

# 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 ( $\mu\text{mhos/cm}$ ).

$$Cl = \max \left( \begin{array}{l} 0.15 * EC - 12 \\ 0.285 * EC - 50 \end{array} \right)$$

## 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

Data Parameter	SAC	SJR	BAY	EST	AGR
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.

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

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

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	<ul style="list-style-type: none"> <li>• Wet Year: &lt;150 for 240 days per calendar year (66% of year)</li> <li>• Above Normal Year: &lt;150 for 190 days per calendar year (52% of year)</li> <li>• Below Normal Year: &lt;150 for 175 days per calendar year (48% of year)</li> <li>• Dry: &lt;150 for 165 days per calendar year (45% of year)</li> <li>• Critical: &lt;150 for 155 days per calendar year (42% of year)</li> </ul> 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	<ul style="list-style-type: none"> <li>• 250 (October–September)</li> </ul> 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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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	21	19	21	28
1%	26	27	29	48	57	41	36	25	20	19	21	27
5%	25	26	26	43	48	37	34	22	19	18	20	27
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	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	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%	1	0	0	0	0	0	2	0	1	0	0	0
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	0	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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%	27	28	30	48	67	51	39	25	20	18	19	29
1%	26	27	29	48	57	42	37	24	20	17	19	27
5%	25	26	26	43	48	39	36	23	19	17	18	26
10%	25	25	25	39	45	37	34	22	18	16	18	24
25%	22	23	23	34	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	22	23	23	33	38	34	33	21	19	17	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%	1	0	0	0	0	0	2	0	0	-2	-2	1
1%	0	0	0	1	0	1	0	-1	0	-2	-2	-1
5%	0	0	0	0	0	2	2	1	0	-1	-2	-1
10%	0	0	-1	-1	0	1	1	1	0	0	-2	0
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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	-1	-1	0	0	0	2	3	0	0	-1	-1	0

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	25
10%	24	25	25	39	45	37	34	22	19	16	18	25
25%	22	24	23	33	38	33	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	33	38	35	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	0	-2	-2	0
1%	0	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%	0	0	0	-1	0	1	1	1	0	0	-2	0
25%	0	0	0	-1	-1	1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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.2-1-6-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%	27	28	30	48	67	51	39	23	20	17	19	28
1%	26	28	29	48	57	42	37	23	20	17	19	27
5%	25	26	26	41	48	39	36	23	19	17	18	26
10%	24	25	25	39	45	36	34	22	18	16	18	24
25%	22	24	23	34	38	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	18	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	33	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	-1	-1	-2	-2	0
1%	0	0	0	1	0	1	0	-1	0	-2	-2	-1
5%	0	0	0	-2	0	2	2	0	0	-1	-2	-1
10%	-1	0	0	-1	0	1	1	1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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	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	18	13	14	12	13	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	21	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	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	17	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%	1	0	0	0	0	0	2	0	0	0	0	0
1%	0	0	0	1	0	0	0	0	0	0	0	-1
5%	0	0	0	0	0	0	0	0	0	-1	0	0
10%	0	0	-1	-1	0	0	0	0	0	1	-1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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	176	209	184	169	134	105	103	144	158	154	163
1%	156	176	193	183	162	120	91	97	132	146	150	162
5%	146	168	180	172	129	100	85	74	105	120	143	155
10%	142	162	164	143	115	88	80	65	78	105	131	147
25%	134	135	143	113	88	80	69	54	49	55	86	130
50%	116	102	116	86	74	73	64	48	45	44	61	107
75%	39	43	64	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	92	107	88	71	63	54	43	48	53	71	95
Wet Water Years	80	73	64	50	41	33	25	18	32	38	39	47
Above Normal Water Years	91	84	109	84	64	56	51	41	41	33	43	54
Below Normal Water Years	74	79	111	90	72	70	58	46	44	45	71	122
Dry Water Years	97	100	135	110	87	75	68	52	45	53	88	120
Critical Water Years	116	133	135	121	104	93	80	71	92	108	125	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	1	5	-4	1	0	4	-3	-1	5	-19	-21
1%	0	2	-7	-4	0	6	0	0	-5	-5	-10	-5
5%	2	6	-9	-4	3	-2	0	1	5	-10	-2	3
10%	2	9	-4	-11	0	1	1	0	-1	-6	-2	-2
25%	2	3	0	-1	-3	1	-2	-1	2	2	-3	-1
50%	-2	-5	0	1	2	1	-2	-2	2	0	2	6
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.2-2-3-D. Banks Pumping Plant, Difference in Monthly Average Chloride (in milligrams per liter), Alternative 2 With TUCP Without VA minus Baseline Conditions

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

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%	169	183	208	184	169	128	95	78	117	157	140	155
1%	157	177	193	183	162	120	85	74	107	136	135	151
5%	154	167	180	172	129	103	81	67	75	95	121	141
10%	144	161	166	147	115	91	75	62	67	77	104	134
25%	134	135	142	113	88	81	69	54	49	55	80	126
50%	119	103	118	86	74	73	64	48	45	44	62	105
75%	39	42	64	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	92	107	88	71	63	53	42	45	50	66	92
Wet Water Years	80	73	64	50	41	33	25	18	32	38	39	47
Above Normal Water Years	91	84	108	85	64	57	51	41	41	33	43	54
Below Normal Water Years	77	82	113	90	72	70	58	47	44	45	71	121
Dry Water Years	97	100	133	109	87	75	68	52	45	53	87	120
Critical Water Years	118	133	136	123	103	96	76	63	76	86	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%	12	8	5	-4	1	-6	-6	-28	-28	4	-33	-29
1%	1	3	-7	-4	0	6	-6	-23	-30	-15	-25	-15
5%	10	5	-10	-4	3	1	-3	-7	-25	-35	-25	-11
10%	3	8	-2	-7	0	3	-4	-3	-12	-34	-29	-15
25%	2	3	0	0	-3	2	-2	-1	2	2	-9	-5
50%	1	-4	1	2	2	1	-1	-2	2	0	2	4
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	2	1	-1	0	0	1	-1	-3	-2	-4	-4	-2
Wet Water Years	0	0	-1	0	0	0	0	-1	0	1	2	2
Above Normal Water Years	1	1	-6	2	0	0	-1	-3	0	0	6	3
Below Normal Water Years	3	4	-1	0	1	0	0	-1	1	1	3	-3
Dry Water Years	2	0	-1	-3	0	1	0	-1	2	1	3	5
Critical Water Years	3	3	2	-1	1	5	-4	-10	-18	-28	-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%	164	181	210	186	222	131	96	78	117	160	136	155
1%	163	181	206	184	169	123	86	75	106	136	135	154
5%	160	169	182	168	129	114	85	68	75	95	120	146
10%	144	162	167	140	115	103	82	64	67	77	104	141
25%	135	135	142	113	89	94	75	57	50	55	84	129
50%	122	104	117	86	74	76	69	51	45	45	65	111
75%	39	43	64	59	54	45	39	34	40	36	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	93	108	88	72	69	56	44	46	50	67	93
Wet Water Years	82	75	66	51	41	34	25	18	32	38	39	46
Above Normal Water Years	91	85	109	85	64	63	56	44	42	34	42	52
Below Normal Water Years	77	80	115	92	73	81	63	49	45	45	72	124
Dry Water Years	97	100	133	107	87	85	75	56	45	54	91	124
Critical Water Years	119	134	134	124	110	98	77	63	76	87	94	128

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%	7	6	6	-2	53	-3	-5	-28	-28	7	-36	-29
1%	8	6	7	-3	7	9	-5	-22	-31	-15	-26	-12
5%	16	7	-8	-8	3	12	0	-5	-24	-35	-25	-6
10%	3	9	-1	-14	0	15	3	-2	-12	-34	-29	-8
25%	3	3	-1	0	-1	15	4	1	2	2	-5	-2
50%	4	-3	0	2	2	4	4	1	3	0	5	10
75%	0	0	1	1	0	2	1	-1	1	0	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	2	2	-1	0	1	7	2	-1	-2	-3	-3	0
Wet Water Years	2	1	0	1	-1	1	0	0	0	1	2	2
Above Normal Water Years	2	2	-5	2	0	6	3	0	1	0	4	2
Below Normal Water Years	3	2	1	2	1	12	5	1	2	1	4	0
Dry Water Years	1	0	0	-5	0	10	6	2	3	2	7	10
Critical Water Years	4	5	0	0	8	7	-3	-9	-18	-27	-39	-21

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%	176	185	210	207	169	129	95	77	109	154	137	152
1%	162	182	205	186	162	120	86	73	90	116	137	150
5%	159	170	179	170	129	112	84	66	72	88	121	146
10%	146	162	166	139	112	103	82	64	64	76	102	140
25%	132	133	143	111	89	94	75	57	48	55	85	128
50%	120	102	116	87	74	77	69	52	44	45	63	108
75%	39	43	64	59	54	44	38	34	40	37	39	51
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	91	92	108	88	71	69	56	43	45	50	66	93
Wet Water Years	81	73	66	51	41	34	25	18	32	38	39	46
Above Normal Water Years	91	85	109	84	64	63	56	44	41	35	41	52
Below Normal Water Years	77	80	114	91	73	81	63	48	43	46	70	124
Dry Water Years	96	100	135	109	87	85	75	56	44	54	91	124
Critical Water Years	120	132	133	125	102	98	77	62	71	83	93	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%	19	11	6	18	1	-4	-6	-29	-35	2	-35	-32
1%	7	8	6	-1	0	6	-5	-24	-47	-34	-23	-16
5%	15	9	-11	-5	3	10	0	-7	-27	-42	-24	-6
10%	5	9	-2	-15	-3	15	3	-1	-14	-35	-31	-9
25%	0	1	0	-2	-2	15	4	2	1	2	-4	-3
50%	2	-5	-1	2	2	5	4	1	1	1	4	7
75%	0	0	0	1	0	1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	2	1	-1	0	0	7	2	-1	-3	-4	-3	0
Wet Water Years	0	0	0	1	0	1	0	0	0	1	2	2
Above Normal Water Years	2	2	-5	1	0	6	3	0	0	1	3	2
Below Normal Water Years	3	2	0	1	1	12	5	1	1	2	3	0
Dry Water Years	1	0	2	-3	0	10	6	3	2	3	7	9
Critical Water Years	5	3	0	1	0	7	-4	-11	-23	-32	-40	-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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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%	161	183	185	192	160	127	101	100	138	158	154	164
1%	157	181	184	177	147	114	92	98	133	145	152	164
5%	150	169	164	150	127	102	86	71	105	124	145	153
10%	142	161	152	134	120	87	78	66	79	104	134	145
25%	134	135	139	107	85	80	69	54	48	55	90	130
50%	118	108	120	78	70	70	63	48	45	44	68	113
75%	61	73	65	61	51	42	39	34	39	36	50	94
99.9%	22	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	99	104	105	83	69	62	54	43	48	53	75	112
Wet Water Years	89	84	66	51	40	32	24	18	32	37	47	83
Above Normal Water Years	102	102	105	74	61	55	51	41	41	33	55	101
Below Normal Water Years	89	101	110	83	69	69	58	46	43	43	70	124
Dry Water Years	103	111	127	100	84	75	68	52	44	53	89	122
Critical Water Years	120	137	135	123	102	91	80	71	92	110	125	145

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%	5	9	-19	3	-8	-7	0	-6	-7	5	-19	-20
1%	1	7	-15	-10	-15	-1	0	1	-5	-5	-8	-3
5%	6	7	-26	-26	1	-1	1	-2	5	-6	0	1
10%	2	8	-16	-20	5	0	-1	1	0	-7	1	-4
25%	2	3	-4	-6	-5	1	-2	-1	1	2	1	-1
50%	0	1	3	-6	-2	-2	-2	-2	2	0	8	12
75%	22	30	2	3	-2	-1	2	-2	0	0	13	46
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	10	14	-3	-5	-2	-1	-1	-1	0	0	6	19
Wet Water Years	9	11	0	1	-1	-1	0	-1	0	0	10	38
Above Normal Water Years	13	19	-8	-9	-3	-2	-2	-3	0	-1	18	51
Below Normal Water Years	15	22	-4	-8	-3	0	0	-2	0	-1	3	-1
Dry Water Years	8	11	-6	-11	-2	0	-1	-1	2	2	5	7
Critical Water Years	5	8	1	-1	0	0	-1	-1	-1	-4	-8	-4

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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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	171	192	176	164	132	101	98	140	154	152	161
1%	150	171	178	172	163	121	92	95	127	145	148	158
5%	141	163	169	164	136	107	89	76	102	118	141	152
10%	137	155	156	137	114	97	83	68	78	101	127	145
25%	128	131	134	116	93	86	75	57	54	60	85	126
50%	109	105	120	90	78	79	67	51	50	52	64	105
75%	50	59	70	65	53	43	38	35	44	45	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	89	74	67	56	45	51	59	74	95
Wet Water Years	84	81	69	54	43	34	25	18	34	47	48	53
Above Normal Water Years	93	92	108	88	67	60	53	43	45	44	51	59
Below Normal Water Years	79	88	108	92	75	75	61	49	48	52	74	118
Dry Water Years	98	103	129	110	91	81	72	56	50	57	88	117
Critical Water Years	115	133	129	119	106	99	84	73	92	107	123	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	1	3	-3	0	0	3	-3	-1	5	-18	-18
1%	1	3	-6	0	1	5	-1	0	-7	-4	-10	-6
5%	2	5	-9	-4	7	-2	0	1	4	-9	-3	2
10%	3	8	-3	-9	-1	1	-1	-1	-3	-11	-2	1
25%	0	3	0	-1	-3	1	0	-1	2	3	-4	-2
50%	-5	-4	1	3	1	0	-2	-2	2	0	2	6
75%	0	1	0	1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	1	1	-1	0	0	0	0	-1	0	0	1	1
Wet Water Years	0	0	-1	0	-1	0	0	0	0	1	2	1
Above Normal Water Years	1	1	-3	1	0	-1	-1	-2	0	0	5	3
Below Normal Water Years	0	1	-2	0	0	0	0	-1	1	1	3	-2
Dry Water Years	1	0	1	-1	0	1	0	-1	2	1	3	5
Critical Water Years	1	3	2	-2	2	3	0	-1	-1	-6	-9	-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%	162	173	192	176	164	129	95	80	114	153	136	148
1%	151	173	178	172	163	125	87	76	105	134	132	147
5%	148	162	169	164	127	114	84	70	75	93	118	136
10%	139	156	159	137	115	97	80	67	69	80	103	130
25%	129	132	133	114	94	87	74	58	54	58	82	121
50%	113	106	120	91	78	79	67	51	50	51	65	105
75%	50	59	70	65	53	44	38	35	44	45	49	58
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	98	106	89	73	67	55	44	49	56	69	92
Wet Water Years	84	81	69	54	43	34	25	18	34	47	48	53
Above Normal Water Years	93	92	107	88	68	60	53	43	46	43	51	59
Below Normal Water Years	81	90	110	92	75	74	61	49	49	52	74	117
Dry Water Years	98	103	127	109	90	81	72	56	50	57	87	117
Critical Water Years	116	132	131	120	105	102	80	66	77	86	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%	12	3	3	-3	0	-2	-2	-22	-27	4	-34	-31
1%	1	5	-5	0	1	9	-6	-19	-28	-15	-26	-17
5%	9	5	-9	-3	-1	5	-5	-5	-22	-34	-26	-14
10%	4	8	0	-8	0	2	-4	-3	-11	-32	-27	-14
25%	2	3	-1	-3	-2	2	-1	-1	2	0	-8	-6
50%	-1	-3	1	4	1	0	-1	-2	2	0	3	6
75%	0	1	0	1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	1	1	-1	0	0	1	-1	-2	-2	-4	-4	-2
Wet Water Years	0	0	-1	0	-1	0	0	0	0	1	2	1
Above Normal Water Years	1	1	-4	2	0	0	-1	-2	0	0	5	3
Below Normal Water Years	3	3	-1	0	0	-1	0	-1	1	1	3	-3
Dry Water Years	1	0	-1	-2	0	1	0	-1	2	1	3	5
Critical Water Years	3	2	3	-1	1	6	-4	-8	-16	-27	-39	-22

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%	158	175	193	176	209	131	96	80	114	155	133	148
1%	156	173	190	172	164	130	90	76	105	134	132	146
5%	152	164	171	156	136	119	88	71	75	94	118	140
10%	139	158	158	135	115	114	86	68	69	79	103	136
25%	129	132	137	115	94	102	80	61	54	60	84	125
50%	115	108	119	90	78	82	70	54	50	52	66	108
75%	50	59	70	65	53	45	38	36	45	46	49	57
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	75	73	58	45	49	56	70	94
Wet Water Years	85	83	70	54	43	36	25	18	34	47	48	53
Above Normal Water Years	94	93	108	88	68	67	56	45	46	44	50	59
Below Normal Water Years	82	88	112	94	76	87	65	51	49	52	75	120
Dry Water Years	98	104	128	107	91	91	78	59	50	58	91	121
Critical Water Years	117	133	130	120	111	104	81	67	77	87	93	125

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%	8	5	4	-3	46	0	-1	-22	-26	6	-37	-32
1%	6	5	6	0	1	14	-3	-19	-29	-15	-26	-18
5%	13	6	-8	-11	7	11	-1	-4	-22	-34	-26	-10
10%	5	10	-1	-10	0	18	2	-2	-11	-32	-26	-8
25%	2	3	2	-3	-2	18	5	2	2	2	-5	-2
50%	1	-1	1	4	1	3	2	1	2	0	4	8
75%	0	1	0	1	0	2	1	-1	2	0	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	2	1	0	0	1	7	2	0	-2	-3	-3	-1
Wet Water Years	1	1	0	0	-1	1	0	0	0	1	1	1
Above Normal Water Years	2	1	-3	2	0	7	3	0	1	0	4	2
Below Normal Water Years	3	1	2	1	1	13	4	1	2	1	4	0
Dry Water Years	1	0	0	-4	0	11	6	2	2	2	7	9
Critical Water Years	4	4	3	0	7	7	-3	-8	-16	-26	-38	-21

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%	168	176	193	178	163	130	95	79	107	149	136	146
1%	154	175	189	177	163	125	90	75	89	115	134	144
5%	152	165	169	163	129	119	88	69	74	88	118	142
10%	141	154	158	135	114	113	86	68	67	78	101	136
25%	127	130	137	115	94	102	79	62	54	59	86	125
50%	114	107	120	91	78	83	70	54	49	53	66	106
75%	50	59	70	65	53	44	38	36	45	46	49	57
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	107	89	73	73	58	45	48	56	70	93
Wet Water Years	84	81	70	54	43	35	25	18	34	47	47	53
Above Normal Water Years	94	93	108	88	68	66	56	45	46	45	49	58
Below Normal Water Years	82	89	111	93	76	87	65	51	48	53	73	120
Dry Water Years	97	103	130	108	91	92	78	60	50	58	91	121
Critical Water Years	118	131	129	121	104	104	81	66	73	83	92	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%	19	6	4	-1	0	-2	-2	-23	-34	0	-34	-33
1%	5	7	5	5	1	9	-3	-20	-45	-34	-24	-20
5%	14	8	-10	-5	1	10	-1	-6	-24	-40	-26	-8
10%	6	7	-1	-10	-1	18	2	-2	-14	-33	-29	-8
25%	-1	2	3	-3	-2	17	5	3	1	1	-4	-2
50%	0	-3	2	5	2	4	2	1	1	2	4	7
75%	0	1	-1	1	0	1	1	-1	2	1	2	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	2	1	0	0	0	7	2	0	-3	-3	-3	-1
Wet Water Years	0	0	0	0	-1	1	0	0	0	1	1	1
Above Normal Water Years	2	2	-4	1	0	6	3	0	0	1	3	2
Below Normal Water Years	3	2	0	0	1	13	4	1	1	2	2	0
Dry Water Years	1	0	1	-3	0	11	6	3	2	3	7	8
Critical Water Years	5	2	2	1	0	8	-4	-9	-20	-30	-39	-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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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%	154	177	174	182	161	129	98	96	134	154	152	162
1%	151	177	173	170	143	123	93	96	127	144	150	161
5%	142	162	155	143	133	110	89	74	101	123	144	150
10%	136	155	143	130	118	96	81	69	79	100	131	140
25%	129	132	131	111	93	86	75	58	52	61	90	127
50%	112	111	119	82	74	77	67	51	50	50	71	110
75%	67	81	71	66	53	43	38	35	44	45	56	91
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	99	107	104	85	72	66	56	45	51	59	78	109
Wet Water Years	91	90	70	54	42	33	24	18	34	46	54	81
Above Normal Water Years	103	107	105	78	65	58	53	43	45	43	61	99
Below Normal Water Years	90	105	107	85	72	74	60	49	48	51	73	119
Dry Water Years	103	112	122	101	89	81	72	56	49	57	89	119
Critical Water Years	117	135	129	121	105	97	84	73	91	109	123	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%	4	7	-15	2	-2	-3	1	-5	-7	5	-18	-18
1%	2	9	-11	-2	-19	8	0	1	-7	-5	-8	-3
5%	3	5	-24	-25	5	1	0	-1	4	-4	0	0
10%	1	7	-16	-15	3	0	-3	-1	-1	-12	1	-4
25%	1	3	-3	-6	-3	1	0	-1	0	3	1	0
50%	-2	2	1	-4	-3	-2	-2	-3	2	-1	8	11
75%	17	23	1	2	-1	-1	1	-2	1	0	9	37
99.9%	1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	7	11	-3	-5	-1	-1	0	-1	0	0	4	15
Wet Water Years	7	8	0	0	-1	-1	0	0	0	1	8	30
Above Normal Water Years	11	15	-6	-8	-2	-2	-1	-2	0	-1	15	43
Below Normal Water Years	11	18	-3	-7	-3	0	0	-1	0	0	2	-1
Dry Water Years	6	9	-6	-10	-2	0	-1	-1	1	2	5	6
Critical Water Years	4	6	1	0	1	1	-1	-1	-1	-4	-8	-4

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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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%	2159	2149	1825	1439	1366	767	1242	1523	1434	1606	1691	1955
1%	2120	2030	1652	1421	1132	595	1058	1513	1400	1600	1663	1883
5%	1989	1990	1406	1194	503	294	592	1185	1327	1542	1626	1800
10%	1868	1823	1306	1040	342	242	329	703	1199	1361	1450	1745
25%	1712	1654	1178	499	133	48	140	263	433	763	1175	1673
50%	1389	865	669	119	26	25	29	120	268	482	857	1390
75%	237	680	176	22	20	20	21	26	128	282	529	340
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	1025	1106	692	327	127	77	128	242	381	587	894	1066
Wet Water Years	839	801	219	31	20	20	20	43	114	227	498	324
Above Normal Water Years	1001	1015	604	171	35	21	24	75	175	277	535	330
Below Normal Water Years	785	995	786	277	82	34	64	147	326	515	882	1410
Dry Water Years	1107	1295	986	520	150	80	101	203	380	734	1148	1657
Critical Water Years	1516	1562	1049	750	409	272	521	901	1091	1347	1536	1735

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%	27	-44	78	20	296	78	41	-80	3	-118	-212	8
1%	-9	-105	-47	44	379	37	15	-45	-12	-59	-58	33
5%	52	15	-70	-23	-13	-21	-33	40	-10	-6	6	15
10%	10	-22	-55	-28	-16	19	-50	-39	17	-16	-117	8
25%	27	1	17	-74	-31	-5	16	28	29	11	24	15
50%	4	-12	-44	-7	0	0	1	39	-6	-8	-11	75
75%	6	-6	-6	0	0	0	0	1	-4	22	22	15
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	7	-12	-11	-17	0	1	1	14	-4	-3	4	12
Wet Water Years	10	1	-4	-2	0	0	0	8	0	9	30	13
Above Normal Water Years	16	-80	-41	-2	0	0	0	17	-4	13	22	20
Below Normal Water Years	-4	-1	-5	6	-2	-1	6	37	4	-11	-43	5
Dry Water Years	2	-2	15	-49	-25	-3	6	22	12	9	24	25
Critical Water Years	14	1	-43	-35	43	13	-10	-17	-41	-49	-36	-6



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%	2189	2022	1925	1435	1096	592	640	977	1434	1488	1468	1958
1%	2137	1996	1912	1377	791	587	552	941	1403	1365	1413	1910
5%	2059	1829	1566	1194	503	294	393	739	1080	1190	1364	1853
10%	1956	1771	1306	1023	341	177	259	480	607	959	1313	1782
25%	1713	1645	1177	493	130	46	104	263	428	736	1170	1693
50%	1394	864	644	131	26	25	29	120	267	486	861	1399
75%	237	679	177	22	20	20	21	26	128	282	529	340
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	1036	1091	693	324	119	69	95	197	345	543	863	1077
Wet Water Years	839	804	220	31	20	20	20	43	114	227	498	324
Above Normal Water Years	1010	1001	593	172	35	21	24	75	175	277	535	329
Below Normal Water Years	803	980	789	277	82	34	64	147	325	524	892	1421
Dry Water Years	1114	1289	965	508	149	80	101	203	380	733	1147	1657
Critical Water Years	1547	1498	1095	745	362	217	316	621	868	1064	1329	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%	57	-172	178	16	26	-96	-561	-626	3	-236	-436	11
1%	8	-139	212	0	38	30	-491	-618	-9	-295	-307	60
5%	122	-146	89	-22	-14	-21	-232	-406	-257	-359	-257	67
10%	98	-74	-55	-46	-17	-46	-120	-262	-575	-419	-254	44
25%	28	-9	16	-80	-34	-6	-20	28	25	-17	19	35
50%	8	-12	-69	6	0	0	1	39	-7	-4	-7	84
75%	6	-6	-6	0	0	0	0	1	-4	23	22	15
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	18	-27	-9	-21	-7	-8	-32	-31	-39	-47	-28	23
Wet Water Years	9	4	-3	-2	0	0	0	8	0	9	30	13
Above Normal Water Years	25	-94	-52	-2	0	0	0	17	-4	13	22	19
Below Normal Water Years	14	-16	-2	6	-2	-1	6	36	3	-3	-33	17
Dry Water Years	9	-7	-6	-60	-26	-3	6	22	12	8	23	25
Critical Water Years	44	-62	3	-40	-4	-42	-216	-298	-264	-332	-244	50

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%	2223	2062	1882	2068	1748	621	642	976	1435	1506	1487	1976
1%	2207	2016	1871	1433	1106	593	556	929	1392	1372	1446	1898
5%	2097	1841	1584	1221	531	293	388	730	1112	1205	1371	1856
10%	1990	1729	1282	1017	339	170	241	475	606	966	1353	1791
25%	1706	1640	1151	521	142	40	87	265	441	762	1191	1690
50%	1373	881	656	168	26	25	28	113	270	488	864	1402
75%	237	696	177	22	20	21	22	26	129	269	531	340
99.9%	37	18	15	12	14	12	11	10	13	36	174	101

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	1041	1084	696	342	132	66	89	193	348	545	867	1080
Wet Water Years	854	798	221	33	20	20	20	43	116	223	495	325
Above Normal Water Years	1009	1016	598	172	35	22	24	65	179	270	525	330
Below Normal Water Years	810	962	820	293	82	30	53	145	332	526	892	1425
Dry Water Years	1108	1289	952	523	158	64	84	193	382	744	1166	1658
Critical Water Years	1557	1477	1090	816	429	228	314	620	869	1073	1342	1800

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%	90	-131	136	650	678	-67	-559	-627	4	-218	-417	30
1%	78	-119	172	56	352	35	-487	-630	-20	-288	-274	47
5%	160	-135	108	4	15	-23	-236	-415	-225	-344	-250	70
10%	132	-116	-79	-52	-19	-53	-138	-267	-576	-411	-215	54
25%	21	-14	-10	-52	-21	-12	-36	30	38	9	40	33
50%	-13	5	-57	42	1	0	0	33	-4	-3	-3	87
75%	5	10	-6	0	0	1	1	2	-3	10	24	15
99.9%	8	0	0	0	0	0	0	0	0	0	4	26

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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	24	-33	-7	-2	6	-10	-38	-35	-36	-45	-23	26
Wet Water Years	25	-3	-1	0	0	0	0	8	2	5	28	15
Above Normal Water Years	24	-79	-46	-1	0	1	0	7	0	6	12	20
Below Normal Water Years	21	-34	29	22	-2	-5	-5	35	10	-1	-33	20
Dry Water Years	3	-8	-19	-46	-17	-18	-10	13	14	19	42	26
Critical Water Years	55	-84	-2	31	63	-31	-218	-298	-263	-323	-231	59

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%	2229	2105	2043	1578	1080	577	610	917	1379	1498	1450	1980
1%	2201	2012	1877	1441	673	567	523	853	1223	1300	1432	1924
5%	2081	1884	1482	1235	437	267	357	619	973	1179	1377	1853
10%	1954	1749	1323	1042	327	138	220	411	556	991	1329	1789
25%	1694	1627	1152	509	145	40	72	208	420	763	1195	1682
50%	1354	870	635	165	26	25	27	75	270	502	838	1395
75%	237	695	177	22	20	21	21	26	137	262	531	342
99.9%	37	18	15	12	14	12	11	10	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	1031	1083	699	333	117	62	77	159	329	541	861	1076
Wet Water Years	826	800	223	32	20	20	20	41	116	222	491	323
Above Normal Water Years	1013	1005	591	170	35	22	23	48	172	265	510	326
Below Normal Water Years	795	957	799	283	82	30	38	102	320	523	879	1410
Dry Water Years	1105	1285	976	531	157	63	67	154	360	746	1166	1657
Critical Water Years	1559	1486	1098	760	339	202	282	536	802	1054	1336	1800

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%	97	-88	297	160	11	-111	-591	-686	-52	-226	-454	33
1%	72	-123	177	64	-80	10	-520	-706	-188	-360	-289	74
5%	144	-91	6	18	-80	-48	-267	-525	-364	-369	-244	68
10%	96	-96	-39	-26	-31	-85	-159	-331	-626	-386	-238	52
25%	9	-27	-9	-64	-18	-12	-52	-27	17	10	44	24
50%	-31	-6	-78	39	0	0	-1	-5	-4	12	-29	80
75%	5	10	-6	0	0	1	0	1	6	2	24	17
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	13	-34	-4	-12	-9	-15	-50	-69	-56	-49	-30	22
Wet Water Years	-4	-1	0	-1	0	0	0	6	2	4	24	13
Above Normal Water Years	28	-90	-53	-3	0	1	-1	-10	-7	2	-3	16
Below Normal Water Years	6	-39	8	12	-2	-5	-20	-9	-2	-4	-46	5
Dry Water Years	0	-12	5	-38	-18	-20	-28	-27	-8	20	42	26
Critical Water Years	57	-75	7	-25	-27	-57	-250	-382	-331	-342	-237	58

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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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%	2176	2133	1922	1415	844	681	1209	1519	1527	1618	1712	1944
1%	2121	2039	1838	1354	783	532	1057	1518	1470	1600	1699	1838
5%	2011	1956	1380	1077	666	333	581	1150	1337	1556	1619	1802
10%	1872	1833	1316	1027	389	238	333	704	1232	1291	1438	1767
25%	1724	1668	1107	566	150	48	115	261	439	742	1149	1665
50%	1341	1251	564	106	26	25	29	123	268	476	830	1405
75%	688	930	198	22	20	20	20	26	128	277	715	782
99.9%	43	18	15	12	14	12	11	11	13	35	171	99

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	1209	1229	657	310	130	80	129	243	385	580	957	1237
Wet Water Years	1013	910	212	28	20	20	20	43	113	226	659	719
Above Normal Water Years	1231	1206	487	96	29	21	24	75	175	275	739	775
Below Normal Water Years	1079	1181	749	233	81	34	62	148	331	499	863	1403
Dry Water Years	1287	1404	920	533	185	87	99	204	381	715	1120	1646
Critical Water Years	1562	1597	1086	745	385	275	533	906	1113	1352	1529	1747

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%	44	-60	175	-3	-225	-7	8	-84	96	-106	-192	-3
1%	-7	-96	139	-23	30	-25	14	-41	59	-60	-21	-12
5%	74	-19	-96	-140	149	18	-44	6	-1	8	-1	16
10%	14	-12	-45	-42	30	15	-46	-38	50	-87	-130	30
25%	39	15	-54	-7	-13	-4	-9	26	36	-11	-2	8
50%	-45	374	-149	-20	0	0	1	42	-6	-14	-37	90
75%	456	245	15	0	0	0	-1	1	-4	18	208	457
99.9%	14	0	0	0	0	0	0	0	0	-1	0	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	191	111	-46	-34	4	3	2	15	1	-11	66	183
Wet Water Years	184	109	-10	-4	0	0	0	8	0	8	191	409
Above Normal Water Years	246	111	-158	-77	-6	0	0	17	-4	11	226	465
Below Normal Water Years	290	184	-42	-38	-3	-1	3	38	9	-28	-62	-1
Dry Water Years	182	107	-51	-36	10	4	5	23	13	-10	-4	14
Critical Water Years	59	36	-6	-40	19	16	2	-12	-20	-44	-43	5

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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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%	234	242	269	260	218	135	126	169	171	177	181	174
1%	221	240	267	251	205	125	89	145	167	165	173	173
5%	204	233	237	227	165	70	60	84	131	143	160	169
10%	189	219	224	196	122	54	48	52	86	124	145	163
25%	166	173	207	138	67	40	38	34	29	50	93	142
50%	136	133	170	72	38	32	31	29	26	37	58	118
75%	22	39	84	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.2-5-3-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	91	57	37	35	35	37	48	72	98
Wet Water Years	91	88	78	36	36	27	24	20	20	23	32	37
Above Normal Water Years	101	103	139	74	41	32	32	28	24	26	38	43
Below Normal Water Years	77	90	148	94	46	33	33	29	26	38	73	132
Dry Water Years	110	124	188	129	66	36	34	32	28	49	90	134
Critical Water Years	150	175	189	141	104	64	59	79	103	121	142	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%	1	-5	4	6	4	2	0	-3	4	3	-25	-34
1%	-3	0	2	3	1	4	4	3	2	-6	-15	-2
5%	15	6	-10	-4	8	2	-10	6	2	-11	2	-1
10%	4	1	-1	-20	7	4	-7	-8	3	-4	3	-2
25%	-1	0	-2	-4	-8	1	-5	-5	1	-1	-2	0
50%	1	-2	-2	-5	1	1	-5	-3	0	1	1	4
75%	0	0	-2	0	0	0	-2	-3	0	0	4	2
99.9%	0	0	-1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	1	0	-2	-2	0	1	-4	-4	-1	-1	2	2
Wet Water Years	1	0	-2	-1	0	0	-3	-3	0	0	2	2
Above Normal Water Years	4	-1	-12	-1	3	1	-9	-6	-1	1	6	5
Below Normal Water Years	1	1	-2	-2	0	0	-6	-6	0	0	3	-1
Dry Water Years	0	0	3	-1	-4	0	-2	-3	0	1	5	7
Critical Water Years	1	1	-1	-6	2	5	0	-3	-3	-7	-8	-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	241	287	274	218	124	87	84	131	175	146	173
1%	235	240	269	251	205	115	75	78	130	146	145	166
5%	218	231	234	230	156	70	61	63	89	103	126	155
10%	196	221	224	206	122	59	48	46	53	86	109	149
25%	175	173	202	143	67	40	38	34	29	47	87	141
50%	138	130	168	75	40	32	31	29	26	36	61	116
75%	22	39	83	29	27	27	27	24	23	24	34	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	142	92	56	37	34	31	32	42	65	95
Wet Water Years	91	88	78	36	36	27	24	20	20	23	32	37
Above Normal Water Years	102	103	137	74	40	32	32	28	24	26	38	43
Below Normal Water Years	83	92	149	97	46	33	33	29	26	38	73	131
Dry Water Years	112	124	185	125	66	36	34	32	28	49	90	134
Critical Water Years	157	174	187	149	99	63	53	54	74	87	102	146

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	-5	22	20	4	-9	-38	-88	-36	1	-61	-35
1%	11	0	4	3	1	-5	-10	-64	-36	-25	-44	-9
5%	30	5	-12	0	-1	3	-10	-16	-41	-51	-32	-15
10%	11	3	0	-11	7	10	-7	-14	-30	-43	-33	-16
25%	8	0	-7	1	-8	1	-5	-5	1	-4	-7	-1
50%	2	-4	-3	-2	3	1	-5	-3	0	1	4	2
75%	0	0	-2	0	0	0	-2	-3	0	0	4	3
99.9%	0	0	-1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	4	0	-3	-1	-1	1	-5	-8	-5	-6	-5	0
Wet Water Years	1	0	-2	-1	0	0	-3	-3	0	0	2	2
Above Normal Water Years	5	-1	-14	-1	2	0	-9	-6	-1	1	6	5
Below Normal Water Years	7	3	-1	0	1	0	-6	-5	0	1	3	-2
Dry Water Years	2	0	-1	-4	-5	0	-2	-3	0	1	4	6
Critical Water Years	9	0	-3	3	-3	4	-6	-27	-32	-41	-48	-18

