

C-5 MODEL RESULTS - WATER QUALITY AND WATER LEVEL

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Introduction

This section contains tables and graphics of water quality and water levels derived from the DSM2 modeling for the Los Vaqueros Reservoir Expansion Project. These results are summarized and discussed in the updated Section 4.2 in the Final EIS/EIR. The modeling approach and methodology is documented in the updated Section 4.2 and in the updated Appendix C-2. Model assumptions are documented in the updated Appendix C-3.

Model results for water quality and water levels are presented in this appendix for without project conditions and with the project alternatives for both 2005 level of development and 2030 level of development.

For each set of conditions, water quality and water level data are presented at a variety of locations within the Delta for the water years 1976 through 1991. The tables and figures provided are described below in the sequence in which they appear for each set of conditions.

Water quality

Water quality results are reported as simulated Electrical Conductivity (EC), a measure of salinity, at the following key locations throughout the Delta:

- water quality compliance locations at Chipps Island, Collinsville, Emmaton, Jersey Point, Rock Slough (reported as Old River at Rock Slough data), Old River at Tracy Road Bridge, Old River at Middle River, San Joaquin River at Brandt Bridge, and San Joaquin River at Vernalis; and
- locations near the intakes of Delta water users at Jones Pumping Plant, Clifton Court Forebay, City of Stockton Intake at Empire Tract, San Joaquin River at Antioch, Barker Slough at North Bay Aqueduct, and Cache Slough at City of Vallejo Intake.

Tables of Salinity. The monthly average of the simulated electrical conductivity (EC) is presented for each month of the 16 year simulation, covering water years 1976 through 1991. At the bottom of the table, the long-term monthly averages are provided for the entire 16 year period, along with average monthly values for wetter water year types¹ (wet, above normal and below normal water years), and for dryer water year types (dry and critical water years). The 16-year study period does not include sufficient years in each water year type category to present average values for each water year type (e.g. there is only one below normal water year type from 1976 to 1991). Grouping the year types into wetter and dryer water year categories reduces the uneven weighting that would occur by taking long term averages over individual water year types.

A table is presented for the without project condition (Existing Condition for the 2005 level of development and Future Without Project for the 2030 level of development) and for each alternative. Following the same format, another table presents differences in the monthly averages of simulated EC between the alternative and the without project conditions. In the table of

¹ Water year types are defined using the Sacramento Valley Water Year Hydrologic Classification, as defined in D-1641 with a 40-30-30 index.

differences, a positive value means that salinity increased in the alternative, relative to the without project condition.

Figures Comparing Salinity in each Alternative to the Without Project Condition. Four figures are provided for each project alternative to illustrate the change in simulated EC compared to the without project condition.

- The first figure illustrates the long-term (16-year) monthly average simulated EC for the without project condition and the project alternative.
- The second figure illustrates the long-term (16-year) monthly average difference in simulated EC between the project alternative and the without project condition
- The third figure presents time series of daily average simulated EC for the project alternative and without project condition; the changes between the alternative and without project condition are also shown.
- The fourth figure presents the probability of exceedence for the daily average of simulated EC for both the without project condition and the project alternative.

Water level

Water level (stage) data are reported at the following locations:

- locations within the southern Delta: Middle River near Howard Road Bridge, Old River near Tracy Road Bridge, Doughty Cut above Grant Line Canal Barrier, and East of Coney Island; and
- locations directly in front of CCWD's intakes on Old River and Victoria Canal. The largest change in water level would be expected to occur at these locations.

Figures Comparing Water Level in each Alternative to the Without Project Condition. Four figures are provided for each project alternative to illustrate the change in water level compared to the without project condition.

Water level data at each station the 16-year DSM2 modeling results include:

- The first figure presents the probability of exceedence for the tidal water level, simulated every 15-minutes, for both the without project condition and the project alternative.
- The second figure presents the probability of exceedence for the water level at lower-low tide for both the without project condition and the project alternative.
- The third figure illustrates the long-term (16-year) monthly average water level at lower-low tide for both the without project condition and the project alternative.
- The fourth figure shows the long-term (16-year) monthly average difference in water level at lower-low tide between the project alternative and the without project condition.

2005 Level of Development

Water Quality

Chipps Island

Existing Condition

Chipps Island Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,383	3,406	4,826	7,352	7,792	6,623	6,009	8,657	11,456	12,367	12,697	13,901
1977	14,594	14,859	13,210	11,906	10,137	8,461	8,497	10,770	12,567	13,357	13,721	14,354
1978	13,516	13,313	9,698	484	215	204	231	427	1,776	4,629	6,717	6,530
1979	6,653	6,812	6,254	2,445	436	451	1,113	1,269	3,365	6,590	9,631	12,614
1980	13,443	7,494	4,703	306	201	200	509	1,076	2,698	5,115	6,880	6,719
1981	6,662	6,786	7,605	3,408	1,200	886	1,806	3,855	6,425	8,944	11,227	12,180
1982	13,134	2,651	188	200	190	203	188	196	729	3,613	5,581	2,718
1983	2,299	468	193	220	210	201	192	184	187	283	1,125	898
1984	2,331	290	188	196	236	246	902	1,908	4,711	5,164	6,045	3,514
1985	3,677	2,071	435	2,465	3,858	3,806	3,476	4,444	6,399	8,587	11,108	13,315
1986	13,340	13,176	8,544	2,242	203	201	364	906	3,356	5,764	6,583	3,612
1987	3,668	4,033	7,385	7,409	3,584	1,142	3,113	5,425	6,648	8,565	11,578	13,559
1988	14,390	13,993	8,361	1,514	1,832	4,980	5,731	6,928	7,853	10,111	12,752	14,181
1989	14,819	14,140	12,852	9,871	8,389	760	701	2,787	6,066	8,738	10,586	12,357
1990	13,646	13,581	13,315	6,385	4,018	4,139	5,027	7,792	10,493	12,241	13,150	14,382
1991	14,372	14,334	14,651	12,110	9,625	1,506	2,303	7,053	10,608	12,068	12,970	14,290
Avg	9,620	8,213	7,025	4,282	3,258	2,126	2,510	3,980	5,959	7,883	9,522	9,945
W/AN/BN	9,245	6,315	4,252	870	242	244	500	852	2,403	4,451	6,080	5,229
D/C	9,912	9,689	9,182	6,936	5,604	3,589	4,074	6,412	8,724	10,553	12,199	13,613

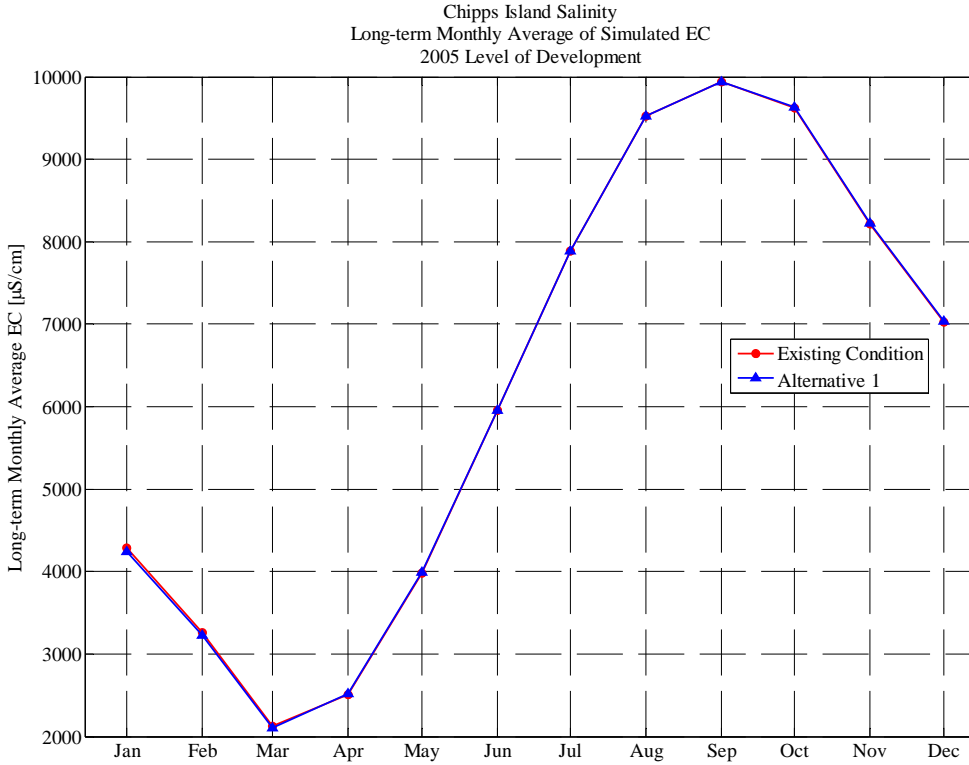
Alternative 1

Chippis Island Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Alternative 1
2005 Level of Development

