project in the Final EIR/EIS. This section considers potential effects on aesthetics and visual resources that would result with the implementation of the proposed project. This section considers potential effects on visual quality and characteristics, scenic vistas, scenic highways, and light and glare related to proposed changes to the approved project. During the January 26, 2018 site visit, one new KOP (KOP 259) was photographed for use in a visual simulation. KOP 259 is shown along with all KOPs in Figure 17-1, *Key Observation Point and Photosimulation Locations*. The simulation is presented in Figure 17-2. The Scenic Quality evaluation forms for this simulation are provided in Appendix 17A.

### 17.3.2 Determination of Effects

The impact thresholds used to determine if impacts under CEQA are significant and effects under NEPA are adverse are the same as indicated in the Final EIR/EIS.

### 17.3.3 Effects and Mitigation Approaches

#### 17.3.3.1 No Action Alternative

Under the No Action Alternative, the new Byron Tract Forebay, reusable tunnel material (RTM) storage, and other footprint changes described for the proposed project would not occur. For the purposes of this Supplemental EIR/EIS, the No Action Alternative, against which this proposed project is compared, is consistent with the No Action Alternative Early Long-Term in the Final EIR/EIS. No differing effects on visual resources would result along the proposed project alignment from what was previously described for the No Action Alternative Early Long-Term in the Final EIR/EIS if the No Action Alternative were to occur.

#### 17.3.3.2 Proposed Project

The Final EIR/EIS found that there was a potential for the approved project to result in impacts on aesthetics and visual resources. The analysis of the proposed project identifies impacts similar to those of the approved project. The primary visual changes would result from proposed

1 modifications to the Byron Tract Forebay near Clifton Court Forebay, changes in RTM storage areas,  
2 shaft sites, and barge landing locations.

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

5 ***Byron Tract Forebay and Conveyance***

6 Potential visual quality and character effects associated with the proposed Byron Tract Forebay  
7 would be similar to those described for the approved project because ground surface changes  
8 associated with forebay embankments would be similar to forebay embankments under the  
9 approved project and the proposed forebay would require converting a large area of agricultural  
10 land to forebay uses similar to changes associated with the approved project. Under the proposed  
11 project, the existing Clifton Court Forebay would remain unchanged. Instead, a 1,081-acre Byron  
12 Tract Forebay would be constructed to the northwest of the existing Clifton Court Forebay, instead  
13 of the 590 acre Clifton Court Forebay expansion to the south of the existing forebay. Construction of  
14 the Byron Tract Forebay would occur in the same manner and within the same timeframes as  
15 described for the approved project. After construction is complete, disturbed areas of exposed soil  
16 would be seeded for erosion control and would revegetate after a short time. The existing ground  
17 surface elevation at this location is -5 to 0 feet and embankments surrounding the proposed Byron  
18 Tract Forebay would be approximately 25 feet above the proposed ground surface, like the  
19 expanded Clifton Court Forebay analyzed under the approved project. As a result, the visual changes  
20 associated with the Byron Tract Forebay would be similar to those described under the approved  
21 project. However, the primary differences would be that the visual prominence of Byron Tract  
22 Forebay could be slightly greater than the approved project forebay because it would be located  
23 closer to sensitive receptors.

24 The Byron Tract Forebay would be constructed in the vicinity of residences and businesses to the  
25 west, but ground-level construction activities would not be visible from this area because of existing  
26 levees bordering a north-south running canal that lies between this developed area and the  
27 proposed forebay. However, ground-level construction activities would likely be visible from Byron  
28 Highway, residences and businesses located along and near Byron Highway that are within a mile of  
29 construction activities, and from local roadways that connect to or are located near Byron Highway  
30 and are within a mile of construction activities. Viewers in the foothills to the southwest may have  
31 distant views of construction activities where views are elevated. Land use changes would also  
32 remove several sensitive residential visual receptors because their homes would need to be  
33 acquired to accommodate construction of the proposed project. This is because construction of the  
34 forebay would require that two residences adjacent to the levees bordering Italian Slough be  
35 relocated.

36 The Byron Tract Forebay and infrastructure would still result in noticeable changes that do not  
37 blend, are not in keeping or are incompatible with the existing visual environment, and could be  
38 viewed by sensitive receptors and from public viewing areas. Because the proposed Byron Tract  
39 Forebay would be located adjacent to the existing Clifton Court Forebay, similar to the approved  
40 project, the effects on visual quality and character would be relatively minor because these facilities  
41 would be located in an area already dominated by Clifton Court Forebay and its appurtenant  
42 facilities.

