Appendix G, Water Quality Technical Appendix

Attachment G.2 Chloride Modeling Results

The information contained in this attachment supports the quantitative assessment of the project alternatives' effects on chloride concentrations at Sacramento–San Joaquin Delta (Delta) assessment locations presented in Appendix G, *Water Quality Technical Appendix*, prepared in support of the Reinitiation of Consultation on the Long-term Operations of the Central Valley Project (CVP) and State Water Project (SWP) Environmental Impact Statement (EIS). This attachment presents the following information.

- The chloride modeling methodology.
- The source water concentrations used in the mass-balance modeling of chloride at the Delta assessment locations.
- Applicable water quality criteria/objectives for chloride used in the effects assessment.
- Tables and figures presenting modeled chloride concentrations at the Delta assessment locations for the No Action Alternative and the project alternatives.

G.2.1 Modeling Methodology

The method for calculating chloride concentrations for the Delta varied by assessment location. For Delta locations where the predominant source of chloride is sea water, chloride concentrations were determined by applying known relationships between electrical conductivity (EC) and chloride to Delta Simulation Model II (DSM2)-modeled EC. For Delta locations where chloride concentrations are more influenced by Delta inflows from the Sacramento and San Joaquin Rivers, a mass-balance approach was applied. Table G.2-1 summarizes the calculation method used for each Delta assessment location.

Table G.2-1. Delta Assessment Locations and Concentration Calculation Method

Assessment Location	Delta Region	Concentration Calculation Method
Barker Slough at North Bay Aqueduct	Northern	Mass-balance
Banks Pumping Plant	Export area	Mass-balance
Jones Pumping Plant	Export area	Mass-balance
San Joaquin River at Antioch	Western	Regression
Contra Costa Water District Pumping Plant #1	Interior	Regression

G.2.1.1 Mass-Balance Methodology

The mass-balance methodology used to calculate chloride concentrations used the DSM2-modeled average monthly source water flow fractions for each Delta assessment location. The source water flow fraction output is the percentage of water at each assessment location constituted by the six primary source waters—Sacramento River (SAC), San Joaquin River (SJR), Yolo Bypass (YOL), Eastside Tributaries (EST), San Francisco Bay (BAY), and Delta Agricultural Return Waters (AGR). These flow fractions were used together with source water constituent concentrations to calculate a given constituent concentration at the assessment locations according to the following equation.

$$C_i = f_{SAC,i}(C_{SAC}) + f_{SJR,i}(C_{SJR}) + f_{YOL,i}(C_{YOL}) + f_{EST,i}(C_{EST}) + f_{BAY,i}(C_{BAY}) + f_{AGR,i}(C_{AGR})$$

In the above equation, C_i is the concentration at Delta assessment location i, $f_{X,i}$ is the average monthly flow fraction from source water X at assessment location i, and C_X is the source water X concentration. Source water concentrations input into the above equation are discussed below in Section G.2.2, *Source Water Concentrations*.

G.2.1.2 Regression Methodology

The regression methodology used known relationships between EC and chloride to calculate chloride concentrations at Delta assessment locations. These relationships were applied to the EC output from DSM2.

The EC-chloride relationship was developed based on data at Mallard Island, Jersey Island, and Old River at Rock Slough (Contra Costa Water District 1997:1). The relationship is defined by the following equation in which Cl is the chloride concentration in milligrams per liter (mg/L) and EC is in micromhos per centimeter (µmhos/cm).

$$Cl = max\begin{pmatrix} 0.15 * EC - 12 \\ 0.285 * EC - 50 \end{pmatrix}$$

G.2.2 Source Water Concentrations

An input to the mass-balance calculation of chloride concentrations at the Delta assessment locations is the concentration of chloride in the primary source waters to the Delta: SAC, SJR, YOL, EST, BAY, and AGR. The concentrations of chloride for all source waters except the San Joaquin River were based on historical data. Table G.2-2 provides summary statistics for the primary source water concentrations, as well as information on the source of the data. Due to data availability, Yolo Bypass concentrations were set equal to concentrations in the Sacramento River, which is the source of flows to the Yolo Bypass.

Table G.2-2. Source Water Concentrations for Chloride (in milligrams per liter)

Data Parameter	SAC	SJR	BAY	EST	AGR
Average	6.4	76	6,507	2.4	156
Minimum	1.0	1.0	8.0	0.3	3.0
Maximum	33	221	12,600	10	2,010
75th percentile	8.0	106	9,255	3.0	184
99th percentile	12	181	12,464	8.7	1,148
Data source	CEDEN 2020, DWR 2020	CEDEN 2020, DWR 2020	CEDEN 2020	CEDEN 2020, U.S. Geological Survey 2020	DWR 2020
Station(s)	SAC at Greene's Landing, SAC at Hood	SJR at Vernalis	Suisun Bay at Bulls Head near Martinez	Mokelumne River, Cosumnes River	Multiple – see narrative description below
Date range	1980–2020	1980–2020	1980–2007	1952–2015	1985–2004
Non-detect results replaced with reporting limit for statistics	No	No	No	None	None
Data omitted	None	None	None	Single <0.1 value from each dataset, 0 values from Cosumnes River	Yes – see narrative description below
Number of data points	1,330	1,232	319	481	1,576

SAC = Sacramento River; SJR = San Joaquin River; BAY = San Francisco Bay; EST = Eastside Tributaries; AGR = Delta Agricultural Return Waters; CEDEN = California Environmental Data Exchange Network; DWR = California Department of Water Resources.

Each source water dataset was evaluated to determine whether the primary source water concentration should be represented by a single value or a different value for each month. Analysis of the Sacramento River (Kruskal Wallis; $p<0.05$), Eastside Tributaries (Kruskal Wallis; $p<0.05$), and Delta Agricultural Return Waters (Kruskal Wallis; $p<0.05$) datasets indicated significant differences in concentration by month. Due to the presence of a distinct monthly pattern in Sacramento River, Eastside Tributaries, and Delta Agricultural Return Waters, monthly average concentrations were used for these locations in the mass-balance calculation. Tables G.2-3, G.2-4, and G.2-5 present monthly average chloride concentrations for the Sacramento River, Eastside Tributaries, and Delta Agricultural Return Waters used in the mass-balance calculation, respectively.

The source water concentrations for the San Joaquin River and San Francisco Bay were calculated in a different manner. Because San Joaquin River and San Francisco Bay chloride concentrations are closely related to flow, in addition to time of year, concentrations were calculated from DSM2-modeled EC. The EC-chloride regression equations defined below were applied to each modeled monthly average EC value for water years 1922–2021 to develop monthly average chloride concentrations for the modeled period, resulting in a time-series of monthly average chloride concentrations consisting of 1,200 values (i.e., 12 months times 100 water years). In the following equation, Cl is the chloride concentration in mg/L and EC is in µmhos/cm.

$$San\ Joaquin\ River\ at\ Vernalis\ Cl = 0.1845 * EC\ at\ Vernalis - 23$$

$$San\ Francisco\ Bay\ at\ Martinez\ Cl = 0.285 * EC\ at\ Martinez - 50$$

The monthly average chloride concentrations were input as C_{SJR} and C_{BAY} in the mass-balance equation defined in Section G.2.1.1.

Table G.2-3. Monthly Average Source Water Chloride Concentrations for the Sacramento River (in milligrams per liter)

Data Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average concentration	7.1	6.9	6.0	5.8	6.5	6.1	5.0	5.7	7.2	6.1	7.1	7.0
Number of data points	107	109	112	110	112	113	112	117	116	114	104	104

Table G.2-4. Monthly Average Source Water Chloride Concentrations for the Eastside Tributaries (in milligrams per liter)

Data Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average concentration	2.7	2.6	2.4	2.0	1.9	2.0	1.8	2.1	2.0	2.5	3.1	2.7
Number of data points	40	30	51	36	34	42	35	25	54	31	31	43

Table G.2-5. Monthly Average Source Water Chloride Concentrations for Delta Agricultural Return Waters (in milligrams per liter)

Data Parameter	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average concentration	198	223	175	188	133	123	115	121	170	170	144	120
Number of data points	235	55	100	233	65	183	221	184	26	186	37	51

Agricultural return drains are distributed unevenly throughout the Delta. Water quality associated with these drains varies depending on the specific location of the drain within the Delta and largely coincides with the water quality of the water that is withdrawn from the Delta for application onto agricultural lands. To characterize chloride concentrations in agricultural drain water as a whole, the following process was followed.

1. All agricultural drain data from the California Department of Water Resources Water Data Library, which had historical chloride data, were compiled.

2. All agricultural drain data were pooled and the results summarized in Table G.2-2.

Data for the Byron Tract #2 (16,800 mg/L on May 29, 1996) and Byron Tract #3 (24,000 µg/L on May 29, 1996) agricultural drains in the west Delta were omitted from the database due to their reported values being substantially outside the distribution of all other values.

G.2.3 Applicable Water Quality Objectives

Applicable water quality objectives for chloride in the Delta are included in the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (Bay-Delta WQCP) (State Water Resources Control Board 2018:11). The Bay-Delta WQCP defines chloride objectives for the protection of municipal and industrial uses that vary by location and water year type. Table G.2-6 summarizes the Bay-Delta WQCP EC objectives for chloride.

Table G.2-6. Water Quality Objectives for Chloride in the Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary for Municipal and Industrial Beneficial Uses (in milligrams per liter)

Location	Objective for Fish and Wildlife Beneficial Uses
Contra Costa Canal at Pumping Plant #1 or San Joaquin River at Antioch Water Works Intake	• Wet Year: <150 for 240 days per calendar year (66% of year) • Above Normal Year: <150 for 190 days per calendar year (52% of year) • Below Normal Year: <150 for 175 days per calendar year (48% of year) • Dry: <150 for 165 days per calendar year (45% of year) • Critical: <150 for 155 days per calendar year (42% of year) Expressed as a maximum mean daily concentration
Contra Costa Canal at Pumping Plant #1, West Canal at Mouth of Clifton Court Forebay, Jones Pumping Plant, Barker Slough at North Bay Aqueduct, and Cache Slough at the City of Vallejo Intake	• 250 (October–September) Expressed as a maximum mean daily concentration

Source: State Water Resources Control Board 2018:11.

G.2.4 Modeling Results

The modeled monthly average concentrations of chloride at each Delta assessment location are presented on the following pages in tables and figures, in the following formats.

- Tables
    - Probability of exceedance of the monthly average concentrations for the entire simulation period (water years 1921–2021).
    - Average of monthly average concentrations for the entire simulation period (water years 1921–2021) and by water year type: wet, above normal, below normal, dry, and critical.
    - Results shown for the No Action Alternative and each project alternative, and the project alternative minus the No Action Alternative.
- Monthly Average Plots
    - Average of monthly average concentrations for the entire simulation period (water years 1921–2021) and by water year type: wet, above normal, below normal, dry, and critical.
    - No Action Alternative and project alternatives shown on same plot.
- Exceedance Plots
    - Probability exceedance of the monthly average concentrations for the entire simulation period (water years 1921–2021).
    - No Action Alternative and project alternatives shown on same plot.

Table G.2-1-1-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), No Action Alternative

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	28	31	48	67	51	36	25	20	20	21	28
1%	26	28	29	46	57	41	36	25	20	20	21	28
5%	25	26	26	43	48	37	34	22	19	18	20	27
10%	25	25	26	40	45	35	33	21	19	16	19	25
25%	22	24	23	34	39	32	30	20	16	14	15	22
50%	21	22	22	24	28	25	27	19	15	14	14	20
75%	20	21	21	20	20	20	24	18	15	13	14	20
99.9%	18	20	18	17	17	16	19	13	14	12	14	19

Table G.2-1-1-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), No Action Alternative

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	21	23	22	27	30	26	27	19	16	14	15	21
Wet Water Years	21	22	22	23	24	22	25	18	15	13	14	20
Above Normal Water Years	21	23	23	28	31	26	26	18	15	13	14	20
Below Normal Water Years	21	23	22	26	28	24	26	19	16	14	14	21
Dry Water Years	21	22	22	28	33	30	29	19	16	14	15	21
Critical Water Years	23	23	23	33	38	33	30	21	19	17	19	25

Table G.2-1-2-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	28	31	48	67	51	39	25	20	17	19	27
1%	26	28	29	48	57	43	37	24	20	17	18	27
5%	25	26	27	44	49	39	36	22	19	17	18	26
10%	25	26	25	40	47	37	34	21	18	16	18	24
25%	23	24	24	34	39	33	31	20	16	14	15	22
50%	21	23	22	24	28	26	28	19	15	13	14	21
75%	20	21	21	20	20	20	24	18	15	13	14	20
99.9%	19	20	19	17	17	16	18	13	14	12	14	19

Table G.2-1-2-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), Alternative 1

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	22	23	22	28	31	27	28	19	16	14	15	21
Wet Water Years	21	23	22	23	24	22	25	18	15	13	14	20
Above Normal Water Years	22	23	23	28	31	26	26	18	15	13	14	20
Below Normal Water Years	22	23	22	26	29	25	27	19	15	14	15	21
Dry Water Years	22	23	22	29	34	30	29	19	16	14	15	21
Critical Water Years	23	24	23	34	39	35	33	21	19	16	18	25

Table G.2-1-2-C. Barker Slough at North Bay Aqueduct, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	0	0	1	0	0	3	0	0	-2	-2	-1
1%	0	0	0	1	0	2	1	-1	0	-2	-2	-1
5%	0	0	0	1	1	2	2	0	0	-1	-2	-1
10%	0	0	0	0	1	2	1	0	0	0	-2	-1
25%	0	0	0	1	1	1	1	0	0	0	0	0
50%	0	0	0	0	0	0	1	0	0	0	0	0
75%	1	0	0	0	0	0	0	0	0	0	0	0
99.9%	1	0	1	0	0	0	0	0	0	0	0	0

Table G.2-1-2-D. Barker Slough at North Bay Aqueduct, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	0	1	0	0	1	0	0	0	0	0
Wet Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Dry Water Years	0	0	1	1	1	0	0	0	0	0	0	0
Critical Water Years	0	0	0	1	1	2	3	0	0	-1	-1	-1

Table G.2-1-3-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	27	28	30	48	67	51	38	25	20	19	21	28
1%	26	28	29	48	57	42	36	24	20	19	21	27
5%	25	26	26	43	48	37	34	22	19	18	20	26
10%	25	25	25	39	45	35	33	21	18	17	19	26
25%	22	24	23	33	38	32	30	20	16	14	15	22
50%	21	22	22	24	28	25	27	19	15	14	14	21
75%	20	21	21	20	20	20	24	18	15	13	14	20
99.9%	18	19	18	17	17	16	19	13	14	12	14	19

Table G.2-1-3-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	21	22	22	27	30	26	27	19	16	14	15	21
Wet Water Years	21	22	22	23	24	22	25	18	15	13	14	20
Above Normal Water Years	21	23	23	28	31	26	26	18	15	13	14	20
Below Normal Water Years	21	22	22	26	28	24	26	19	16	14	15	21
Dry Water Years	21	22	22	28	33	30	29	19	16	14	15	21
Critical Water Years	23	23	23	33	38	33	31	21	19	17	19	26

Table G.2-1-3-C. Barker Slough at North Bay Aqueduct, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	0	0	0	0	0	2	0	0	0	0	-1
1%	0	0	0	1	0	0	0	0	0	-1	0	-1
5%	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	-1	-1	0	-1	0	0	0	0	0	1
25%	0	0	0	-1	-1	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
75%	0	0	0	0	0	0	0	0	0	0	0	0
99.9%	-1	0	0	0	0	0	0	0	0	0	0	0

Table G.2-1-3-D. Barker Slough at North Bay Aqueduct, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	0	0	0	0	0	0	0	0	0	0
Wet Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Dry Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Critical Water Years	0	0	0	0	0	0	1	0	0	0	0	0

Table G.2-1-4-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	28	30	48	67	51	39	25	20	18	19	27
1%	26	28	28	48	57	42	37	24	20	17	18	26
5%	25	26	26	42	48	39	36	23	19	17	18	26
10%	24	25	25	39	45	36	34	21	18	16	18	24
25%	22	24	23	33	38	32	31	20	16	14	15	22
50%	21	22	22	24	28	25	27	19	15	14	14	21
75%	20	21	21	20	20	20	24	18	15	13	14	20
99.9%	19	20	18	17	17	16	19	13	14	12	14	19

Table G.2-1-4-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	21	22	22	27	30	27	28	19	16	14	15	21
Wet Water Years	21	22	22	23	24	22	25	18	15	13	14	20
Above Normal Water Years	21	23	23	28	31	26	26	18	15	13	14	20
Below Normal Water Years	21	22	22	26	28	24	26	19	16	14	15	21
Dry Water Years	21	22	22	28	33	30	29	19	16	14	15	21
Critical Water Years	23	23	23	33	38	34	33	21	19	16	18	25

Table G.2-1-4-C. Barker Slough at North Bay Aqueduct, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	0	0	0	0	0	2	0	-1	-2	-2	-1
1%	0	0	-1	1	0	1	0	-1	0	-2	-2	-2
5%	0	0	0	-1	0	2	2	1	0	-1	-2	-1
10%	0	0	-1	-1	0	1	1	0	0	0	-2	-1
25%	0	0	0	0	-1	0	1	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
75%	0	0	0	0	0	0	0	0	0	0	0	0
99.9%	0	0	0	0	0	0	0	0	0	0	0	0

Table G.2-1-4-D. Barker Slough at North Bay Aqueduct, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	0	0	0	0	0	0	0	0	0	0
Wet Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Dry Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Critical Water Years	0	0	0	0	0	1	3	0	0	-1	-1	-1

Table G.2-1-5-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	28	30	48	67	51	39	25	20	17	19	28
1%	26	28	29	48	57	42	37	23	20	17	18	27
5%	25	26	26	41	48	39	36	23	19	17	18	26
10%	24	25	25	39	45	37	34	21	18	16	18	24
25%	22	24	23	33	39	32	31	20	16	14	15	21
50%	21	22	22	24	28	25	27	19	16	14	14	21
75%	20	21	21	20	20	20	24	18	15	13	14	20
99.9%	18	19	18	17	17	16	19	13	14	12	14	19

Table G.2-1-5-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	21	22	22	27	30	27	28	19	16	14	15	21
Wet Water Years	21	22	22	23	24	22	25	18	15	13	14	20
Above Normal Water Years	21	23	23	28	31	26	26	18	15	13	14	20
Below Normal Water Years	21	22	22	26	28	24	26	19	16	14	15	21
Dry Water Years	21	22	22	28	33	30	29	19	16	14	15	21
Critical Water Years	23	23	23	32	38	34	33	21	19	16	18	25

Table G.2-1-5-C. Barker Slough at North Bay Aqueduct, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	0	0	0	0	0	2	0	-1	-2	-2	0
1%	-1	0	0	1	0	1	0	-1	0	-2	-2	-1
5%	-1	0	0	-2	0	2	2	1	0	-1	-2	-1
10%	-1	0	0	-1	0	1	1	0	0	0	-2	0
25%	0	0	0	0	0	0	1	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
75%	0	0	0	0	0	0	0	0	0	0	0	0
99.9%	-1	0	0	0	0	0	0	0	0	0	0	0

Table G.2-1-5-D. Barker Slough at North Bay Aqueduct, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	0	0	0	0	0	0	0	0	0	0
Wet Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Dry Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Critical Water Years	0	0	0	-1	0	2	3	0	0	-1	-1	-1

Table G.2-1-6-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	28	30	48	67	51	39	24	20	17	19	27
1%	26	27	30	48	57	42	37	23	20	17	18	26
5%	25	26	27	41	48	39	36	23	19	17	18	26
10%	24	25	25	39	45	36	34	21	18	16	18	24
25%	22	24	23	33	39	32	31	20	16	14	15	21
50%	21	22	22	24	28	25	27	19	15	14	14	21
75%	20	21	21	20	20	20	24	18	15	13	14	20
99.9%	18	19	18	17	17	16	19	13	14	12	14	19

Table G.2-1-6-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	21	22	22	27	30	27	28	19	16	14	15	21
Wet Water Years	21	22	22	23	24	22	25	18	15	13	14	20
Above Normal Water Years	21	23	23	28	31	26	26	18	15	13	14	20
Below Normal Water Years	21	22	22	26	28	24	26	19	16	14	15	21
Dry Water Years	21	22	22	28	33	30	29	19	16	14	15	21
Critical Water Years	23	23	23	32	38	34	33	21	18	16	18	25

Table G.2-1-6-C. Barker Slough at North Bay Aqueduct, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	0	0	0	0	0	2	0	-1	-2	-2	-1
1%	-1	0	1	1	0	1	0	-1	0	-2	-2	-2
5%	-1	0	0	-2	0	2	2	0	0	-2	-2	-1
10%	-1	0	0	-1	0	1	1	0	0	0	-2	0
25%	0	0	0	0	0	0	1	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
75%	0	0	0	0	0	0	0	0	0	0	0	0
99.9%	-1	0	0	0	0	0	0	0	0	0	0	0

Table G.2-1-6-D. Barker Slough at North Bay Aqueduct, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	0	0	0	0	0	0	0	0	0	0
Wet Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Dry Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Critical Water Years	0	0	0	0	0	2	3	0	0	-1	-1	-1

Table G.2-1-7-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	28	30	54	71	61	43	26	21	18	19	26
1%	26	28	29	50	62	45	42	26	20	17	19	26
5%	25	26	27	44	54	42	39	23	20	17	18	25
10%	24	25	26	41	49	39	36	22	18	16	18	23
25%	22	24	24	35	40	35	33	21	16	15	16	22
50%	21	23	23	25	29	27	28	20	16	14	15	21
75%	20	21	21	20	20	21	25	19	15	14	15	21
99.9%	19	20	19	17	17	17	18	13	14	12	14	19

Table G.2-1-7-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), Alternative 3

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	22	23	23	29	32	28	29	20	16	14	15	22
Wet Water Years	21	23	23	25	25	23	27	20	15	14	15	21
Above Normal Water Years	22	23	23	29	34	29	29	20	16	14	15	21
Below Normal Water Years	22	23	23	27	30	25	27	19	16	15	15	22
Dry Water Years	22	23	22	30	34	32	30	20	16	14	15	20
Critical Water Years	23	24	23	35	40	36	33	22	19	16	18	24

Table G.2-1-7-C. Barker Slough at North Bay Aqueduct, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	-1	0	0	7	4	9	6	1	1	-2	-2	-2
1%	0	0	0	3	5	4	6	1	0	-2	-2	-2
5%	0	0	1	1	6	5	5	1	0	-2	-2	-2
10%	0	0	0	1	4	3	3	1	0	0	-2	-1
25%	0	1	1	2	1	3	3	1	0	1	1	0
50%	0	0	1	1	1	2	1	1	0	1	1	1
75%	1	0	1	1	0	1	1	1	0	1	1	1
99.9%	1	0	1	1	0	1	-1	0	1	0	0	0

Table G.2-1-7-D. Barker Slough at North Bay Aqueduct, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	1	2	2	2	2	1	0	0	0	0
Wet Water Years	0	0	1	2	2	2	2	2	0	1	1	1
Above Normal Water Years	0	0	1	2	2	3	3	1	0	1	1	1
Below Normal Water Years	0	0	0	1	2	1	1	0	0	1	1	1
Dry Water Years	0	0	1	1	1	2	1	0	0	0	0	0
Critical Water Years	0	1	1	2	2	3	3	1	0	-1	-1	-1

Table G.2-1-8-A. Barker Slough at North Bay Aqueduct, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	27	28	30	48	67	51	38	25	20	19	21	28
1%	26	28	29	48	57	41	36	24	20	19	21	27
5%	25	26	26	43	48	37	34	22	19	19	20	26
10%	25	25	25	39	45	35	33	21	19	17	19	26
25%	22	24	23	33	38	32	30	20	16	14	15	22
50%	21	22	22	24	28	25	27	19	15	14	14	21
75%	20	21	20	20	20	20	24	18	15	13	14	20
99.9%	18	19	18	17	17	16	19	13	14	12	14	19

Table G.2-1-8-B. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), Alternative 4

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	21	23	22	27	30	26	27	19	16	14	15	21
Wet Water Years	21	22	22	23	24	22	25	18	15	13	14	20
Above Normal Water Years	21	23	23	28	31	26	26	18	15	13	14	20
Below Normal Water Years	21	22	22	26	28	24	26	19	16	14	14	21
Dry Water Years	21	22	22	28	33	30	29	19	16	14	15	21
Critical Water Years	23	23	23	33	38	33	31	21	19	18	19	26

Table G.2-1-8-C. Barker Slough at North Bay Aqueduct, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	0	0	0	0	0	2	0	0	0	0	-1
1%	0	0	0	1	0	0	0	0	0	0	0	-1
5%	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	-1	0	0	-1	0	0	0	1	0	1
25%	0	0	0	0	-1	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
75%	0	0	0	0	0	0	0	0	0	0	0	0
99.9%	-1	0	0	0	0	0	0	0	0	0	0	0

Table G.2-1-8-D. Barker Slough at North Bay Aqueduct, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	0	0	0	0	0	0	0	0	0	0
Wet Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Dry Water Years	0	0	0	0	0	0	0	0	0	0	0	0
Critical Water Years	0	0	0	0	0	0	1	0	0	0	0	0

Table G.2-2-1-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), No Action Alternative

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	157	175	204	188	169	134	101	106	145	153	173	184
1%	156	174	199	187	162	114	91	97	137	151	160	166
5%	144	162	190	176	126	102	85	73	100	130	145	152
10%	141	153	168	154	115	87	79	65	79	111	133	149
25%	132	132	143	113	91	79	71	56	47	53	89	131
50%	118	107	117	84	72	72	65	50	43	44	60	101
75%	39	43	64	58	53	43	37	36	39	36	37	48
99.9%	20	6	1	1	1	1	1	0	2	25	27	28

Table G.2-2-1-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), No Action Alternative

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	90	91	108	88	71	62	54	44	48	54	69	93
Wet Water Years	81	73	66	50	41	33	24	18	32	37	37	45
Above Normal Water Years	89	83	114	83	64	57	53	44	41	34	37	50
Below Normal Water Years	74	78	114	90	72	70	58	48	43	44	68	124
Dry Water Years	96	100	133	111	87	75	69	53	42	51	84	115
Critical Water Years	115	129	133	124	102	91	81	72	94	114	133	149

Table G.2-2-2-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	175	195	179	188	177	122	92	76	120	151	132	159
1%	165	186	178	187	175	121	85	70	104	134	130	149
5%	157	174	170	172	149	108	79	69	82	101	110	141
10%	147	169	165	155	126	95	77	62	69	75	101	134
25%	140	146	157	133	103	73	67	53	49	56	86	129
50%	130	130	124	84	63	54	59	46	40	43	68	123
75%	120	108	60	47	42	38	37	33	34	35	54	111
99.9%	21	6	1	2	1	1	1	0	2	26	27	27

Table G.2-2-2-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 1

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	125	123	112	88	70	56	51	41	43	50	71	117
Wet Water Years	115	101	67	46	35	28	24	18	29	38	49	107
Above Normal Water Years	135	130	118	76	52	46	49	40	34	32	57	128
Below Normal Water Years	124	119	110	85	72	56	54	45	40	43	75	115
Dry Water Years	130	130	138	120	90	67	64	50	43	53	85	119
Critical Water Years	130	147	148	129	113	96	77	64	78	89	95	126

Table G.2-2-2-C. Banks Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	19	20	-25	-1	8	-11	-9	-30	-24	-2	-41	-25
1%	10	11	-21	0	13	7	-6	-27	-33	-17	-30	-17
5%	13	12	-20	-4	23	5	-5	-4	-17	-29	-36	-11
10%	7	16	-3	1	10	7	-1	-3	-10	-36	-32	-15
25%	8	14	14	20	12	-6	-4	-2	2	3	-3	-2
50%	12	23	8	-1	-9	-18	-6	-4	-3	-1	8	22
75%	81	65	-4	-12	-12	-5	0	-3	-5	-2	17	63
99.9%	0	0	0	0	0	0	0	0	0	1	0	-1

Table G.2-2-2-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	36	32	4	0	-1	-6	-3	-4	-5	-4	2	24
Wet Water Years	34	28	1	-4	-6	-5	0	-1	-4	0	12	62
Above Normal Water Years	46	47	4	-7	-11	-11	-3	-4	-7	-2	20	78
Below Normal Water Years	50	41	-4	-5	1	-13	-4	-3	-3	-1	8	-10
Dry Water Years	34	31	5	9	3	-8	-4	-3	1	1	1	5
Critical Water Years	16	18	14	5	11	5	-3	-9	-16	-25	-38	-23

Table G.2-2-3-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	157	178	209	185	169	125	98	99	145	156	154	165
1%	156	178	193	185	162	120	93	96	130	156	153	160
5%	146	166	179	169	129	101	85	74	105	120	144	154
10%	141	162	164	154	113	88	80	65	75	104	132	146
25%	132	135	143	113	89	80	69	54	50	55	86	129
50%	116	101	116	86	74	73	64	48	45	44	64	108
75%	40	43	63	59	54	42	39	34	39	36	40	51
99.9%	21	6	1	1	1	1	1	0	2	26	27	27

Table G.2-2-3-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	90	91	107	88	70	62	54	43	48	53	71	95
Wet Water Years	80	72	64	50	41	33	25	18	32	38	39	47
Above Normal Water Years	91	83	108	84	64	57	51	41	41	32	41	54
Below Normal Water Years	74	79	110	89	72	70	58	46	44	44	71	123
Dry Water Years	96	100	134	111	87	75	68	52	45	53	87	119
Critical Water Years	115	134	137	124	101	92	80	71	92	109	127	145

Table G.2-2-3-C. Banks Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	4	5	-4	1	-9	-3	-7	1	4	-18	-19
1%	1	4	-7	-2	0	6	2	-1	-7	5	-7	-7
5%	2	4	-10	-6	2	-1	0	1	5	-10	-1	2
10%	1	9	-5	-1	-2	1	1	0	-3	-7	-1	-3
25%	0	3	1	0	-2	1	-2	-1	3	2	-3	-2
50%	-2	-5	-1	1	2	1	-1	-2	2	-1	4	7
75%	1	0	0	1	0	-1	2	-2	0	0	3	4
99.9%	1	0	0	0	0	0	0	0	0	1	0	-1

Table G.2-2-3-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	1	-1	0	0	0	0	-1	0	0	1	1
Wet Water Years	-1	-1	-1	0	-1	-1	0	-1	0	1	2	2
Above Normal Water Years	2	0	-6	1	0	0	-1	-3	0	-1	4	3
Below Normal Water Years	1	1	-3	-1	0	0	0	-1	1	0	3	-1
Dry Water Years	1	0	1	-1	0	1	-1	-1	2	1	3	5
Critical Water Years	0	5	3	0	-1	1	-1	-2	-2	-5	-6	-3

Table G.2-2-4-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	160	176	208	185	169	121	91	76	115	153	135	152
1%	157	172	193	185	162	120	85	74	103	131	133	150
5%	152	167	180	174	128	103	80	66	74	94	119	140
10%	142	161	165	154	113	91	75	62	65	77	103	134
25%	133	137	142	113	89	80	69	54	49	55	79	124
50%	118	100	116	86	74	73	64	48	45	44	62	106
75%	39	43	63	59	53	43	39	34	39	36	40	51
99.9%	21	6	1	1	1	1	1	0	2	26	27	27

Table G.2-2-4-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	91	91	106	89	71	63	53	42	45	49	65	91
Wet Water Years	79	72	64	50	41	33	25	18	32	38	39	47
Above Normal Water Years	91	84	108	85	64	57	51	41	41	32	42	54
Below Normal Water Years	75	80	112	90	72	70	58	47	44	45	70	121
Dry Water Years	97	100	132	110	87	75	68	52	45	53	86	119
Critical Water Years	118	134	134	126	104	95	76	63	74	85	93	127

Table G.2-2-4-C. Banks Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	4	1	5	-3	1	-13	-10	-30	-29	1	-38	-32
1%	1	-2	-7	-2	0	6	-6	-23	-34	-20	-27	-16
5%	8	5	-10	-2	2	1	-4	-7	-25	-36	-26	-12
10%	2	9	-3	-1	-2	3	-4	-4	-14	-34	-30	-15
25%	1	5	-1	-1	-2	2	-2	-1	2	2	-10	-7
50%	0	-6	-1	2	2	1	-1	-2	2	-1	3	5
75%	0	0	0	1	0	0	2	-2	0	0	3	4
99.9%	1	0	0	0	0	0	0	0	0	1	0	-1

Table G.2-2-4-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1	1	-2	0	0	1	-1	-3	-2	-4	-4	-2
Wet Water Years	-1	-2	-1	0	-1	0	0	-1	0	1	2	2
Above Normal Water Years	2	0	-6	2	0	0	-1	-3	0	-1	4	3
Below Normal Water Years	2	2	-2	0	0	0	0	-1	1	1	2	-4
Dry Water Years	2	0	-1	-2	0	1	-1	-1	2	1	2	5
Critical Water Years	3	5	1	2	1	5	-5	-10	-19	-29	-40	-21

Table G.2-2-5-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	175	184	210	186	222	130	96	78	116	157	135	151
1%	163	181	206	185	169	122	86	75	102	132	134	151
5%	158	172	181	167	129	114	84	68	75	94	119	147
10%	149	162	167	144	113	103	82	64	66	77	102	139
25%	133	133	144	113	89	94	75	57	50	54	82	126
50%	120	102	116	86	74	77	69	51	45	44	65	109
75%	39	43	63	59	53	45	39	34	40	37	40	51
99.9%	21	6	1	1	1	1	1	0	2	26	27	27

Table G.2-2-5-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	92	92	107	88	72	69	56	43	46	50	66	93
Wet Water Years	81	73	65	50	41	34	25	18	32	38	39	46
Above Normal Water Years	92	85	108	85	64	63	56	44	42	34	42	52
Below Normal Water Years	77	79	113	91	72	81	63	49	45	45	71	124
Dry Water Years	96	100	133	108	87	85	75	56	46	53	89	123
Critical Water Years	119	134	134	125	108	99	77	63	75	85	93	129

Table G.2-2-5-C. Banks Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	18	9	6	-2	54	-3	-5	-28	-29	4	-38	-33
1%	8	7	7	-2	7	8	-5	-23	-35	-19	-26	-15
5%	14	10	-9	-8	3	12	0	-6	-25	-36	-26	-5
10%	9	10	-1	-10	-3	15	3	-2	-13	-35	-30	-10
25%	2	1	1	-1	-1	15	4	1	3	2	-7	-4
50%	2	-5	-1	2	2	5	4	1	2	0	5	8
75%	0	0	-1	1	0	2	1	-1	1	1	2	3
99.9%	1	0	0	0	0	0	0	0	0	1	0	-1

Table G.2-2-5-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	2	1	-1	0	1	7	2	-1	-2	-4	-3	-1
Wet Water Years	1	0	-1	0	0	1	0	0	0	1	2	2
Above Normal Water Years	3	2	-5	2	0	6	3	0	1	1	5	2
Below Normal Water Years	4	1	-1	1	1	12	5	1	2	1	4	-1
Dry Water Years	1	0	0	-3	0	10	6	2	3	2	5	8
Critical Water Years	5	5	0	1	6	8	-3	-9	-19	-29	-40	-20

Table G.2-2-6-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	183	185	209	186	222	131	96	77	108	151	136	149
1%	178	181	205	186	167	123	86	74	86	112	136	149
5%	160	172	179	168	129	114	84	65	71	87	119	146
10%	143	163	164	142	116	104	82	63	63	76	102	140
25%	133	132	142	110	89	94	75	58	49	55	82	128
50%	120	106	116	86	74	78	68	52	44	45	64	108
75%	39	43	63	59	54	45	38	34	40	37	39	50
99.9%	21	6	1	1	1	1	1	0	2	26	27	27

Table G.2-2-6-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	92	92	107	88	72	69	56	43	44	50	65	92
Wet Water Years	81	73	65	50	41	34	25	18	32	38	39	46
Above Normal Water Years	91	85	108	84	64	63	56	44	41	33	39	51
Below Normal Water Years	78	81	112	91	73	81	63	48	43	46	70	124
Dry Water Years	96	99	132	106	86	85	75	56	44	54	91	123
Critical Water Years	119	132	134	126	110	99	77	62	70	81	92	128

Table G.2-2-6-C. Banks Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	10	6	-2	54	-3	-5	-29	-36	-1	-36	-35
1%	22	7	6	-1	5	9	-5	-23	-51	-39	-24	-17
5%	16	10	-11	-8	3	12	0	-8	-29	-44	-26	-6
10%	2	10	-4	-12	1	16	3	-2	-16	-35	-31	-9
25%	1	0	-1	-3	-2	15	4	2	2	2	-8	-3
50%	2	0	-1	2	2	6	3	1	1	1	4	7
75%	0	0	-1	1	0	2	1	-1	1	1	2	3
99.9%	1	0	0	0	0	0	0	0	0	1	0	-1

Table G.2-2-6-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	2	1	-1	0	1	7	2	-1	-3	-4	-4	-1
Wet Water Years	1	0	-1	0	0	1	0	0	0	1	2	2
Above Normal Water Years	2	2	-5	2	0	6	3	0	0	0	2	1
Below Normal Water Years	5	3	-1	0	1	12	5	1	1	2	2	-1
Dry Water Years	1	-1	-1	-5	-1	10	6	3	2	3	7	9
Critical Water Years	4	3	0	2	8	9	-3	-10	-24	-33	-41	-21

Table G.2-2-7-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	138	165	158	147	157	126	96	86	107	87	93	105
1%	137	164	155	140	137	124	94	83	86	83	90	105
5%	124	156	142	127	118	118	92	79	79	75	87	100
10%	112	145	132	118	107	113	90	78	75	73	70	85
25%	80	110	119	95	94	96	86	75	71	68	59	51
50%	64	83	92	79	74	68	65	54	66	56	44	44
75%	45	51	57	59	56	40	34	34	53	46	40	40
99.9%	20	5	1	1	1	1	1	0	0	28	31	30

Table G.2-2-7-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 3

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	67	84	87	77	70	67	58	49	58	57	50	52
Wet Water Years	55	66	71	52	40	33	22	17	38	57	49	42
Above Normal Water Years	70	78	84	76	63	60	49	44	60	59	47	45
Below Normal Water Years	60	75	82	79	80	78	63	57	61	58	47	45
Dry Water Years	69	92	92	88	86	82	80	67	67	46	40	46
Critical Water Years	88	118	115	102	95	98	89	77	75	68	73	92

Table G.2-2-7-C. Banks Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	-19	-10	-45	-41	-11	-8	-5	-20	-38	-65	-79	-79
1%	-18	-10	-45	-47	-25	10	3	-15	-51	-68	-70	-62
5%	-20	-6	-47	-49	-8	16	7	6	-21	-55	-58	-53
10%	-29	-8	-36	-36	-8	26	11	13	-4	-39	-63	-64
25%	-52	-22	-24	-18	3	18	15	19	24	15	-30	-80
50%	-53	-23	-25	-6	2	-4	0	4	23	12	-16	-57
75%	6	8	-7	1	3	-3	-3	-2	14	10	3	-8
99.9%	-1	-1	0	0	0	0	0	0	-2	4	4	2

Table G.2-2-7-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	-23	-7	-21	-11	0	5	4	5	11	3	-19	-42
Wet Water Years	-25	-7	5	2	-1	0	-3	-2	6	20	12	-3
Above Normal Water Years	-19	-6	-29	-7	-1	3	-3	0	19	26	10	-5
Below Normal Water Years	-13	-3	-32	-11	8	9	4	9	19	14	-20	-80
Dry Water Years	-26	-8	-41	-23	0	8	12	14	25	-6	-44	-69
Critical Water Years	-27	-12	-18	-22	-7	8	8	5	-19	-46	-60	-57

Table G.2-2-8-A. Banks Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	157	178	192	183	171	132	111	107	132	159	158	166
1%	156	178	180	179	162	115	92	98	131	155	153	163
5%	149	168	165	161	123	99	85	73	99	125	144	152
10%	142	162	152	153	112	88	80	65	77	103	132	148
25%	134	138	141	110	88	79	69	54	48	55	85	129
50%	118	104	116	81	71	70	63	48	44	44	63	108
75%	39	43	65	59	51	42	39	34	39	36	40	51
99.9%	21	6	1	1	1	1	1	0	2	26	27	27

Table G.2-2-8-B. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 4

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	91	92	104	87	68	61	54	43	47	53	70	95
Wet Water Years	81	73	65	51	40	32	25	18	32	38	39	46
Above Normal Water Years	90	83	104	82	61	55	51	41	41	32	41	53
Below Normal Water Years	75	81	107	87	69	69	58	46	43	44	71	125
Dry Water Years	96	100	129	109	84	74	68	52	44	52	86	120
Critical Water Years	116	134	133	120	99	90	80	71	90	111	126	146

Table G.2-2-8-C. Banks Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	3	-12	-5	2	-1	10	1	-13	7	-14	-18
1%	1	4	-19	-8	0	1	0	1	-6	5	-8	-3
5%	5	6	-25	-15	-4	-3	0	0	-1	-6	-1	0
10%	2	9	-17	-2	-3	1	1	0	-1	-8	-1	-2
25%	2	6	-2	-4	-3	0	-2	-1	1	2	-4	-2
50%	0	-3	-1	-3	-2	-2	-2	-2	2	-1	3	7
75%	0	0	2	1	-2	-1	2	-2	0	-1	3	4
99.9%	1	0	0	0	0	0	0	0	0	1	0	-1

Table G.2-2-8-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1	1	-4	-2	-2	-1	0	-1	0	0	1	2
Wet Water Years	1	0	-1	1	-1	-1	0	-1	0	1	2	2
Above Normal Water Years	1	-1	-9	-1	-2	-2	-2	-3	0	-1	4	3
Below Normal Water Years	2	2	-7	-4	-2	0	0	-2	1	0	3	0
Dry Water Years	1	0	-4	-3	-2	0	-1	-1	2	1	2	5
Critical Water Years	2	5	-1	-4	-3	0	0	-1	-4	-3	-7	-3

Table G.2-3-1-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), No Action Alternative

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	150	170	189	179	163	132	97	101	141	149	170	179
1%	150	168	184	172	163	115	93	95	134	149	158	164
5%	139	157	179	167	128	108	89	75	98	128	144	150
10%	135	148	159	145	115	96	84	69	80	111	130	144
25%	128	128	134	117	96	85	75	59	52	58	89	127
50%	114	109	119	86	77	79	68	53	48	51	62	99
75%	50	58	71	64	53	43	37	36	44	45	47	54
99.9%	23	6	2	2	1	2	1	1	2	28	33	37

Table G.2-3-1-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), No Action Alternative

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	92	97	106	90	73	66	56	46	51	60	73	94
Wet Water Years	84	81	70	54	43	34	25	18	34	46	46	52
Above Normal Water Years	92	91	112	86	67	60	54	45	46	44	46	56
Below Normal Water Years	78	87	111	92	75	75	60	50	48	51	71	120
Dry Water Years	97	103	128	111	91	81	72	57	48	56	84	112
Critical Water Years	113	129	127	121	104	97	84	74	93	113	131	146

Table G.2-3-2-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	168	179	170	172	170	126	93	79	116	146	129	151
1%	159	179	167	172	166	125	88	74	102	132	126	141
5%	151	168	161	164	143	112	83	71	83	100	108	135
10%	140	163	156	151	130	100	81	66	71	77	101	128
25%	133	140	149	127	104	81	70	56	55	61	87	123
50%	123	126	125	89	71	64	62	50	46	51	71	118
75%	114	109	68	56	49	41	37	34	40	44	60	104
99.9%	23	6	2	2	1	2	1	1	2	28	33	36