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%	239	248	297	315	340	148	90	85	131	180	153	173
1%	235	244	268	275	215	122	78	79	128	147	144	173
5%	226	225	233	228	149	75	71	63	88	102	128	163
10%	199	218	224	195	124	60	62	46	52	87	112	157
25%	174	173	205	145	69	47	50	39	30	50	92	143
50%	143	133	160	77	40	40	42	33	26	36	65	122
75%	22	40	86	29	27	30	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	43	43	34	32	43	67	97
Wet Water Years	93	90	80	38	36	28	28	21	20	23	31	37
Above Normal Water Years	103	104	138	74	40	41	52	34	25	26	37	42
Below Normal Water Years	84	92	153	103	47	45	47	33	27	38	75	135
Dry Water Years	112	125	184	121	66	41	43	36	28	51	95	139
Critical Water Years	158	174	181	154	113	69	54	55	74	88	104	148

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%	6	1	32	61	127	15	-36	-87	-36	6	-54	-34
1%	11	4	4	27	11	2	-6	-63	-37	-24	-44	-2
5%	37	-1	-14	-3	-9	7	0	-15	-42	-52	-30	-7
10%	14	0	-1	-22	9	10	7	-14	-31	-42	-30	-9
25%	8	-1	-5	3	-6	8	6	0	2	-2	-3	1
50%	7	-1	-12	0	3	9	6	1	0	1	7	7
75%	0	1	0	0	0	3	2	-2	0	0	3	2
99.9%	0	0	-1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	5	1	-3	0	1	6	4	-5	-5	-6	-3	2
Wet Water Years	3	2	0	0	0	1	1	-2	0	0	1	2
Above Normal Water Years	6	0	-13	-1	2	9	11	1	0	1	4	4
Below Normal Water Years	7	2	3	6	1	12	8	-1	0	1	5	2
Dry Water Years	2	1	-1	-8	-4	5	7	2	1	2	9	12
Critical Water Years	10	0	-9	7	11	10	-5	-27	-32	-40	-46	-16

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%	246	251	296	385	217	124	87	80	121	175	154	173
1%	231	250	268	252	205	118	78	76	104	126	147	171
5%	225	233	240	224	148	71	71	56	79	92	124	164
10%	197	218	226	194	122	59	64	45	45	83	111	152
25%	173	171	209	139	68	48	49	38	29	48	89	143
50%	143	132	159	76	39	39	41	32	25	34	61	119
75%	22	41	86	28	27	30	31	25	23	24	32	41
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	113	143	93	56	41	42	33	30	42	66	97
Wet Water Years	91	88	80	37	36	28	28	20	20	23	31	37
Above Normal Water Years	103	105	138	73	39	40	51	33	24	26	35	41
Below Normal Water Years	84	92	151	98	47	45	47	31	26	38	72	134
Dry Water Years	112	124	187	125	66	41	43	36	27	50	95	138
Critical Water Years	158	172	182	154	99	63	53	51	65	82	101	147

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%	13	4	31	132	4	-9	-39	-92	-45	1	-53	-34
1%	7	11	4	4	1	-2	-7	-66	-61	-46	-42	-4
5%	36	7	-6	-7	-9	4	1	-23	-51	-63	-34	-6
10%	12	0	1	-23	6	9	9	-15	-38	-46	-31	-13
25%	6	-3	0	-4	-7	9	6	-2	0	-3	-6	1
50%	8	-3	-13	-1	2	8	6	0	-1	-1	4	5
75%	0	1	0	0	0	3	1	-2	0	0	1	3
99.9%	0	0	-1	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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	4	0	-3	0	-1	5	4	-6	-7	-7	-5	1
Wet Water Years	1	0	0	-1	0	0	1	-2	0	0	1	2
Above Normal Water Years	6	1	-13	-2	1	9	10	0	0	1	3	3
Below Normal Water Years	7	2	1	2	1	12	8	-3	0	1	2	1
Dry Water Years	1	0	1	-4	-4	5	7	1	0	2	9	11
Critical Water Years	9	-3	-8	7	-2	4	-6	-31	-41	-46	-49	-17

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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
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%	233	246	284	275	203	115	117	166	167	178	182	179
1%	223	245	281	244	179	95	93	146	163	171	176	175
5%	198	232	237	201	161	75	58	78	134	147	164	170
10%	190	221	222	169	119	61	48	55	88	123	143	162
25%	170	178	204	113	71	38	37	34	29	51	96	142
50%	138	137	168	61	36	31	30	29	26	36	66	118
75%	54	86	96	29	27	26	27	24	23	24	49	93
99.9%	19	20	12	7	7	6	5	5	13	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	117	134	148	81	55	36	34	35	37	48	77	118
Wet Water Years	102	106	84	35	36	27	24	20	20	23	43	80
Above Normal Water Years	118	131	146	51	36	32	31	28	24	26	54	96
Below Normal Water Years	99	125	158	79	41	32	33	29	26	38	72	133
Dry Water Years	121	143	186	110	69	37	34	31	28	50	92	135
Critical Water Years	156	182	196	143	98	59	59	79	104	124	143	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%	0	-1	19	21	-10	-18	-9	-6	1	4	-25	-28
1%	-1	5	16	-4	-25	-26	9	4	-2	-1	-12	0
5%	9	6	-9	-30	3	7	-12	-1	4	-7	6	0
10%	4	3	-2	-48	3	11	-7	-5	5	-5	1	-3
25%	3	5	-6	-30	-4	-1	-7	-6	1	0	2	0
50%	2	3	-3	-16	-2	0	-6	-3	0	1	9	4
75%	32	46	11	1	-1	0	-3	-3	0	0	18	55
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

<b>Average</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
Full Simulation Period	14	21	3	-12	-2	0	-4	-4	0	0	7	22
Wet Water Years	12	18	4	-2	0	-1	-4	-3	0	0	12	46
Above Normal Water Years	21	28	-5	-24	-3	1	-10	-6	-1	1	22	58
Below Normal Water Years	22	35	8	-17	-4	-1	-6	-6	0	1	3	0
Dry Water Years	11	19	1	-19	-2	1	-2	-4	0	2	6	8
Critical Water Years	8	8	6	-4	-4	0	-1	-3	-2	-5	-7	-4

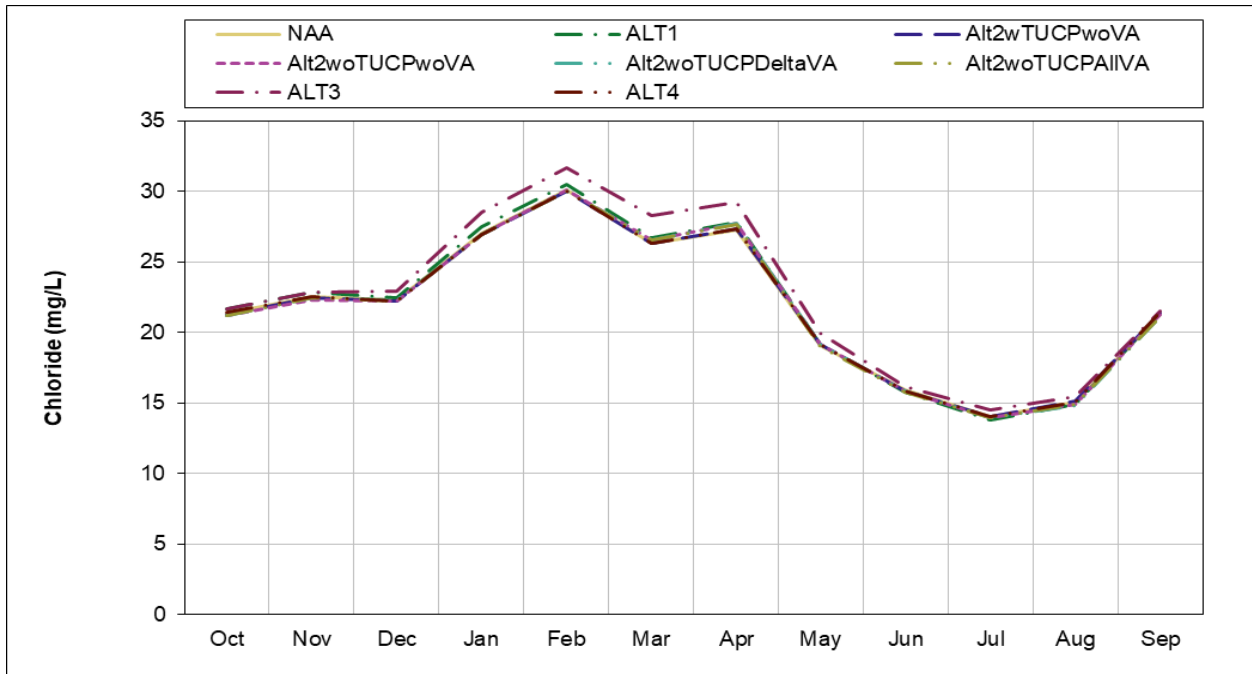


Figure G.2-1-1. Barker Slough at North Bay Aqueduct, Long term Monthly Average Chloride (in milligrams per liter)

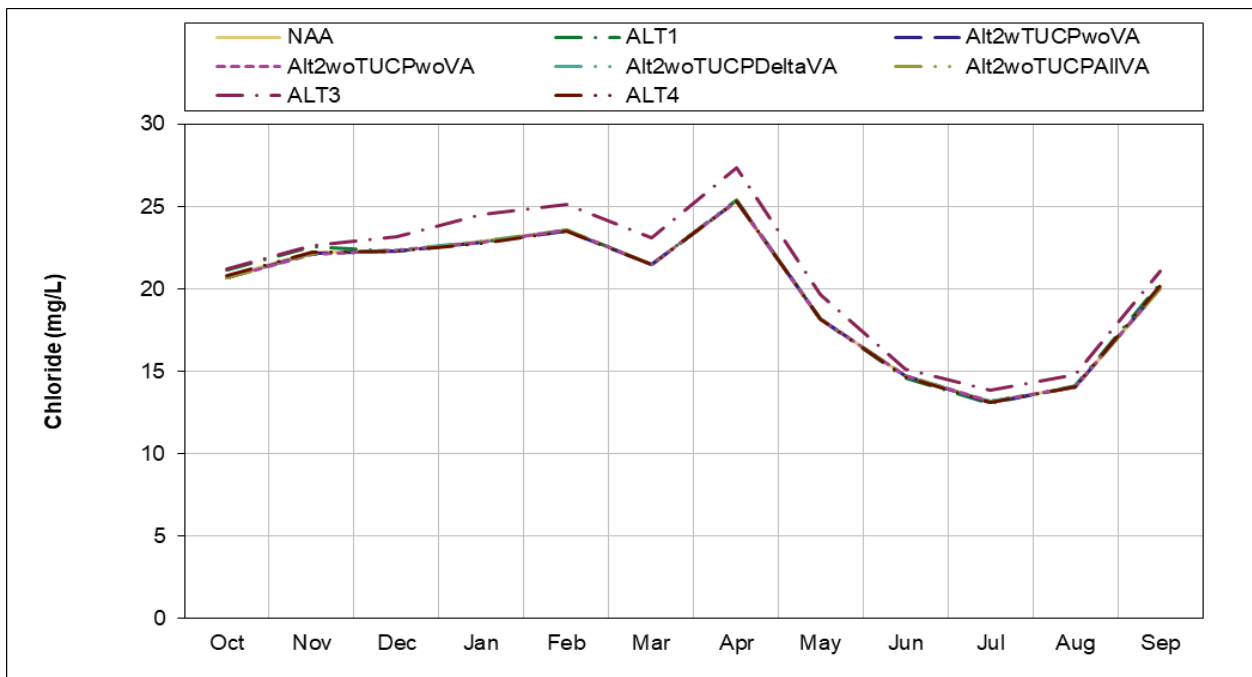


Figure G.2-1-2. Barker Slough at North Bay Aqueduct, Wet Year Monthly Average Chloride (in milligrams per liter)

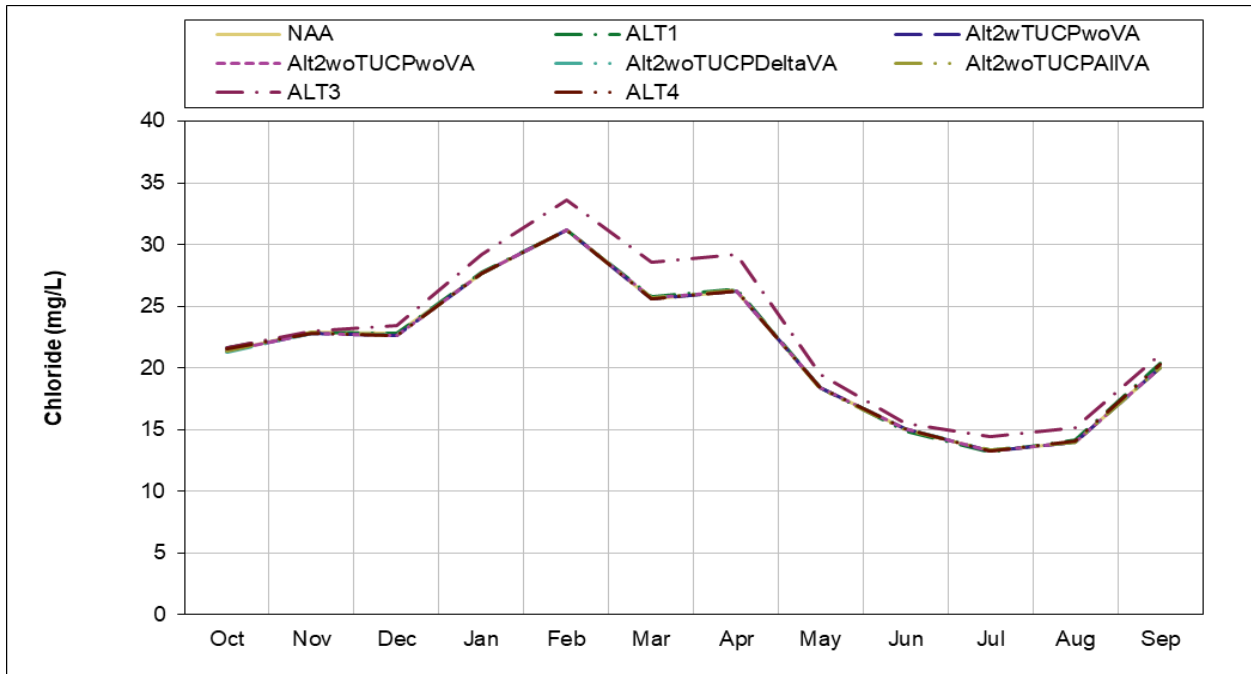


Figure G.2-1-3. Barker Slough at North Bay Aqueduct, Above Normal Year Monthly Average Chloride (in milligrams per liter)

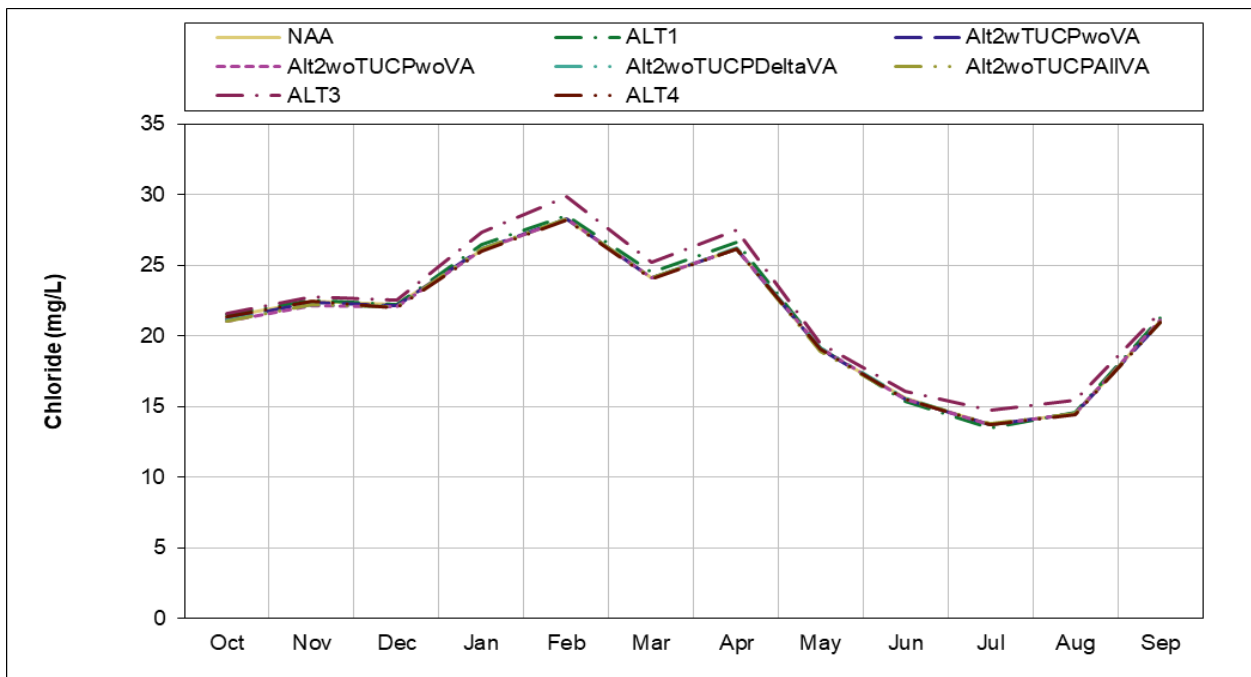


Figure G.2-1-4. Barker Slough at North Bay Aqueduct, Below Normal Year Monthly Average Chloride (in milligrams per liter)

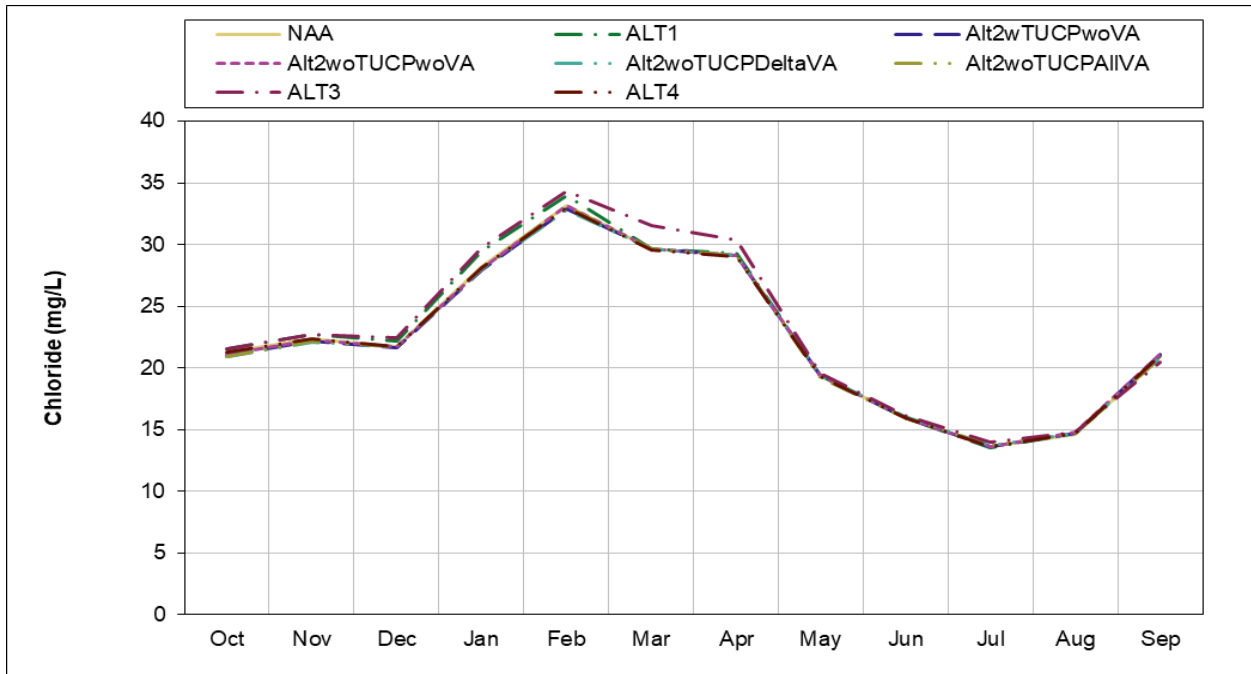


Figure G.2-1-5. Barker Slough at North Bay Aqueduct, Dry Year Monthly Average Chloride (in milligrams per liter)

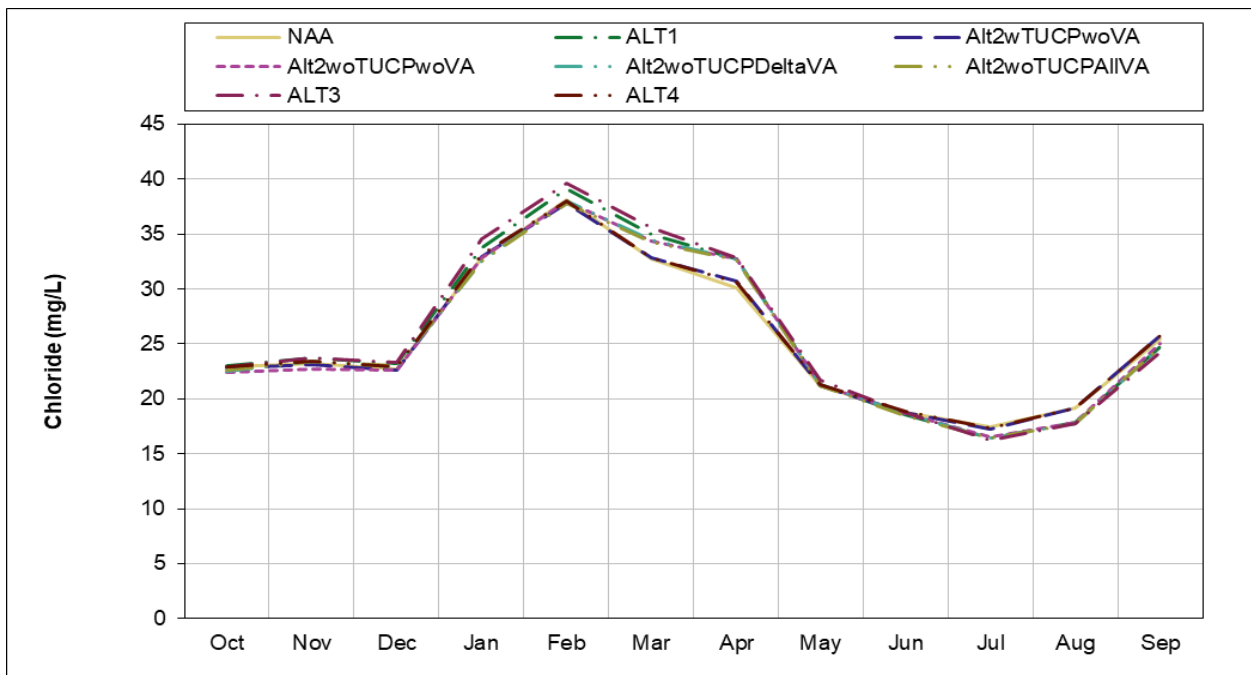


Figure G.2-1-6. Barker Slough at North Bay Aqueduct, Critical Year Monthly Average Chloride (in milligrams per liter)