1        **Reusable Tunnel Material Areas**

2        Potential visual quality and character effects associated with constructing the RTM areas under the  
3        proposed project are similar to those described for the approved project. The amount of land  
4        affected by RTM areas would be reduced from 2,571 acres under the approved project to 2,369  
5        acres under the proposed project, a net reduction of 202 acres. As described in more detail, below,  
6        this reduction is the result of removing some RTM areas while other RTM areas are increased in  
7        size. The proposed height ranges for the RTM areas would be the same as the approved project. As  
8        described for the approved project, once construction of the water conveyance facilities is complete,  
9        the RTM areas would result in large-scale landscape effects that would alter the agrarian visual  
10       character. Alterations at these locations would result in elevated landforms introduced into a  
11       landscape that is currently predominantly flat. These features would be visually discordant with the  
12       area's existing forms, patterns, colors, and textures associated with the existing agrarian character  
13       in the study area. Therefore, the primary visual changes associated with the RTM storage area  
14       modifications under the proposed project would result from increasing the visual prominence of  
15       these features at site-specific locations because RTM areas would be located closer to sensitive  
16       receptors or their ground surface area would increase.

17       Some of the RTM areas under the approved project would not occur under the proposed project.  
18       However, the RTM areas near the intermediate forebay, south of State Route (SR) 12 on Bouldin  
19       Island, and near Clifton Court Forebay would be modified and the total number of RTM areas would  
20       be reduced from eleven under the approved project to nine under the proposed project. Three RTM  
21       areas in the general vicinity of the intermediate forebay would be removed. This includes the two  
22       south of Lambert Road and north of Dierssen Road (46 and 33 acres) and the one west of the  
23       intermediate forebay (131 acres), on Zacharias Island along Snodgrass Slough. The two RTM areas  
24       north of Twin Cities Road (39 and 43 acres) and one south of Twin Cities Road (114 acres) would be  
25       reconfigured. Instead there would be one larger RTM area north of Twin Cities Road (275 acres) and  
26       one smaller RTM area south of Twin Cities Road (77 acres). This would reduce the number of RTM  
27       areas, and the amount of land affected by RTM areas in the general vicinity of the intermediate  
28       forebay would be reduced from 405 acres to 352 acres, a net reduction of 53 acres. Removal of the  
29       RTM areas south of Lambert Road, north of Dierssen Road, and west of the intermediate forebay and  
30       reconfiguration of the RTM areas north and south of Twin Cities Road would reduce the amount of  
31       surface disturbance seen in this area and, in particular, from Lambert and Dierssen Roads. Instead,  
32       the area of disturbance would be centralized to two locations that are immediately adjacent to one  
33       another, slightly restricting the area of visual disturbance. While this would be beneficial, the overall  
34       area of disturbance would be larger and the appearance of the disturbance would result in effects  
35       similar to effects of the approved project.

36       On Bouldin Island, there was one RTM area south of SR 12 (1,209 acres) under the approved project.  
37       However, portions of the RTM area affected sensitive wetlands. Therefore, while some of the  
38       modified RTM areas would overlay areas proposed for RTM use under the approved project, the  
39       remainder would be shifted north to avoid the sensitive wetlands. This would result in the creation  
40       four adjacent RTM areas (1,203 acres total) surrounding the shaft site and slightly decrease the total  
41       acreage of lands affected by RTM storage by 6 acres. This is a not a notable change in the amount of  
42       RTM lands in relation to the overall size of Bouldin Island; however, the modifications would shift  
43       RTM areas closer to nearby residents and roadways and this would make RTM areas appear to be  
44       more prominent in views. However, at a distance, the RTM areas would not be very visible or  
45       discernable, as seen in Figure 17-2, *Existing and Simulated Views of Bouldin Island Shafts, Looking*

1 South from SR 12. From this vantage, the scenic view across agricultural fields from SR 12 are not  
2 affected by the RTM areas. Therefore, effects would remain consistent with the approved project.

3 Near Clifton Court Forebay, the RTM area immediately east of Byron Highway would be removed  
4 under the proposed project and one area slightly farther east would remain. An RTM area would be  
5 shifted north of the forebay. The overall area in RTM use would be reduced from 904 acres total to  
6 761 acres total, resulting in 143 fewer acres affected by RTM placement under the proposed project  
7 compared with the approved project. As described for the approved project, the RTM area east of  
8 Byron Highway near the Clifton Court Forebay would primarily affect roadway users on the highway  
9 and nearby local roadways. Because these viewers are not as sensitive and there is nearby rolling  
10 terrain, these RTM areas would not appear as visually obtrusive as the other RTM areas for the  
11 proposed project. The northernmost RTM area would be 0.8 mile away from Discovery Bay and,  
12 even though it would be closer to Discovery Bay than under the approved project, it would not be  
13 distinguishable when seen from Discovery Bay because of the distance from this community and the  
14 height of the RTM area is not substantial enough to stand out in the landscape from that distance  
15 and hedgerows would obscure views. The RTM conveyor transporting excavated material from the  
16 launch site northeast of Clifton Court Forebay to the nearby RTM area would not be needed under  
17 the proposed project so would not be visible to residents living on Kings Island.