Table G.2-3-2-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 1

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	120	122	110	91	74	62	53	43	47	56	74	112
Wet Water Years	110	103	73	52	39	31	24	18	32	46	56	100
Above Normal Water Years	129	130	116	82	60	52	51	42	41	43	63	121
Below Normal Water Years	117	118	107	89	77	65	56	47	46	51	77	111
Dry Water Years	123	127	133	118	94	76	68	53	49	57	85	116
Critical Water Years	126	143	142	126	114	102	81	67	79	90	95	123

Table G.2-3-2-C. Jones Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	18	9	-19	-7	7	-6	-4	-23	-25	-3	-41	-28
1%	10	11	-17	0	4	10	-5	-21	-32	-17	-33	-23
5%	13	11	-17	-3	15	4	-6	-4	-15	-27	-36	-15
10%	6	15	-3	5	15	4	-3	-3	-9	-34	-29	-16
25%	5	12	14	9	8	-3	-5	-3	3	3	-3	-4
50%	9	17	7	2	-6	-14	-6	-3	-2	0	9	19
75%	64	50	-2	-8	-4	-3	0	-2	-3	-1	13	50
99.9%	0	0	0	0	0	0	0	0	0	0	0	0

Table G.2-3-2-D. Jones Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	28	25	4	1	1	-4	-3	-3	-3	-3	1	18
Wet Water Years	26	22	2	-2	-4	-3	0	-1	-3	1	10	48
Above Normal Water Years	37	38	4	-5	-8	-8	-2	-3	-4	-1	17	65
Below Normal Water Years	38	32	-4	-3	2	-10	-4	-3	-1	0	6	-9
Dry Water Years	26	24	5	8	3	-5	-5	-3	1	1	1	3
Critical Water Years	13	14	15	6	10	6	-3	-7	-14	-23	-36	-23

Table G.2-3-3-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	151	173	192	176	163	128	96	96	141	154	153	162
1%	150	172	178	170	163	121	92	94	125	152	151	157
5%	141	161	169	161	128	107	89	76	102	119	143	153
10%	135	156	155	144	115	97	83	68	76	99	127	141
25%	128	132	136	115	94	86	74	58	55	60	86	125
50%	109	104	120	89	78	79	67	51	50	51	65	105
75%	50	58	70	64	53	43	38	35	44	46	49	58
99.9%	23	6	2	2	1	2	1	1	2	28	33	36

Table G.2-3-3-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	92	97	106	90	73	67	56	45	51	59	74	95
Wet Water Years	83	80	69	53	43	34	25	18	34	47	48	53
Above Normal Water Years	94	92	108	88	67	60	53	43	45	43	50	59
Below Normal Water Years	79	88	108	91	75	75	61	49	48	52	74	119
Dry Water Years	97	103	129	110	90	81	72	56	50	57	86	117
Critical Water Years	113	133	130	122	105	98	83	73	91	108	125	142

Table G.2-3-3-C. Jones Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	1	3	3	-3	0	-4	-1	-6	0	5	-16	-17
1%	0	4	-6	-2	1	5	-1	-1	-9	3	-7	-7
5%	2	4	-10	-6	0	-1	0	1	4	-9	-1	3
10%	0	9	-4	-1	-1	1	-1	-1	-4	-13	-3	-3
25%	0	3	2	-2	-2	1	-1	-1	3	2	-3	-2
50%	-5	-5	1	2	1	0	-1	-2	2	0	3	6
75%	0	0	0	0	0	0	1	-2	1	0	2	4
99.9%	0	0	0	0	0	0	0	0	0	0	0	-1

Table G.2-3-3-D. Jones Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	0	0	-1	0	0	0	0	-1	0	0	1	1
Wet Water Years	-1	-1	-1	0	-1	0	0	0	0	1	2	1
Above Normal Water Years	2	0	-4	1	0	0	-1	-2	0	-1	3	3
Below Normal Water Years	1	1	-3	-1	0	0	0	-1	1	0	3	-1
Dry Water Years	1	0	1	0	0	1	0	-1	2	1	2	4
Critical Water Years	0	4	3	1	1	2	-1	-2	-2	-5	-7	-4

Table G.2-3-4-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	154	171	192	176	163	125	92	78	113	150	131	149
1%	150	165	178	171	163	125	87	76	101	129	131	146
5%	146	162	169	161	135	114	84	69	74	92	116	136
10%	137	157	157	147	115	97	80	66	68	79	102	130
25%	128	134	136	114	94	86	74	58	55	59	80	121
50%	113	103	119	89	78	79	67	51	50	51	65	104
75%	50	58	70	64	53	44	38	35	44	45	49	57
99.9%	23	6	2	2	1	2	1	1	2	28	33	36

Table G.2-3-4-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	93	97	105	90	73	67	55	44	49	56	69	92
Wet Water Years	83	80	69	53	43	34	25	18	34	46	48	53
Above Normal Water Years	93	92	107	88	68	60	53	43	46	43	50	59
Below Normal Water Years	80	89	110	92	75	74	60	49	49	52	73	117
Dry Water Years	98	103	127	109	90	81	72	56	50	57	86	117
Critical Water Years	116	133	130	123	105	102	80	66	76	85	92	124

Table G.2-3-4-C. Jones Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	4	1	3	-3	0	-6	-5	-23	-28	1	-38	-30
1%	1	-3	-5	-1	1	10	-5	-19	-32	-20	-28	-18
5%	8	4	-9	-6	7	6	-5	-6	-23	-35	-28	-14
10%	3	9	-2	2	0	2	-4	-3	-12	-32	-28	-14
25%	0	5	1	-3	-2	1	-1	-1	2	1	-10	-6
50%	-1	-6	1	3	1	0	-1	-2	2	0	3	5
75%	0	0	-1	0	0	0	1	-2	1	0	2	3
99.9%	0	0	0	0	0	0	0	0	0	0	0	-1

Table G.2-3-4-D. Jones Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1	0	-1	0	0	1	-1	-2	-2	-4	-4	-2
Wet Water Years	-1	-1	-1	0	-1	0	0	0	0	1	2	1
Above Normal Water Years	1	1	-5	2	0	0	-1	-2	0	-1	4	3
Below Normal Water Years	1	2	-1	0	0	-1	0	-1	1	1	2	-4
Dry Water Years	1	0	-1	-1	0	1	0	-1	2	1	2	4
Critical Water Years	2	3	3	2	1	5	-4	-8	-17	-28	-40	-21

Table G.2-3-5-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	168	176	193	176	210	131	96	80	113	152	131	146
1%	155	174	190	171	164	129	90	76	101	130	131	145
5%	150	165	170	156	135	120	88	70	75	92	117	140
10%	144	158	158	141	114	113	86	68	68	79	101	136
25%	128	130	136	116	94	102	80	61	54	59	84	123
50%	114	105	120	90	78	82	70	54	50	51	67	106
75%	50	59	70	64	53	45	38	36	45	46	49	56
99.9%	23	6	2	2	1	2	1	1	2	28	33	36

Table G.2-3-5-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	94	98	106	89	74	74	58	45	49	56	70	93
Wet Water Years	84	82	70	54	43	35	25	18	34	47	47	53
Above Normal Water Years	94	93	108	88	68	67	57	45	46	44	50	58
Below Normal Water Years	82	87	111	93	76	87	65	51	49	52	74	119
Dry Water Years	97	103	128	108	91	91	78	59	50	57	89	120
Critical Water Years	117	133	130	121	109	105	81	67	76	85	92	126

Table G.2-3-5-C. Jones Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	18	6	4	-3	46	-1	-1	-22	-27	3	-39	-33
1%	5	6	6	-1	1	14	-3	-19	-33	-19	-27	-20
5%	12	8	-8	-11	7	11	-1	-4	-23	-35	-27	-10
10%	9	10	-1	-4	-1	18	2	-2	-12	-33	-29	-8
25%	0	1	1	-1	-2	18	5	2	2	1	-6	-5
50%	0	-4	1	4	2	4	2	1	2	0	4	7
75%	0	1	-1	0	0	2	1	0	2	1	2	2
99.9%	0	0	0	0	0	0	0	0	0	0	0	-1

Table G.2-3-5-D. Jones Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	2	1	0	0	1	7	2	0	-2	-4	-4	-1
Wet Water Years	0	0	-1	0	-1	1	1	0	0	1	1	1
Above Normal Water Years	2	2	-4	2	0	7	3	0	1	1	4	2
Below Normal Water Years	4	1	0	1	1	13	5	1	2	1	3	-1
Dry Water Years	1	0	0	-3	0	11	6	3	2	1	5	7
Critical Water Years	4	4	3	0	5	8	-3	-8	-17	-27	-39	-20

Table G.2-3-6-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	175	176	192	178	210	131	96	79	107	147	134	144
1%	170	174	189	172	164	130	90	76	85	111	132	144
5%	152	165	169	156	135	119	88	69	72	86	116	140
10%	138	158	153	136	115	114	86	67	67	78	101	136
25%	128	129	136	114	94	102	80	62	54	59	83	125
50%	113	110	119	90	78	84	70	54	49	52	66	106
75%	50	59	70	65	53	45	38	36	45	46	48	56
99.9%	23	6	2	2	1	2	1	1	2	28	33	36

Table G.2-3-6-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	94	98	105	89	74	74	58	45	48	56	69	93
Wet Water Years	85	82	70	54	43	35	25	18	34	47	47	53
Above Normal Water Years	93	93	108	88	68	67	57	46	46	44	48	57
Below Normal Water Years	83	90	109	92	76	87	65	51	48	53	73	119
Dry Water Years	97	103	127	106	90	92	78	60	49	58	90	120
Critical Water Years	117	131	129	122	111	105	81	66	72	82	91	125

Table G.2-3-6-C. Jones Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	26	6	4	-2	47	0	-1	-22	-34	-2	-36	-35
1%	21	6	5	0	1	14	-3	-19	-49	-38	-26	-20
5%	14	8	-9	-11	7	11	-1	-6	-26	-41	-28	-10
10%	3	10	-6	-9	0	18	2	-2	-14	-33	-29	-8
25%	1	1	2	-3	-2	17	5	3	2	1	-6	-2
50%	-1	0	0	4	2	5	2	1	1	1	4	7
75%	0	1	-1	0	0	2	1	-1	2	1	1	2
99.9%	0	0	0	0	0	0	0	0	0	0	0	-1

Table G.2-3-6-D. Jones Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	2	1	-1	0	1	8	2	0	-3	-4	-4	-1
Wet Water Years	1	0	-1	0	-1	1	0	0	0	1	1	1
Above Normal Water Years	1	1	-4	2	0	7	3	0	0	0	2	1
Below Normal Water Years	5	3	-2	0	1	13	4	1	1	2	2	-1
Dry Water Years	0	0	-1	-5	-1	11	6	3	1	2	6	8
Critical Water Years	4	2	2	2	7	9	-3	-9	-21	-31	-41	-21

Table G.2-3-7-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	134	158	156	149	160	129	96	84	105	87	93	105
1%	133	158	152	137	143	128	95	84	87	84	91	104
5%	122	149	136	127	118	124	93	82	82	76	87	100
10%	110	142	130	118	111	120	92	80	79	75	71	85
25%	83	111	117	97	100	101	89	77	74	70	61	55
50%	69	91	98	86	79	75	67	54	68	59	49	50
75%	54	60	63	64	59	41	35	35	55	49	44	45
99.9%	22	5	2	2	1	2	2	1	1	28	37	38

Table G.2-3-7-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 3

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	72	89	90	81	74	71	59	51	60	59	54	56
Wet Water Years	62	74	76	56	43	34	23	17	38	60	54	48
Above Normal Water Years	74	84	89	82	67	62	50	45	61	62	51	50
Below Normal Water Years	67	83	85	84	83	83	63	57	63	61	51	50
Dry Water Years	73	95	95	91	91	89	82	69	71	49	43	50
Critical Water Years	89	117	111	102	99	105	91	79	77	69	74	92

Table G.2-3-7-C. Jones Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	-16	-13	-33	-30	-4	-3	-2	-17	-36	-62	-77	-75
1%	-17	-11	-31	-35	-20	13	3	-11	-47	-65	-67	-60
5%	-17	-9	-42	-41	-10	16	4	7	-16	-51	-57	-50
10%	-24	-6	-29	-27	-4	24	8	11	-2	-36	-59	-59
25%	-45	-18	-17	-21	4	16	14	18	22	12	-28	-72
50%	-46	-18	-20	-1	3	-4	-2	1	20	7	-13	-49
75%	4	2	-8	0	6	-3	-2	-2	12	4	-3	-9
99.9%	-1	0	0	0	0	0	0	0	-1	0	3	1

Table G.2-3-7-D. Jones Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	-20	-8	-17	-9	0	5	3	5	9	-1	-20	-38
Wet Water Years	-22	-7	6	3	-1	0	-2	-1	4	14	7	-4
Above Normal Water Years	-18	-7	-23	-4	-1	2	-3	0	15	18	5	-6
Below Normal Water Years	-12	-4	-26	-9	8	8	3	8	16	9	-20	-70
Dry Water Years	-23	-9	-33	-19	0	8	10	12	23	-7	-41	-62
Critical Water Years	-24	-12	-16	-19	-5	9	6	5	-16	-44	-57	-54

Table G.2-3-8-A. Jones Pumping Plant, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	151	173	178	169	164	131	104	101	126	157	156	164
1%	150	170	169	168	164	117	93	96	126	151	151	160
5%	143	162	157	159	126	104	89	75	97	124	142	150
10%	136	155	145	143	114	96	83	69	78	100	128	145
25%	128	135	133	115	94	86	74	58	53	60	85	125
50%	111	108	117	86	75	77	67	51	50	50	66	105
75%	50	58	71	65	53	43	38	35	44	46	49	57
99.9%	23	6	2	2	1	2	1	1	2	28	33	36

Table G.2-3-8-B. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), Alternative 4

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	93	98	103	88	72	66	56	45	51	59	74	96
Wet Water Years	85	81	69	54	42	33	24	18	34	47	48	53
Above Normal Water Years	93	91	104	86	66	58	53	43	45	43	50	59
Below Normal Water Years	80	89	105	89	73	74	61	49	48	51	74	120
Dry Water Years	97	103	124	108	89	81	72	56	50	56	86	117
Critical Water Years	115	133	127	118	103	97	84	73	89	109	124	142

Table G.2-3-8-C. Jones Pumping Plant, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	1	2	-11	-10	1	-1	7	-1	-15	8	-14	-16
1%	0	2	-14	-4	1	2	0	1	-8	3	-7	-4
5%	4	5	-22	-9	-2	-4	0	0	-1	-4	-2	0
10%	2	8	-14	-2	-1	0	-1	0	-2	-12	-2	1
25%	1	6	-2	-2	-2	1	-1	-1	1	2	-4	-2
50%	-3	-1	-2	0	-2	-2	-2	-3	2	-1	4	6
75%	0	0	0	1	-1	0	1	-2	1	0	2	3
99.9%	0	0	0	0	0	0	0	0	0	0	0	-1

Table G.2-3-8-D. Jones Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1	1	-3	-2	-2	-1	0	-1	0	0	1	1
Wet Water Years	1	0	-1	0	-1	-1	0	0	0	1	2	1
Above Normal Water Years	1	0	-7	-1	-2	-2	-1	-2	0	-1	3	3
Below Normal Water Years	1	2	-6	-3	-2	0	0	-1	0	0	3	0
Dry Water Years	0	0	-4	-3	-2	0	0	-1	2	1	2	5
Critical Water Years	2	4	0	-3	-1	0	0	-1	-4	-4	-7	-3

Table G.2-4-1-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), No Action Alternative

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	2132	2193	1747	1418	1069	688	1201	1603	1431	1724	1904	1947
1%	2129	2135	1699	1377	753	558	1043	1559	1412	1660	1721	1850
5%	1937	1975	1477	1217	517	315	624	1145	1337	1548	1620	1785
10%	1859	1845	1361	1068	358	223	379	742	1182	1377	1567	1737
25%	1685	1653	1161	573	164	52	124	235	403	753	1151	1657
50%	1386	876	713	126	26	25	28	80	274	490	868	1315
75%	232	685	183	23	20	20	21	25	132	259	507	325
99.9%	29	18	15	12	14	12	11	11	13	36	170	76

Table G.2-4-1-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), No Action Alternative

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1018	1118	703	344	126	76	127	228	384	590	891	1054
Wet Water Years	829	800	223	33	20	20	20	35	114	218	468	310
Above Normal Water Years	985	1095	644	173	35	21	24	58	179	264	513	310
Below Normal Water Years	789	996	791	271	84	35	58	110	322	527	925	1405
Dry Water Years	1105	1297	971	569	175	83	95	181	368	725	1124	1632
Critical Water Years	1502	1561	1092	785	366	259	532	918	1133	1396	1572	1742

Table G.2-4-2-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	1957	2246	1758	1602	1030	564	571	978	1448	1472	1455	1815
1%	1933	2214	1713	1524	824	489	559	959	1396	1346	1424	1787
5%	1861	1973	1586	1328	641	357	441	779	1129	1209	1367	1680
10%	1765	1801	1508	1234	473	264	277	505	605	962	1341	1654
25%	1572	1645	1374	975	300	77	128	262	406	723	1154	1543
50%	1411	1497	968	249	29	28	30	119	252	483	852	1337
75%	1175	1241	253	22	20	19	20	25	118	290	744	1127
99.9%	35	17	15	12	14	12	11	11	13	35	171	99

Table G.2-4-2-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), Alternative 1

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1347	1341	830	465	175	81	100	199	324	535	935	1305
Wet Water Years	1180	1032	293	53	23	20	21	43	92	231	684	1033
Above Normal Water Years	1408	1358	753	218	44	22	25	76	144	282	739	1140
Below Normal Water Years	1302	1254	920	421	138	47	69	147	256	489	868	1245
Dry Water Years	1413	1528	1180	800	263	101	110	205	381	713	1122	1528
Critical Water Years	1537	1681	1212	947	465	245	327	629	881	1075	1341	1658

Table G.2-4-2-C. San Joaquin River at Antioch, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	-175	53	11	184	-39	-124	-631	-625	17	-252	-449	-131
1%	-196	79	13	147	71	-69	-485	-599	-15	-314	-297	-64
5%	-76	-2	109	112	124	42	-183	-366	-208	-340	-254	-105
10%	-94	-44	146	165	115	41	-102	-237	-577	-415	-226	-83
25%	-113	-8	213	402	136	24	4	27	3	-30	3	-114
50%	26	620	255	123	3	2	2	39	-21	-8	-16	22
75%	943	556	70	-1	0	-1	-1	1	-13	31	237	802
99.9%	6	0	0	0	0	0	0	0	0	-1	0	24

Table G.2-4-2-D. San Joaquin River at Antioch, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	329	223	127	120	49	5	-27	-29	-60	-55	44	251
Wet Water Years	351	232	70	21	3	0	1	8	-22	13	217	723
Above Normal Water Years	423	263	109	44	9	1	1	18	-35	18	226	830
Below Normal Water Years	513	258	129	149	54	12	11	36	-66	-37	-57	-160
Dry Water Years	308	231	209	231	88	19	15	25	13	-12	-2	-104
Critical Water Years	35	120	120	162	99	-14	-205	-289	-252	-321	-232	-84

Table G.2-4-3-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	2195	2152	1920	1441	1089	641	1209	1476	1480	1616	1725	1950
1%	2128	2039	1886	1421	765	599	1044	1460	1472	1604	1663	1881
5%	1982	2001	1464	1108	443	307	586	1182	1318	1523	1622	1801
10%	1878	1821	1352	1005	326	224	330	701	1172	1386	1452	1750
25%	1689	1648	1201	489	151	48	140	263	433	765	1166	1677
50%	1341	864	622	120	26	25	29	120	267	491	866	1399
75%	238	680	176	22	20	20	21	26	128	283	530	341
99.9%	37	18	15	12	14	12	11	11	13	36	173	101

Table G.2-4-3-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1023	1099	703	319	116	76	127	239	382	590	897	1069
Wet Water Years	818	790	214	29	20	20	20	43	114	227	498	324
Above Normal Water Years	1005	1005	599	171	35	21	24	75	175	279	539	329
Below Normal Water Years	788	995	797	273	79	34	62	146	326	520	894	1425
Dry Water Years	1112	1288	988	530	150	80	101	202	379	732	1145	1657
Critical Water Years	1526	1555	1114	692	344	264	517	885	1101	1362	1540	1741

Table G.2-4-3-C. San Joaquin River at Antioch, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	63	-42	174	22	19	-47	7	-127	49	-108	-179	4
1%	0	-96	187	44	12	41	1	-99	61	-56	-58	30
5%	45	26	-13	-109	-74	-8	-39	38	-19	-26	2	16
10%	20	-25	-9	-63	-32	1	-49	-41	-10	8	-116	13
25%	4	-6	40	-84	-13	-5	16	28	30	13	15	19
50%	-45	-12	-91	-6	0	0	1	40	-6	1	-2	84
75%	6	-5	-6	0	0	0	0	1	-4	24	23	16
99.9%	8	0	0	0	0	0	0	0	0	0	2	25

Table G.2-4-3-D. San Joaquin River at Antioch, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	5	-19	0	-25	-11	0	0	11	-2	0	6	16
Wet Water Years	-11	-10	-9	-4	0	0	0	8	0	9	30	13
Above Normal Water Years	20	-90	-45	-2	0	0	0	17	-5	15	25	19
Below Normal Water Years	-1	-1	6	2	-5	-1	4	36	4	-6	-30	20
Dry Water Years	7	-8	17	-39	-25	-3	6	22	11	7	21	25
Critical Water Years	23	-6	22	-94	-23	5	-15	-33	-31	-34	-32	-1

Table G.2-4-4-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	2208	2018	1833	2028	1091	593	629	943	1423	1480	1471	1951
1%	2189	1987	1772	1450	784	548	535	900	1351	1344	1403	1883
5%	2065	1829	1494	1144	509	295	393	719	1074	1206	1365	1846
10%	1991	1736	1350	1022	328	145	259	452	605	958	1314	1779
25%	1698	1640	1186	486	141	46	104	263	427	736	1164	1686
50%	1336	864	615	143	26	26	29	120	266	489	866	1409
75%	238	681	176	22	20	20	21	26	128	283	529	341
99.9%	37	18	15	12	14	12	11	11	13	36	173	101

Table G.2-4-4-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1034	1079	697	332	117	68	95	195	343	542	863	1080
Wet Water Years	817	788	213	29	20	20	20	43	114	227	498	324
Above Normal Water Years	1010	1000	591	171	35	21	24	75	175	279	538	328
Below Normal Water Years	810	972	821	286	80	34	62	146	327	523	893	1435
Dry Water Years	1119	1281	968	520	150	80	101	203	379	731	1145	1658
Critical Water Years	1557	1476	1089	771	353	212	313	609	854	1060	1331	1792

Table G.2-4-4-C. San Joaquin River at Antioch, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	76	-175	87	610	21	-96	-573	-660	-8	-245	-432	4
1%	60	-148	72	73	31	-10	-508	-659	-61	-316	-318	33
5%	128	-147	17	-73	-8	-20	-231	-426	-263	-342	-255	61
10%	133	-109	-11	-46	-30	-78	-120	-290	-577	-420	-254	42
25%	13	-14	25	-87	-22	-6	-20	28	24	-17	13	28
50%	-50	-12	-98	17	0	0	1	39	-8	-2	-2	94
75%	6	-5	-6	0	0	0	0	1	-4	23	22	16
99.9%	8	0	0	0	0	0	0	0	0	0	3	25

Table G.2-4-4-D. San Joaquin River at Antioch, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	16	-38	-6	-13	-9	-8	-33	-33	-41	-48	-27	26
Wet Water Years	-13	-12	-10	-4	0	0	0	8	0	9	30	13
Above Normal Water Years	25	-95	-53	-2	0	0	0	17	-4	15	25	18
Below Normal Water Years	21	-24	30	15	-4	-1	4	36	5	-4	-32	30
Dry Water Years	14	-16	-3	-49	-26	-3	6	22	11	6	21	26
Critical Water Years	55	-84	-2	-15	-13	-47	-219	-309	-278	-336	-242	51

Table G.2-4-5-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	2229	2057	1861	2056	1731	613	642	938	1429	1501	1482	1977
1%	2212	2019	1844	1433	1108	592	555	907	1358	1357	1438	1923
5%	2096	1840	1505	1193	422	285	388	709	1097	1189	1380	1858
10%	1993	1751	1331	1024	327	158	241	455	600	965	1343	1791
25%	1692	1639	1165	510	142	38	87	265	441	765	1180	1689
50%	1364	869	618	157	26	25	28	114	269	488	865	1402
75%	237	695	177	22	20	21	22	27	130	275	531	340
99.9%	37	18	15	12	14	12	11	11	13	39	171	98

Table G.2-4-5-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1038	1082	694	337	127	65	89	191	346	544	868	1082
Wet Water Years	833	796	218	30	20	20	20	43	116	223	494	324
Above Normal Water Years	1015	1006	592	172	35	22	24	65	179	275	528	328
Below Normal Water Years	809	961	806	289	82	30	53	145	333	525	895	1432
Dry Water Years	1113	1283	958	529	154	64	84	193	381	742	1164	1662
Critical Water Years	1560	1482	1096	784	405	219	313	609	854	1068	1342	1806

Table G.2-4-5-C. San Joaquin River at Antioch, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	96	-136	115	637	662	-75	-559	-665	-2	-223	-422	30
1%	83	-116	145	57	354	34	-488	-652	-54	-303	-282	72
5%	159	-135	29	-23	-94	-30	-236	-435	-240	-360	-240	72
10%	134	-94	-31	-45	-31	-65	-138	-287	-582	-412	-224	54
25%	7	-14	4	-63	-22	-15	-37	30	38	12	29	31
50%	-22	-7	-95	31	0	0	0	34	-5	-2	-3	87
75%	5	9	-5	0	0	1	1	2	-2	16	24	15
99.9%	8	0	0	0	0	0	0	0	0	3	0	23

Table G.2-4-5-D. San Joaquin River at Antioch, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	20	-36	-9	-8	1	-12	-38	-37	-39	-46	-23	29
Wet Water Years	3	-4	-5	-2	0	0	0	8	2	5	26	13
Above Normal Water Years	30	-89	-52	-2	0	1	0	7	0	11	15	18
Below Normal Water Years	20	-35	15	18	-2	-5	-5	35	11	-2	-29	27
Dry Water Years	8	-14	-13	-40	-21	-19	-10	13	13	17	40	30
Critical Water Years	58	-78	4	-1	39	-40	-218	-309	-278	-328	-230	64

Table G.2-4-6-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	2230	2412	1860	2042	1744	618	618	879	1370	1495	1437	1975
1%	2210	2113	1838	1421	1097	582	560	856	1175	1276	1400	1959
5%	2064	1900	1489	1196	541	275	358	600	952	1179	1374	1855
10%	1994	1760	1286	1039	343	155	220	409	554	988	1336	1786
25%	1701	1644	1150	511	129	41	72	209	418	761	1176	1685
50%	1383	870	643	163	26	25	26	74	271	504	849	1401
75%	236	682	177	22	20	21	21	26	137	264	531	340
99.9%	37	18	15	12	14	12	11	11	13	39	171	98

Table G.2-4-6-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1034	1090	691	336	131	64	78	157	327	541	862	1077
Wet Water Years	842	807	221	31	20	20	20	41	116	222	491	323
Above Normal Water Years	1009	999	589	170	35	22	23	48	172	269	514	326
Below Normal Water Years	792	1000	803	276	82	30	38	101	320	526	887	1411
Dry Water Years	1106	1281	944	511	156	63	67	154	360	746	1166	1660
Critical Water Years	1555	1481	1098	819	424	218	286	525	788	1049	1331	1806

Table G.2-4-6-C. San Joaquin River at Antioch, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	98	219	113	624	674	-70	-584	-724	-61	-229	-467	29
1%	81	-22	139	44	344	24	-483	-703	-237	-384	-321	109
5%	127	-75	13	-21	24	-40	-267	-545	-385	-369	-246	69
10%	135	-85	-76	-29	-16	-68	-159	-334	-628	-389	-231	49
25%	16	-10	-12	-62	-34	-11	-52	-26	15	8	25	27
50%	-3	-6	-70	37	0	0	-1	-6	-3	14	-19	86
75%	5	-3	-6	0	0	1	0	1	5	4	24	15
99.9%	8	0	0	0	0	0	0	0	0	3	0	23

Table G.2-4-6-D. San Joaquin River at Antioch, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	16	-28	-12	-8	4	-12	-50	-71	-58	-49	-29	24
Wet Water Years	12	7	-2	-2	0	0	0	6	2	4	23	12
Above Normal Water Years	24	-96	-56	-3	0	1	-1	-10	-7	5	1	16
Below Normal Water Years	3	3	12	5	-2	-5	-20	-9	-2	-1	-38	6
Dry Water Years	1	-16	-27	-57	-19	-20	-28	-27	-8	21	42	28
Critical Water Years	53	-80	7	34	58	-41	-246	-393	-345	-347	-241	64

Table G.2-4-7-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	2113	2132	1855	1019	629	613	1153	1316	932	1117	1202	1596
1%	2049	2108	1632	989	420	289	508	1004	836	1117	1186	1581
5%	1979	1838	1427	683	309	148	363	705	730	922	1136	1555
10%	1814	1745	1363	502	130	130	167	359	597	731	953	1382
25%	1294	1583	581	221	48	32	57	148	347	536	522	811
50%	889	713	227	32	26	25	27	41	234	411	450	689
75%	198	226	60	22	21	22	22	23	149	243	324	226
99.9%	21	17	14	12	13	12	10	9	11	26	78	29

Table G.2-4-7-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), Alternative 3

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	824	894	429	164	65	49	78	145	276	437	496	637
Wet Water Years	615	643	116	24	21	21	21	23	118	182	268	214
Above Normal Water Years	789	770	227	39	22	22	25	33	186	359	371	214
Below Normal Water Years	669	676	432	123	37	25	34	78	298	526	507	710
Dry Water Years	874	1060	586	213	67	41	49	116	245	441	467	773
Critical Water Years	1318	1439	917	493	208	162	316	574	651	847	1035	1460

Table G.2-4-7-C. San Joaquin River at Antioch, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	-19	-61	109	-399	-440	-76	-48	-287	-498	-607	-702	-351
1%	-80	-27	-68	-388	-333	-268	-536	-554	-576	-543	-535	-269
5%	42	-138	-50	-534	-207	-167	-261	-440	-607	-626	-484	-231
10%	-45	-100	1	-566	-229	-93	-213	-383	-585	-646	-614	-355
25%	-391	-71	-580	-352	-115	-20	-66	-88	-56	-217	-629	-846
50%	-496	-163	-486	-94	0	-1	-1	-40	-40	-79	-418	-626
75%	-34	-460	-123	-1	0	1	1	-2	17	-16	-183	-99
99.9%	-8	0	-1	0	-1	0	-1	-1	-2	-10	-92	-47

Table G.2-4-7-D. San Joaquin River at Antioch, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	-194	-223	-273	-180	-61	-27	-49	-83	-108	-153	-395	-417
Wet Water Years	-214	-157	-107	-9	1	1	1	-12	5	-36	-200	-96
Above Normal Water Years	-196	-325	-417	-134	-12	1	1	-25	7	95	-143	-96
Below Normal Water Years	-120	-320	-359	-148	-47	-10	-24	-32	-24	-1	-418	-695
Dry Water Years	-231	-237	-385	-356	-108	-42	-45	-64	-123	-285	-657	-858
Critical Water Years	-184	-122	-175	-292	-159	-97	-216	-345	-481	-549	-538	-282

Table G.2-4-8-A. San Joaquin River at Antioch, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	2195	2156	1894	1431	1136	816	1247	1516	1513	1645	1707	1962
1%	2128	2144	1843	1331	1082	589	1056	1491	1446	1613	1642	1840
5%	1936	1970	1407	1098	524	302	545	1127	1336	1537	1624	1807
10%	1871	1818	1317	1019	360	244	330	704	1178	1389	1443	1760
25%	1728	1662	1176	572	159	52	137	262	432	732	1139	1653
50%	1405	865	609	119	25	25	28	119	268	486	856	1413
75%	237	683	176	22	20	20	20	26	128	283	527	341
99.9%	37	18	15	12	14	12	11	11	13	36	172	100

Table G.2-4-8-B. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), Alternative 4

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	1034	1109	673	325	133	82	129	238	383	584	888	1067
Wet Water Years	850	815	207	29	20	20	20	43	114	227	497	324
Above Normal Water Years	1000	1006	579	160	34	21	24	74	175	280	539	328
Below Normal Water Years	802	1002	767	261	81	35	62	149	330	511	888	1429
Dry Water Years	1117	1285	949	565	176	80	100	202	378	712	1118	1643
Critical Water Years	1522	1567	1051	697	408	298	529	875	1106	1365	1534	1741

Table G.2-4-8-C. San Joaquin River at Antioch, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	63	-37	148	13	67	128	46	-87	82	-79	-197	15
1%	0	9	144	-46	329	32	13	-67	34	-47	-79	-10
5%	-1	-5	-70	-119	7	-13	-80	-17	-2	-12	4	21
10%	13	-28	-44	-50	2	21	-49	-38	-4	11	-124	23
25%	43	9	15	-1	-4	-1	13	26	29	-21	-12	-4
50%	19	-12	-104	-7	0	0	1	39	-6	-4	-12	98
75%	6	-2	-7	0	0	0	-1	1	-4	23	20	16
99.9%	8	0	0	0	0	0	0	0	0	0	2	24

Table G.2-4-8-D. San Joaquin River at Antioch, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	16	-9	-30	-20	6	5	2	10	-1	-6	-2	13
Wet Water Years	20	15	-16	-4	0	0	0	8	0	8	29	14
Above Normal Water Years	15	-89	-66	-13	-1	0	0	16	-4	16	26	18
Below Normal Water Years	13	6	-24	-10	-3	0	4	38	7	-15	-37	24
Dry Water Years	12	-12	-22	-4	1	-3	5	22	10	-13	-6	11
Critical Water Years	20	7	-41	-88	42	39	-3	-44	-27	-31	-39	-1

Table G.2-5-1-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), No Action Alternative

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	233	247	265	254	213	133	126	172	166	174	207	208
1%	224	240	265	248	204	120	84	142	165	171	188	175
5%	189	226	246	231	158	68	70	79	129	155	158	170
10%	186	218	224	216	115	50	55	60	83	129	142	165
25%	167	173	209	142	75	39	44	39	28	51	95	142
50%	136	134	172	77	38	31	36	32	26	35	57	114
75%	22	39	86	28	27	27	29	28	23	24	31	38
99.9%	18	20	12	7	7	6	6	5	14	16	20	19

Table G.2-5-1-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), No Action Alternative

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	103	113	146	93	57	36	39	39	37	49	70	96
Wet Water Years	90	88	80	38	36	27	27	23	20	23	30	34
Above Normal Water Years	97	104	151	75	38	32	41	34	25	25	32	38
Below Normal Water Years	77	89	150	96	46	33	39	34	26	37	70	133
Dry Water Years	110	124	185	129	70	36	36	35	27	48	86	127
Critical Water Years	149	174	190	147	102	59	59	81	106	128	150	164

Table G.2-5-2-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	246	318	336	260	256	127	82	83	138	168	145	180
1%	226	277	284	248	244	117	79	78	134	141	134	167
5%	214	260	252	239	216	98	67	65	93	104	123	153
10%	189	236	239	219	175	63	50	45	55	82	105	148
25%	171	193	224	181	112	46	35	33	29	47	89	141
50%	153	169	180	92	36	28	29	29	24	32	68	133
75%	140	144	107	28	24	24	26	24	21	24	50	121
99.9%	18	18	11	7	7	6	5	5	14	16	20	19

Table G.2-5-2-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), Alternative 1

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	152	164	162	107	73	37	33	31	32	41	71	127
Wet Water Years	138	133	96	40	35	27	25	20	19	22	44	113
Above Normal Water Years	166	175	170	85	35	26	31	28	23	24	55	135
Below Normal Water Years	148	155	160	107	62	31	29	28	25	35	74	123
Dry Water Years	154	174	202	159	103	39	32	31	27	48	87	131
Critical Water Years	167	203	210	164	138	72	55	56	76	88	103	145

Table G.2-5-2-C. Contra Costa Water District Pumping Plant #1, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	13	71	71	6	43	-6	-43	-90	-28	-6	-62	-28
1%	2	37	19	0	40	-3	-5	-64	-31	-30	-54	-8
5%	25	34	5	9	59	30	-3	-14	-36	-50	-35	-17
10%	3	18	15	2	60	14	-5	-15	-28	-47	-37	-17
25%	4	19	15	39	37	7	-9	-6	0	-4	-6	-1
50%	18	35	8	15	-2	-3	-7	-3	-2	-3	11	19
75%	119	105	21	-1	-3	-3	-4	-4	-2	0	20	83
99.9%	-1	-1	-1	0	0	0	0	0	0	0	0	0

Table G.2-5-2-D. Contra Costa Water District Pumping Plant #1, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 1 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	49	51	16	14	16	1	-5	-8	-6	-7	0	32
Wet Water Years	48	45	15	2	-1	-1	-3	-3	-1	0	13	78
Above Normal Water Years	69	71	19	10	-3	-6	-10	-6	-2	-1	23	97
Below Normal Water Years	71	65	10	11	17	-2	-10	-6	-1	-3	4	-10
Dry Water Years	43	50	17	29	33	3	-4	-4	0	0	2	4
Critical Water Years	19	29	20	17	36	13	-4	-26	-30	-40	-47	-18

Table G.2-5-3-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	233	244	269	274	217	123	111	162	173	174	173	181
1%	224	243	269	251	205	107	91	140	165	171	173	174
5%	204	236	237	230	126	65	60	84	131	151	163	167
10%	190	219	232	196	113	51	48	51	81	126	144	163
25%	166	174	207	148	69	38	38	34	29	49	93	140
50%	140	118	170	69	39	32	31	29	26	35	59	118
75%	22	39	84	29	27	27	27	24	23	24	33	40
99.9%	19	19	12	7	7	6	5	5	14	16	20	19

Table G.2-5-3-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	104	113	144	92	55	36	35	35	36	48	72	98
Wet Water Years	91	87	78	35	36	26	24	20	20	23	32	37
Above Normal Water Years	102	102	137	74	41	32	32	28	24	24	37	43
Below Normal Water Years	78	90	148	94	45	33	33	29	26	38	74	134
Dry Water Years	111	124	188	130	67	36	34	32	28	48	89	133
Critical Water Years	151	177	192	146	92	59	58	78	102	123	144	160

Table G.2-5-3-C. Contra Costa Water District Pumping Plant #1, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	0	-3	4	20	4	-10	-15	-10	7	0	-34	-27
1%	0	4	4	3	1	-13	7	-2	0	0	-16	-1
5%	15	9	-10	-1	-32	-3	-11	6	2	-4	5	-3
10%	4	2	8	-20	-2	1	-7	-9	-2	-3	2	-2
25%	-1	1	-3	5	-6	-1	-5	-5	1	-2	-2	-2
50%	4	-17	-2	-8	1	1	-5	-3	0	0	2	4
75%	0	0	-2	0	0	0	-2	-3	0	0	3	3
99.9%	0	0	0	0	0	0	0	0	0	0	0	0

Table G.2-5-3-D. Contra Costa Water District Pumping Plant #1, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	2	0	-2	-1	-2	0	-4	-4	-1	-1	2	2
Wet Water Years	1	-2	-2	-2	0	-1	-3	-3	0	0	1	2
Above Normal Water Years	5	-2	-14	-1	3	1	-9	-6	-1	-1	5	5
Below Normal Water Years	1	1	-2	-2	0	0	-6	-6	0	0	4	1
Dry Water Years	1	0	3	0	-4	0	-2	-3	0	0	3	6
Critical Water Years	2	3	2	-1	-10	0	-1	-4	-4	-5	-6	-4

Table G.2-5-4-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	237	240	281	320	281	122	81	81	129	171	143	172
1%	234	240	269	282	219	102	75	78	121	140	142	167
5%	211	230	234	230	136	71	59	63	85	101	124	157
10%	197	220	218	196	115	58	48	45	53	84	109	149
25%	175	174	202	155	69	39	38	34	29	47	86	139
50%	141	117	166	71	40	32	31	29	26	34	59	115
75%	22	39	83	29	27	27	27	24	23	24	33	41
99.9%	19	19	12	7	7	6	5	5	14	16	20	19

Table G.2-5-4-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	107	113	141	93	56	36	34	31	32	42	64	95
Wet Water Years	90	86	78	35	36	26	24	20	20	23	32	37
Above Normal Water Years	102	102	136	74	40	32	32	28	24	24	37	43
Below Normal Water Years	81	91	148	99	46	33	33	29	26	38	72	130
Dry Water Years	113	123	184	127	66	36	34	32	28	48	89	133
Critical Water Years	160	176	184	153	102	62	52	54	72	86	101	145

Table G.2-5-4-C. Contra Costa Water District Pumping Plant #1, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	4	-6	16	67	67	-11	-44	-91	-37	-3	-64	-35
1%	10	0	4	34	15	-18	-9	-64	-44	-31	-46	-8
5%	22	4	-13	0	-21	3	-11	-16	-44	-54	-33	-13
10%	11	3	-6	-20	0	8	-7	-15	-30	-45	-33	-16
25%	8	1	-7	12	-6	0	-5	-5	1	-5	-8	-3
50%	6	-17	-6	-6	3	1	-5	-3	0	-1	2	1
75%	0	0	-2	0	0	0	-2	-3	0	0	3	3
99.9%	0	0	0	0	0	0	0	0	0	0	0	0

Table G.2-5-4-D. Contra Costa Water District Pumping Plant #1, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Without VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	4	0	-4	0	-1	0	-5	-8	-6	-7	-6	-1
Wet Water Years	0	-2	-2	-2	0	-1	-3	-3	0	0	1	2
Above Normal Water Years	5	-1	-15	-1	2	0	-9	-6	-1	-1	5	5
Below Normal Water Years	5	1	-2	3	0	0	-6	-5	0	0	2	-3
Dry Water Years	3	0	-1	-3	-4	0	-2	-3	0	0	3	5
Critical Water Years	11	2	-6	6	0	3	-7	-28	-34	-42	-49	-19

Table G.2-5-5-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	246	248	293	309	339	146	90	84	130	177	150	174
1%	238	245	268	282	215	122	78	79	122	143	144	171
5%	226	233	233	223	166	75	71	63	85	100	127	165
10%	201	221	221	210	119	60	64	46	52	86	110	154
25%	174	171	203	144	69	47	50	39	30	47	91	143
50%	143	125	161	75	40	39	42	33	26	36	63	118
75%	22	40	85	29	27	28	31	26	23	24	33	40
99.9%	19	19	12	7	7	6	5	5	14	16	20	19

Table G.2-5-5-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	108	114	142	93	58	42	43	34	32	42	66	97
Wet Water Years	92	89	79	36	36	27	29	21	20	23	31	36
Above Normal Water Years	104	104	137	74	40	41	52	34	25	26	37	41
Below Normal Water Years	85	91	151	100	47	45	47	33	26	38	73	134
Dry Water Years	112	124	184	123	67	42	43	36	28	49	93	138
Critical Water Years	159	175	183	155	109	68	54	54	72	86	103	149

