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Photo Simulation Data Sources and Assumptions

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17B.1 Data Sources

Reports

- Draft_CER_All_Tunnel_Option_Volume_2,_Rev_A.pdf
- TM 20-2 Rev 0 Proposed North Intake Facilities for the Draft EIRS.pdf
- DHCCP EIR Supplemental Information_rev 0_4-5-10_[1].pdf
- 2011-09-12 Info Summary Memo for Intakes Alt 3, Alt 4, Alt 5, 6 & 7.pdf
- MDC Option Report (DCN_WAS_DWR-00328).pdf
- MPTO_CER_FINALDRAFT_12-21-12_VOL1_CONCEPT_REPORT_NARRATIVE.PDF
- MPTO_CER_FINALDRAFT_12-21-12_VOL2_CONCEPTDRAWINGS_PART2.PDF
- MPTO_CER_FINALDRAFT_12-21-12_VOL2_CONCEPTDRAWINGS_PART1.PDF
- Volume 1 - Draft CER-CCO (04-09-2015).PDF
- Volume 2 - Draft CER-CCO (04-02-2015).PDF

GIS

- Eng_Rev9b (KMZ files showing facilities for Alternatives 1 through 8)
- Eng_Rev10 (KMZ files showing facilities for Alternatives 1 through 8)
- SCO-Rev3 (Alternative 9.kmz showing DCC and GS intakes)
- CCO Rev 5b.kmz (KMZ files showing facilities for Alternatives 4, 4A, 2D, and 5A)

17B.2 Assumptions

- All intakes will be on-bank; none will be in-river.

Visibility of Features and Inclusion in Visual Simulations

- Intake facility features likely to be clearly visible from most or all visual simulation viewpoints include: on-bank intake structures, pumping plants, surge towers, and SR 160 realignments. In Alternative 4, visible features would include the intake structure, storage and electrical buildings, the substation, security fencing, and perimeter trees. Removal of trees and buildings for grading and construction will also be a visible change.
- All features except the intake structures would be partly obscured after several years by growth of trees planted around each intake site outside the security fencing. For Alternatives 4, 4A, 2D, and 5A, buildings heights and colors determined using Volumes 1 and 2 of Draft CER-CCO.

- 1 • Features not likely to be visible because of their low profile, small size, or screening by other
2 features include: sedimentation basins, solids lagoons, valve vaults, air vents, and other at-grade
3 or low-profile structures.
- 4 • Features not shown in the simulations because they are temporary and would not be present
5 after completion includes: temporary access roads, temporary work area fencing, and sheet pile
6 coffer dams.

7 **Intakes 1–5 (Alternatives 1–8)**

- 8 • Locations: use the Eng_Rev9b GIS files, Alt 1A for east-side intakes and Alt 1C for west-side
9 intakes, but assume locations are approximate, subject to minor adjustments in later more
10 detailed site-specific design. For Alternatives 4, , 4A, 2D, and 5A, used the CCO Rev 5b GIS files
11 for east-side intakes.
- 12 • Site-specific locations of intake structures, pumping plants, transformers, substations,
13 permanent road realignments, and temporary roads: use the Eng_Rev9b GIS files (CCO Rev 5b
14 GIS files for Alternatives 4, 4A, 2D, and 5A), but assume these locations are approximate, subject
15 to minor adjustments in later more detailed site-specific design.
- 16 • West-side intakes only: levee and intake area footprints and major structures are not clearly
17 delineated in Eng_Rev9b (because they are for in-river intakes and even then are too
18 generalized and fewer features are shown), so use the final levee and intake area footprint
19 delineated in Figure ON-6 (page 134 in TM 20-2 Rev 0 Proposed North Intake Facilities for the
20 Draft EIRS.pdf) for Intake 4-East as a generic envelope to apply as needed to west-side Intakes.
- 21 • Locations of sedimentation basins, solids lagoons, and security fencing are not delineated in
22 Eng_Rev9b, so use Figure ON-6 (page 134 in TM 20-2 Rev 0 Proposed North Intake Facilities for
23 the Draft EIRS.pdf) for Intake 4-East as a generic site plan to apply as needed to Intakes 1–5 East
24 and West. Used CCO Rev 5b GIS files for Alternatives 4, 4A, 2D, and 5A.

25 **Intake 3-East (Alternatives 1A, 1B, 2A, 2B, 6A, 6B, 7, and 8)**

- 26 • All buildings and trees completely or partially covered by Polygon 1616 (Alt 1A, Intake 3,
27 Permanent Surface Impact) in Eng_Rev9b would be removed.