### 18 **Shaft Sites**

19 Shaft sites would be shifted on Staten, Bouldin, and Mandeville Islands and the safe haven work  
20 areas on Staten Island would also be shifted. Potential visual quality and character effects associated  
21 with shifting the shaft sites under the proposed project are similar to those described under the  
22 approved project. This is because visual changes associated with constructing the relocated shaft  
23 sites and safe haven work areas are also the same as described for the approved project. However,  
24 the primary changes to visual character and quality associated with the proposed project  
25 relocations would result from locating features closer to sensitive receptors or because the size of  
26 features would increase, increasing the overall visual prominence of these features. No shaft sites or  
27 safe haven work areas presented for the approved project would be removed under the proposed  
28 project. No new shaft sites are proposed under the proposed project; however, one new safe haven  
29 work area is proposed for Staten Island. The addition of a new safe haven work area would  
30 introduce a new project element into the landscape that was not analyzed under the approved  
31 project. Because this site would be in use only temporarily and then restored once maintenance is  
32 complete, there would no permanent visual effects associated with this feature, similar to other safe  
33 haven work areas described under the approved project.

34 The shaft site on Mandeville Island is in an area where there are no immediate viewers and,  
35 therefore, shifting the location would not result in a visible difference compared with the approved  
36 project. Similarly, shifting the shaft site and two safe haven work areas on the southern portions of  
37 Staten Island would not alter the analysis for the approved project because the size of the shaft sites  
38 would not increase and the new locations are so close that the change would not result in a  
39 perceivable difference in effects compared with the approved project.

40 Relocating the northernmost shaft site on Staten Island would place the shaft site within 380 feet of  
41 two residences along Gas Well Road. The relocated shaft site would also be approximately 39 acres,  
42 instead of 10 acres, which would make it more prominent in views, including when seen by viewers  
43 passing by on rural roadways on Staten Island, which is noted for its sandhill crane wintering  
44 habitat and wildlife viewing. While the overall effects of the northernmost shaft site are similar to

1 those identified for the approved project, its relocation and increased size would make it more  
2 readily visible to sensitive receptors. However, this change would result in an overall incremental  
3 change to effects associated with shaft sites.

4 The new proposed safe haven work area on northern Staten Island would increase the visual  
5 presence of construction activities on Staten Island. Walnut Grove Road is a well-traveled rural  
6 roadway that passes near the new proposed safe haven work area, making this work area readily  
7 visible to roadway travelers. As described for the approved project, it would take approximately 9 to  
8 12 months to develop and maintain the safe haven work area that would be used to set up  
9 equipment, construct flood protection facilities, excavate/construct the shaft to access the tunnel  
10 boring machine (TBM), and set up and maintain the equipment necessary for the TBM maintenance  
11 work. Once the TBM maintenance has been completed and the TBM moves past the safe haven work  
12 area, disturbed areas would be returned to preconstruction conditions.

13 Shifting the shaft site on Bouldin Island to the east would not result in effects on visual resources  
14 different from effects of the approved project analysis; however, the relocated shaft site would  
15 require a larger tunnel work area. The relocated shaft site work area would be approximately 56  
16 acres, instead of 13 acres, which would make it much more prominent when seen by viewers  
17 passing by on SR 12, but views of construction activities would be fleeting to motorist using this  
18 roadway. The concrete batch plant and fuel station would be relocated immediately west of the new  
19 proposed shaft site and would still be visible from SR 12. The effects of the proposed project would  
20 be similar to those of the approved project. As may be seen in Figure 17-2, *Existing and Simulated*  
21 *Views of Bouldin Island Shafts, Looking South from SR 12*, the scenic view across agricultural fields  
22 from SR 12 is fairly open but contains existing transmission lines and a single residence. The existing  
23 visual character of the vista from KOP 259 on SR 12 toward the shaft sites would be altered,  
24 reducing the available views of agricultural lands. The shaft site pads would add a man-made visual  
25 massing that would have a visible geometric shape within middleground views of the roadway in an,  
26 otherwise, mostly flat landscape. Overall, this would reduce the Scenic Quality Rating from a **C** to a **D**  
27 (see Appendix 17A).

### 28 ***Docks and Barge Traffic***

29 Potential visual quality and character effects under the proposed project would remain similar to  
30 those of the approved project. No new barge unloading facilities are proposed under the proposed  
31 project. However, the dock located along Snodgrass Slough, north of Twin Cities Road, near the  
32 intermediate forebay would not be built under the proposed project. This would be beneficial  
33 because boat traffic would not be constricted, vegetation would not be removed, and water-based  
34 views and views from Twin Cities Road would no longer be affected by or because of these elements  
35 at this location. However, visual effects associated with docks and barge traffic would remain similar  
36 to those of the approved project because the other docks – six total – identified and analyzed under  
37 the approved project would be constructed under the proposed project.