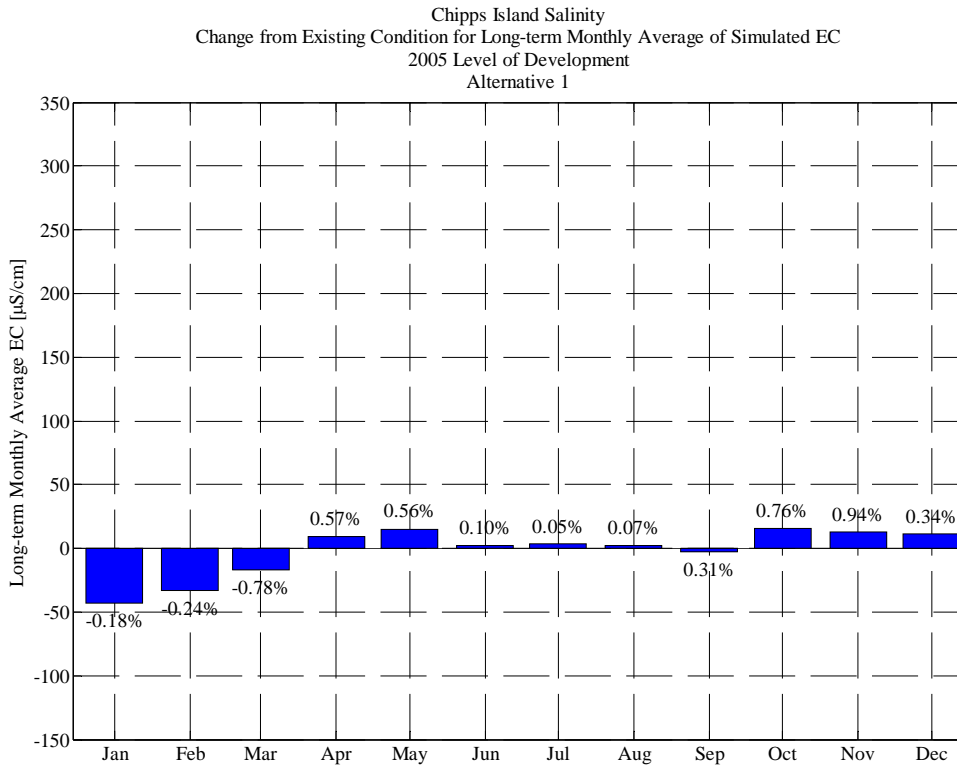
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,383	3,404	4,823	7,349	7,789	6,577	6,050	8,722	11,483	12,372	12,622	13,835
1977	14,592	14,869	13,200	11,898	10,137	8,459	8,497	10,771	12,567	13,356	13,712	14,342
1978	13,538	13,339	9,707	484	215	204	231	433	1,804	4,656	6,726	6,534
1979	6,654	6,805	6,327	2,478	438	447	1,141	1,281	3,400	6,623	9,641	12,618
1980	13,443	7,495	4,744	308	201	201	520	1,084	2,662	5,083	6,873	6,718
1981	6,657	6,784	7,606	3,407	1,209	878	1,827	3,878	6,433	8,945	11,229	12,195
1982	13,147	2,656	188	200	190	203	188	196	738	3,625	5,584	2,876
1983	2,574	513	193	219	210	201	191	184	187	284	1,133	905
1984	2,345	291	188	196	236	243	918	1,923	4,713	5,172	6,051	3,514
1985	3,676	2,165	447	2,487	3,906	3,689	3,466	4,484	6,414	8,584	11,134	13,344
1986	13,351	13,183	8,553	2,250	203	202	368	925	3,309	5,709	6,571	3,607
1987	3,668	4,031	7,384	7,410	3,588	1,113	3,104	5,436	6,647	8,559	11,580	13,556
1988	14,389	13,993	8,368	1,517	1,832	4,982	5,802	6,984	7,866	10,134	12,691	14,102
1989	14,772	14,085	12,924	9,958	8,418	761	702	2,788	6,061	8,738	10,710	12,301
1990	13,521	13,541	13,355	6,420	4,022	4,122	5,014	7,790	10,490	12,244	13,118	14,327
1991	14,470	14,459	14,580	11,244	8,998	1,456	2,295	7,043	10,595	12,108	13,011	14,306
Avg	9,636	8,226	7,037	4,239	3,224	2,109	2,520	3,995	5,961	7,887	9,524	9,942
W/AN/BN	9,293	6,326	4,271	876	242	243	508	861	2,402	4,450	6,083	5,253
D/C	9,903	9,703	9,187	6,854	5,544	3,560	4,084	6,433	8,728	10,560	12,201	13,590

Percent (%) Change from Existing Condition for Chippis Island Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	-0.1%	-0.1%	0.0%	0.0%	-0.7%	0.7%	0.8%	0.2%	0.0%	-0.6%	-0.5%
1977	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
1978	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	-0.1%	1.2%	1.6%	0.6%	0.1%	0.1%
1979	0.0%	-0.1%	1.2%	1.3%	0.4%	-0.8%	2.5%	1.0%	1.1%	0.5%	0.1%	0.0%
1980	0.0%	0.0%	0.9%	0.7%	0.0%	0.1%	2.2%	0.7%	-1.3%	-0.6%	-0.1%	0.0%
1981	-0.1%	0.0%	0.0%	0.0%	0.7%	-1.0%	1.2%	0.6%	0.1%	0.0%	0.0%	0.1%
1982	0.1%	0.2%	0.0%	-0.1%	-0.1%	0.1%	0.0%	0.1%	1.2%	0.3%	0.1%	5.8%
1983	12.0%	9.7%	0.1%	-0.4%	-0.1%	0.0%	-0.1%	-0.1%	0.0%	0.2%	0.7%	0.7%
1984	0.6%	0.3%	0.0%	0.0%	-0.1%	-1.4%	1.7%	0.8%	0.1%	0.1%	0.1%	0.0%
1985	0.0%	4.5%	2.7%	0.9%	1.3%	-3.1%	-0.3%	0.9%	0.2%	0.0%	0.2%	0.2%
1986	0.1%	0.0%	0.1%	0.4%	0.0%	0.3%	1.0%	2.1%	-1.4%	-0.9%	-0.2%	-0.2%
1987	0.0%	-0.1%	0.0%	0.0%	0.1%	-2.5%	-0.3%	0.2%	0.0%	-0.1%	0.0%	0.0%
1988	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	1.2%	0.8%	0.2%	0.2%	-0.5%	-0.6%
1989	-0.3%	-0.4%	0.6%	0.9%	0.3%	0.3%	0.1%	0.0%	-0.1%	0.0%	1.2%	-0.5%
1990	-0.9%	-0.3%	0.3%	0.5%	0.1%	-0.4%	-0.3%	0.0%	0.0%	0.0%	-0.2%	-0.4%
1991	0.7%	0.9%	-0.5%	-7.1%	-6.5%	-3.3%	-0.3%	-0.1%	-0.1%	0.3%	0.3%	0.1%
Avg	0.8%	0.9%	0.3%	-0.2%	-0.2%	-0.8%	0.6%	0.6%	0.1%	0.0%	0.1%	0.3%
W/AN/BN	1.8%	1.5%	0.3%	0.3%	0.0%	-0.3%	1.0%	0.8%	0.2%	0.0%	0.1%	0.9%
D/C	-0.1%	0.5%	0.3%	-0.5%	-0.4%	-1.2%	0.2%	0.3%	0.1%	0.1%	0.0%	-0.2%