Table G.2-5-5-C. Contra Costa Water District Pumping Plant #1, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	13	2	28	55	125	13	-36	-89	-36	3	-57	-33
1%	14	5	4	34	11	1	-6	-63	-43	-28	-45	-4
5%	37	6	-14	-8	8	7	0	-16	-45	-54	-31	-5
10%	15	4	-3	-7	4	10	9	-14	-30	-43	-32	-11
25%	7	-2	-6	2	-6	8	6	0	2	-4	-4	1
50%	8	-9	-11	-2	3	8	6	1	0	0	6	4
75%	0	0	-1	0	0	2	2	-2	0	1	3	2
99.9%	0	0	0	0	0	0	0	0	0	0	0	0

Table G.2-5-5-D. Contra Costa Water District Pumping Plant #1, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Delta VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	5	1	-4	0	1	6	4	-5	-5	-6	-4	1
Wet Water Years	2	0	-1	-2	0	0	1	-2	0	0	1	2
Above Normal Water Years	7	0	-14	-1	2	9	11	1	0	1	4	4
Below Normal Water Years	8	2	0	4	1	12	8	-1	0	0	3	1
Dry Water Years	1	0	-1	-6	-4	5	7	2	1	1	7	11
Critical Water Years	11	1	-7	8	7	9	-5	-27	-34	-42	-47	-15

Table G.2-5-6-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	260	291	389	311	341	149	89	80	120	172	151	172
1%	249	251	269	278	212	123	78	77	98	120	145	170
5%	225	233	232	225	164	75	71	55	77	90	119	164
10%	198	219	223	196	118	61	62	45	45	82	111	156
25%	173	171	204	137	70	48	49	38	29	46	88	143
50%	143	136	157	77	39	39	42	32	25	34	61	119
75%	22	40	86	28	27	29	31	25	23	24	32	40
99.9%	18	19	12	7	7	6	5	5	14	16	20	19

Table G.2-5-6-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	107	114	143	92	58	42	42	33	30	41	65	97
Wet Water Years	92	89	80	37	36	28	29	20	20	23	31	36
Above Normal Water Years	103	105	137	74	39	40	51	33	24	24	34	40
Below Normal Water Years	86	94	157	96	47	45	46	31	26	38	72	134
Dry Water Years	111	123	183	120	65	41	43	36	27	50	94	138
Critical Water Years	158	172	183	156	114	69	54	51	63	81	101	148

Table G.2-5-6-C. Contra Costa Water District Pumping Plant #1, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	27	44	124	57	127	16	-37	-92	-46	-3	-55	-35
1%	25	11	5	30	8	2	-7	-64	-67	-51	-43	-5
5%	36	6	-15	-5	6	7	0	-23	-52	-64	-39	-6
10%	13	1	-1	-20	2	11	7	-15	-38	-47	-31	-10
25%	6	-2	-5	-6	-6	9	6	-1	0	-6	-7	1
50%	8	2	-15	0	2	8	6	0	-1	-1	4	4
75%	0	1	0	0	0	2	1	-2	0	0	1	3
99.9%	0	0	0	0	0	0	0	0	0	0	0	0

Table G.2-5-6-D. Contra Costa Water District Pumping Plant #1, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 Without TUCP Systemwide VA minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	5	1	-2	-1	1	6	4	-6	-7	-7	-5	1
Wet Water Years	2	1	-1	-1	0	0	1	-2	0	0	1	2
Above Normal Water Years	6	1	-14	-1	1	9	10	0	0	-1	2	2
Below Normal Water Years	9	5	6	0	1	12	7	-3	0	1	2	1
Dry Water Years	1	-1	-2	-9	-6	5	7	1	0	2	8	11
Critical Water Years	9	-2	-7	9	12	10	-5	-31	-42	-47	-49	-16

Table G.2-5-7-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	198	240	237	232	195	122	124	149	118	91	93	115
1%	197	240	228	182	109	111	116	94	95	84	93	107
5%	171	216	202	155	96	93	99	84	78	62	81	103
10%	140	209	182	123	84	84	87	82	57	54	60	89
25%	84	139	167	74	54	67	75	70	47	39	32	34
50%	47	89	84	48	44	45	58	60	41	31	28	29
75%	20	24	28	30	31	29	43	45	30	28	26	22
99.9%	19	19	8	7	6	5	4	3	7	16	20	19

Table G.2-5-7-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), Alternative 3

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	62	91	99	61	48	49	58	55	40	36	35	38
Wet Water Years	46	69	73	36	38	43	39	28	24	27	26	23
Above Normal Water Years	62	84	80	45	39	50	65	59	38	32	27	23
Below Normal Water Years	53	69	81	59	47	53	65	63	39	37	31	30
Dry Water Years	62	97	111	71	53	46	59	60	43	30	29	33
Critical Water Years	101	151	160	108	67	61	73	78	69	61	71	94

Table G.2-5-7-C. Contra Costa Water District Pumping Plant #1, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	-35	-6	-28	-22	-18	-11	-2	-23	-48	-83	-114	-93
1%	-27	0	-37	-66	-95	-10	32	-48	-70	-88	-96	-68
5%	-18	-11	-44	-76	-61	25	29	6	-51	-93	-77	-67
10%	-45	-8	-42	-94	-31	34	32	21	-26	-75	-82	-76
25%	-82	-34	-42	-68	-21	28	31	31	18	-12	-63	-108
50%	-89	-46	-88	-29	6	14	22	28	15	-4	-29	-85
75%	-2	-16	-57	1	3	3	14	17	6	4	-5	-16
99.9%	0	0	-4	0	-1	-1	-1	-2	-7	0	0	0

Table G.2-5-7-D. Contra Costa Water District Pumping Plant #1, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 3 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	-41	-22	-47	-31	-9	13	19	16	3	-13	-35	-58
Wet Water Years	-44	-19	-7	-2	2	16	12	6	4	4	-4	-11
Above Normal Water Years	-35	-20	-71	-30	1	18	24	26	14	7	-5	-15
Below Normal Water Years	-24	-20	-69	-37	1	20	26	29	13	0	-39	-103
Dry Water Years	-48	-27	-74	-58	-18	9	23	26	15	-18	-57	-94
Critical Water Years	-47	-23	-30	-39	-35	2	14	-4	-37	-67	-79	-70

Table G.2-5-8-A. Contra Costa Water District Pumping Plant #1, Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	237	245	278	265	221	152	136	175	165	177	186	174
1%	225	244	249	238	205	123	89	144	157	173	175	174
5%	198	236	235	231	126	69	61	76	130	154	161	169
10%	190	221	214	179	116	51	47	53	84	126	143	163
25%	169	175	197	131	76	39	37	34	29	48	94	140
50%	138	136	147	66	36	31	30	29	26	35	61	117
75%	22	40	83	29	27	27	27	24	23	24	34	40
99.9%	19	19	12	7	7	6	5	5	14	16	20	19

Table G.2-5-8-B. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), Alternative 4

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	105	114	139	87	55	36	34	35	36	48	71	98
Wet Water Years	92	89	78	35	36	27	24	20	20	23	32	37
Above Normal Water Years	101	101	130	68	39	32	31	28	24	24	37	42
Below Normal Water Years	79	93	142	87	43	32	33	29	26	38	73	135
Dry Water Years	111	124	180	123	69	36	33	32	28	48	89	133
Critical Water Years	152	178	189	137	94	61	59	77	101	125	144	160

Table G.2-5-8-C. Contra Costa Water District Pumping Plant #1, Difference in Exceedance Probabilities for Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Probability of Exceedance	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0.1%	4	-2	13	12	8	19	11	2	-1	3	-20	-34
1%	1	4	-16	-10	2	3	5	2	-8	2	-13	-1
5%	10	10	-11	0	-32	1	-10	-2	1	-1	4	-1
10%	4	3	-11	-37	1	1	-8	-7	2	-3	1	-2
25%	2	2	-12	-11	1	0	-6	-5	1	-4	-1	-2
50%	2	2	-25	-11	-2	0	-6	-3	0	-1	4	3
75%	0	0	-3	0	-1	0	-3	-3	0	0	3	2
99.9%	0	0	0	0	0	0	0	0	0	0	0	0

Table G.2-5-8-D. Contra Costa Water District Pumping Plant #1, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 4 minus Baseline Conditions

Average	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Full Simulation Period	2	1	-7	-6	-2	0	-4	-4	-1	-1	1	2
Wet Water Years	2	1	-3	-2	0	-1	-4	-3	0	0	1	2
Above Normal Water Years	4	-3	-21	-7	1	0	-10	-6	-1	-1	4	4
Below Normal Water Years	2	3	-8	-10	-2	-1	-6	-6	0	0	3	2
Dry Water Years	1	0	-6	-6	-1	0	-3	-3	0	0	3	6
Critical Water Years	3	4	-1	-10	-8	2	0	-4	-5	-3	-7	-4

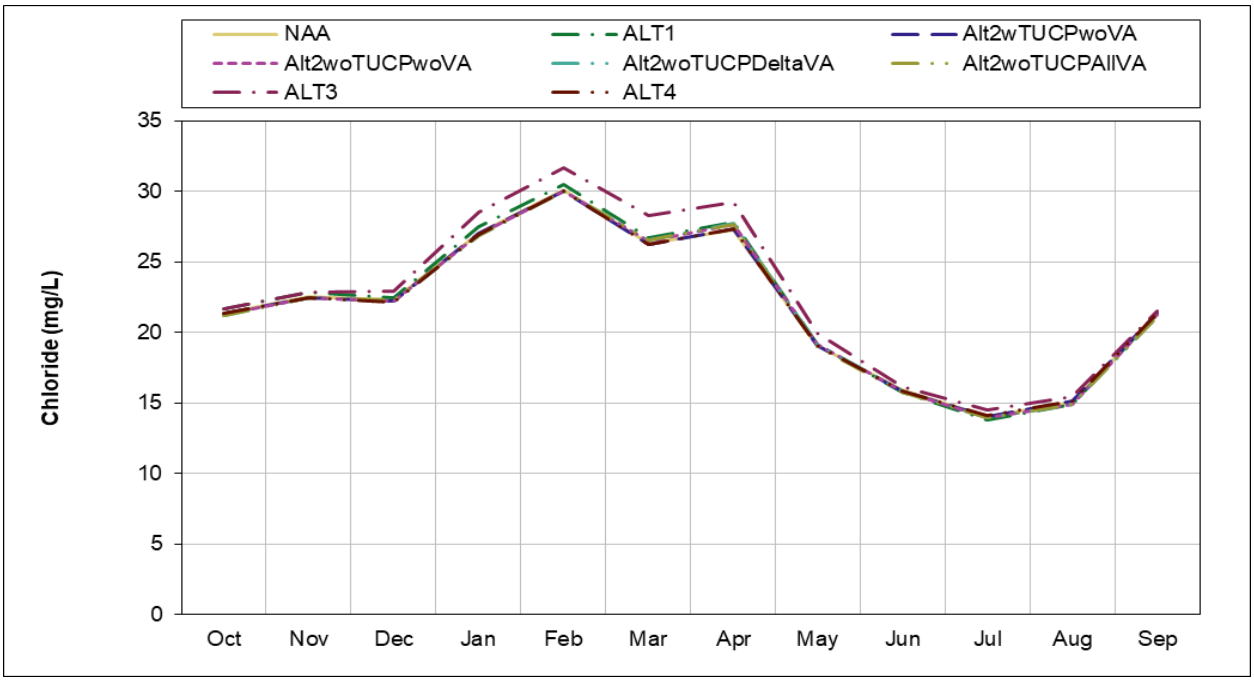

Figure G.2-1-1. Barker Slough at North Bay Aqueduct, Long term Monthly Average Chloride (in milligrams per liter)

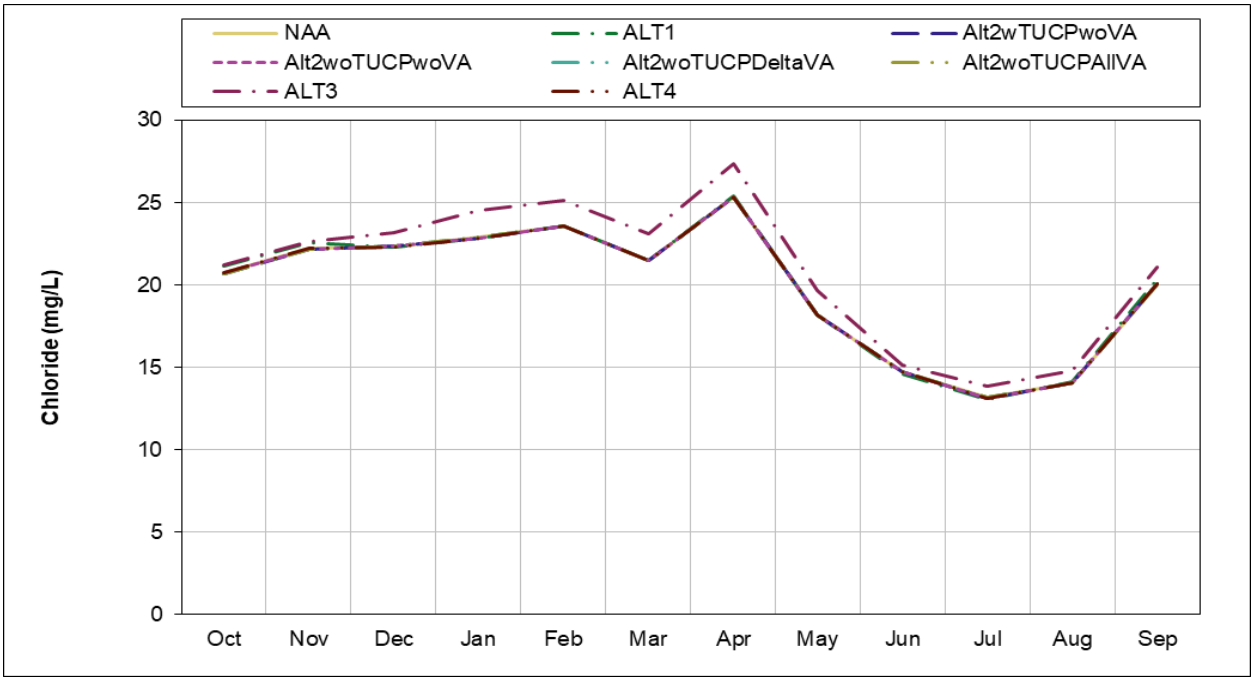

Figure G.2-1-2. Barker Slough at North Bay Aqueduct, Wet Year Monthly Average Chloride (in milligrams per liter)

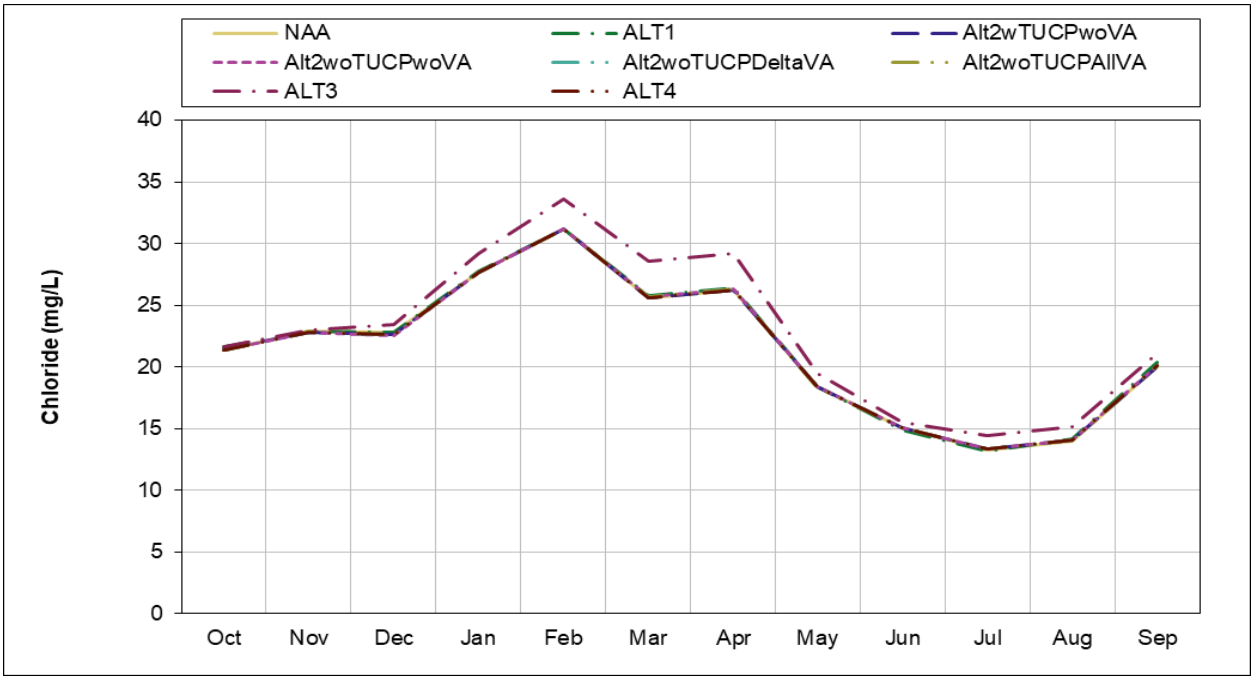

Figure G.2-1-3. Barker Slough at North Bay Aqueduct, Above Normal Year Monthly Average Chloride (in milligrams per liter)

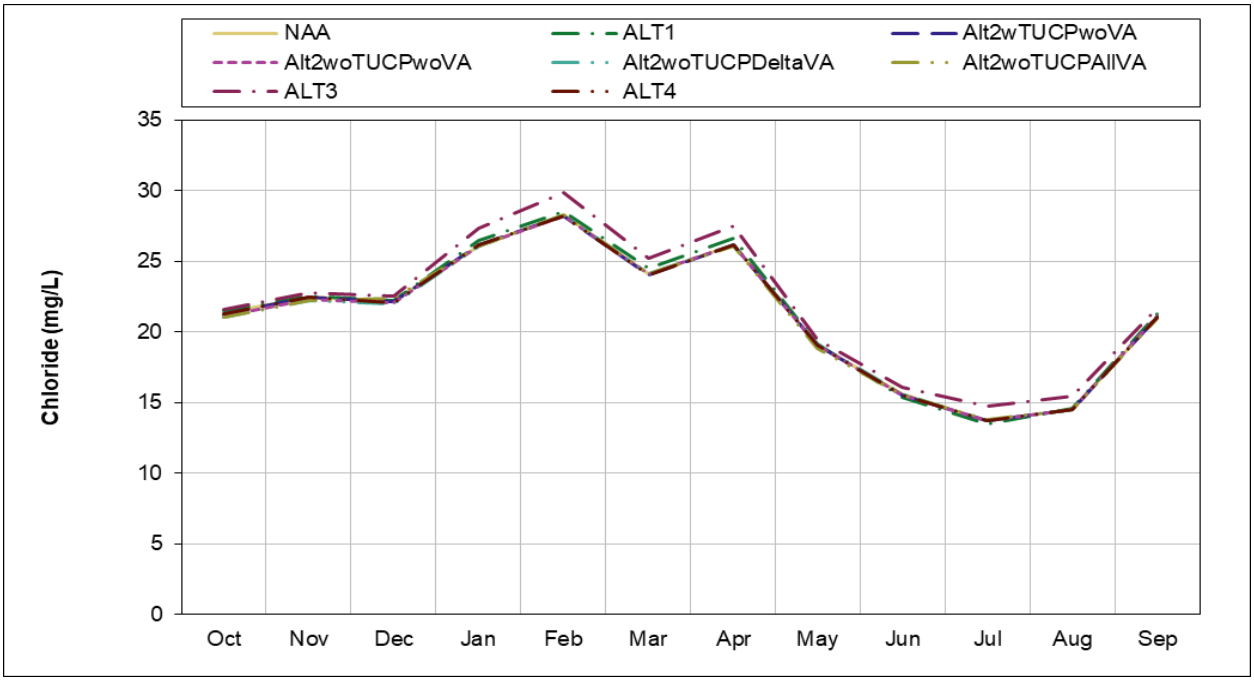

Figure G.2-1-4. Barker Slough at North Bay Aqueduct, Below Normal Year Monthly Average Chloride (in milligrams per liter)

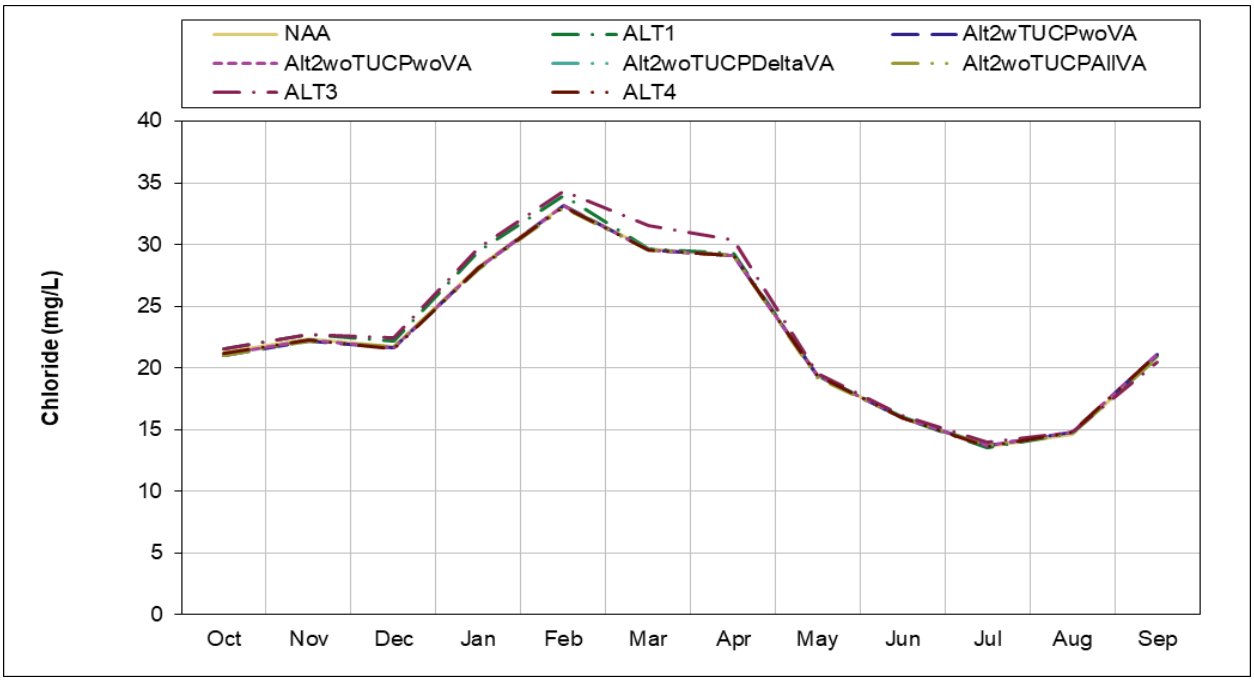

Figure G.2-1-5. Barker Slough at North Bay Aqueduct, Dry Year Monthly Average Chloride (in milligrams per liter)

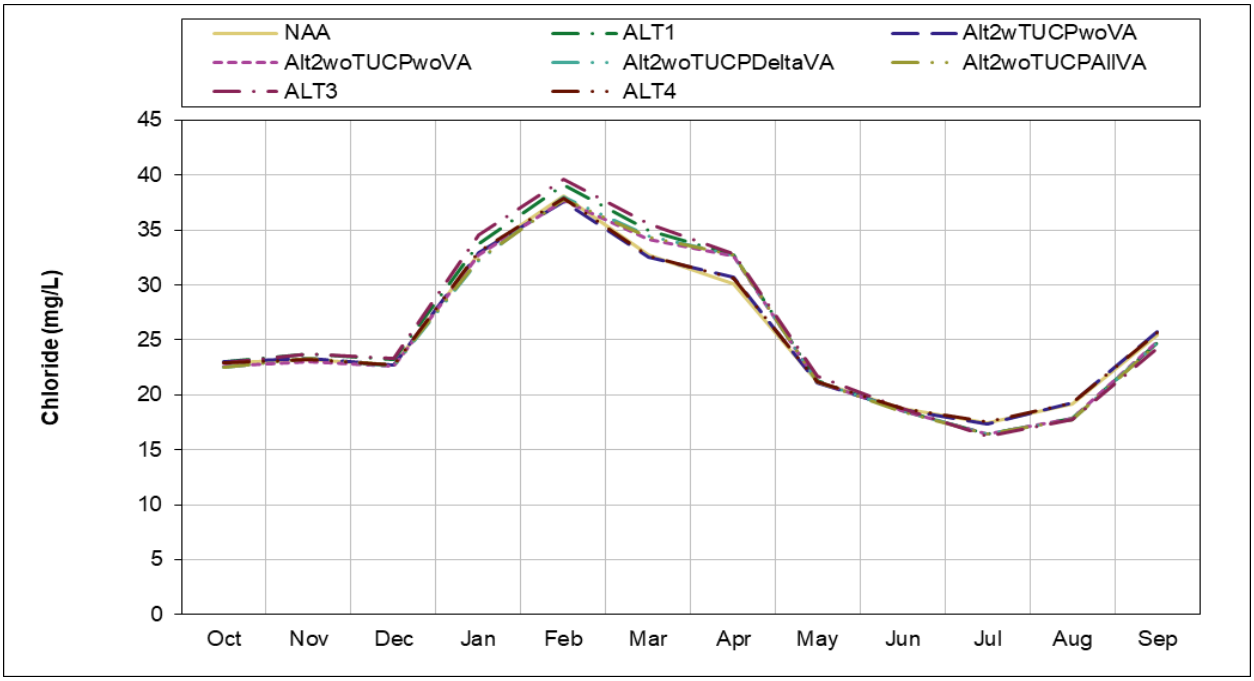

Figure G.2-1-6. Barker Slough at North Bay Aqueduct, Critical Year Monthly Average Chloride (in milligrams per liter)