38 ***NEPA Effects:*** The potential under the proposed project to create substantial alteration in visual  
39 quality or character during construction of conveyance facilities would be similar to those impacts  
40 described for the approved project and would constitute an adverse effect on existing visual  
41 character because of the long-term nature of construction, combined with the proximity to sensitive  
42 receptors, effects on residences and agricultural buildings, removal of vegetation, and changes to  
43 topography through grading, consistent with the findings of the Final EIR/EIS. The primary features  
44 that would affect the existing visual quality and character under the proposed project, would be

1 Byron Tract Forebay, landscape effects from spoil/borrow and RTM areas, and slightly modified  
2 transmission lines. Mitigation Measures AES-1b through AES-1f have been adopted to address visual  
3 effects resulting from construction of the proposed project water conveyance facilities that differ  
4 from the approved project. These measures, as written in the Final EIR/EIS, remain adequate  
5 without change for addressing impacts of the proposed project.

6 **CEQA Conclusion:** Construction of the proposed project would alter the existing visual quality and  
7 character present in the study area in a manner similar to that described for the approved project.  
8 The long-term nature of construction of the RTM areas and Byron Tract Forebay; presence and  
9 visibility of heavy construction equipment; proximity to sensitive receptors; and other effects as  
10 described in the Final EIR/EIS would all contribute to this impact.

11 **Incremental Impact:** Construction of the proposed project would substantially alter the existing  
12 visual quality and character present in the study area in a manner similar to that described for  
13 the approved project. The proposed project would result in incremental changes to the existing  
14 visual character and quality of views due to the slightly smaller footprint, slightly shifted  
15 location for a few project elements, and inclusion and elimination of a few project elements. This  
16 impact would be significant, as with the approved project, because of the substantial visual  
17 changes that would result from conveyance facility construction. Mitigation Measures AES-1b  
18 through AES-1f would partially reduce impacts that differ from impacts of the approved project,  
19 but not to a less-than-significant level because not all of the visual changes could be eliminated  
20 and permanent changes would be made to the regional landscape. Thus, the impact would be  
21 similar to that of the approved project and the proposed project would result in significant and  
22 unavoidable impacts (CEQA) on the existing visual quality and character in the study area.

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

25 Please see Mitigation Measure AES-1b in Chapter 17 of the Final EIR/EIS.

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

28 Please see Mitigation Measure AES-1c in Chapter 17 of the Final EIR/EIS.

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

30 Please see Mitigation Measure AES-1d in Chapter 17 of the Final EIR/EIS.

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

33 Please see Mitigation Measure AES-1e in Chapter 17 of the Final EIR/EIS.

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

36 Please see Mitigation Measure AES-1f in Chapter 17 of the Final EIR/EIS.



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

Scenic vistas are mapped and were included in Appendix 17D, Figure 17D-1(a-d), of the Final EIR/EIS. These figures have been updated to show where they are in relation to the proposed project alignment (see Figure 17-3 [a-d]). As identified under the approved project, the primary features that would affect scenic vistas subsequent to completion of construction are Intakes 2, 3, and 5, the proposed forebays, the Clifton Court Forebay pumping plants, landscape effects remaining from tunnel work and RTM areas, and permanent transmission lines. The effects on scenic vistas resulting from these features would be similar to those of the proposed project. The primary visual changes to scenic vistas resulting from the proposed project compared with those described under the approved project would be from the modifications to Byron Tract Forebay, RTM areas, and shaft sites.

### ***Byron Tract Forebay and Conveyance***

Potential scenic vista effects associated with constructing the RTM areas under the proposed project would be similar to those described for the approved project. In addition to those effects, the Byron Tract Forebay would be located 1.5 miles south of the scenic vista available from SR 4. The northernmost RTM area associated with the Byron Tract Forebay would be 0.4 mile away from Discovery Bay. Even though Byron Tract Forebay and the RTM area would be in the vicinity of SR 4, these facilities would not be distinguishable when seen from SR 4 because the northern RTM areas height is not enough for it to stand out in the landscape from that distance and intervening hedgerows would obscure views to the facilities.

### ***RTM Storage***

Potential scenic vista effects associated with constructing the RTM areas within scenic vistas under the proposed project would be similar to those described for approved project. As described under Impact AES-1, the amount of land affected by RTM areas would be reduced from 2,571 acres under the approved project to 2,369 acres under the proposed project, a net reduction of 202 acres. This reduction is the result of removing some RTM areas while other RTM areas are increased in size. The proposed height ranges for the RTM areas would be the same as the approved project. As described for the approved project, once construction of the water conveyance facilities is complete, the RTM areas would result in large-scale landscape effects that would alter the agrarian visual character of scenic vistas. Alterations at these locations would result in elevated landforms introduced into a landscape that is currently predominantly flat. These features would be visually discordant with the existing forms, patterns, colors, and textures associated with the existing agrarian character of scenic vistas in the study area. Therefore, the primary visual changes associated with the RTM storage area modifications would result from increasing visual prominence of these features within scenic vistas at site-specific locations because RTM areas would be located closer to sensitive receptors or their ground surface area would increase. Near the intermediate forebay, the dock and barge traffic along Snodgrass Slough would no longer affect the scenic vista from Twin Cities Road. However, as described under Impact AES-1, RTM areas along Twin Cities Road would still affect views from the roadway, including scenic vistas. The area of disturbance near the intermediate forebay would be centralized to two locations that are immediately next to one another, slightly restricting the area of visual disturbance. While this would be beneficial, the overall area of disturbance would be larger and the appearance of the disturbance would still effect scenic vistas, as described under the approved project. On Bouldin Island, the modifications would shift RTM areas closer to nearby residents and roadways that have scenic vistas and this would make