28 **Intake 4-East (Alternatives 1A, 1B, 2A, 2B, 6A, and 6B)**

- 29 • All buildings and trees completely or partially covered by Polygon 1644 (Alt 1A, Intake 4,
30 Permanent Surface Impact) in Eng_Rev9b would be removed.

31 **Intake 2-West (Alternatives 1C, 2C, and 6C)**

- 32 • Buildings and trees at the southeast end of Clarksburg along County Hwy E9 would be removed.
- 33 • Buildings and trees at the intersection of County Hwy E9 and County Rd 141 would be removed.

34 **Intakes 2-East and 3-East (Alternatives 4, 4A, 2D, and 5A)**

- 35 • Locations: use the CCO Rev 5b GIS files.

1 **Delta Cross Canal Intake at Walnut Grove and Locke** 2 **(Alternative 9)**

- 3 • Location and length: see SCO-Rev3 (Alternative 9.kmz)
- 4 • Approximate and generalized design of DCC and GS intake structures: see MDC Option Report
5 (DCN_WAS_DWR-00328).pdf
- 6 • Visible surfaces would be concrete and that floating log booms would be located in front of the
7 intake bays. Existing vegetation on the levee within the intake structure footprint would be
8 removed.

9 **Launch/Retrieval Shaft Site near Isleton Road**

- 10 • Buildings within the barge unloading facility area near Isleton Road would be removed. The
11 elevated pad for construction of launch and retrieval shafts would be removed after
12 construction. The permanent access road would be built at approximately existing grade.

13 **Intermediate Forebay (Alternatives 1–8)**

- 14 • Location: Use the Eng_Rev10 GIS files. Assume footprints of embankments, roads, and work
15 areas are approximate, subject to minor adjustments in later more detailed site-specific design.
- 16 • Visibility: The forebay embankment would be about 27 ft. (8.3 m) high, but about 0.6 mile away,
17 therefore not visually prominent. The permanent 230kV transmission line would not visible
18 because it would be almost directly overhead. Structures and access roads at the north end of
19 intermediate forebay would not visible because of their low profile and distance from the
20 camera (0.60 to 0.7 mile).

21 **Intermediate Forebay (Alternatives 4, 4A, 2D, and 5A)**

- 22 • Locations: use the CCO Rev 5b GIS files. The site would border the north side of Twin Cities
23 Road.
- 24 • Visibility: The forebay embankment crest would be about 32 feet above sea level. The height of
25 the overflow containment berm was not defined in the CER; its crest was assumed to be
26 approximately 10 feet above sea level.

27 **East Canal from I-5 near the Lambert Road Overpass**

- 28 • The canal levee would be approximately 2 miles away, so the levee height of 25 feet would be
29 very low in the distance, just a very thin line near the horizon. The siphon would be slightly
30 visible as gap in the levee. The bridge and ramp on Lambert Road would be partly obscured by
31 trees.

32 **East Canal from SR 12 near Guard Road**

- 33 • The grain elevators and associated buildings are within the canal footprint would all be
34 removed. Trees on both sides of road would be removed from the start of road work to the canal
35 levee. The west end of bridge over canal may be visible, but very small.

1 **East Canal from SR 4 near South Whiskey Slough Road**

- 2 • The nearest edge of levee, about 25 feet high, would be about 0.37 mile away. Buildings and
3 trees in distance would be on far side of canal, beyond permanent impact area.

4 **West Canal from SR 4 near Discovery Bay**

- 5 • The nearest edge of levee would be about 0.22 mile away. Houses and trees on far side of fields
6 are outside impact areas on far side of canal. Assume that trees and buildings on the south side
7 of SR 4 within the permanent and temporary impact areas would be removed. The west end of
8 bridge over the canal may be visible, but very small.

9 **Operable Barrier on Threemile Slough at Brannan Island SRA**

- 10 • The operable barrier would use miter gates, extending the full width of the waterway, with the
11 gates normally be closed, and with a lock for boat passage. Assume the boat lock and control
12 building would be on the north side of the channel. Assume that visible surfaces would be
13 concrete and that floating log booms would be located in front of gates not intended for boat
14 passage.

15 **Channel Modification at Hammer Island**

- 16 • No detailed designs are available, only the approximate positions of new levees and channels.
17 Assume that all existing structures and woody vegetation would be removed within the
18 apparent channel and levee modification areas.