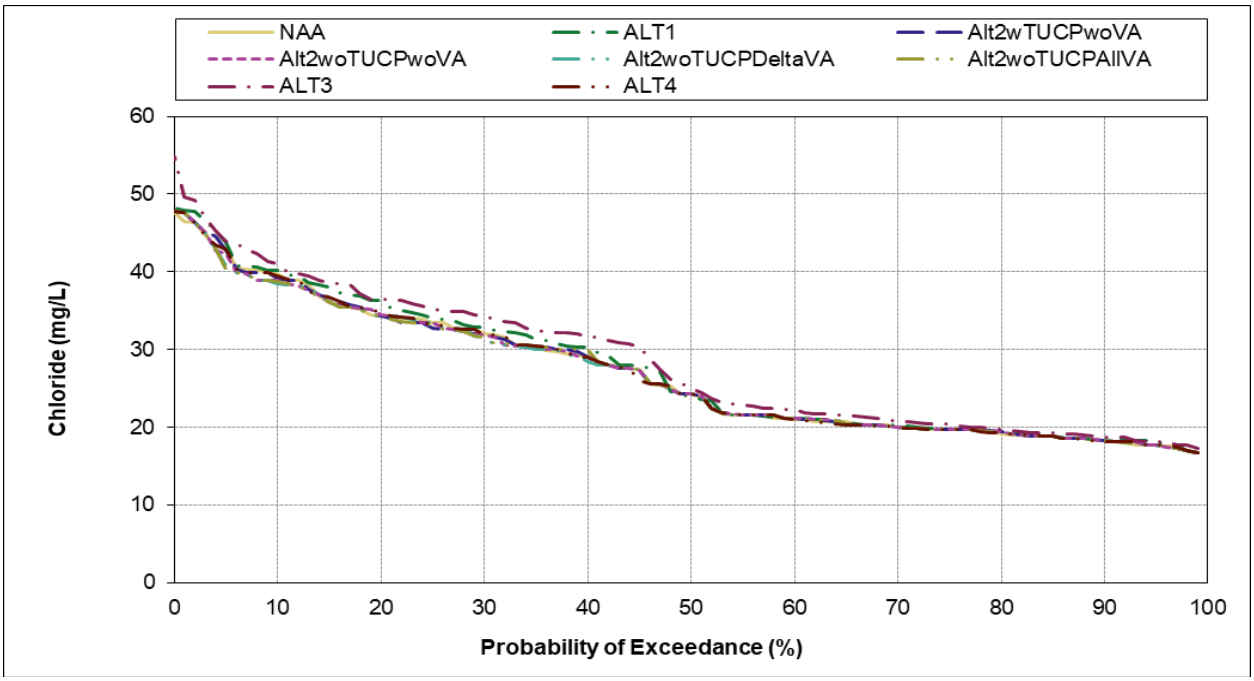

Figure G.2-1-7. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), January

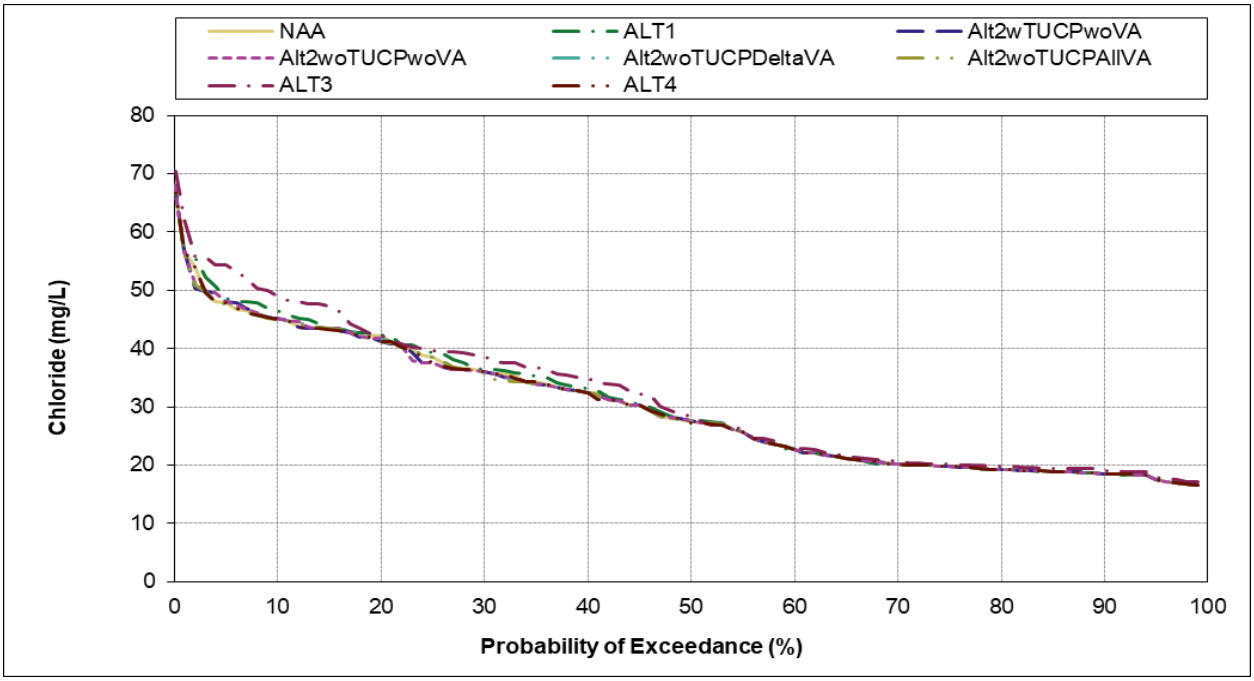

Figure G.2-1-8. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), February

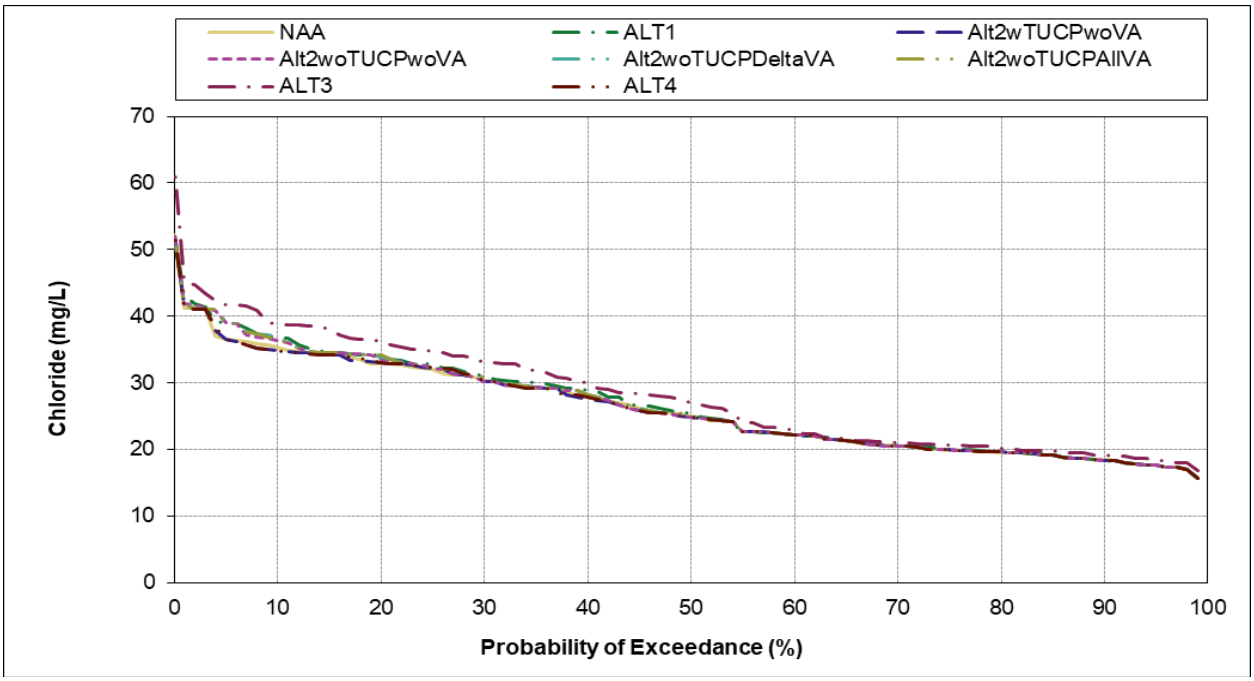

Figure G.2-1-9. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), March

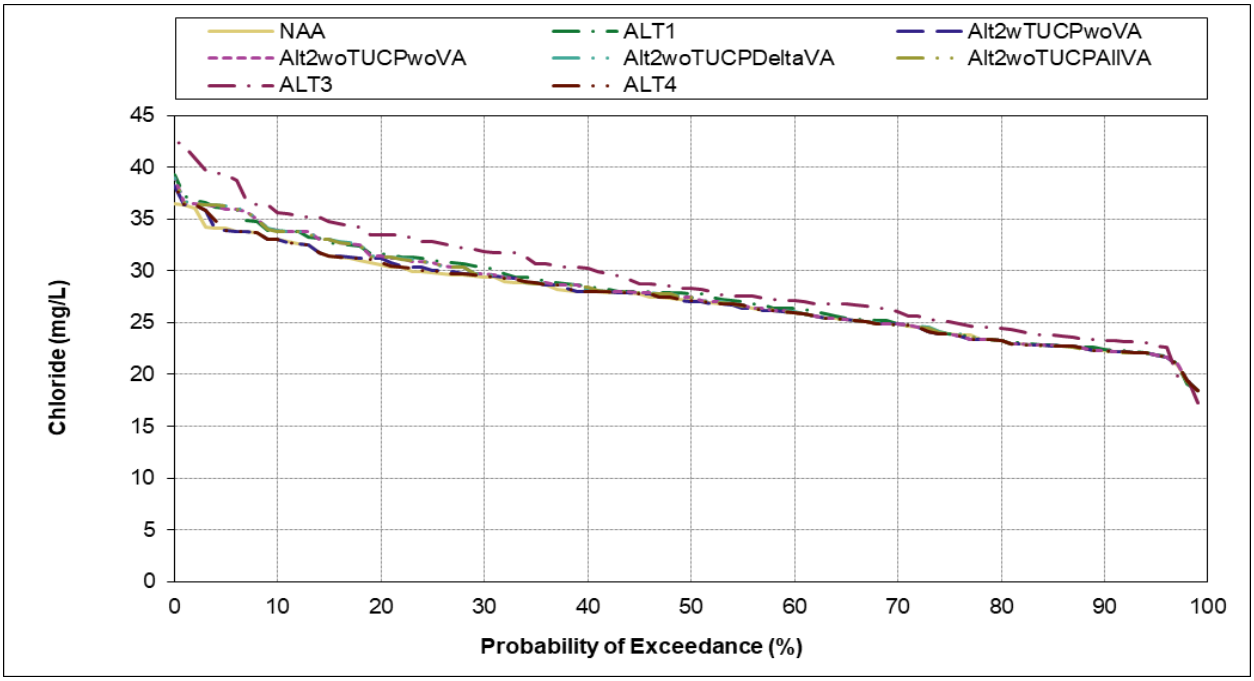

Figure G.2-1-10. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), April

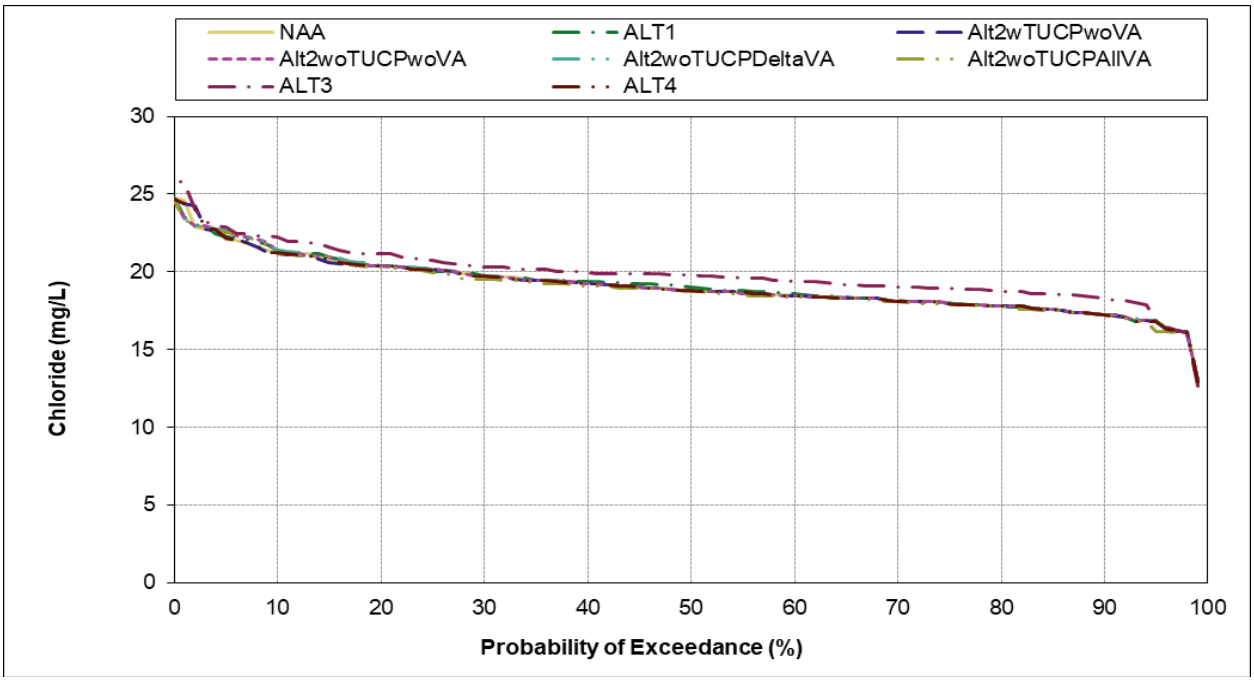

Figure G.2-1-11. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), May

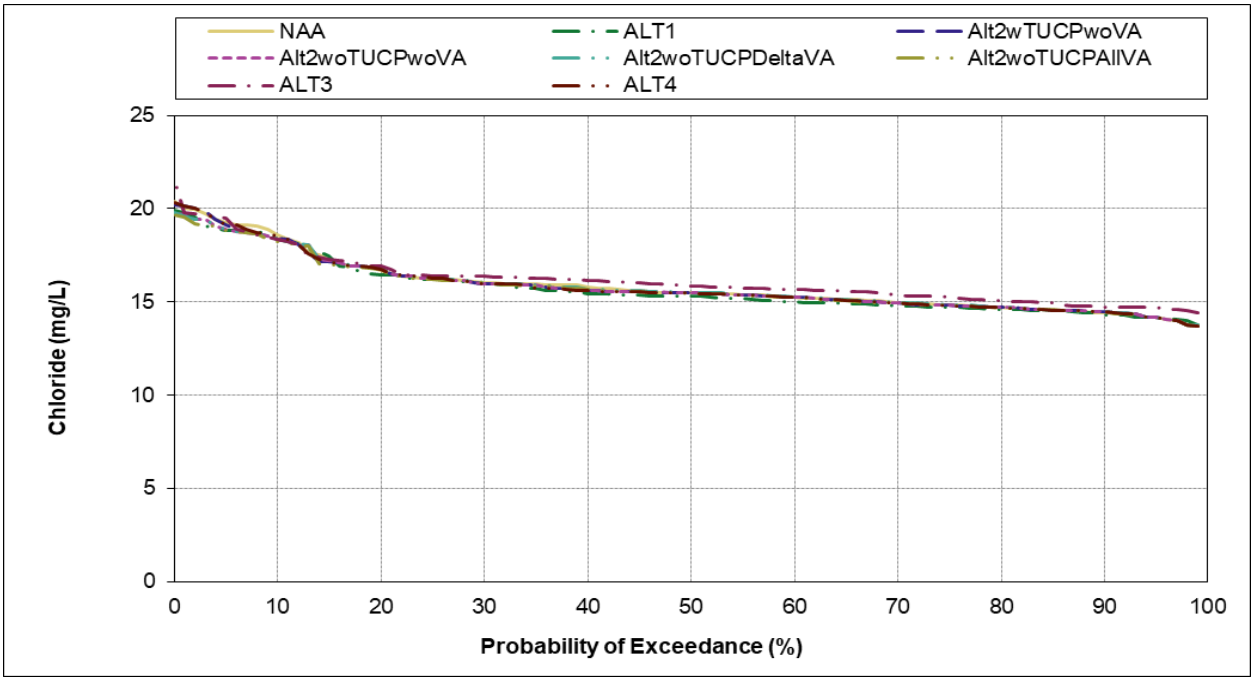

Figure G.2-1-12. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), June

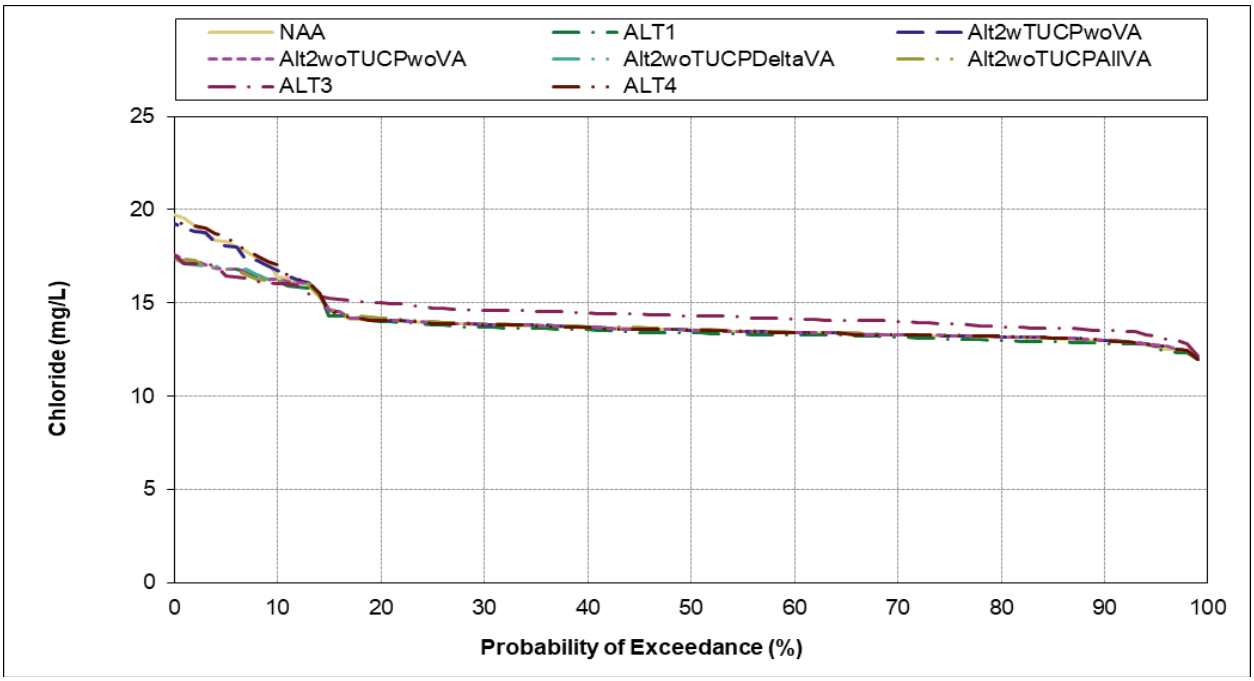

Figure G.2-1-13. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), July

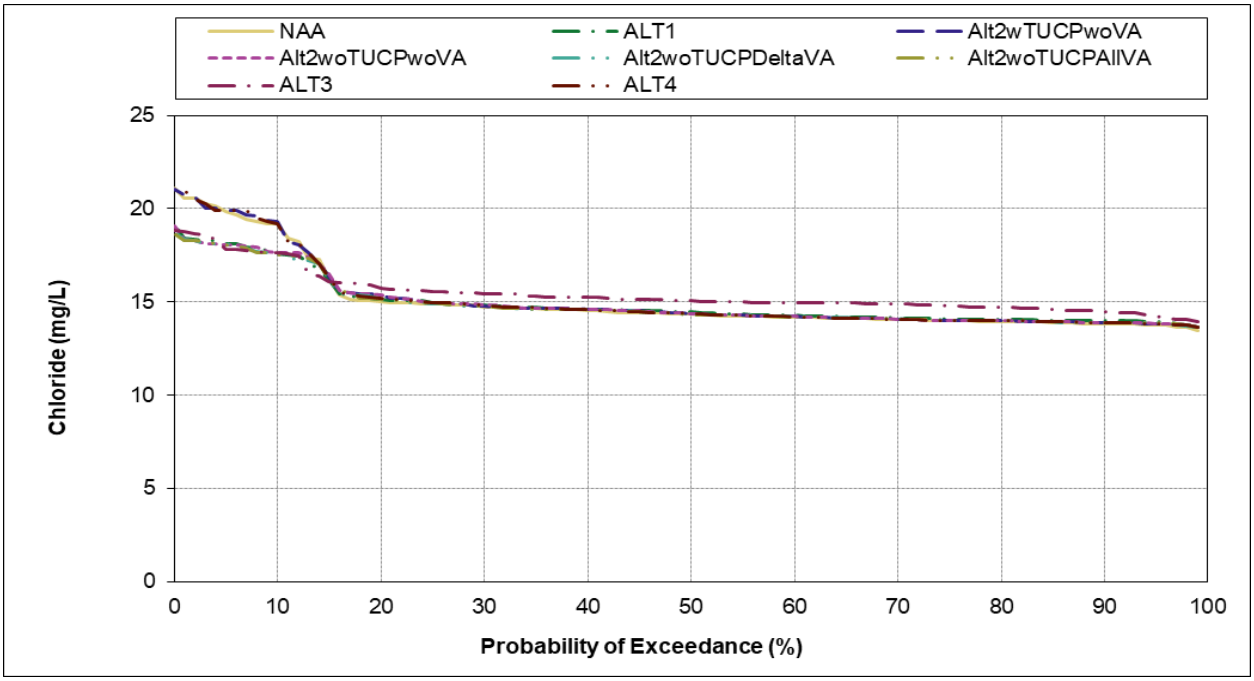

Figure G.2-1-14. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), August

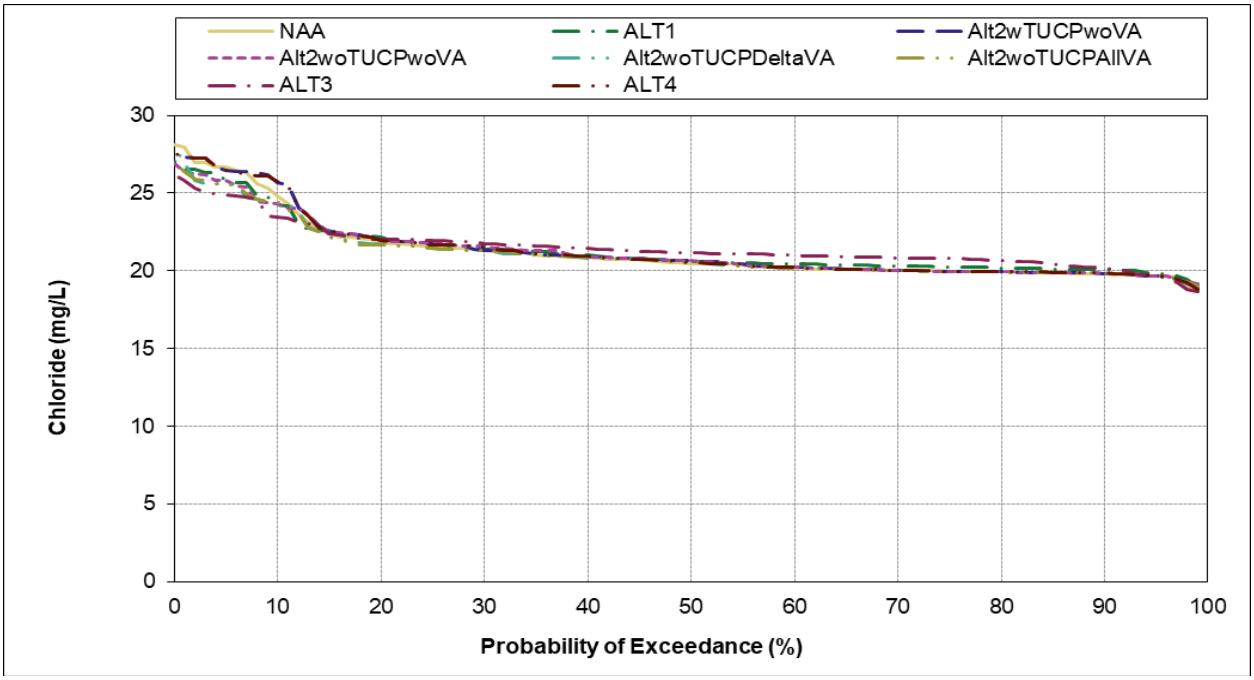

Figure G.2-1-15. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), September

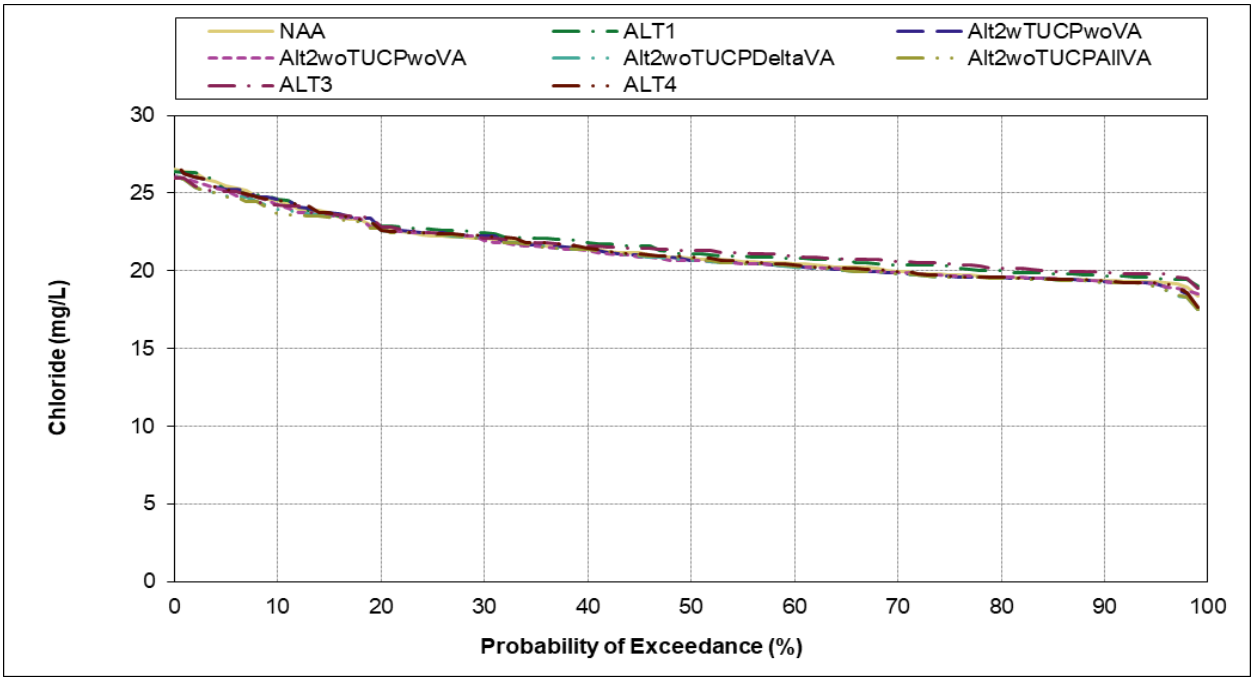

Figure G.2-1-16. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), October

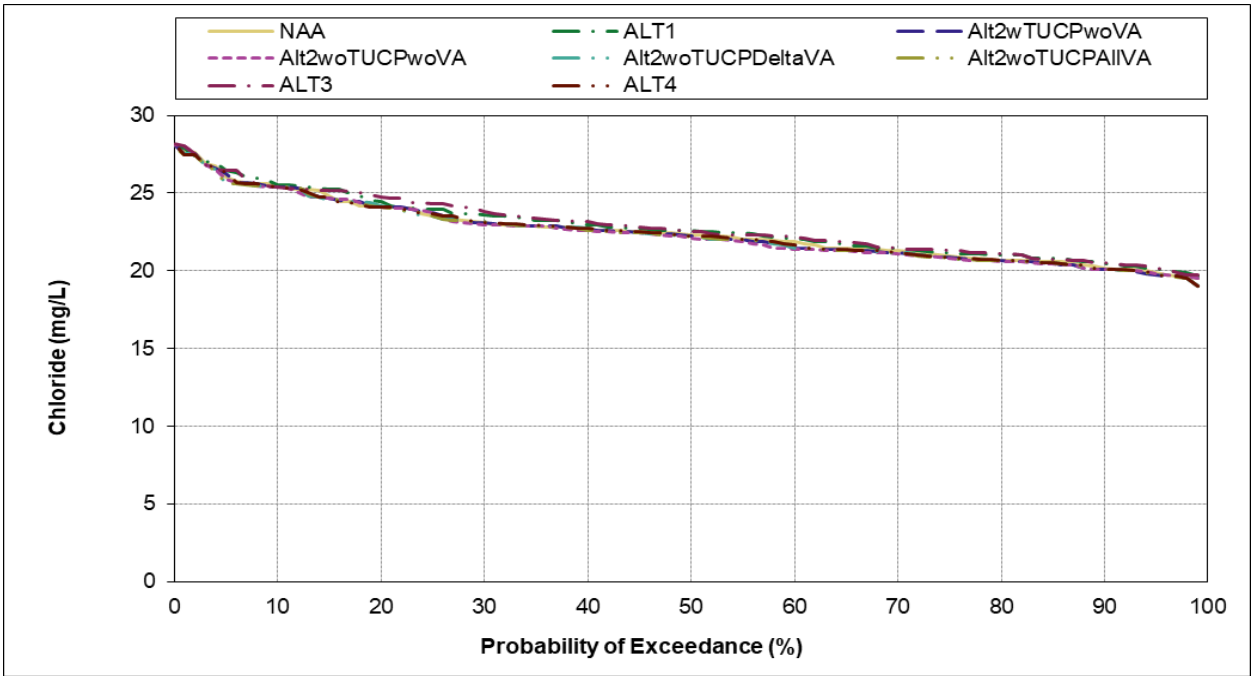

Figure G.2-1-17. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), November

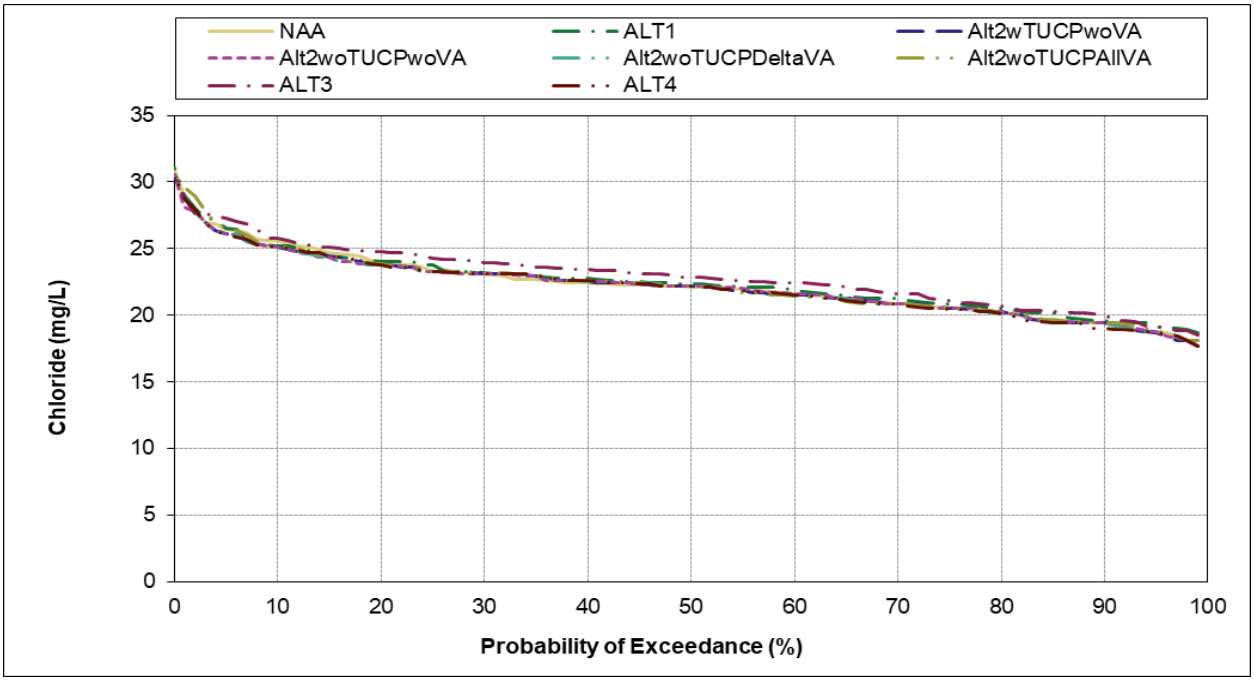

Figure G.2-1-18. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), December

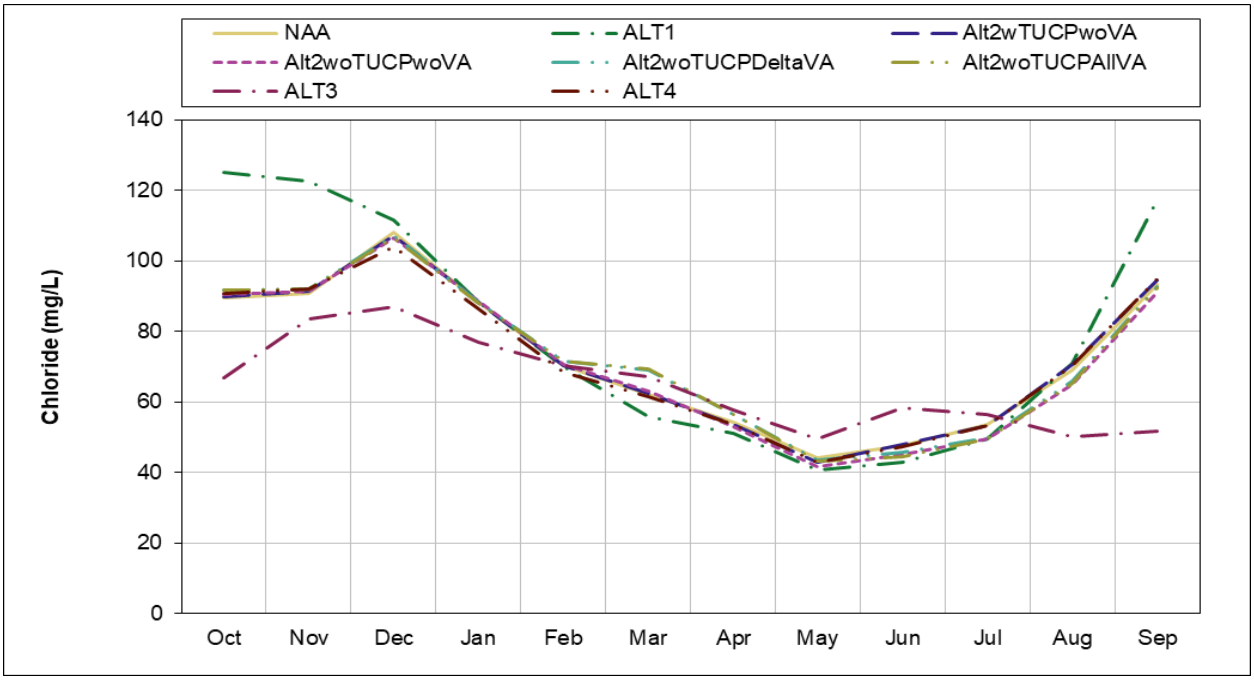

Figure G.2-2-1. Banks Pumping Plant, Long term Monthly Average Chloride (in milligrams per liter)

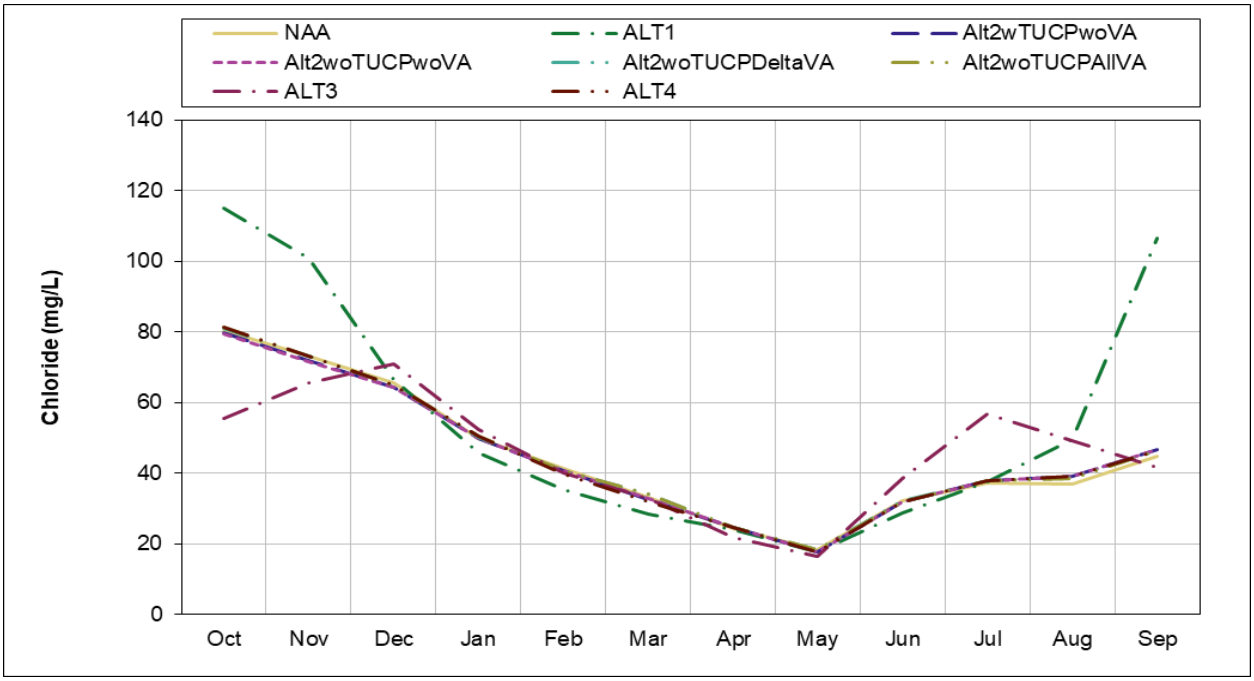

Figure G.2-2-2. Banks Pumping Plant, Wet Year Monthly Average Chloride (in milligrams per liter)

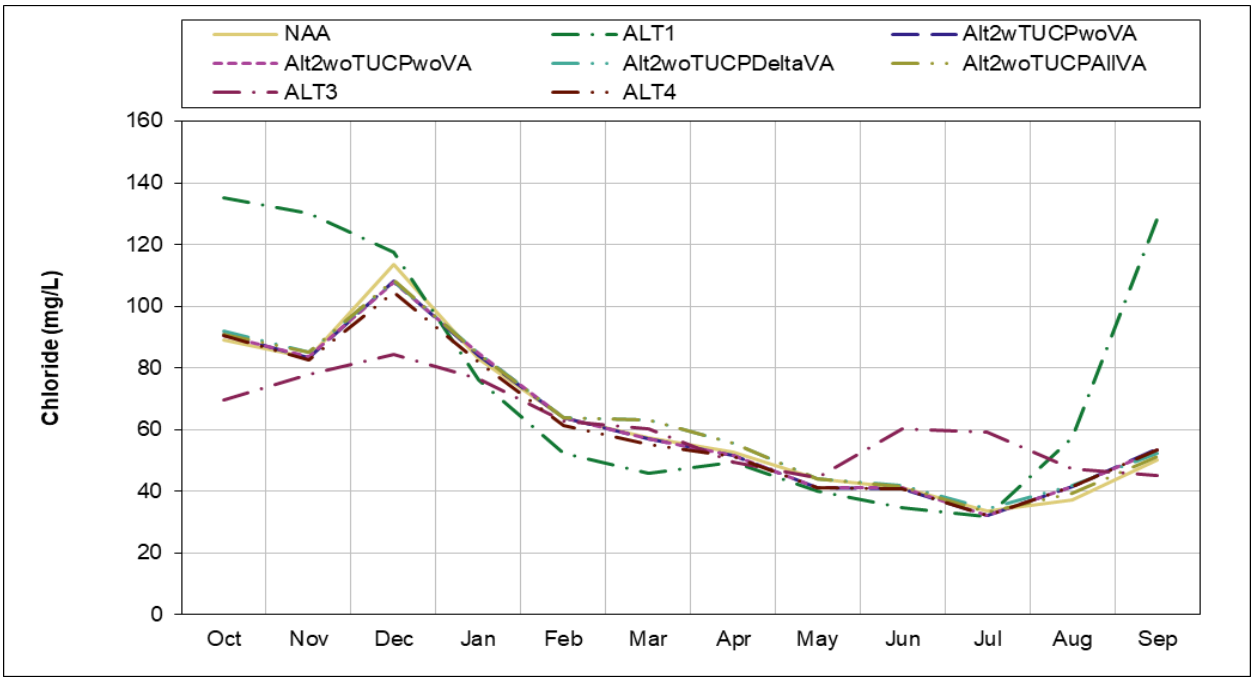

Figure G.2-2-3. Banks Pumping Plant, Above Normal Year Monthly Average Chloride (in milligrams per liter)

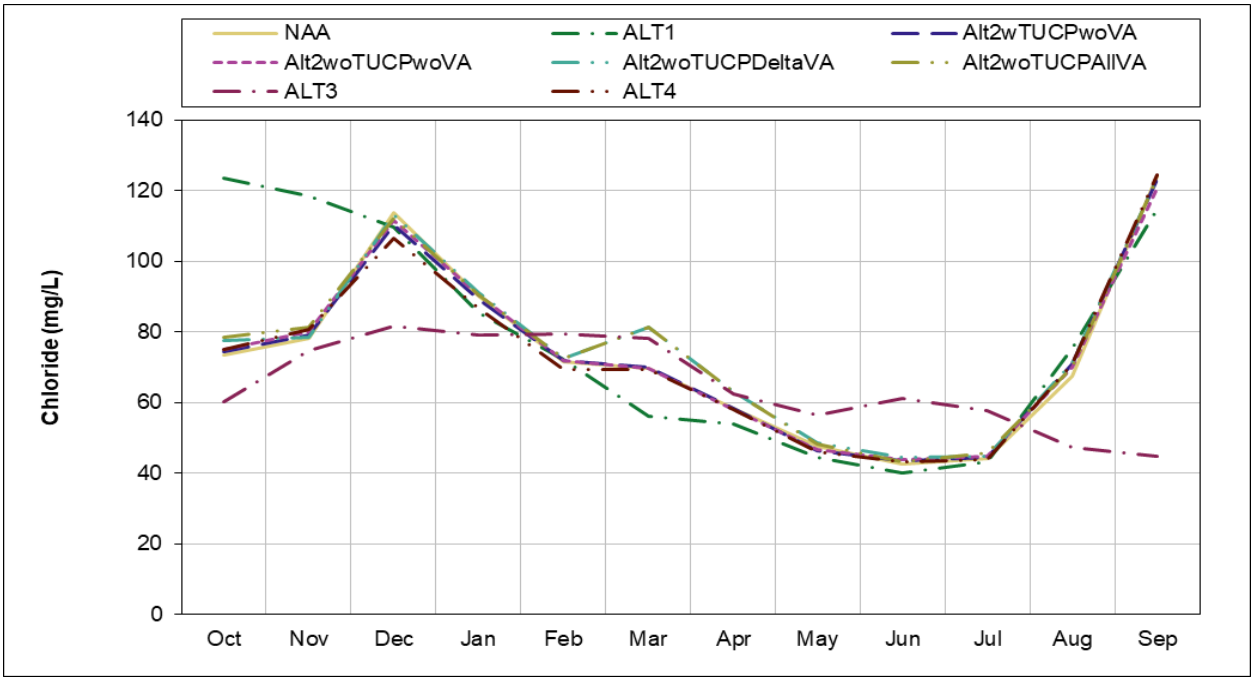

Figure G.2-2-4. Banks Pumping Plant, Below Normal Year Monthly Average Chloride (in milligrams per liter)

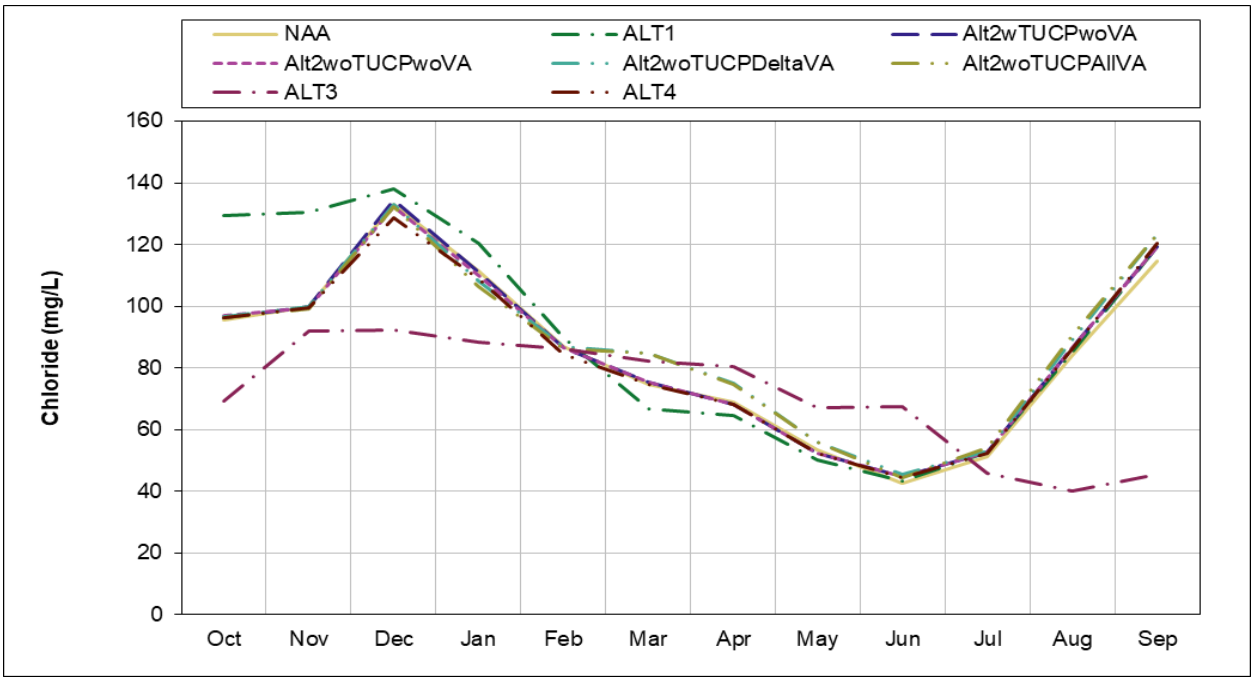

Figure G.2-2-5. Banks Pumping Plant, Dry Year Monthly Average Chloride (in milligrams per liter)

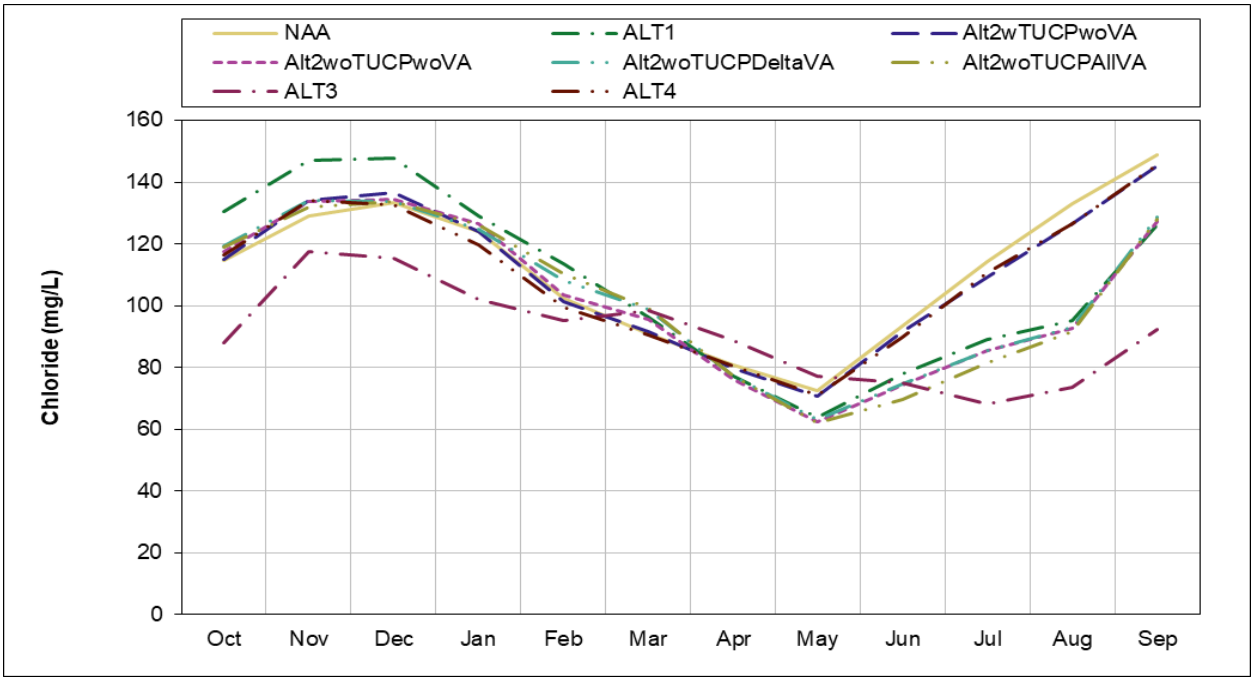

Figure G.2-2-6. Banks Pumping Plant, Critical Year Monthly Average Chloride (in milligrams per liter)