1 RTM areas appear to be more prominent in and disrupt scenic vistas. However, at a distance, the  
2 RTM areas would not be very visible or discernable, as seen in Figure 17-2, *Existing and Simulated*  
3 *Views of Bouldin Island Shafts, Looking South from SR 12*. From this vantage, the scenic view across  
4 agricultural fields from SR 12 would not be affected by the RTM areas. Therefore, effects would  
5 remain consistent with those of the approved project.

## 6 **Shaft Sites**

7 Only the shaft sites on Staten and Bouldin Islands and the safe haven work areas on Staten Island  
8 would be visible in scenic vistas from public roadways. Potential scenic vista effects associated with  
9 the relocated shaft sites and safe haven work areas under the proposed project would be similar to  
10 those described for the approved project because visual changes to scenic vistas associated with  
11 constructing the relocated shaft sites and safe haven work areas would be the same as described for  
12 the approved project. Therefore, the primary visual changes associated with the relocations would  
13 result from increasing visual prominence of these features because they would be located closer to  
14 sensitive receptors or because the size of features would increase, increasing the overall visual  
15 prominence of these features within scenic vistas. Relocating the northernmost shaft site on Staten  
16 Island would place the shaft site within 380 feet of two residences along Gas Well Road and  
17 increasing its size would make it more prominent in views, including when seen by viewers passing  
18 by on rural roadways on Staten Island. While the overall effect of the northernmost shaft site are  
19 similar to those identified under the approved project, its relocation and increased size would make  
20 it more readily visible to sensitive receptors. The addition of a new safe haven work area would  
21 introduce a new project element that would create further visual discordance for scenic vistas from  
22 local roadways on Staten Island that was not analyzed under the approved project. However, as  
23 described in Impact AES-1, once the TBM maintenance has been completed and the TBM moves past  
24 the safe haven work area, disturbed areas would be returned to preconstruction conditions. Because  
25 this site would be in use only temporarily and then restored once maintenance is complete, there  
26 would be no permanent adverse visual effects on scenic vistas associated with new planned safe  
27 have work area, consistent with the approved project.

28 Shifting the shaft site on Bouldin Island to the east would result in effects on scenic vistas similar to  
29 effects of the approved project; however, the relocated shaft site proposes a larger tunnel work area  
30 and the RTM areas would be shifted closer to sensitive receptors. The relocated shaft site work area  
31 would be much more prominent in scenic vistas when seen by viewers passing by on SR 12, but  
32 views of construction activities would be fleeting as travelers on these roadways travel by the site.  
33 The concrete batch plant and fuel station would be relocated to the south of the new proposed shaft  
34 site, making these features less visible from SR 12. However, locating RTM areas closer to sensitive  
35 receptors would detract from scenic vistas. The effects of the proposed project would be similar to  
36 the effects of the approved project. As may be seen in Figure 17-2, *Existing and Simulated Views of*  
37 *Bouldin Island Shafts, Looking South from SR 12*, the scenic view across agricultural fields from SR 12  
38 is fairly open but contains existing transmission lines and a single residence. The existing visual  
39 character of the vista from KOP 259 on SR 12 toward the shaft sites would be altered, reducing the  
40 available views of agricultural lands. The shaft site pads would add a man-made visual massing that  
41 would have a visible geometric shape within middleground views of the roadway in an, otherwise,  
42 mostly flat landscape. Overall, this would reduce the Scenic Quality Rating from a **C** to a **D** (see  
43 Appendix 17A).

1        ***Docks and Barge Traffic***

2        Potential scenic vista view effects associated with the proposed project would remain similar to  
3        those of the approved project. The dock located along Snodgrass Slough, north of Twin Cities Road,  
4        near the intermediate forebay would not be built under the proposed project. This would be  
5        beneficial because boat traffic would not be constricted, vegetation would not be removed, and  
6        scenic vista views from Twin Cities Road would no longer be affected by or because of these  
7        elements at this location. However, visual effects associated with docks and barge traffic would  
8        remain similar to those of the approved project because the other docks identified and analyzed  
9        under the approved project would remain a part of the proposed project.

