

Attachment 8: DSM2 Water Quality Compliance Results

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The following results of the DSM2 model are included for D-1641 compliance conditions for the following scenarios:

- Baseline Conditions (1EX_2020 €)
- Proposed Project (9b_v2_2020)

Title	Model Parameter	Table Numbers	Figure Numbers
D-1641 AG Delta Mendota Canal at Tracy Pumping Plant	Post-processed (CHDMC006)	4B-8-1	4B-8-1
D-1641 AG Old River at Clifton Court Forebay	Post-processed (CHSWP003)	4B-8-2	4B-8-2
D-1641 AG Old River near Middle River	Post-processed (OLD_MID)	4B-8-3	4B-8-3
D-1641 AG Old River at Tracy Road	Post-processed (ROLD059)	4B-8-4	4B-8-4
D-1641 AG Sacramento River at Emmaton	Post-processed (RSAC092)	4B-8-5	4B-8-5
D-1641 AG San Joaquin River at Jersey Point	Post-processed (RSAN018)	4B-8-6	4B-8-6
D-1641 AG San Joaquin River at San Andreas Landing	Post-processed (RSAN032)	4B-8-7	4B-8-7
D-1641 AG San Joaquin River at Brandt Bridge	Post-processed (RSAN072)	4B-8-8	4B-8-8
D-1641 AG San Joaquin River at Vernalis	Post-processed (RSAN112)	4B-8-9	4B-8-9
D-1641 AG South Fork Mokelumne River at Terminous	Post-processed (RSMKL008)	4B-8-10	4B-8-10
D-1641 FWS San Joaquin River at Jersey Point	Post-processed (RSAN018)	4B-8-11	4B-8-11
D-1641 FWS San Joaquin River at Prisoners Point	Post-processed (RSAN037)	4B-8-12	4B-8-12
D-1641 MI Delta Mendota Canal at Tracy Pumping Plant	Post-processed (CHDMC006)	4B-8-13	4B-8-13
D-1641 MI Old River at Clifton Court Forebay	Post-processed (CHSWP003)	4B-8-14	4B-8-14
D-1641 MI Old River at Rock Slough (150 mg/L)	Post-processed (ROLD024_150)	4B-8-15	4B-8-15
D-1641 MI Old River at Rock Slough (250 mg/L)	Post-processed (ROLD024_250)	4B-8-16	4B-8-16
D-1641 MI Barker Slough	Post-processed (SLBAR002)	4B-8-17	4B-8-17
D-1641 MI Cache Slough at Vallejo	Post-processed (SLCCH016)	4B-8-18	4B-8-18

Report formats:

- For all D-1641 water quality objectives, tables with the number of days exceeding standards for the Baseline Conditions (1EX_2020 €) and Proposed Project (9b_v2_2020).
- For D-1641 AG and MI objectives, exceedance charts comparing two scenarios (scenario minus water quality standard) over the entire 100-year simulation period. For D-1641 U.S. Fish and Wildlife Service objectives, bar charts comparing two scenarios with water quality standards over the 100-year simulation period.

Table 4B-8-1. D-1641 AG Delta Mendota Canal at Tracy Pumping Plant (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	0	0.00
9b_v2_2020	36525	0	0.00

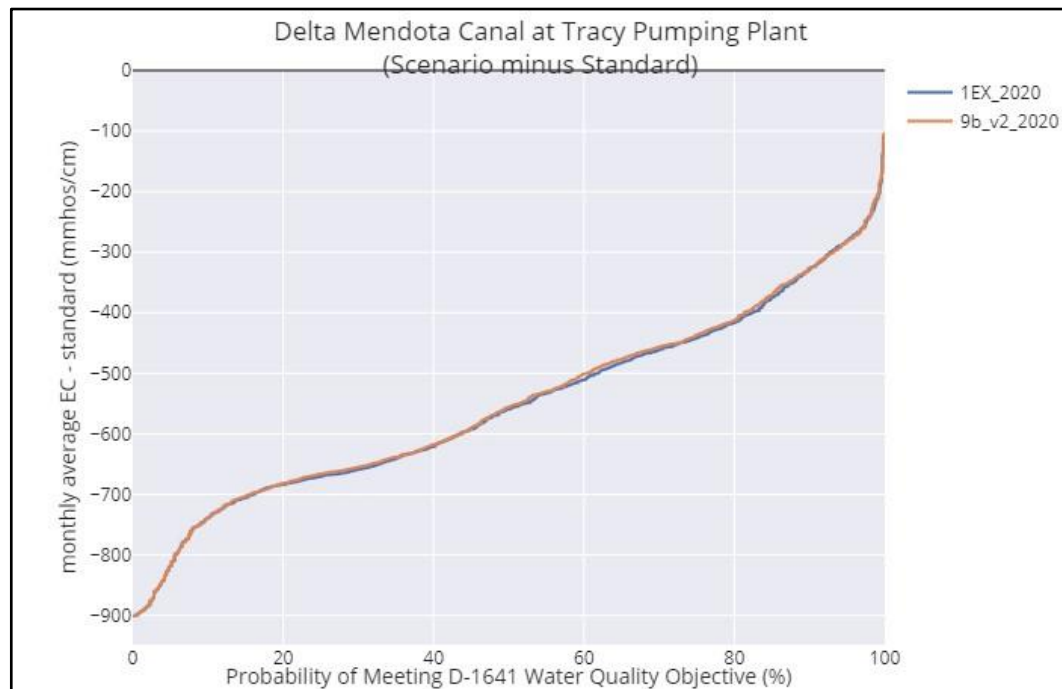
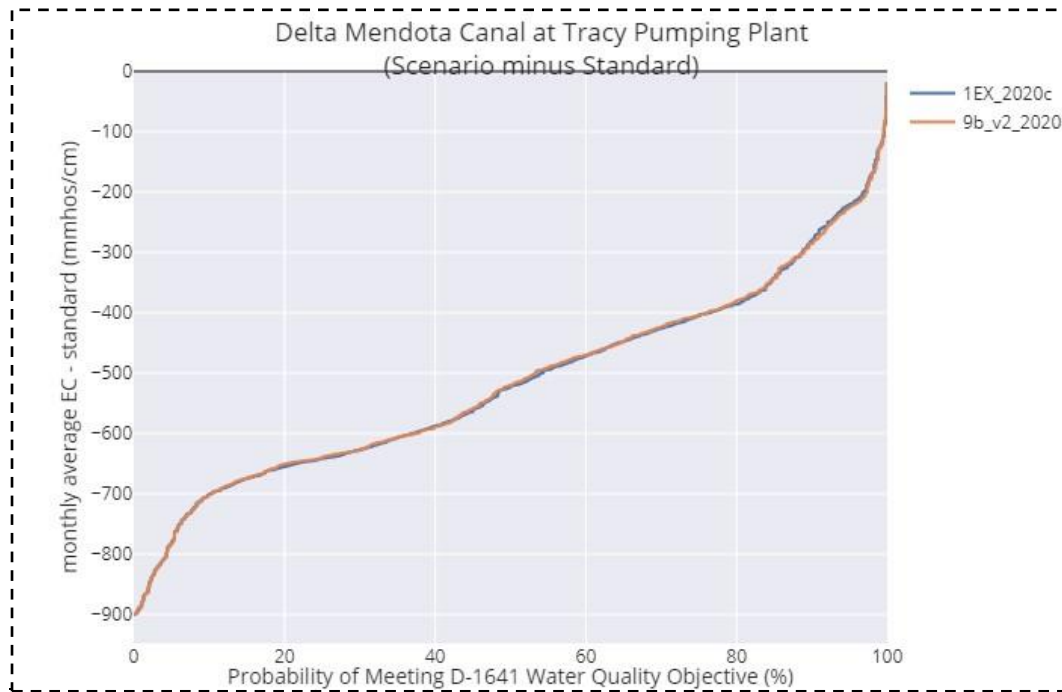
**Figure 4B-8-1. D-1641 AG Delta Mendota Canal at Tracy Pumping Plant**

Table 4B-8-2. D-1641 AG Old River at Clifton Court Forebay (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	0	0.00
9b_v2_2020	36525	0	0.00

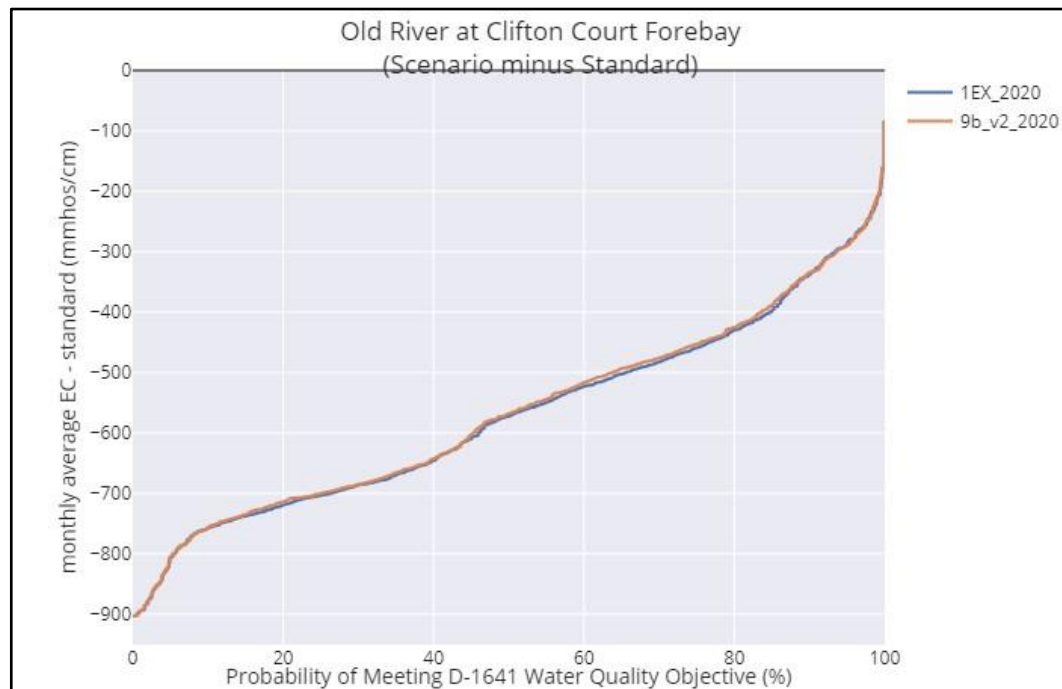
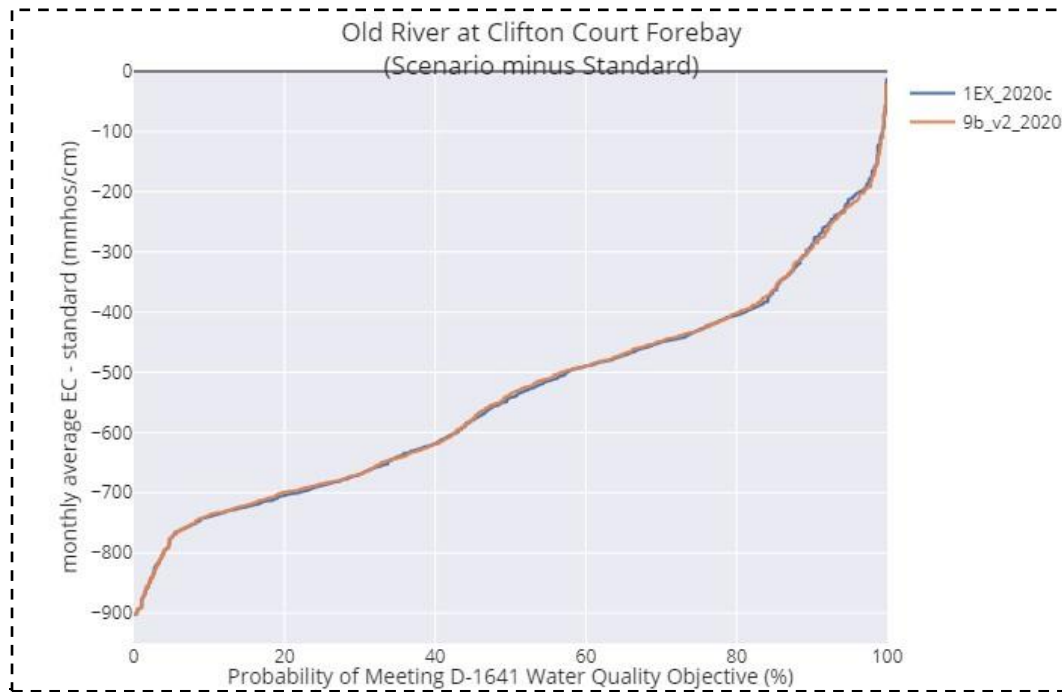
**Figure 4B-8-2. D-1641 AG Old River at Clifton Court Forebay**