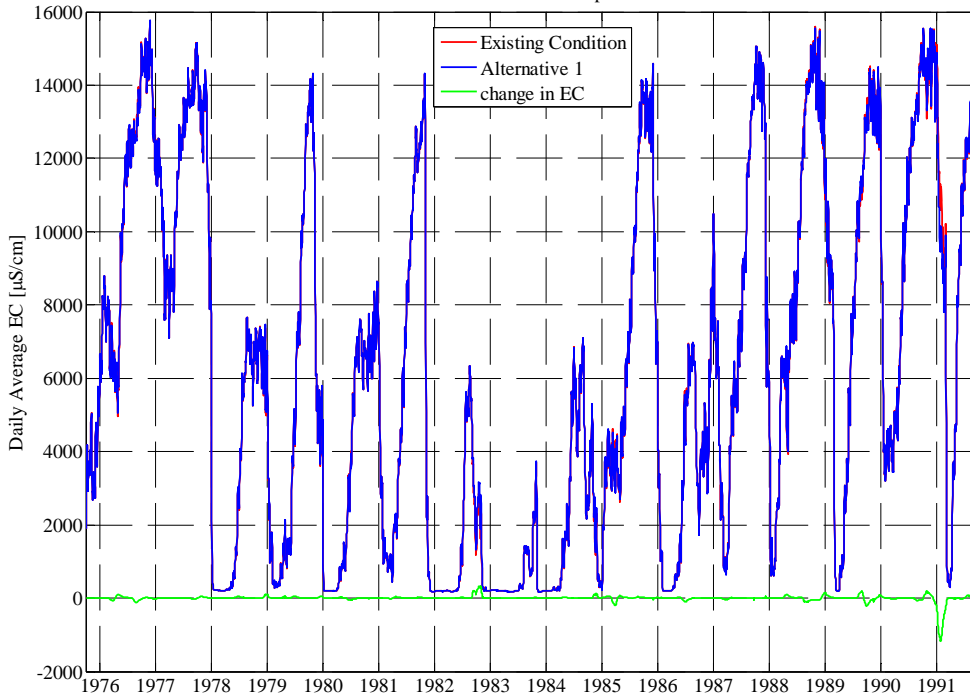


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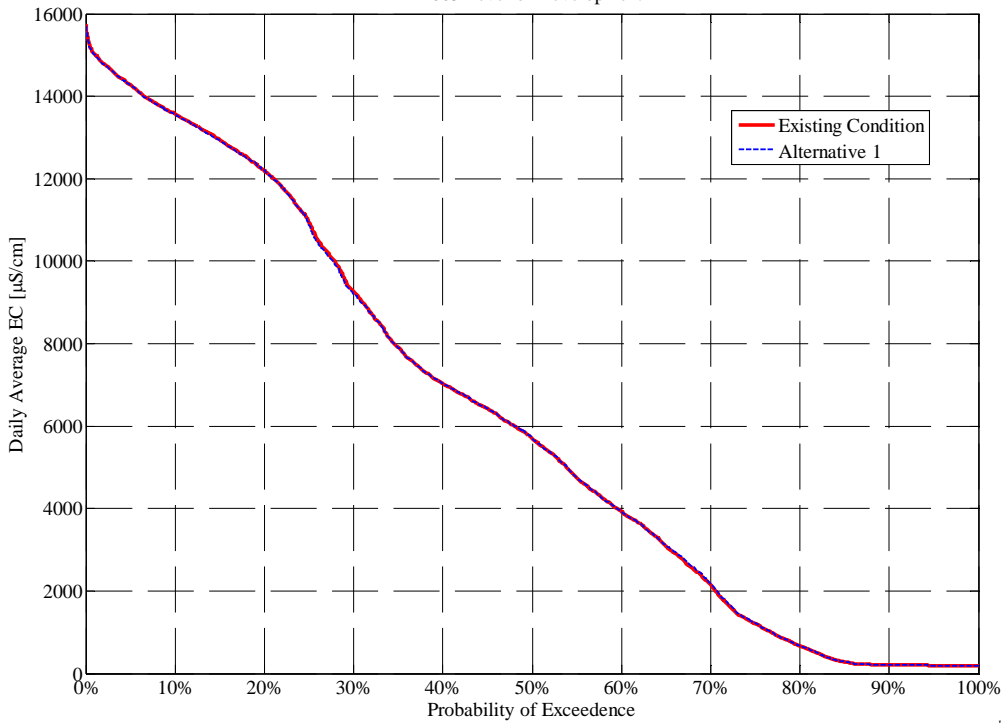
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Chipps Island Salinity
Daily Average of Simulated EC
2005 Level of Development



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Chipps Island Salinity
Daily Average of Simulated EC
2005 Level of Development



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Alternative 2

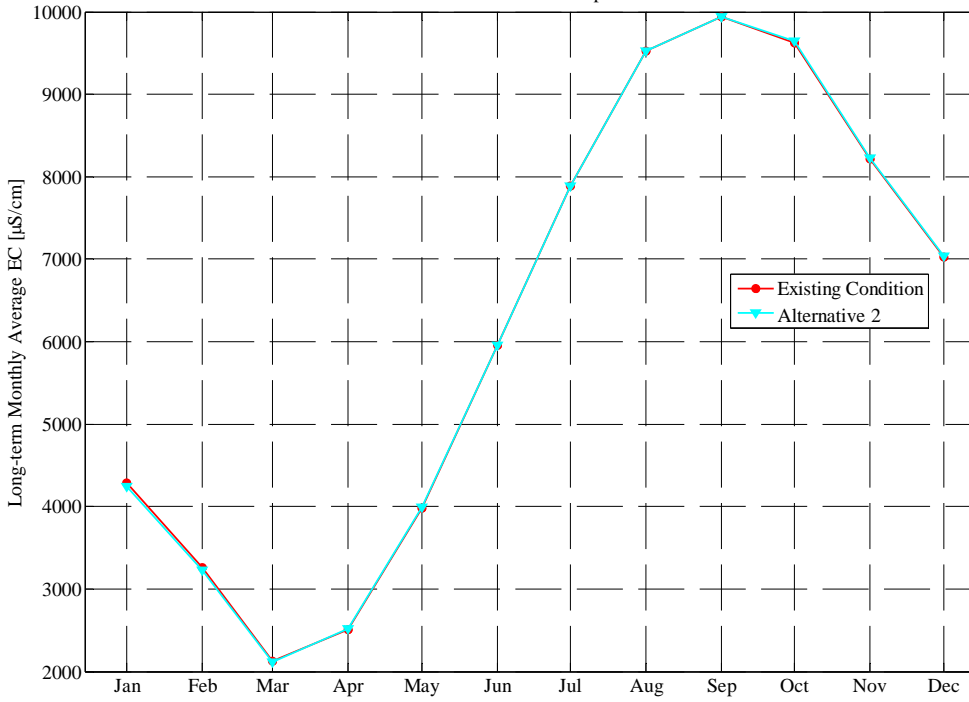
Chippis Island Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,384	3,404	4,823	7,349	7,789	6,576	6,049	8,720	11,481	12,372	12,619	13,833
1977	14,592	14,868	13,206	11,907	10,140	8,461	8,497	10,771	12,567	13,357	13,717	14,347
1978	13,529	13,328	9,705	484	215	204	231	433	1,804	4,656	6,726	6,533
1979	6,654	6,805	6,330	2,479	438	447	1,141	1,281	3,401	6,623	9,641	12,618
1980	13,443	7,495	4,743	308	201	201	520	1,084	2,662	5,083	6,873	6,718
1981	6,657	6,783	7,606	3,407	1,209	890	1,835	3,879	6,433	8,945	11,229	12,195
1982	13,147	2,670	188	200	190	203	188	196	738	3,625	5,584	2,875
1983	2,574	513	193	219	210	201	191	184	187	284	1,135	923
1984	2,430	297	188	195	236	243	918	1,923	4,713	5,172	6,051	3,514
1985	3,676	2,185	449	2,487	3,906	3,701	3,473	4,485	6,415	8,584	11,134	13,343
1986	13,350	13,183	8,553	2,250	203	202	368	925	3,309	5,710	6,571	3,607
1987	3,668	4,031	7,384	7,410	3,588	1,128	3,083	5,422	6,653	8,560	11,581	13,557
1988	14,389	13,993	8,367	1,517	1,832	4,981	5,801	6,983	7,865	10,136	12,687	14,096
1989	14,791	14,095	12,938	9,975	8,424	762	702	2,788	6,061	8,738	10,713	12,299
1990	13,517	13,541	13,360	6,423	4,023	4,122	5,014	7,790	10,490	12,244	13,117	14,325
1991	14,473	14,463	14,577	11,263	9,015	1,458	2,295	7,043	10,595	12,107	13,009	14,305
Avg	9,642	8,228	7,038	4,242	3,226	2,111	2,519	3,994	5,961	7,887	9,524	9,943
W/AN/BN	9,304	6,327	4,272	876	242	243	508	861	2,402	4,450	6,083	5,256
D/C	9,905	9,707	9,190	6,860	5,547	3,564	4,083	6,431	8,729	10,560	12,201	13,589

Percent (%) Change from Existing Condition for Chippis Island Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

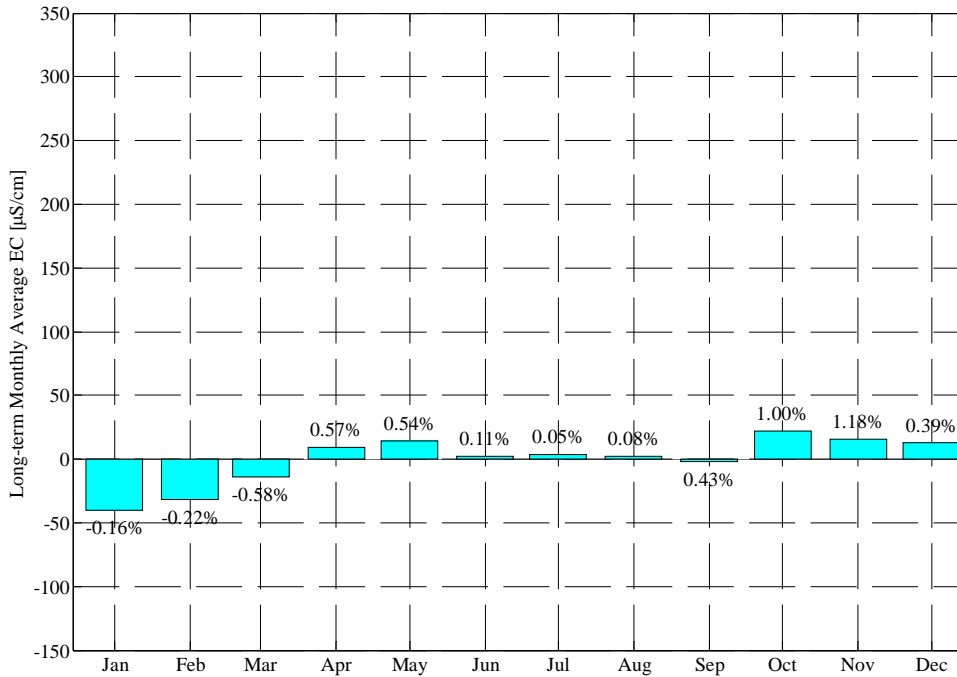
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	-0.1%	-0.1%	0.0%	0.0%	-0.7%	0.7%	0.7%	0.2%	0.0%	-0.6%	-0.5%
1977	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	-0.1%	1.2%	1.6%	0.6%	0.1%	0.1%
1979	0.0%	-0.1%	1.2%	1.4%	0.5%	-0.8%	2.5%	1.0%	1.1%	0.5%	0.1%	0.0%
1980	0.0%	0.0%	0.9%	0.7%	0.0%	0.0%	2.2%	0.7%	-1.3%	-0.6%	-0.1%	0.0%
1981	-0.1%	0.0%	0.0%	0.0%	0.7%	0.4%	1.6%	0.6%	0.1%	0.0%	0.0%	0.1%
1982	0.1%	0.7%	0.1%	-0.1%	-0.1%	0.1%	0.0%	0.1%	1.2%	0.3%	0.1%	5.8%
1983	12.0%	9.7%	0.1%	-0.6%	-0.1%	0.0%	-0.2%	-0.1%	-0.1%	0.3%	0.9%	2.7%
1984	4.2%	2.7%	0.0%	-0.1%	0.0%	-1.3%	1.7%	0.8%	0.1%	0.2%	0.1%	0.0%
1985	0.0%	5.5%	3.3%	0.9%	1.3%	-2.8%	-0.1%	0.9%	0.2%	0.0%	0.2%	0.2%
1986	0.1%	0.1%	0.1%	0.3%	-0.1%	0.2%	1.0%	2.1%	-1.4%	-0.9%	-0.2%	-0.1%
1987	0.0%	0.0%	0.0%	0.0%	0.1%	-1.2%	-1.0%	-0.1%	0.1%	-0.1%	0.0%	0.0%
1988	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	1.2%	0.8%	0.2%	0.2%	-0.5%	-0.6%
1989	-0.2%	-0.3%	0.7%	1.1%	0.4%	0.3%	0.1%	0.0%	-0.1%	0.0%	1.2%	-0.5%
1990	-0.9%	-0.3%	0.3%	0.6%	0.1%	-0.4%	-0.3%	0.0%	0.0%	0.0%	-0.3%	-0.4%
1991	0.7%	0.9%	-0.5%	-7.0%	-6.3%	-3.2%	-0.3%	-0.1%	-0.1%	0.3%	0.3%	0.1%
Avg	1.0%	1.2%	0.4%	-0.2%	-0.2%	-0.6%	0.6%	0.5%	0.1%	0.1%	0.1%	0.4%
W/AN/BN	2.4%	1.9%	0.3%	0.2%	0.0%	-0.3%	1.0%	0.8%	0.2%	0.0%	0.1%	1.2%
D/C	-0.1%	0.6%	0.4%	-0.5%	-0.4%	-0.8%	0.2%	0.3%	0.1%	0.1%	0.0%	-0.2%