10       ***NEPA Effects:*** Effects related to scenic vistas under the proposed project would be similar to those  
11       described for the approved project. During construction the introduction of construction equipment  
12       and removal of vegetation would alter the scenic elements that contribute to the viewing experience  
13       from scenic vistas. As described for the approved project, the effects of permanent access road  
14       effects on scenic vistas would not be adverse. The effects of shaft site pads and access hatches on  
15       scenic vistas could be adverse. The large scale of facilities, the visual presence of large-scale  
16       borrow/spoil and RTM area landscape effects, and transmission lines may result in adverse effects  
17       on scenic vistas, as discussed under the approved project. Overall, effects on scenic vistas associated  
18       with the proposed project would be adverse because some elements of the conveyance facilities  
19       would permanently change views to scenic vistas. Mitigation Measures AES-1c and AES-1e have  
20       been adopted to address the proposed project's effects that are different from those of the approved  
21       project. These measures, as written in the Final EIR/EIS, remain adequate without change for  
22       dealing with the impacts of the proposed project.

23       ***CEQA Conclusion:*** Construction of conveyance facilities under the proposed project would have  
24       effects on scenic vistas that are similar to those of the approved project. Impacts on scenic vistas  
25       associated with proposed permanent access roads would be the same as described for the approved  
26       project. The presence of the Clifton Court Forebay pumping plants would have impacts very similar  
27       to the approved project's impacts resulting from the Byron Tract Forebay pumping plants. Large-  
28       scale borrow/spoil and RTM area landscape effects, shaft site pads and access hatches, and  
29       transmission lines would also result in impacts on scenic vistas because construction and operation  
30       would result in a reduction in the visual quality in some locations and introduce dominant visual  
31       elements that would result in noticeable changes in the visual character of scenic vistas in the study  
32       area. Mitigation Measure AES-1a, AES-1c, and AES-1e would partially reduce these impacts but not  
33       to a less-than-significant level.

34       ***Incremental Impact:*** Construction of conveyance facilities under the proposed project would  
35       have an incremental change and similar effects on scenic vistas as described for the approved  
36       project. Because proposed permanent access roads would generally follow existing rights-of-  
37       way, they would have less-than-significant impacts on scenic vistas. The presence of the Byron  
38       Tract Forebay pumping plants, large-scale borrow/spoil and RTM area, shaft site pads and  
39       access hatches, and transmission lines would result in significant impacts on scenic vistas  
40       because construction and operation would result in a reduction in the visual quality in some  
41       locations and introduce dominant visual elements that would result in noticeable changes in the  
42       visual character of scenic vistas in the study area. Mitigation Measures AES-1c and AES-1e from  
43       the Final EIR/EIS would partially reduce the incremental impacts that differ from the approved  
44       project but not to a less-than-significant level. Thus, the impact would be the same as under the

1 approved project and impacts on scenic vistas associated with the proposed project would  
2 remain significant and unavoidable (CEQA).

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

5 Please refer to Mitigation Measure AES-1c in Chapter 17 of the Final EIR/EIS.

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

8 Please refer to Mitigation Measure AES-1e in Chapter 17 of the Final EIR/EIS.

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

11 Potential effects on scenic highways associated with the proposed project would remain similar to  
12 those of the approved project. Effects on state scenic highways under the proposed project would be  
13 the same as those described for the approved project because visual changes resulting from the  
14 project modifications to Byron Tract Forebay, RTM areas, shaft sites, and docks and barge traffic  
15 would not affect scenic roadways identified under the approved project. However, the canal  
16 connecting the California Aqueduct to the Delta-Mendota Canal would be located south of Byron  
17 Bethany Road (i.e., Byron Highway) and Mountain House Road, which are Alameda County scenic  
18 roadways. Levees along the Delta-Mendota Canal would block views of the new proposed canal from  
19 Mountain House Road. The same is true for most views along Byron Bethany Road. The only place  
20 the new proposed canal would be visible would be where roadway travelers pass by the Delta-  
21 Mendota Canal. Here, viewers would be able to see where the proposed canal enters the existing  
22 canal. Because the existing canal is already a prominent part of the landscape, the new canal  
23 connection would not introduce a discordant visual element into this view. In addition, viewers pass  
24 by this location very quickly, so views of the new connection would be fleeting, lasting only a few  
25 seconds.

26 **NEPA Effects:** Views associated with the proposed canal connector would not adversely affect scenic  
27 resources associated with Alameda County scenic roadways. However, effects on scenic highways  
28 identified under the approved project would still result under the proposed project. As described for  
29 the approved project, the visual elements introduced by the intakes, RTM area north of Intake 2, and  
30 intermediate forebay associated with the proposed project would conflict with the existing forms,  
31 patterns, colors, and textures along River Road and SR 160; would dominate riverfront visible from  
32 SR 160; and would alter broad views and the general nature of the visual experience presently  
33 available from River Road and SR 160. These changes would reduce the visual quality near intake  
34 structure locations and result in noticeable changes in the visual character of scenic highway  
35 viewsheds in the study area. This effect would be adverse for the same reasons discussed for the  
36 approved project under the proposed project. Mitigation Measures AES-1a, AES-1c, and AES-1e have  
37 been adopted to address these effects, but the effects would remain adverse. These measures, as  
38 written in the Final EIR/EIS, remain adequate without change for dealing with the impacts of the  
39 proposed project.