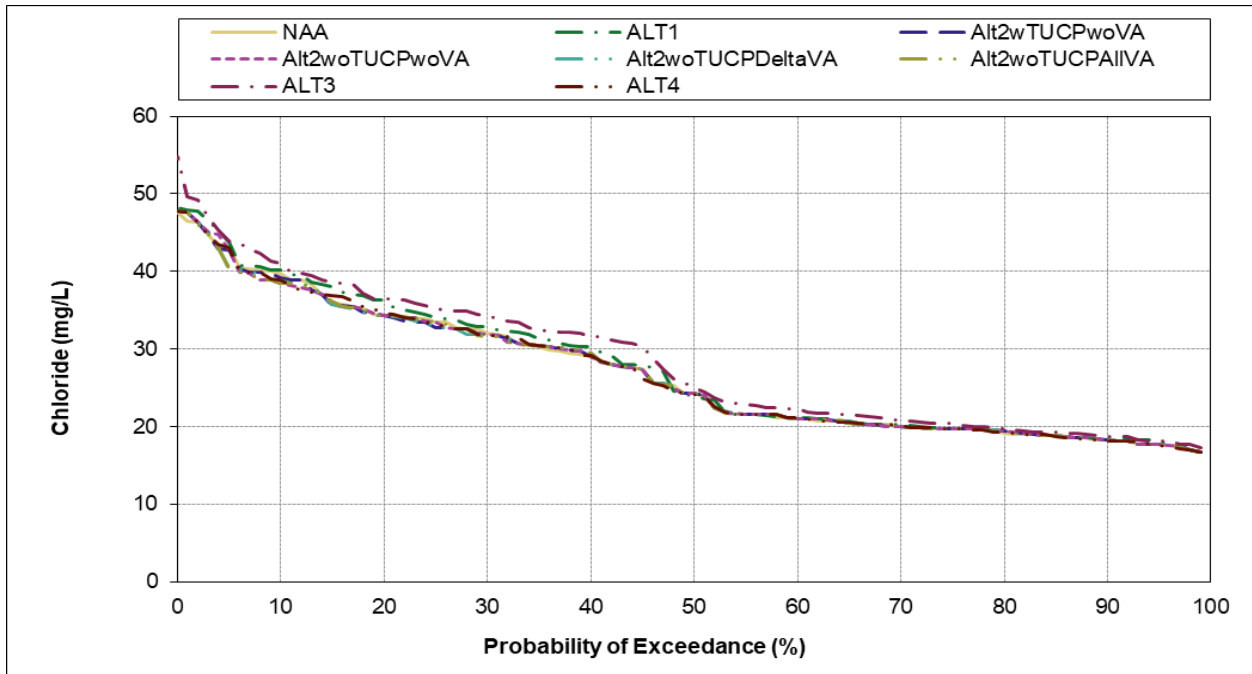


Figure G.2-1-7. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), January

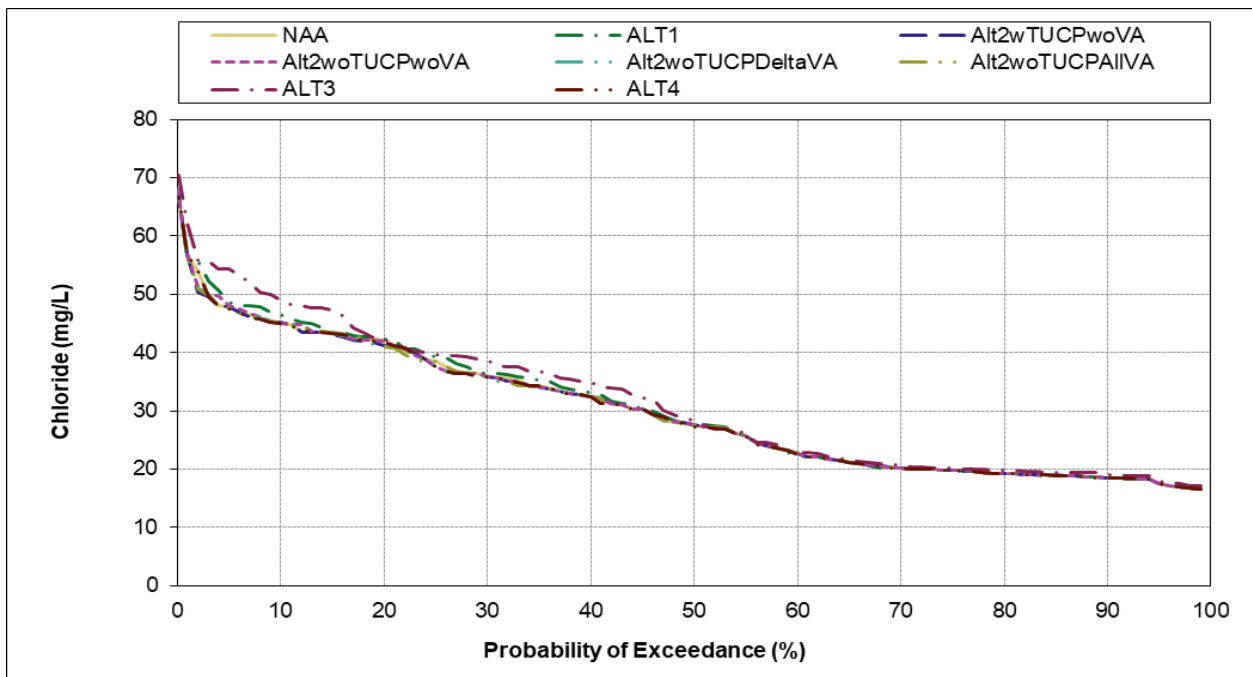


Figure G.2-1-8. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), February

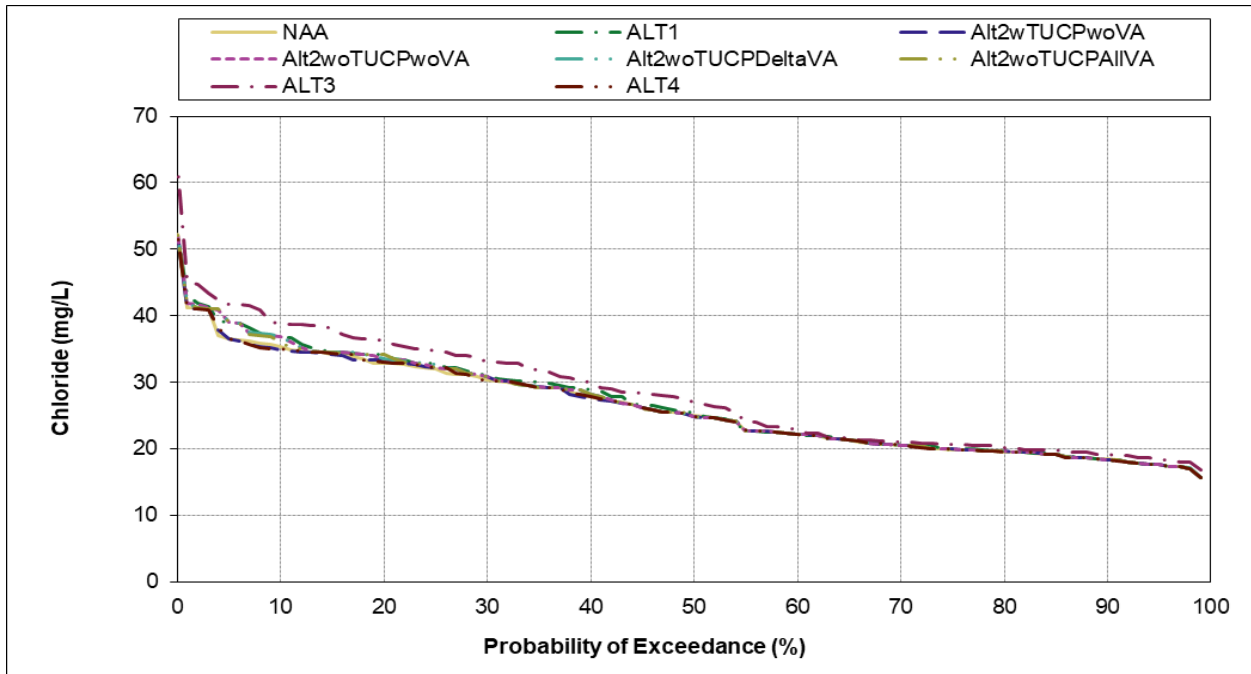


Figure G.2-1-9. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), March

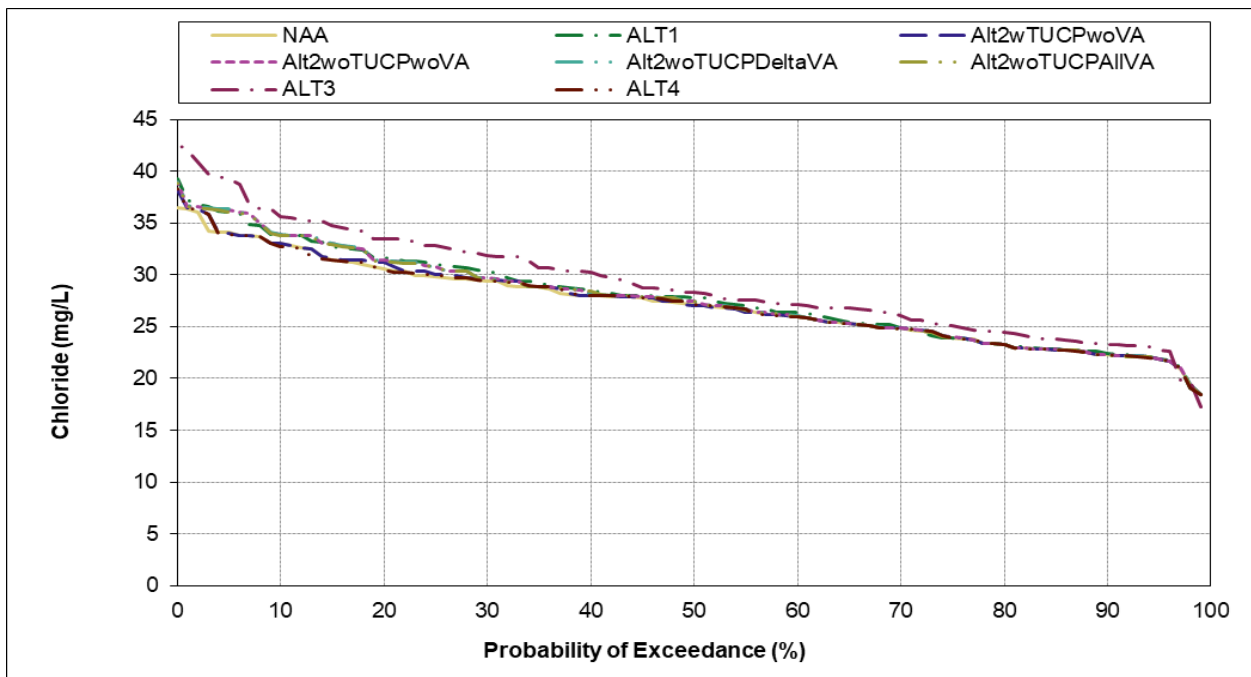


Figure G.2-1-10. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), April

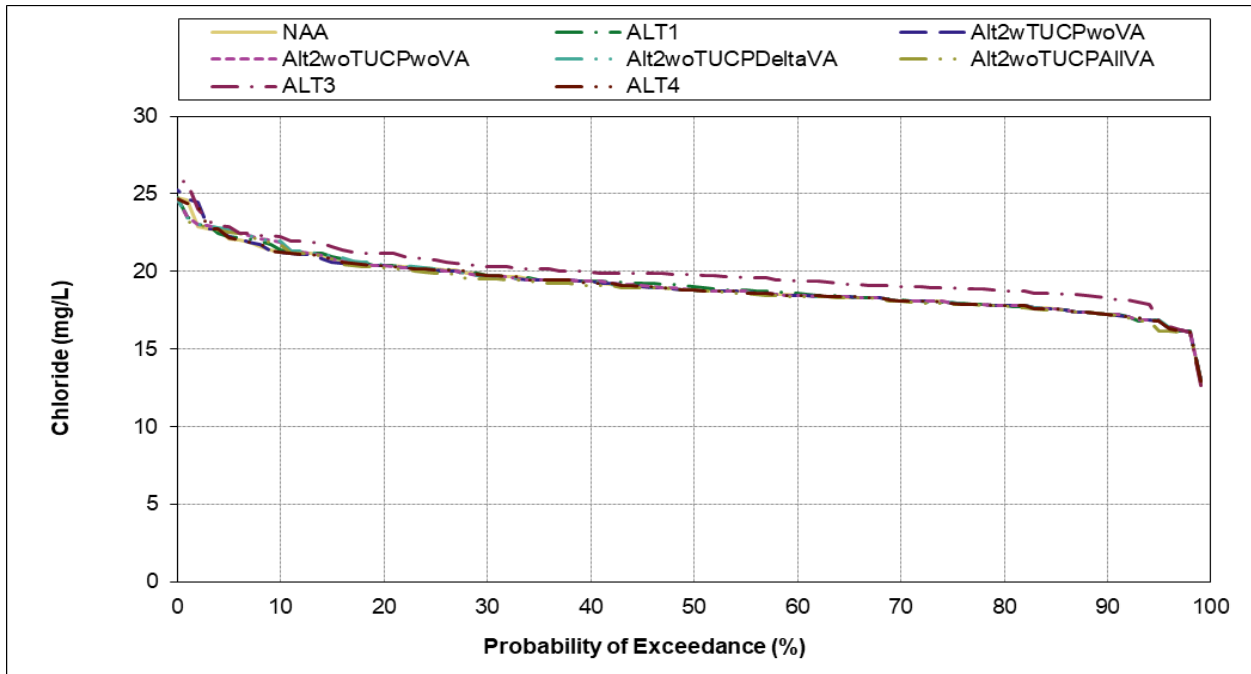


Figure G.2-1-11. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), May

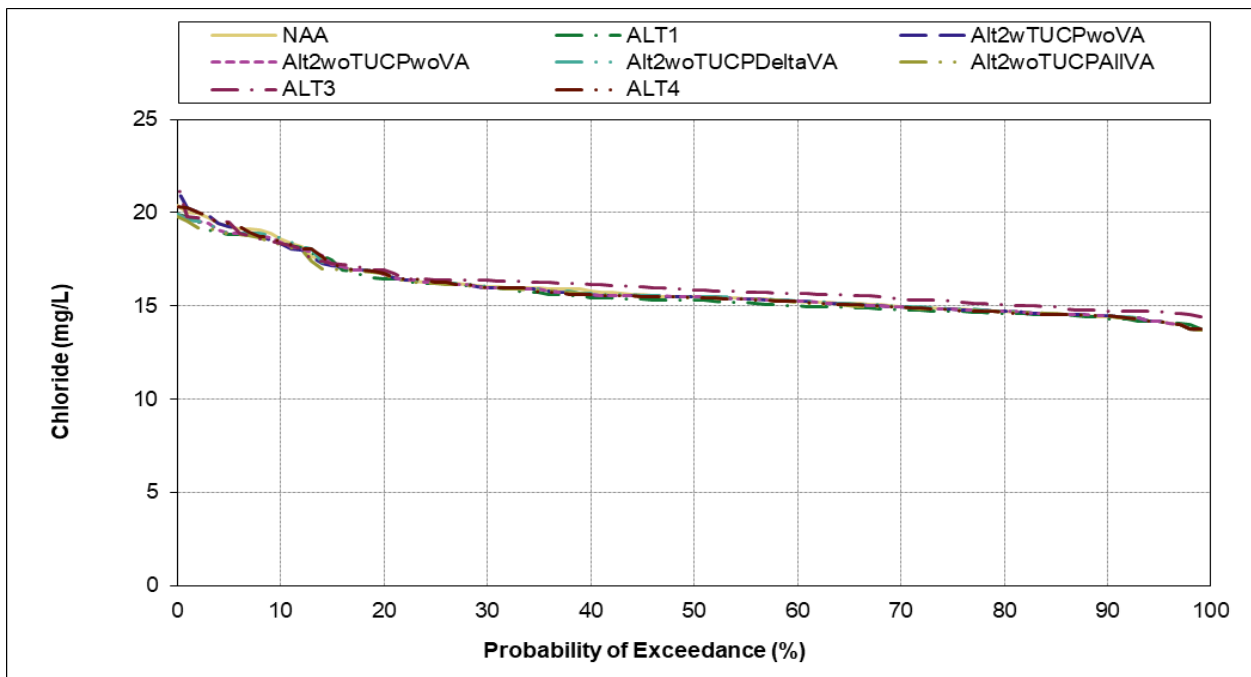


Figure G.2-1-12. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), June

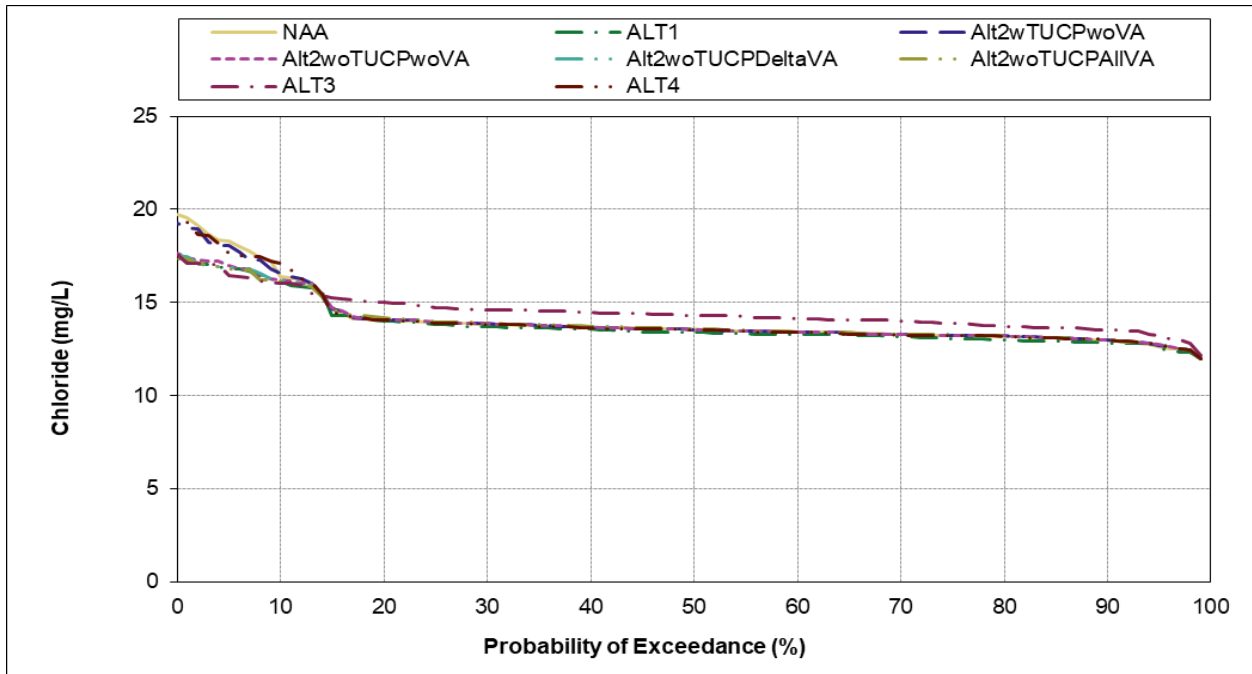


Figure G.2-1-13. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), July

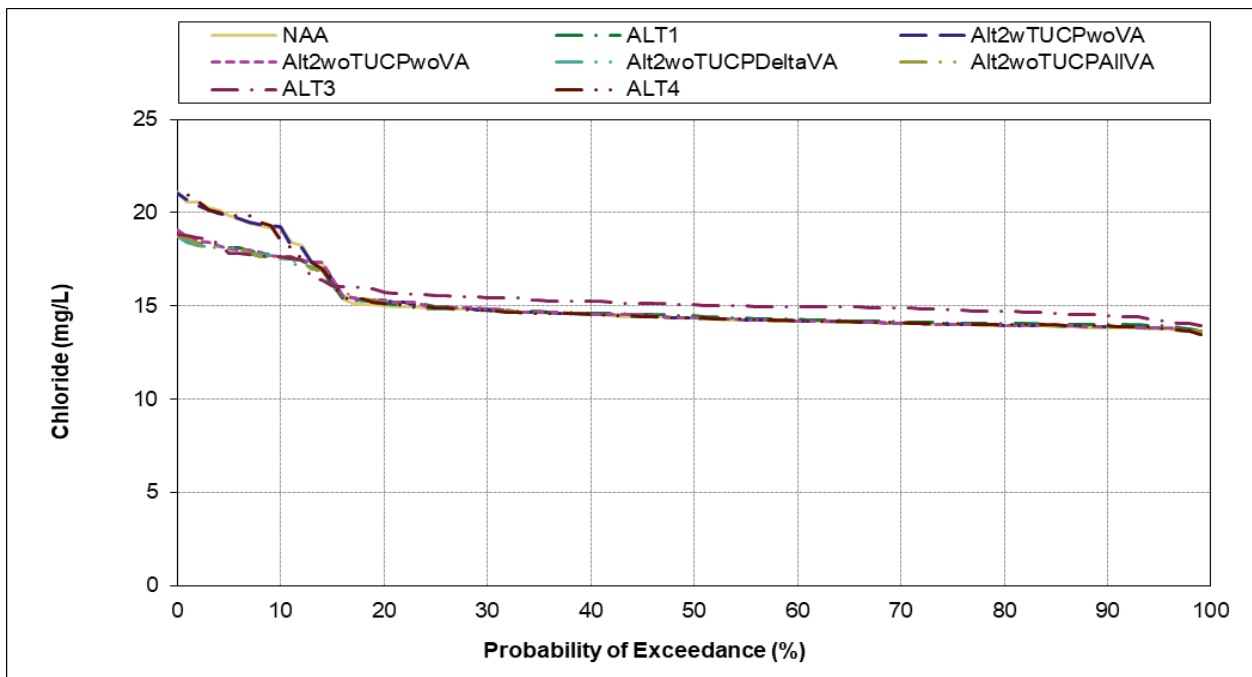


Figure G.2-1-14. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), August



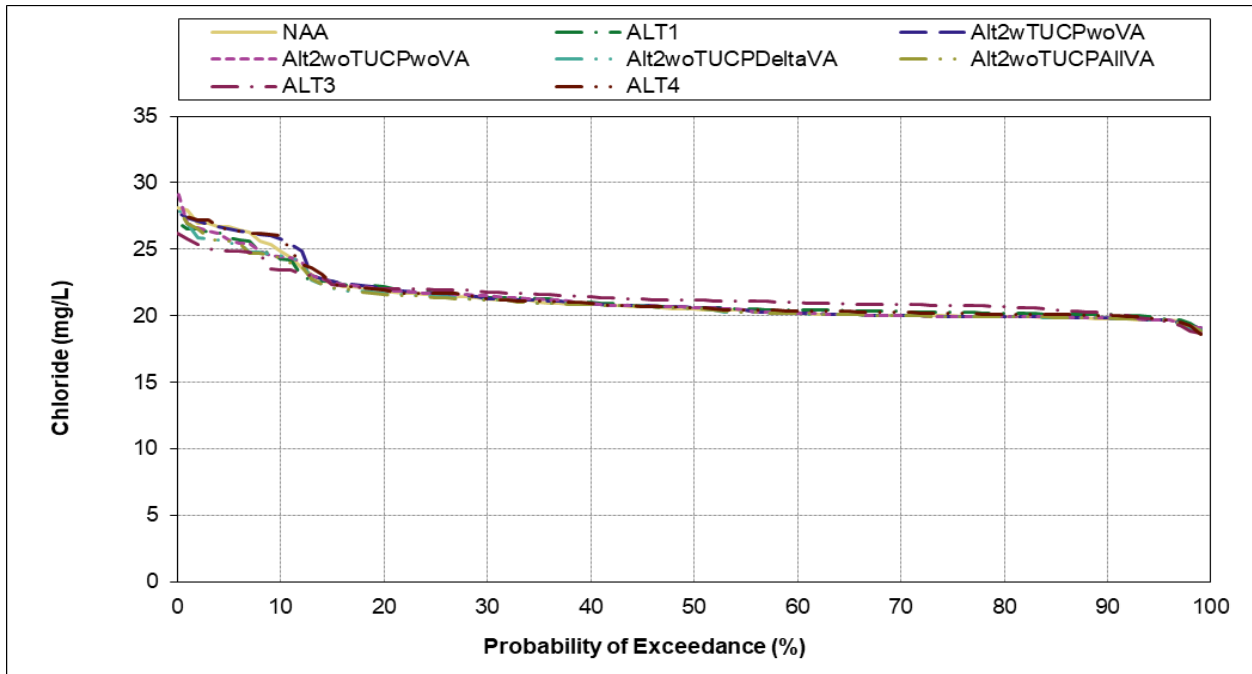


Figure G.2-1-15. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), September

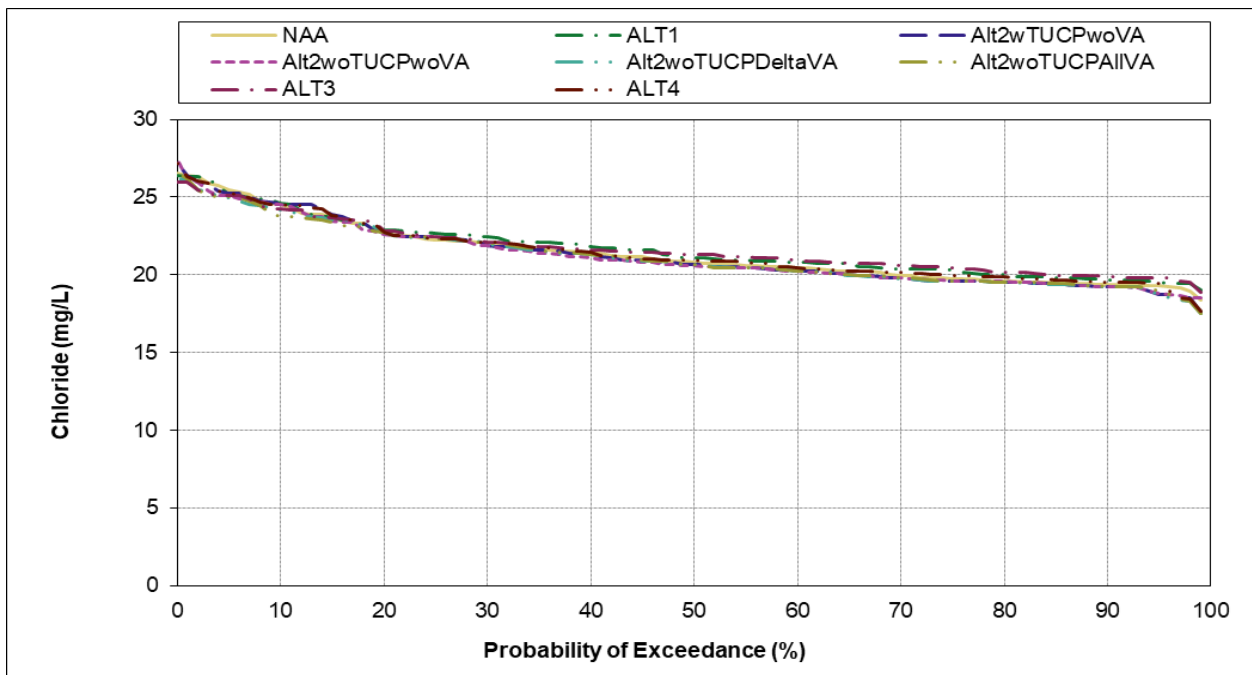


Figure G.2-1-16. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), October

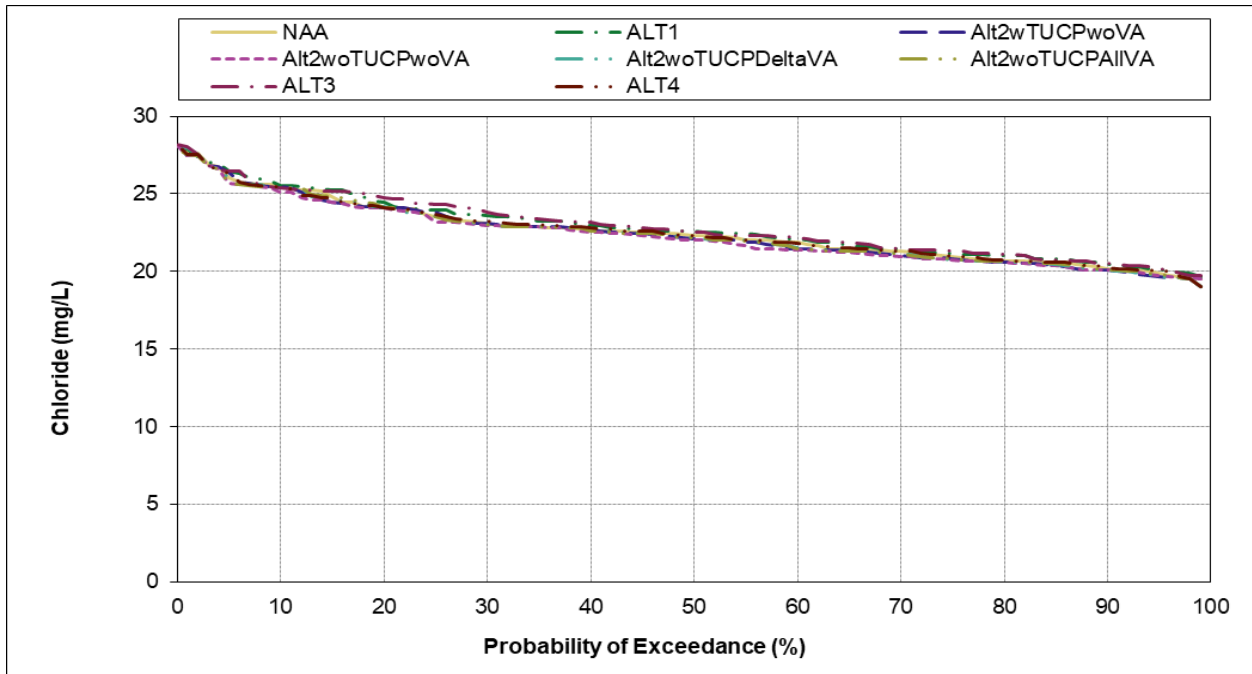


Figure G.2-1-17. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), November

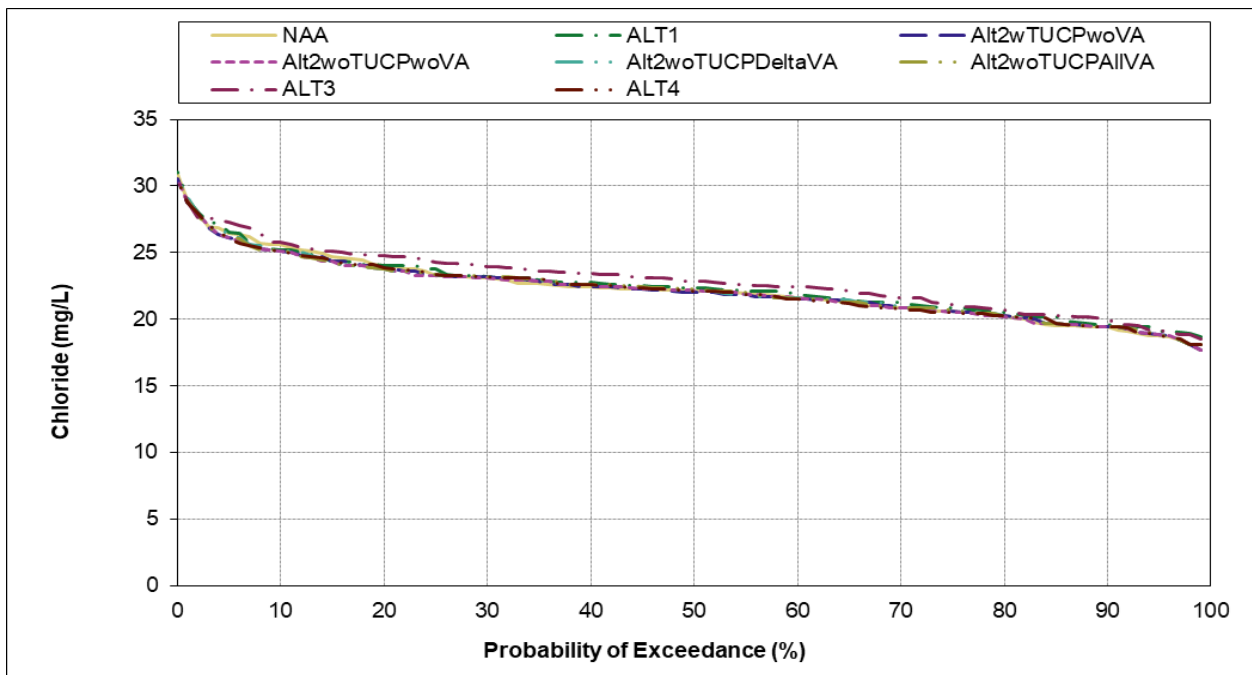


Figure G.2-1-18. Barker Slough at North Bay Aqueduct, Monthly Average Chloride (in milligrams per liter), December

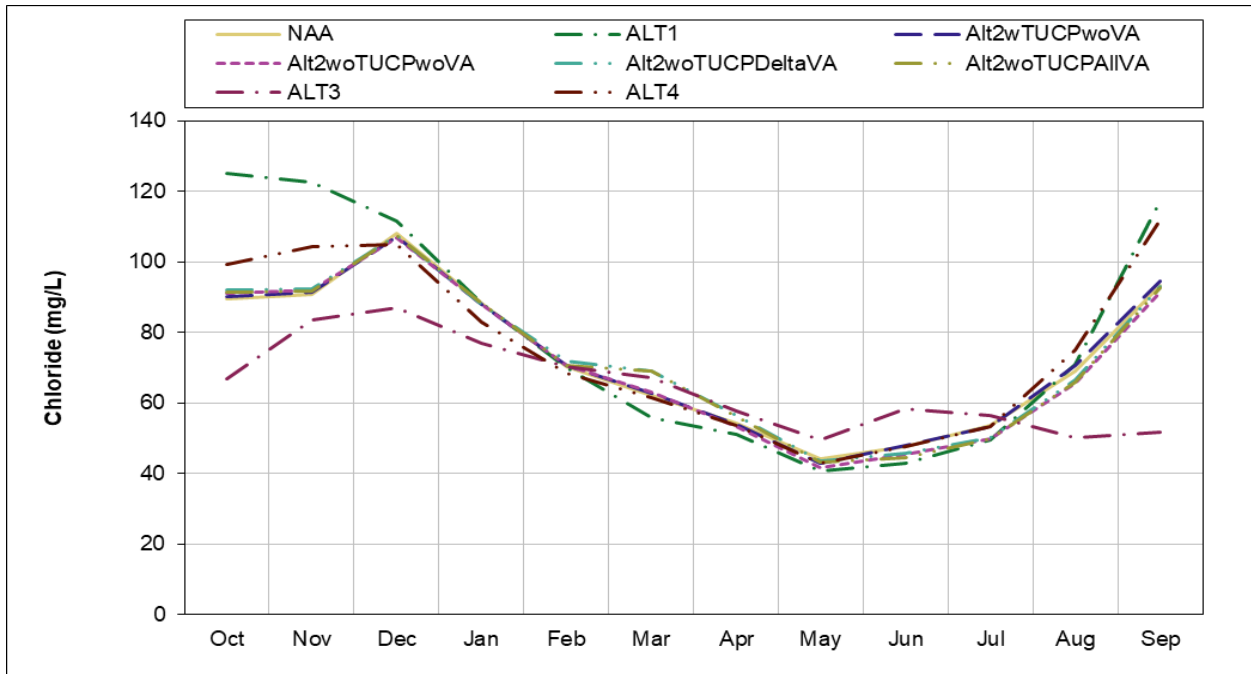


Figure G.2-2-1. Banks Pumping Plant, Long term Monthly Average Chloride (in milligrams per liter)

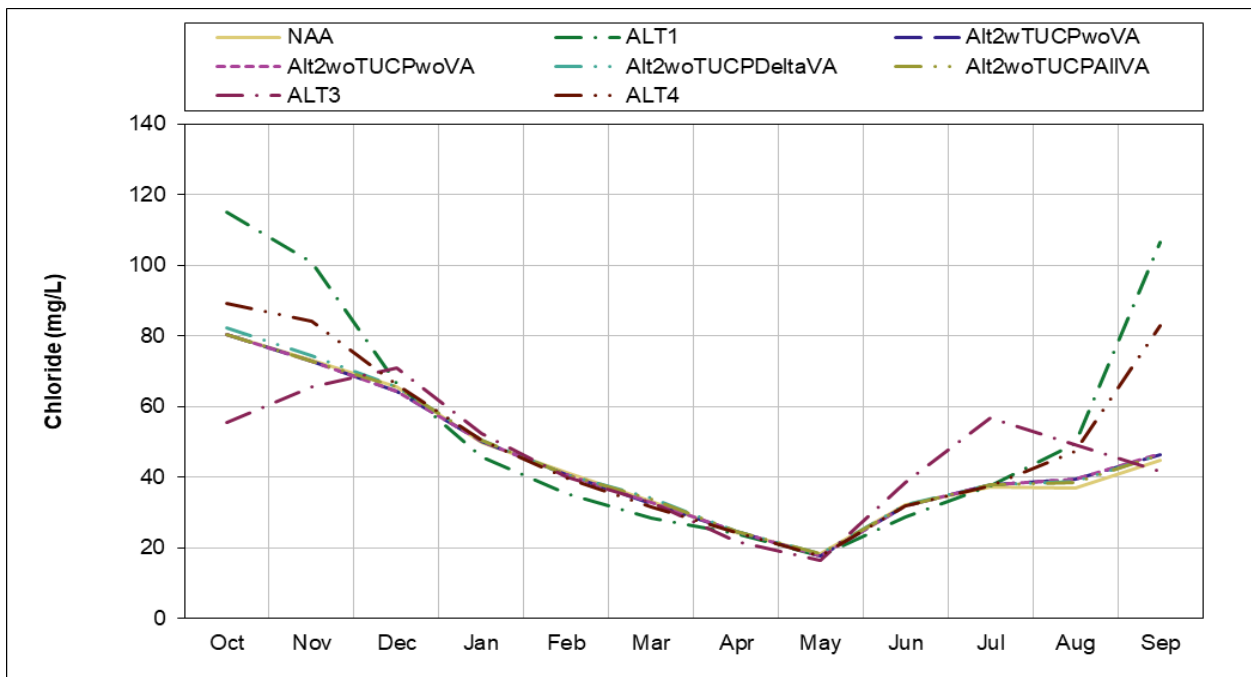


Figure G.2-2-2. Banks Pumping Plant, Wet Year Monthly Average Chloride (in milligrams per liter)

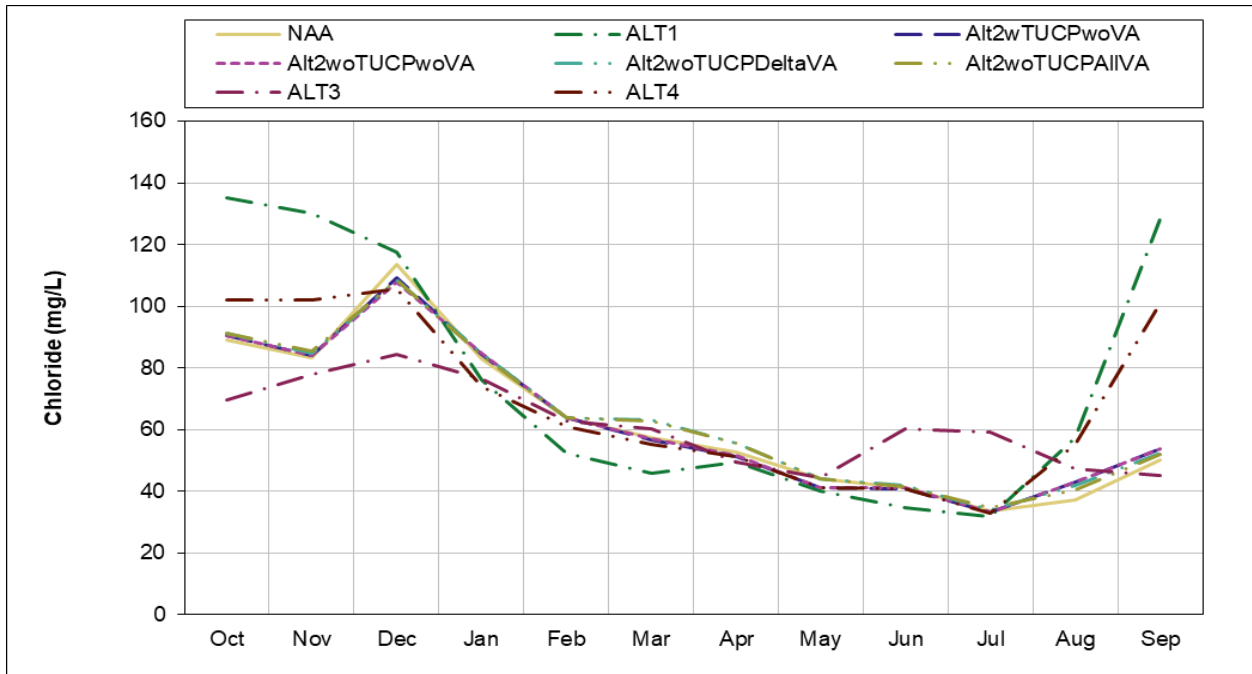


Figure G.2-2-3. Banks Pumping Plant, Above Normal Year Monthly Average Chloride (in milligrams per liter)

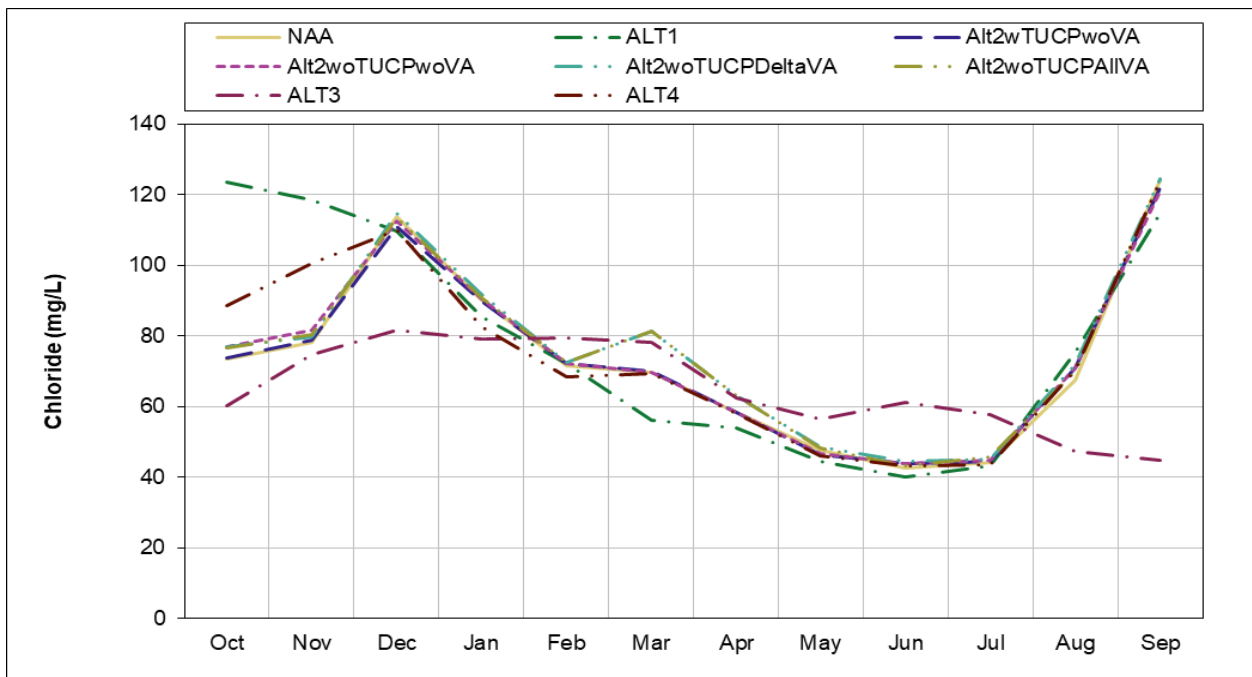


Figure G.2-2-4. Banks Pumping Plant, Below Normal Year Monthly Average Chloride (in milligrams per liter)

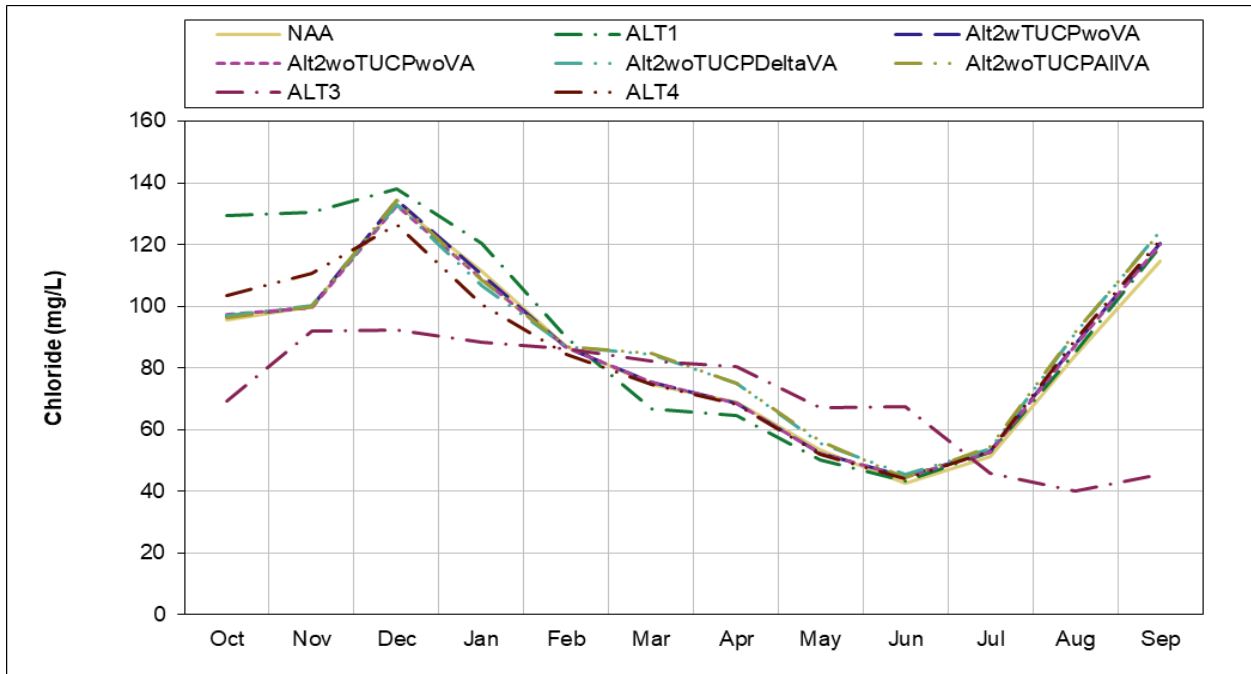


Figure G.2-2-5. Banks Pumping Plant, Dry Year Monthly Average Chloride (in milligrams per liter)

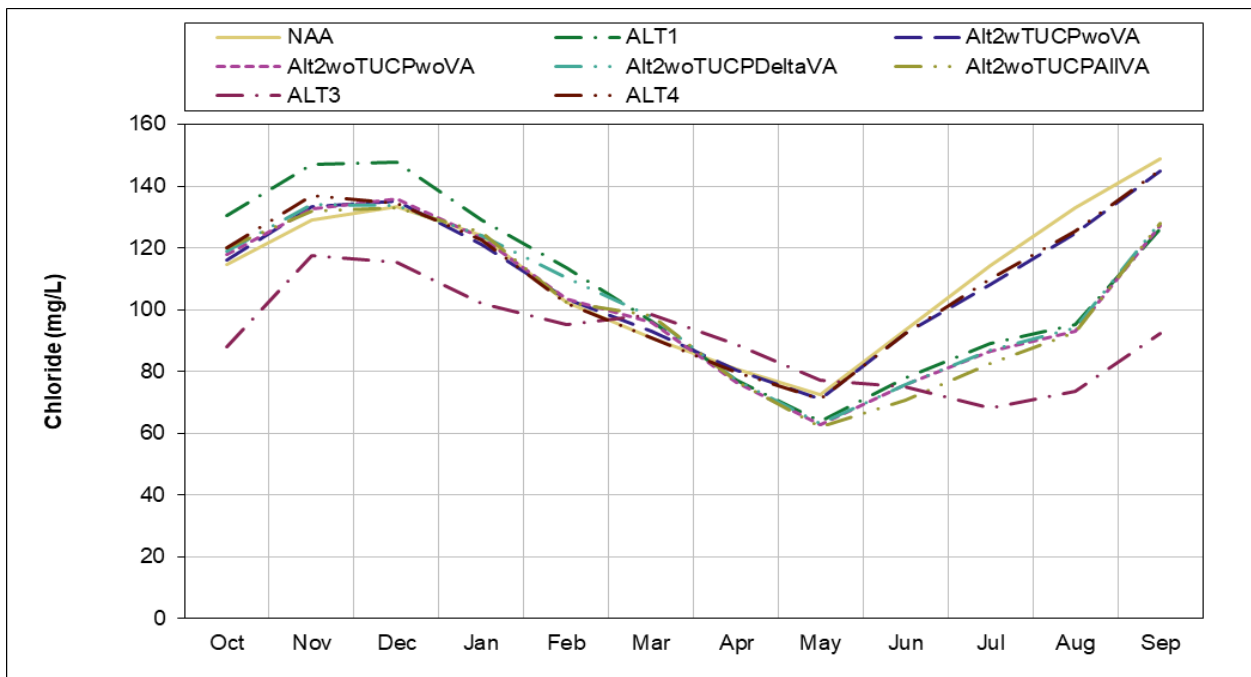


Figure G.2-2-6. Banks Pumping Plant, Critical Year Monthly Average Chloride (in milligrams per liter)