Table 4B-8-3. D-1641 AG Old River near Middle River (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	9 <u>5</u>	0.02 <u>0.01</u>
9b_v2_2020	36525	9 <u>5</u>	0.02 <u>0.01</u>

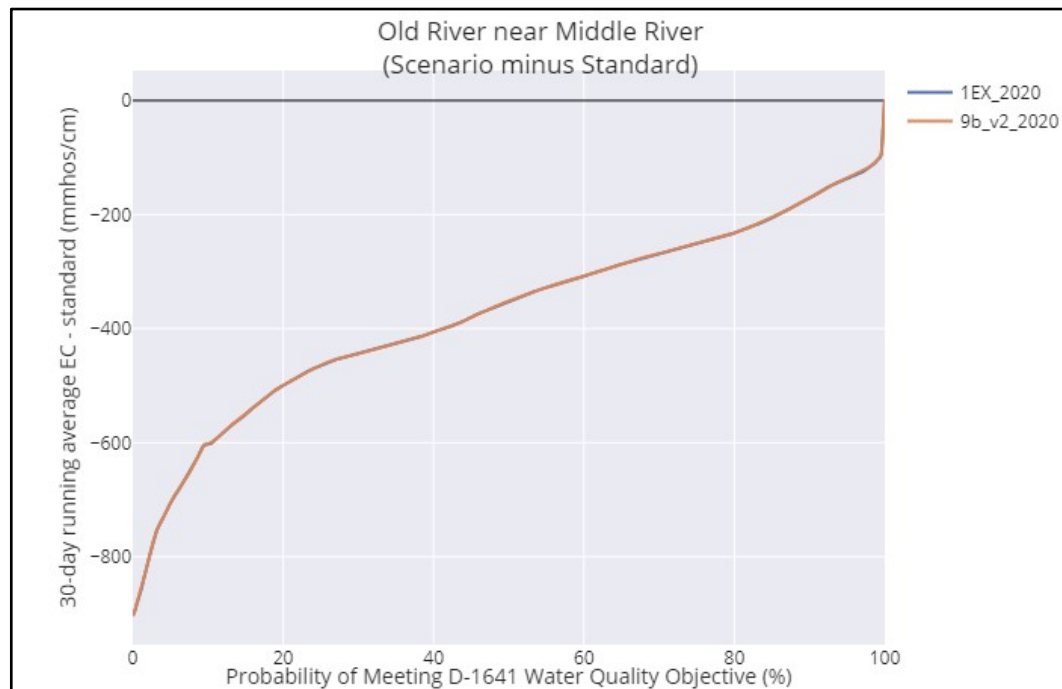
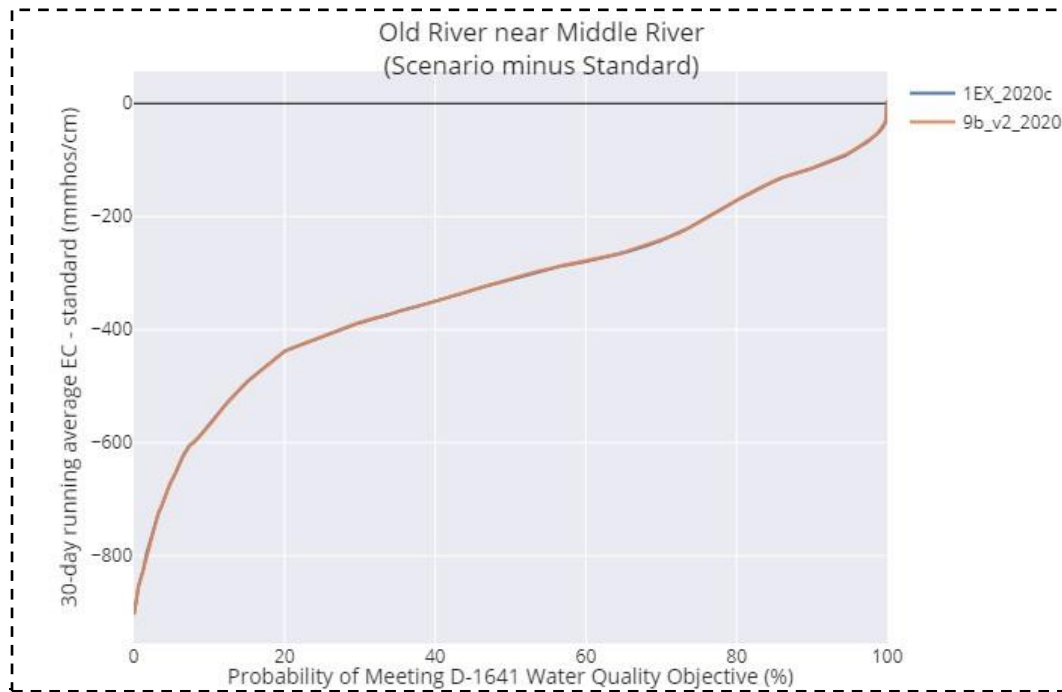
**Figure 4B-8-3. D-1641 AG Old River near Middle River**

Table 4B-8-4. D-1641 AG Old River at Tracy Road (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	34 <u>5</u>	0.09 <u>0.01</u>
9b_v2_2020	36525	38 <u>6</u>	0.10 <u>0.02</u>

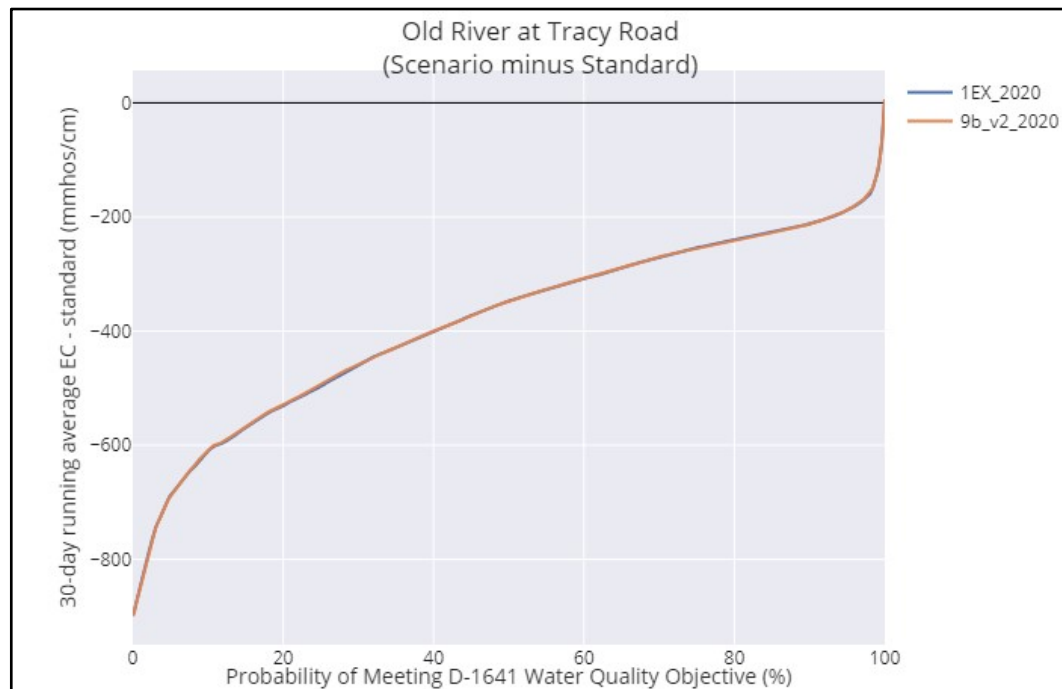
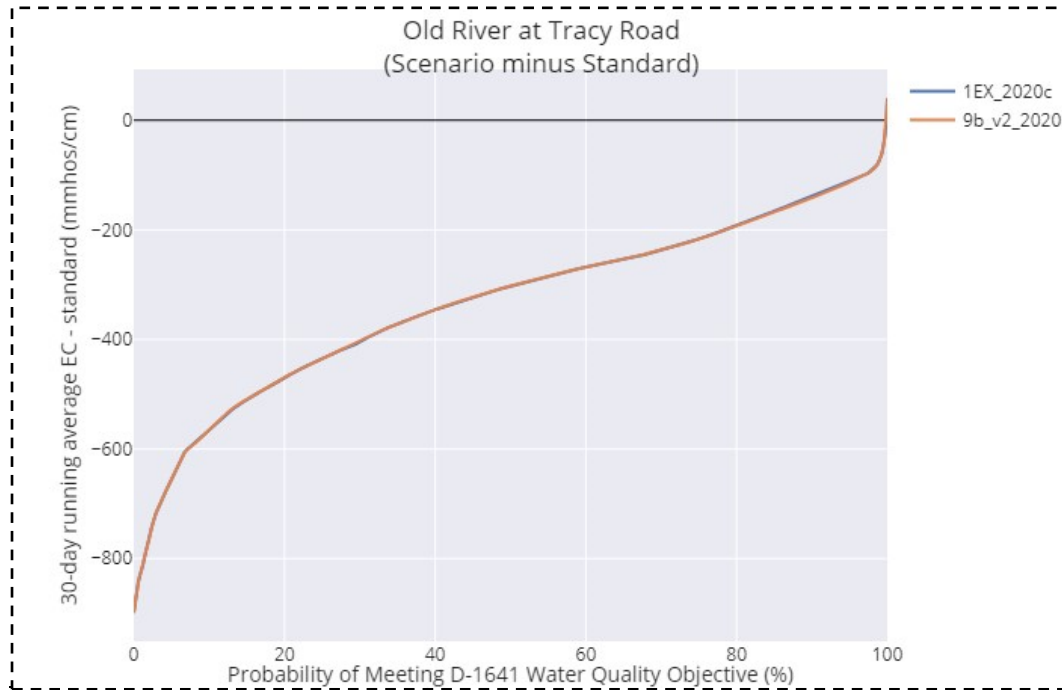
**Figure 4B-8-4. D-1641 AG Old River at Tracy Road**