40 **CEQA Conclusion:** Construction of conveyance facilities under the proposed project would have  
41 effects on scenic highways identical to those described for the approved project. Impacts associated  
42 with proposed permanent access roads would be the same as described for the approved project.

1 The presence of the Clifton Court Forebay pumping plants would be very similar to the approved  
2 project's impacts resulting from the Byron Tract Forebay pumping plants. RTM area landscape  
3 effects, shaft site pads and access hatches, and transmission lines would also result in impacts on  
4 scenic highways because construction and operation would result in a reduction in the visual quality  
5 in some locations and introduce dominant visual elements that would result in noticeable changes in  
6 the visual character of scenic highway viewsheds in the study area.

7 **Incremental Impact:** Construction of conveyance facilities under the proposed project would  
8 have effects on scenic highways identical to those described for the approved project and there  
9 would be no incremental change. Because proposed permanent access roads would generally  
10 follow existing rights-of-way, they would have less-than-significant impacts on scenic highways.  
11 The presence of the Clifton Court Forebay pumping plants, RTM area, shaft site pads and access  
12 hatches, and transmission lines would result in significant impacts, similar to that of the  
13 approved project, on scenic highways because construction and operation would result in a  
14 reduction in the visual quality in some locations and introduce dominant visual elements that  
15 would result in noticeable changes in the visual character of scenic highway viewsheds in the  
16 study area. Mitigation Measures AES-1a, AES-1c, and AES-1e would partially reduce these  
17 incremental impacts but not to a less-than-significant level for the same reasons identified for  
18 the approved project. Thus, the impact would be the same as under the approved project and  
19 impacts on scenic highways associated with the proposed project would be significant and  
20 unavoidable (CEQA), as with the approved project.

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

24 Please see Mitigation Measure AES-1a in Chapter 17 of the Final EIR/EIS.

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

27 Please refer to Mitigation Measure AES-1c in Chapter 17 of the Final EIR/EIS.

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

30 Please refer to Mitigation Measure AES-1e in Chapter 17 of the Final EIR/EIS.

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

33 Changes resulting from the new proposed Byron Tract Forebay, and relocating the northernmost  
34 shaft site on Staten Island would result in very minor changes to light and glare under the proposed  
35 project compared with to the approved project and would affect nearby sensitive receptors in the  
36 same manner as described for the approved project. The new proposed Byron Tract Forebay and  
37 canal connecting the California Aqueduct and Delta Mendota Canal would have a similar surface area  
38 compared to the approved project, which would have similar glare effects related to sunlight  
39 reflecting off the new water surfaces. However, the water surface of the forebay is not likely to be  
40 seen by sensitive receptors driving along or located near Byron Highway. There would be few views  
41 of the water surface, even from elevated vantage points from the foothills to the southwest due to terrain

1 that blocks views and few sensitive receptors. Relocating the northernmost shaft site on Staten  
2 Island would place the shaft site within 380 feet of two residences along Gas Well Road and would  
3 increase the potential for these residences to be affected by nighttime construction lighting.  
4 However, the overall number of sensitive receptors to be affected by nighttime construction under  
5 the approved project would not be greatly altered by the proposed project. Locating RTM closer to  
6 the eastern edge of Bouldin Island, near the Tower Park Marina Resort along Little Potato Slough,  
7 could increase the amount of nighttime construction lighting that could be seen at the marina. This  
8 would negatively affect nighttime views from the marina by introducing bright sources of nighttime  
9 lighting that could be seen radiating above the levee tops and potentially, create glare on the water  
10 surface.

11 **NEPA Effects:** Changes to light and glare would remain adverse under the proposed project,  
12 consistent with the approved project. As described for the approved project in the Final EIR/EIS,  
13 there are many viewers in and around the waterways, intake structures, and intermediate forebay;  
14 project facilities would increase the amount of nighttime lighting in the Delta above existing ambient  
15 light levels; blue-rich white light (BRWL) LED lighting could exacerbate project lighting impacts; and  
16 the study area currently experiences low levels of light because there are fewer light/glare  
17 producers than are typical in urban areas. Mitigation Measures AES-4a through AES-4d have been  
18 adopted to address the effects that differ from the approved project, although the effects would  
19 remain adverse. These measures, as written in the Final EIR/EIS, remain adequate without change  
20 for addressing the impacts of the proposed project.

21 **CEQA Conclusion:** Construction of conveyance facilities under the proposed project would have  
22 effects related to light and glare similar to those described for the approved project because the  
23 proposed project would still impact a large number of viewers in and around the waterways where  
24 construction would occur and increase the amount of nighttime lighting in the Delta above existing  
25 ambient light levels; BRWL LED lighting could exacerbate project lighting impacts; and the study  
26 area currently experiences low levels of light because there are fewer light/glare producers than are  
27 typical in urban areas.