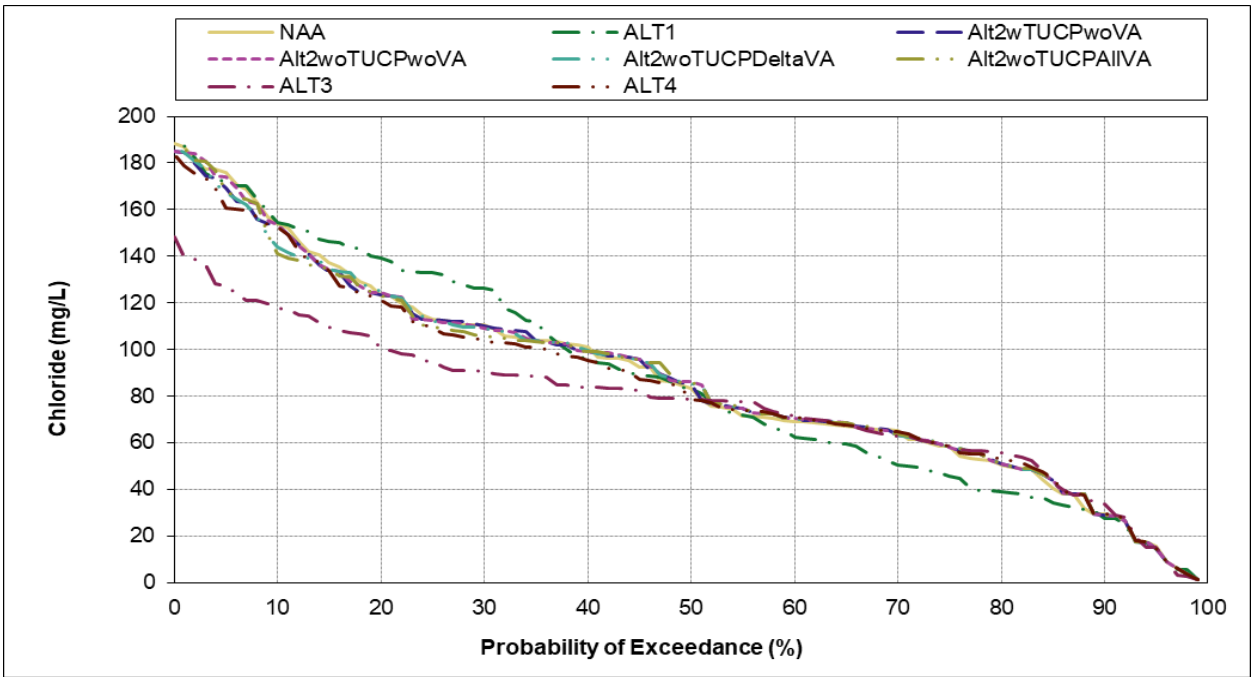

Figure G.2-2-7. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), January

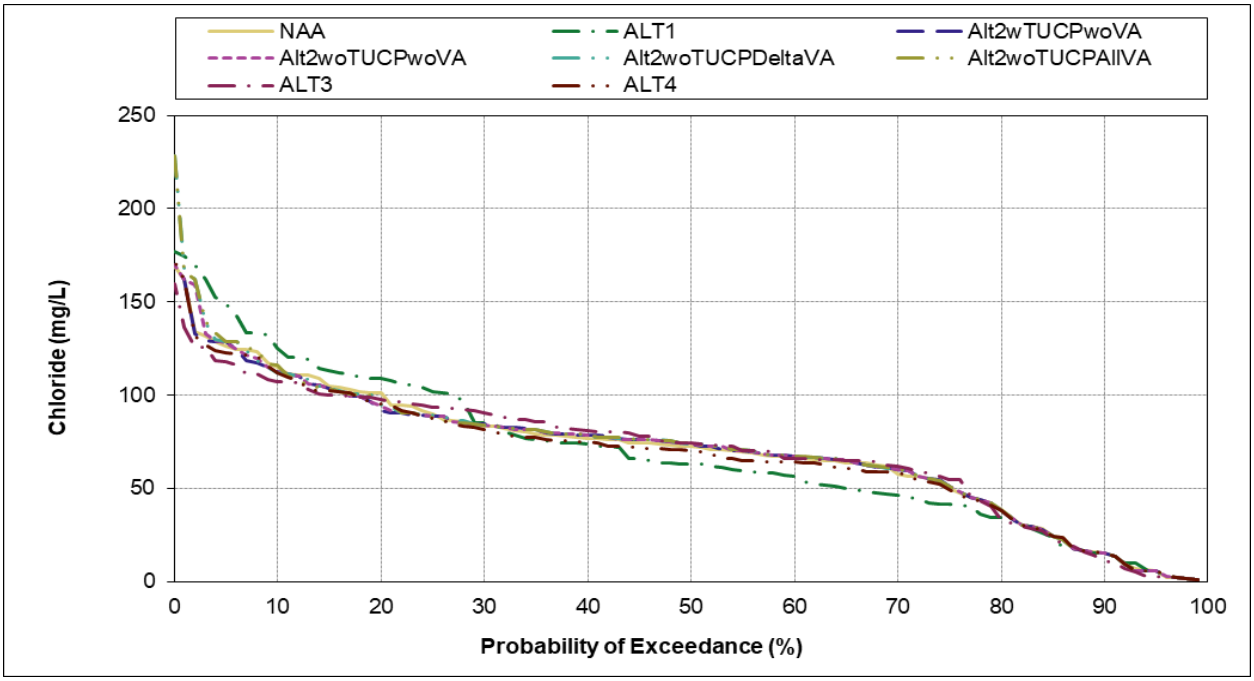

Figure G.2-2-8. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), February

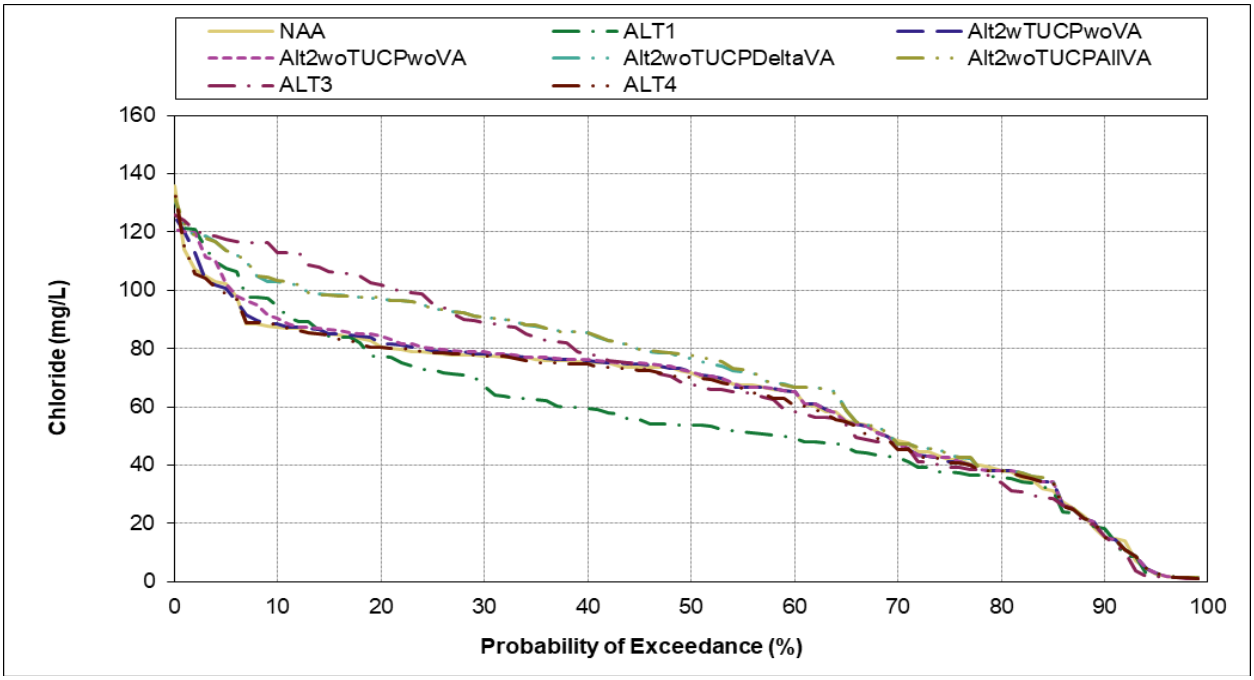

Figure G.2-2-9. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), March

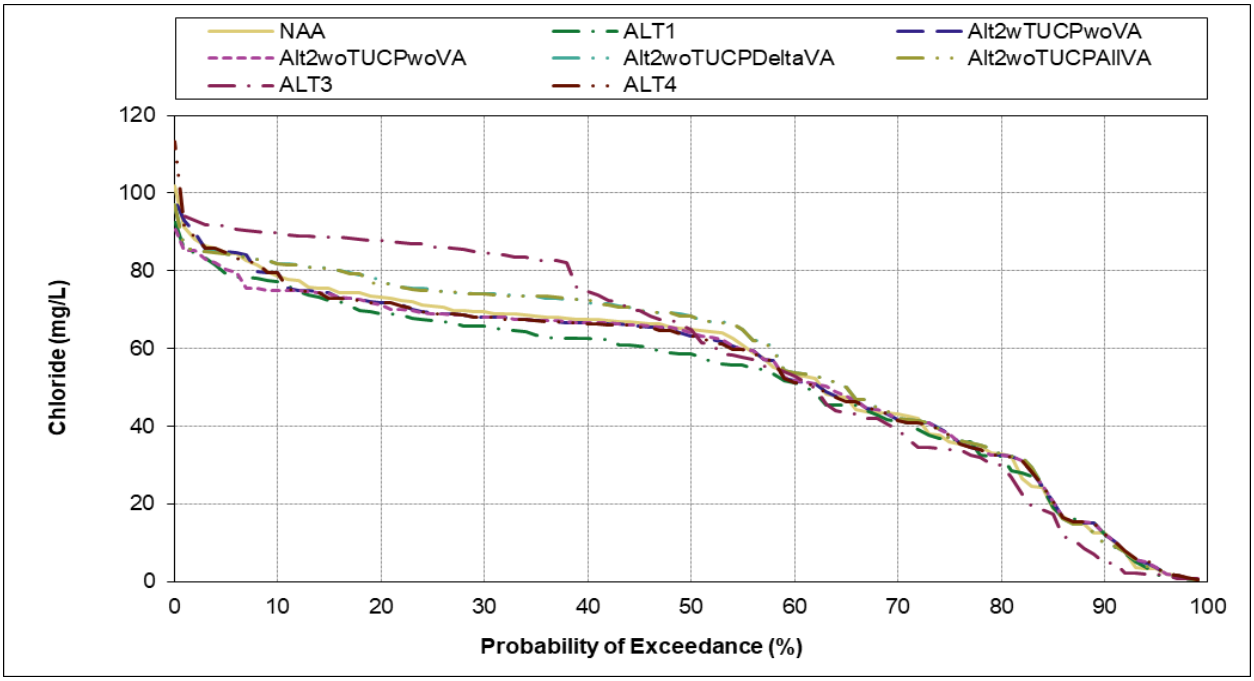

Figure G.2-2-10. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), April

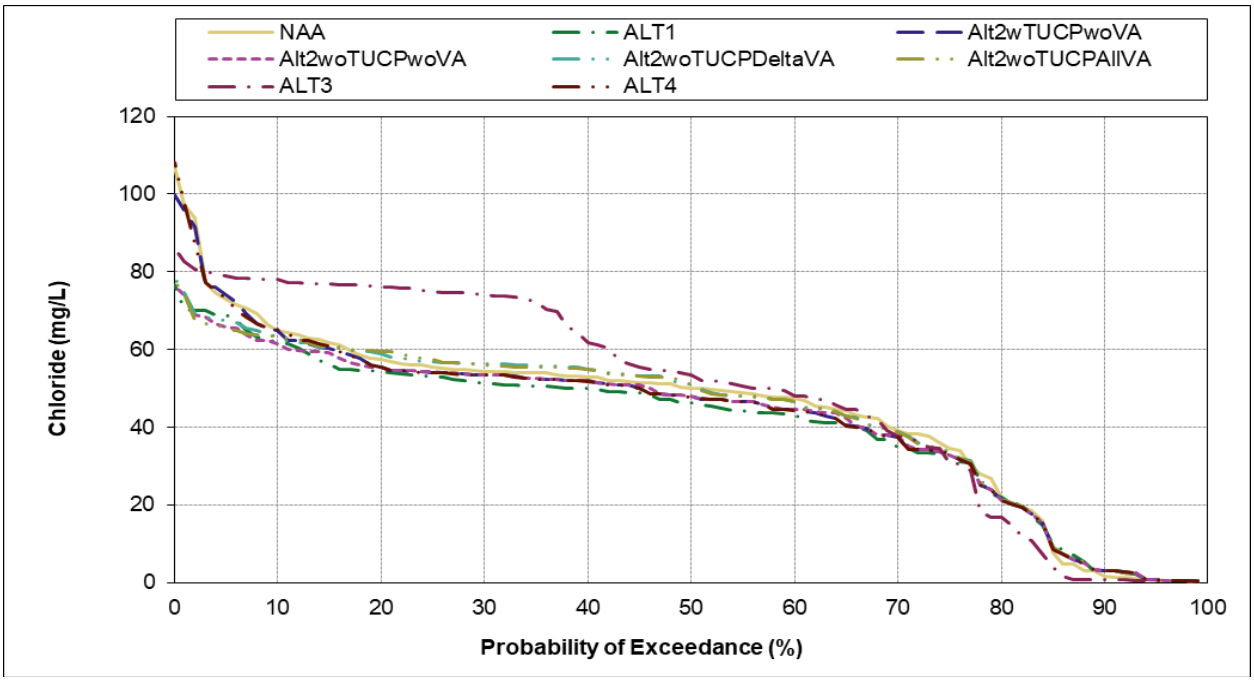

Figure G.2-2-11. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), May

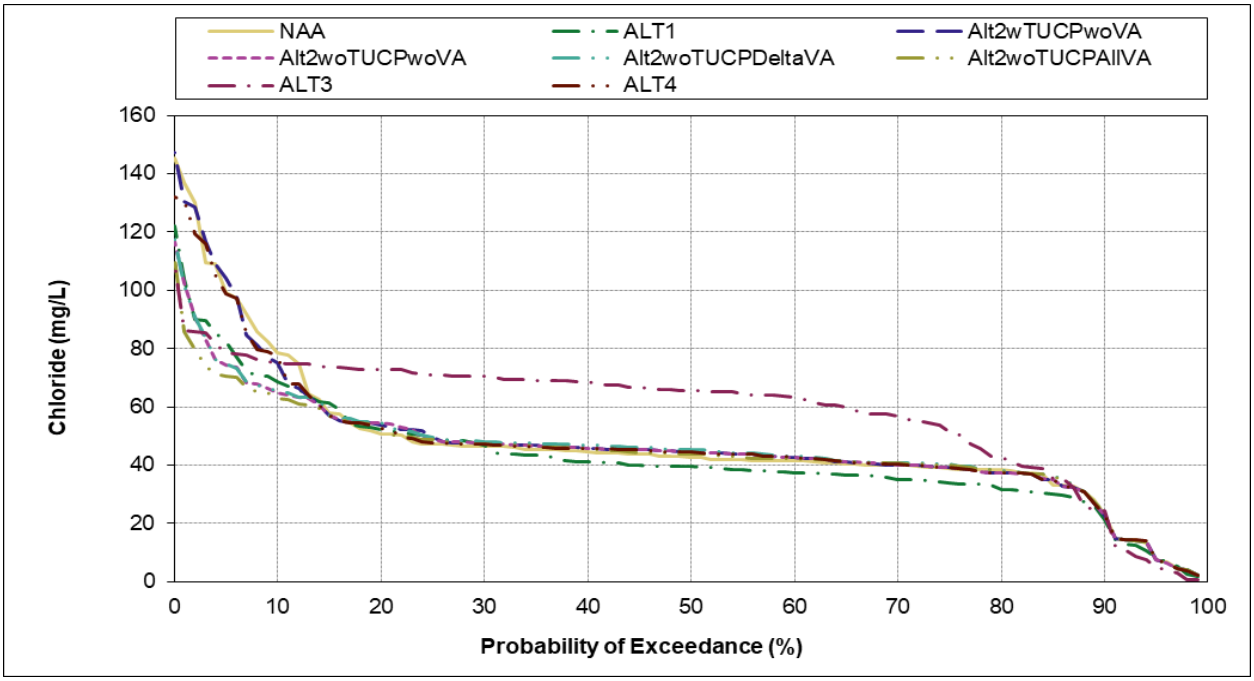

Figure G.2-2-12. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), June

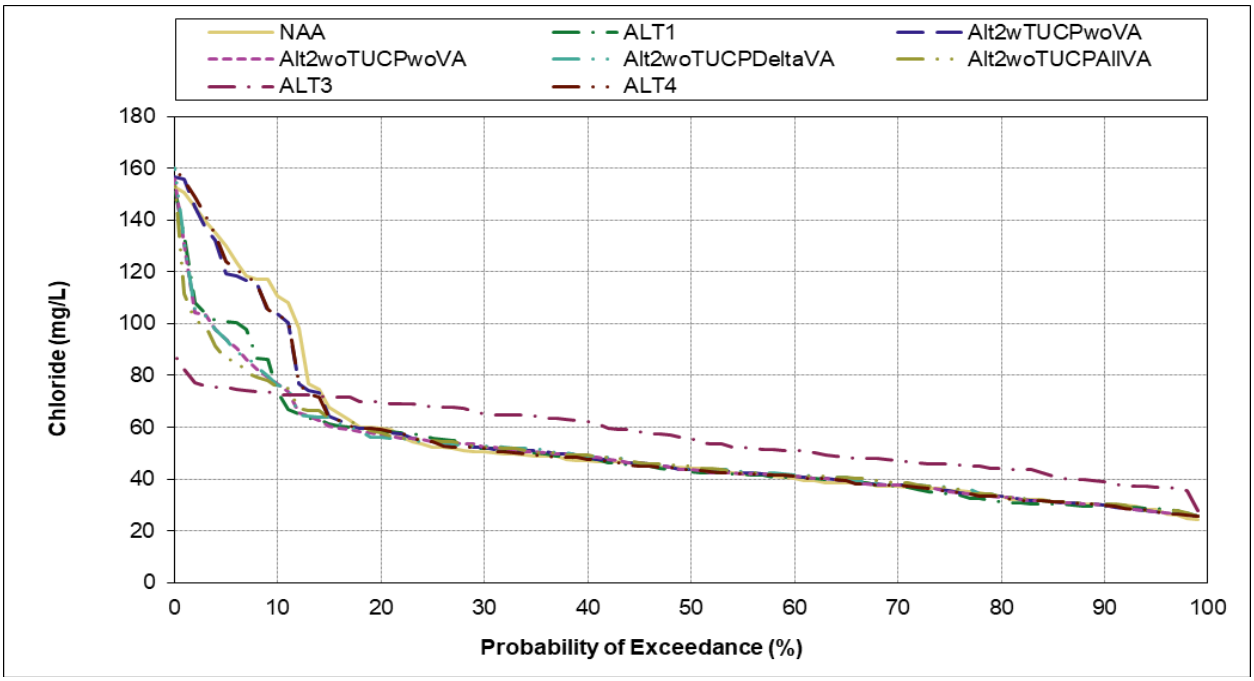

Figure G.2-2-13. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), July

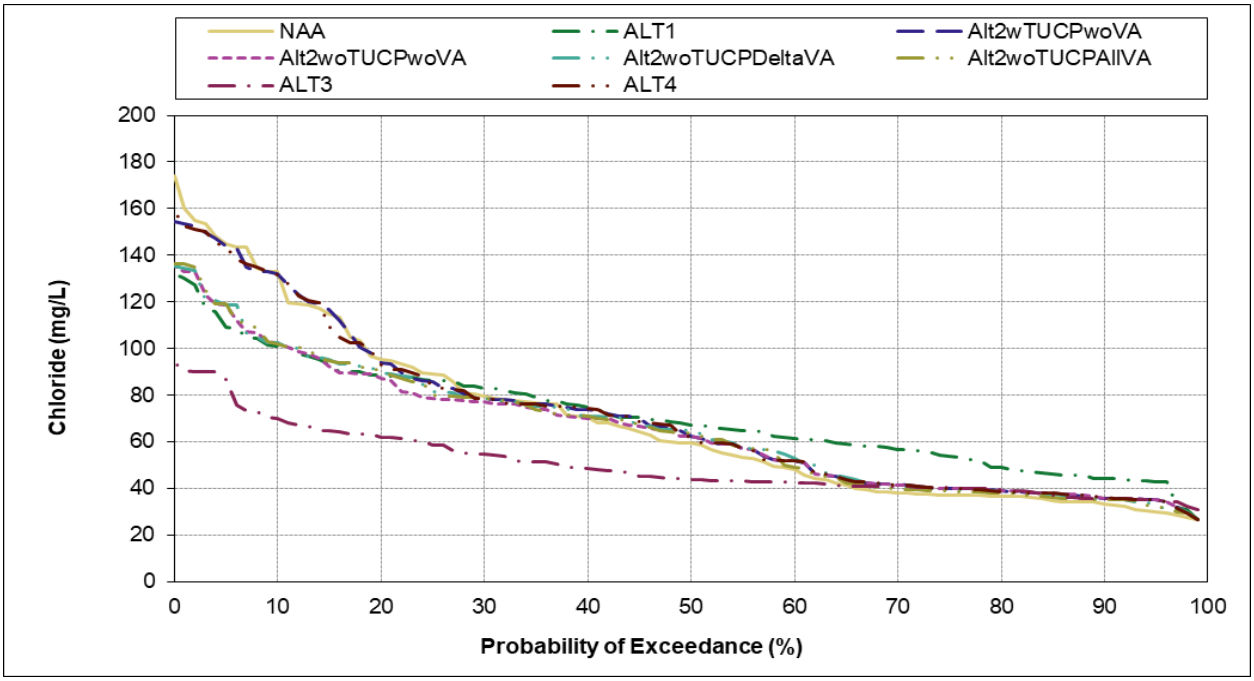

Figure G.2-2-14. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), August

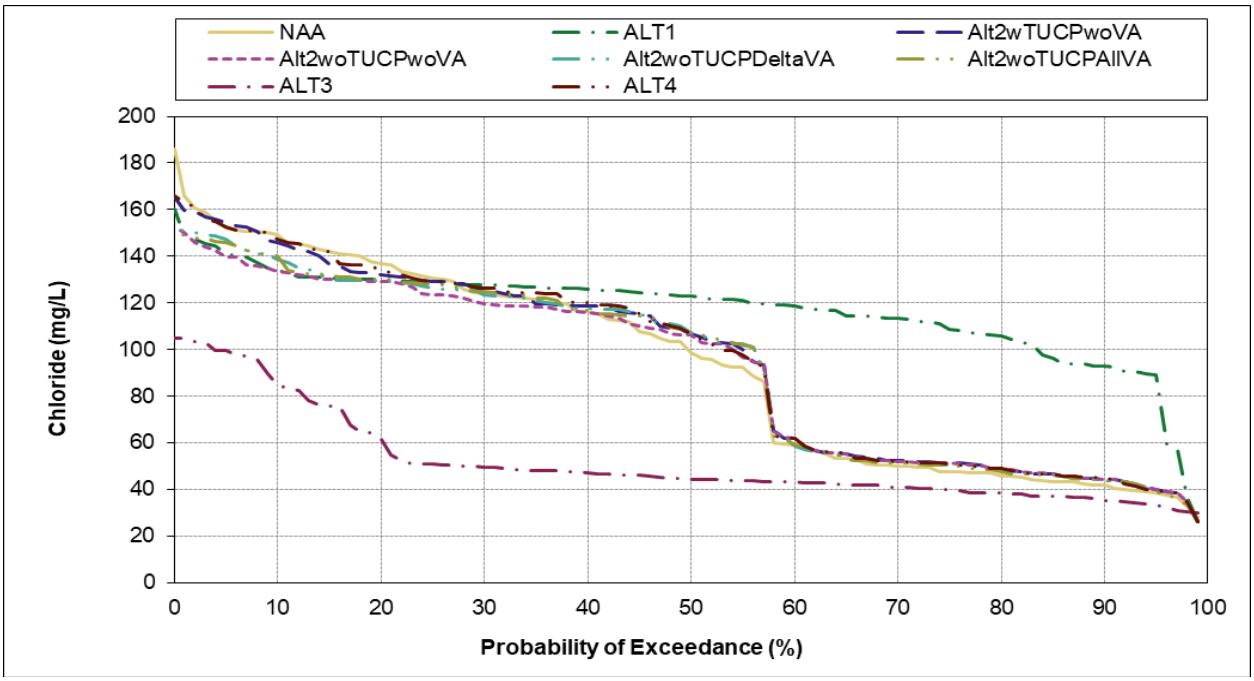

Figure G.2-2-15. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), September

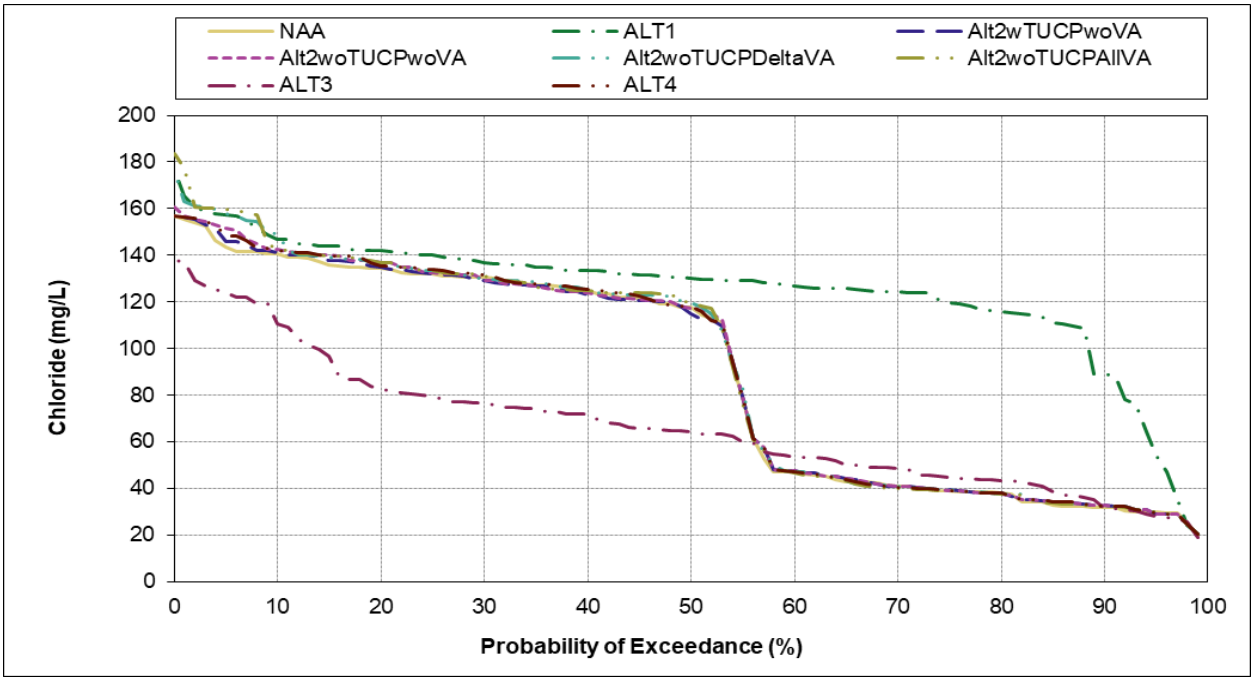

Figure G.2-2-16. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), October

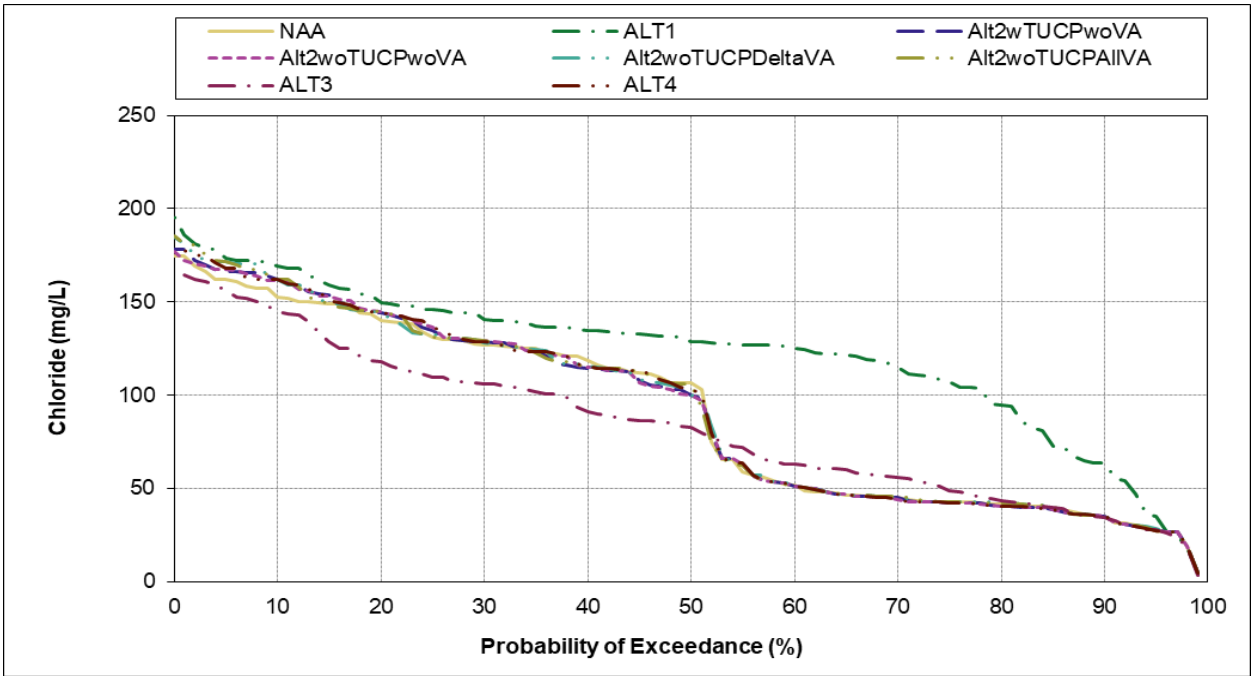

Figure G.2-2-17. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), November

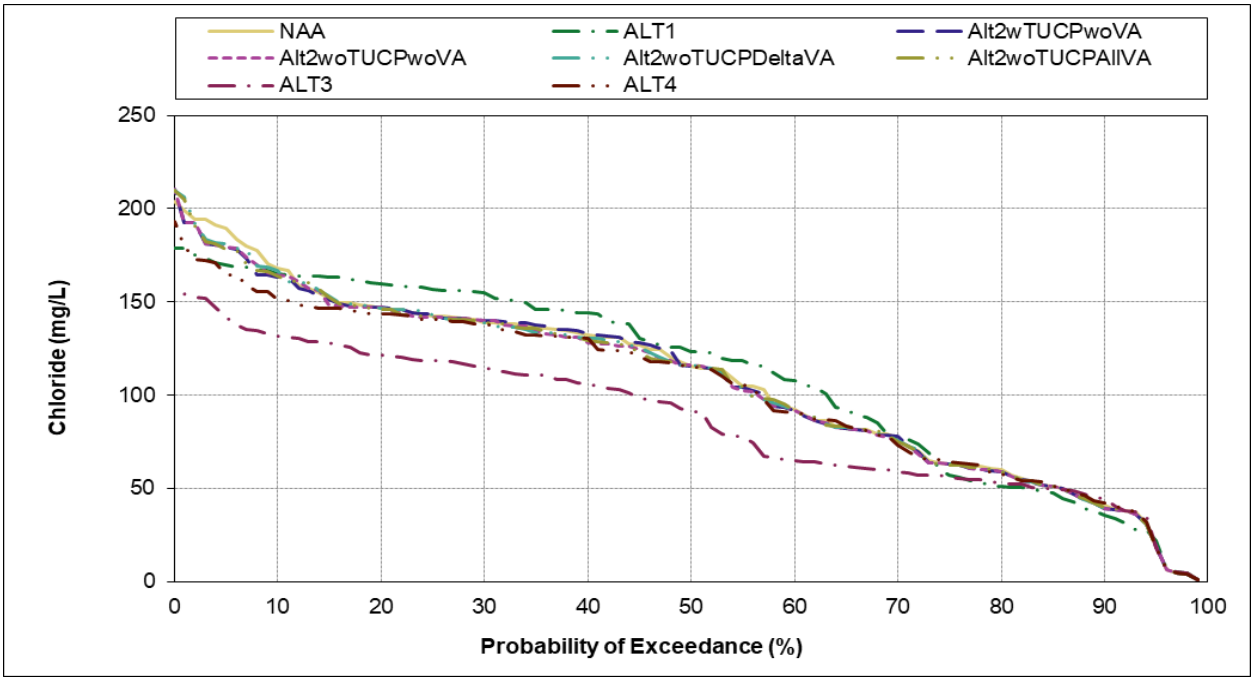

Figure G.2-2-18. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), December

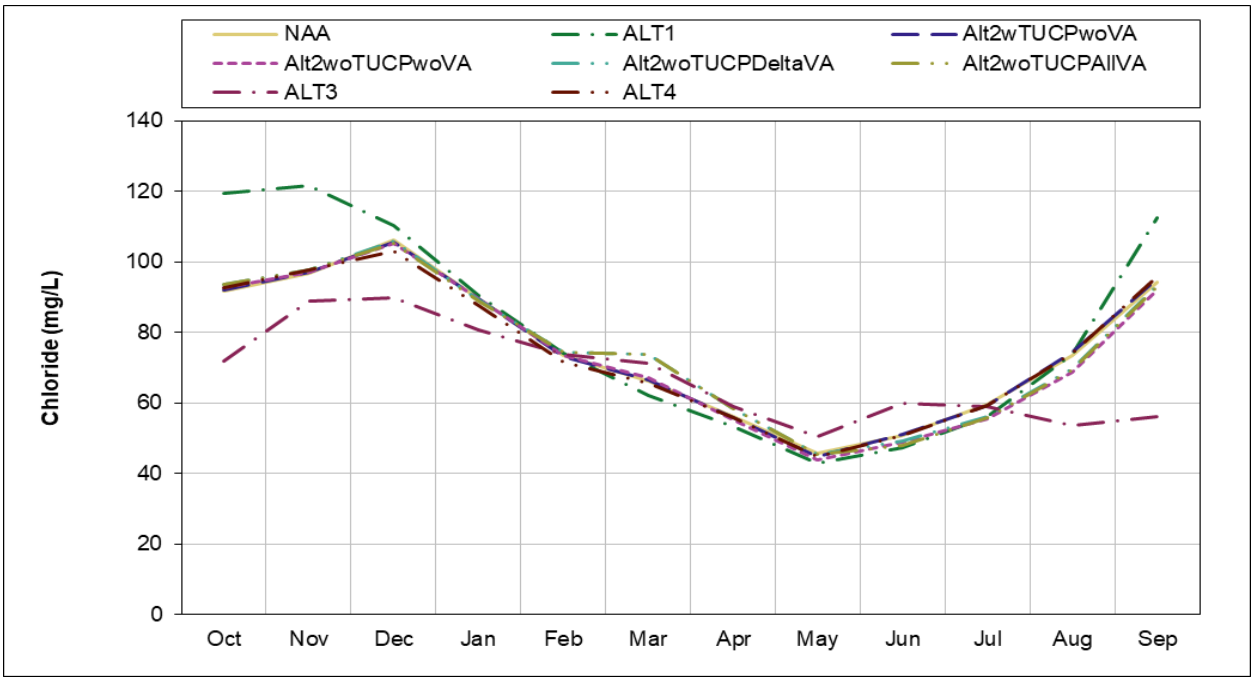

Figure G.2-3-1. Jones Pumping Plant, Long term Monthly Average Chloride (in milligrams per liter)

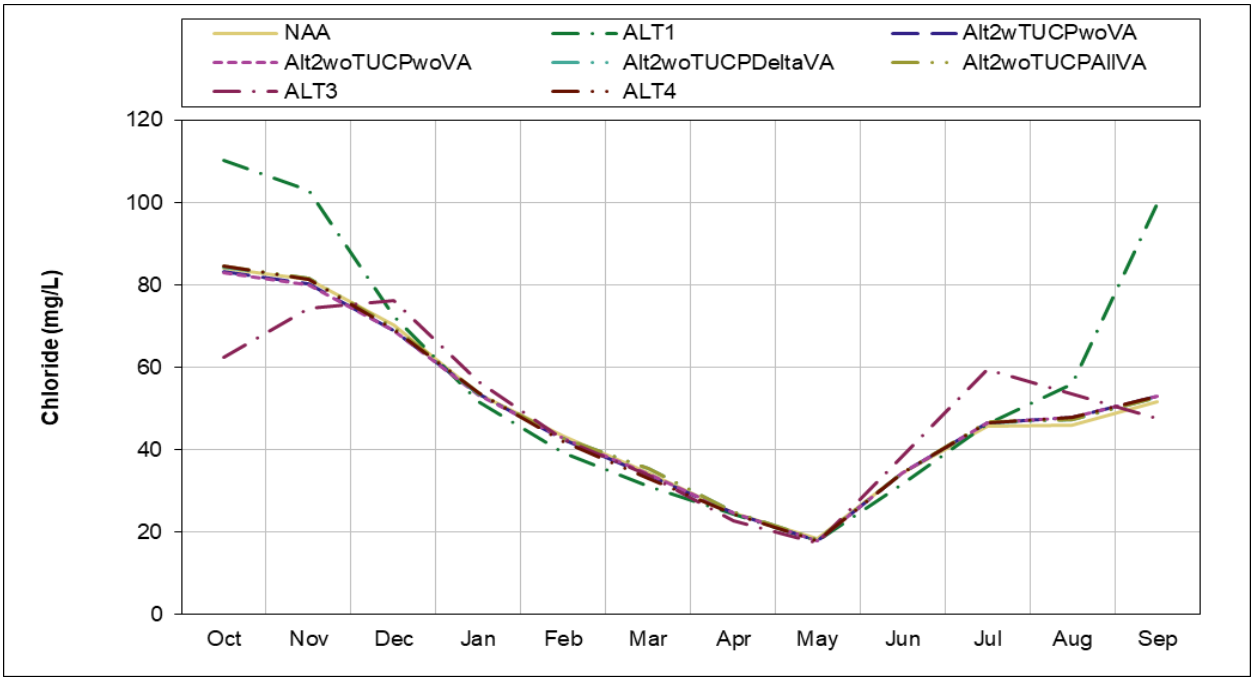

Figure G.2-3-2. Jones Pumping Plant, Wet Year Monthly Average Chloride (in milligrams per liter)

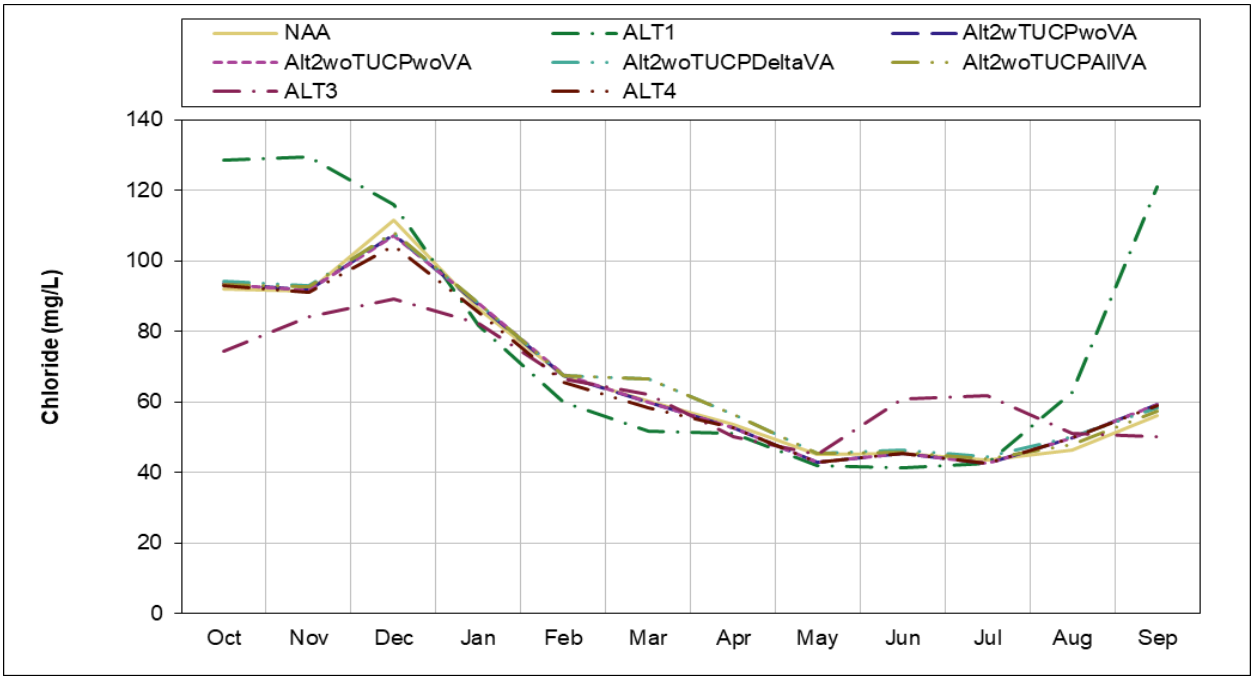

Figure G.2-3-3. Jones Pumping Plant, Above Normal Year Monthly Average Chloride (in milligrams per liter)

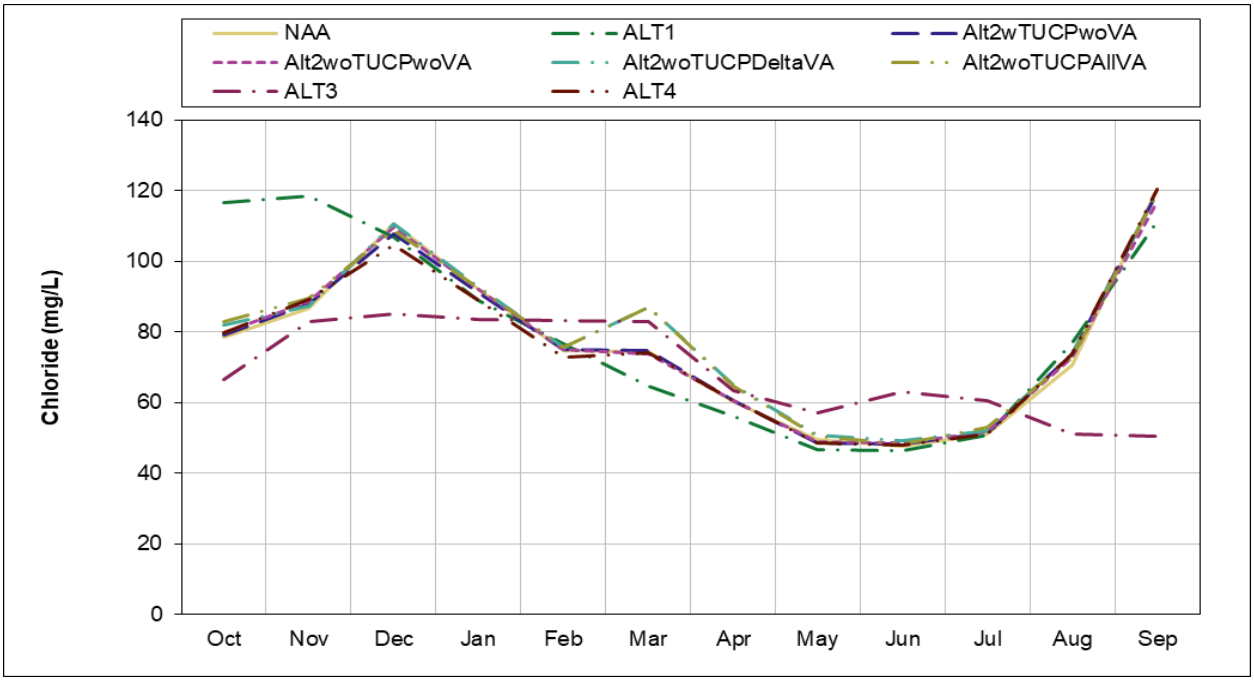

Figure G.2-3-4. Jones Pumping Plant, Below Normal Year Monthly Average Chloride (in milligrams per liter)

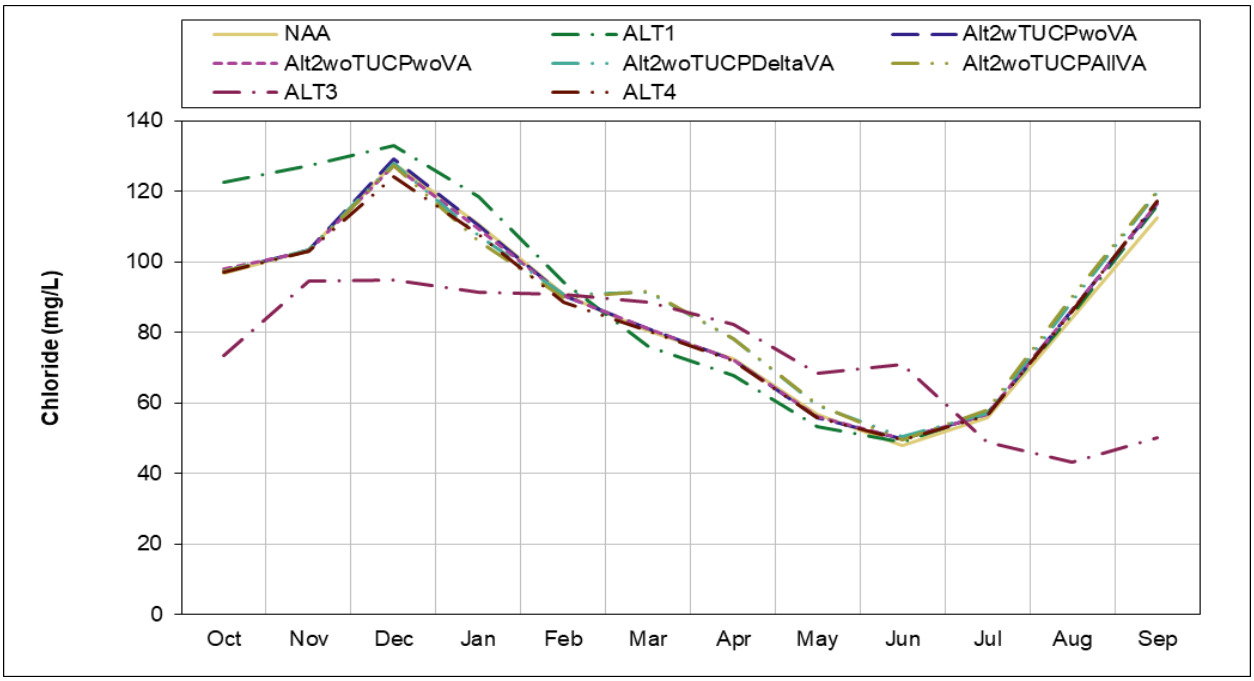

Figure G.2-3-5. Jones Pumping Plant, Dry Year Monthly Average Chloride (in milligrams per liter)

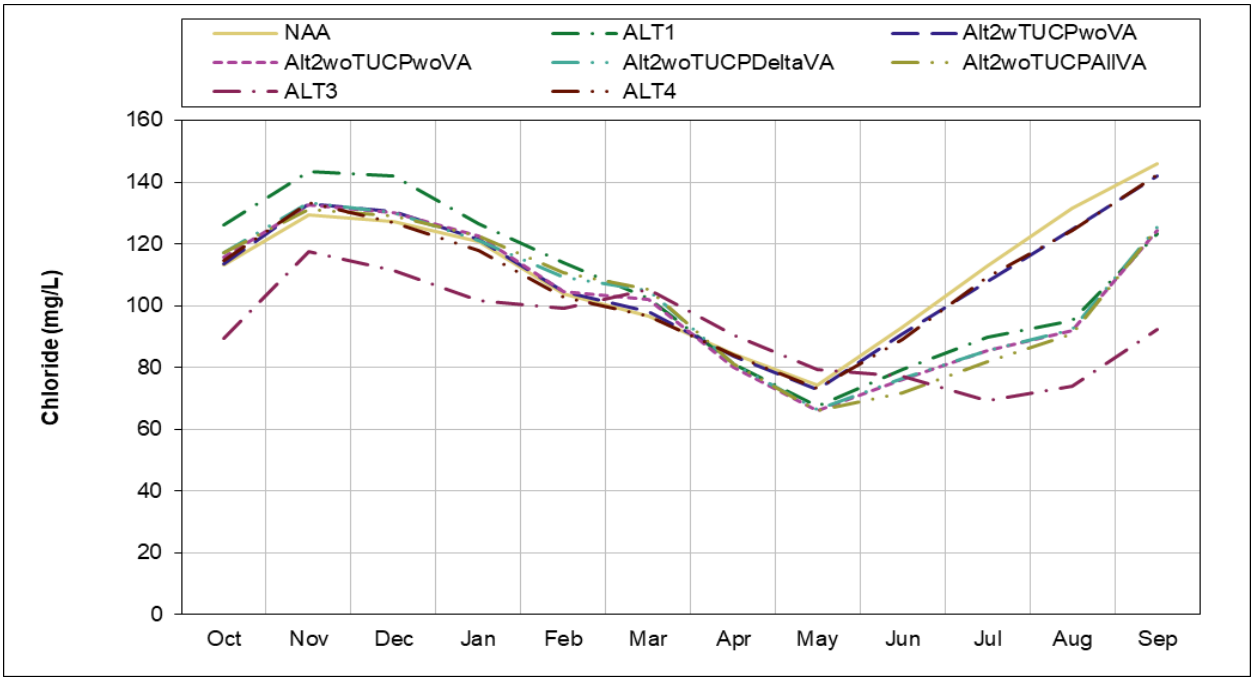

Figure G.2-3-6. Jones Pumping Plant, Critical Year Monthly Average Chloride (in milligrams per liter)