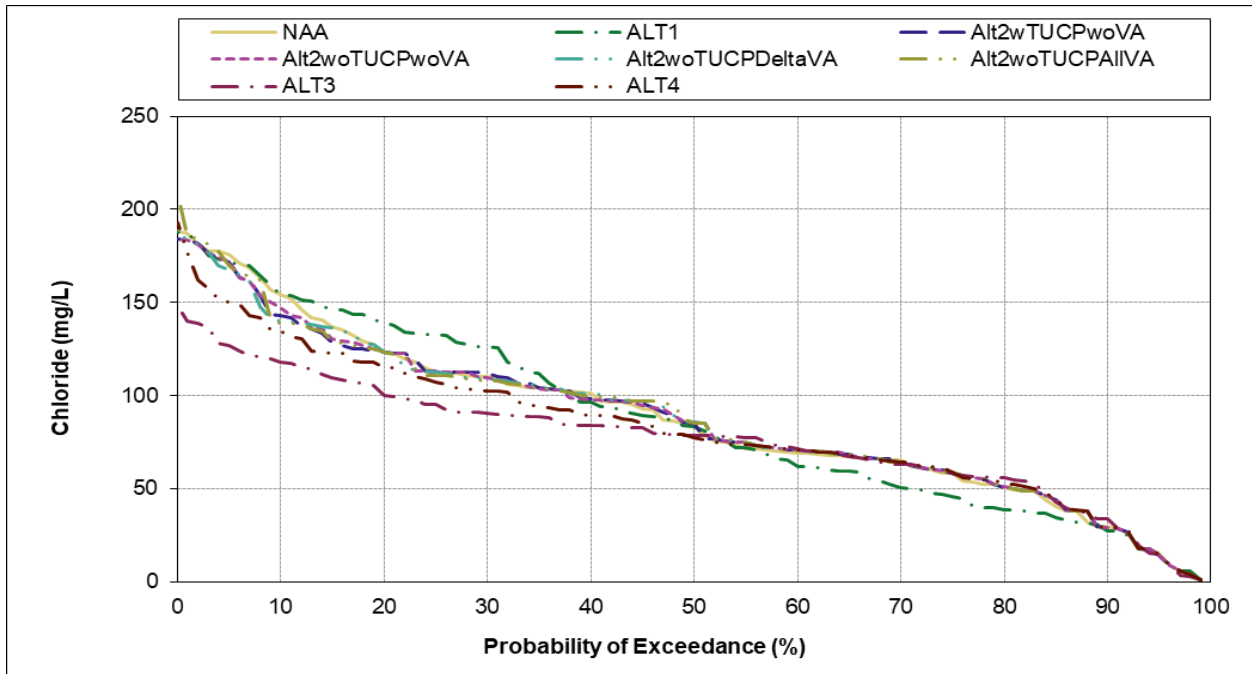


Figure G.2-2-7. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), January

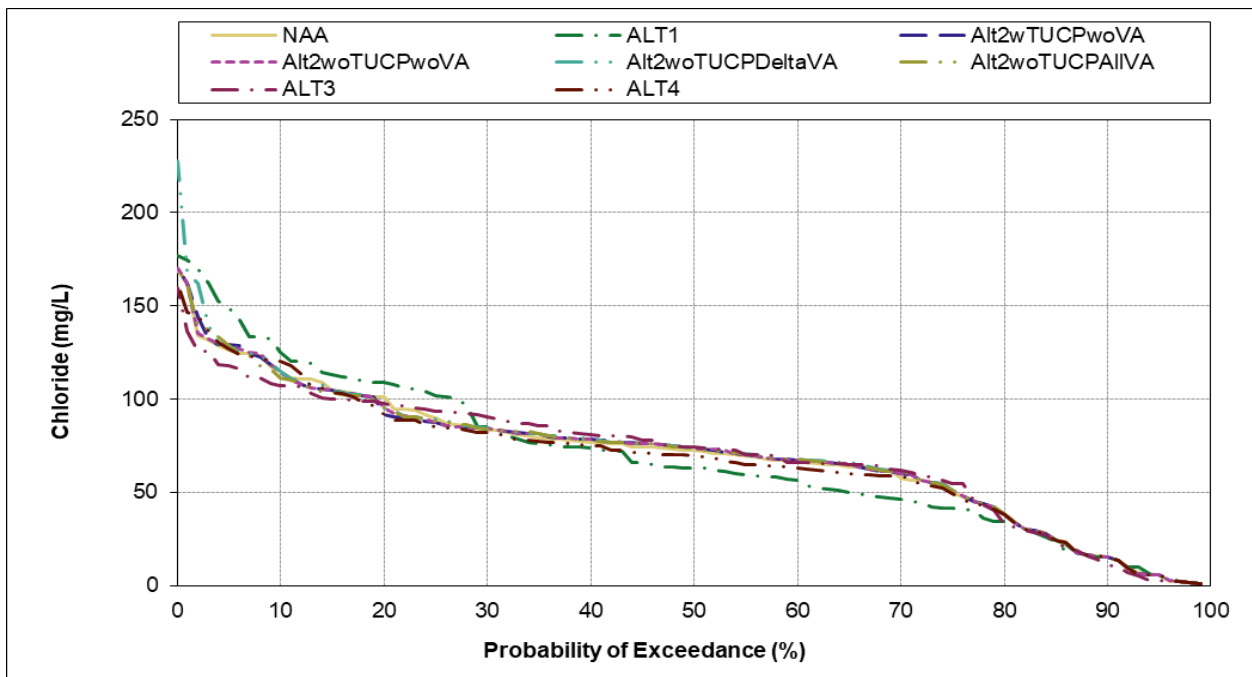


Figure G.2-2-8. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), February

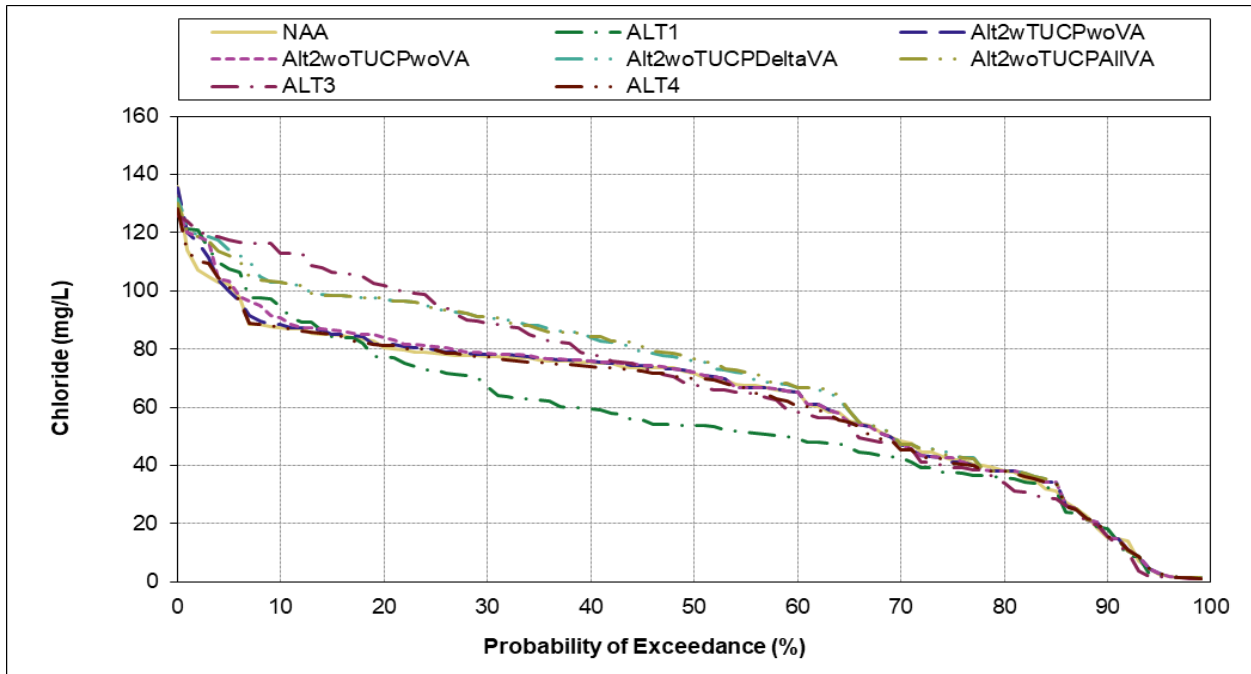


Figure G.2-2-9. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), March

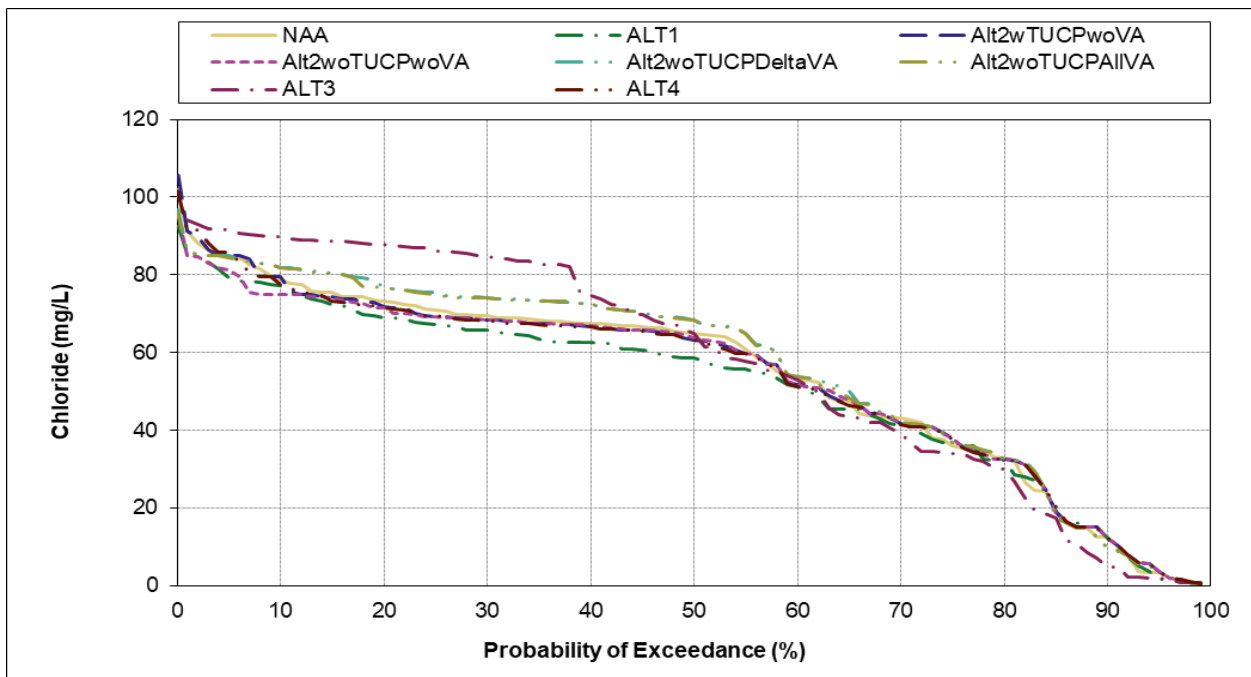


Figure G.2-2-10. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), April

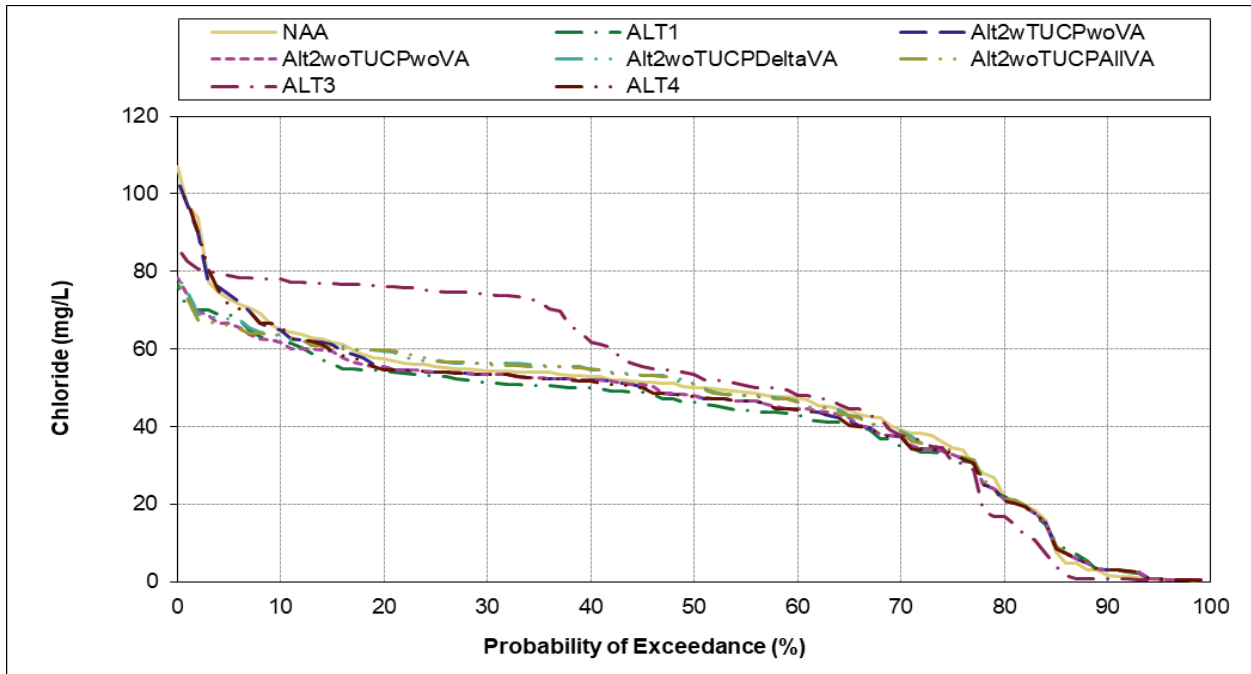


Figure G.2-2-11. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), May

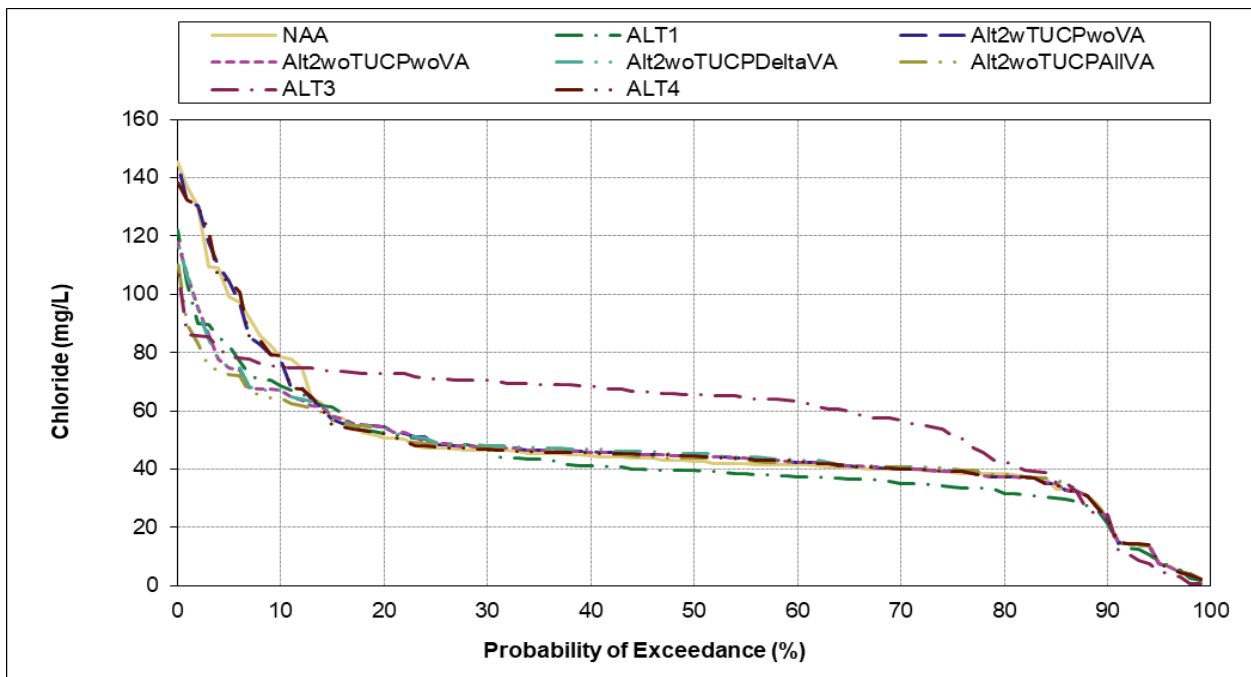


Figure G.2-2-12. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), June



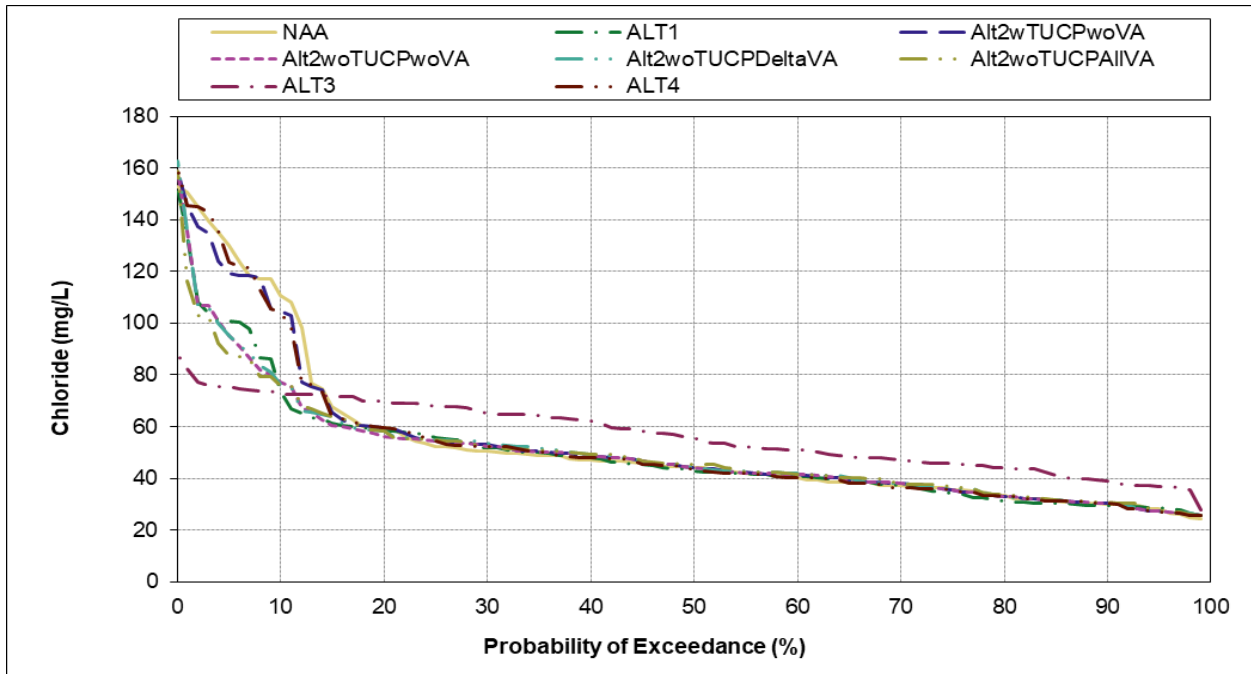


Figure G.2-2-13. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), July

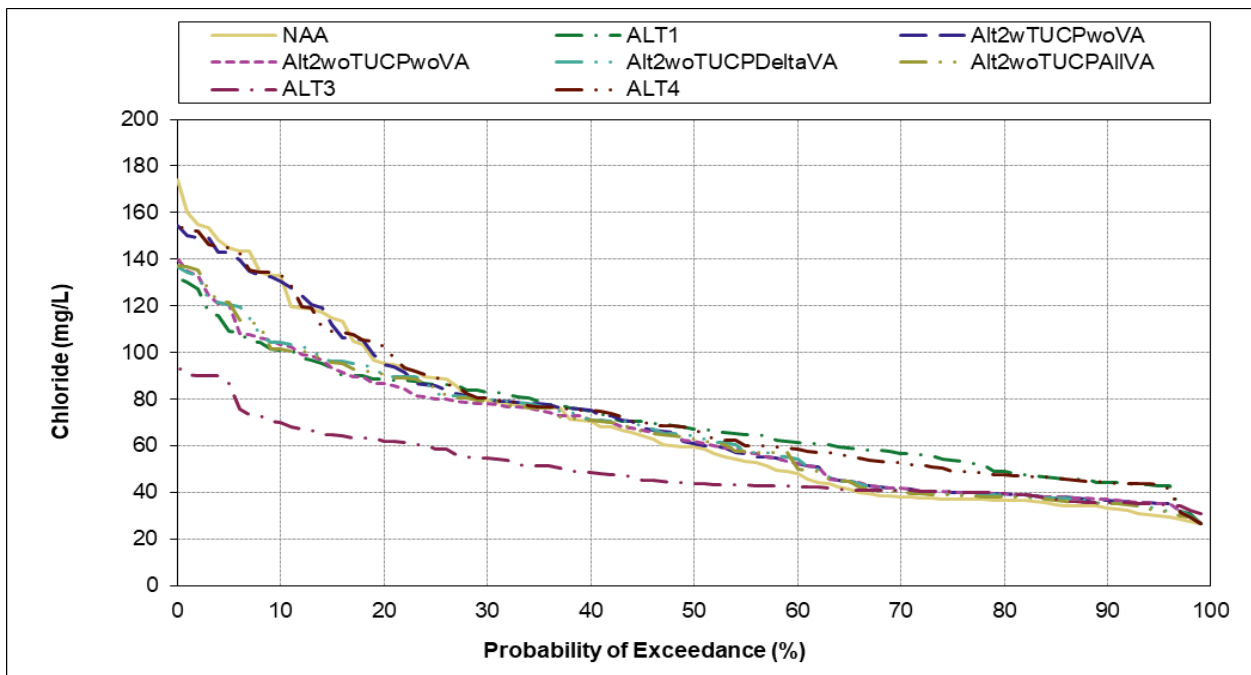


Figure G.2-2-14. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), August

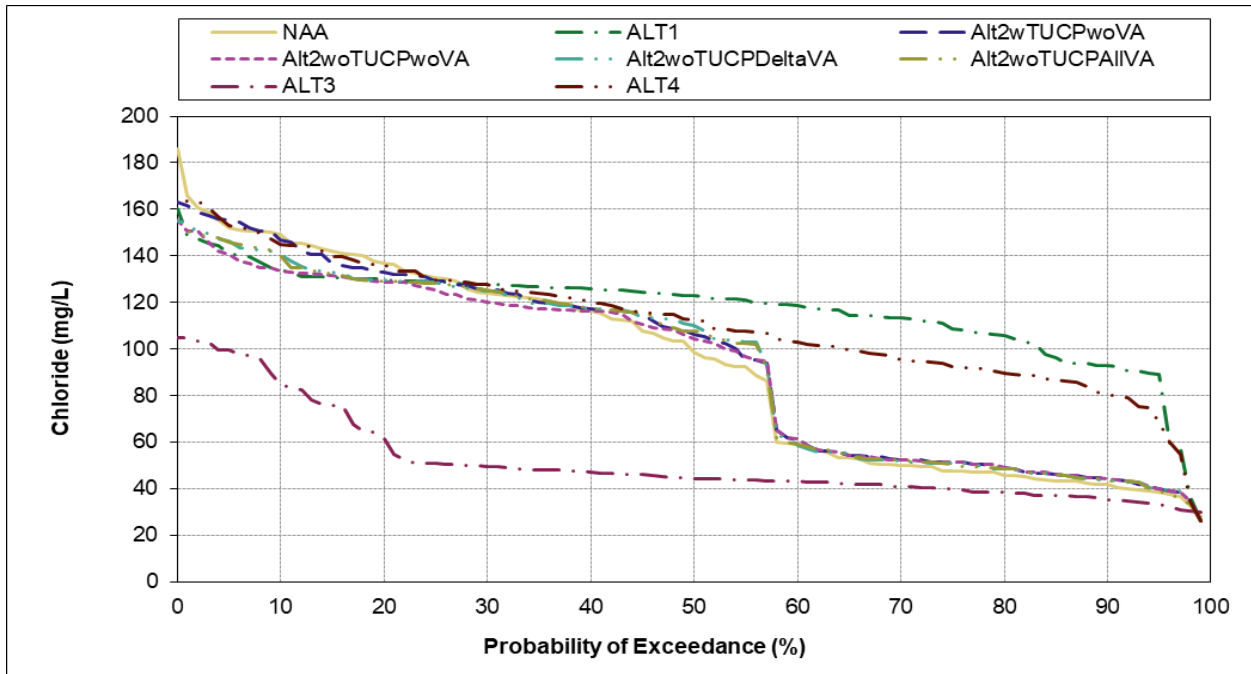


Figure G.2-2-15. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), September

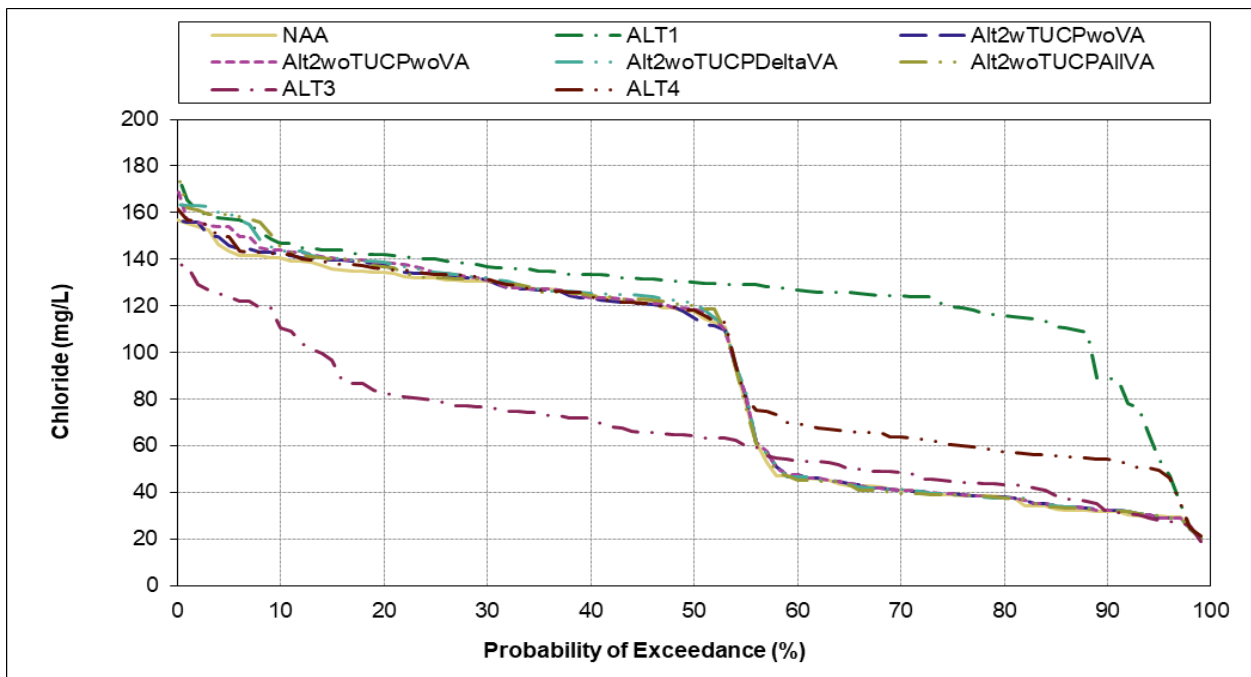


Figure G.2-2-16. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), October

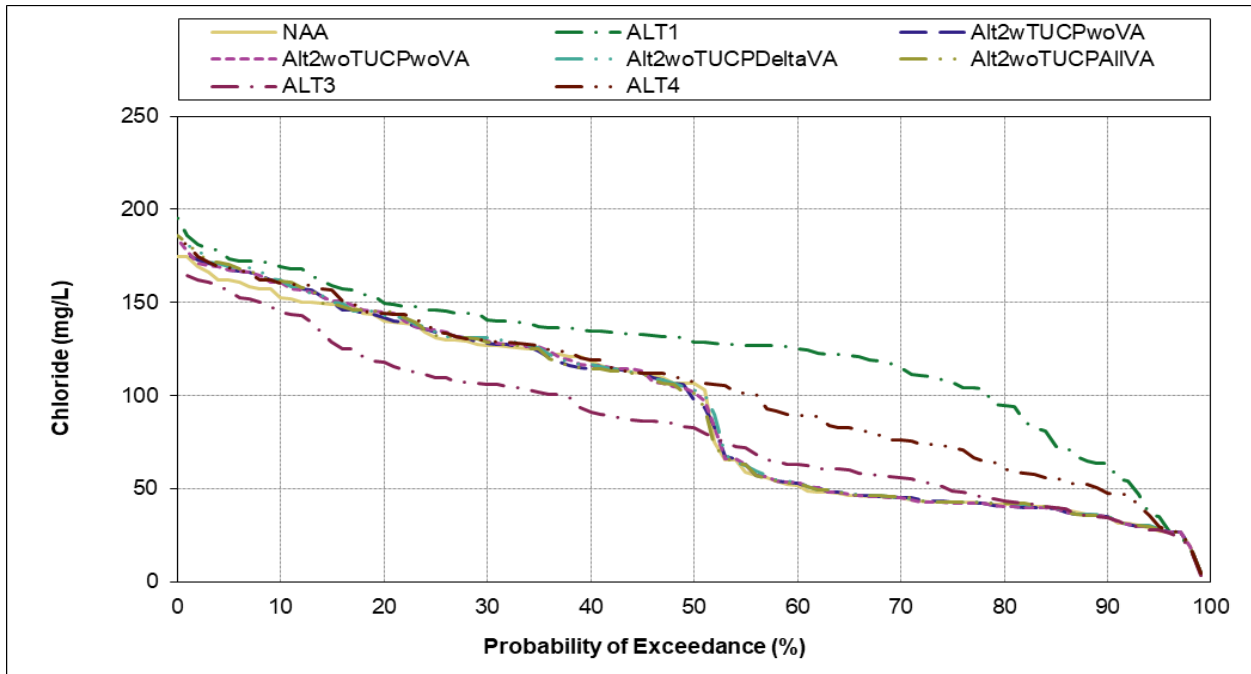


Figure G.2-2-17. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), November

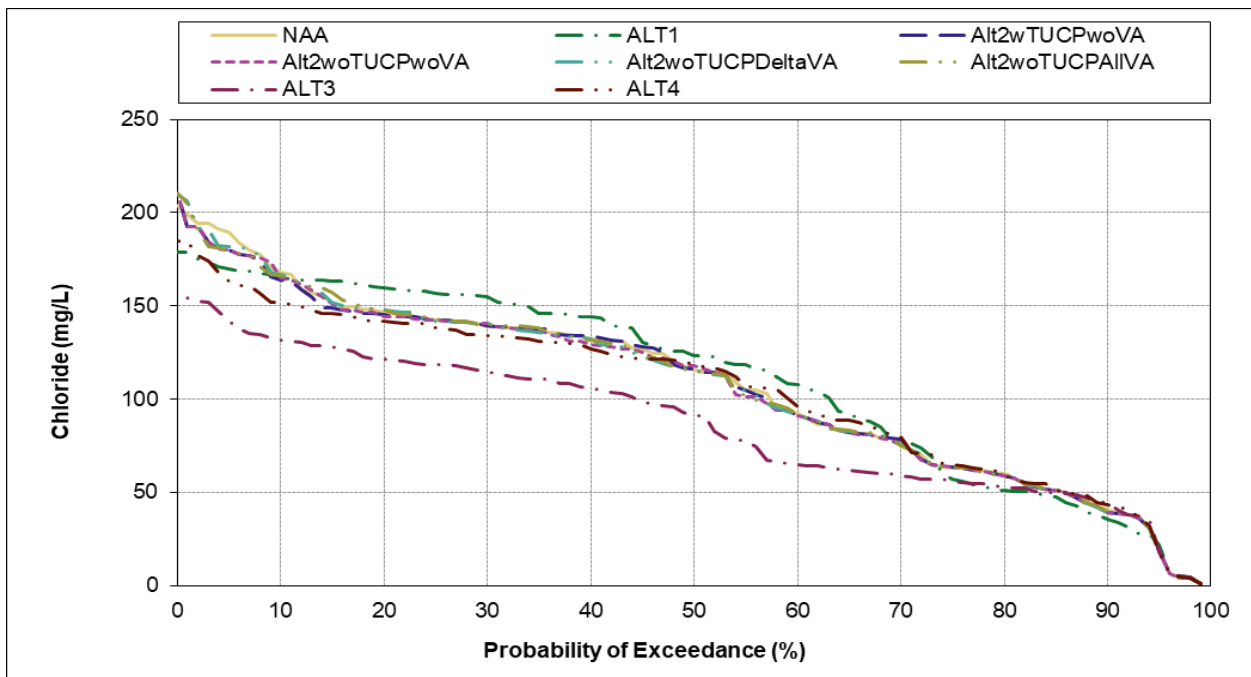


Figure G.2-2-18. Banks Pumping Plant, Monthly Average Chloride (in milligrams per liter), December

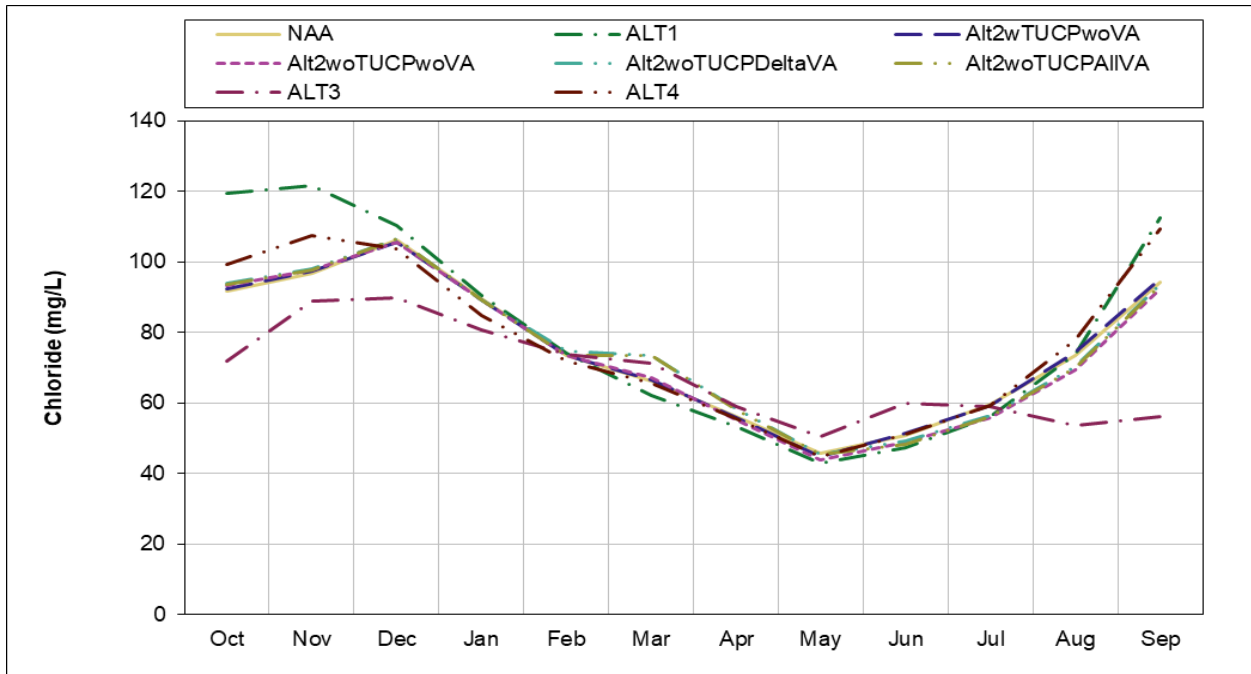


Figure G.2-3-1. Jones Pumping Plant, Long term Monthly Average Chloride (in milligrams per liter)