28 **Incremental Impact:** Although the modifications to the configuration and location of water  
29 conveyance facilities under the proposed project would result in a slightly smaller permanent  
30 footprint, construction of conveyance facilities under the proposed project would have the same  
31 effects related to light and glare as described for the approved project and the incremental  
32 changes would be small enough that they would not result in a noticeable change. These impacts  
33 would be considered significant for the same reasons as described for the approved project.  
34 Mitigation Measures AES-4a through AES-4d from the Final EIR/EIS would partially reduce the  
35 incremental impacts that differ from the approved project but not to a less-than-significant level  
36 because all instances of light and glare impacts would not be reduced by the adopted mitigation  
37 measures. Thus, the impact would be the same as under the approved project, and the new  
38 sources of daytime and nighttime light and glare associated with the proposed project would  
39 result in significant and unavoidable impacts (CEQA) on public views in the project vicinity.

40 **Mitigation Measure AES-4a: Limit Construction Outside of Daylight Hours within 0.25 Mile**  
41 **of Residents at the Intakes**

42 Please see Mitigation Measure AES-4a in Chapter 17 of the Final EIR/EIS.

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

3           Please see Mitigation Measure AES-4b in Chapter 17 of the Final EIR/EIS.

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

6           Please see Mitigation Measure AES-4c in Chapter 17 of the Final EIR/EIS.

7           **Mitigation Measure AES-4d: Avoid the Use of Blue Rich White Light LED Lighting**

8           Please see Mitigation Measure AES-4d in Chapter 17 of the Final EIR/EIS.

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

12          **NEPA Effects:** Constructing water conveyance facilities and implementing Environmental  
13          Commitments under the proposed project would have the same potential for incompatibilities with  
14          one or more plans and policies related to preserving the visual quality and character of the Delta as  
15          described for the approved project. Potential incompatibility with plans and policies could exist  
16          related to preserving the visual quality and character of the Delta (i.e., The Johnston-Baker-Andal-  
17          Boatwright Delta Protection Act of 1992, Delta Protection Commission Land Use and Resource  
18          Management Plan for the Primary Zone of the Delta, Delta Plan, Brannan Island and Franks Tract  
19          State Recreation Areas General Plan). In addition, with the exception of Solano and Alameda  
20          Counties, the proposed project may be incompatible with county general plan policies that protect  
21          visual resources in the study area.

22          **CEQA Conclusion:** The potential incompatibilities with plans and policies listed above indicate the  
23          potential for a physical consequence to the environment. The physical effects they suggest are  
24          discussed in Impacts AES-1 through AES-4, and no additional CEQA conclusion is required related to  
25          the compatibility of the proposed project with relevant plans and policies.

26          **Incremental Impact:** There would be no incremental impact.

27          **17.3.4 Cumulative Analysis**

28          The Final EIR/EIS found that there was a potential for the approved project and other projects to  
29          have a cumulative effect on aesthetics and visual resources in the Plan Area because they would  
30          result in reduced visual quality and introduce dominant visual elements that would result in  
31          noticeable changes that do not blend, are not in keeping or are incompatible with the existing visual  
32          environment, and could be viewed by sensitive receptors and from public viewing areas. The size of  
33          the study area and the nature of changes introduced by the approved project and other cumulative  
34          projects would result in permanent changes to the regional landscape such that there would be  
35          noticeable to very noticeable changes that do not blend or are not in keeping with the existing visual  
36          environment, including impacting scenic vistas and scenic highways due to temporary and  
37          permanent conversion of agricultural land to nonagricultural uses. Cumulative projects could also  
38          affect the amount of new artificial sources of light and glare through development and introduction  
39          of anthropogenic features. The analysis for cumulative effects for aesthetics and visual resources

1 remains the same as described in the Final EIR/EIS with consideration of the proposed project  
2 modifications. Environmental commitments would help to reduce emissions of construction-related  
3 criteria pollutants, including basic and enhanced fugitive dust control measures and measures for  
4 entrained road dust that would negatively affect short-range views during construction.  
5 Revegetation and lighting would also be designed in accordance with guidance given by DWR's  
6 WREM No. 30a, *Architectural Motif, State Water Project*, and through coordination with local  
7 agencies through an architectural review process. In addition, mitigation has been adopted to  
8 minimize these cumulative effects. However, construction and ongoing operations associated with  
9 proposed project modifications would still result in considerable cumulative effects on aesthetics  
10 and visual resources.

## 11 **17.4 References Cited**

- 12 Alameda County. 1994. *Scenic Route Element of the General Plan*. Amended May 5, 1994. Available:  
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- 15 ICF International. 2013. *Bay Delta Conservation Plan*. Sacramento, CA. Prepared for California  
16 Department of Water Resources, Sacramento, CA.