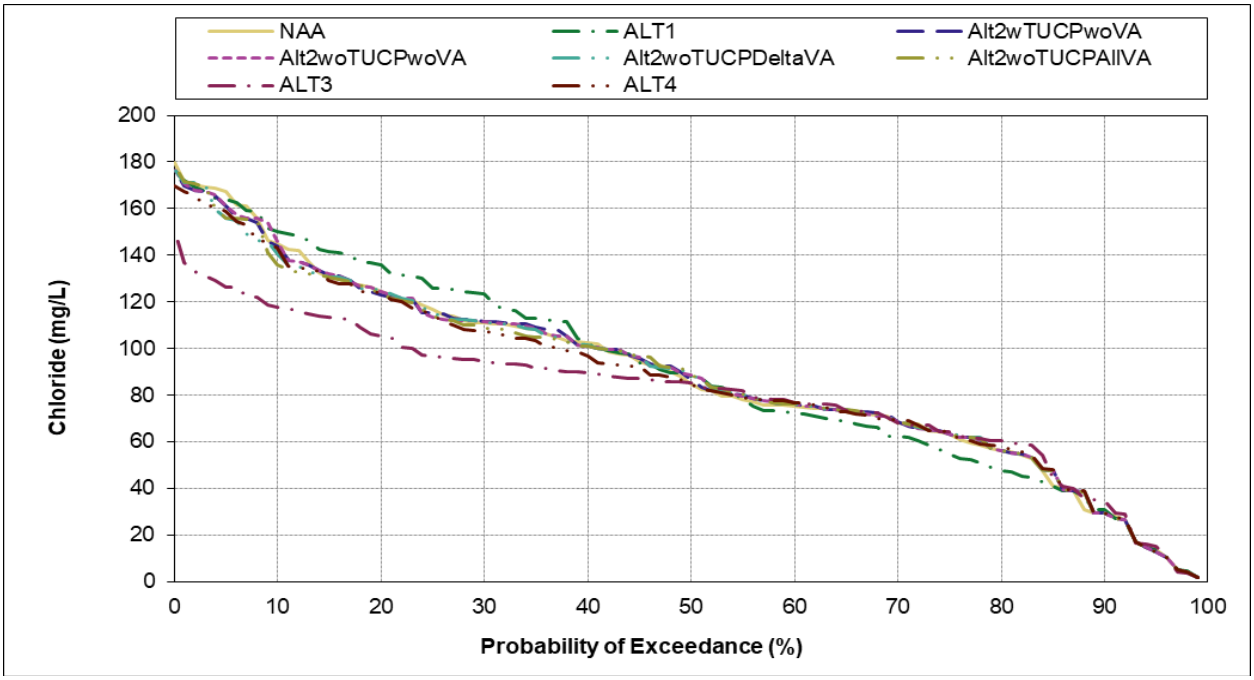

Figure G.2-3-7. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), January

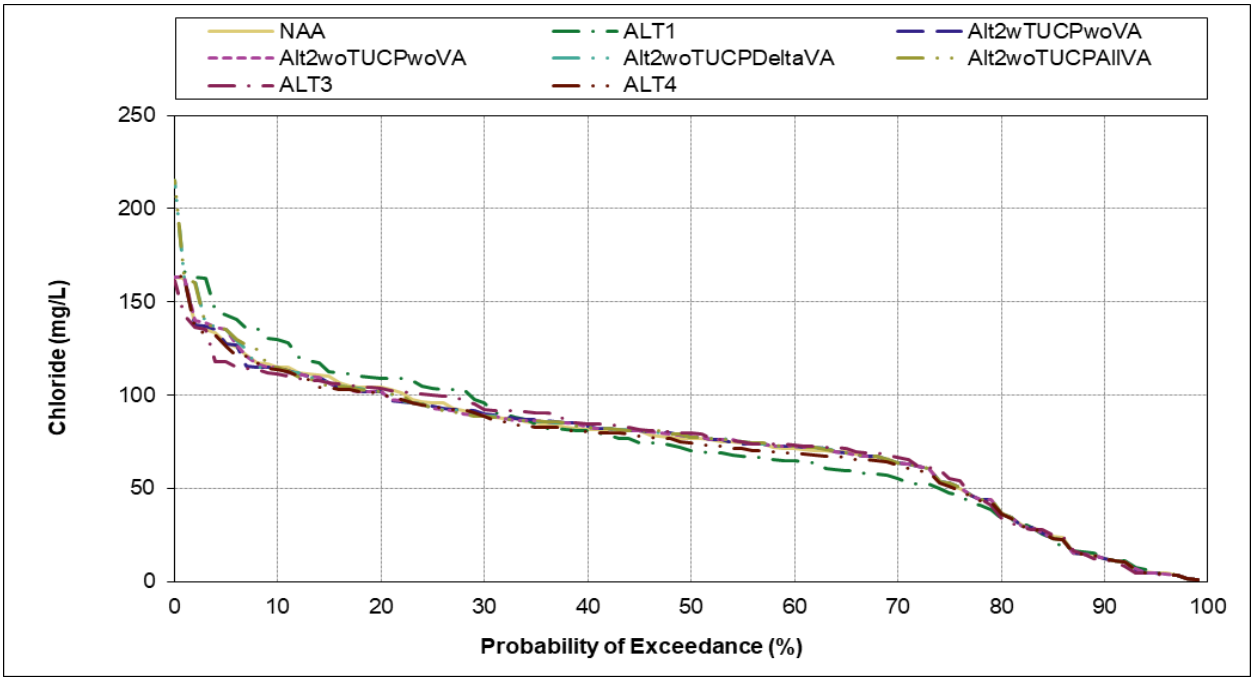

Figure G.2-3-8. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), February

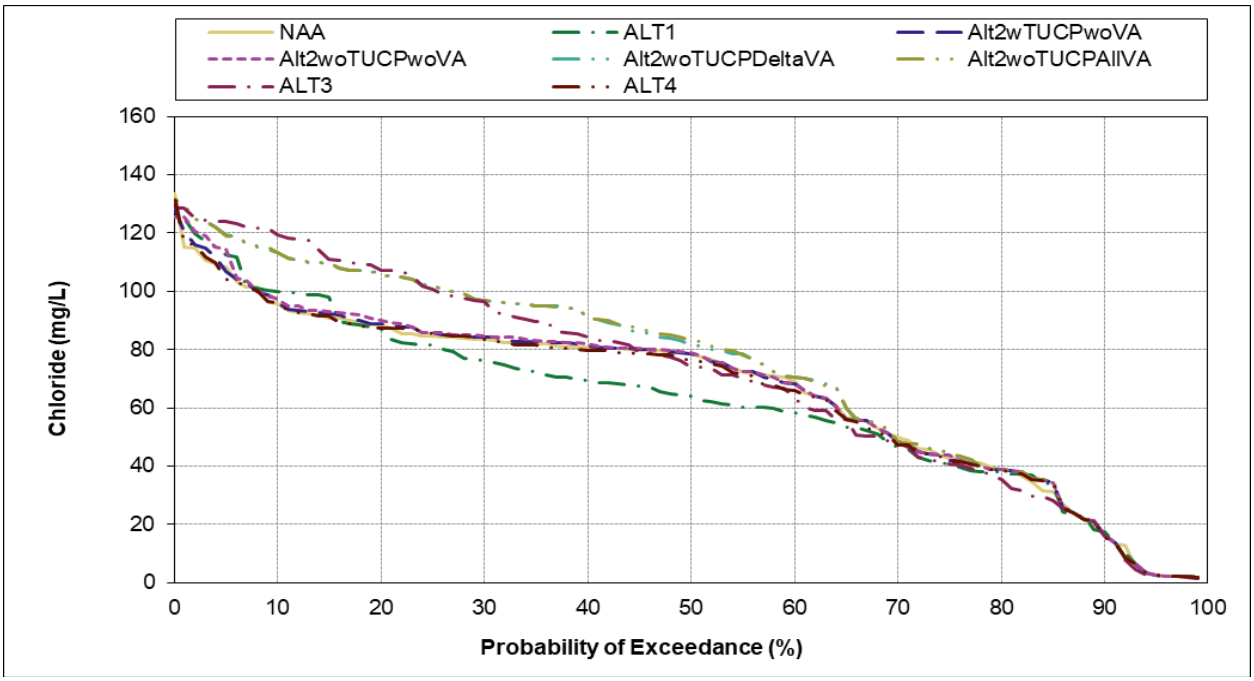

Figure G.2-3-9. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), March

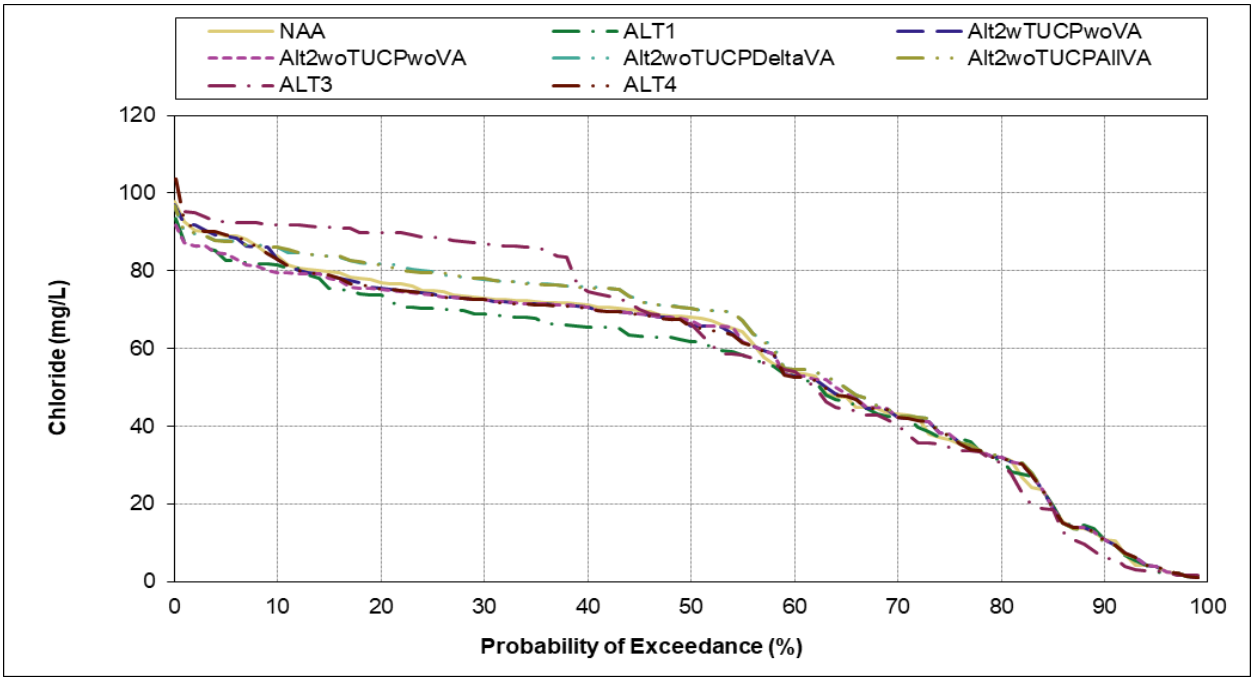

Figure G.2-3-10. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), April

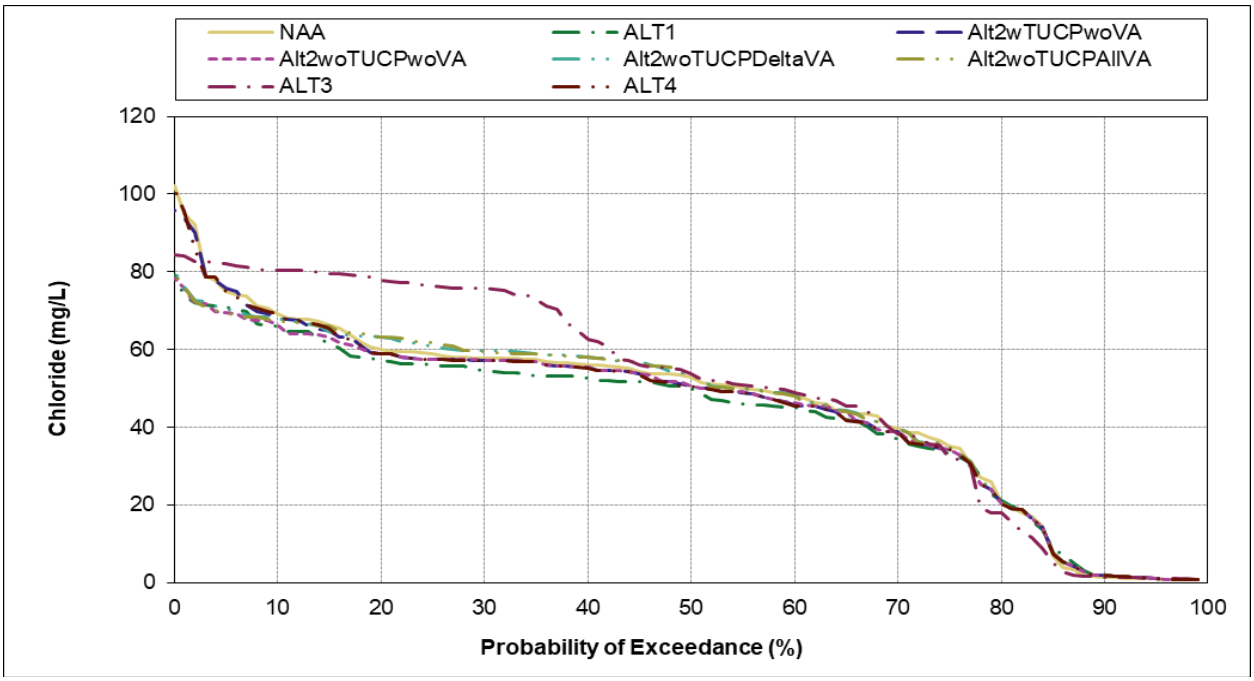

Figure G.2-3-11. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), May

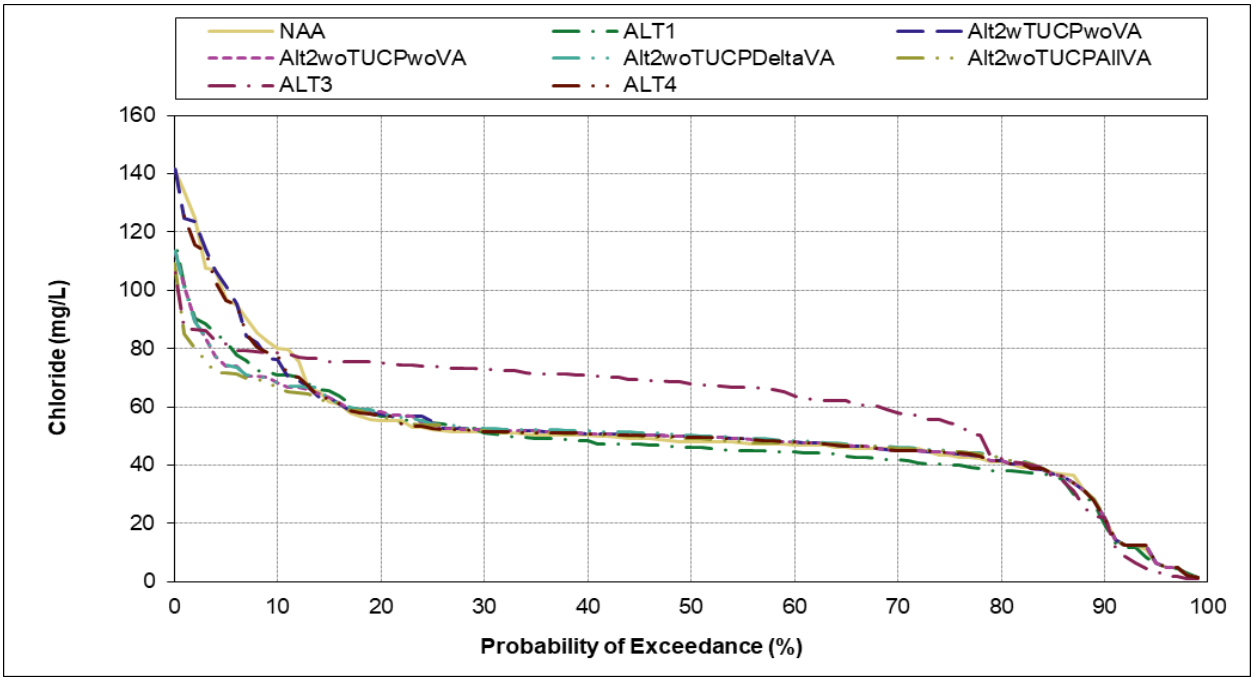

Figure G.2-3-12. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), June

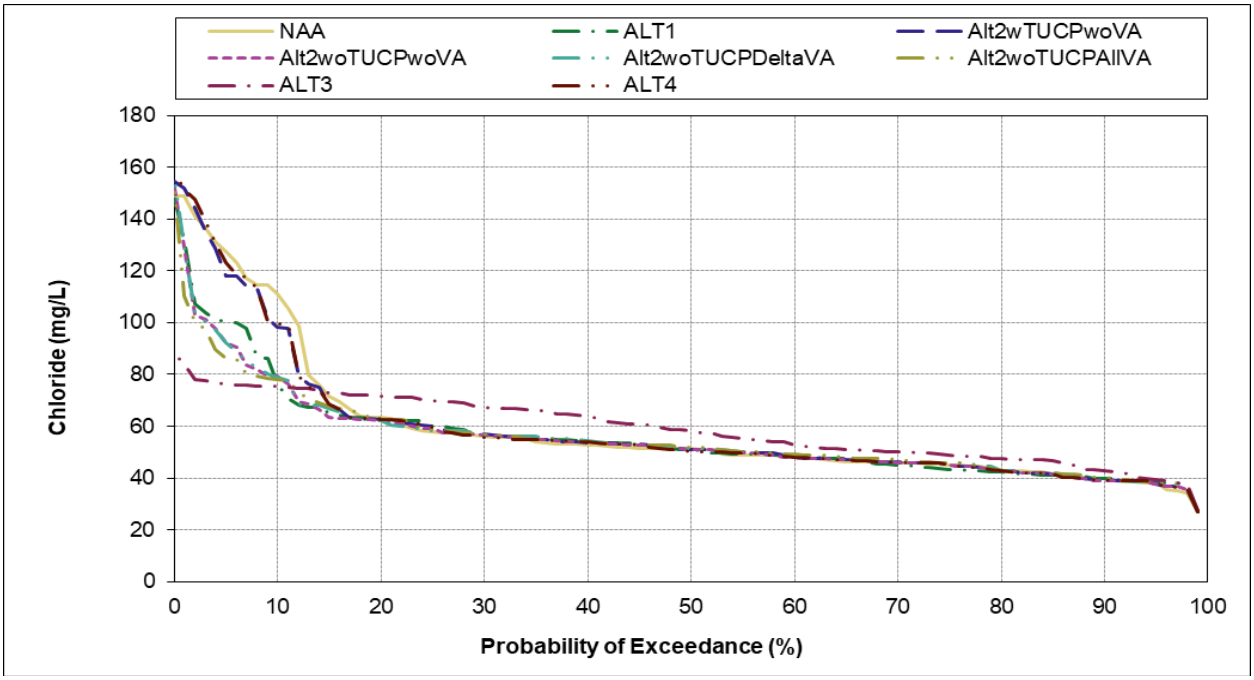

Figure G.2-3-13. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), July

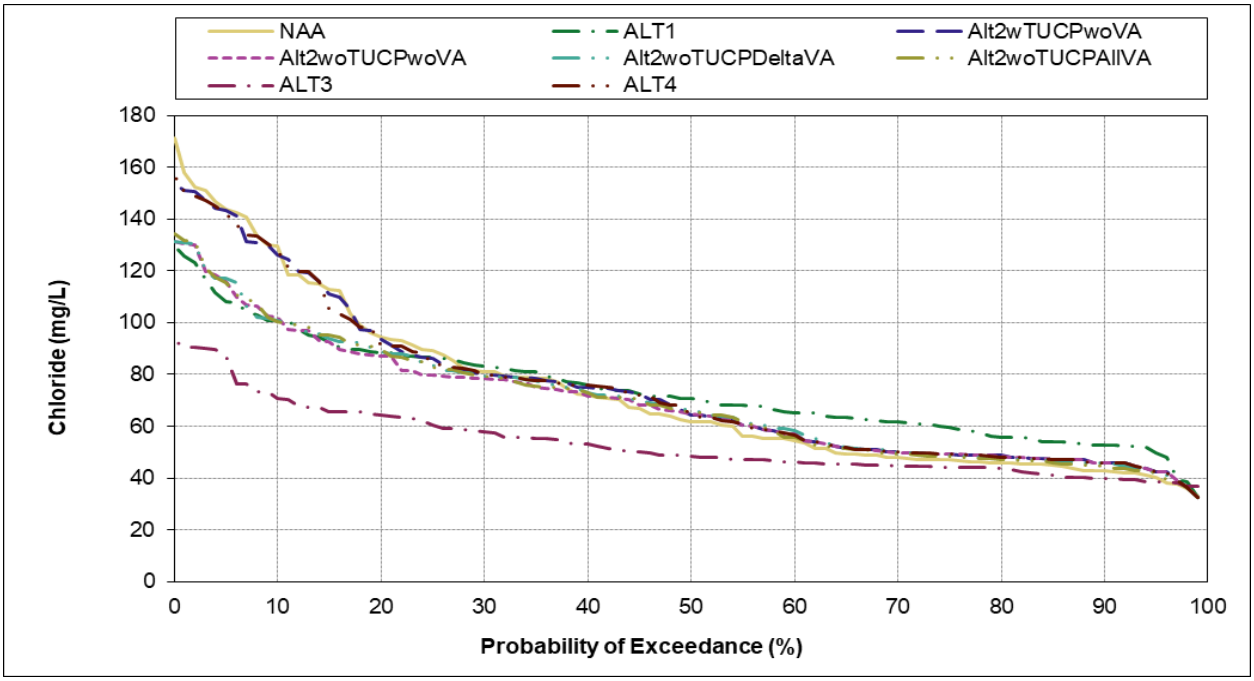

Figure G.2-3-14. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), August

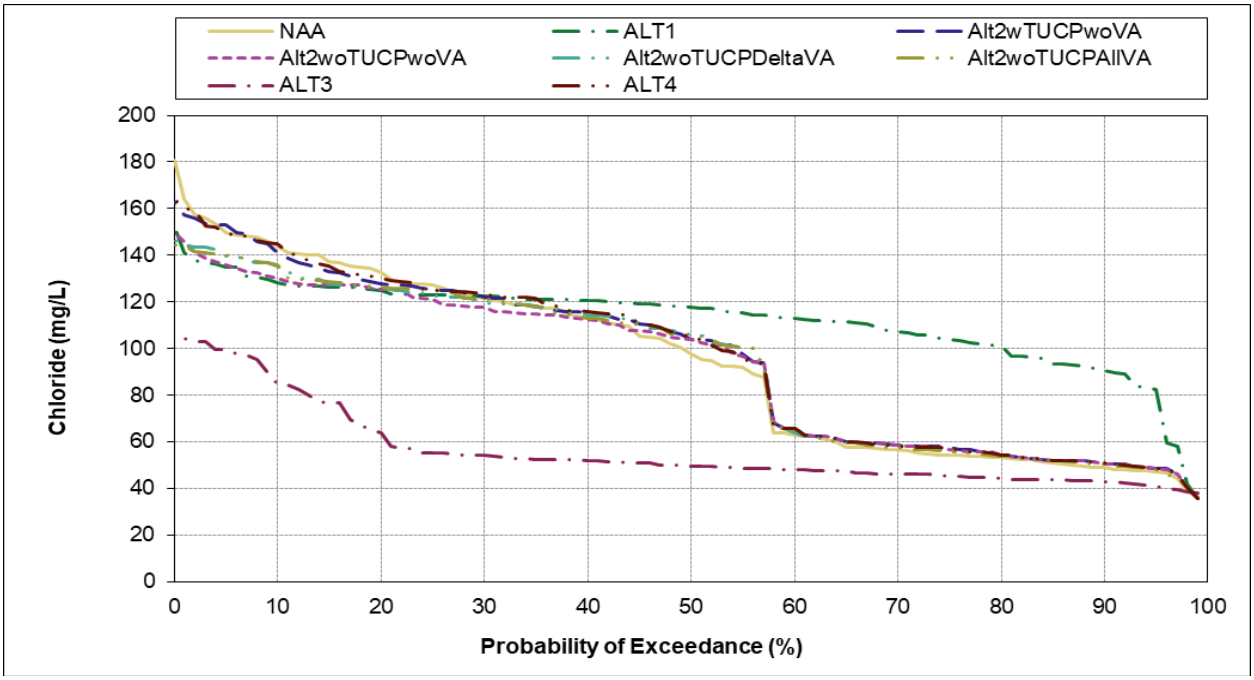

Figure G.2-3-15. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), September

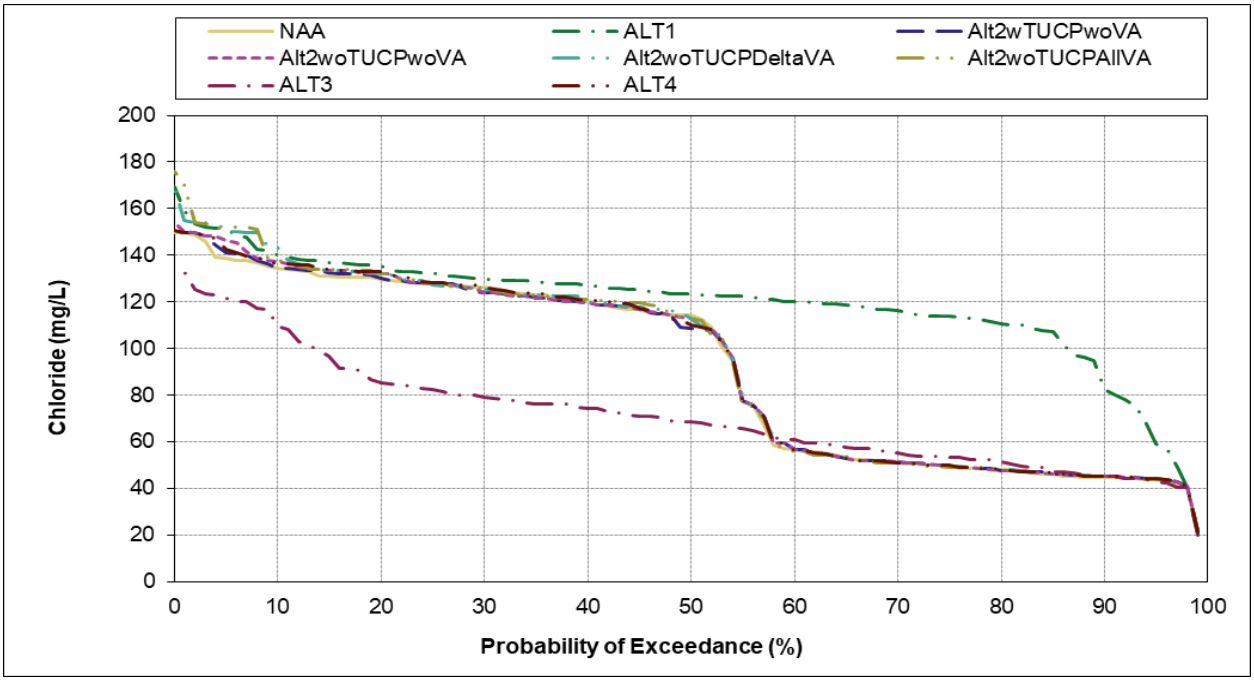

Figure G.2-3-16. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), October

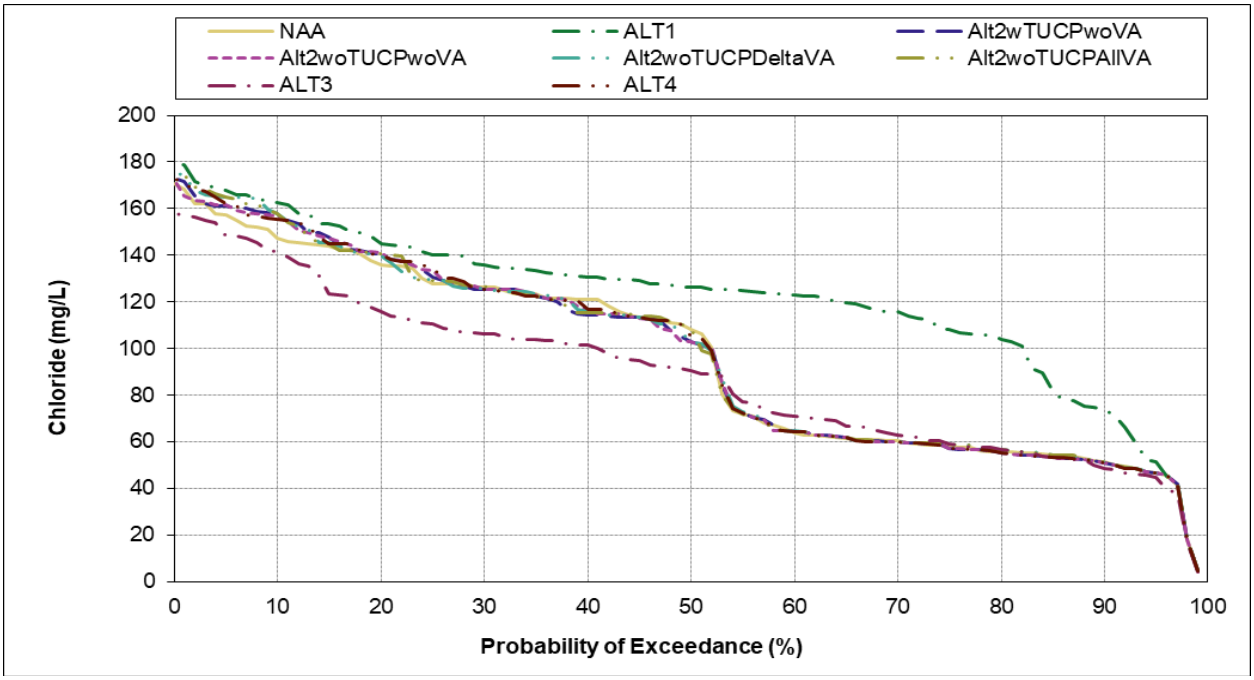

Figure G.2-3-17. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), November

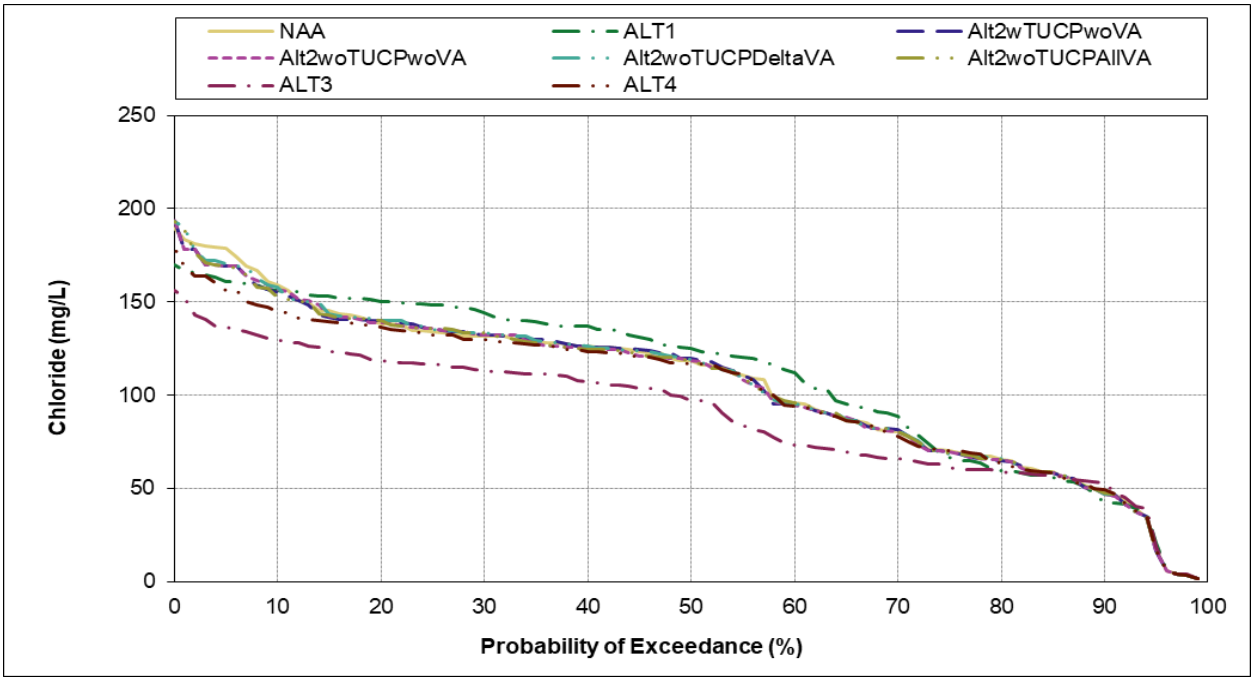

Figure G.2-3-18. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), December

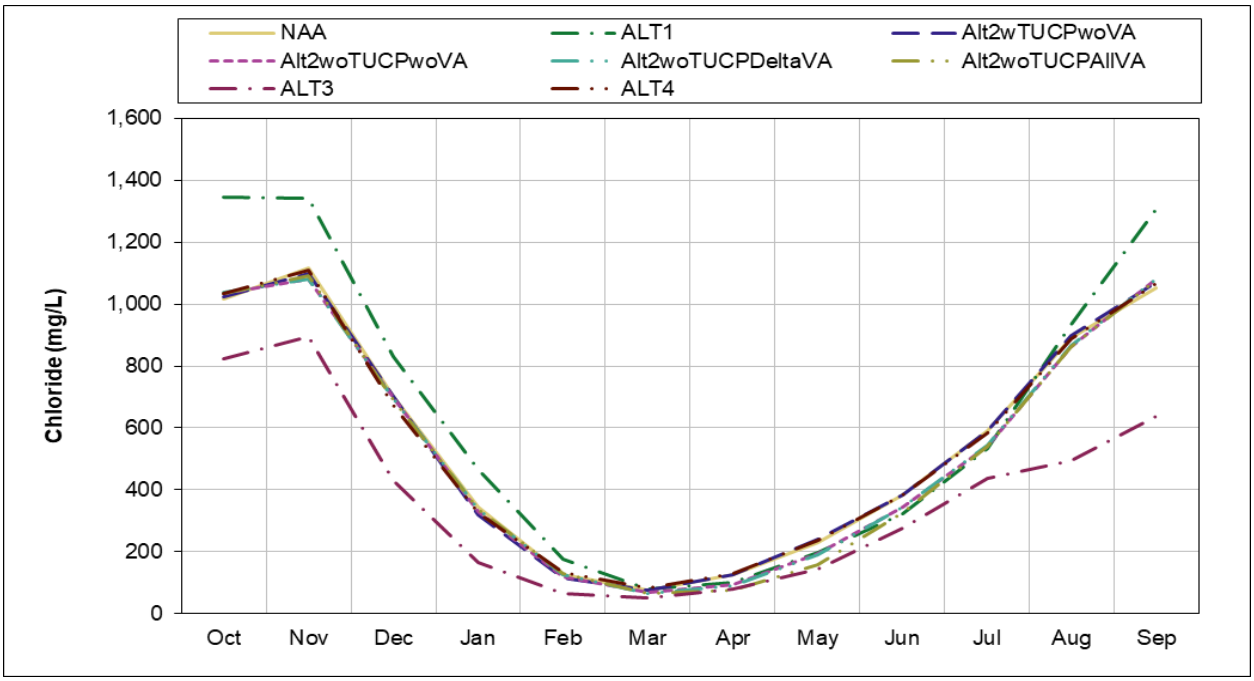

Figure G.2-4-1. San Joaquin River at Antioch, Long term Monthly Average Chloride (in milligrams per liter)

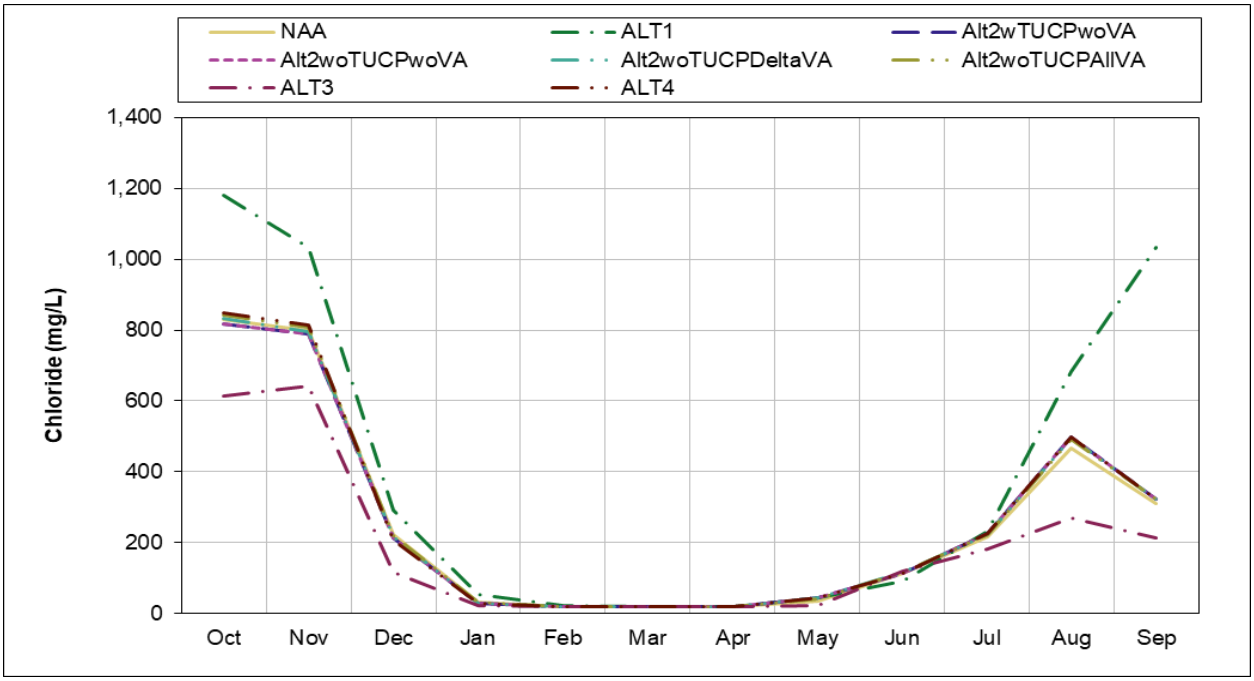

Figure G.2-4-2. San Joaquin River at Antioch, Wet Year Monthly Average Chloride (in milligrams per liter)

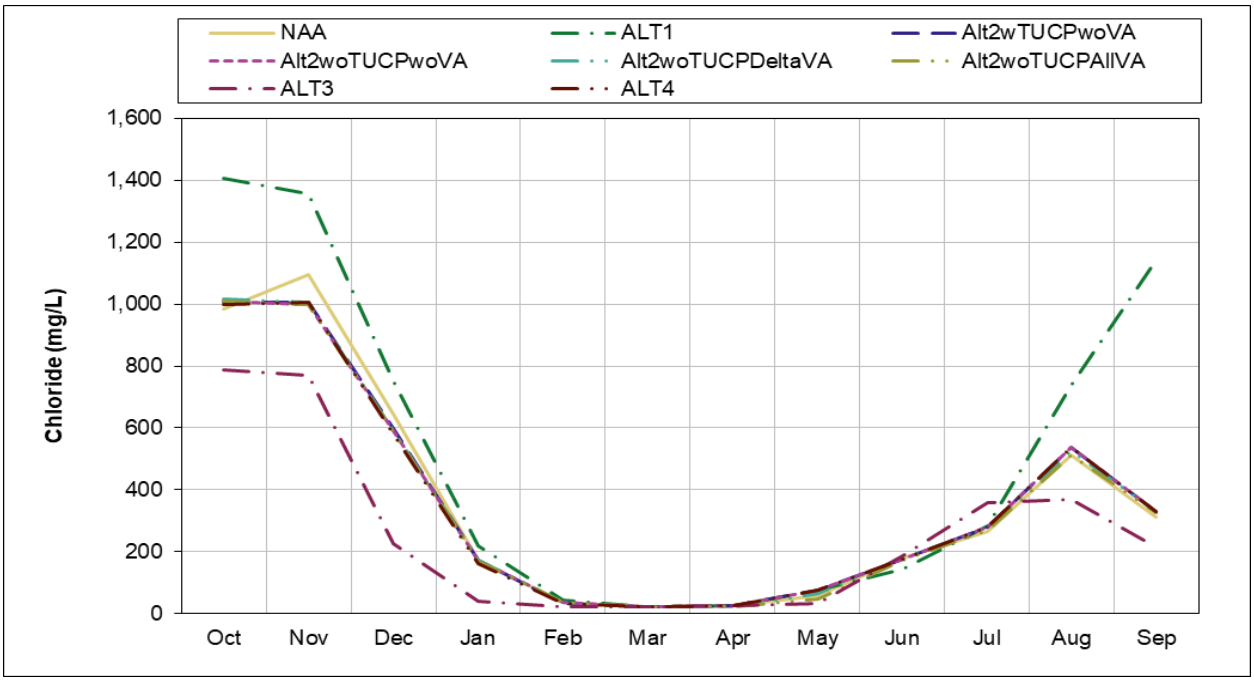

Figure G.2-4-3. San Joaquin River at Antioch, Above Normal Year Monthly Average Chloride (in milligrams per liter)

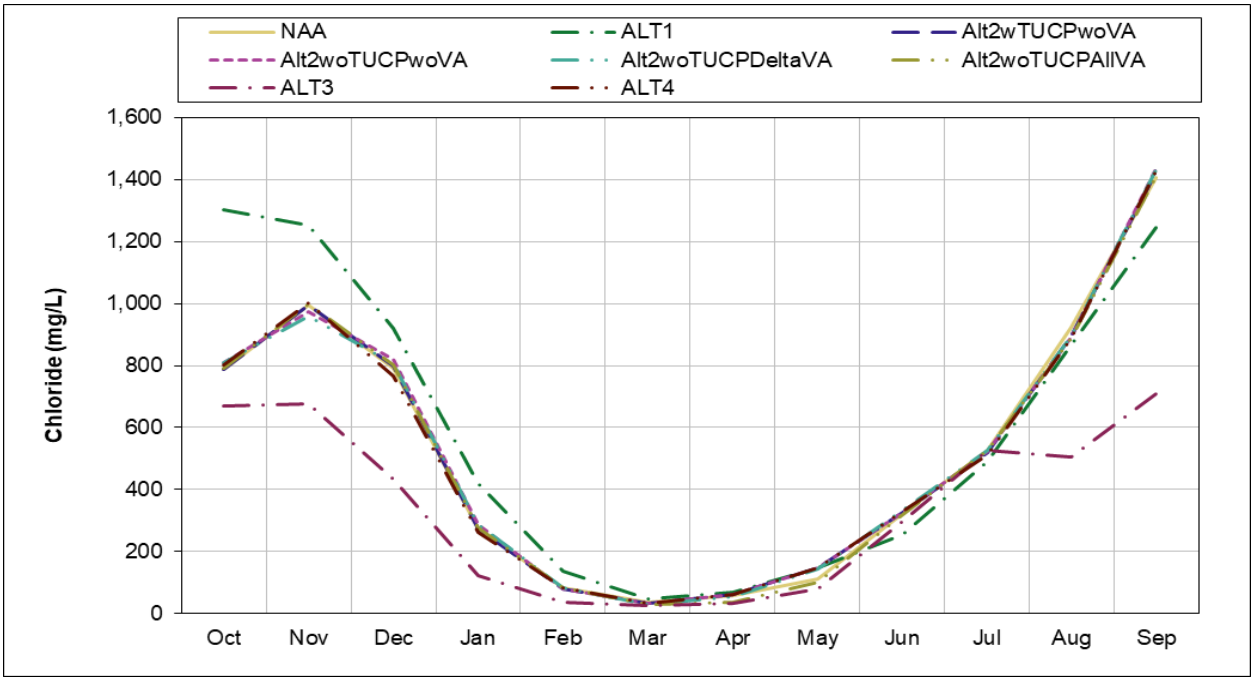

Figure G.2-4-4. San Joaquin River at Antioch, Below Normal Year Monthly Average Chloride (in milligrams per liter)

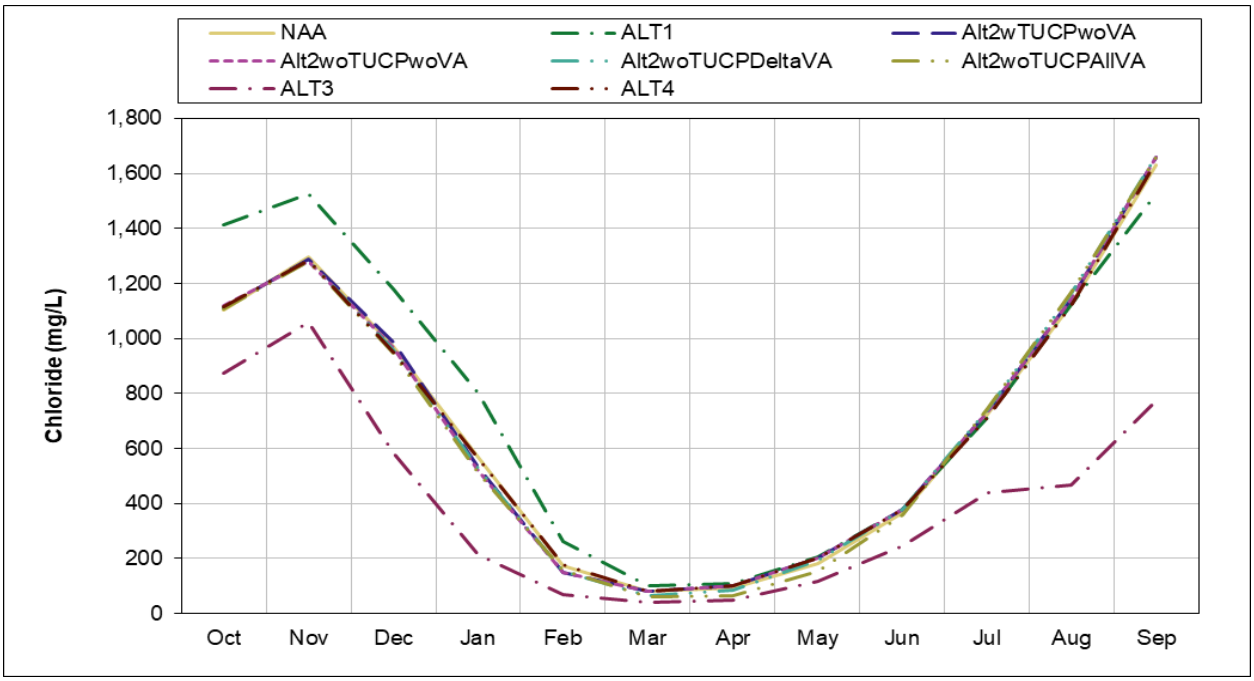

Figure G.2-4-5. San Joaquin River at Antioch, Dry Year Monthly Average Chloride (in milligrams per liter)