Chipps Island Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



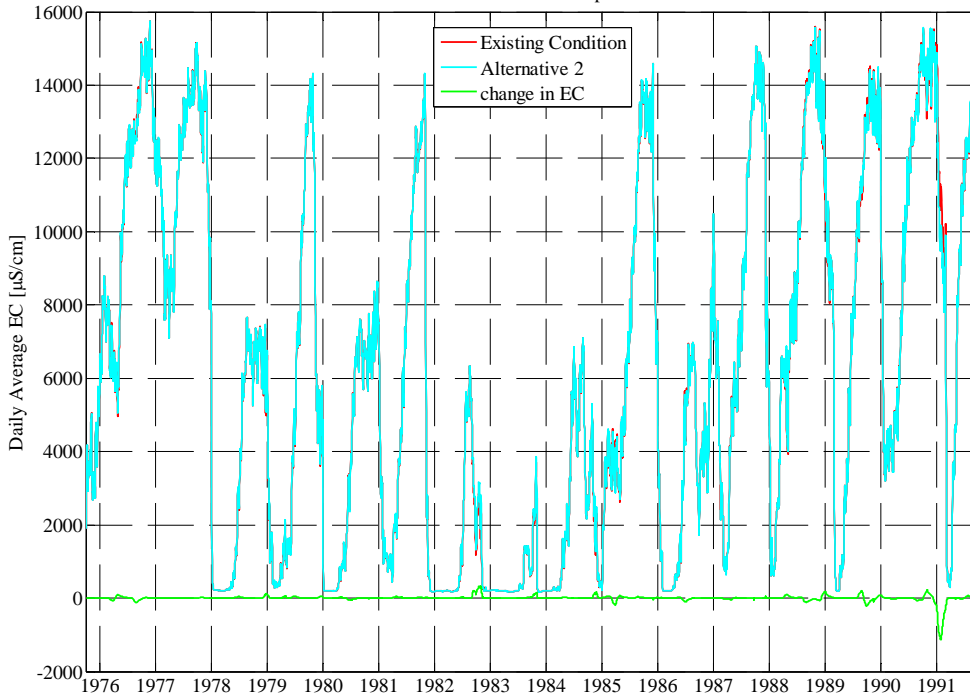
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Chipps Island Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



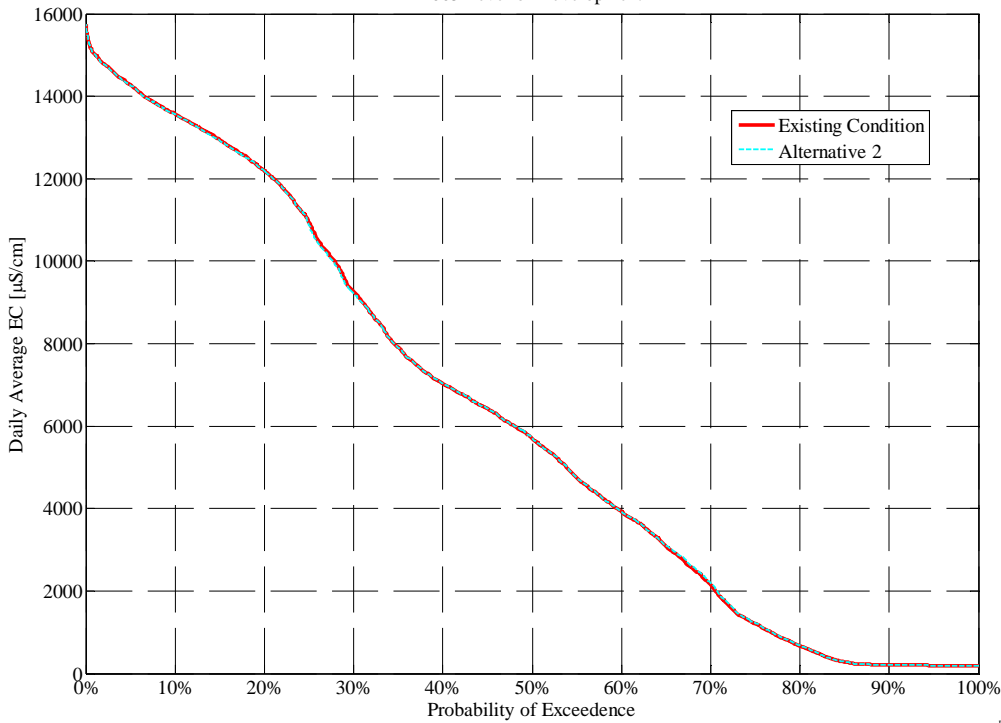
p_lve_wq_feir.m
 07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