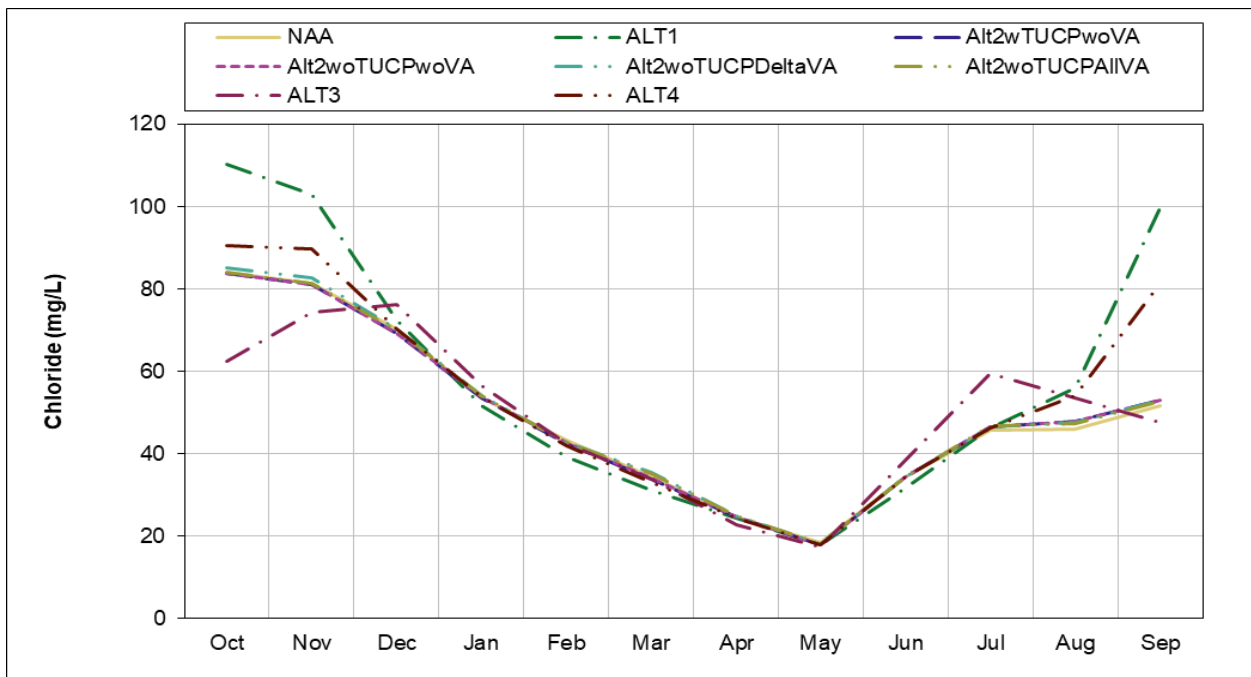


Figure G.2-3-2. Jones Pumping Plant, Wet Year Monthly Average Chloride (in milligrams per liter)

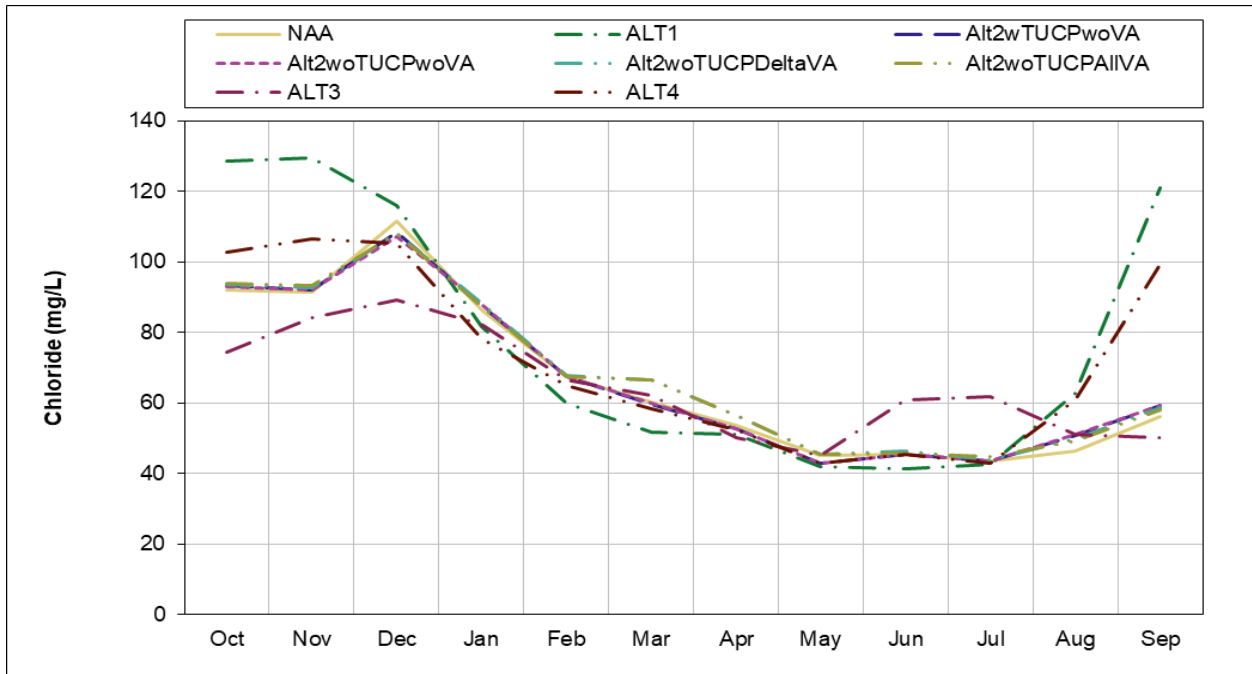


Figure G.2-3-3. Jones Pumping Plant, Above Normal Year Monthly Average Chloride (in milligrams per liter)

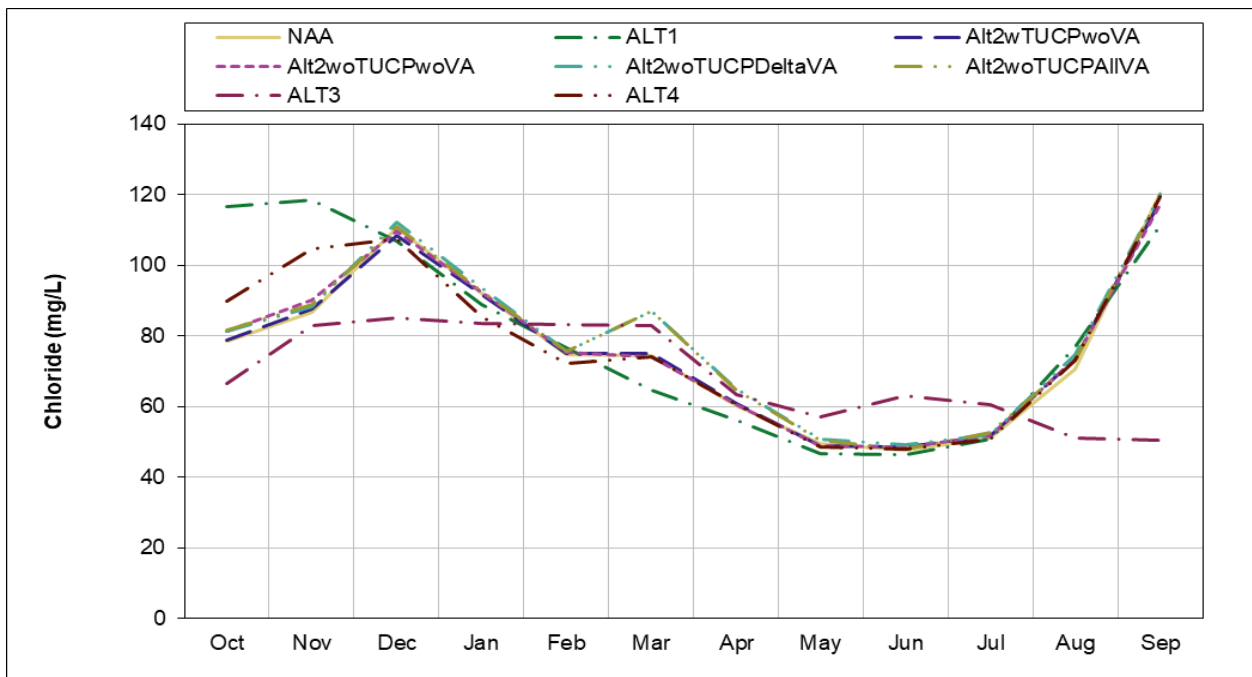


Figure G.2-3-4. Jones Pumping Plant, Below Normal Year Monthly Average Chloride (in milligrams per liter)

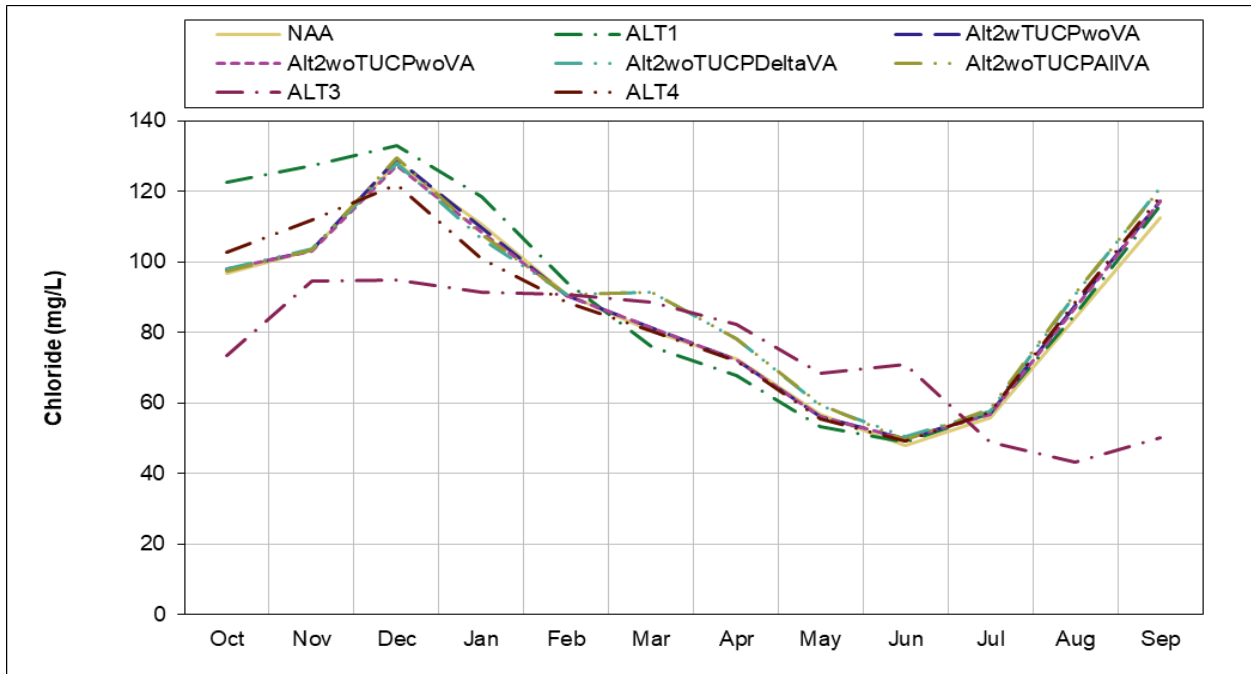


Figure G.2-3-5. Jones Pumping Plant, Dry Year Monthly Average Chloride (in milligrams per liter)

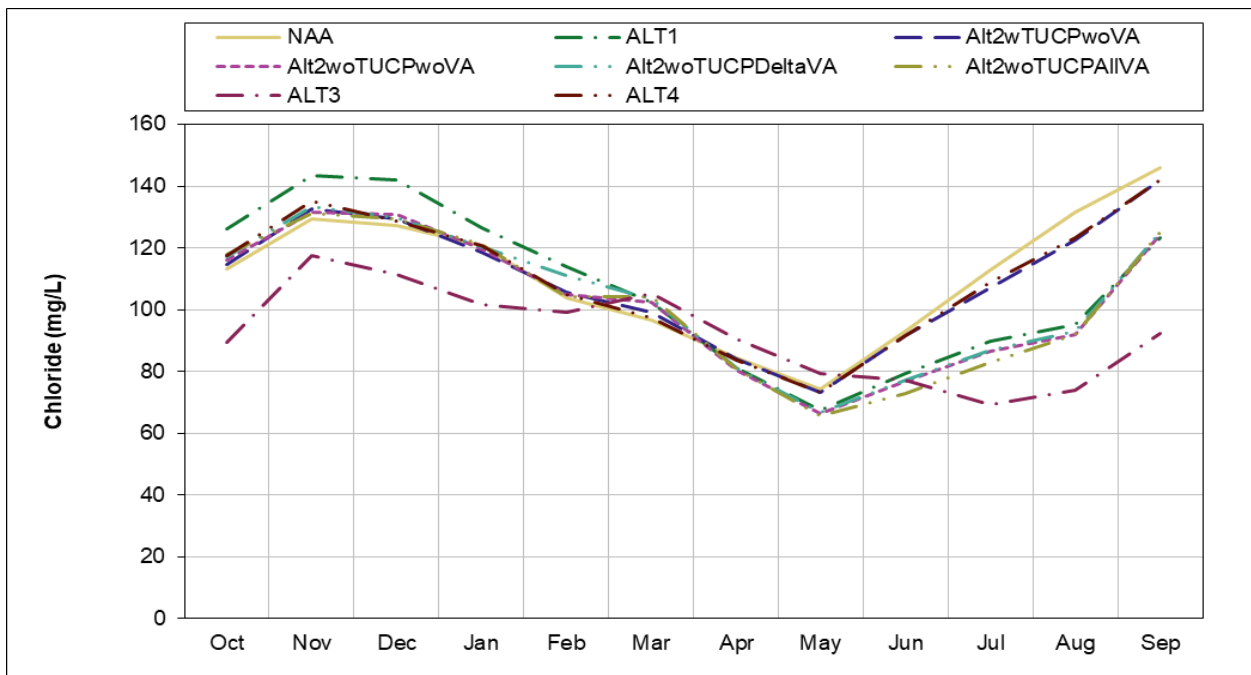


Figure G.2-3-6. Jones Pumping Plant, Critical Year Monthly Average Chloride (in milligrams per liter)

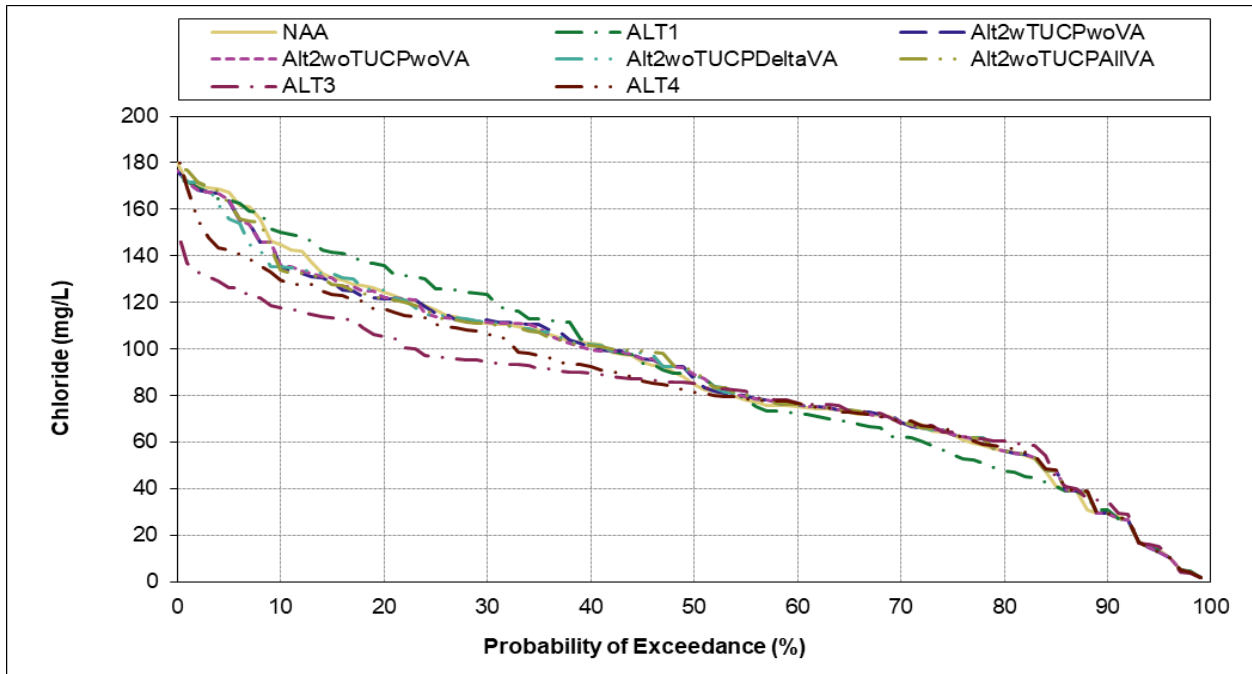


Figure G.2-3-7. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), January

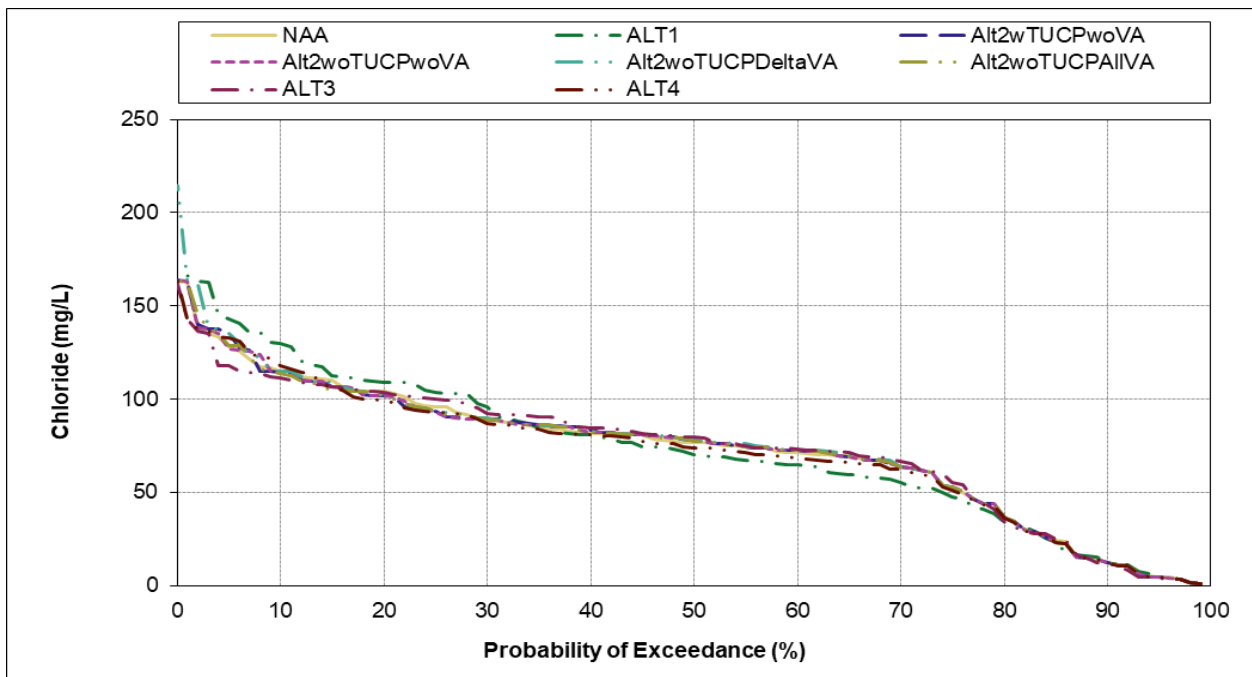


Figure G.2-3-8. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), February

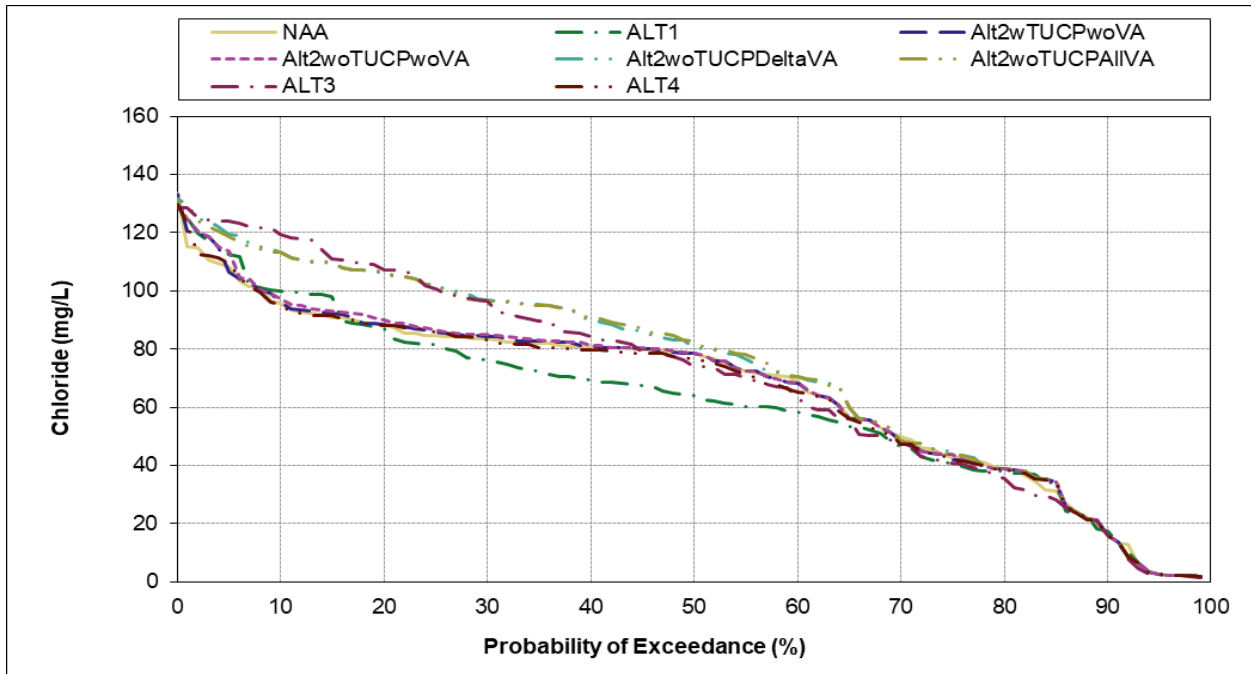


Figure G.2-3-9. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), March

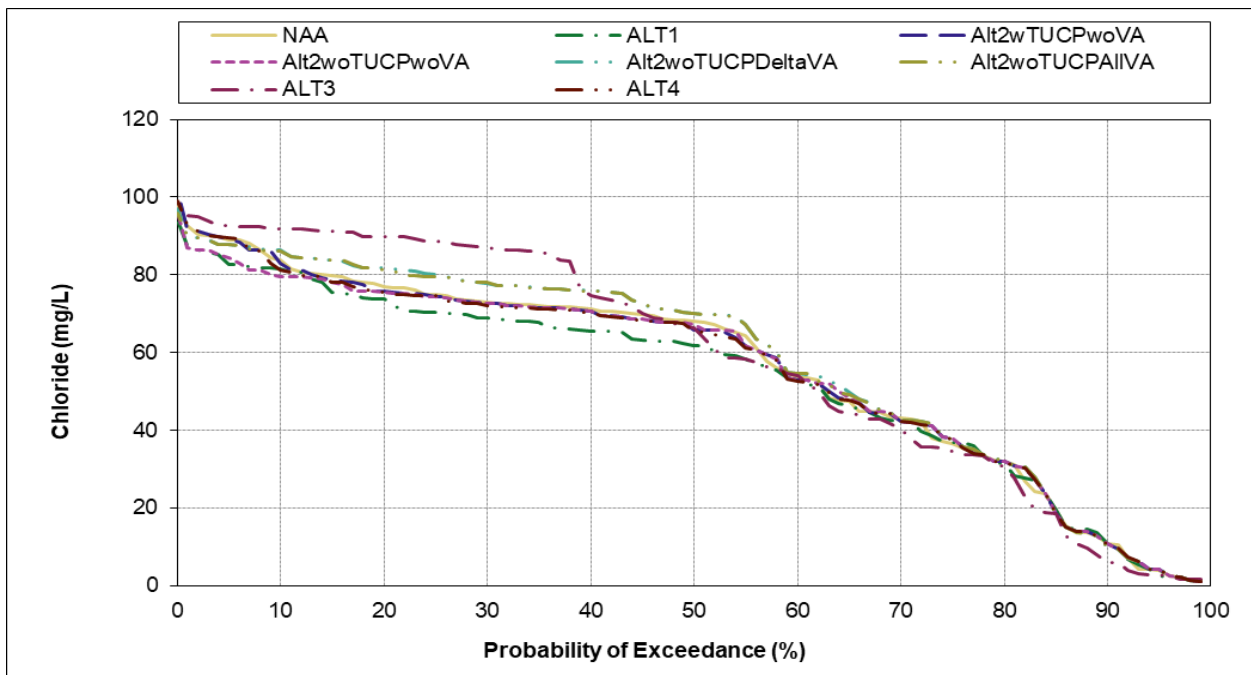


Figure G.2-3-10. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), April



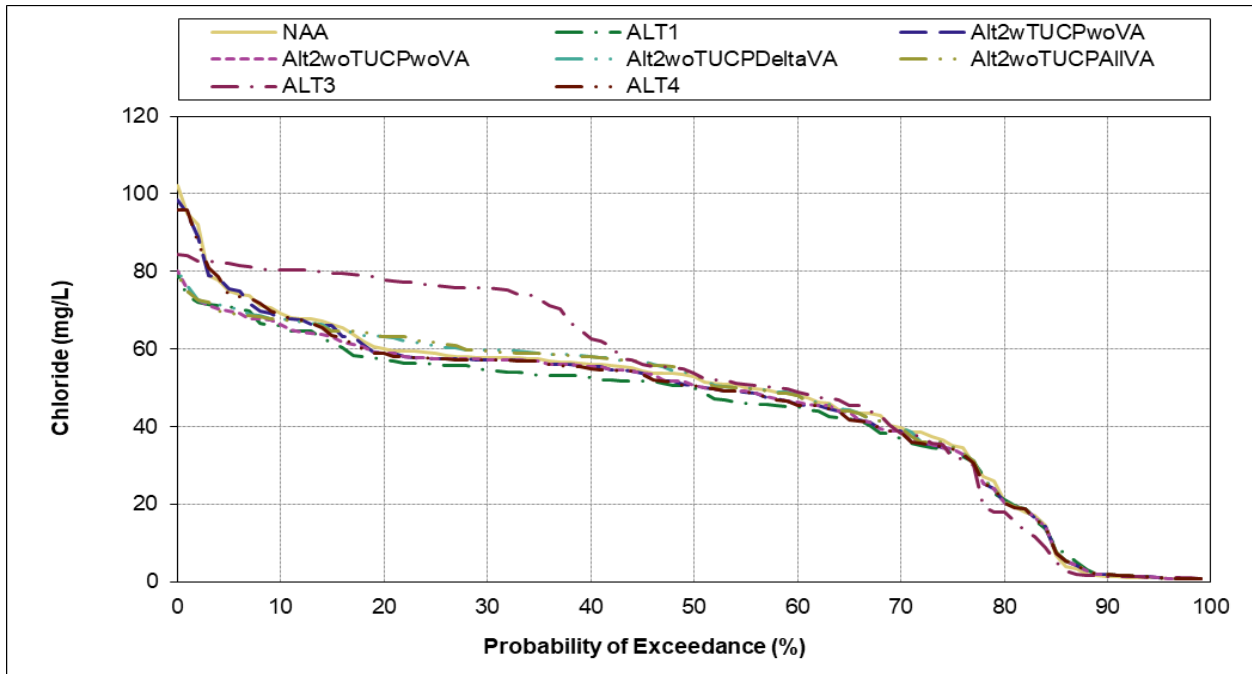


Figure G.2-3-11. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), May

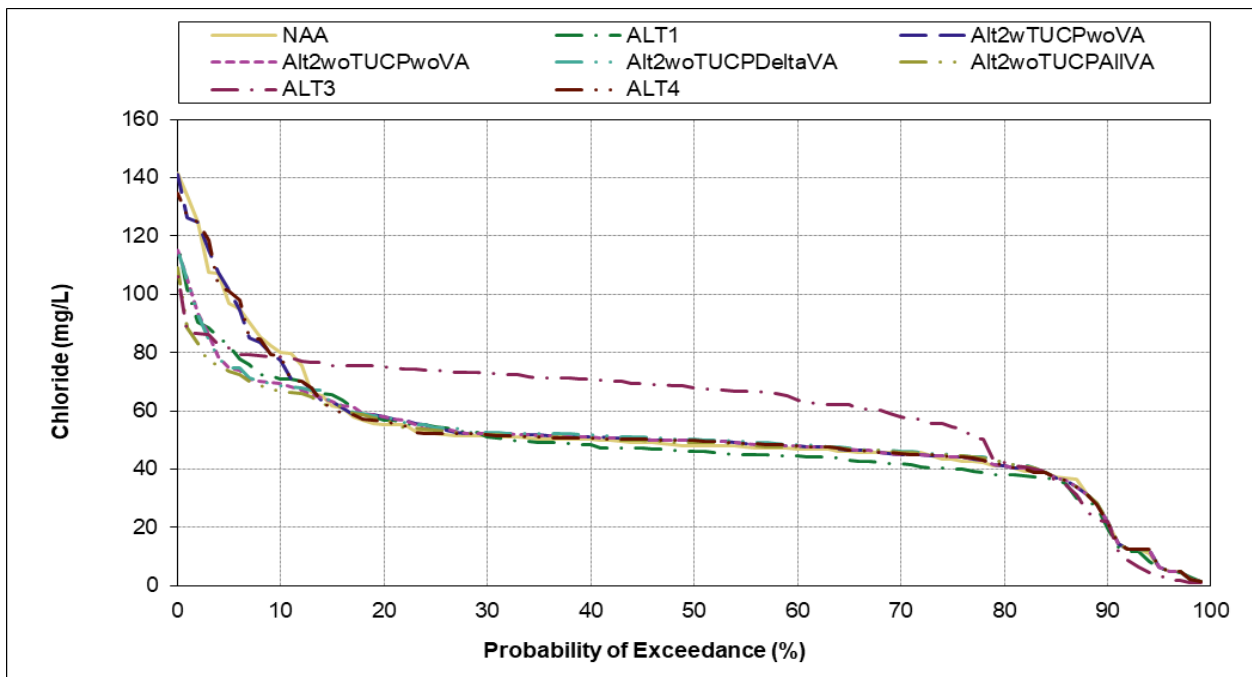


Figure G.2-3-12. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), June

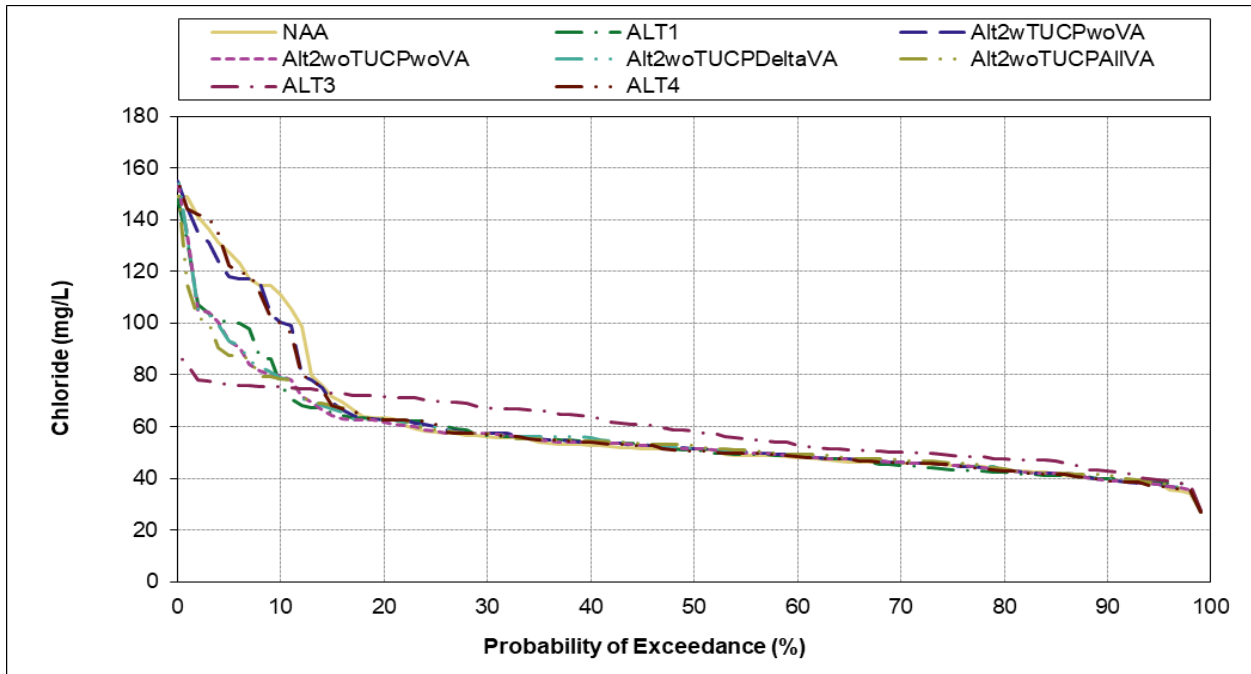


Figure G.2-3-13. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), July

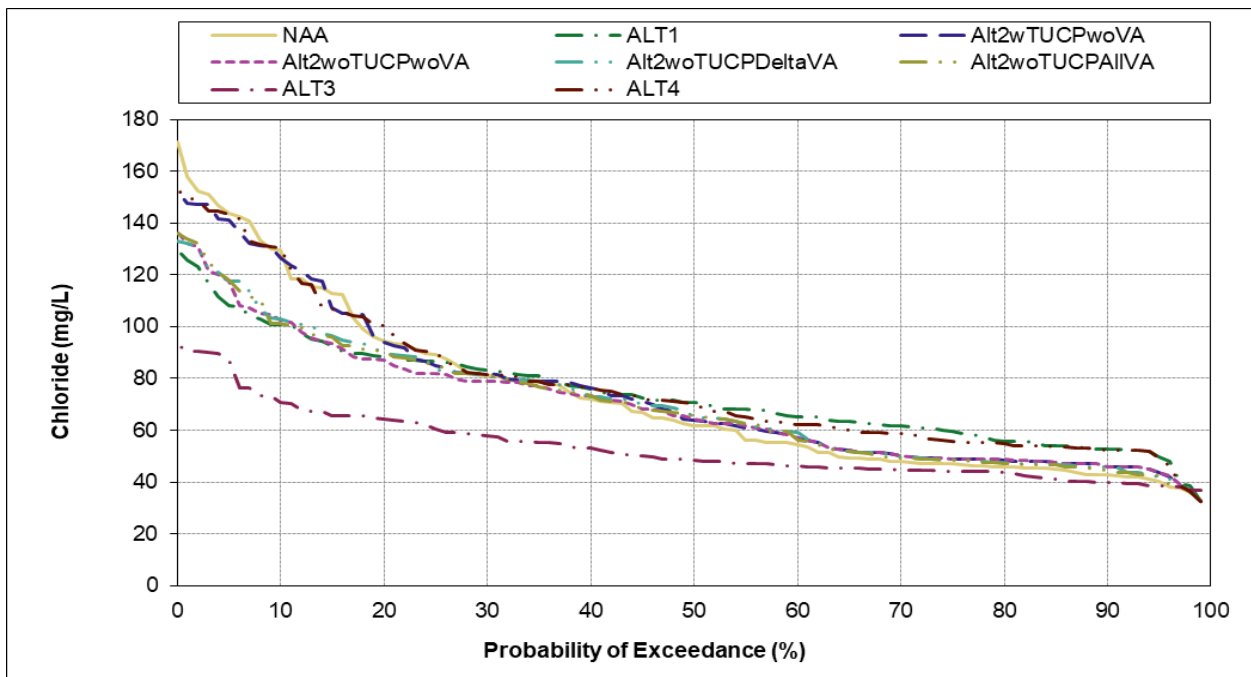


Figure G.2-3-14. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), August

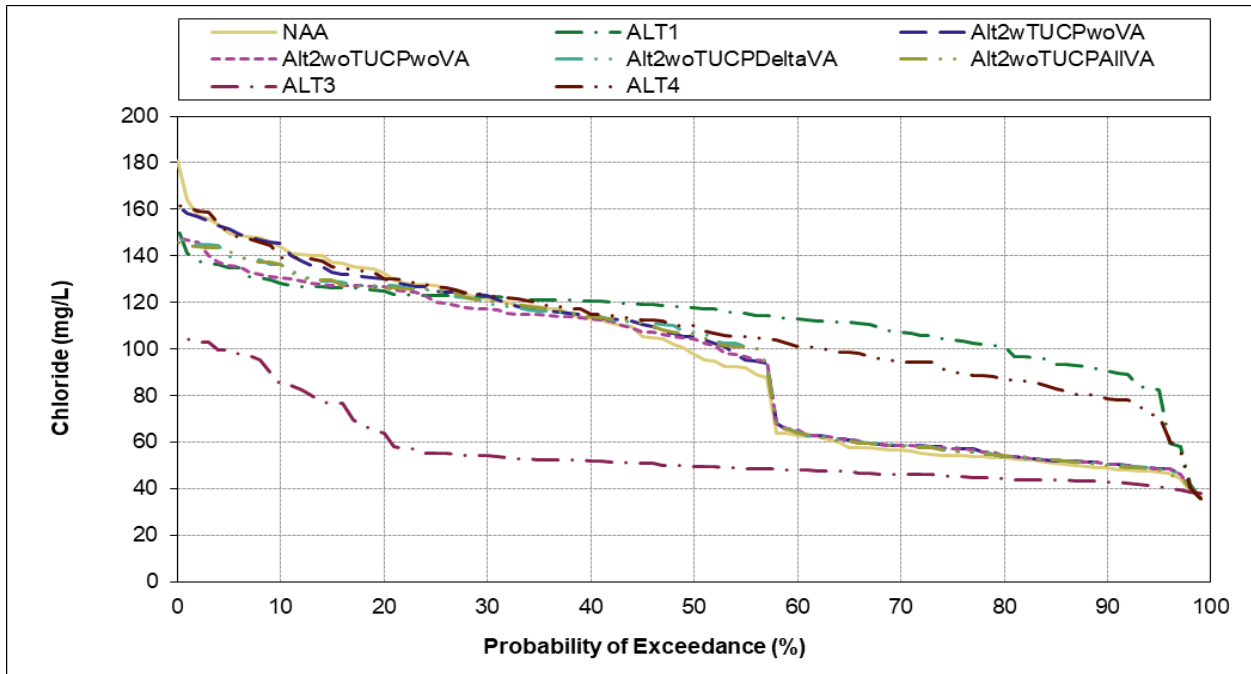


Figure G.2-3-15. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), September