Table 4B-8-5. D-1641 AG Sacramento River at Emmaton (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	13700	372 <u>347</u>	2.72 <u>2.53</u>
9b_v2_2020	13700	373 <u>308</u>	2.72 <u>2.25</u>

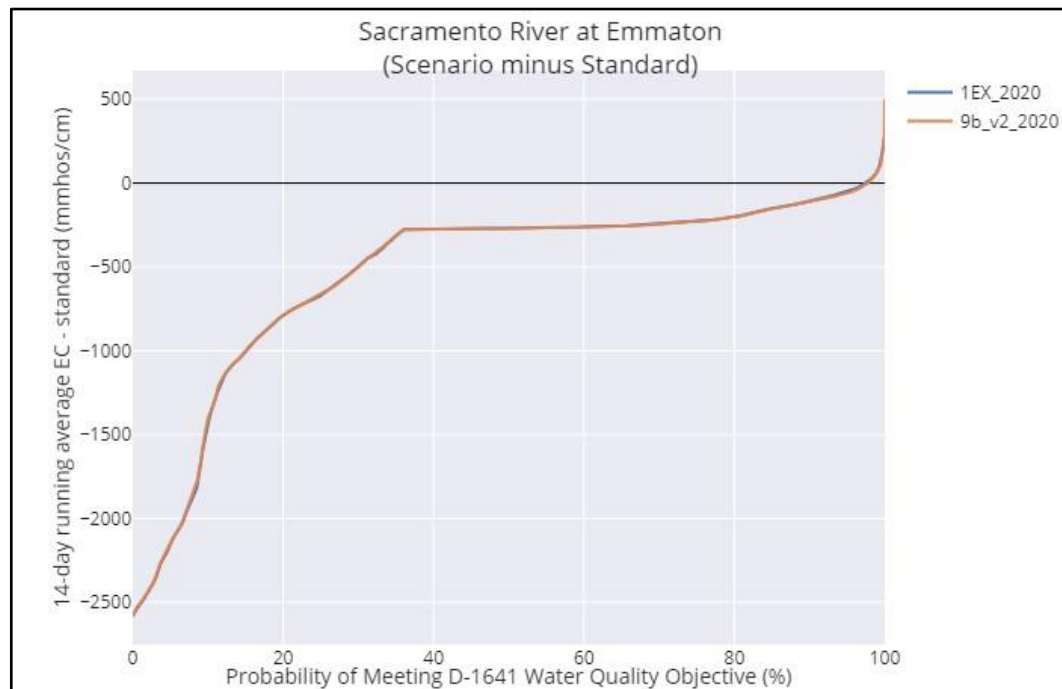
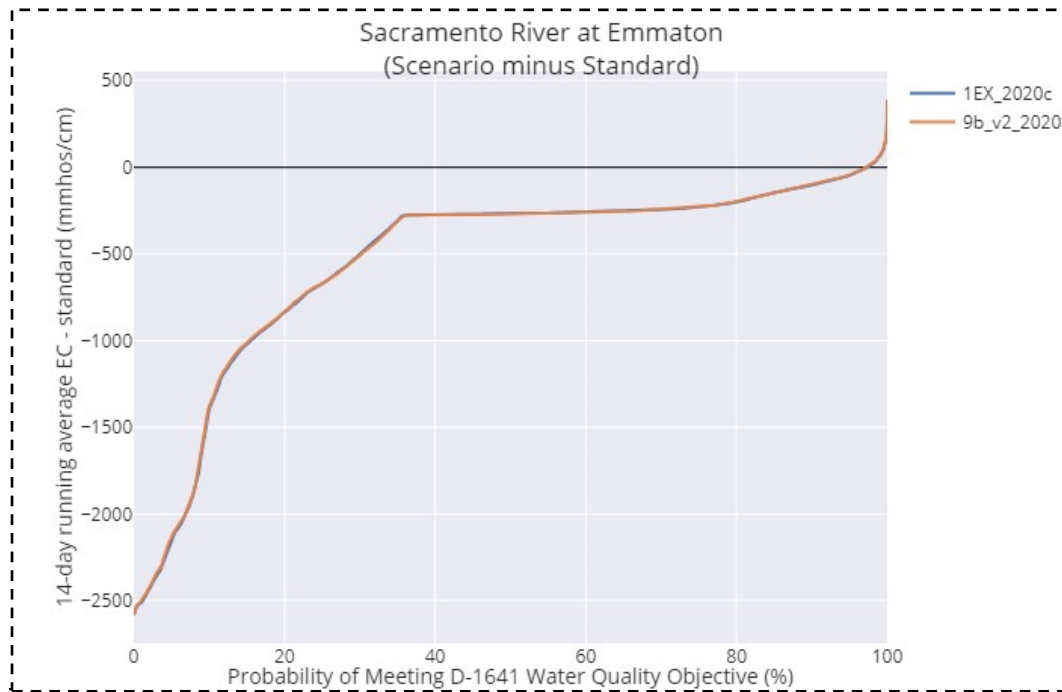
**Figure 4B-8-5. D-1641 AG Sacramento River at Emmaton**

Table 4B-8-6. D-1641 AG San Joaquin River at Jersey Point (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	13700	760 <u>565</u>	5.55 <u>4.12</u>
9b_v2_2020	13700	733 <u>550</u>	5.35 <u>4.01</u>

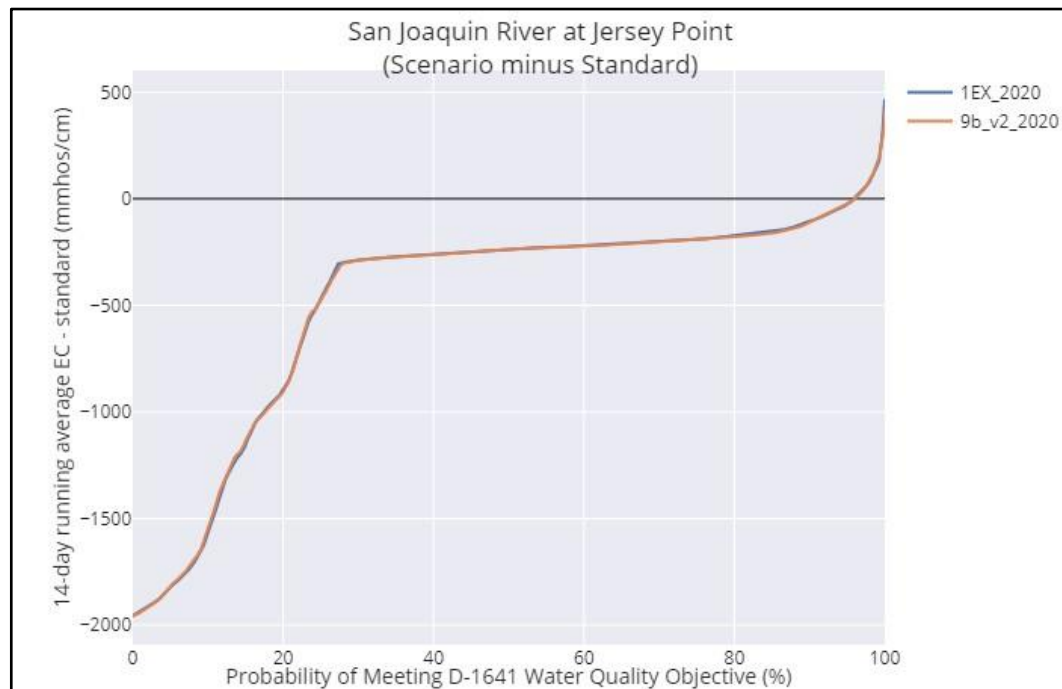
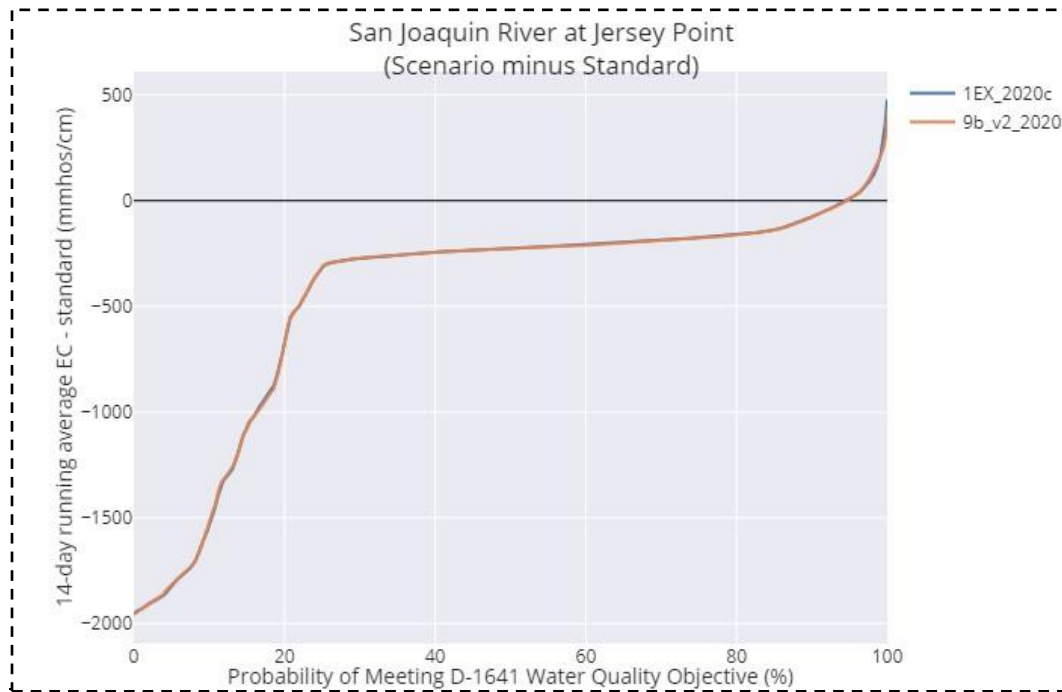
**Figure 4B-8-6. D-1641 AG San Joaquin River at Jersey Point**

Table 4B-8-7. D-1641 AG San Joaquin River at San Andreas Landing (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	13700	0	0.00
9b_v2_2020	13700	0	0.00