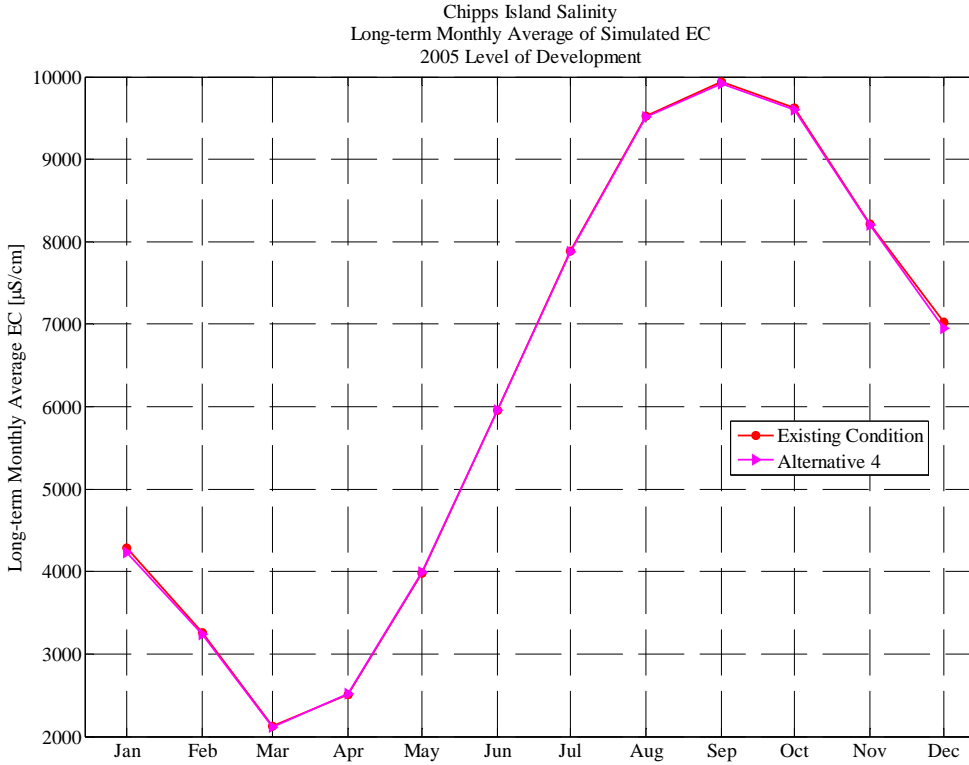
Alternative 4

**Chippis Island Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2005 Level of Development**

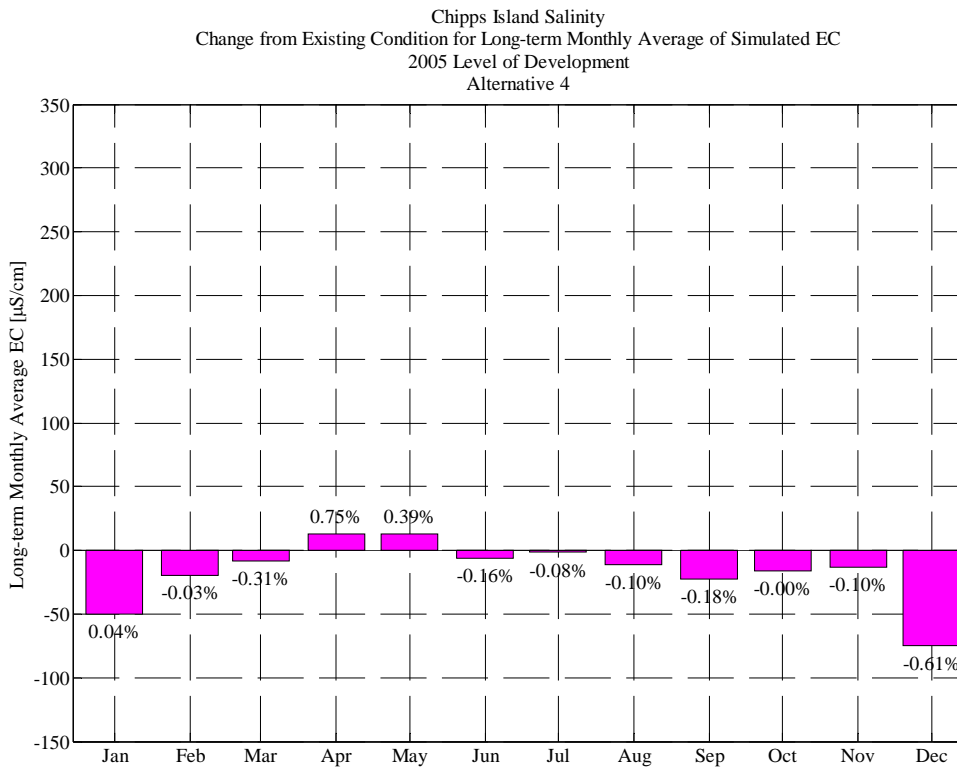
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,384	3,405	4,826	7,352	7,792	6,579	6,047	8,717	11,481	12,373	12,621	13,837
1977	14,595	14,818	12,679	11,447	9,977	8,396	8,472	10,758	12,561	13,421	13,840	14,479
1978	13,335	13,076	9,680	487	215	204	231	433	1,806	4,656	6,724	6,532
1979	6,655	6,808	6,353	2,497	439	447	1,148	1,307	3,378	6,583	9,629	12,610
1980	13,463	7,558	4,731	306	201	201	520	1,084	2,664	5,083	6,870	6,716
1981	6,661	6,786	7,605	3,407	1,210	887	1,831	3,882	6,437	8,948	11,237	12,175
1982	13,122	2,643	188	200	190	203	188	196	738	3,624	5,582	2,719
1983	2,350	475	193	220	210	201	192	184	187	283	1,126	899
1984	2,331	290	188	196	236	245	922	1,925	4,718	5,175	6,052	3,515
1985	3,678	2,066	435	2,487	3,908	3,830	3,550	4,487	6,441	8,590	10,940	13,175
1986	13,347	13,061	8,273	2,385	204	202	368	883	3,165	5,608	6,531	3,599
1987	3,667	3,956	7,296	7,395	3,591	1,129	3,082	5,417	6,650	8,578	11,587	13,558
1988	14,390	13,993	8,338	1,505	1,830	4,981	5,798	6,984	7,861	10,135	12,660	14,059
1989	14,815	14,391	12,281	9,284	8,247	750	701	2,787	6,063	8,740	10,730	12,328
1990	13,534	13,566	13,476	6,505	4,040	4,128	5,015	7,789	10,491	12,248	13,165	14,396
1991	14,343	14,296	14,668	12,037	9,517	1,495	2,299	7,045	10,602	12,066	12,885	14,164
Avg	9,604	8,199	6,950	4,232	3,238	2,117	2,523	3,992	5,953	7,882	9,511	9,923
W/AN/BN	9,229	6,273	4,229	898	242	243	510	859	2,379	4,430	6,073	5,227
D/C	9,896	9,698	9,067	6,824	5,568	3,575	4,088	6,430	8,732	10,566	12,185	13,574

**Percent (%) Change from Existing Condition for Chippis Island Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	0.0%	0.0%	0.0%	0.0%	-0.7%	0.6%	0.7%	0.2%	0.0%	-0.6%	-0.5%
1977	0.0%	-0.3%	-4.0%	-3.9%	-1.6%	-0.8%	-0.3%	-0.1%	-0.1%	0.5%	0.9%	0.9%
1978	-1.3%	-1.8%	-0.2%	0.7%	0.0%	0.0%	-0.1%	1.3%	1.7%	0.6%	0.1%	0.0%
1979	0.0%	0.0%	1.6%	2.1%	0.7%	-0.8%	3.1%	3.0%	0.4%	-0.1%	0.0%	0.0%
1980	0.1%	0.9%	0.6%	0.1%	0.0%	0.1%	2.2%	0.8%	-1.3%	-0.6%	-0.1%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	1.4%	0.7%	0.2%	0.1%	0.1%	0.0%
1982	-0.1%	-0.3%	0.0%	-0.1%	-0.2%	0.1%	0.0%	0.1%	1.2%	0.3%	0.0%	0.0%
1983	2.2%	1.5%	0.1%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.1%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	2.2%	0.9%	0.2%	0.2%	0.1%	0.0%
1985	0.0%	-0.2%	0.0%	0.9%	1.3%	0.6%	2.1%	1.0%	0.6%	0.0%	-1.5%	-1.0%
1986	0.1%	-0.9%	-3.2%	6.4%	0.6%	0.1%	1.1%	-2.5%	-5.7%	-2.7%	-0.8%	-0.4%
1987	0.0%	-1.9%	-1.2%	-0.2%	0.2%	-1.1%	-1.0%	-0.2%	0.0%	0.1%	0.1%	0.0%
1988	0.0%	0.0%	-0.3%	-0.6%	-0.1%	0.0%	1.2%	0.8%	0.1%	0.2%	-0.7%	-0.9%
1989	0.0%	1.8%	-4.4%	-5.9%	-1.7%	-1.3%	-0.1%	0.0%	0.0%	0.0%	1.4%	-0.2%
1990	-0.8%	-0.1%	1.2%	1.9%	0.5%	-0.3%	-0.2%	0.0%	0.0%	0.1%	0.1%	0.1%
1991	-0.2%	-0.3%	0.1%	-0.6%	-1.1%	-0.8%	-0.2%	-0.1%	-0.1%	0.0%	-0.7%	-0.9%
Avg	0.0%	-0.1%	-0.6%	0.0%	0.0%	-0.3%	0.8%	0.4%	-0.2%	-0.1%	-0.1%	-0.2%
W/AN/BN	0.1%	-0.1%	-0.2%	1.3%	0.2%	-0.1%	1.2%	0.5%	-0.5%	-0.3%	-0.1%	0.0%
D/C	-0.1%	-0.1%	-1.0%	-0.9%	-0.2%	-0.5%	0.4%	0.3%	0.1%	0.1%	-0.1%	-0.3%

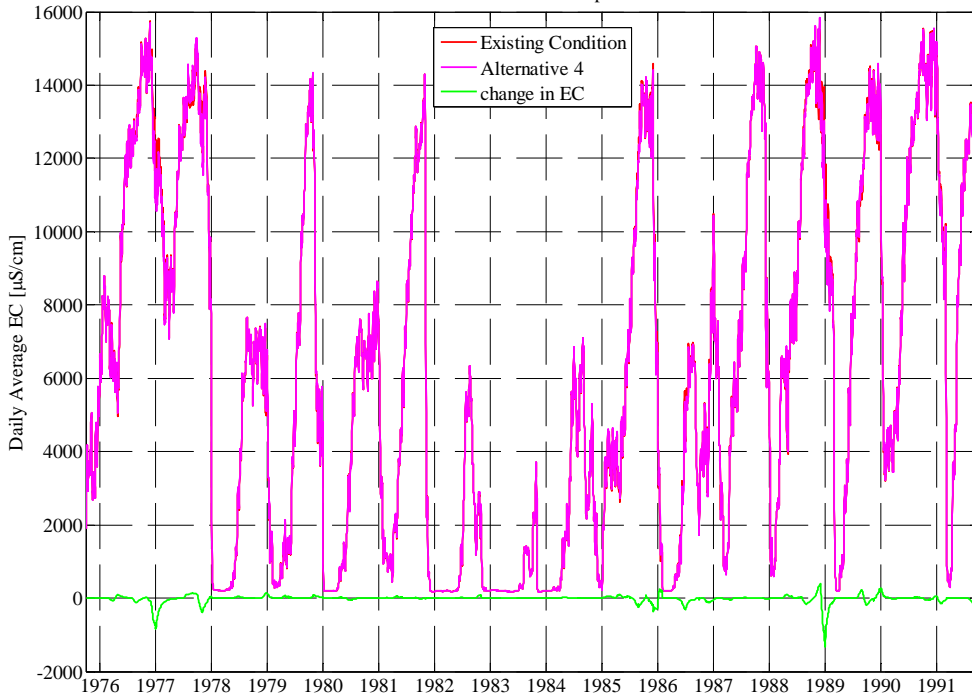


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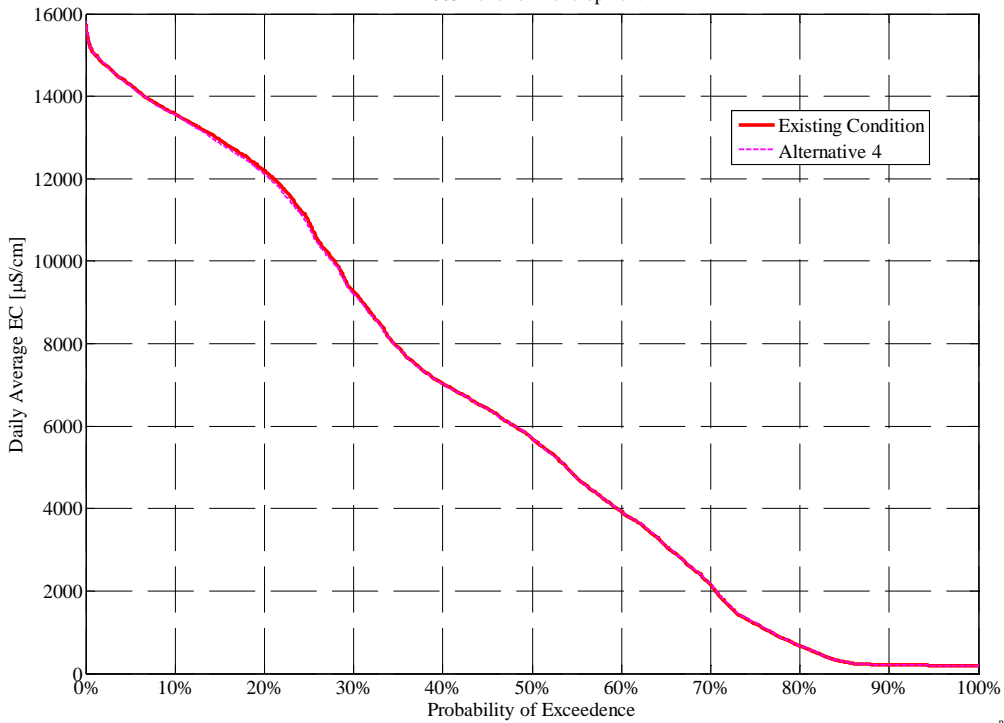
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07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Collinsville