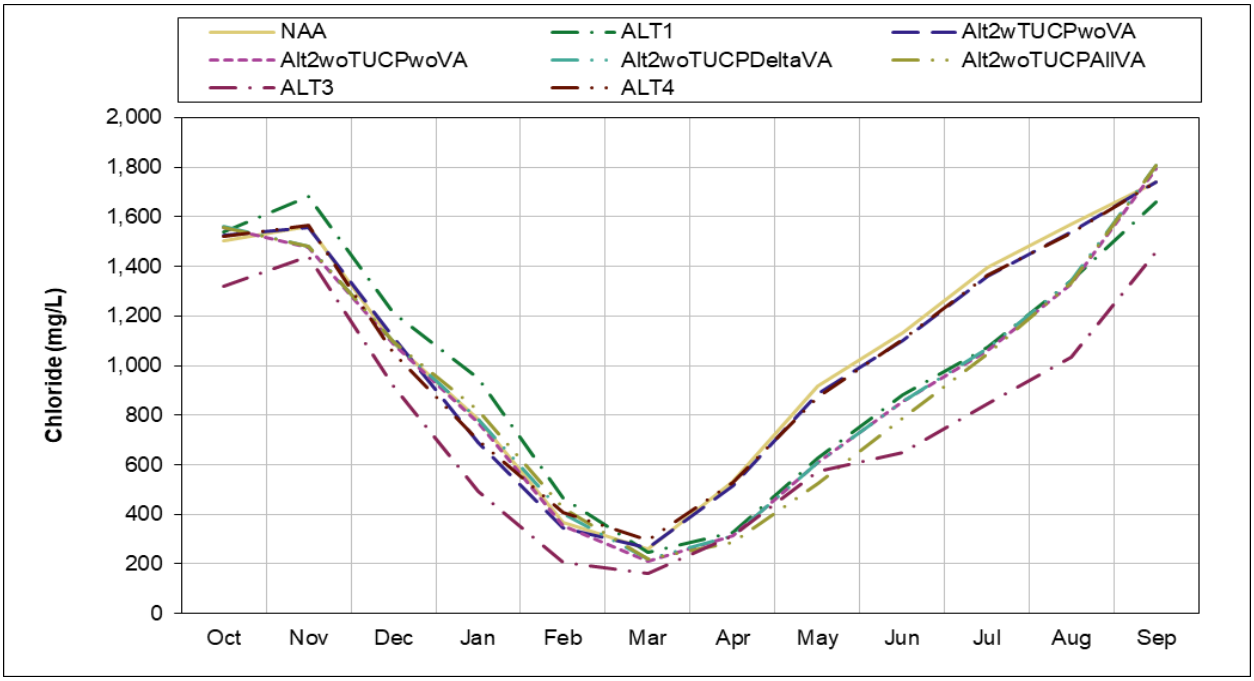

Figure G.2-4-6. San Joaquin River at Antioch, Critical Year Monthly Average Chloride (in milligrams per liter)

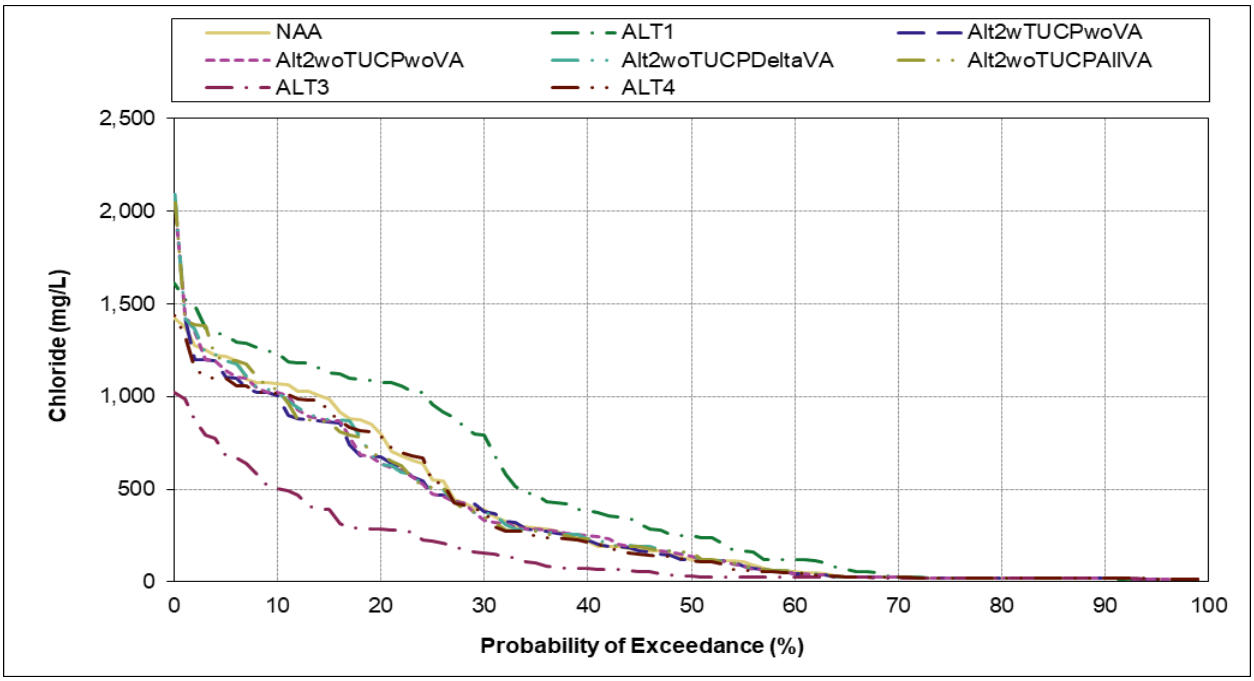

Figure G.2-4-7. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), January

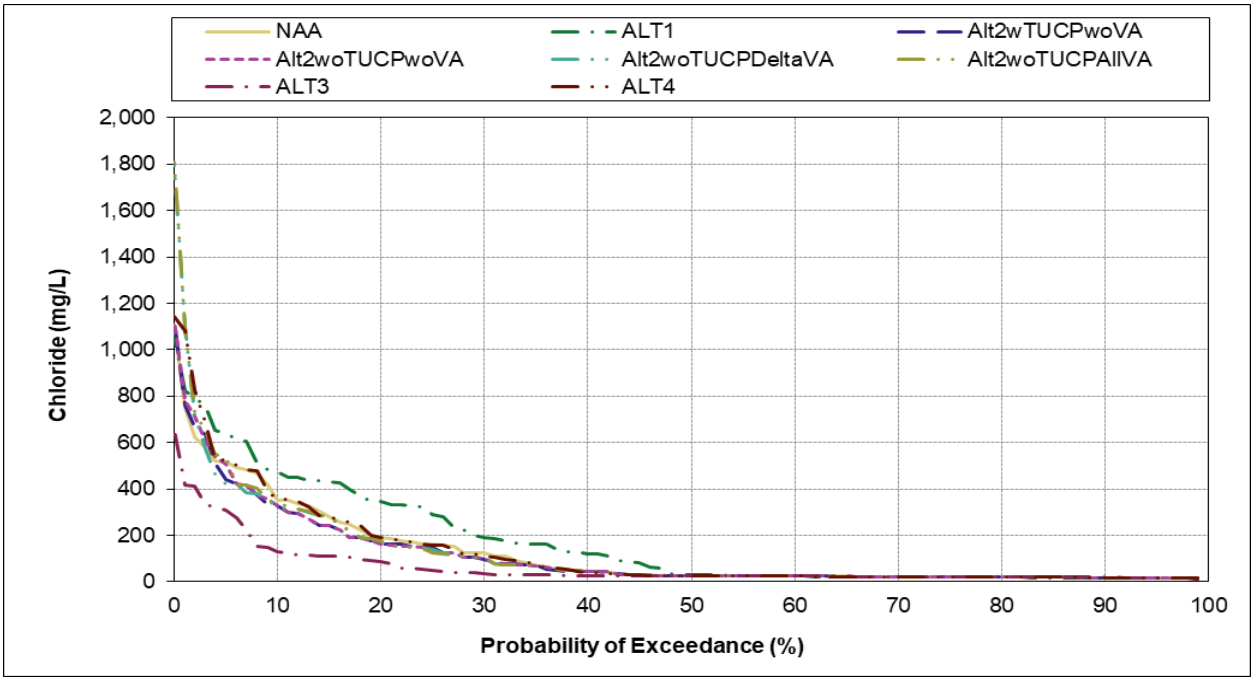

Figure G.2-4-8. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), February

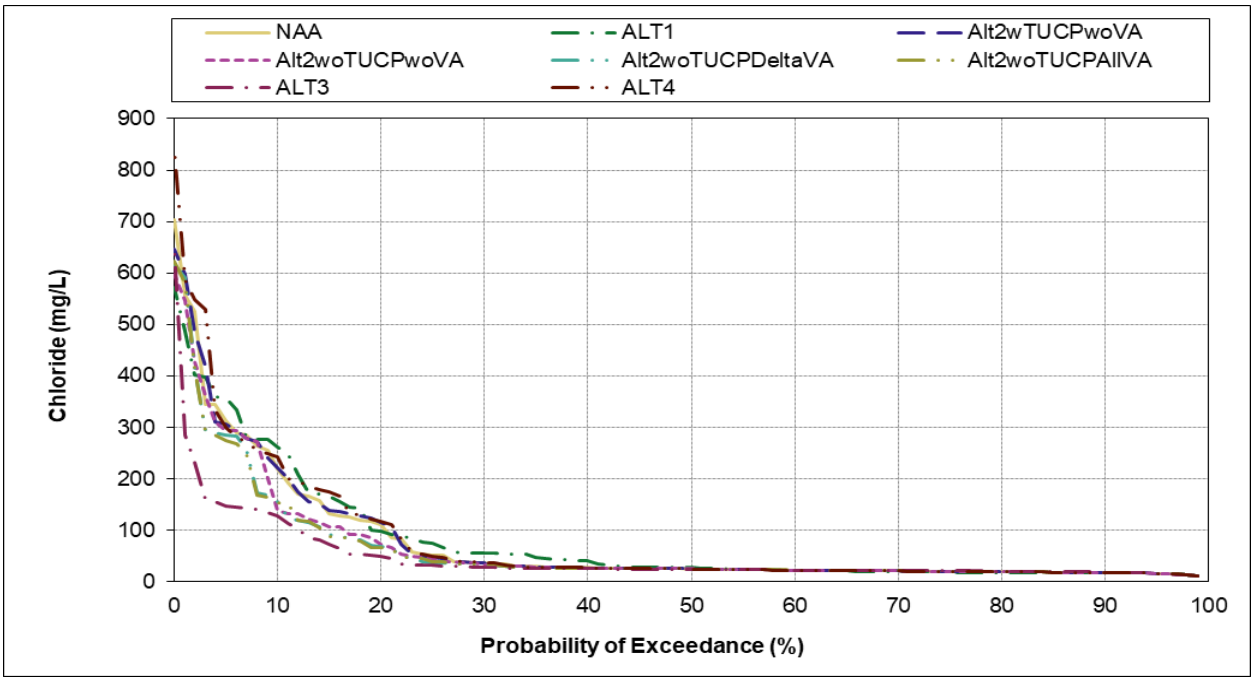

Figure G.2-4-9. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), March

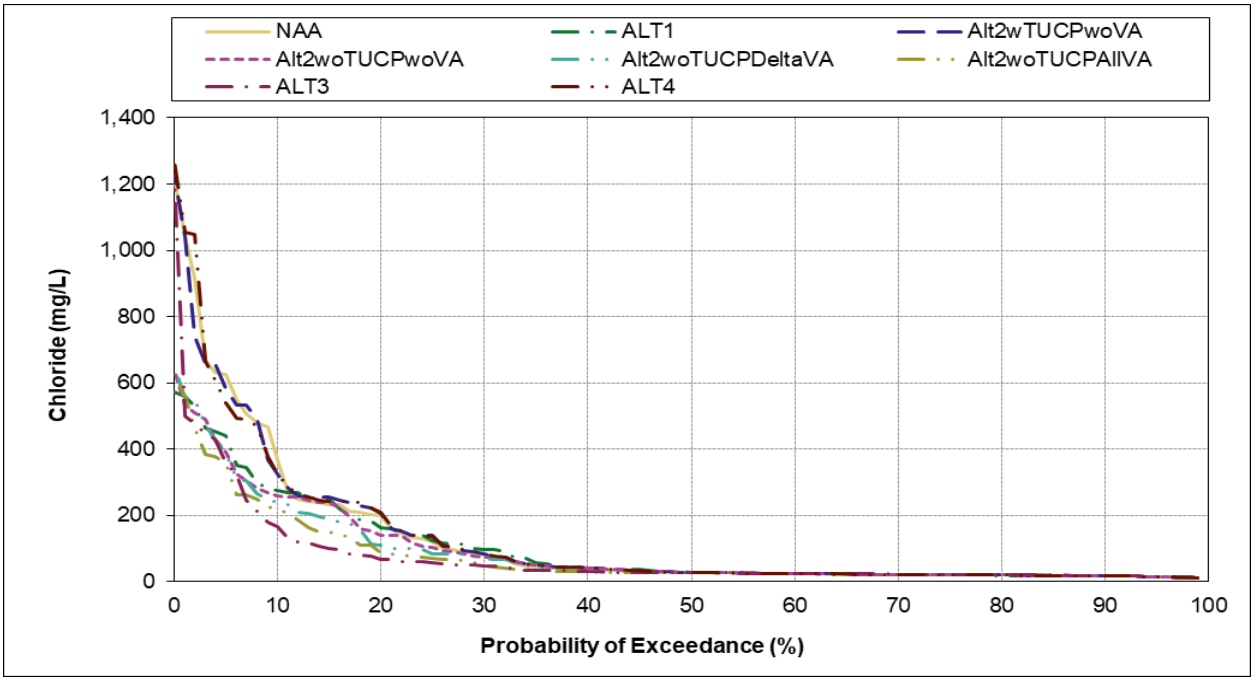

Figure G.2-4-10. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), April

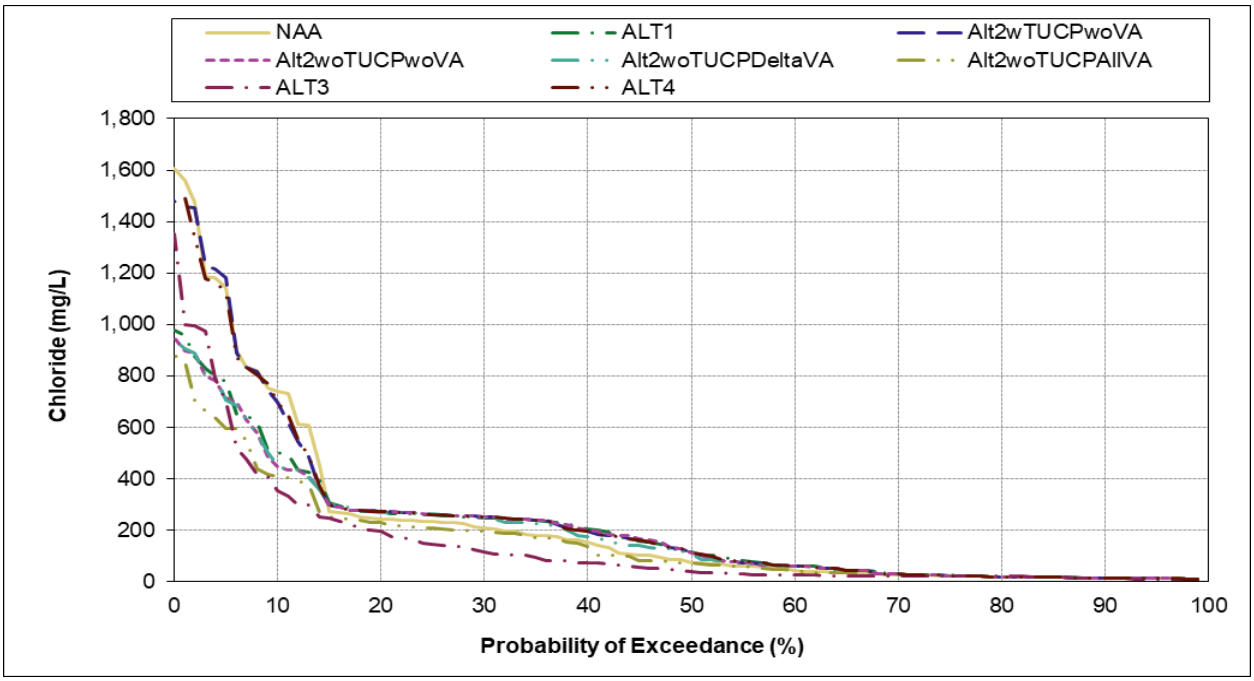

Figure G.2-4-11. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), May

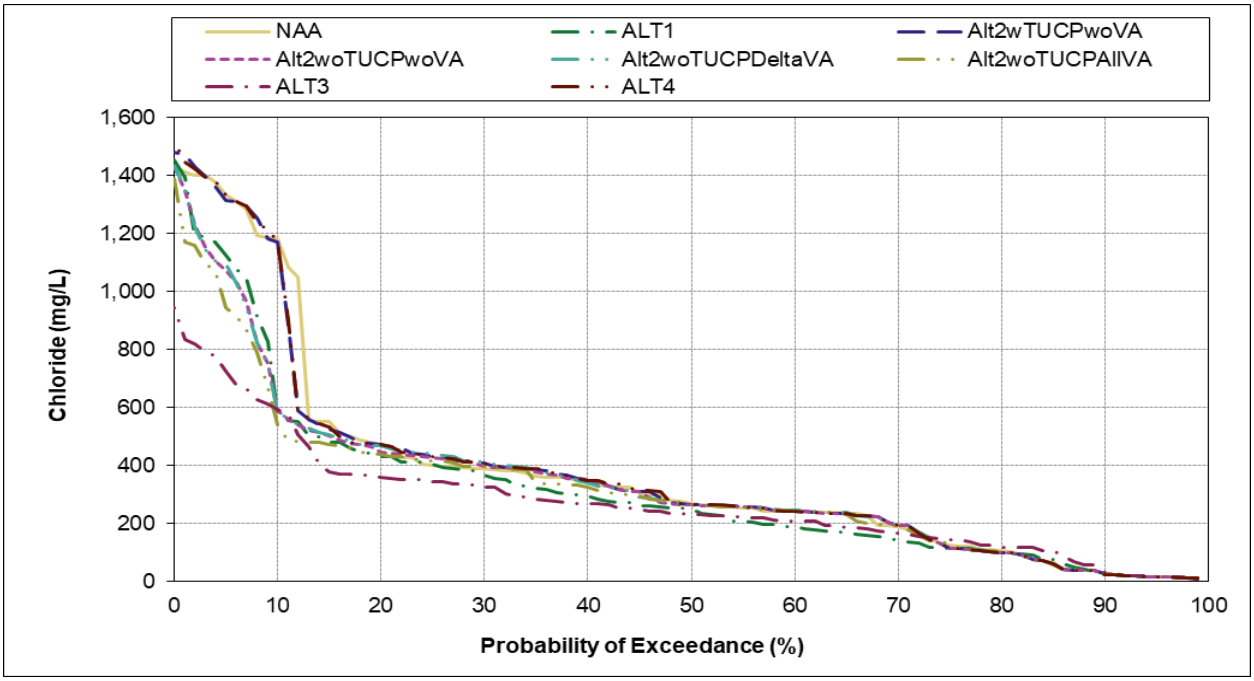

Figure G.2-4-12. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), June

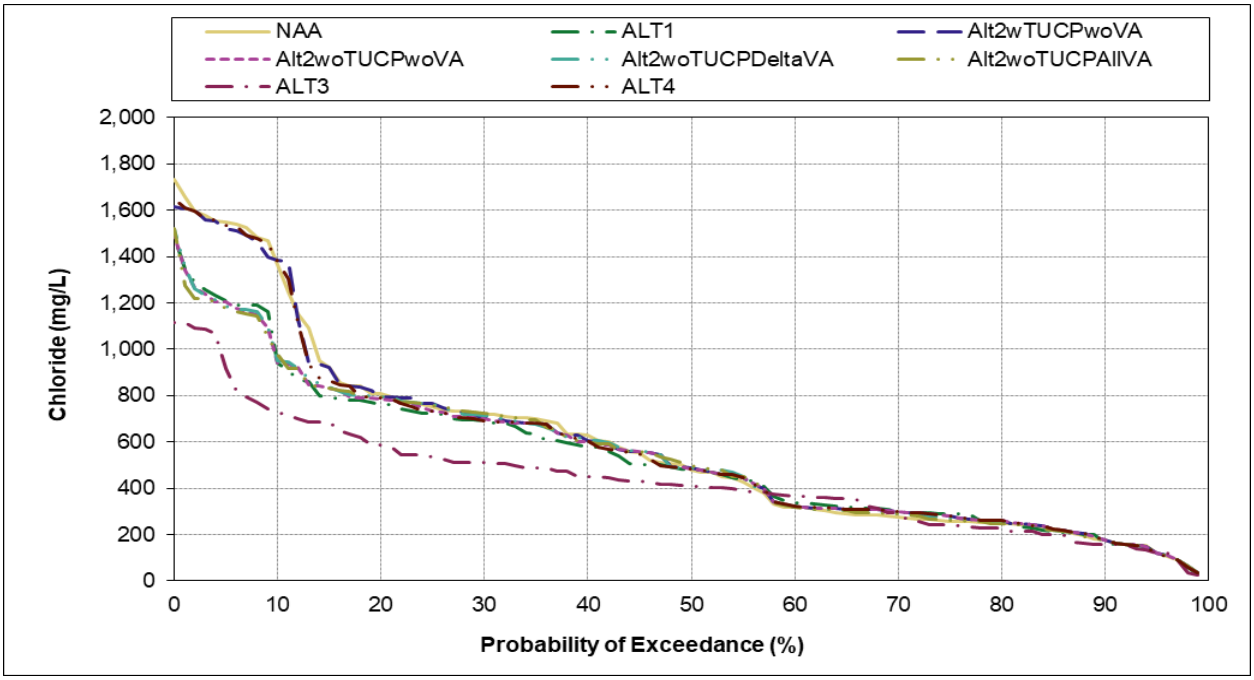

Figure G.2-4-13. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), July

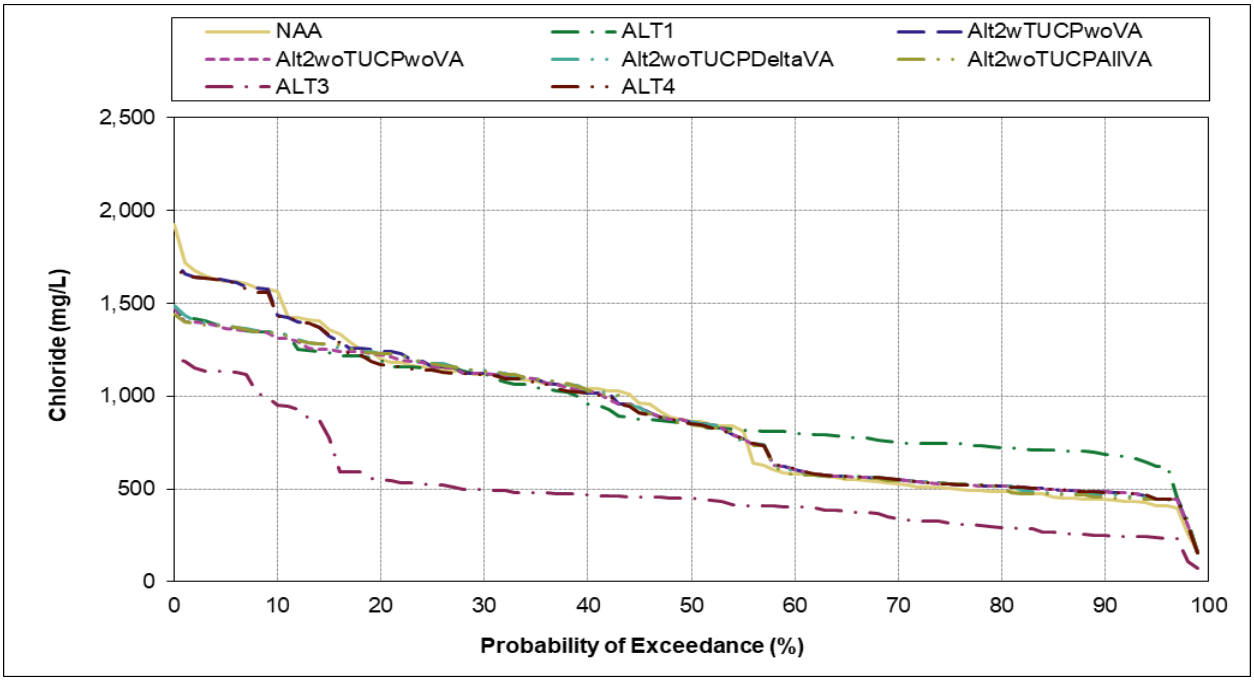

Figure G.2-4-14. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), August

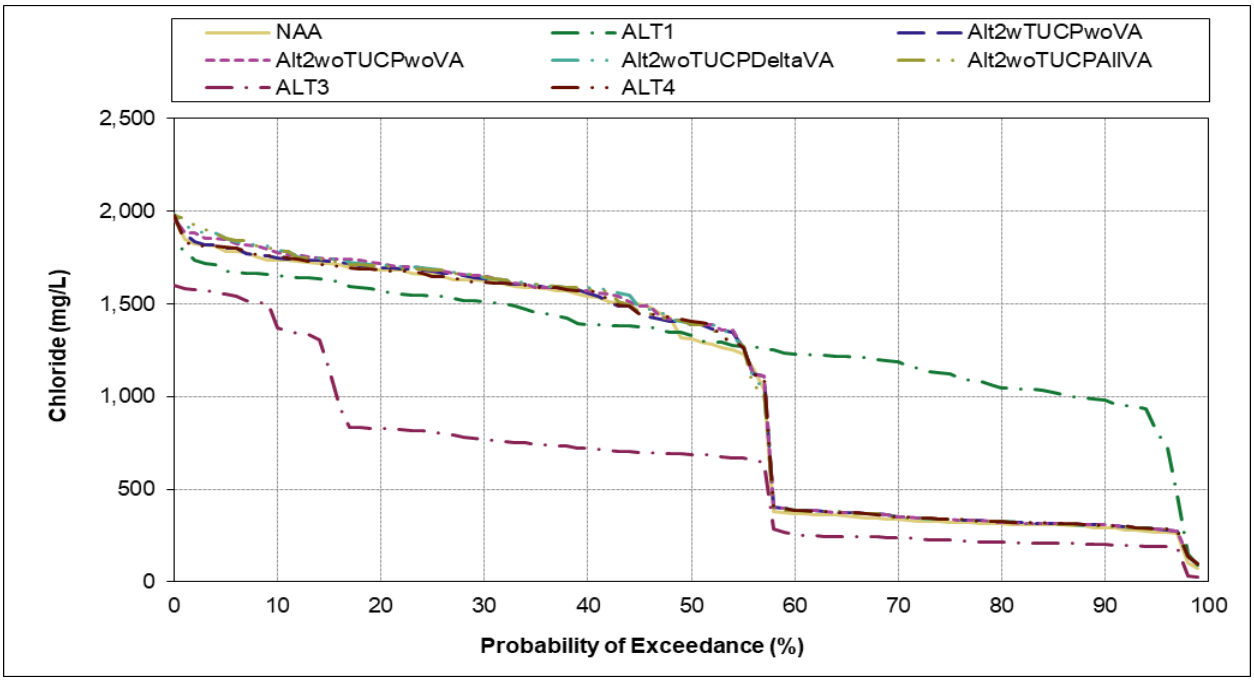

Figure G.2-4-15. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), September

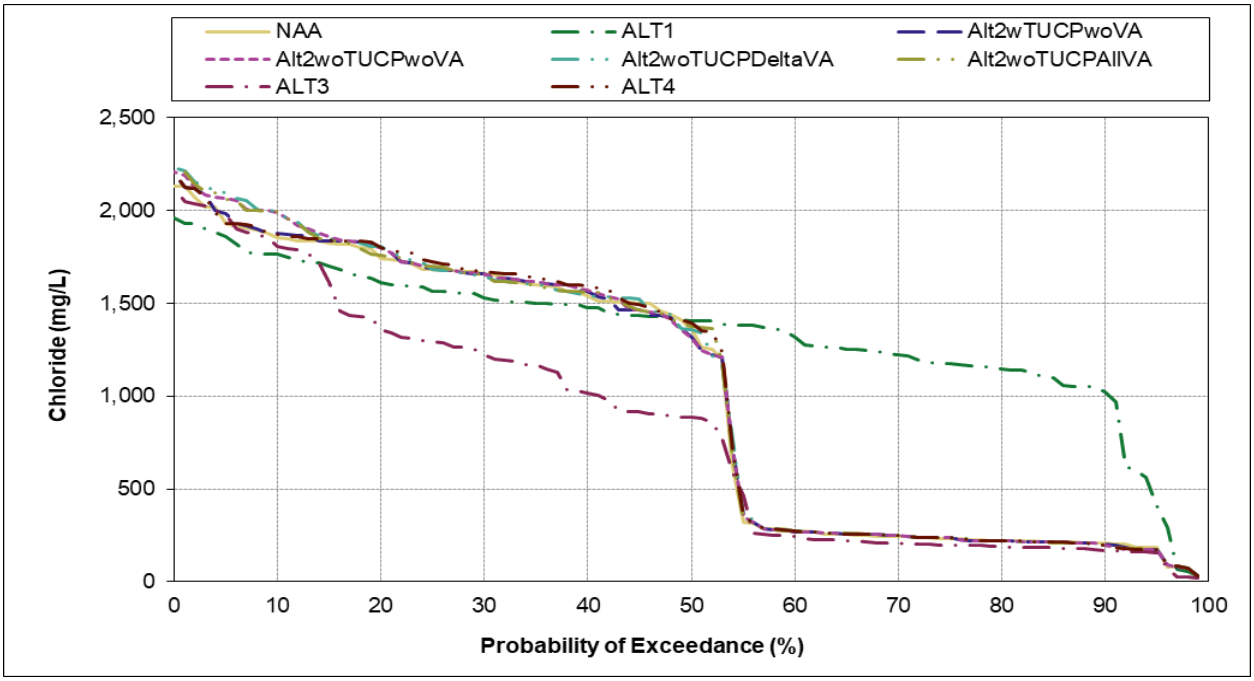

Figure G.2-4-16. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), October

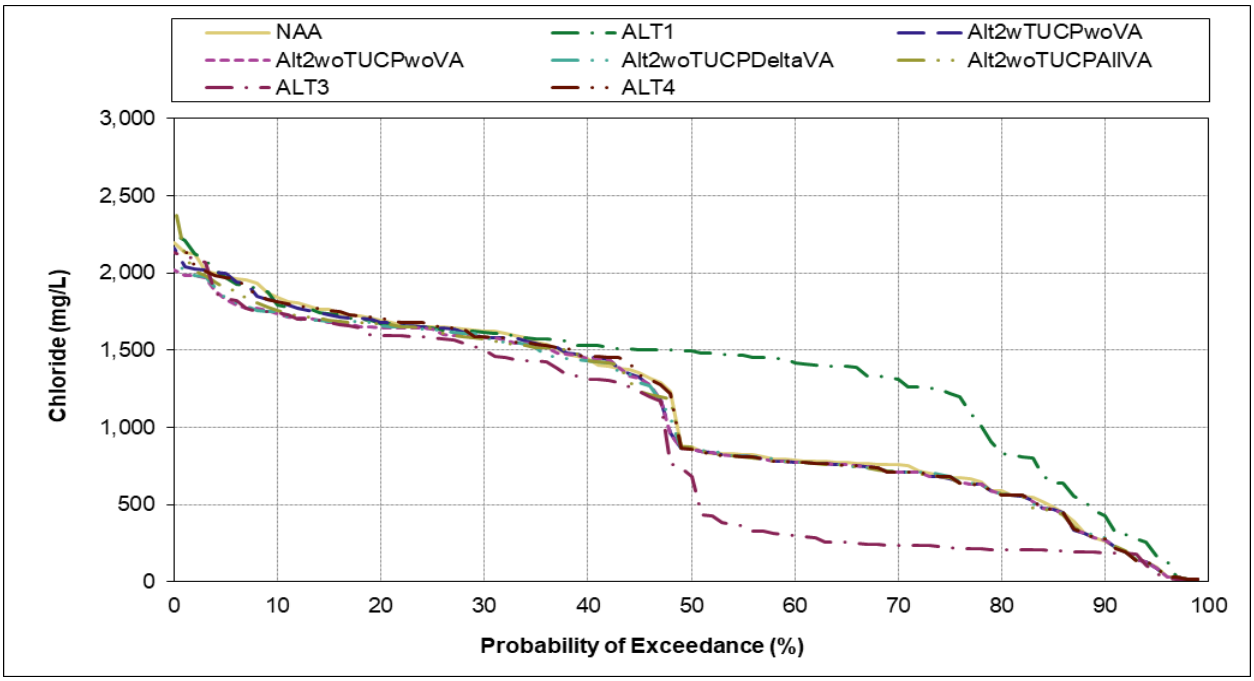

Figure G.2-4-17. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), November

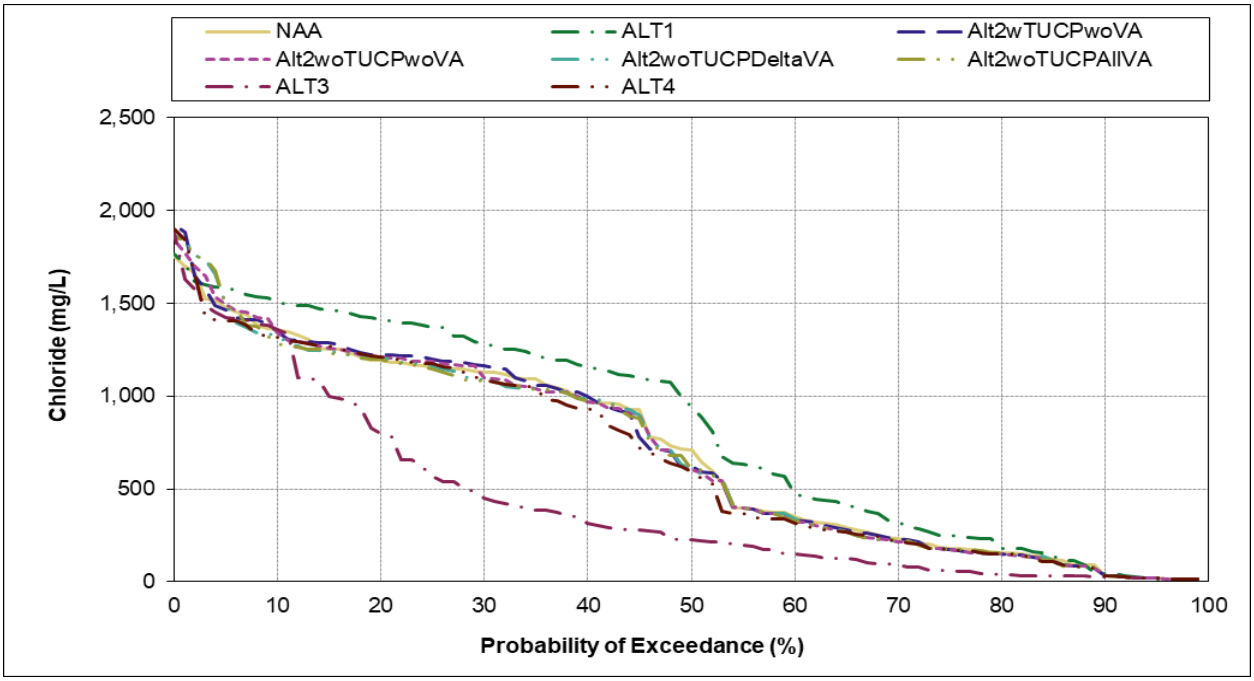

Figure G.2-4-18. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), December

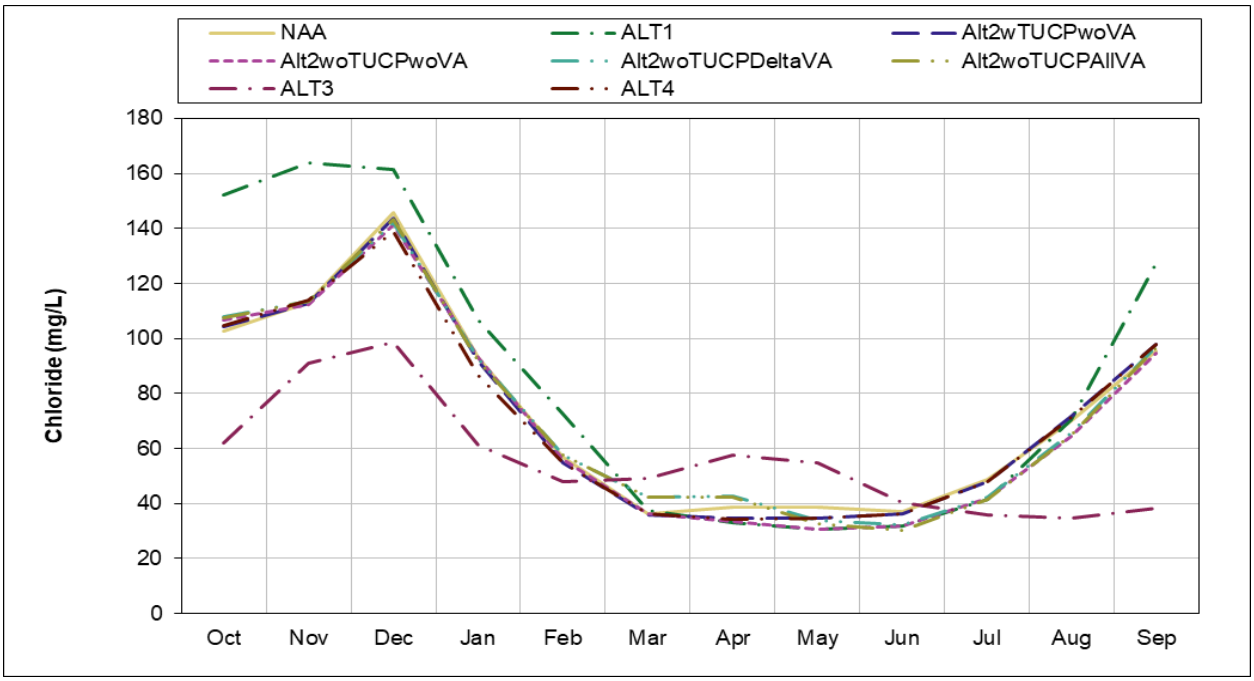

Figure G.2-5-1. Contra Costa Water District Pumping Plant #1, Long term Monthly Average Chloride (in milligrams per liter)

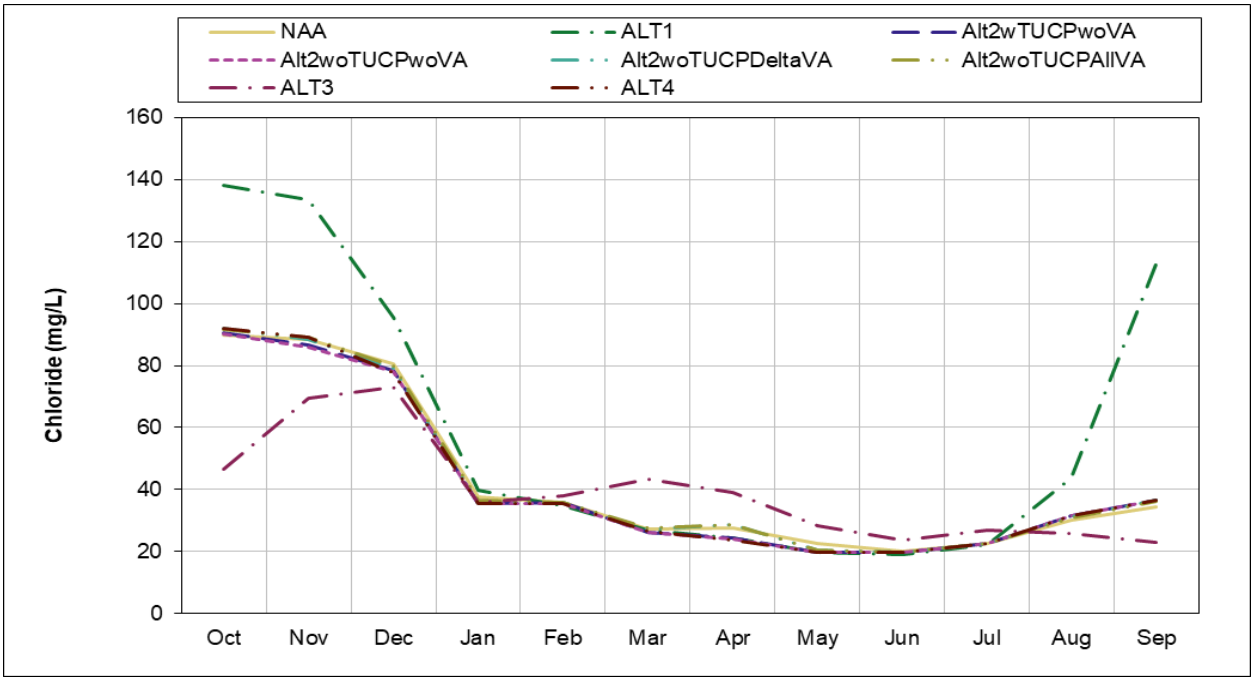

Figure G.2-5-2. Contra Costa Water District Pumping Plant #1, Wet Year Monthly Average Chloride (in milligrams per liter)