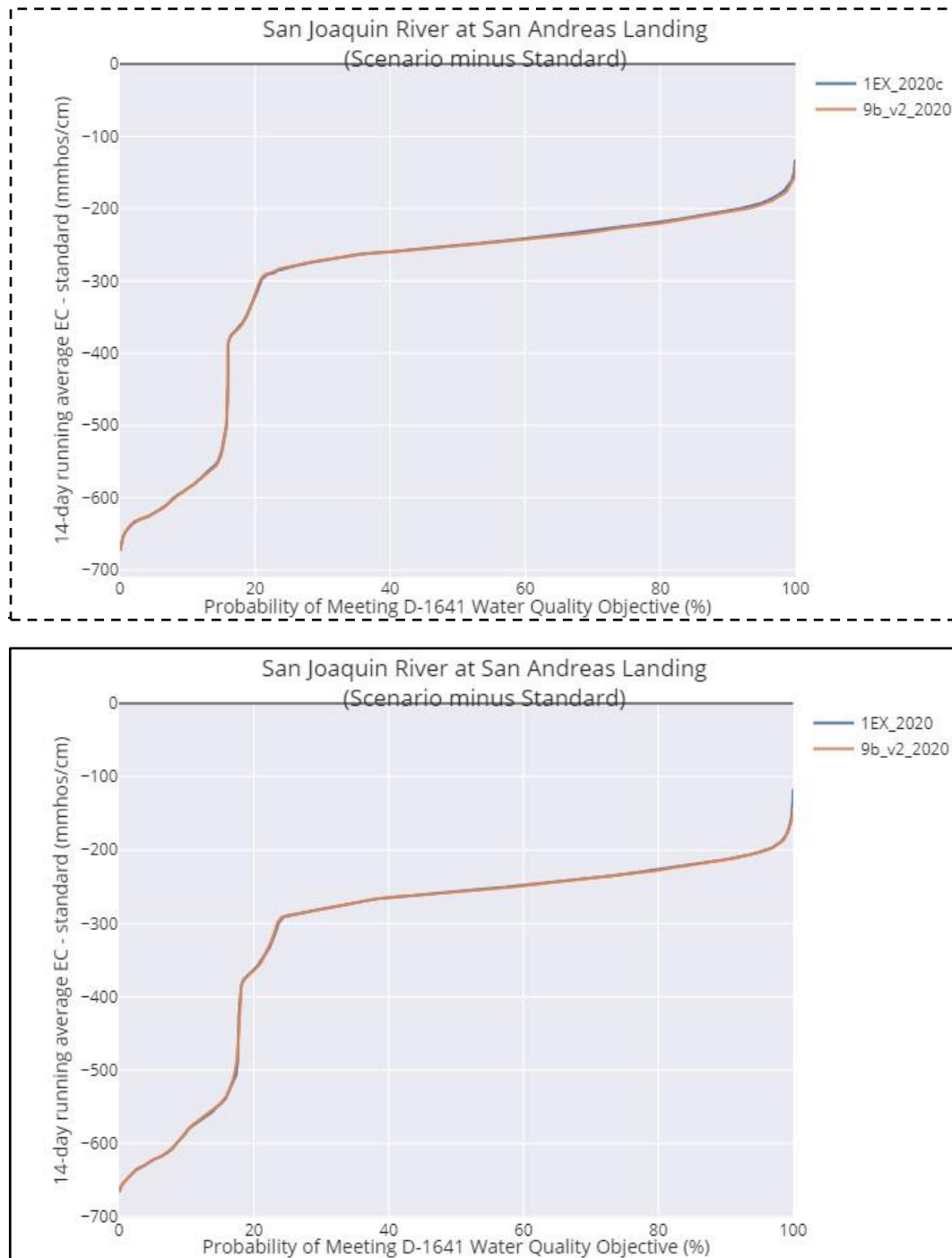
**Figure 4B-8-7. D-1641 AG San Joaquin River at San Andreas Landing**

Table 4B-8-8. D-1641 AG San Joaquin River at Brandt Bridge (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	7 <u>3</u>	0.02 <u>0.01</u>
9b_v2_2020	36525	7 <u>3</u>	0.02 <u>0.01</u>

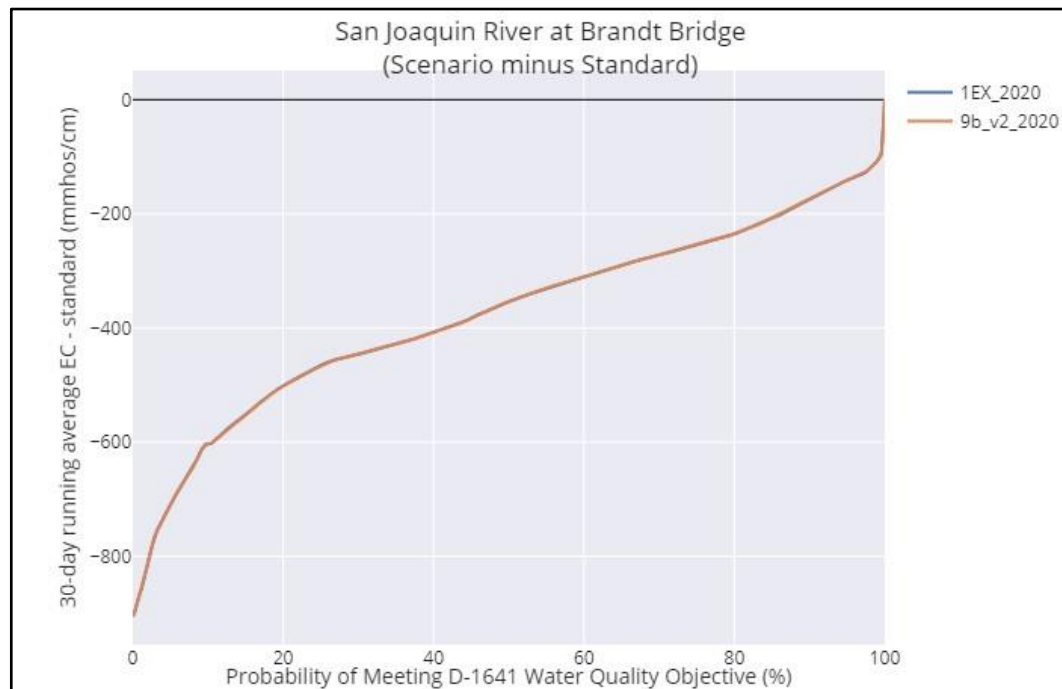
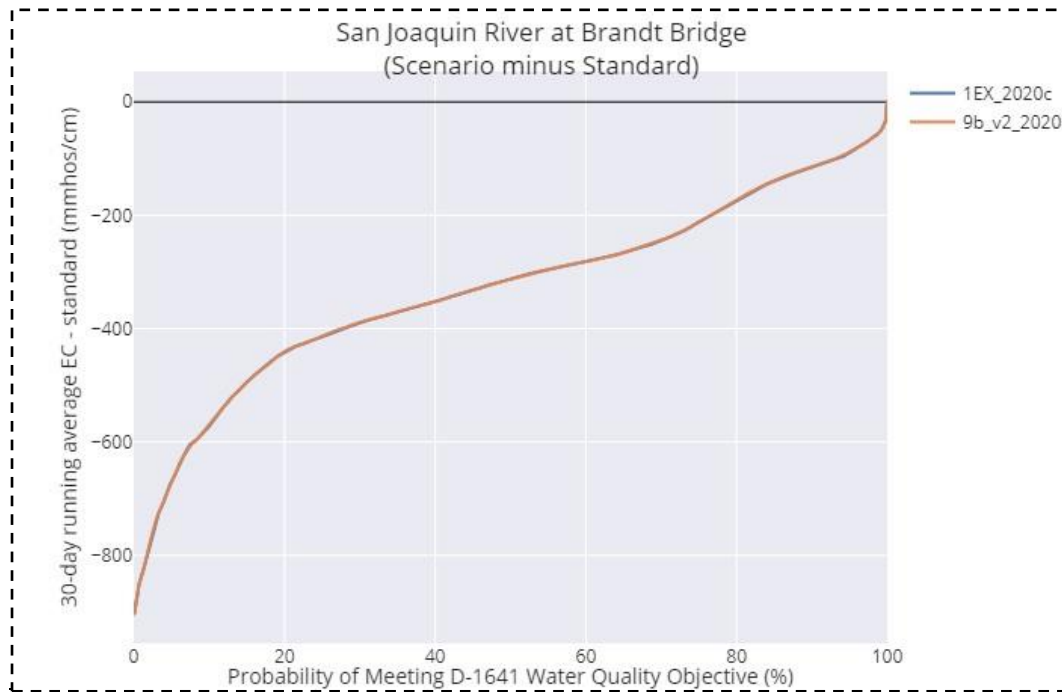
**Figure 4B-8-8. D-1641 AG San Joaquin River at Brandt Bridge**

Table 4B-8-9. D-1641 AG San Joaquin River at Vernalis (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	6 1	0.02 0.00
9b_v2_2020	36525	1 2	0.00 0.01