Existing Condition

Collinsville Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,139	1,176	1,893	3,618	3,793	2,891	2,577	4,814	7,164	7,501	7,905	9,072
1977	9,898	10,240	8,369	7,017	5,546	4,123	4,254	6,481	8,173	8,770	9,034	9,673
1978	8,750	8,568	5,016	301	206	201	218	232	569	1,856	3,035	2,865
1979	3,004	3,144	2,615	861	247	233	364	403	1,267	2,958	5,257	7,980
1980	8,753	3,582	1,707	224	194	196	234	348	910	2,114	3,147	2,966
1981	3,018	3,101	3,579	1,222	350	280	560	1,482	3,018	4,623	6,453	7,263
1982	8,480	1,096	185	199	187	200	183	184	267	1,424	2,315	865
1983	675	228	190	213	193	184	188	183	186	204	361	270
1984	733	204	182	194	195	187	310	576	1,992	2,055	2,637	1,236
1985	1,331	605	201	896	1,361	1,327	1,195	1,752	2,982	4,333	6,447	8,637
1986	8,611	8,279	4,129	731	186	190	234	321	1,302	2,462	2,956	1,238
1987	1,313	1,491	3,753	3,556	1,247	354	1,206	2,404	3,132	4,349	7,188	9,012
1988	9,694	9,305	4,115	519	597	2,174	2,475	3,367	3,928	5,660	8,330	9,643
1989	10,138	9,278	7,927	5,094	4,235	361	264	972	2,825	4,449	5,915	7,728
1990	8,920	8,698	8,618	2,756	1,429	1,521	2,057	4,127	6,355	7,506	8,519	9,833
1991	9,654	9,670	10,013	7,278	5,131	685	866	3,664	6,481	7,258	8,319	9,666
Avg	5,882	4,917	3,906	2,167	1,569	944	1,074	1,957	3,159	4,220	5,489	6,122
W/AN/BN	5,572	3,586	2,003	389	201	199	247	321	927	1,868	2,816	2,489
D/C	6,123	5,952	5,385	3,551	2,632	1,524	1,717	3,229	4,895	6,050	7,568	8,948

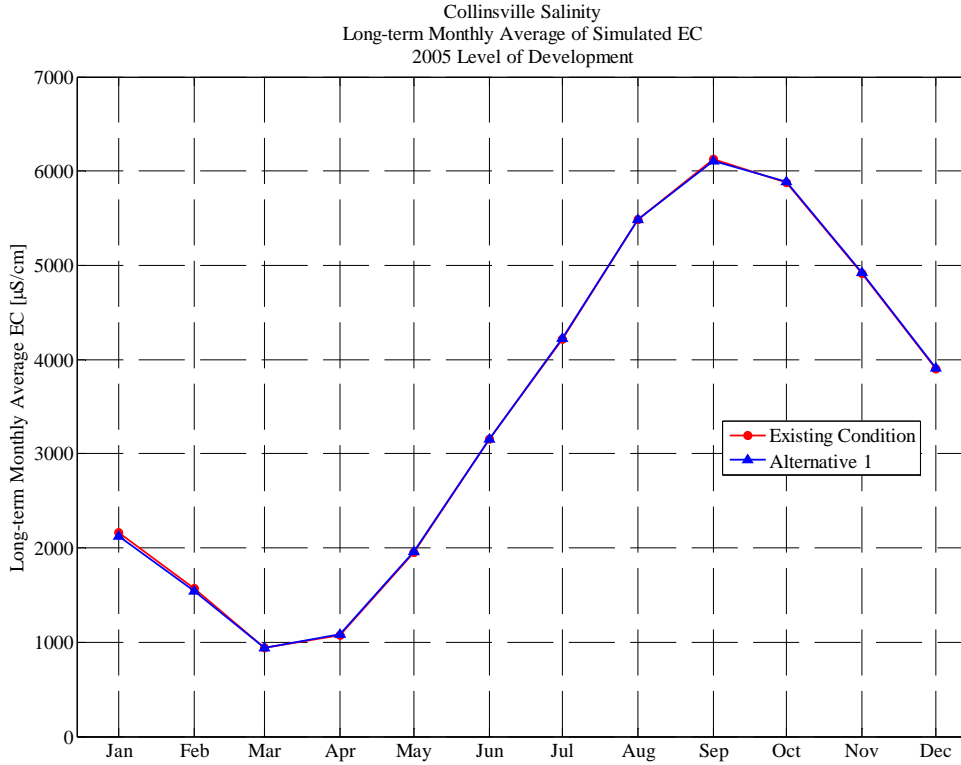
Alternative 1

Collinsville Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 1
2005 Level of Development

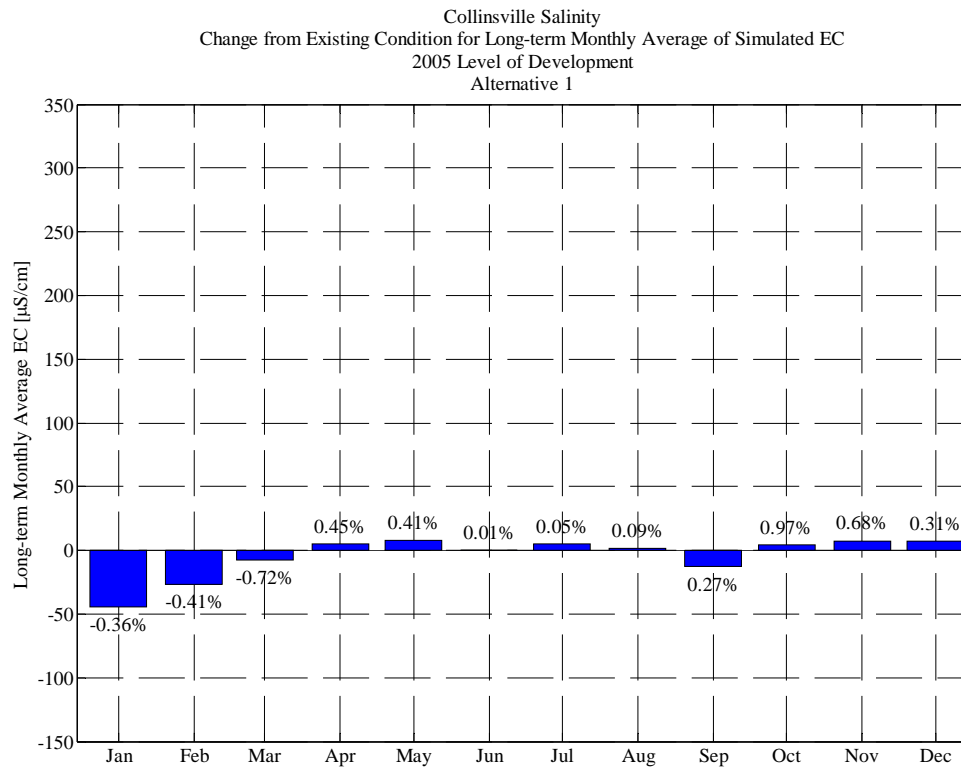
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,140	1,175	1,891	3,615	3,791	2,863	2,606	4,865	7,187	7,501	7,830	9,023
1977	9,900	10,255	8,358	7,009	5,546	4,121	4,254	6,482	8,172	8,768	9,026	9,659
1978	8,776	8,594	5,022	301	206	201	218	232	578	1,869	3,040	2,867
1979	3,005	3,137	2,664	876	247	233	372	405	1,286	2,977	5,264	7,983
1980	8,752	3,582	1,727	225	194	196	235	349	893	2,097	3,143	2,966
1981	3,013	3,101	3,579	1,222	351	278	567	1,491	3,021	4,622	6,453	7,280
1982	8,491	1,096	185	199	187	200	183	184	269	1,429	2,316	926
1983	779	240	190	213	193	184	188	182	186	204	363	271
1984	739	204	182	193	195	187	315	580	1,993	2,059	2,641	1,236
1985	1,330	634	203	907	1,385	1,269	1,192	1,772	2,991	4,327	6,491	8,666
1986	8,616	8,283	4,136	734	186	190	235	325	1,272	2,429	2,948	1,235
1987	1,314	1,491	3,753	3,556	1,248	349	1,206	2,411	3,130	4,339	7,191	9,011
1988	9,692	9,305	4,119	520	598	2,177	2,521	3,404	3,935	5,684	8,258	9,538
1989	10,082	9,219	8,001	5,163	4,256	362	264	973	2,819	4,454	6,017	7,625
1990	8,789	8,668	8,668	2,779	1,430	1,512	2,050	4,127	6,353	7,512	8,495	9,776
1991	9,766	9,800	9,928	6,455	4,658	660	862	3,657	6,467	7,330	8,360	9,679
Avg	5,886	4,924	3,913	2,123	1,542	936	1,079	1,965	3,159	4,225	5,490	6,109
W/AN/BN	5,594	3,591	2,015	392	201	199	249	322	925	1,866	2,816	2,498
D/C	6,114	5,961	5,389	3,470	2,585	1,510	1,725	3,242	4,897	6,060	7,569	8,917