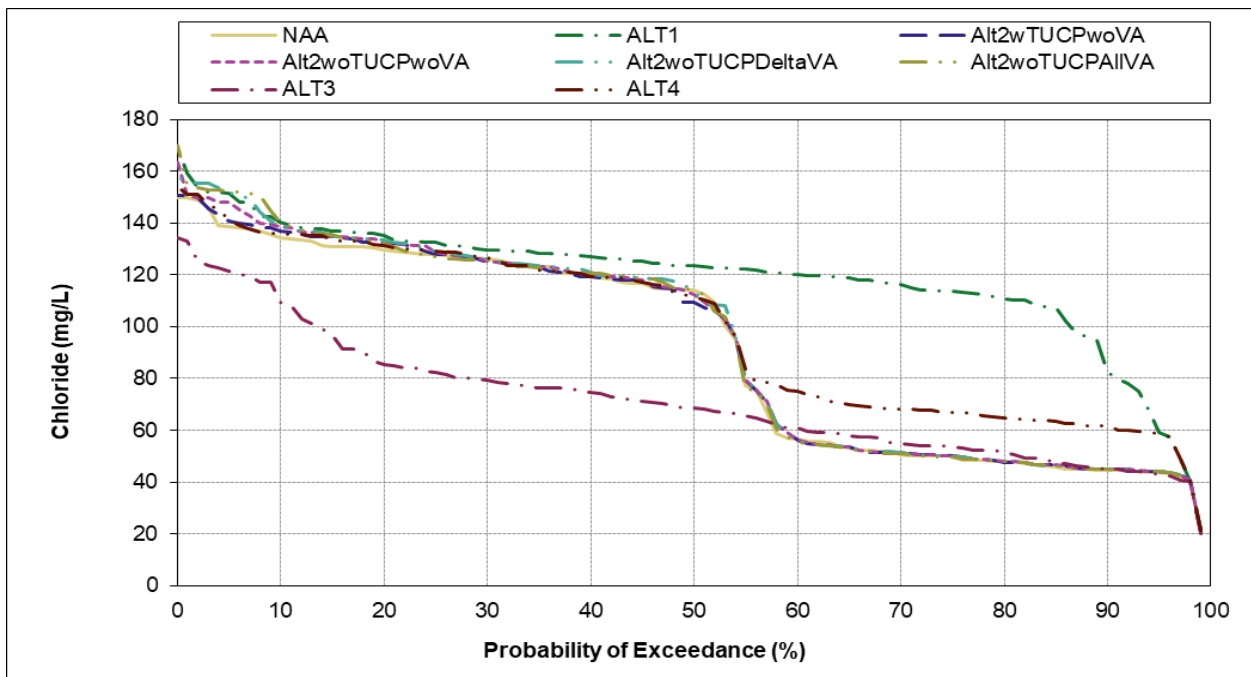


Figure G.2-3-16. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), October

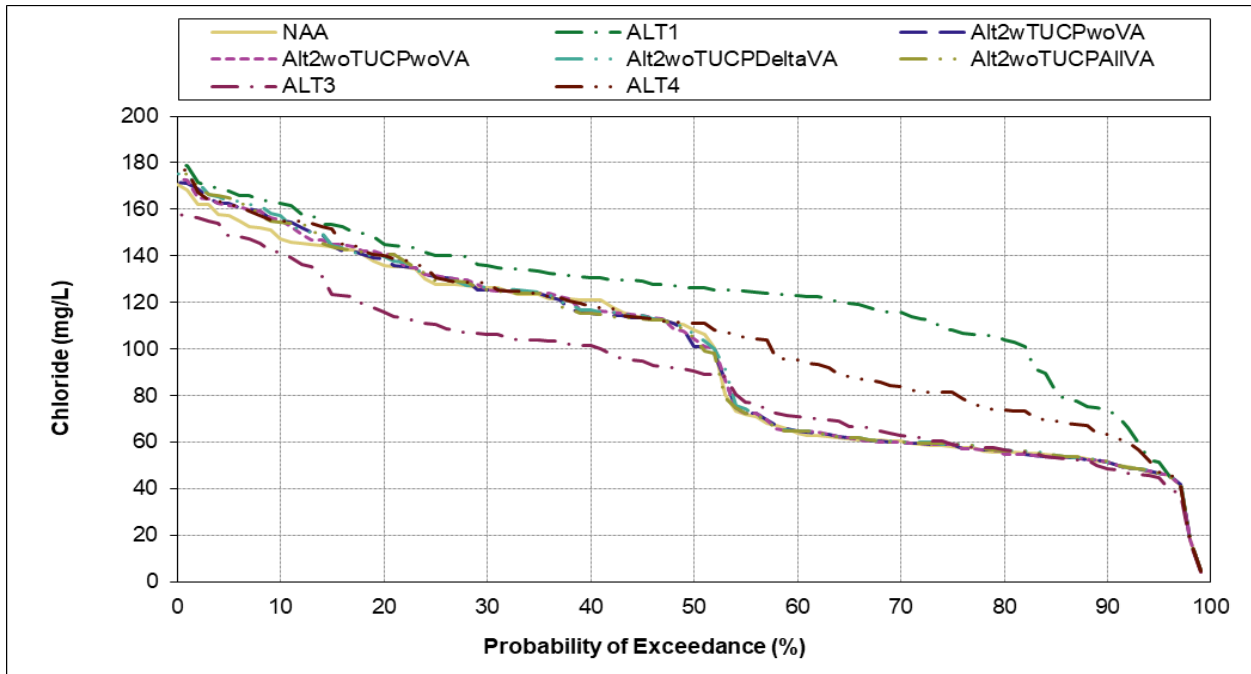


Figure G.2-3-17. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), November

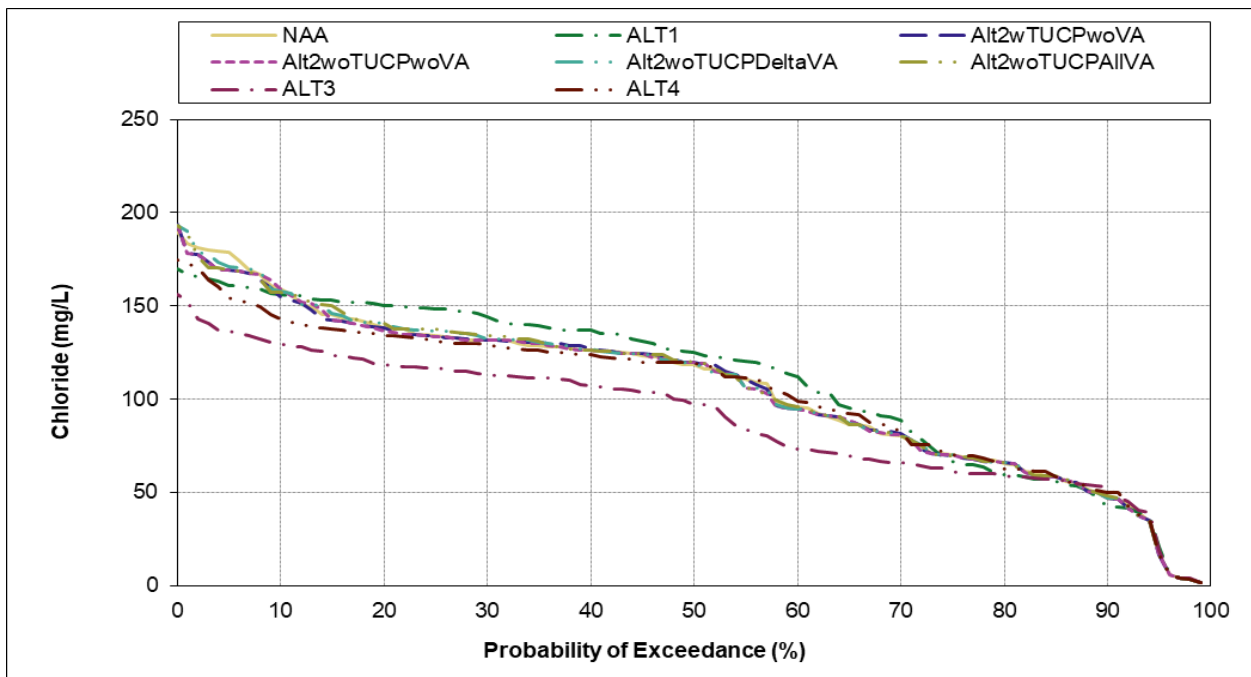


Figure G.2-3-18. Jones Pumping Plant, Monthly Average Chloride (in milligrams per liter), December

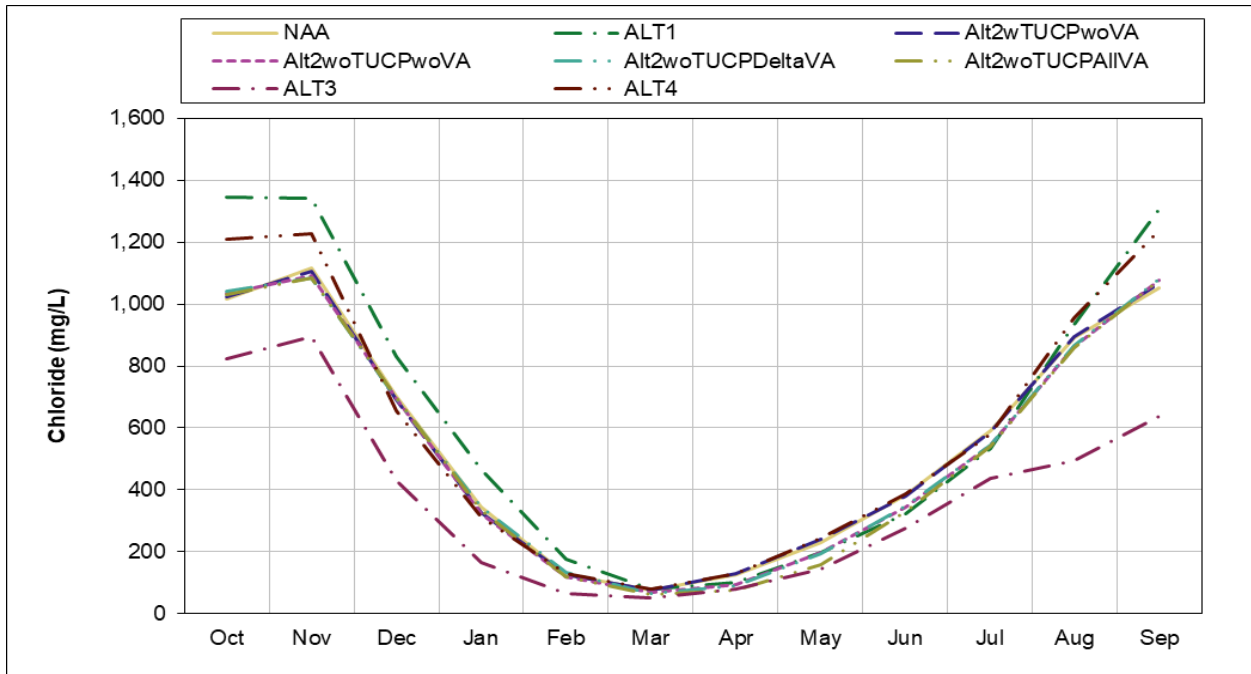


Figure G.2-4-1. San Joaquin River at Antioch, Long term Monthly Average Chloride (in milligrams per liter)

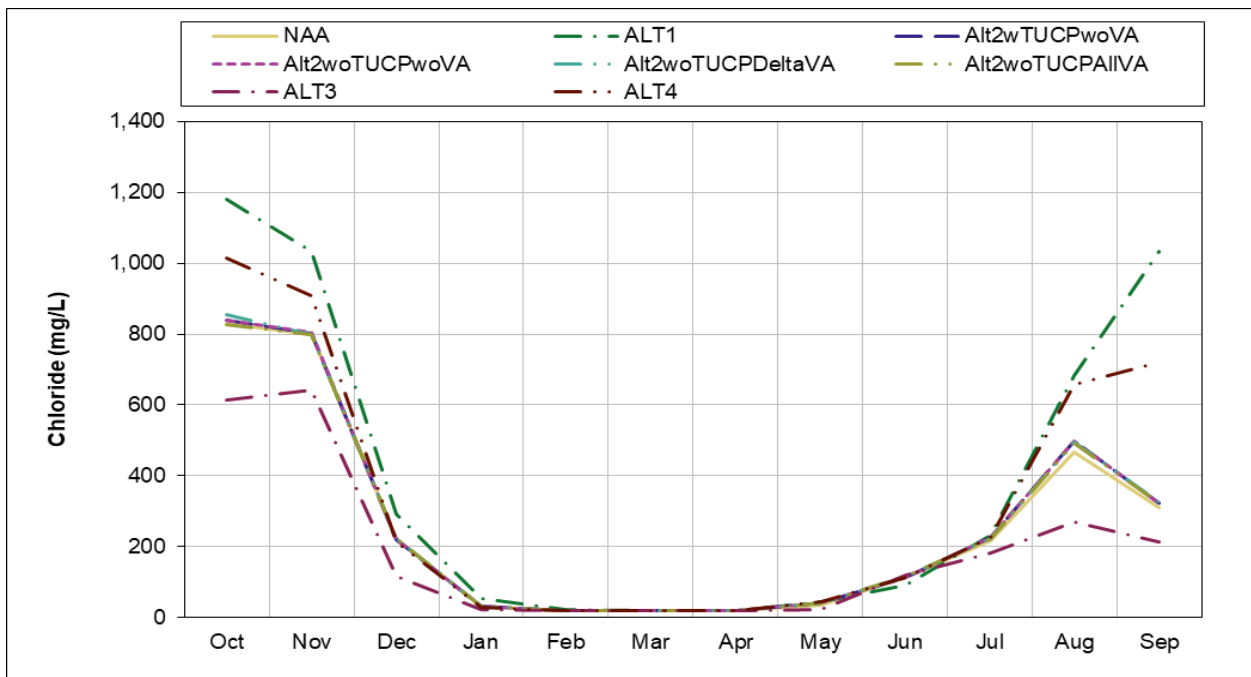


Figure G.2-4-2. San Joaquin River at Antioch, Wet Year Monthly Average Chloride (in milligrams per liter)

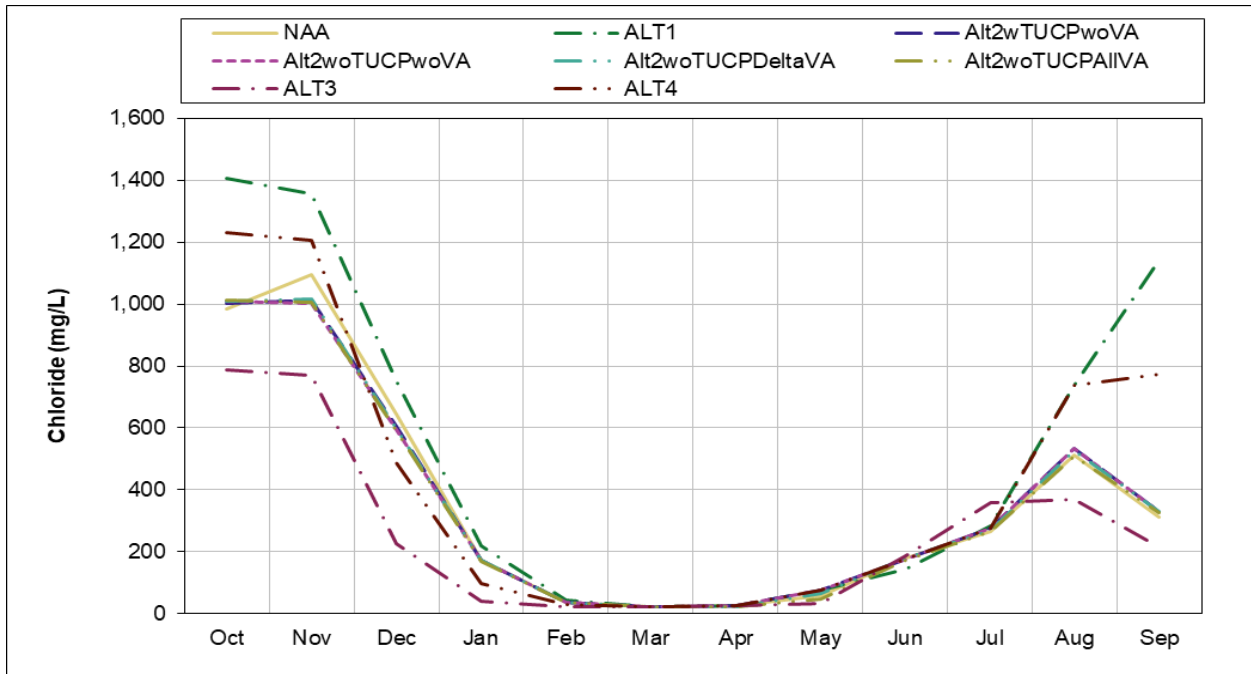


Figure G.2-4-3. San Joaquin River at Antioch, Above Normal Year Monthly Average Chloride (in milligrams per liter)

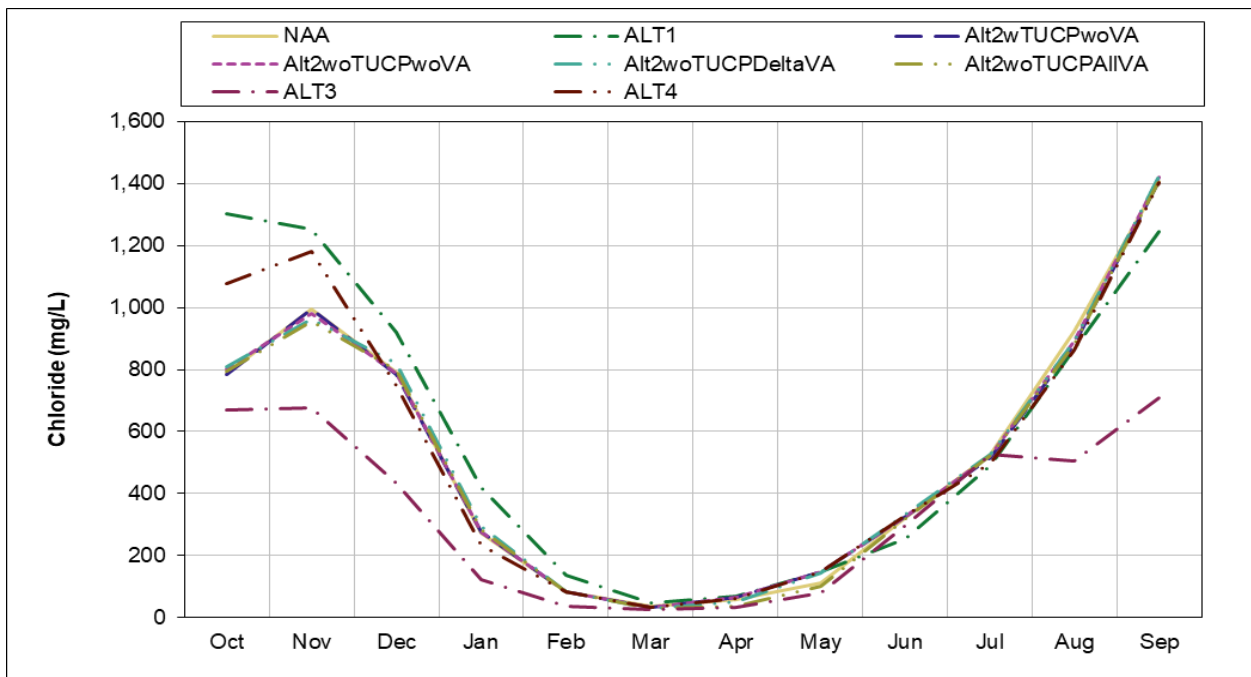


Figure G.2-4-4. San Joaquin River at Antioch, Below Normal Year Monthly Average Chloride (in milligrams per liter)

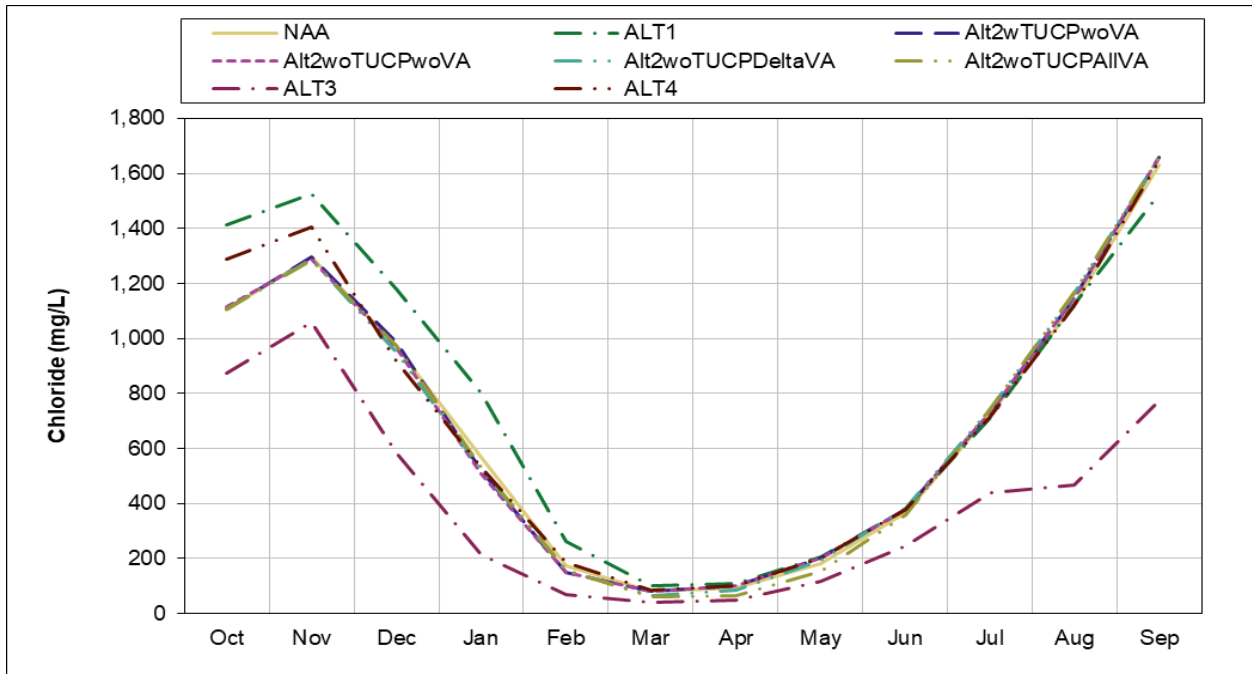


Figure G.2-4-5. San Joaquin River at Antioch, Dry Year Monthly Average Chloride (in milligrams per liter)

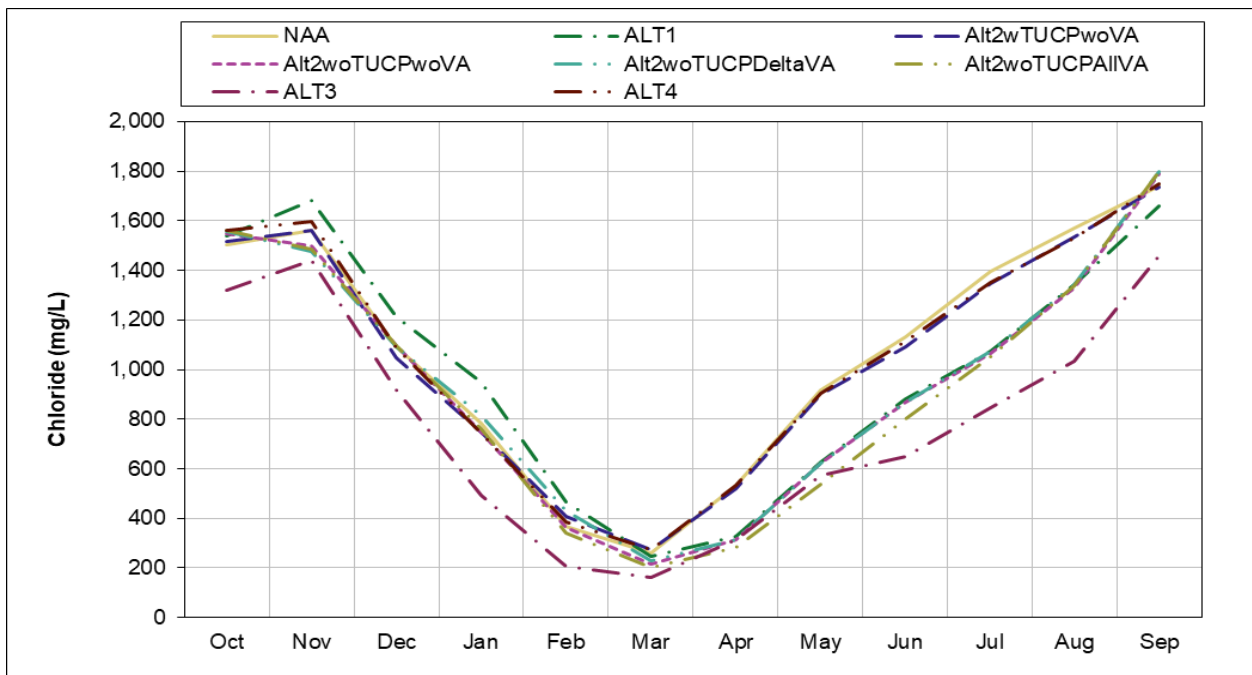


Figure G.2-4-6. San Joaquin River at Antioch, Critical Year Monthly Average Chloride (in milligrams per liter)