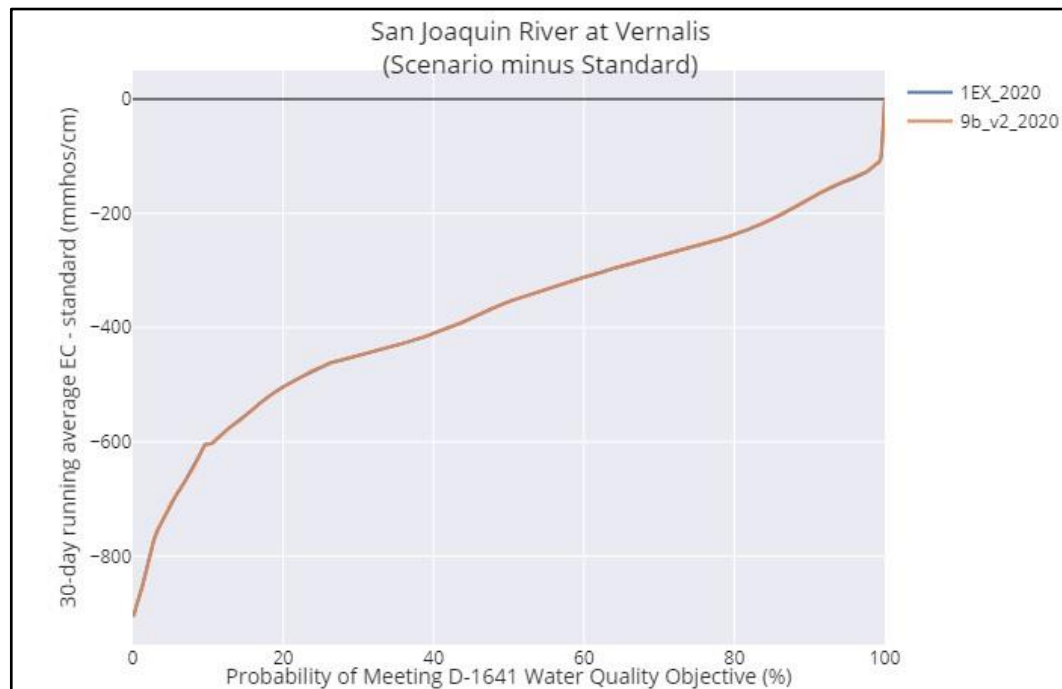
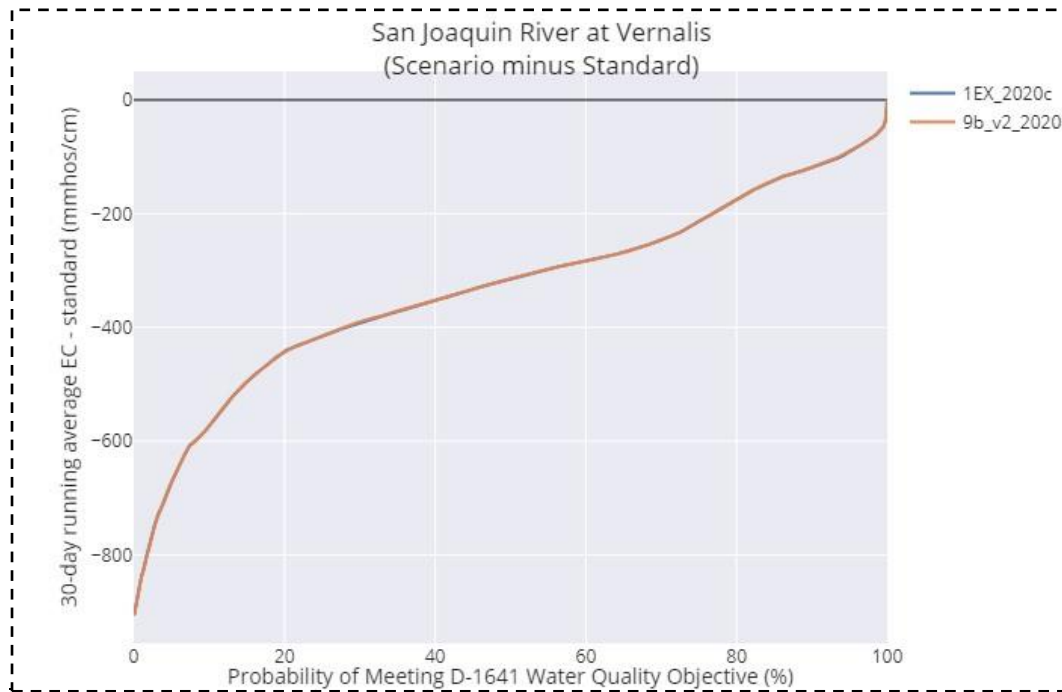
**Figure 4B-8-9. D-1641 AG San Joaquin River at Vernalis**

Table 4B-8-10. D-1641 AG South Fork Mokelumne River at Terminous (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	13700	0	0.00
9b_v2_2020	13700	0	0.00

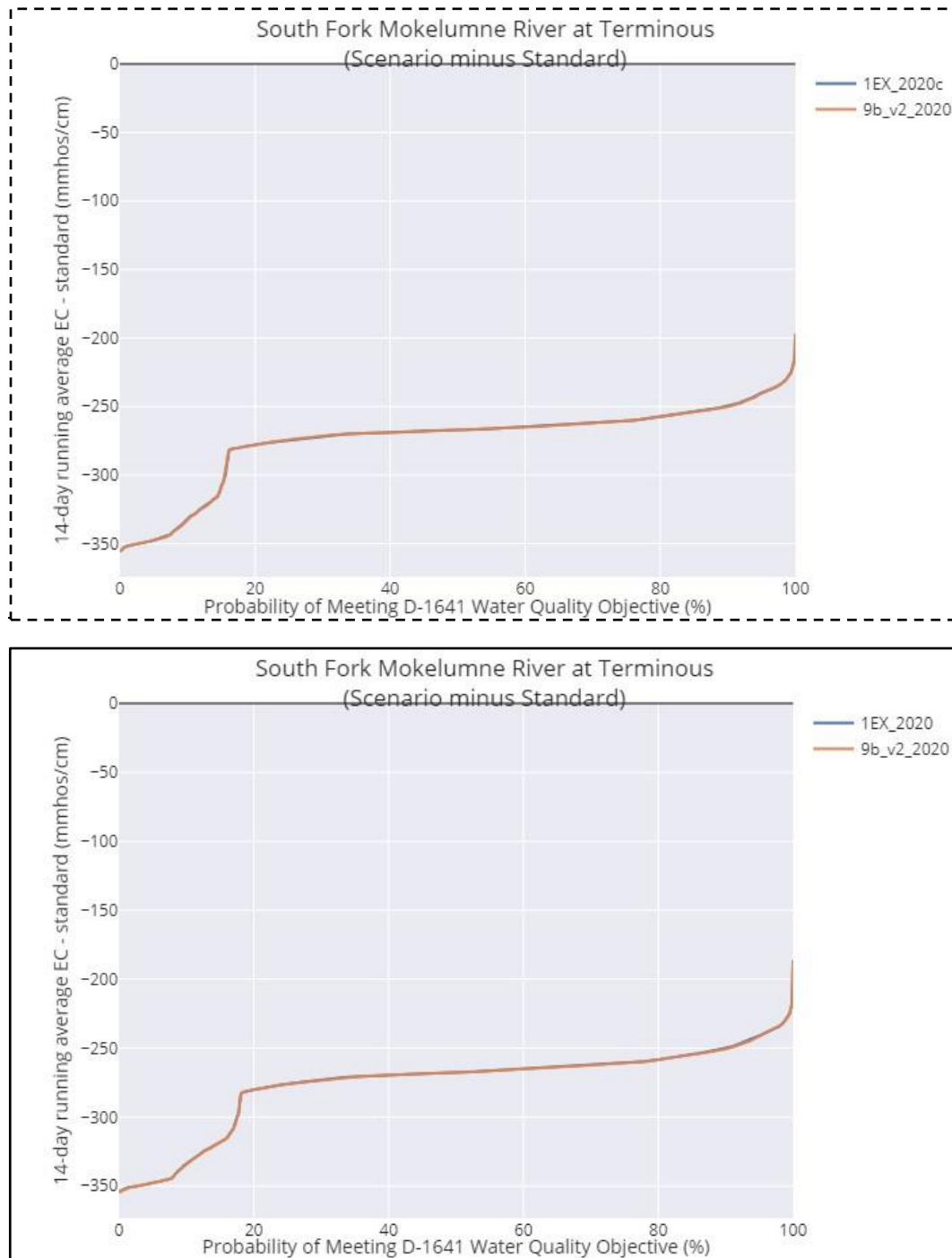
**Figure 4B-8-10. D-1641 AG South Fork Mokelumne River at Terminous**

Table 4B-8-11. D-1641 FWS San Joaquin River at Jersey Point (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	5124 5002	17 11	0.33 0.22
9b_v2_2020	5124 5002	0 6	0.00 0.12

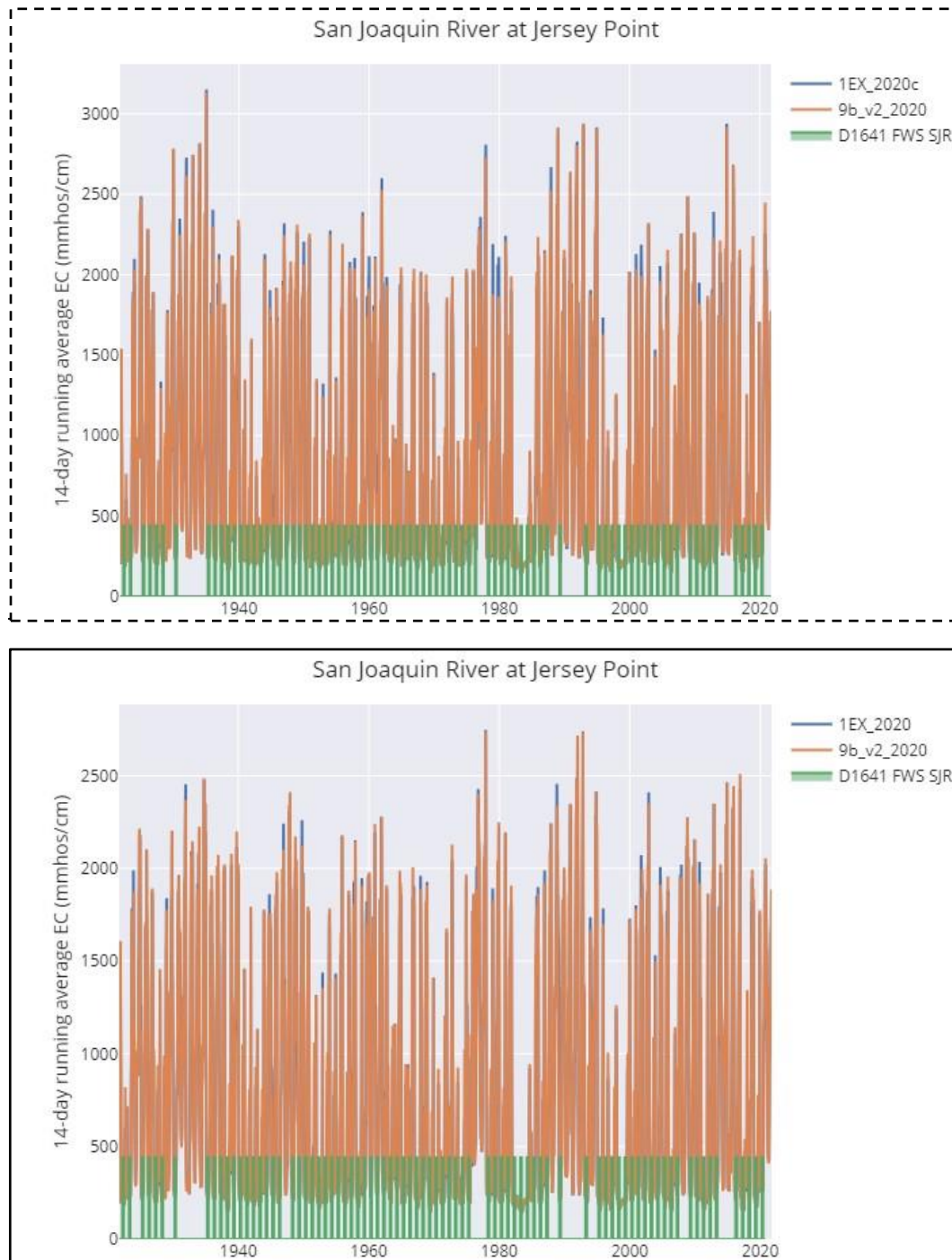
**Figure 4B-8-11. D-1641 FWS San Joaquin River at Jersey Point**

Table 4B-8-12. D-1641 FWS San Joaquin River at Prisoners Point (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	5124 5002	24 3	0.44 0.06
9b_v2_2020	5124 5002	23 0	0.45 0.00