Percent (%) Change from Existing Condition for Collinsville Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-1.0%	1.1%	1.1%	0.3%	0.0%	-0.9%	-0.5%
1977	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
1978	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	-0.2%	0.0%	1.7%	0.7%	0.2%	0.1%
1979	0.0%	-0.2%	1.8%	1.8%	0.1%	-0.2%	2.1%	0.5%	1.5%	0.6%	0.1%	0.0%
1980	0.0%	0.0%	1.2%	0.4%	0.0%	0.1%	0.6%	0.2%	-1.9%	-0.8%	-0.1%	0.0%
1981	-0.2%	0.0%	0.0%	0.0%	0.5%	-0.7%	1.4%	0.7%	0.1%	0.0%	0.0%	0.2%
1982	0.1%	0.1%	0.0%	-0.1%	-0.1%	0.1%	0.0%	-0.1%	0.7%	0.3%	0.1%	7.1%
1983	15.4%	5.3%	0.0%	-0.3%	0.0%	0.0%	-0.1%	-0.1%	0.0%	-0.1%	0.6%	0.5%
1984	0.7%	0.2%	0.0%	0.0%	-0.1%	0.0%	1.4%	0.7%	0.0%	0.2%	0.1%	0.0%
1985	-0.1%	4.8%	1.0%	1.2%	1.7%	-4.4%	-0.3%	1.2%	0.3%	-0.2%	0.7%	0.3%
1986	0.1%	0.0%	0.2%	0.3%	0.0%	0.1%	0.1%	1.1%	-2.3%	-1.3%	-0.3%	-0.2%
1987	0.1%	0.0%	0.0%	0.0%	0.1%	-1.5%	0.0%	0.3%	-0.1%	-0.2%	0.0%	0.0%
1988	0.0%	0.0%	0.1%	0.2%	0.0%	0.1%	1.9%	1.1%	0.2%	0.4%	-0.9%	-1.1%
1989	-0.6%	-0.6%	0.9%	1.4%	0.5%	0.3%	0.1%	0.1%	-0.2%	0.1%	1.7%	-1.3%
1990	-1.5%	-0.3%	0.6%	0.8%	0.1%	-0.6%	-0.4%	0.0%	0.0%	0.1%	-0.3%	-0.6%
1991	1.2%	1.3%	-0.8%	-11.3%	-9.2%	-3.6%	-0.5%	-0.2%	-0.2%	1.0%	0.5%	0.1%
Avg	1.0%	0.7%	0.3%	-0.4%	-0.4%	-0.7%	0.5%	0.4%	0.0%	0.1%	0.1%	0.3%
W/AN/BN	2.4%	0.8%	0.5%	0.3%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%	0.1%	1.1%
D/C	-0.1%	0.6%	0.2%	-0.9%	-0.7%	-1.3%	0.4%	0.5%	0.0%	0.1%	0.1%	-0.3%

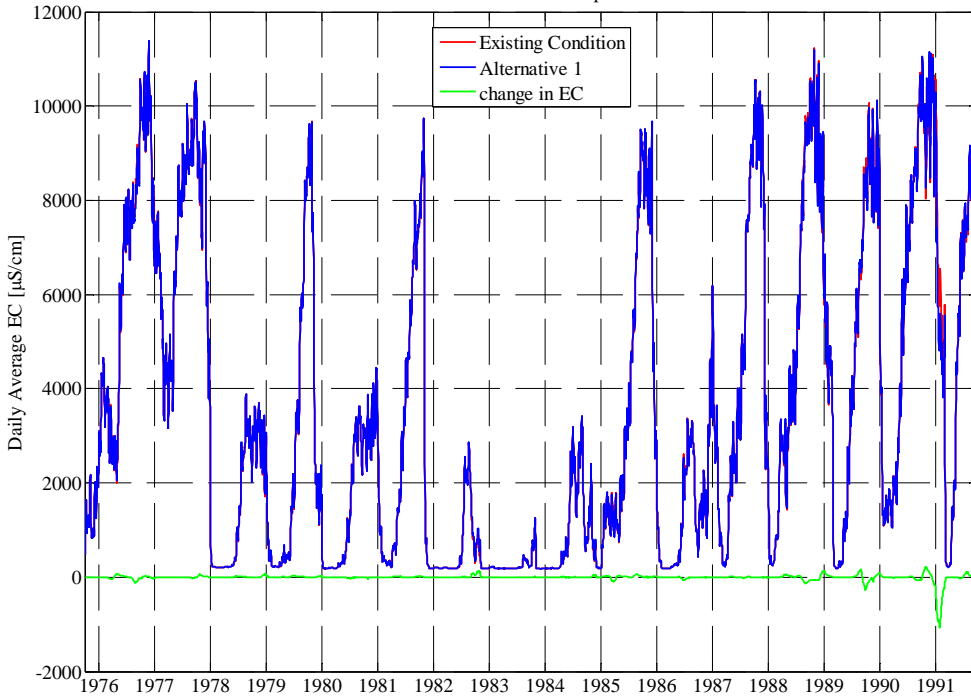


p_lve_wq_feir.m
07-Jan-2010 DS



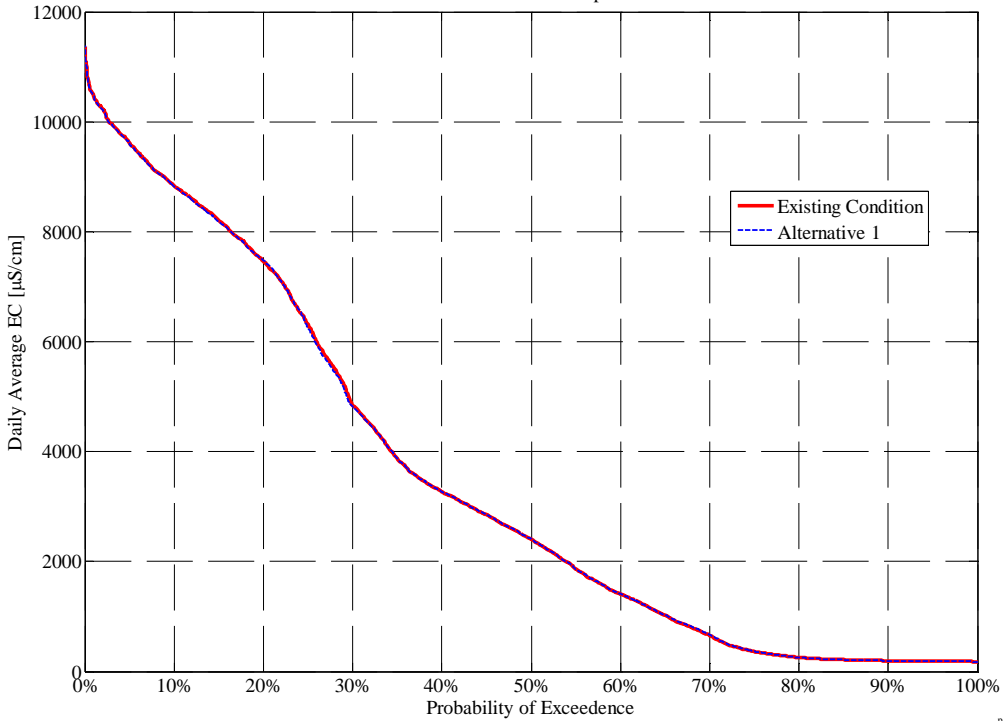
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07-Jan-2010 DS

Collinsville Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Collinsville Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