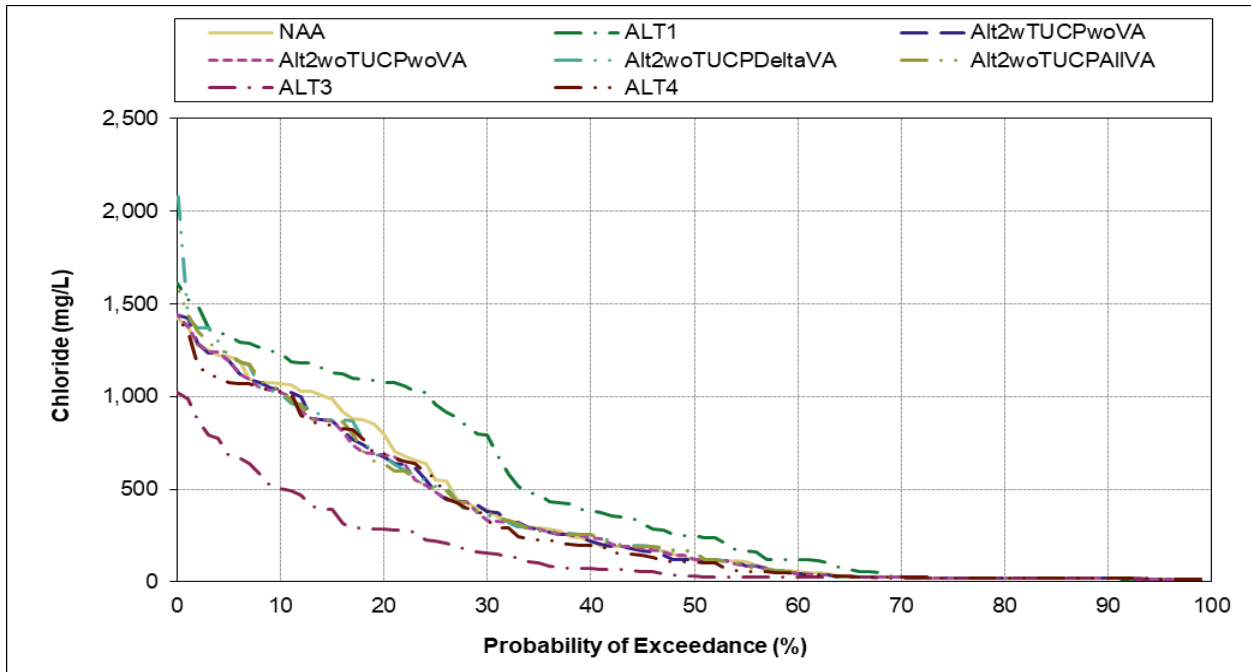


Figure G.2-4-7. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), January

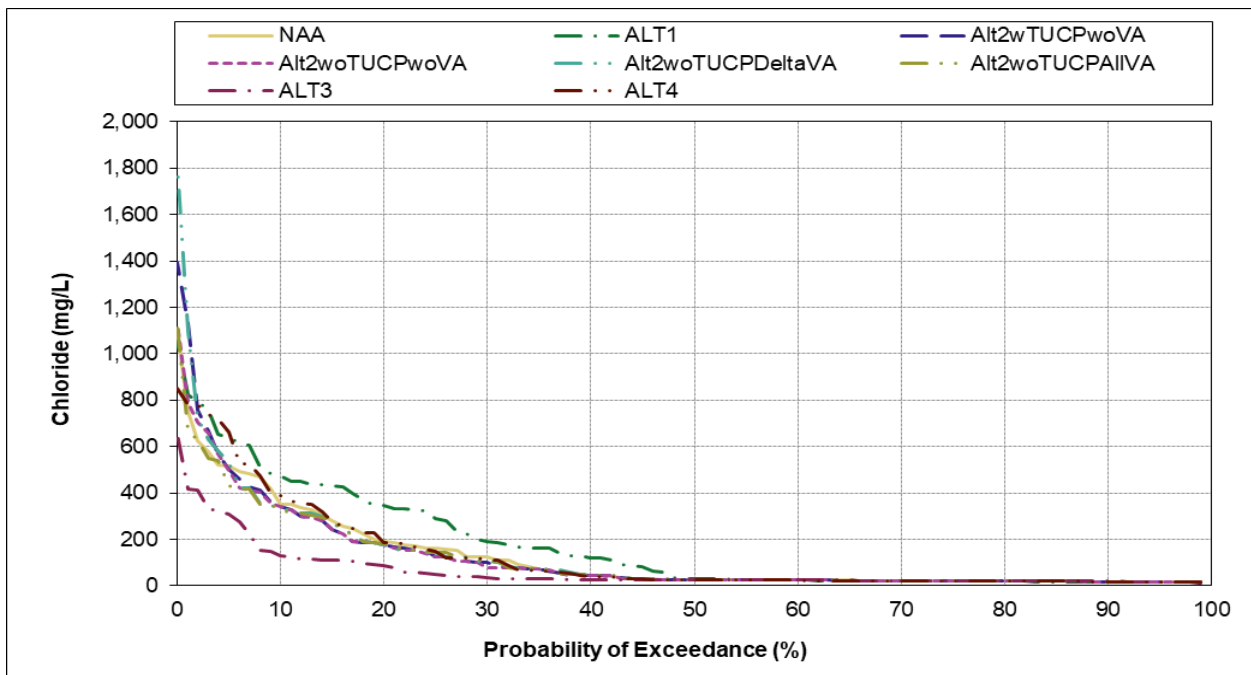


Figure G.2-4-8. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), February



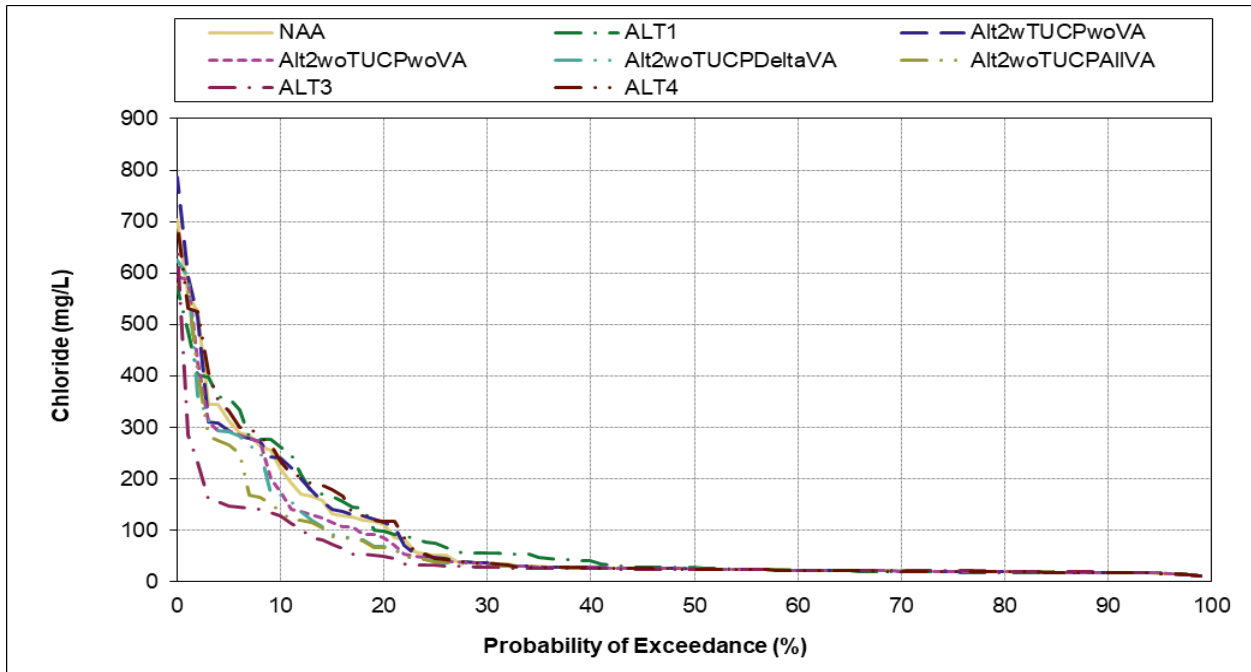


Figure G.2-4-9. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), March

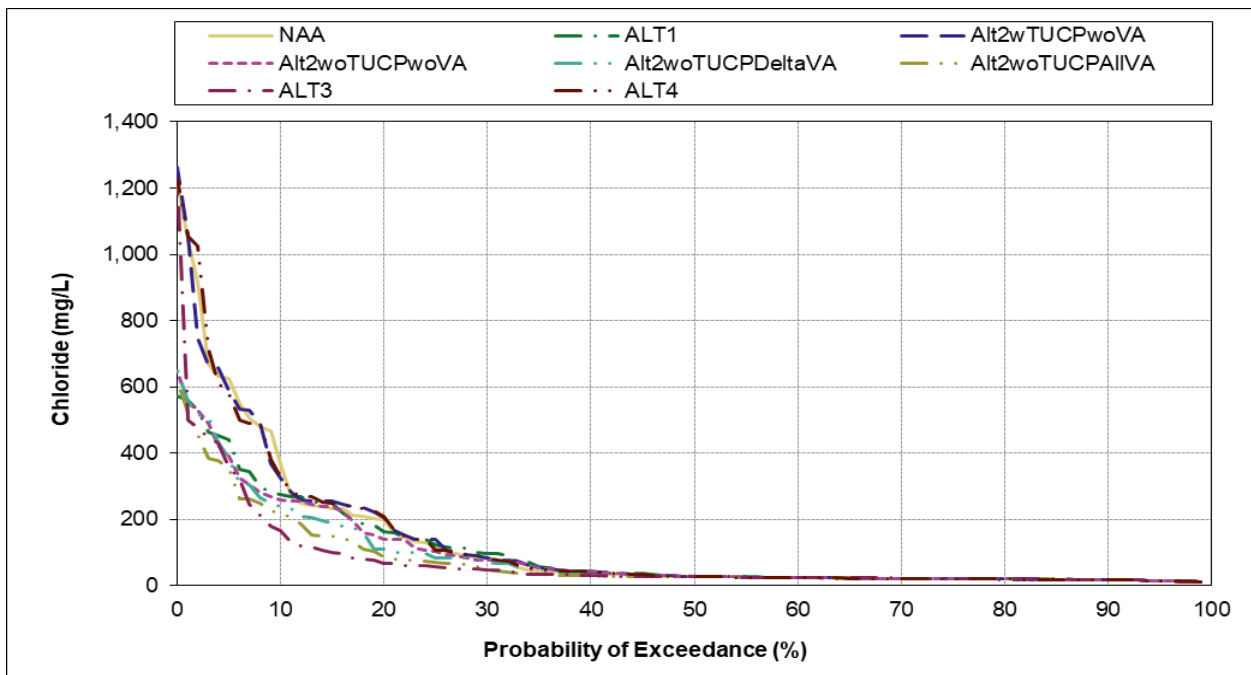


Figure G.2-4-10. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), April

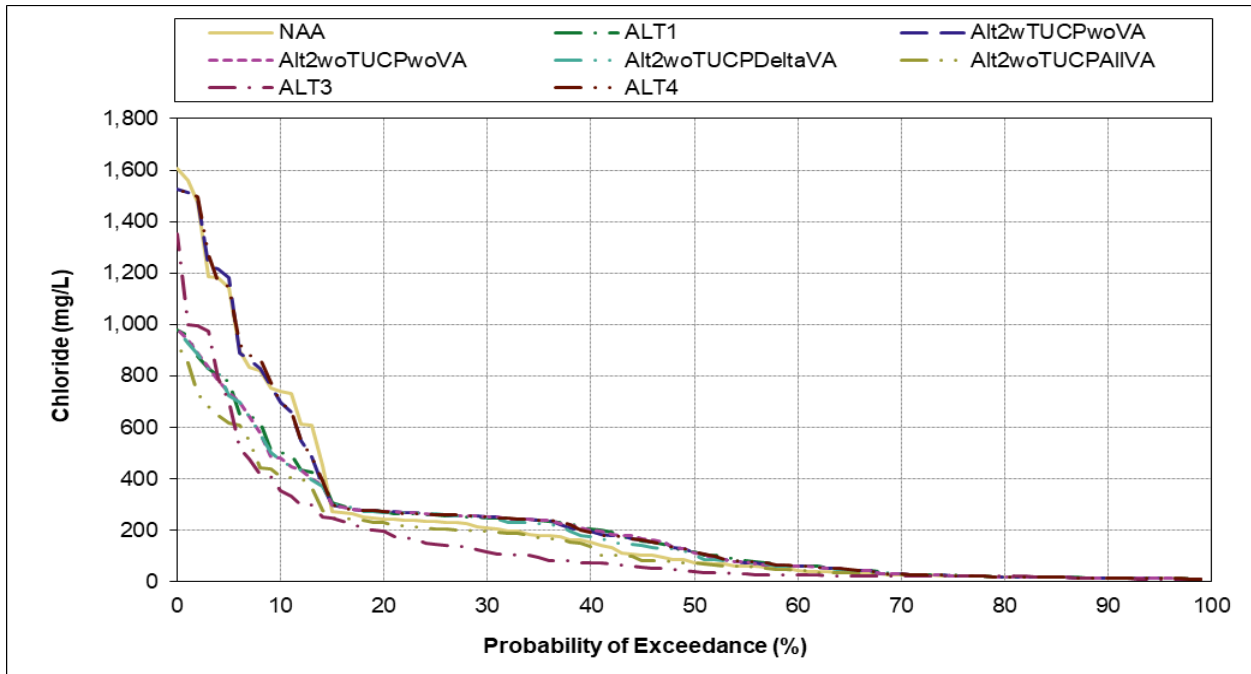


Figure G.2-4-11. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), May

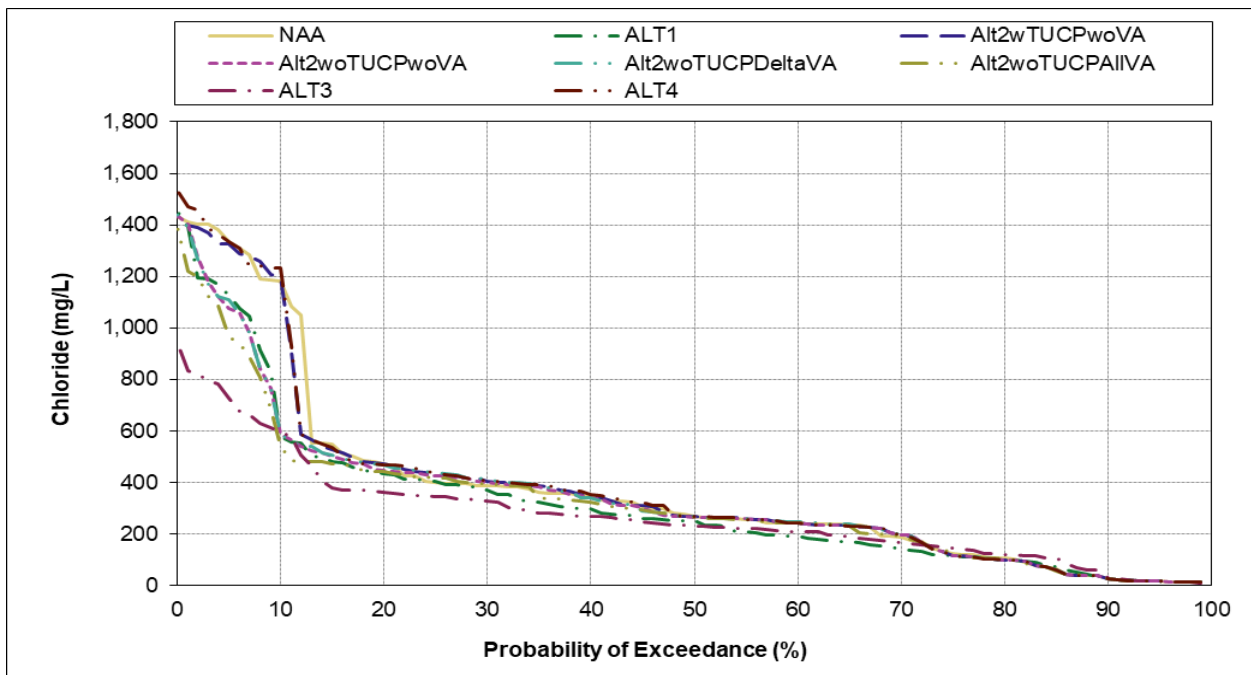


Figure G.2-4-12. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), June

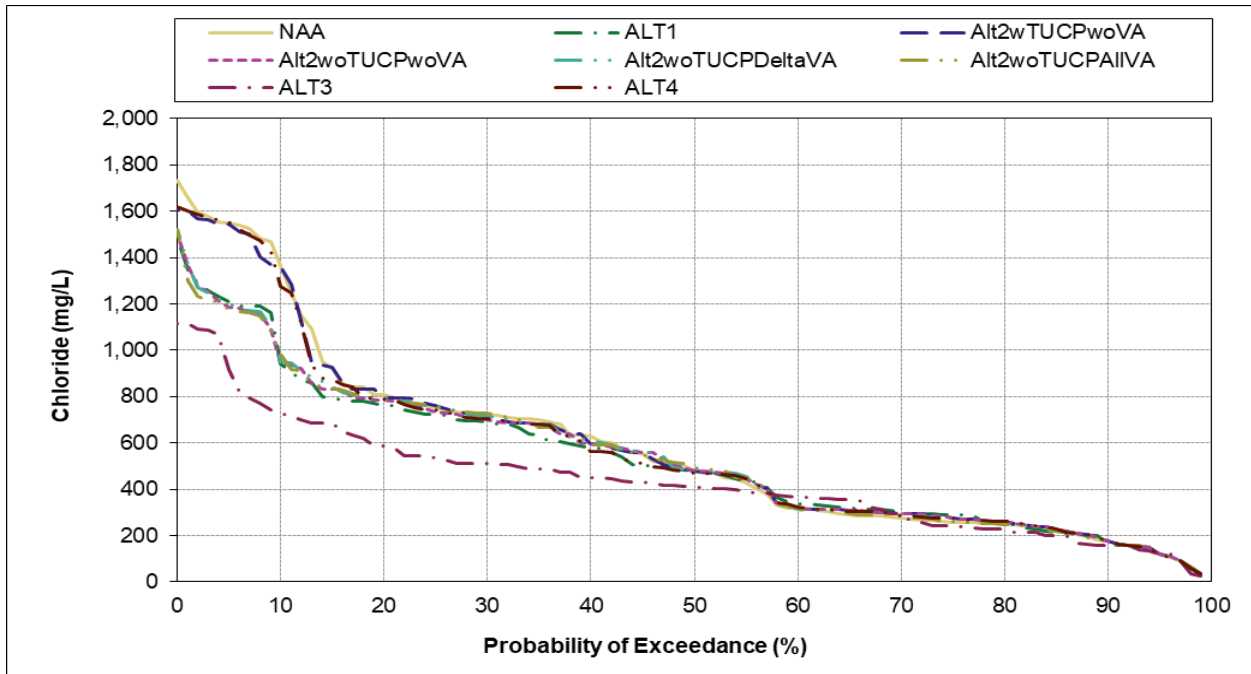


Figure G.2-4-13. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), July

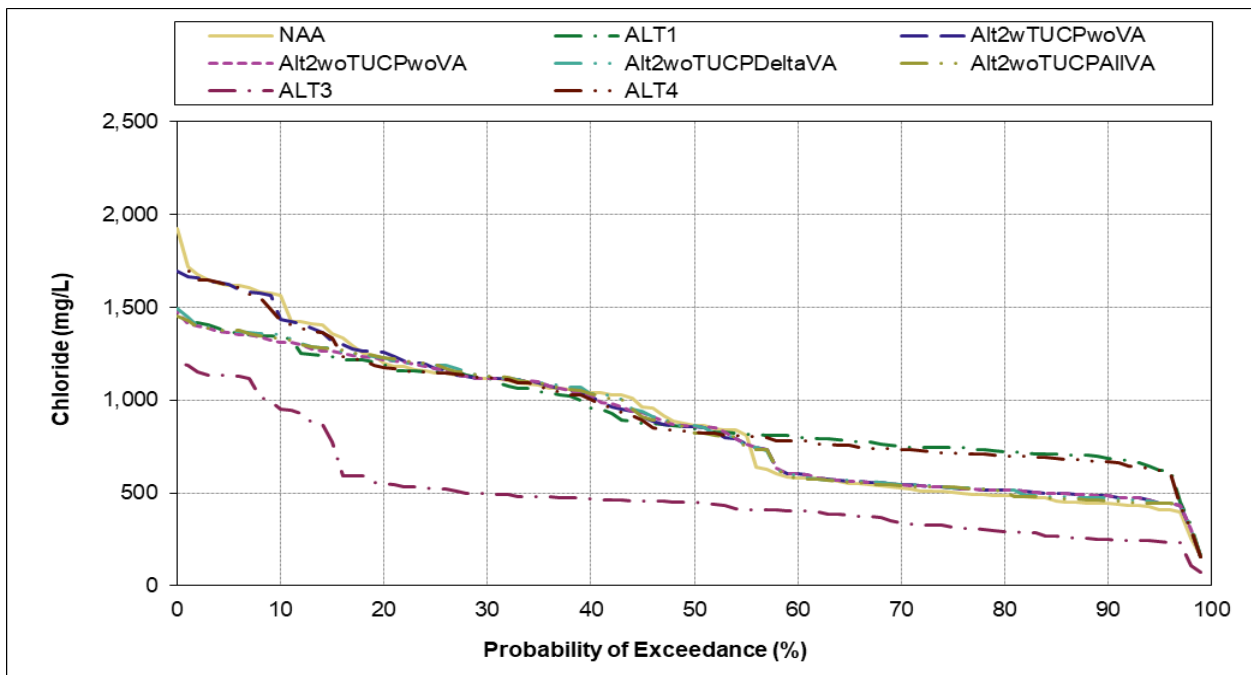


Figure G.2-4-14. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), August

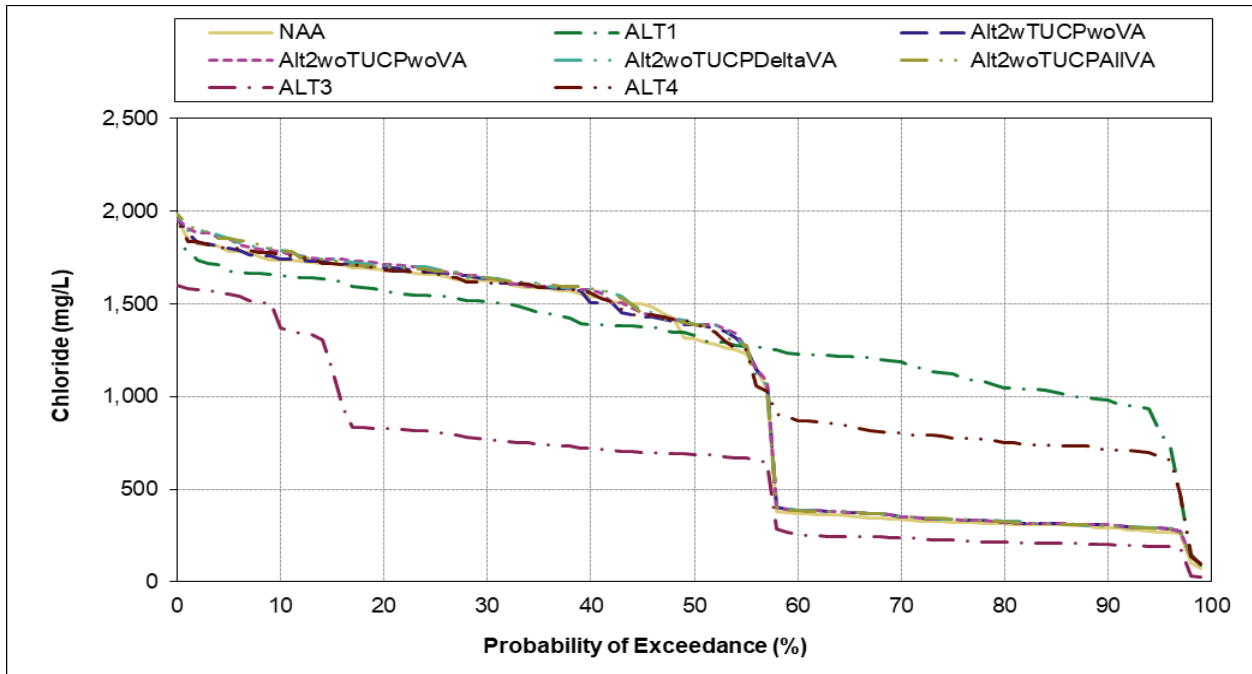


Figure G.2-4-15. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), September

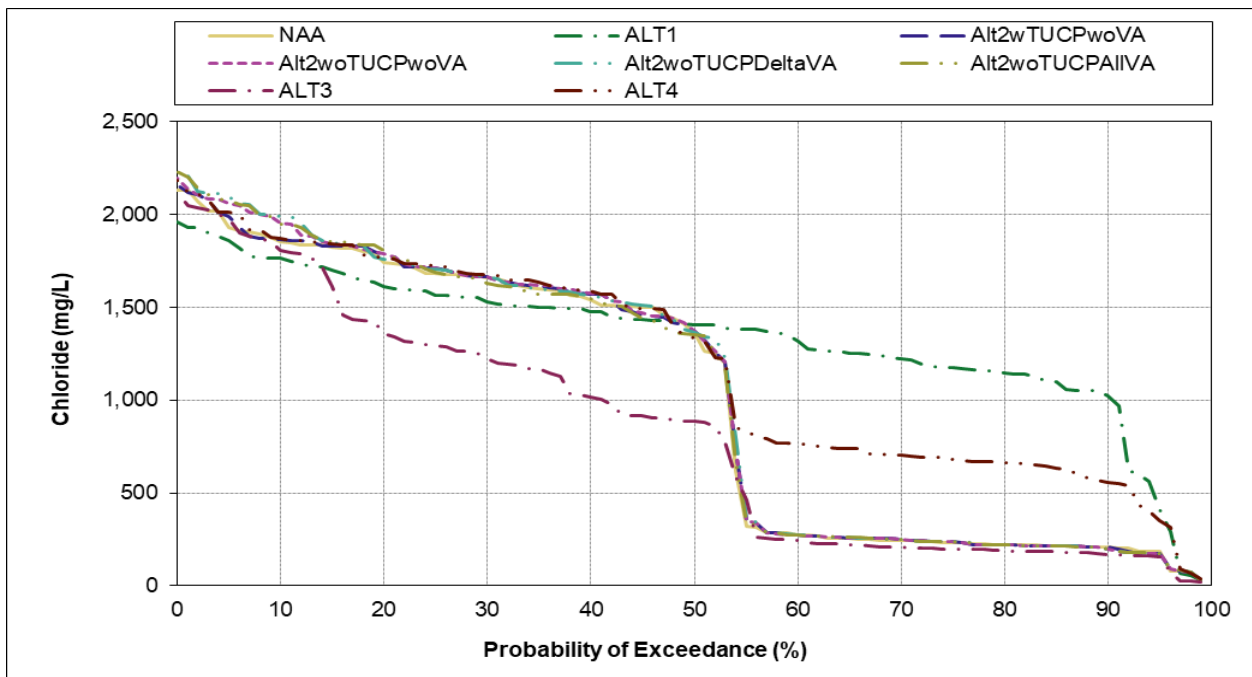


Figure G.2-4-16. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), October

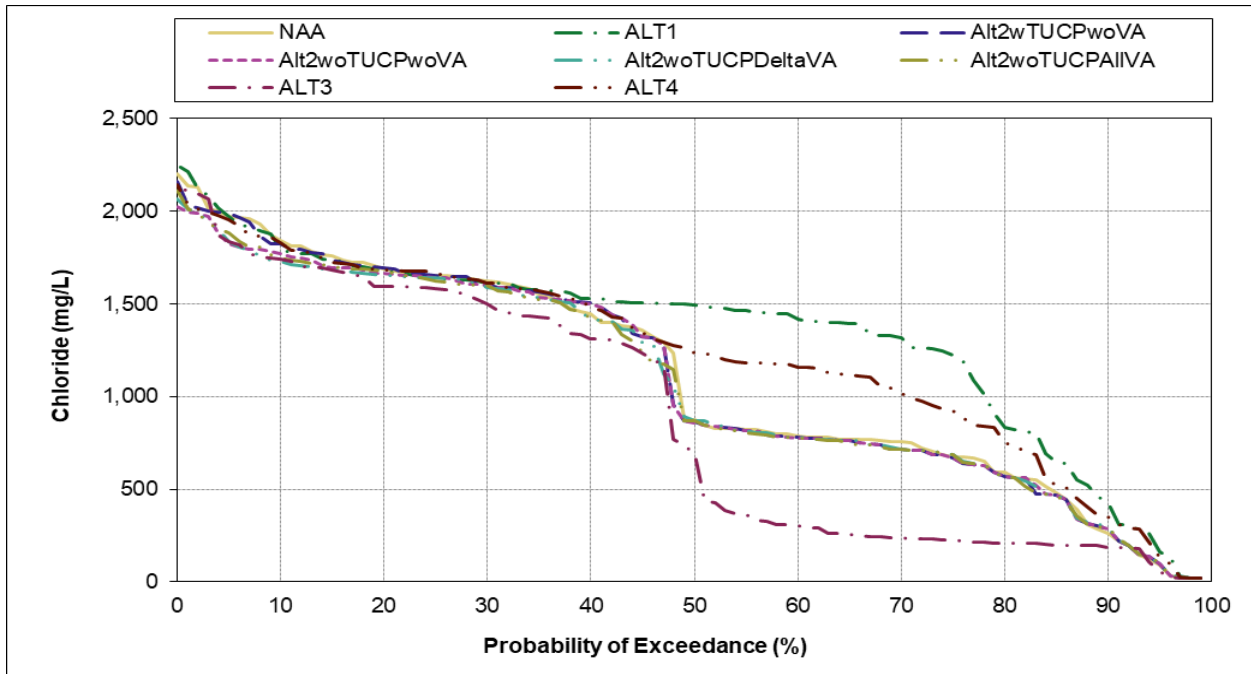


Figure G.2-4-17. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), November

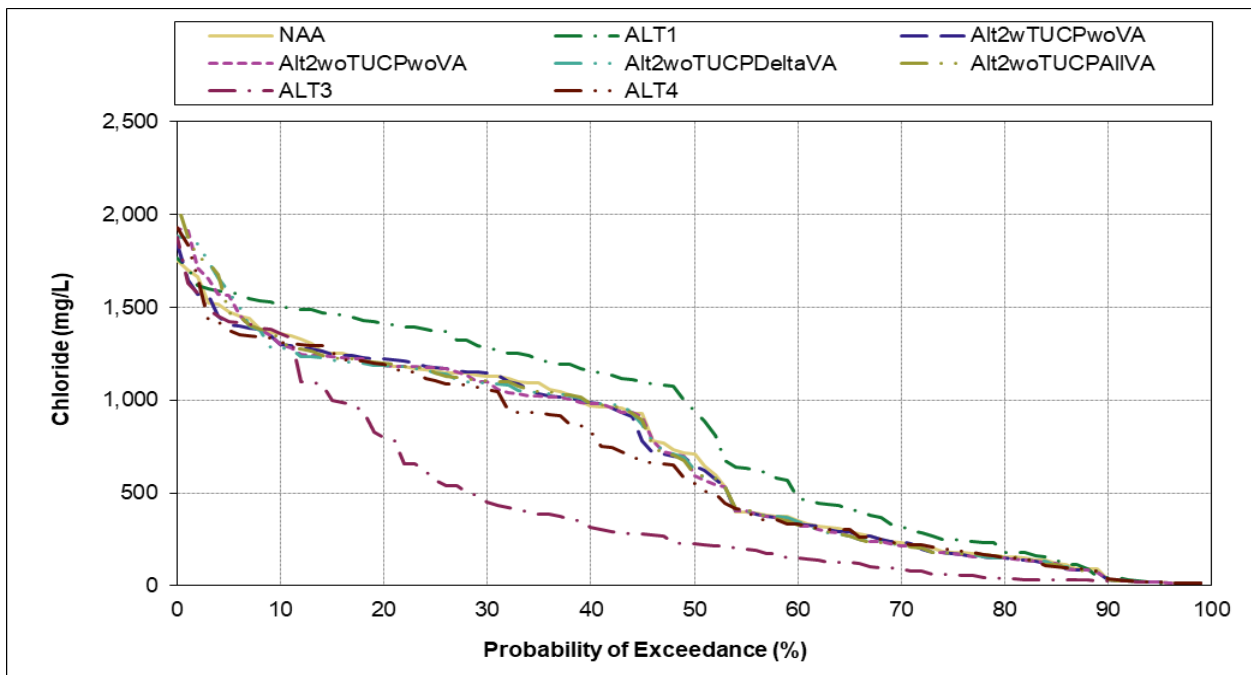


Figure G.2-4-18. San Joaquin River at Antioch, Monthly Average Chloride (in milligrams per liter), December

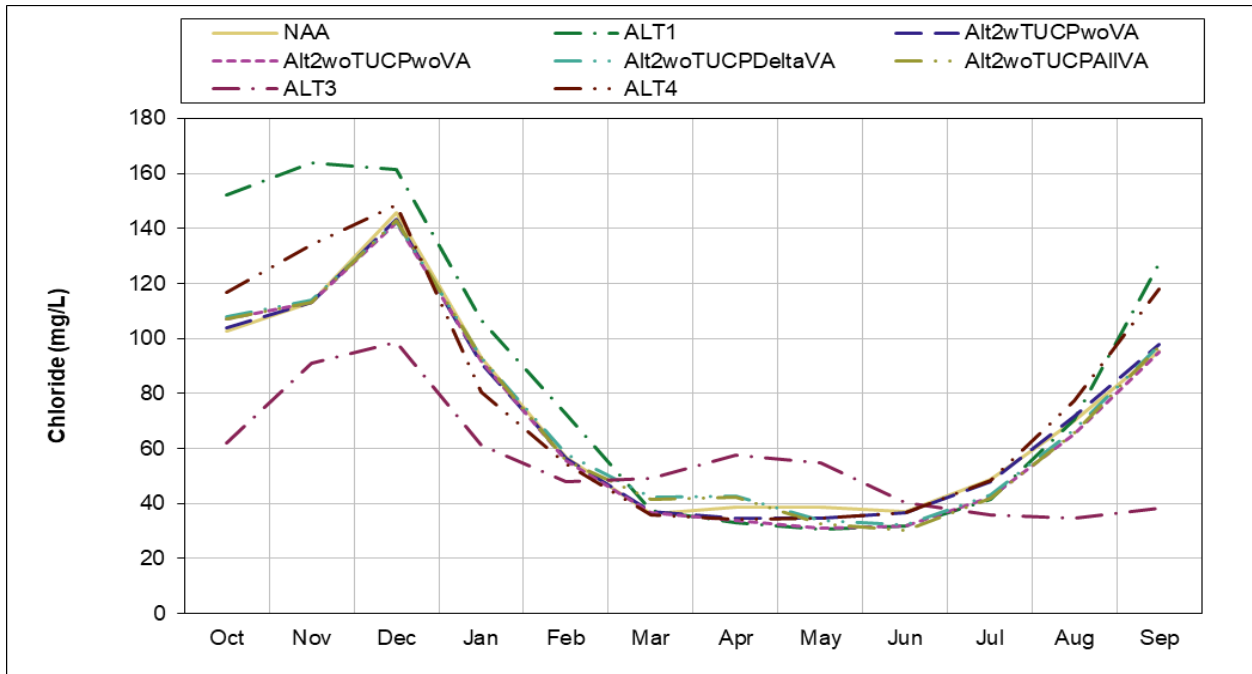


Figure G.2-5-1. Contra Costa Water District Pumping Plant #1, Long term Monthly Average Chloride (in milligrams per liter)

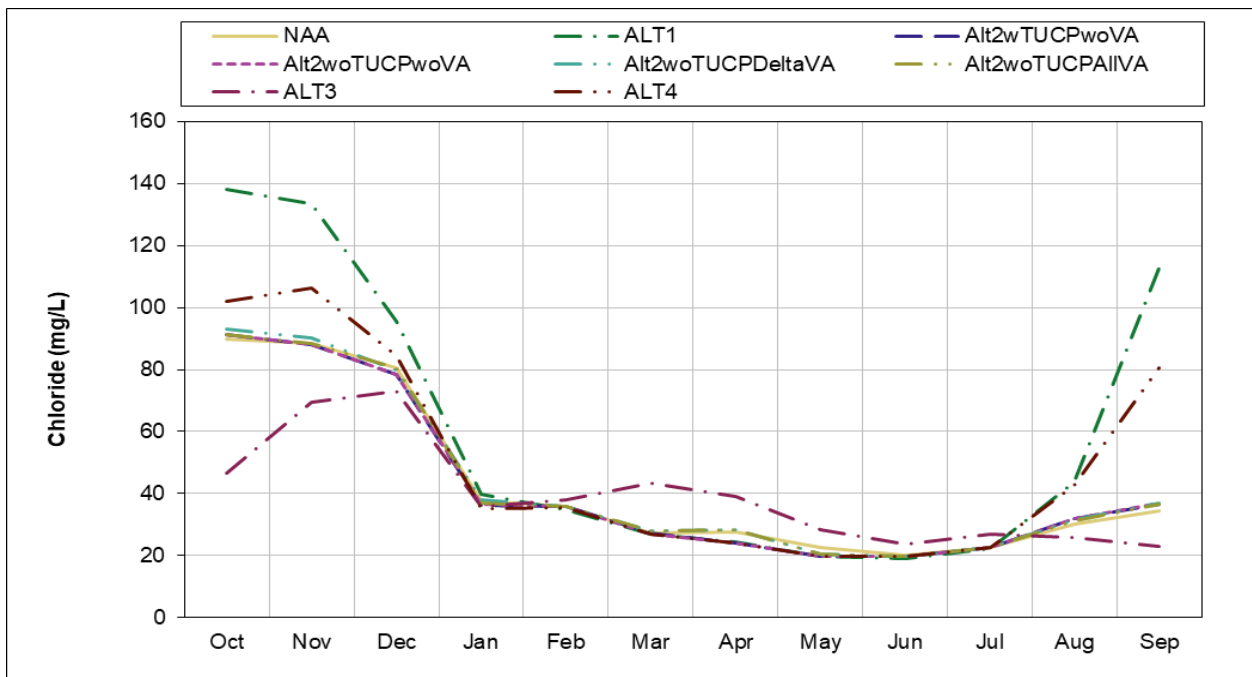


Figure G.2-5-2. Contra Costa Water District Pumping Plant #1, Wet Year Monthly Average Chloride (in milligrams per liter)

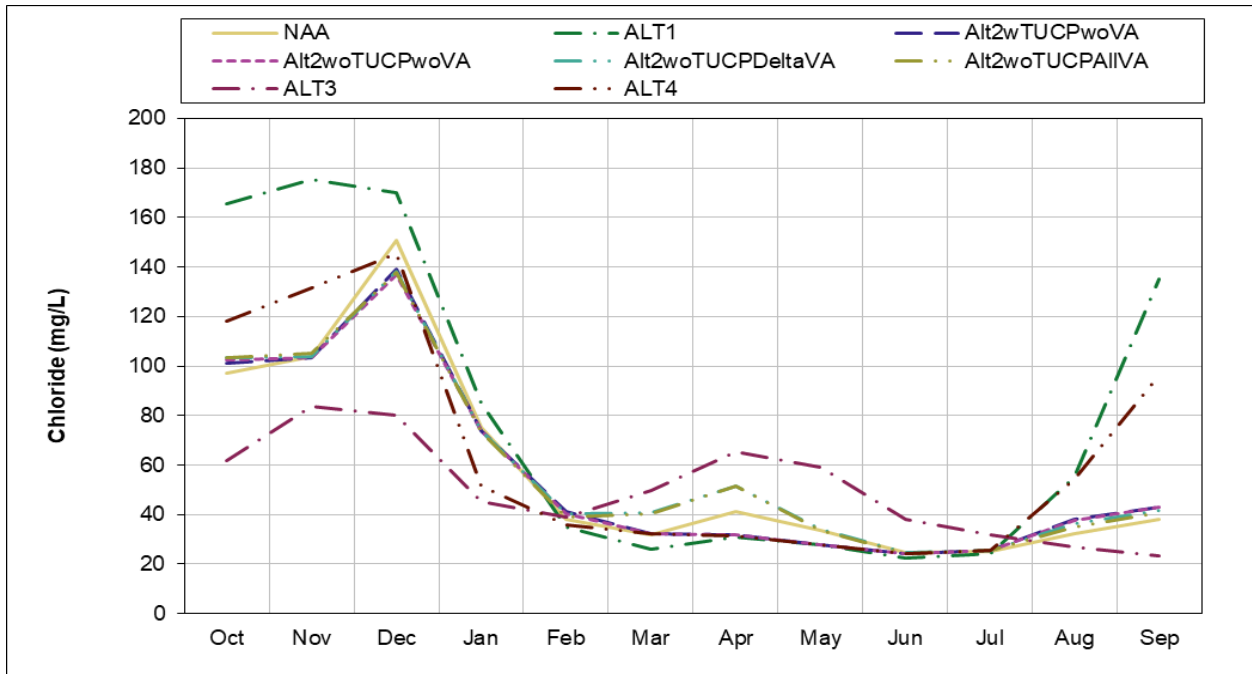


Figure G.2-5-3. Contra Costa Water District Pumping Plant #1, Above Normal Year Monthly Average Chloride (in milligrams per liter)

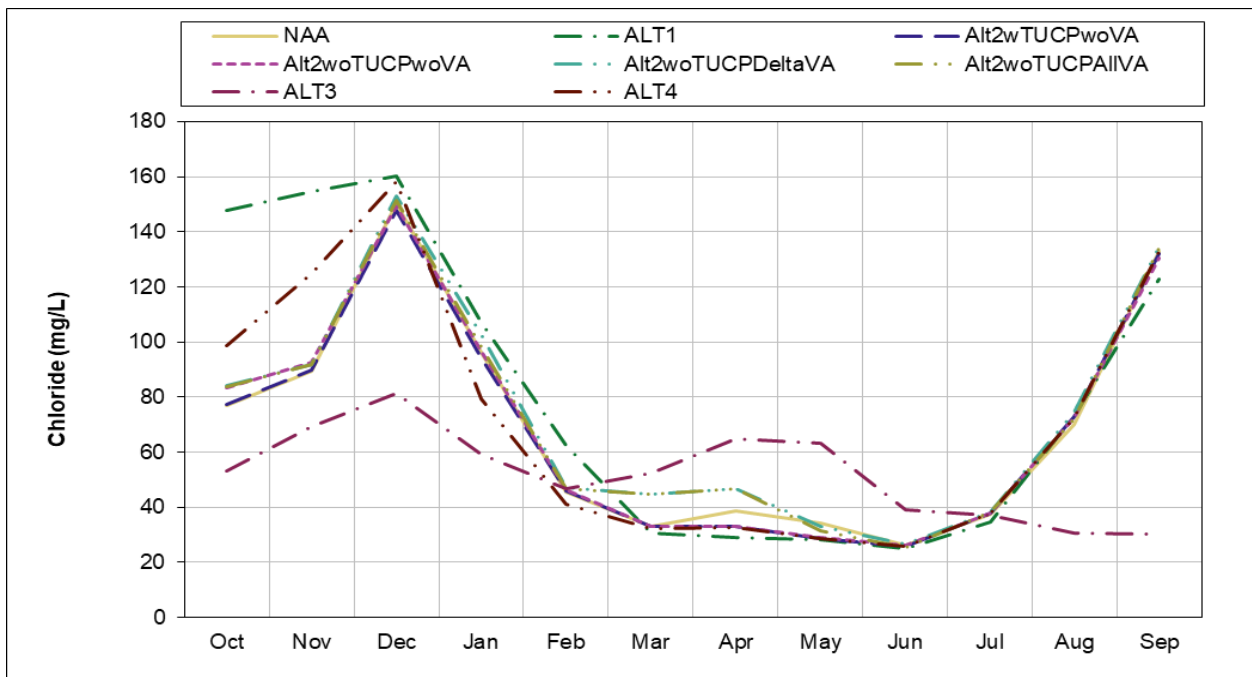


Figure G.2-5-4. Contra Costa Water District Pumping Plant #1, Below Normal Year Monthly Average Chloride (in milligrams per liter)

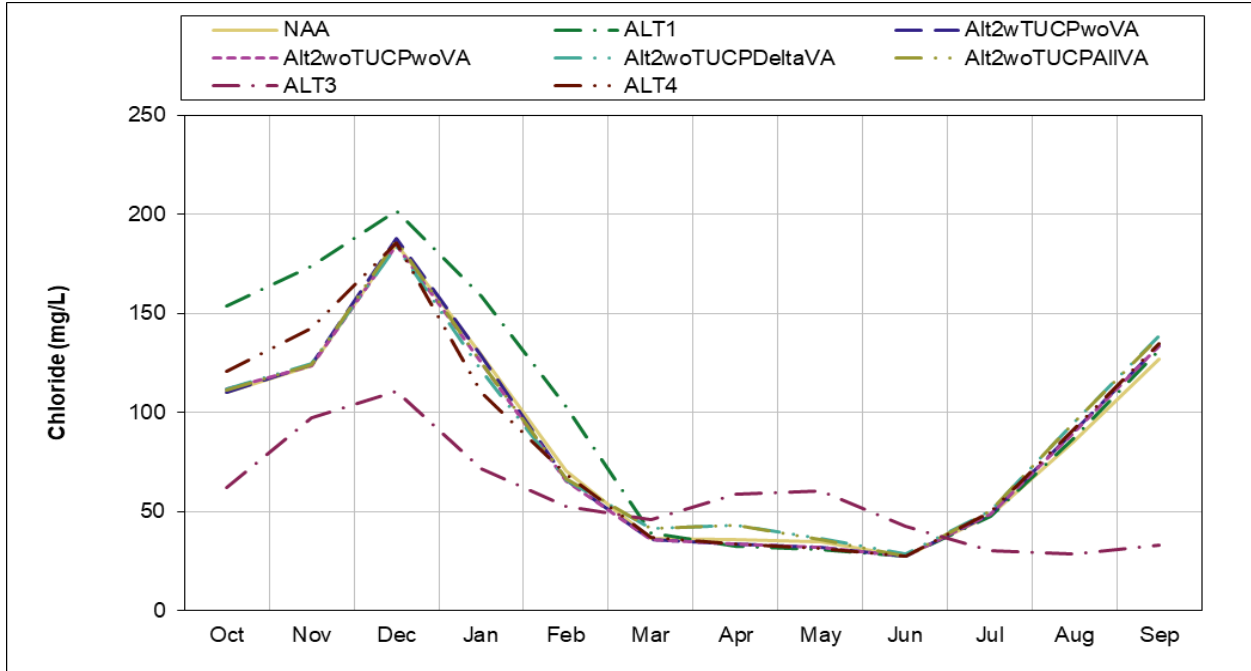


Figure G.2-5-5. Contra Costa Water District Pumping Plant #1, Dry Year Monthly Average Chloride (in milligrams per liter)