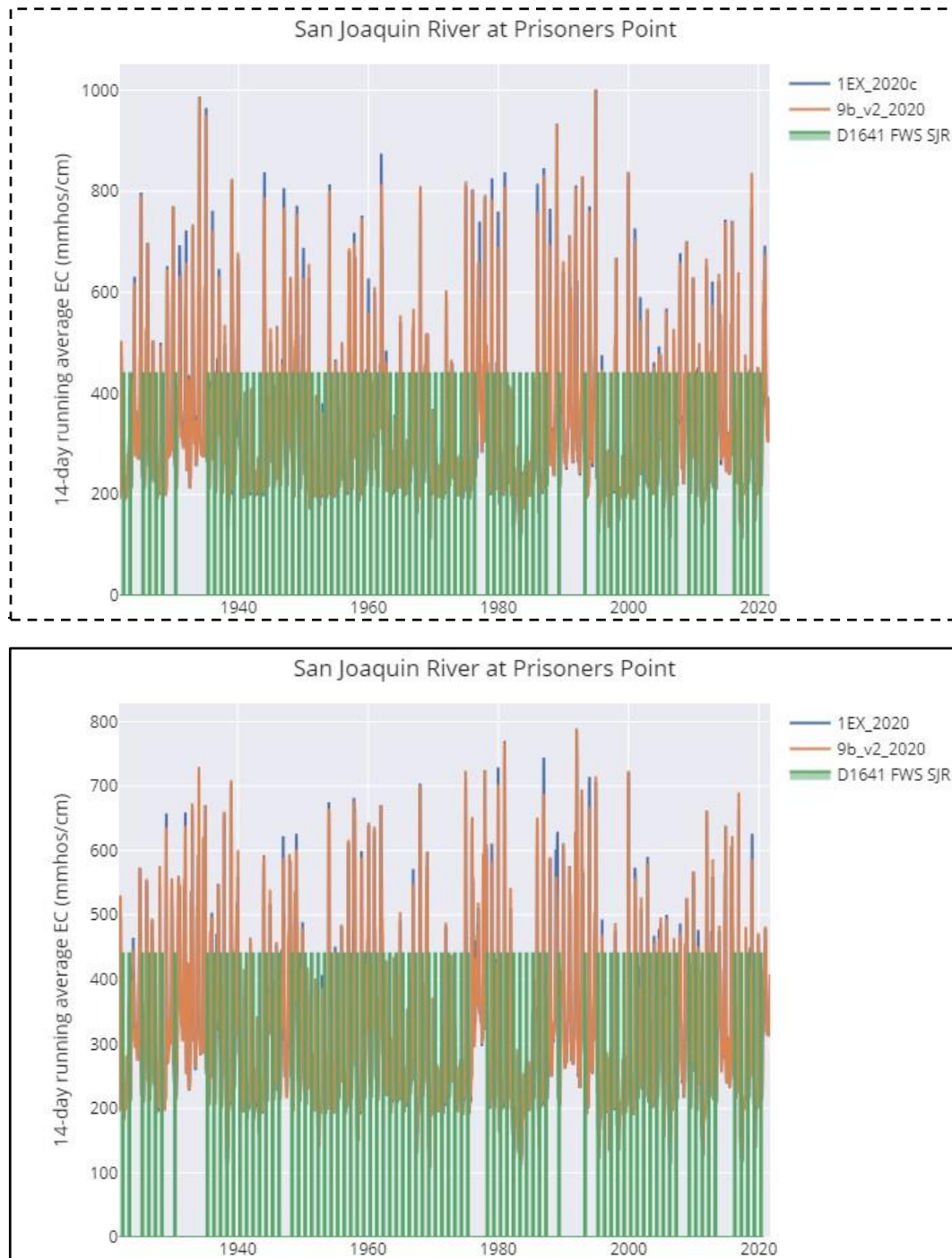
**Figure 4B-8-12. D-1641 FWS San Joaquin River at Prisoners Point**

Table 4B-8-13. D-1641 MI Delta Mendota Canal at Tracy Pumping Plant (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	7 0	0.02 0.00
9b_v2_2020	36525	5 0	0.01 0.00

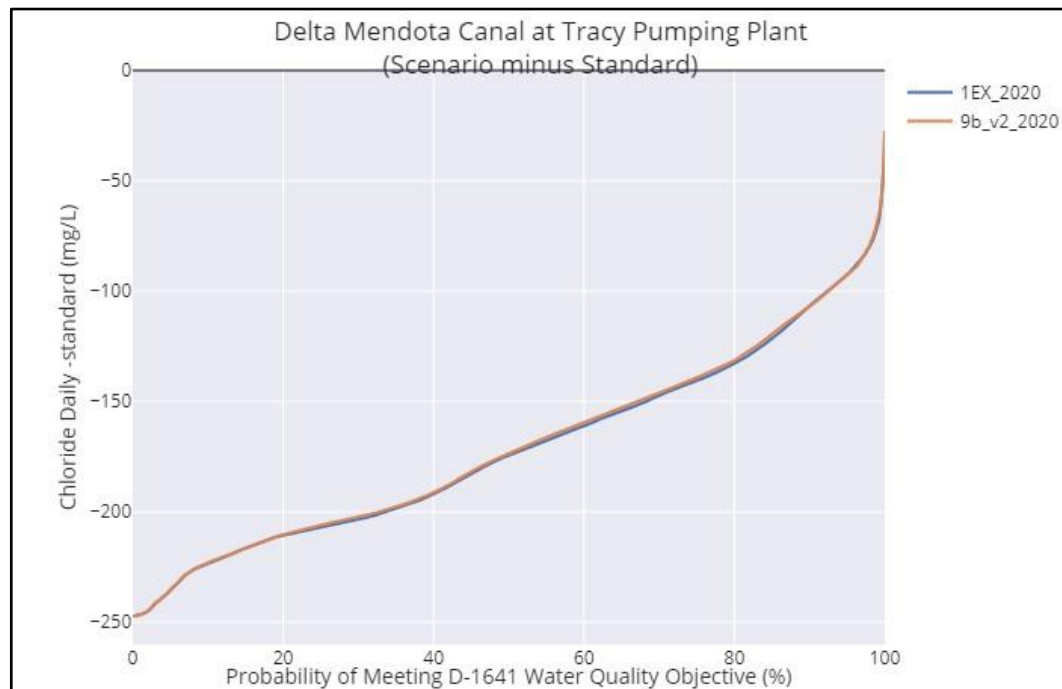
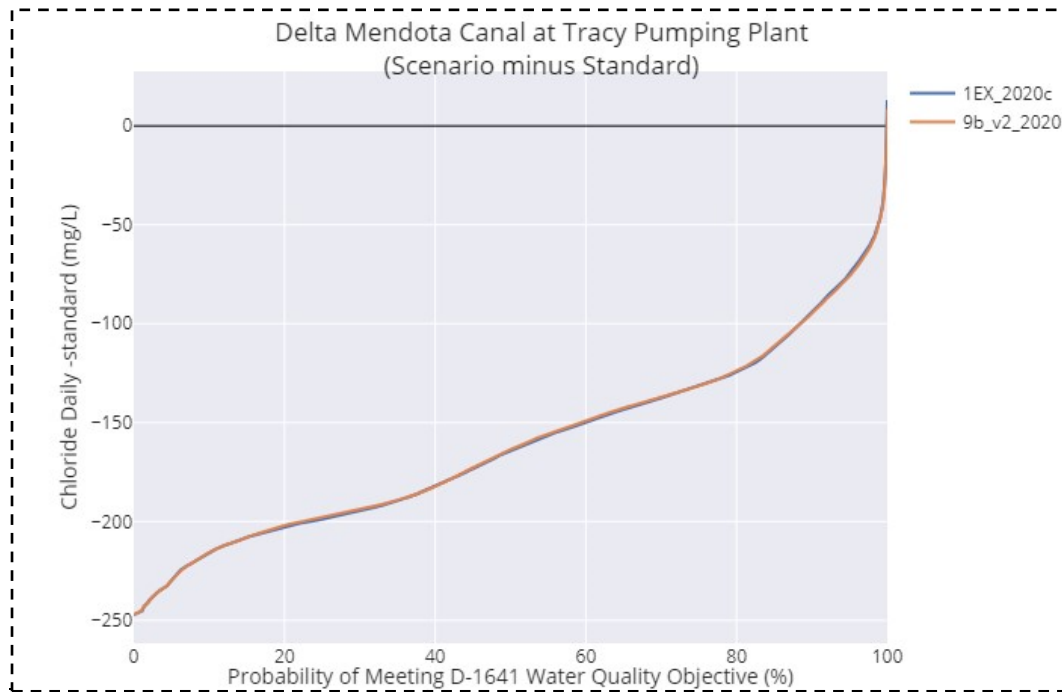
**Figure 4B-8-13. D-1641 MI Delta Mendota Canal at Tracy Pumping Plant**

Table 4B-8-14. D-1641 MI Old River at Clifton Court Forebay (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	21 0	0.06 0.00
9b_v2_2020	36525	19 0	0.05 0.00