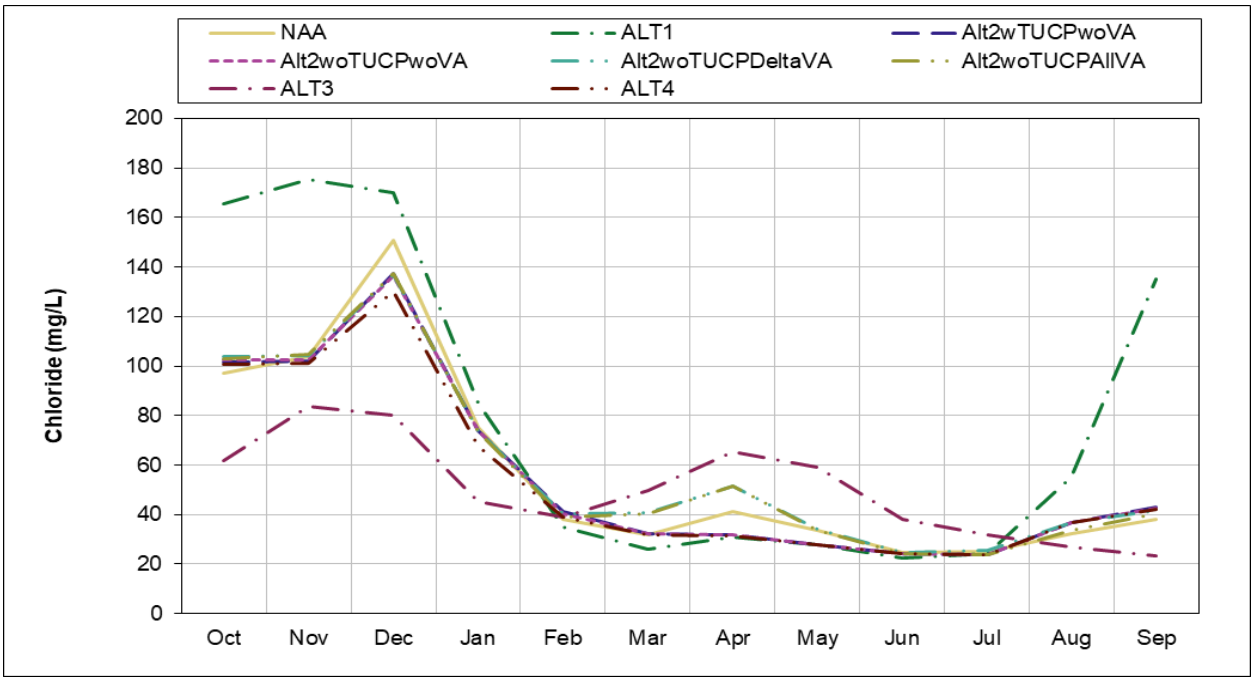

Figure G.2-5-3. Contra Costa Water District Pumping Plant #1, Above Normal Year Monthly Average Chloride (in milligrams per liter)

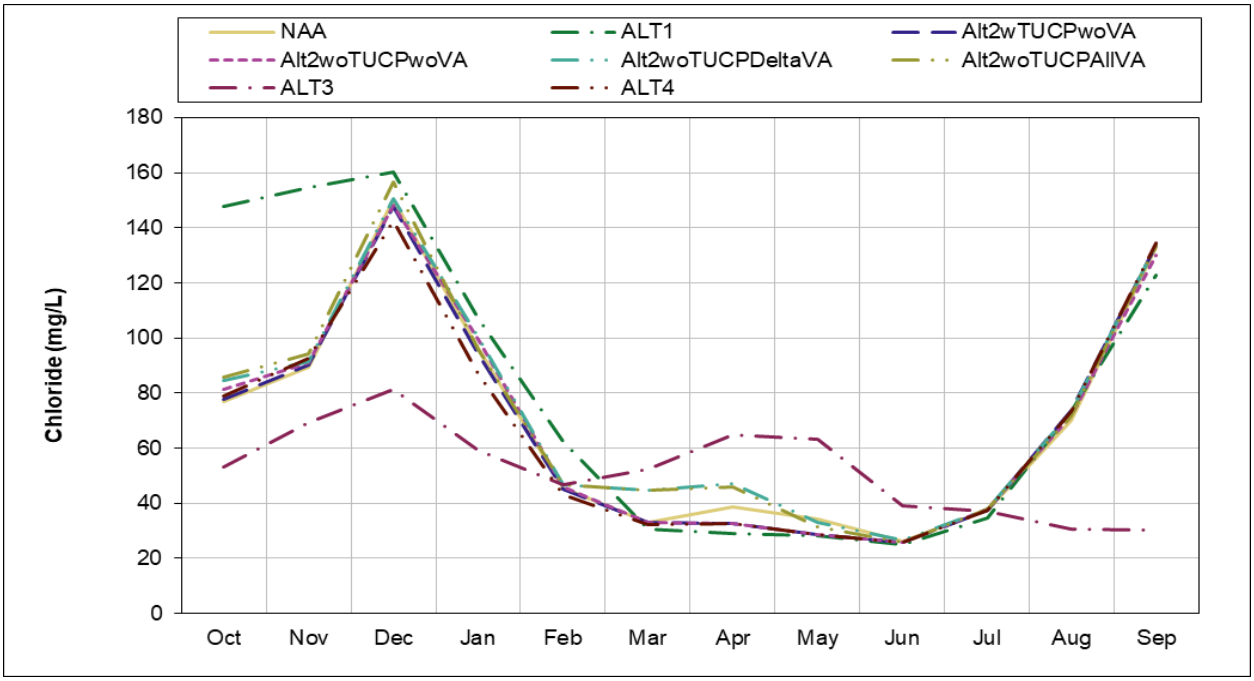

Figure G.2-5-4. Contra Costa Water District Pumping Plant #1, Below Normal Year Monthly Average Chloride (in milligrams per liter)

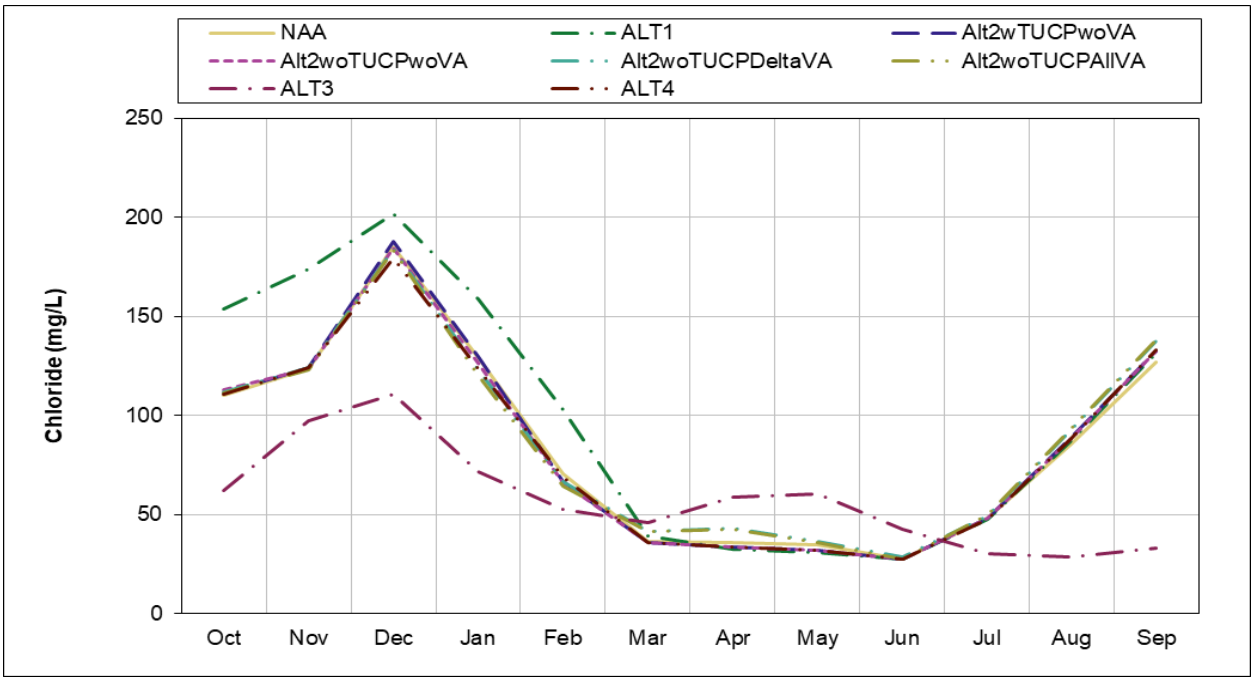

Figure G.2-5-5. Contra Costa Water District Pumping Plant #1, Dry Year Monthly Average Chloride (in milligrams per liter)

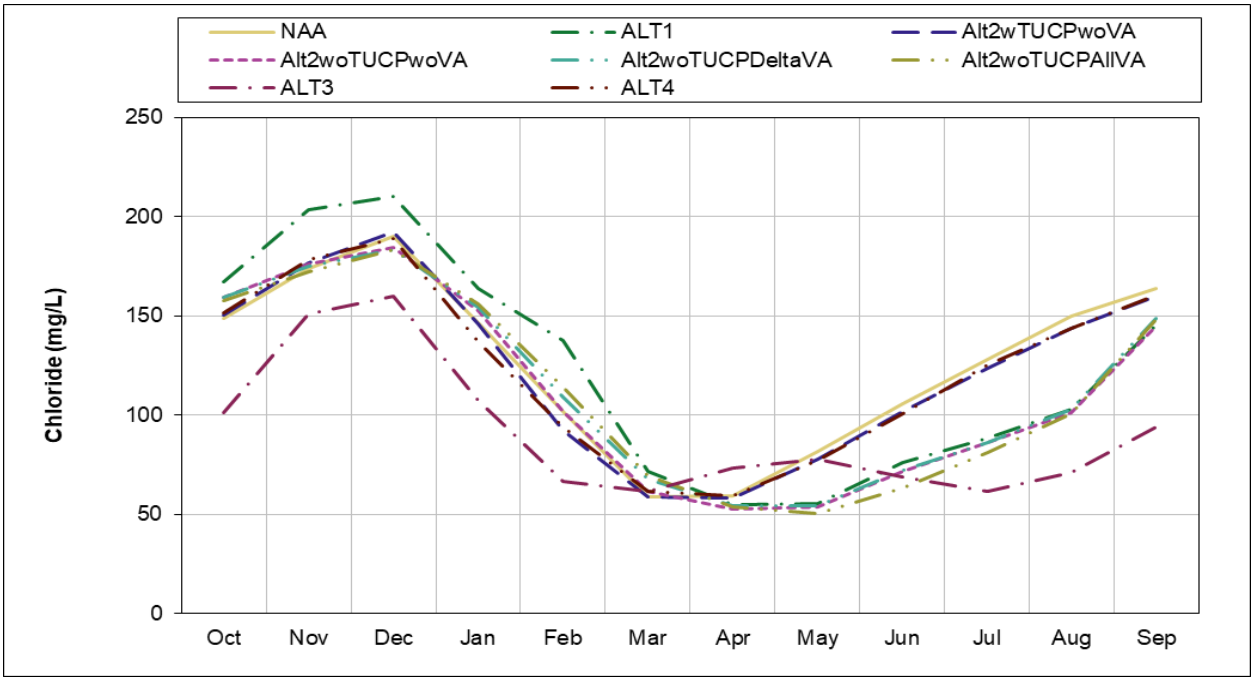

Figure G.2-5-6. Contra Costa Water District Pumping Plant #1, Critical Year Monthly Average Chloride (in milligrams per liter)

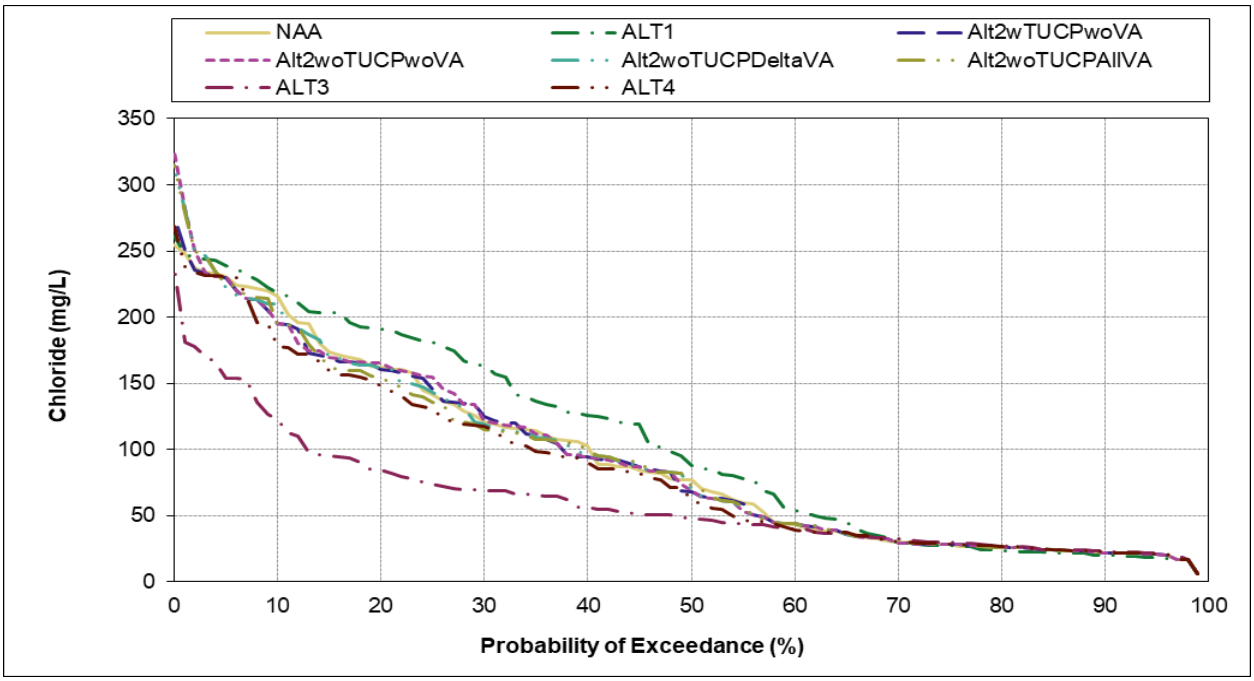

Figure G.2-5-7. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), January

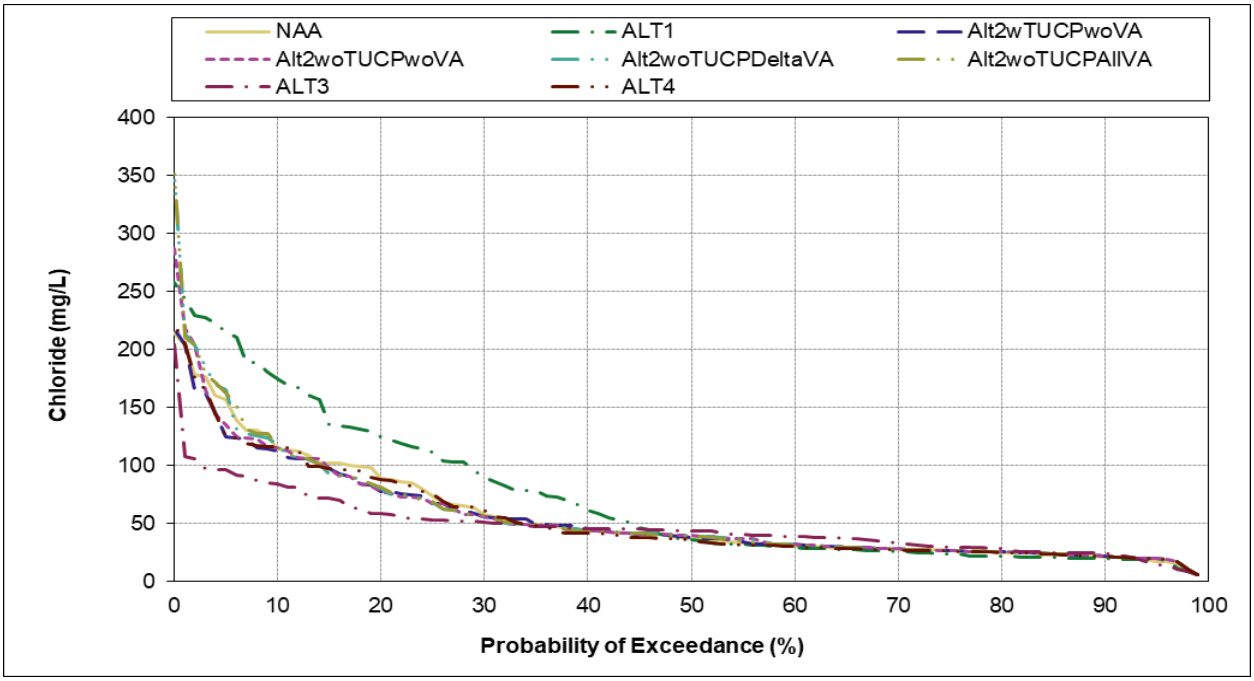

Figure G.2-5-8. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), February

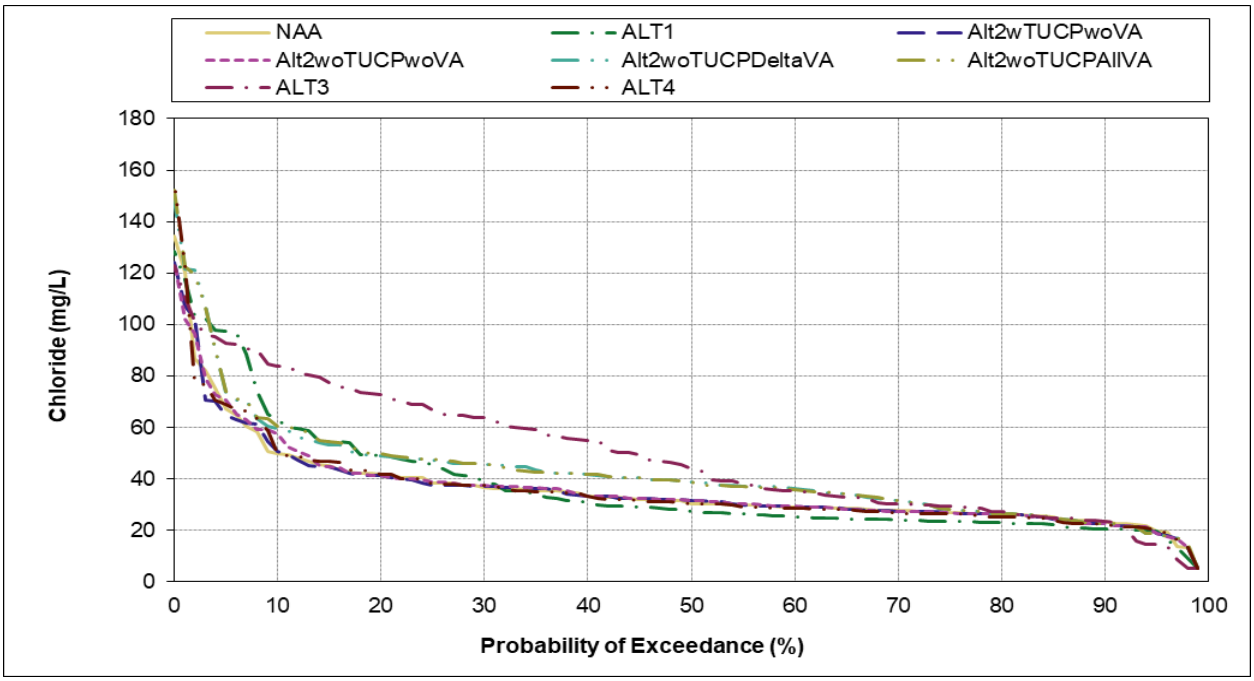

Figure G.2-5-9. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), March

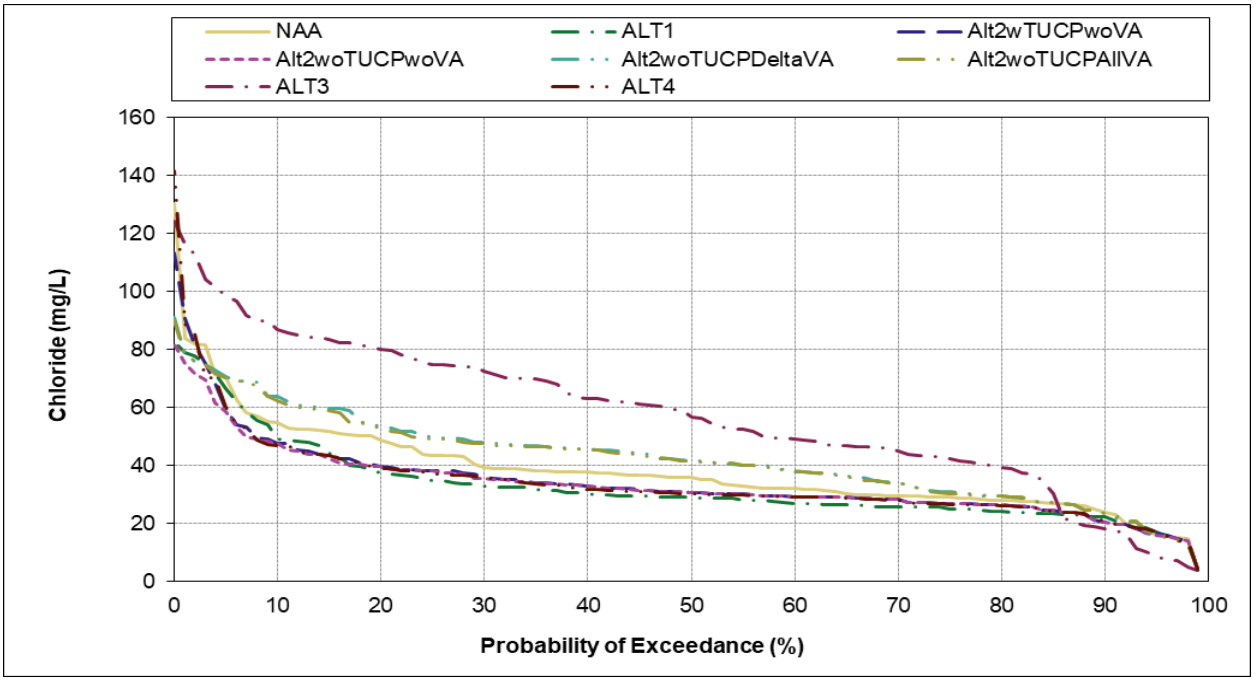

Figure G.2-5-10. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), April

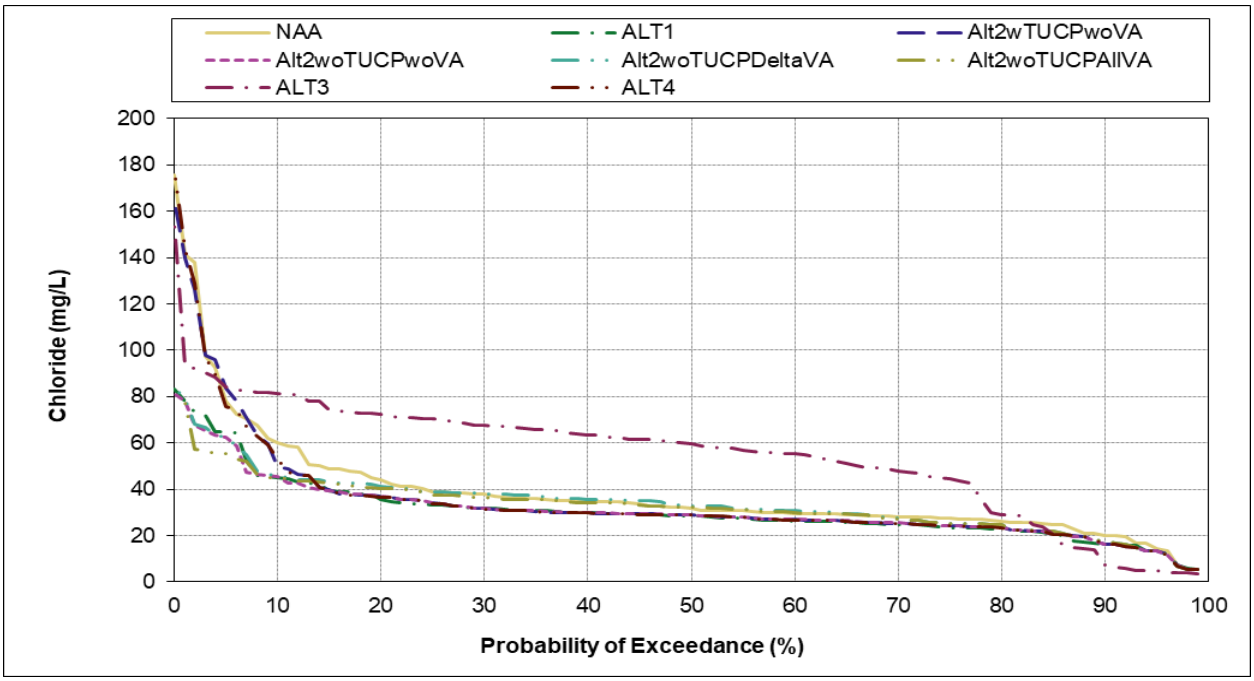

Figure G.2-5-11. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), May

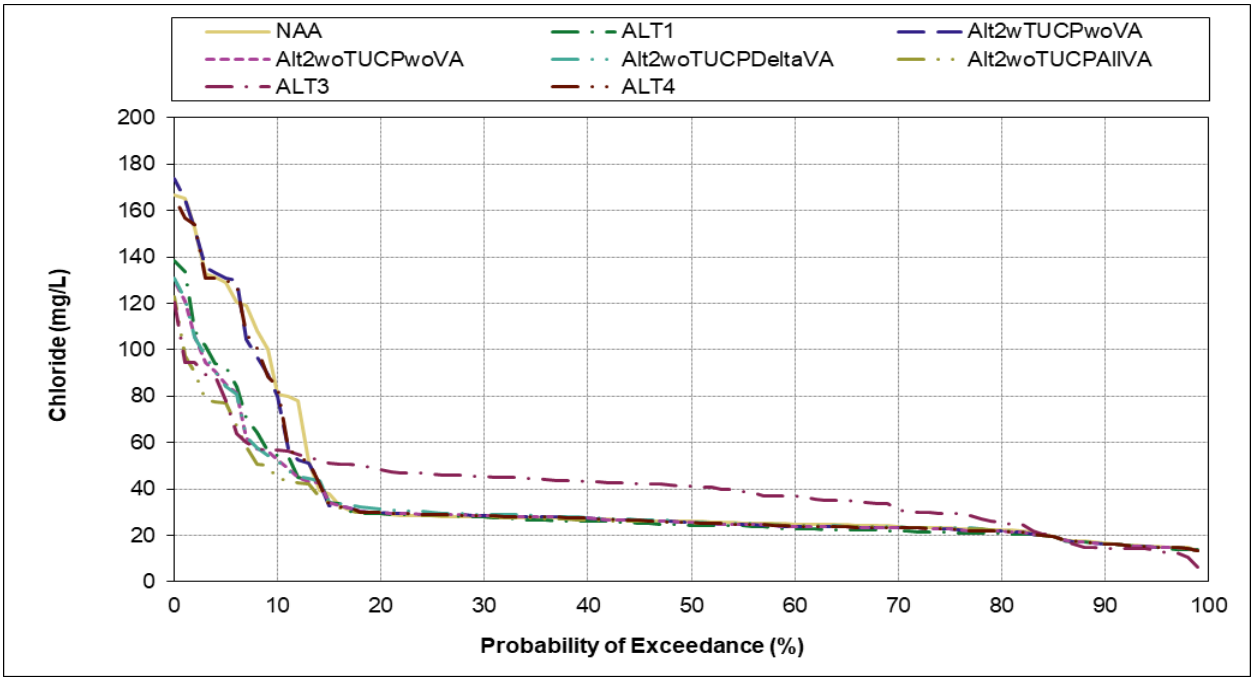

Figure G.2-5-12. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), June

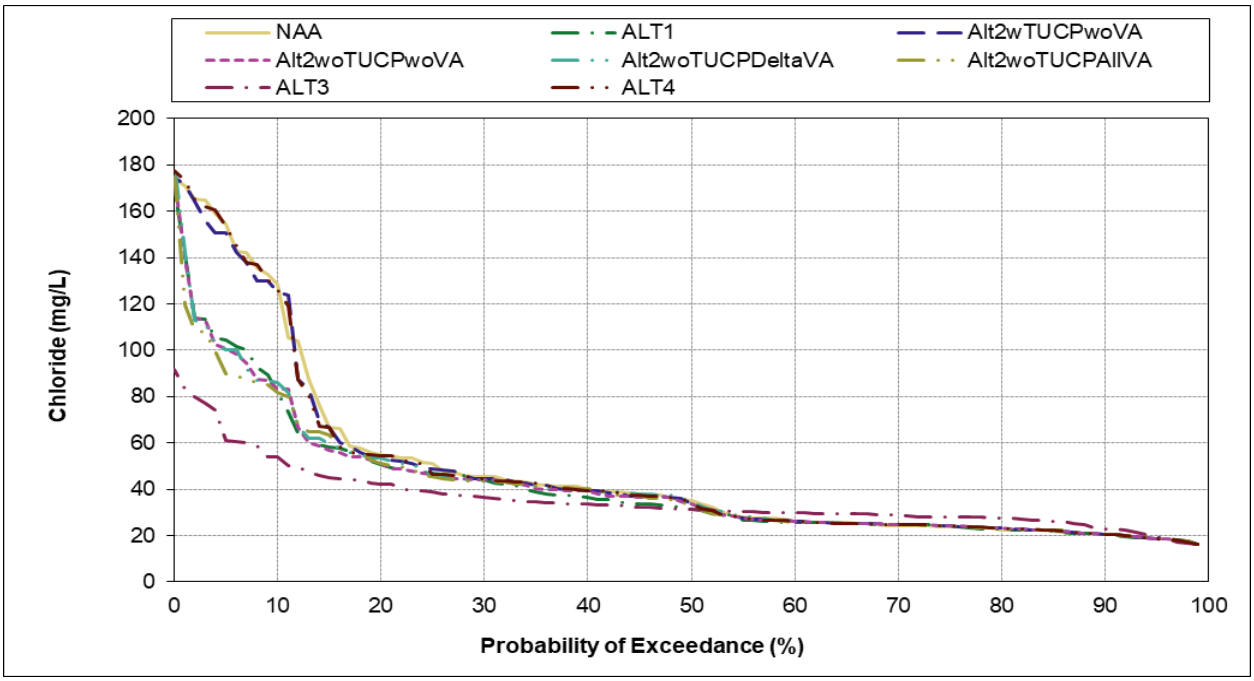

Figure G.2-5-13. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), July

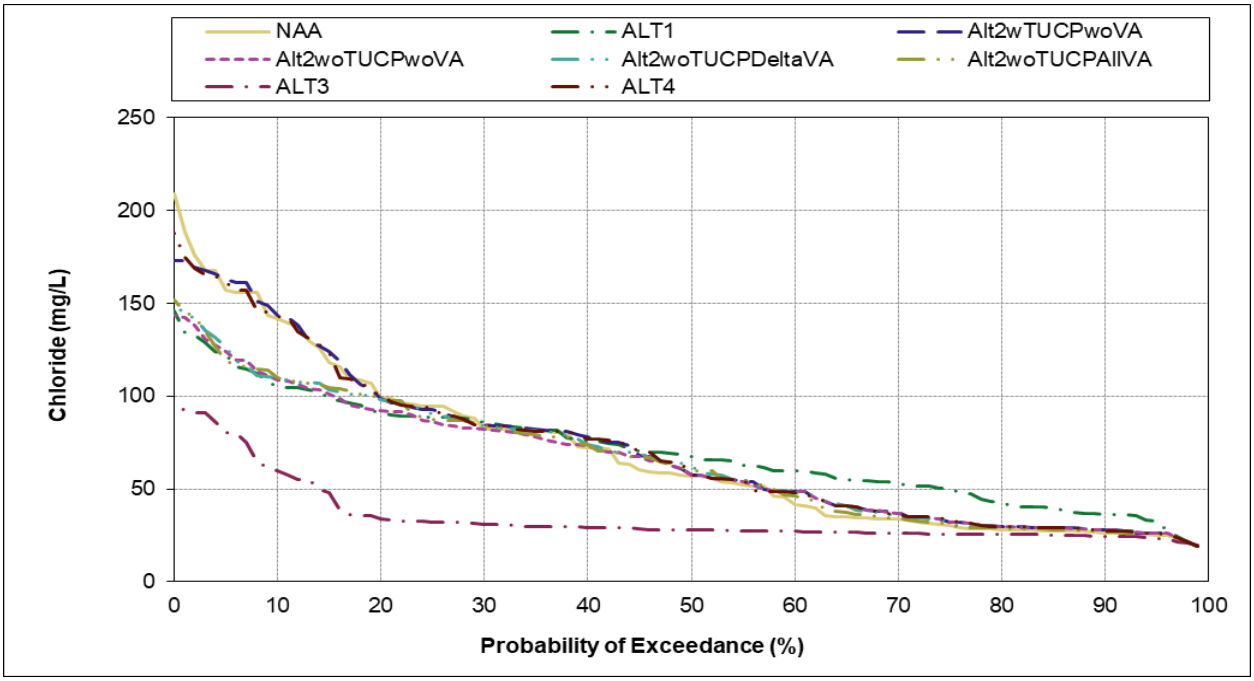

Figure G.2-5-14. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), August

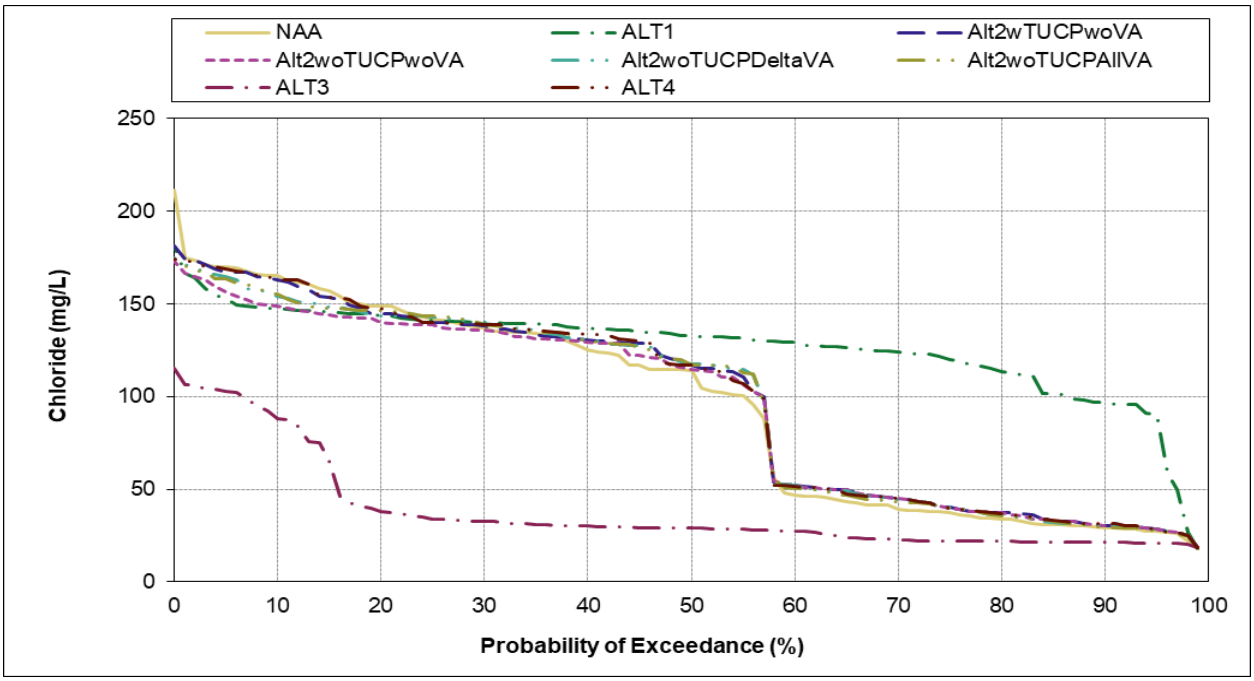

Figure G.2-5-15. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), September

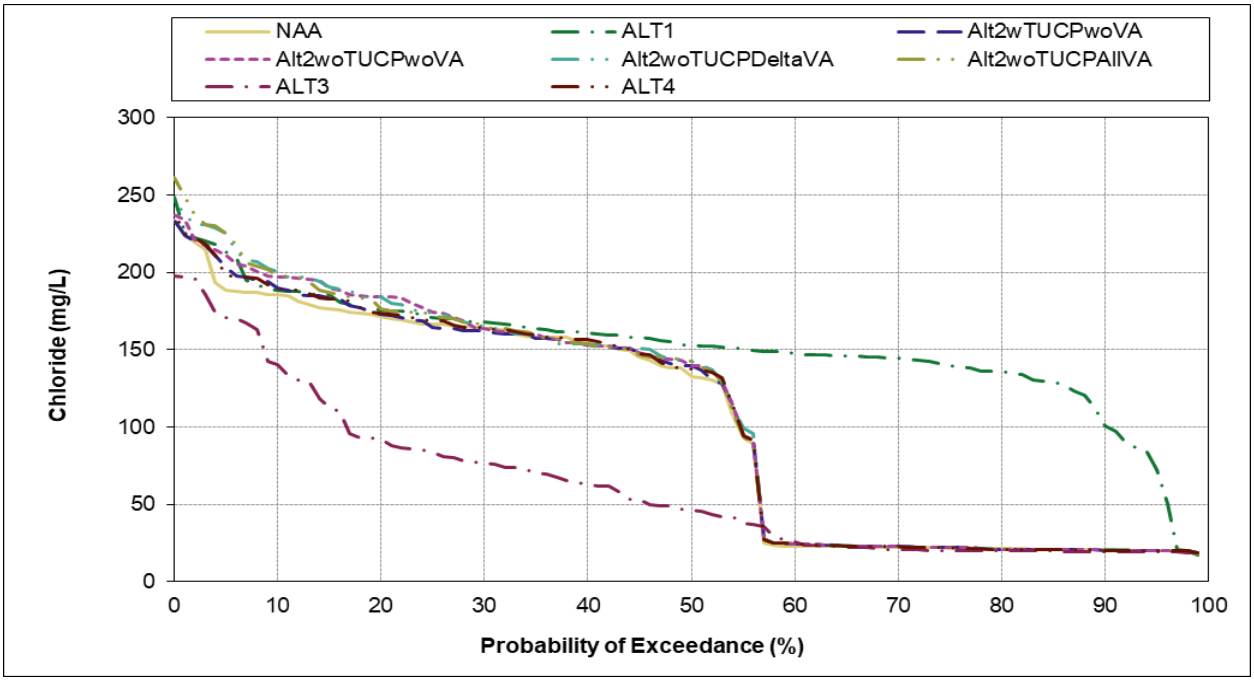

Figure G.2-5-16. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), October

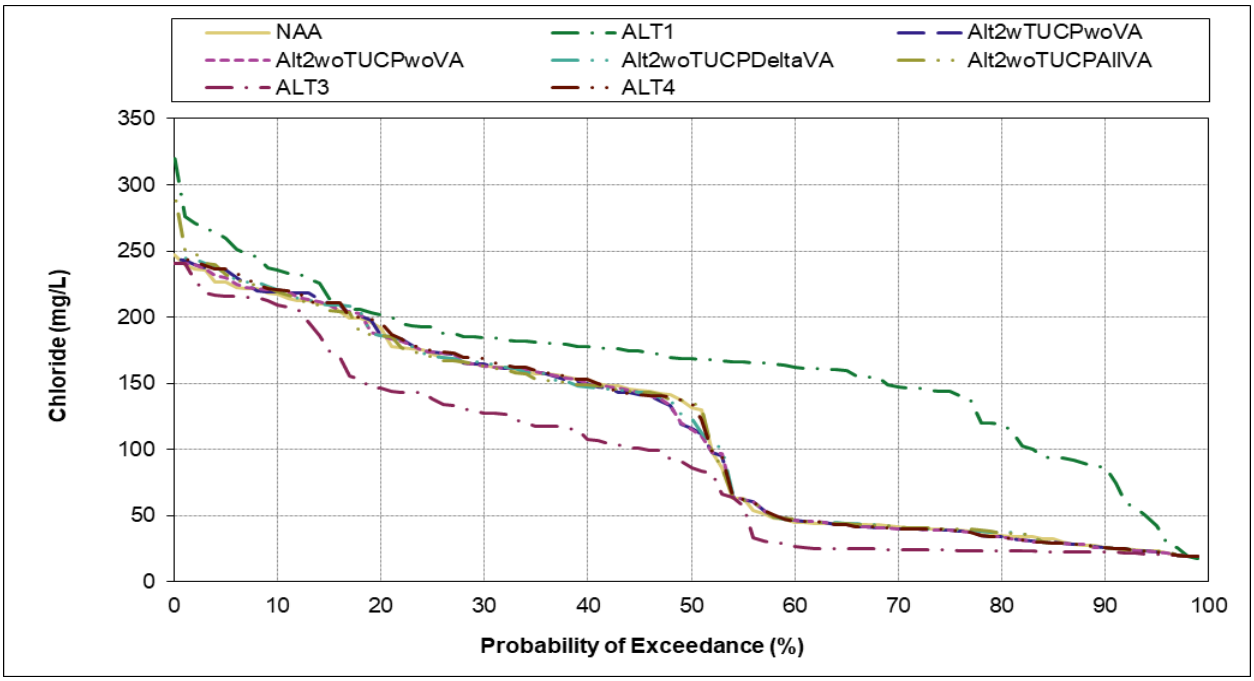

Figure G.2-5-17. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), November

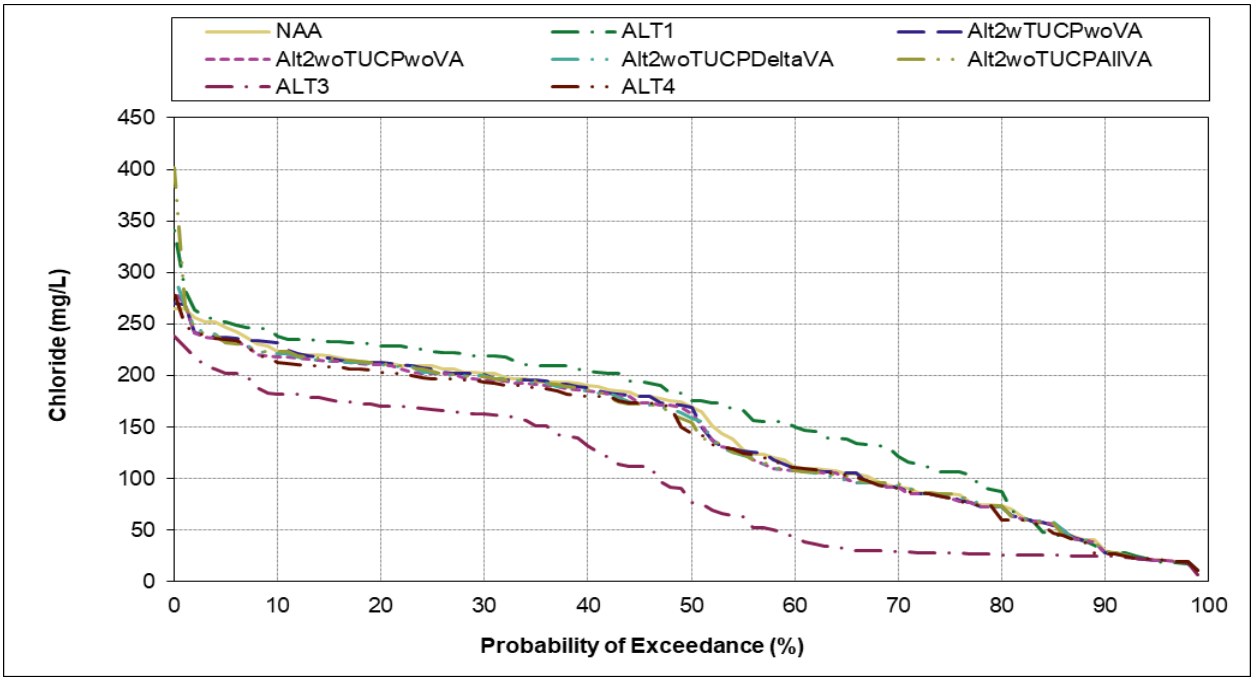

Figure G.2-5-18. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), December

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