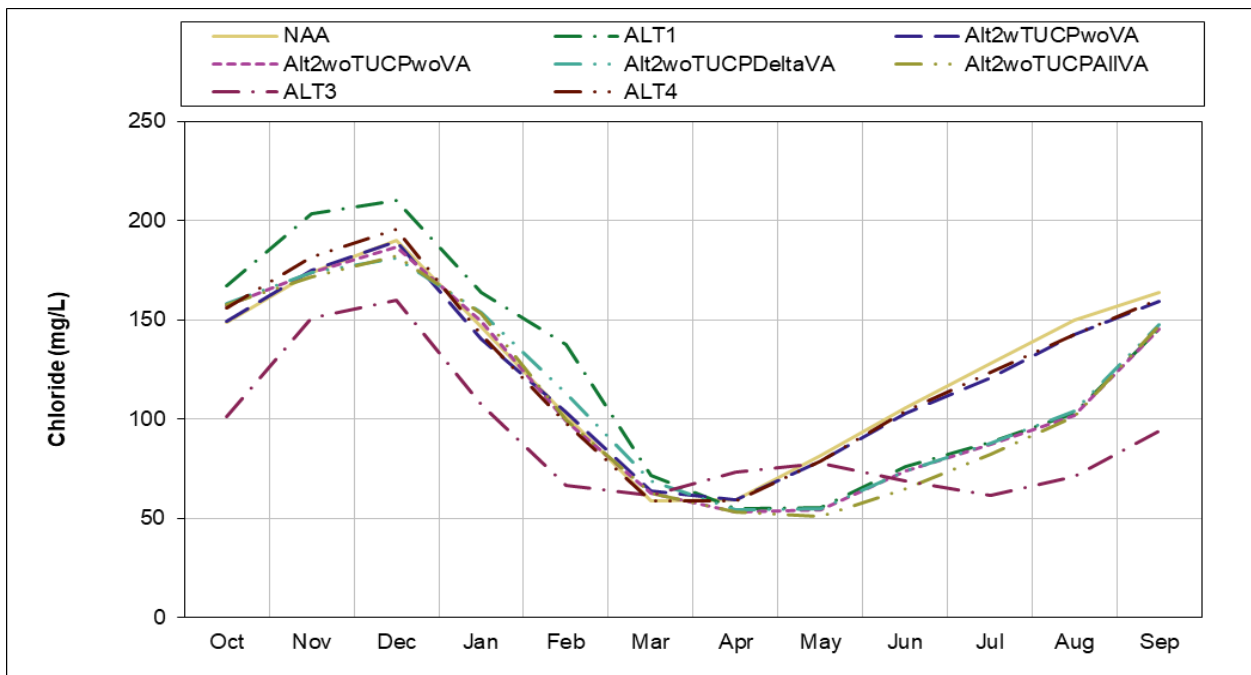


Figure G.2-5-6. Contra Costa Water District Pumping Plant #1, Critical Year Monthly Average Chloride (in milligrams per liter)



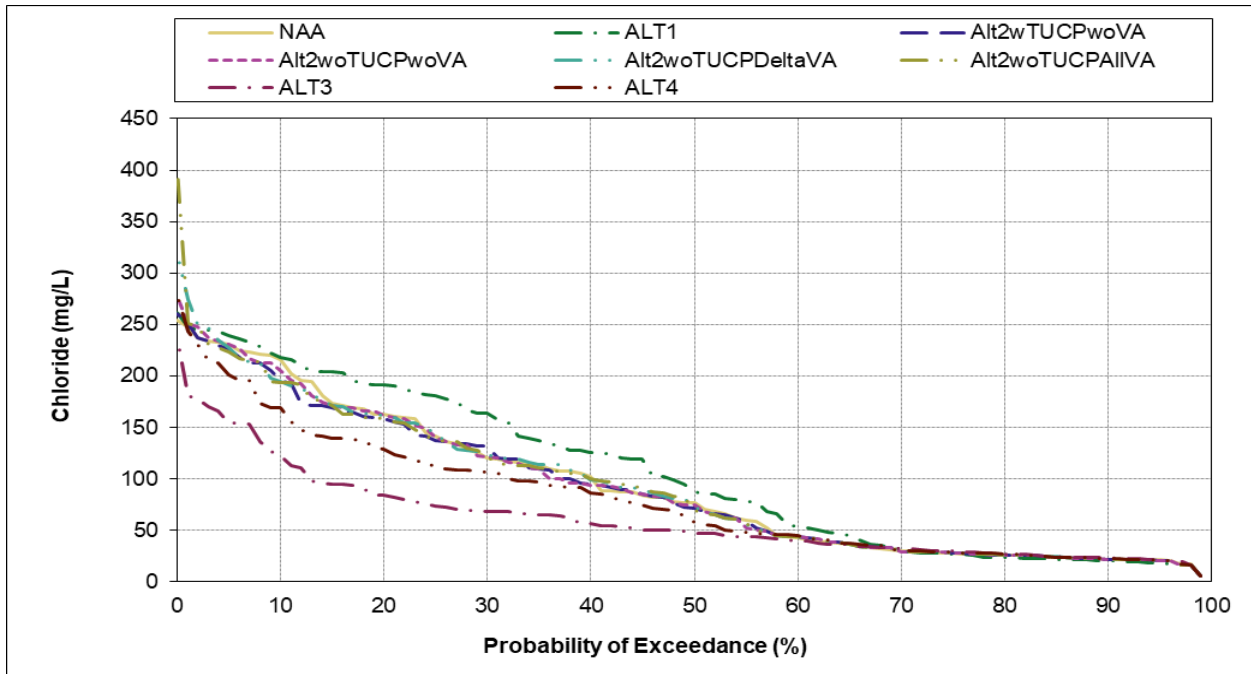


Figure G.2-5-7. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), January

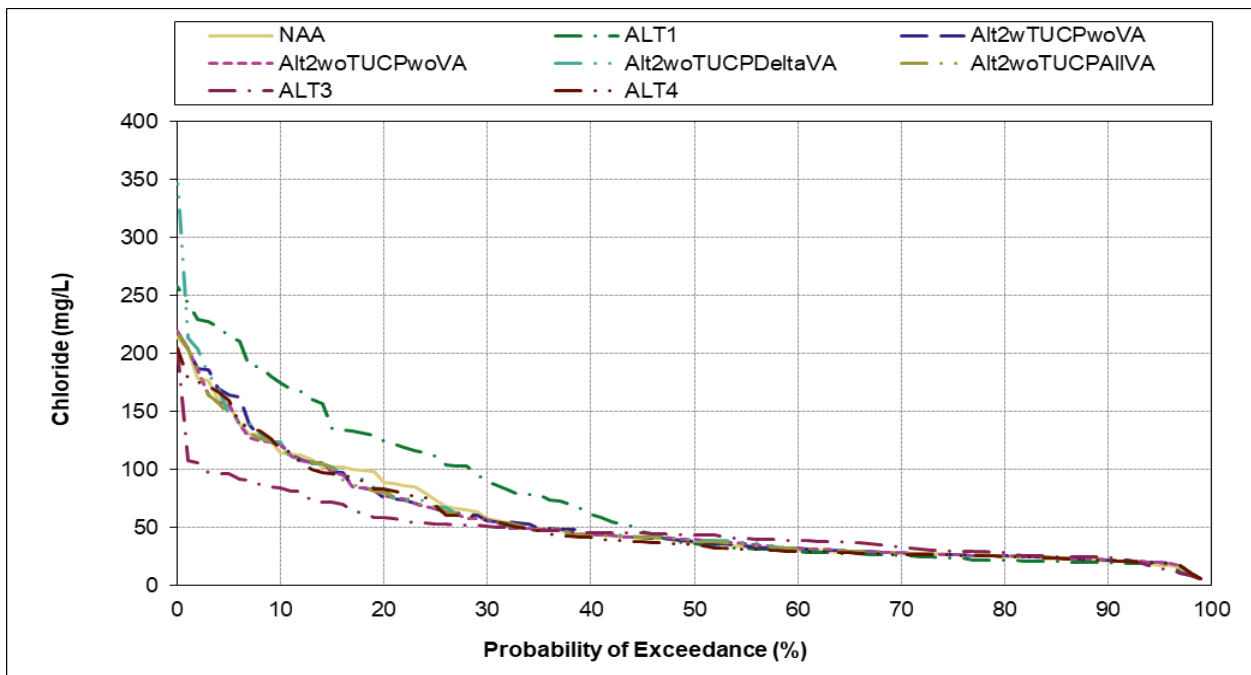


Figure G.2-5-8. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), February

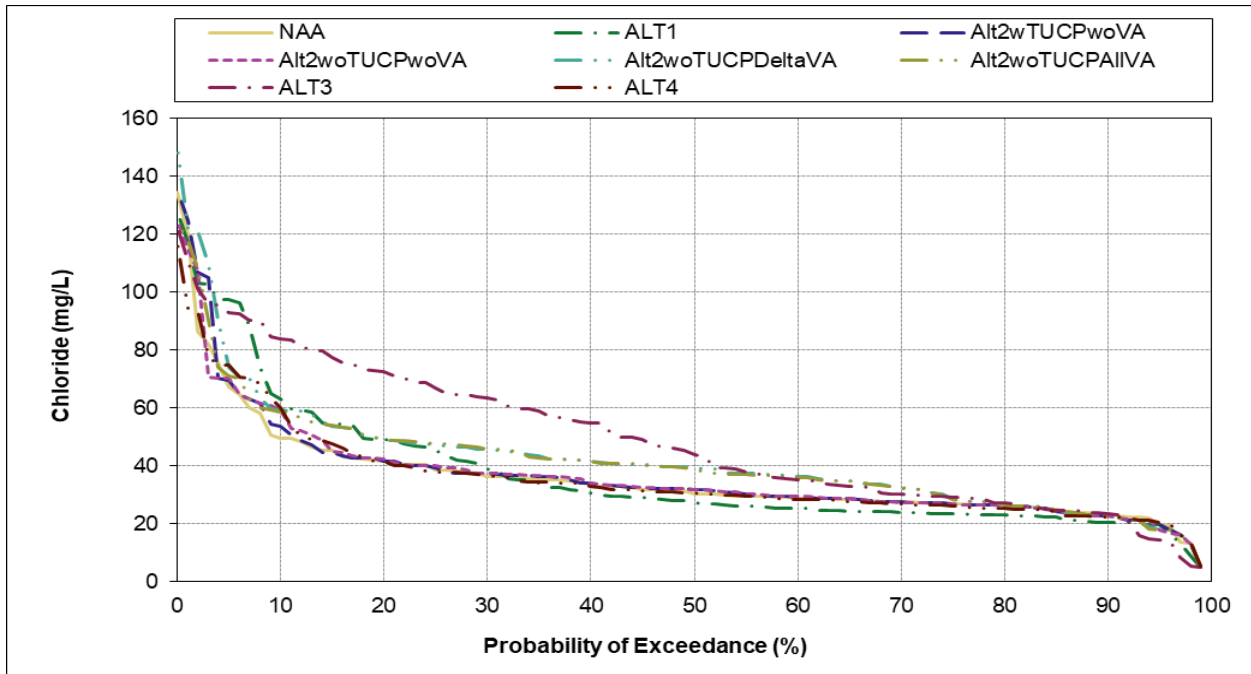


Figure G.2-5-9. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), March

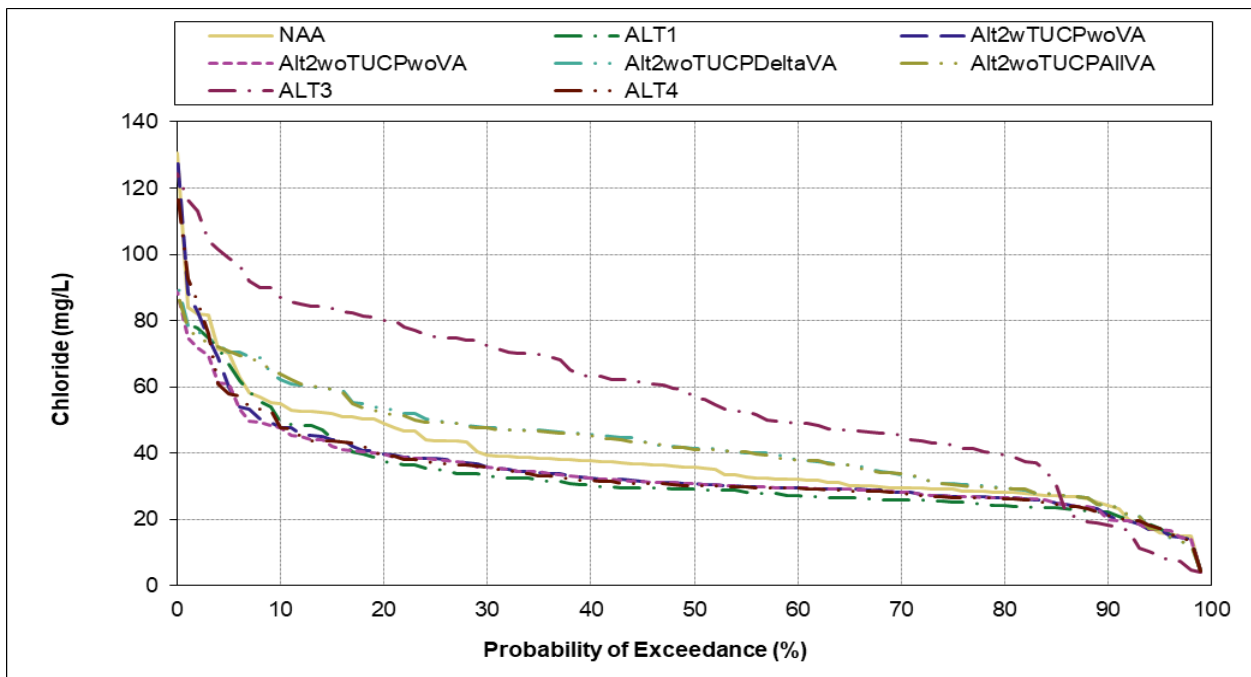


Figure G.2-5-10. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), April

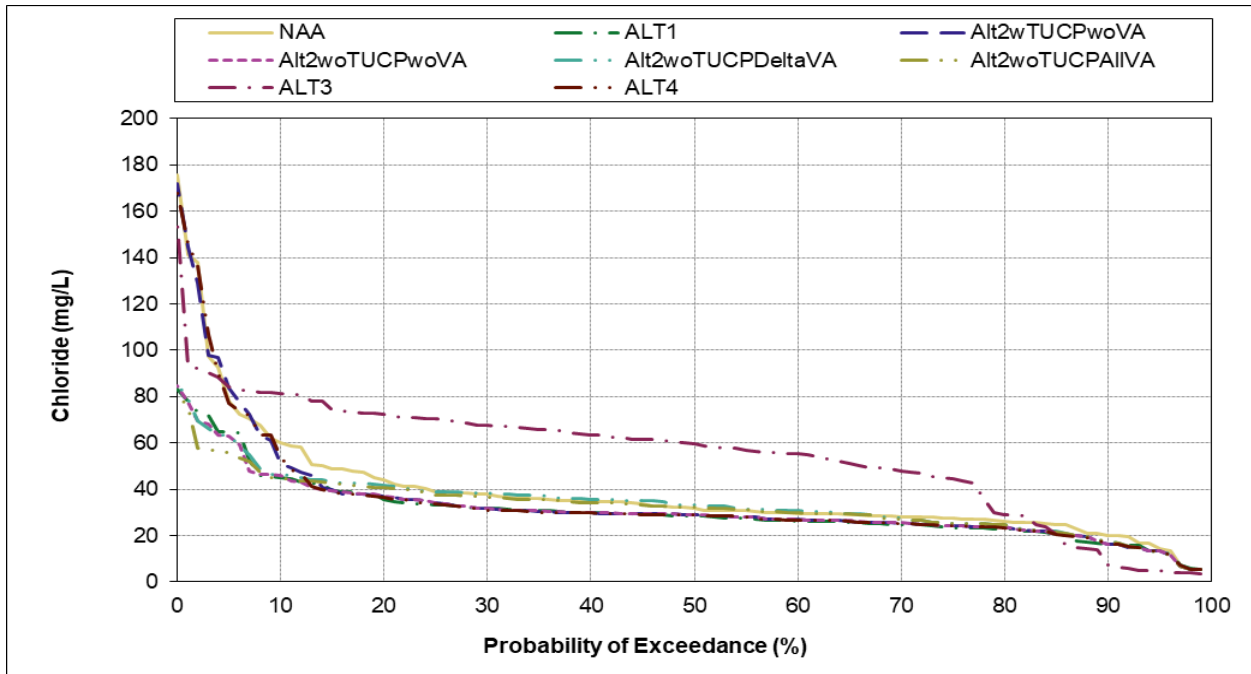


Figure G.2-5-11. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), May

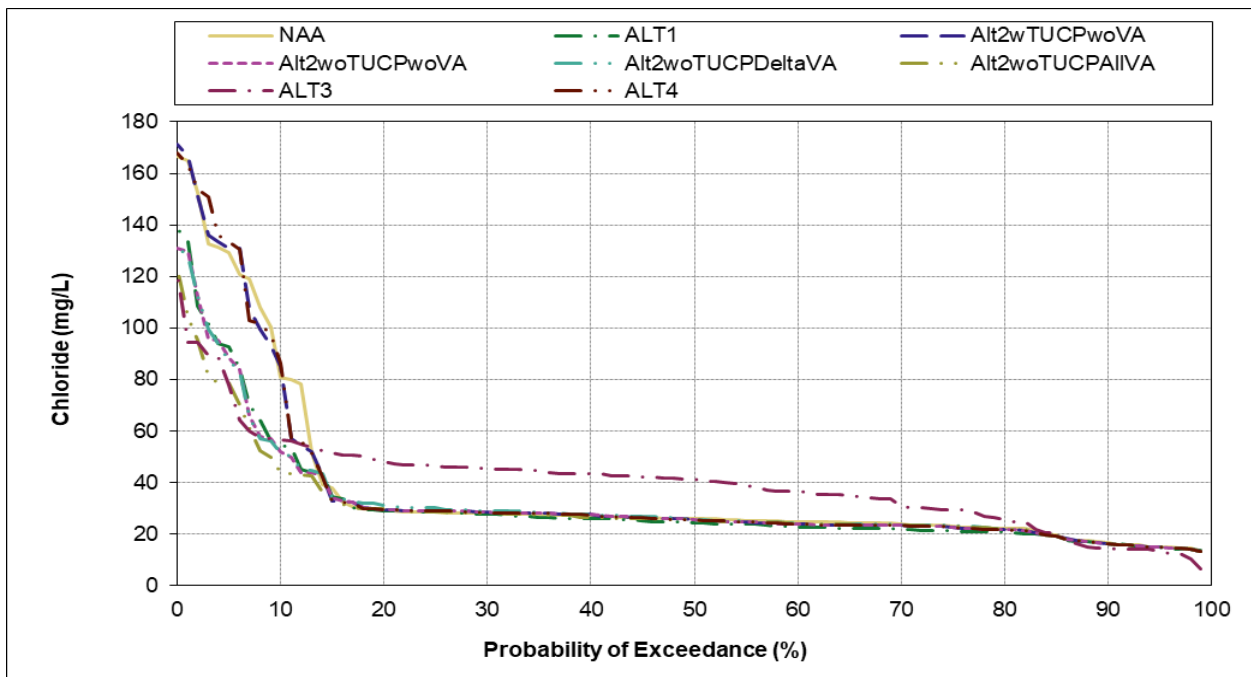


Figure G.2-5-12. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), June

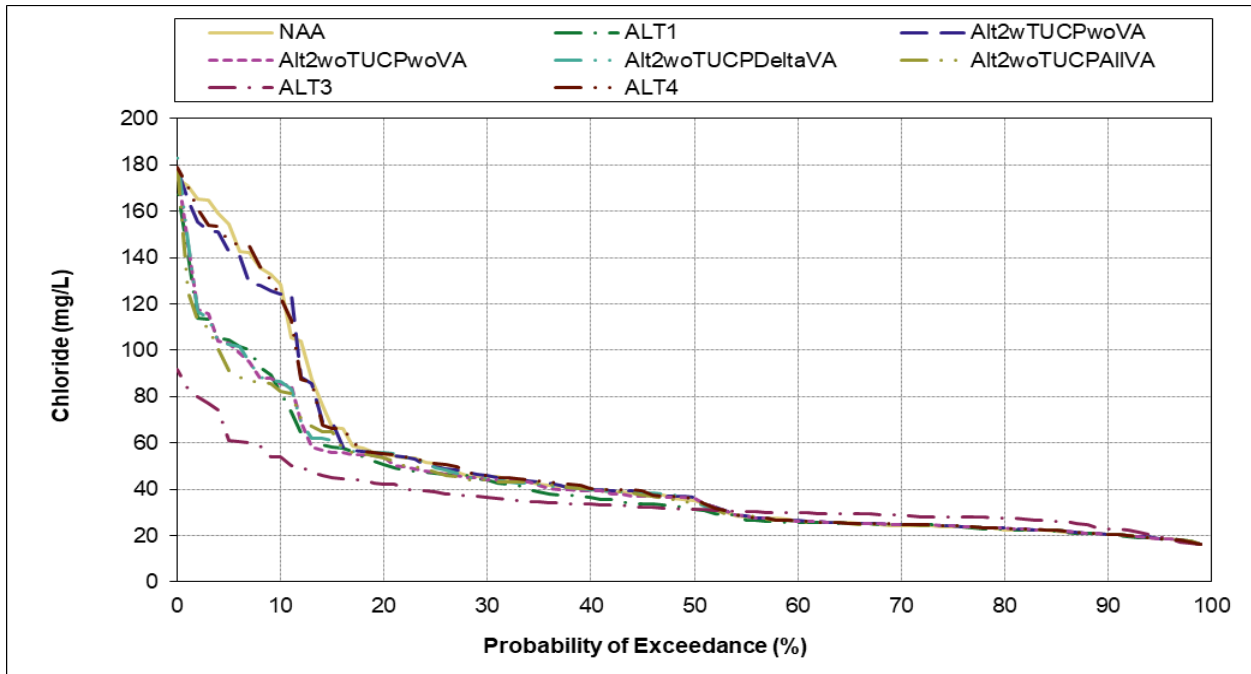


Figure G.2-5-13. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), July

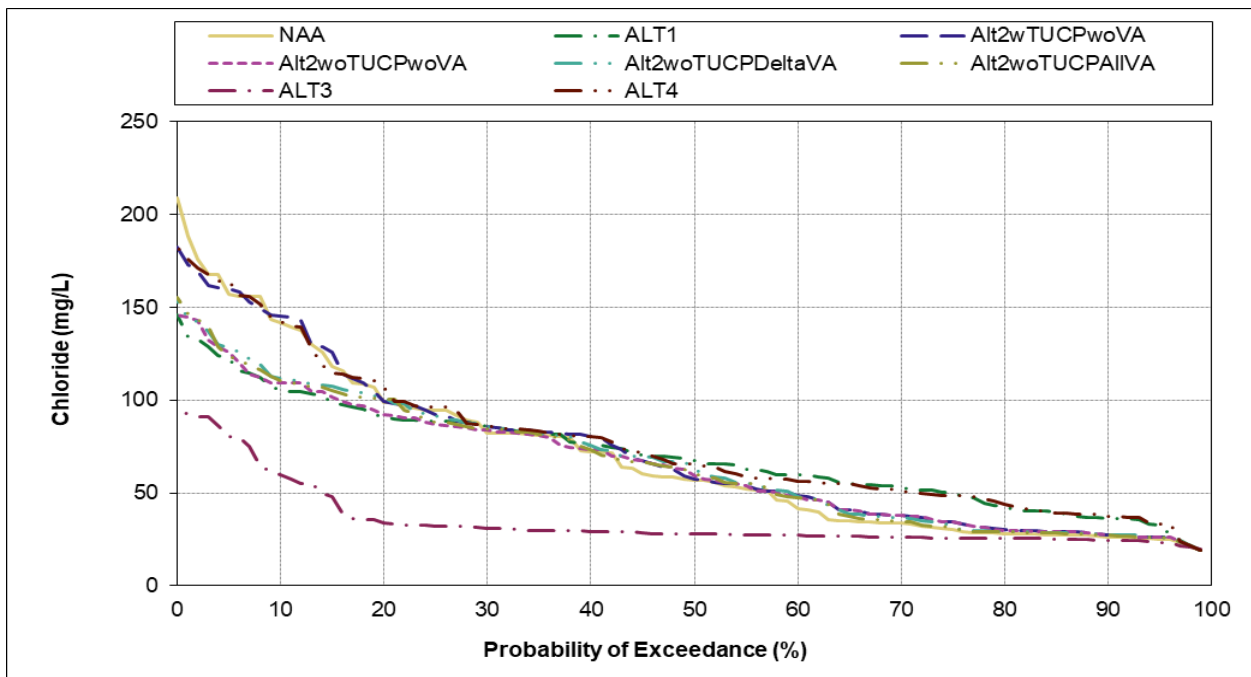


Figure G.2-5-14. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), August

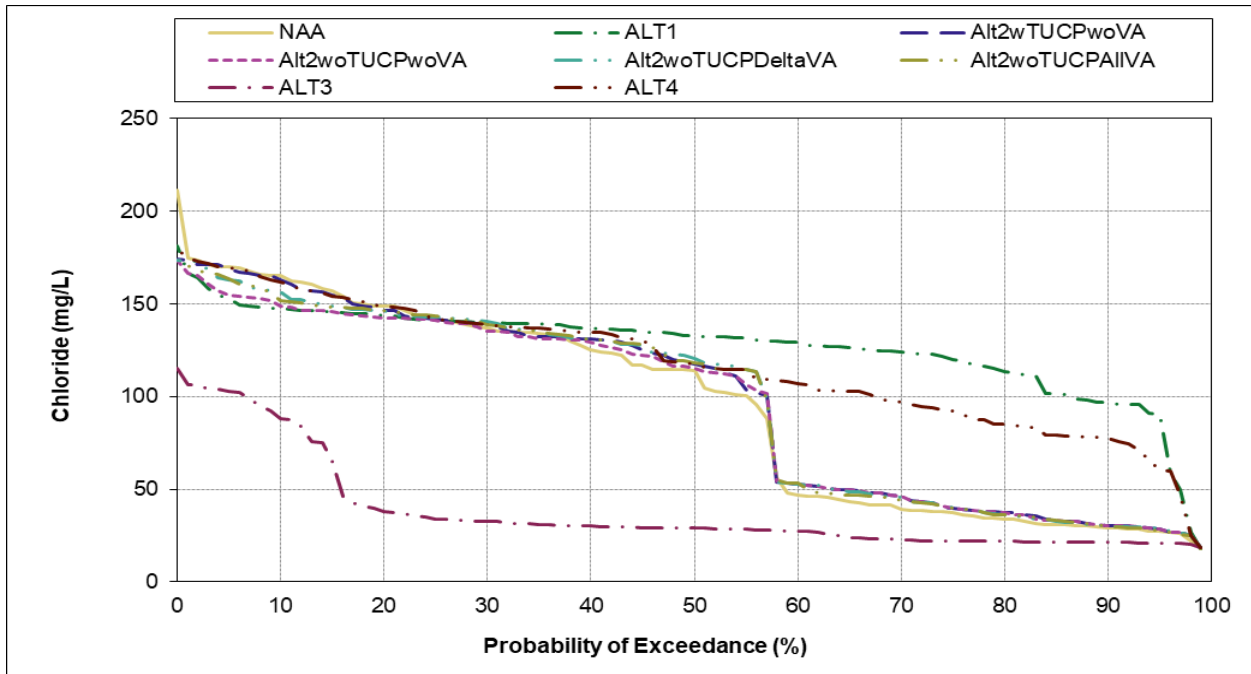


Figure G.2-5-15. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), September

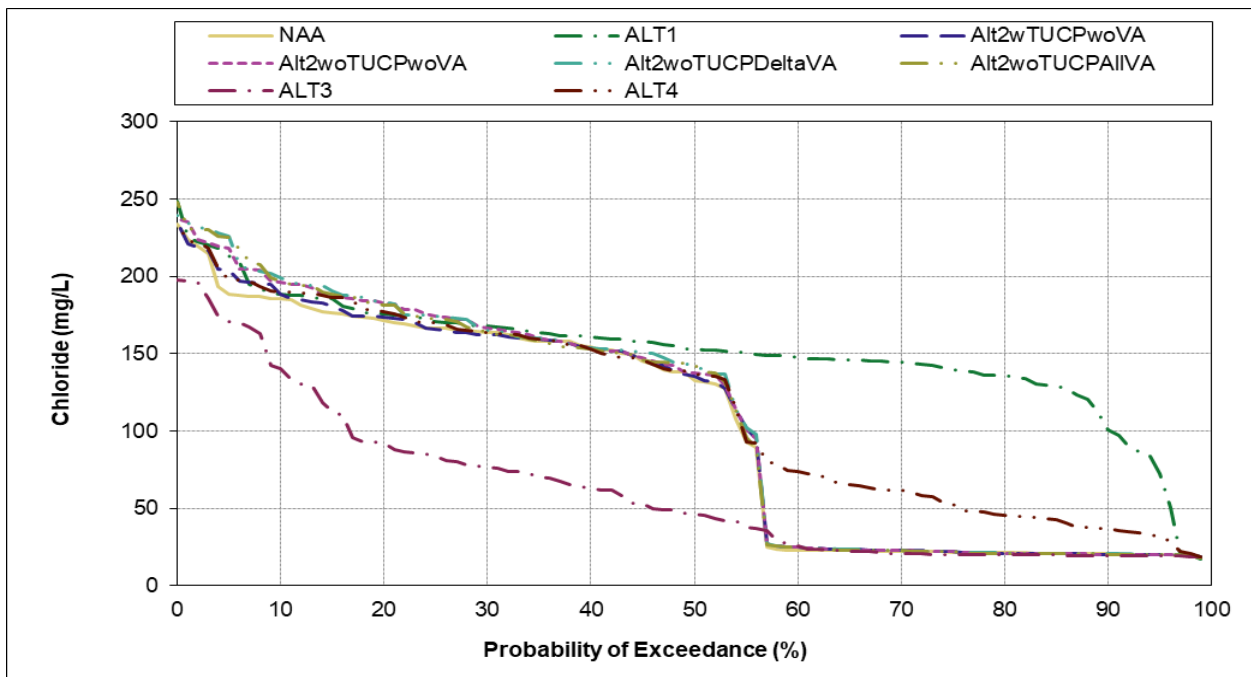


Figure G.2-5-16. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), October

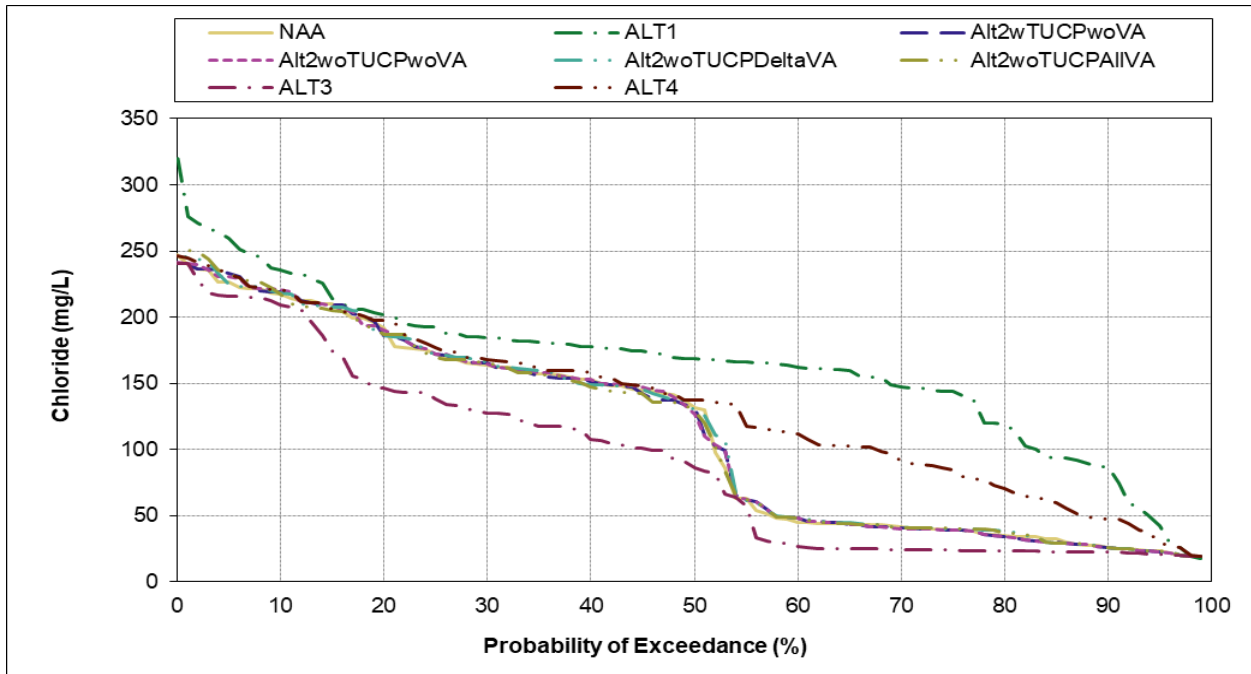


Figure G.2-5-17. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), November

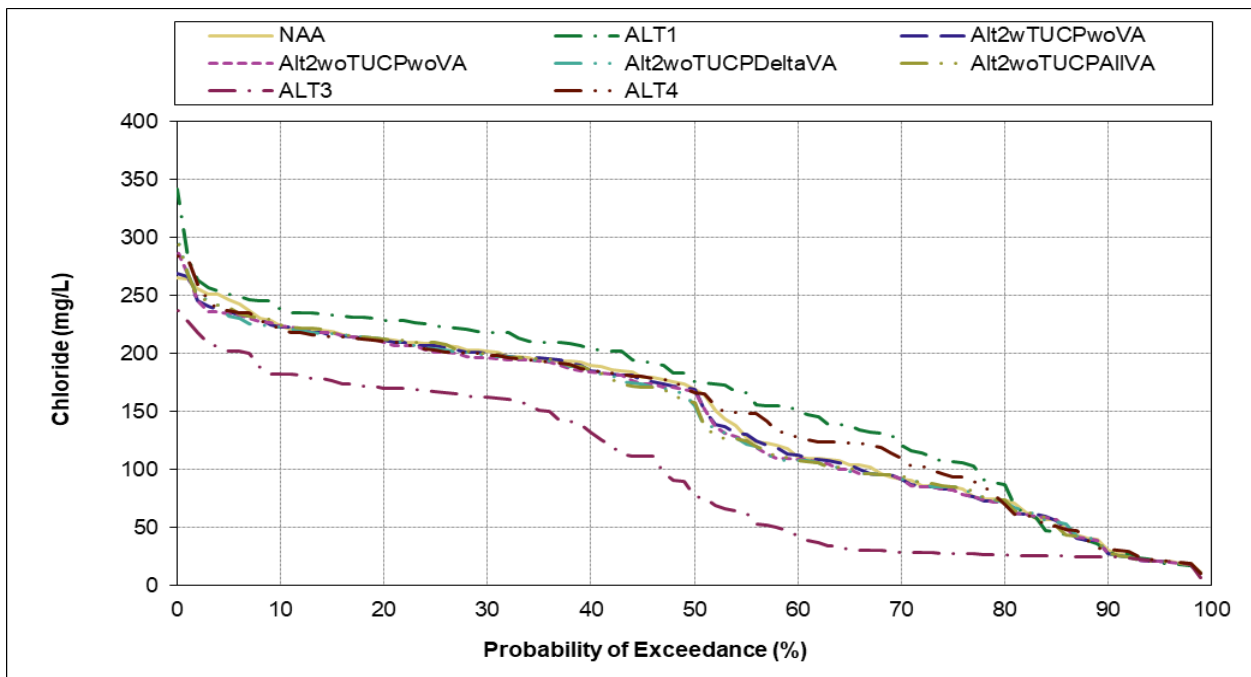


Figure G.2-5-18. Contra Costa Water District Pumping Plant #1, Monthly Average Chloride (in milligrams per liter), December

## G.2.5 References

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