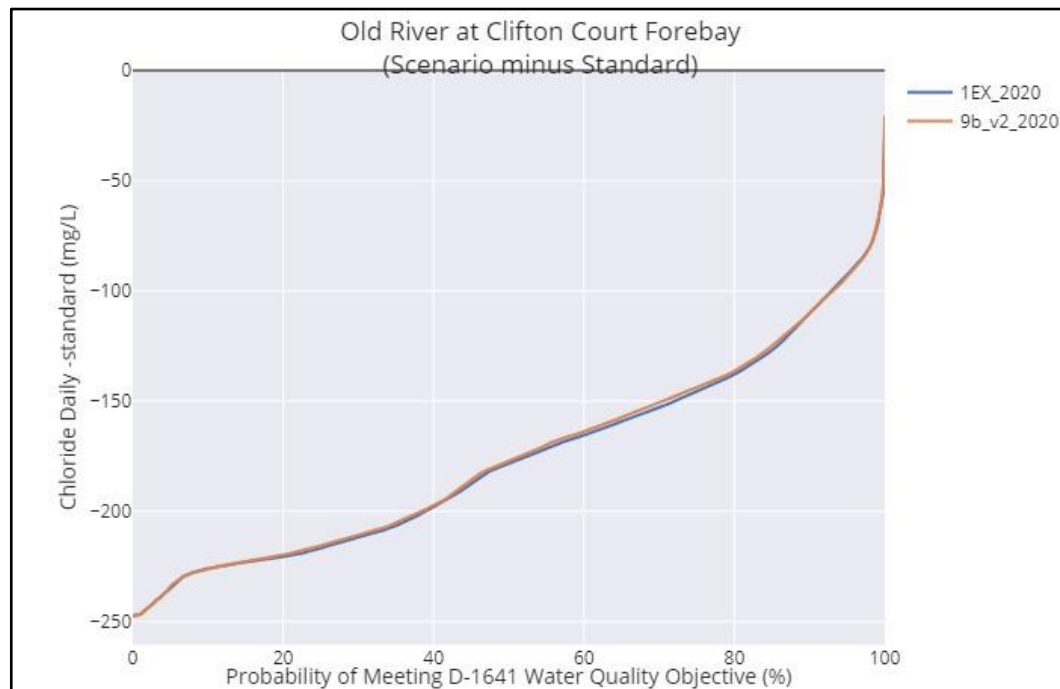
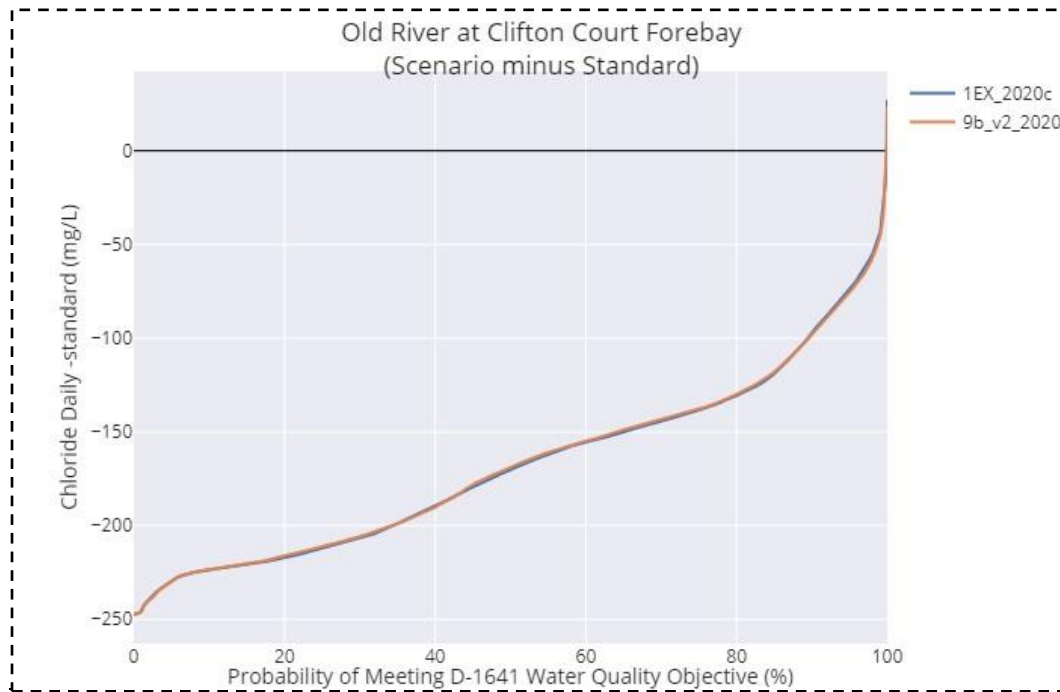
**Figure 4B-8-14. D-1641 MI Old River at Clifton Court Forebay**

Table 4B-8-15. D-1641 MI Old River at Rock Slough (150 mg/L) (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	99	0 <u>1</u>	0.00 <u>1.01</u>
9b_v2_2020	99	0 <u>1</u>	0.00 <u>1.01</u>

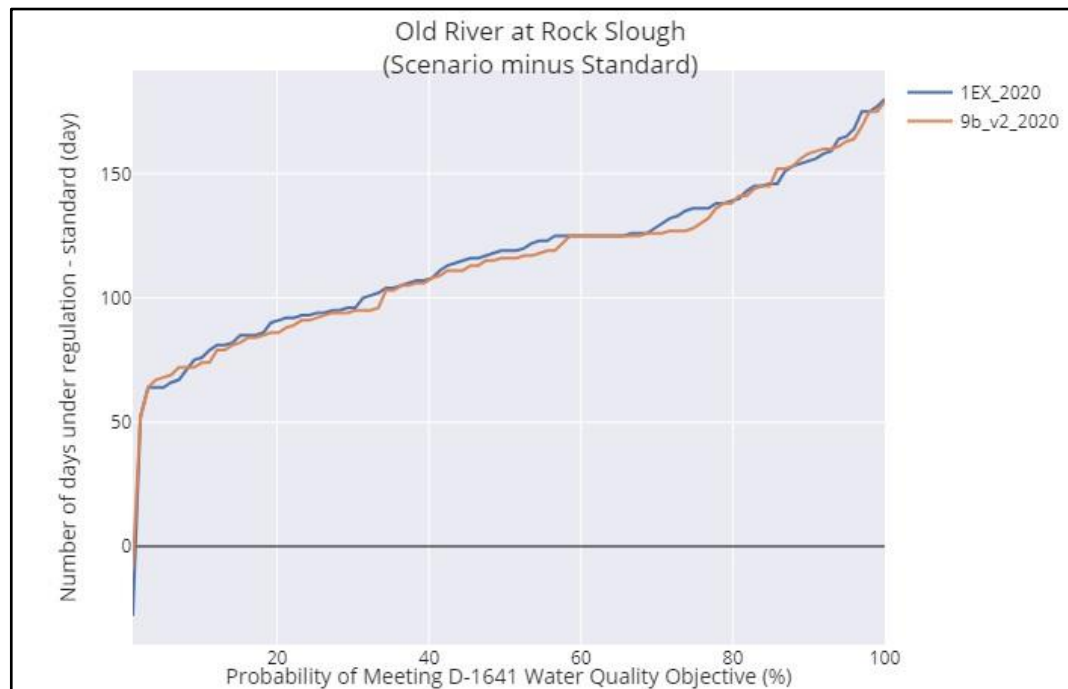
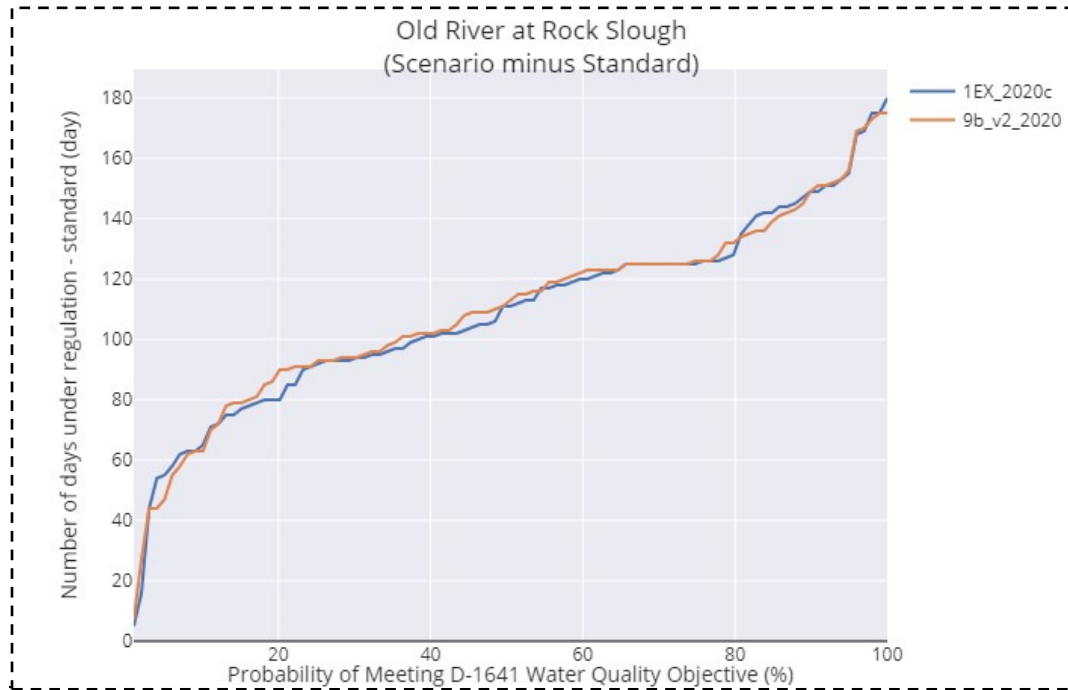
**Figure 4B-8-15. D-1641 MI Old River at Rock Slough (150 mg/L)**

Table 4B-8-16. D-1641 MI Old River at Rock Slough (250 mg/L) (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	1224 <u>283</u>	3.34 <u>0.77</u>
9b_v2_2020	36525	1122 <u>290</u>	3.07 <u>0.79</u>

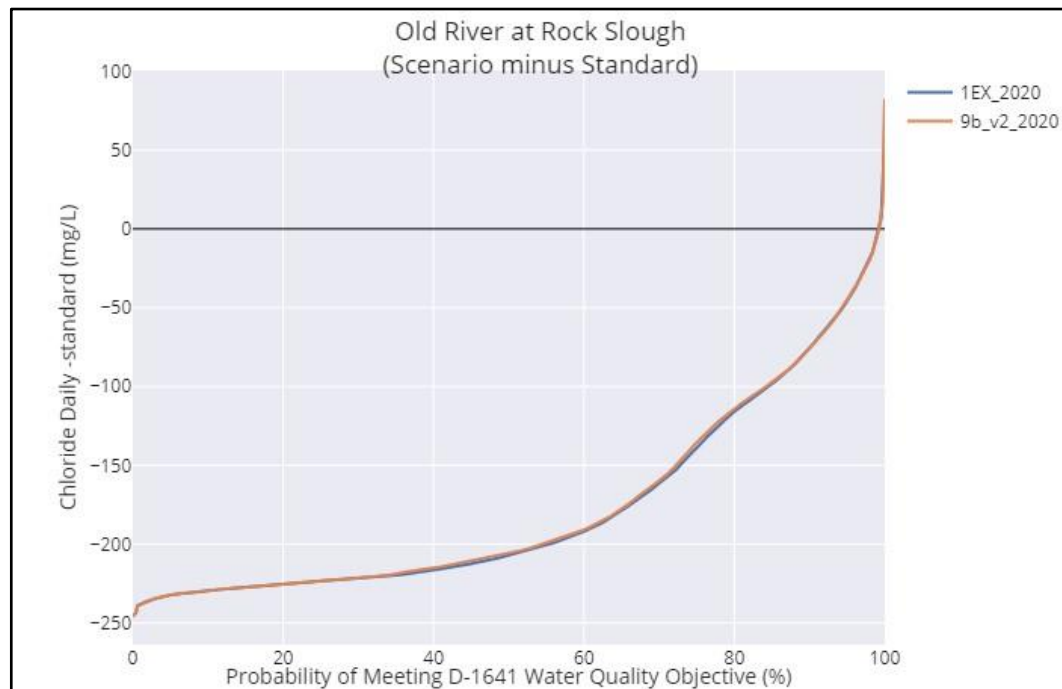
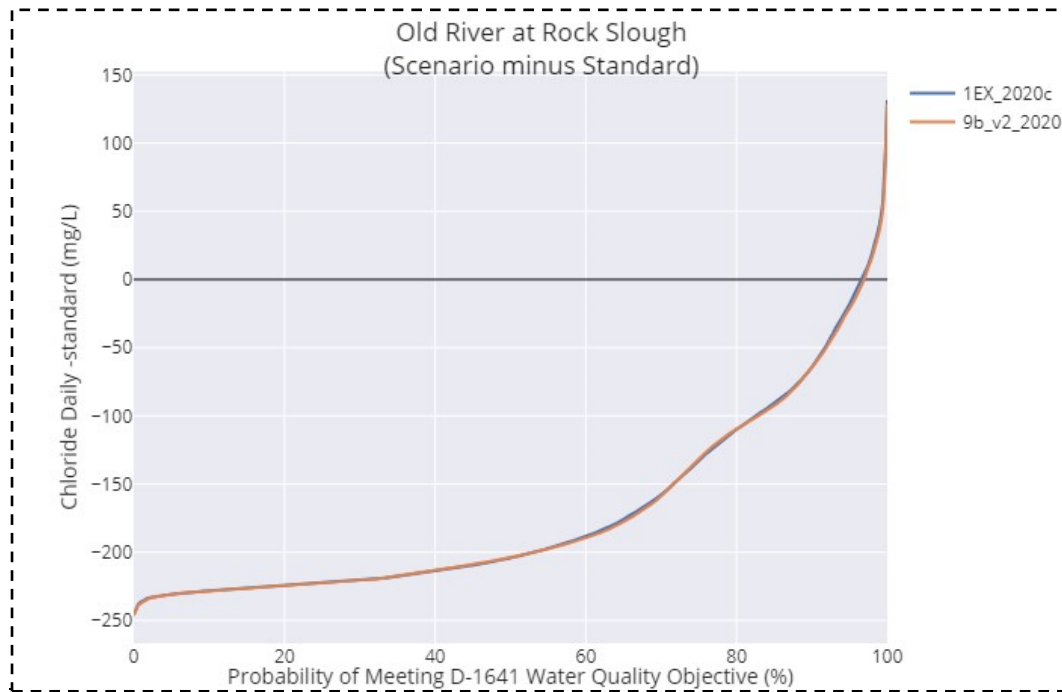
**Figure 4B-8-16. D-1641 MI Old River at Rock Slough (250 mg/L)**

Table 4B-8-17. D-1641 MI Barker Slough (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	0	0.00
9b_v2_2020	36525	0	0.00

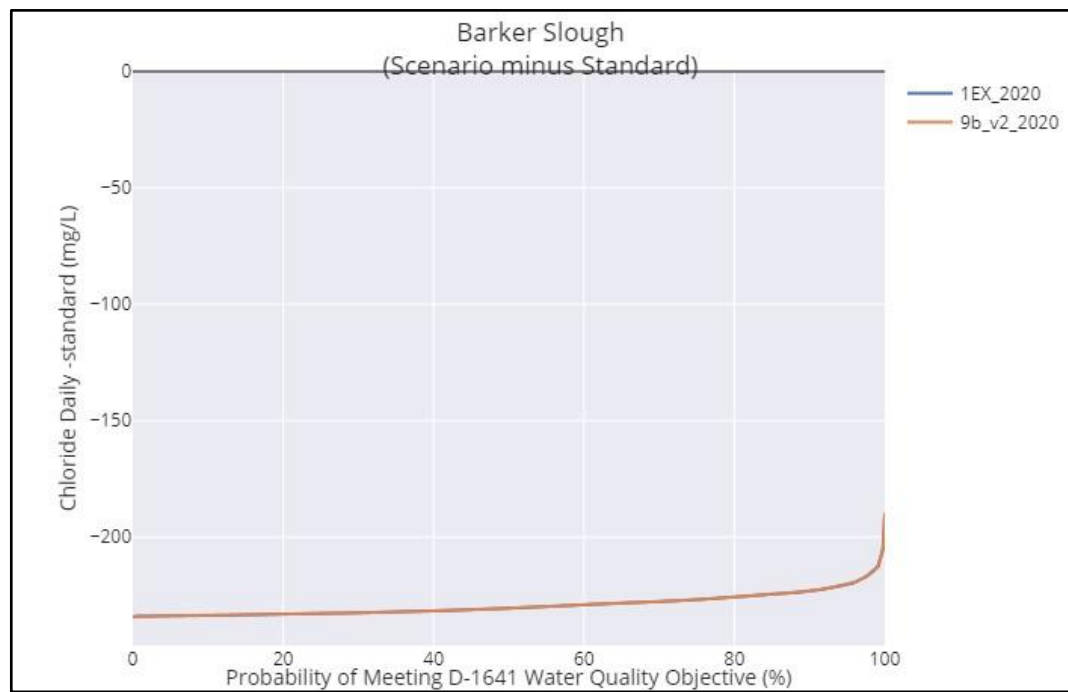
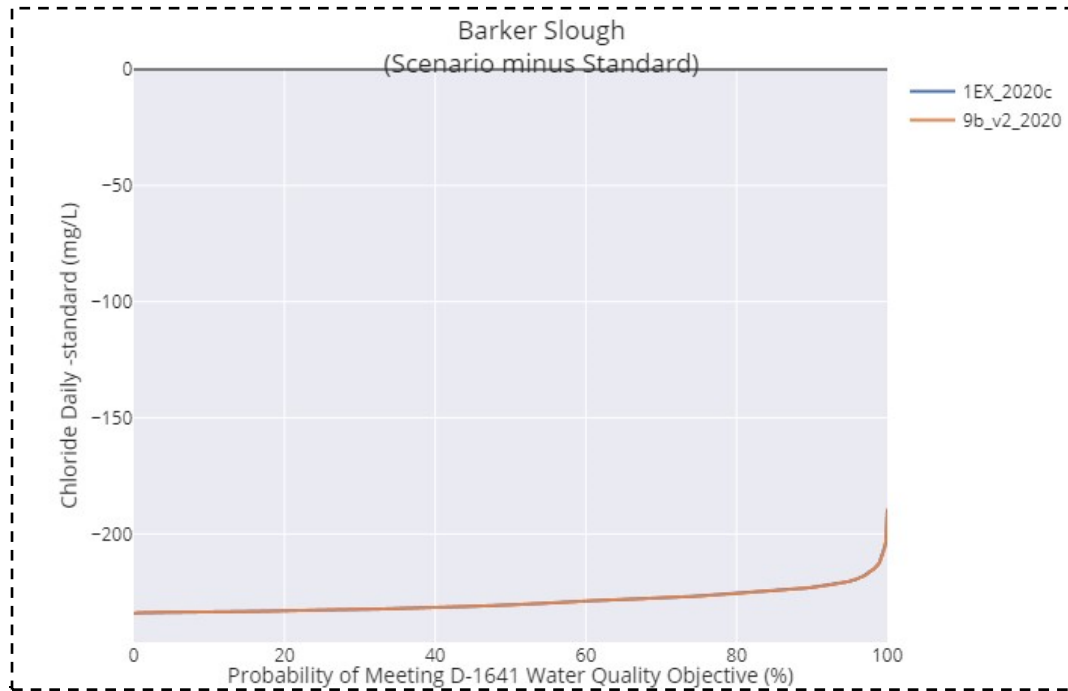
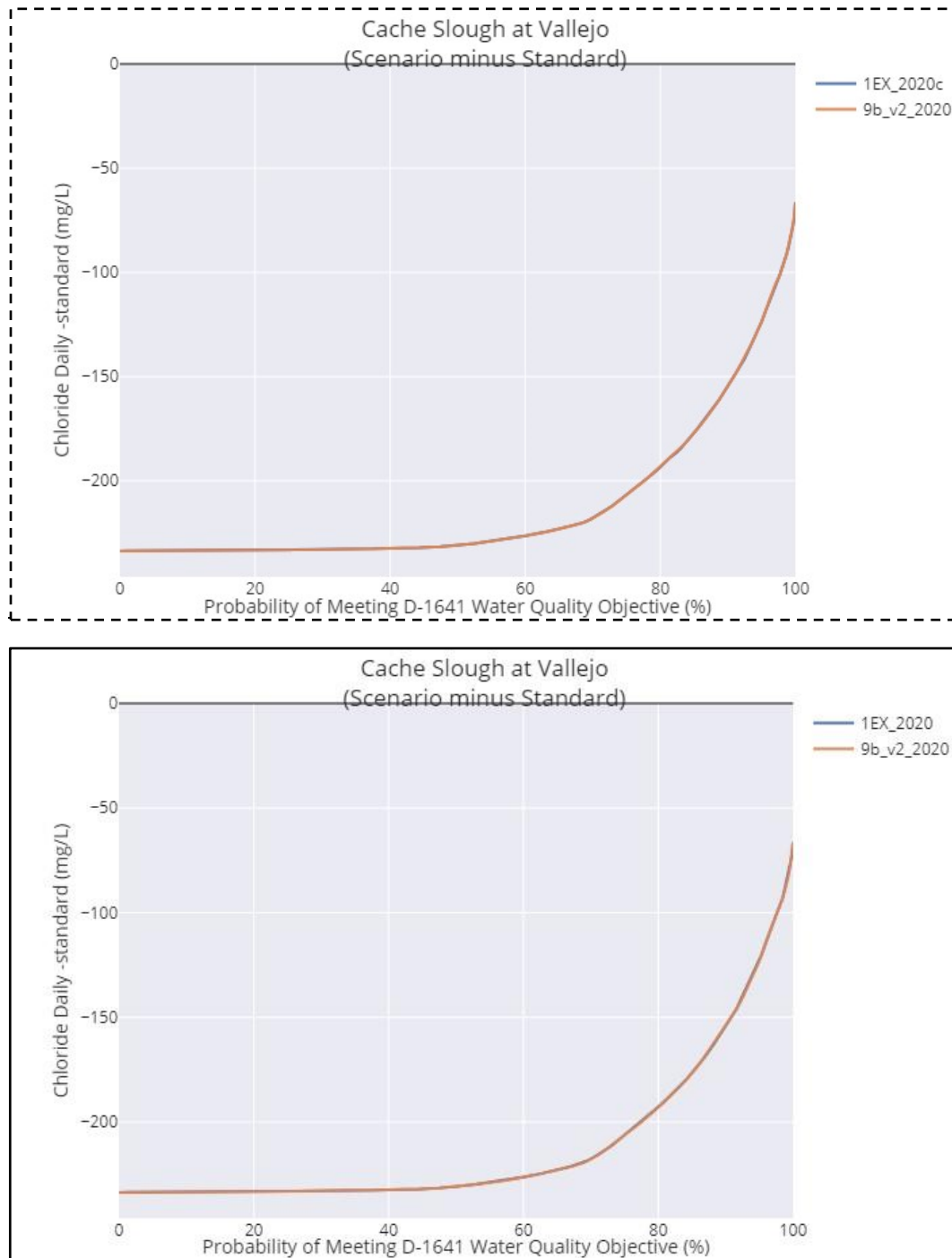
**Figure 4B-8-17. D-1641 MI Barker Slough**

Table 4B-8-18. D-1641 MI Cache Slough at Vallejo (Days Exceeding Standard for Each Scenario)

Scenario	# of Days Standards are Applicable	# of Days Exceeded	% of Days Exceeded
1EX_2020 e	36525	0	0.00
9b_v2_2020	36525	0	0.00

**Figure 4B-8-18. D-1641 MI Cache Slough at Vallejo**