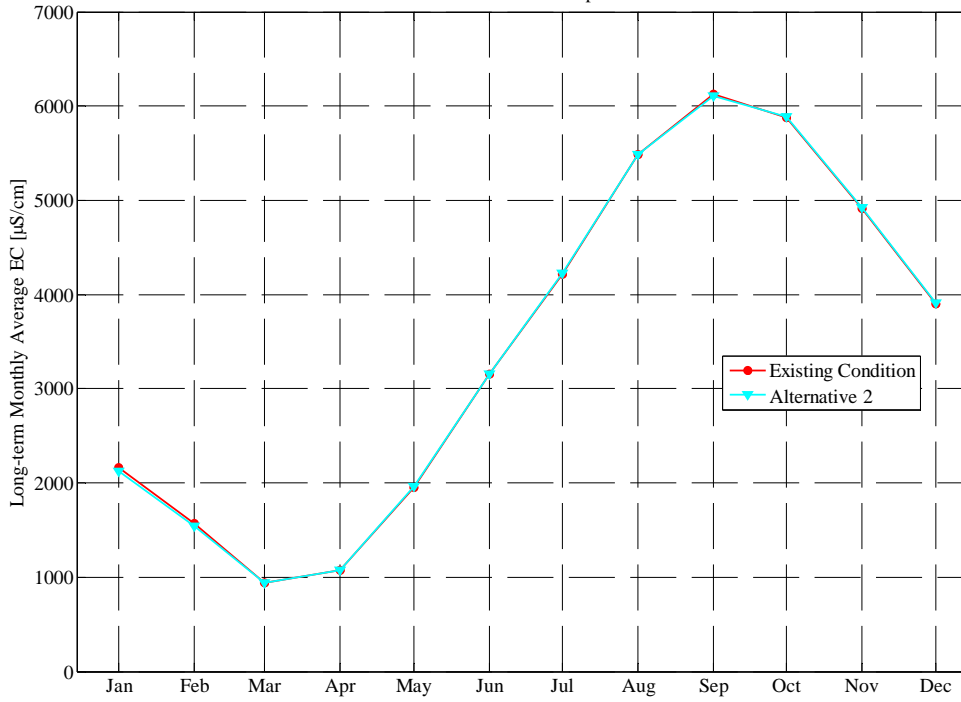
Collinsville Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,141	1,175	1,891	3,615	3,790	2,862	2,605	4,863	7,186	7,501	7,828	9,022
1977	9,901	10,253	8,363	7,017	5,549	4,122	4,254	6,482	8,172	8,769	9,031	9,665
1978	8,767	8,583	5,022	301	206	201	218	232	578	1,870	3,040	2,867
1979	3,005	3,137	2,665	877	247	233	372	405	1,287	2,977	5,264	7,983
1980	8,752	3,582	1,727	225	194	196	235	349	893	2,097	3,143	2,966
1981	3,013	3,101	3,580	1,223	351	281	570	1,492	3,022	4,622	6,453	7,280
1982	8,491	1,099	185	199	187	200	183	184	269	1,429	2,316	926
1983	779	240	190	212	193	184	188	182	186	204	363	275
1984	772	206	182	193	194	187	315	580	1,993	2,060	2,641	1,236
1985	1,330	640	204	907	1,385	1,275	1,195	1,773	2,991	4,326	6,491	8,666
1986	8,615	8,284	4,136	734	186	190	235	325	1,272	2,430	2,948	1,235
1987	1,313	1,491	3,753	3,556	1,248	351	1,191	2,403	3,134	4,339	7,192	9,012
1988	9,693	9,306	4,118	519	598	2,177	2,521	3,404	3,934	5,687	8,254	9,532
1989	10,104	9,228	8,013	5,177	4,260	362	264	973	2,819	4,453	6,020	7,623
1990	8,786	8,668	8,674	2,781	1,431	1,512	2,050	4,127	6,352	7,511	8,494	9,774
1991	9,770	9,805	9,925	6,471	4,670	661	862	3,657	6,467	7,328	8,358	9,677
Avg	5,889	4,925	3,914	2,125	1,543	937	1,079	1,964	3,160	4,225	5,490	6,109
W/AN/BN	5,597	3,590	2,015	392	201	199	249	322	925	1,866	2,816	2,498
D/C	6,117	5,963	5,391	3,474	2,587	1,511	1,723	3,241	4,898	6,060	7,569	8,917

Percent (%) Change from Existing Condition for Collinsville Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

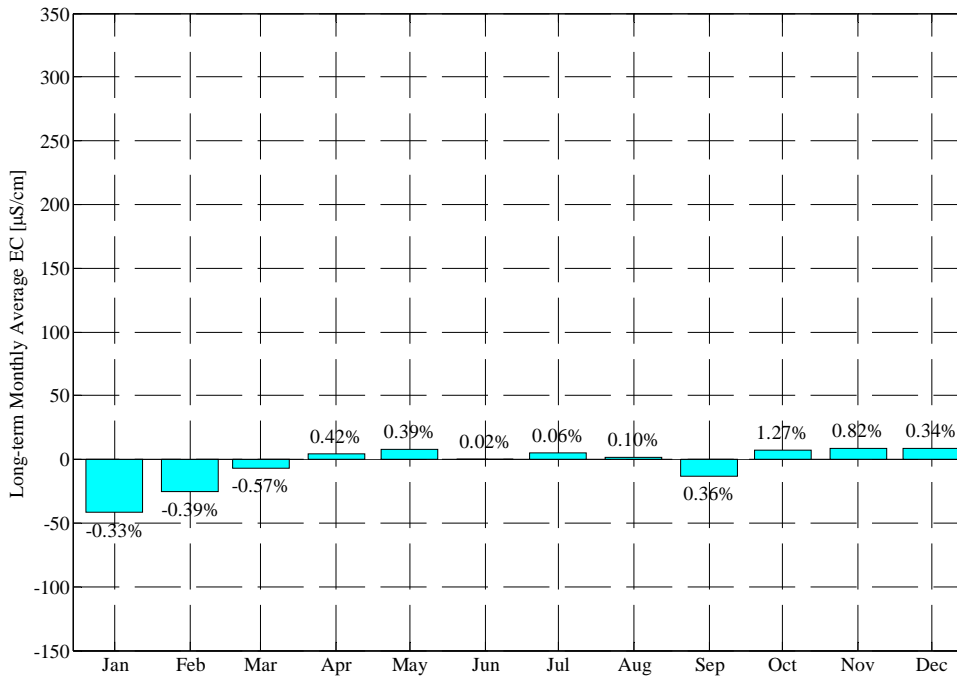
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-1.0%	1.1%	1.0%	0.3%	0.0%	-1.0%	-0.6%
1977	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1978	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	-0.2%	0.0%	1.7%	0.7%	0.2%	0.1%
1979	0.0%	-0.2%	1.9%	1.9%	0.1%	-0.2%	2.1%	0.5%	1.5%	0.6%	0.1%	0.0%
1980	0.0%	0.0%	1.2%	0.4%	0.0%	0.0%	0.6%	0.2%	-1.9%	-0.8%	-0.1%	0.0%
1981	-0.2%	0.0%	0.0%	0.0%	0.5%	0.3%	1.8%	0.7%	0.1%	0.0%	0.0%	0.2%
1982	0.1%	0.3%	0.1%	-0.1%	-0.1%	0.1%	0.0%	-0.1%	0.7%	0.3%	0.0%	7.1%
1983	15.4%	5.3%	0.0%	-0.4%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	0.7%	1.8%
1984	5.3%	1.3%	0.0%	-0.1%	-0.1%	0.0%	1.4%	0.7%	0.0%	0.2%	0.1%	0.0%
1985	-0.1%	5.8%	1.2%	1.2%	1.7%	-3.9%	0.0%	1.2%	0.3%	-0.2%	0.7%	0.3%
1986	0.0%	0.1%	0.2%	0.3%	0.0%	0.1%	0.2%	1.1%	-2.3%	-1.3%	-0.3%	-0.2%
1987	0.0%	0.0%	0.0%	0.0%	0.1%	-0.7%	-1.3%	0.0%	0.1%	-0.2%	0.1%	0.0%
1988	0.0%	0.0%	0.1%	0.2%	0.0%	0.1%	1.9%	1.1%	0.2%	0.5%	-0.9%	-1.2%
1989	-0.3%	-0.5%	1.1%	1.6%	0.6%	0.3%	0.1%	0.1%	-0.2%	0.1%	1.8%	-1.4%
1990	-1.5%	-0.3%	0.6%	0.9%	0.1%	-0.6%	-0.4%	0.0%	0.0%	0.1%	-0.3%	-0.6%
1991	1.2%	1.4%	-0.9%	-11.1%	-9.0%	-3.6%	-0.5%	-0.2%	-0.2%	1.0%	0.5%	0.1%
Avg	1.3%	0.8%	0.3%	-0.3%	-0.4%	-0.6%	0.4%	0.4%	0.0%	0.1%	0.1%	0.4%
W/AN/BN	3.0%	1.0%	0.5%	0.3%	0.0%	0.0%	0.6%	0.3%	0.0%	0.0%	0.1%	1.3%
D/C	-0.1%	0.7%	0.2%	-0.8%	-0.7%	-1.0%	0.3%	0.4%	0.1%	0.1%	0.1%	-0.3%

Collinsville Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



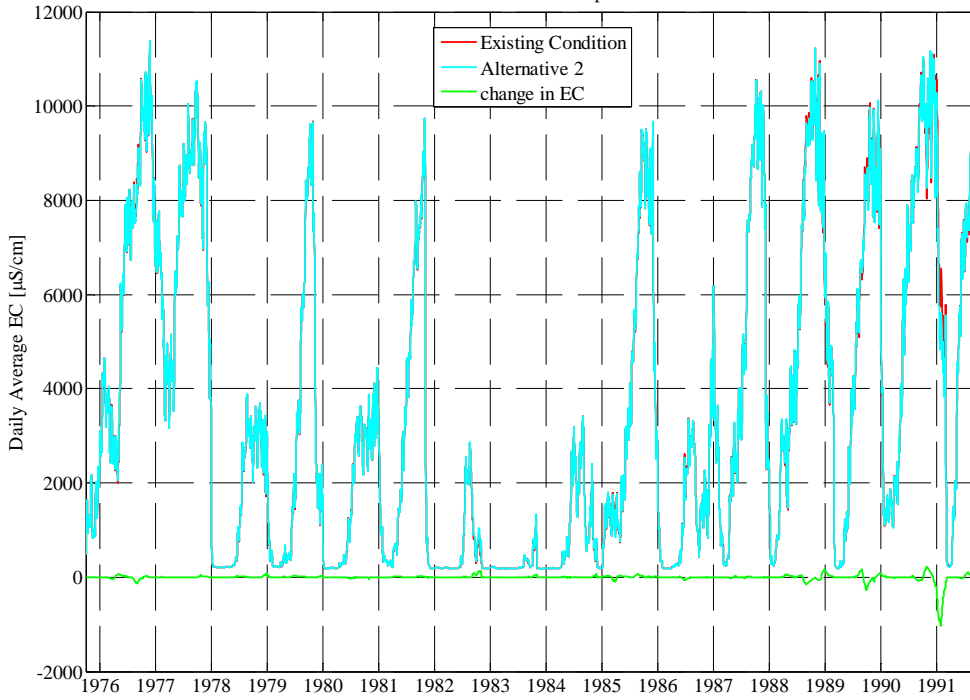
p_lve_wq_feir.m
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Collinsville Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



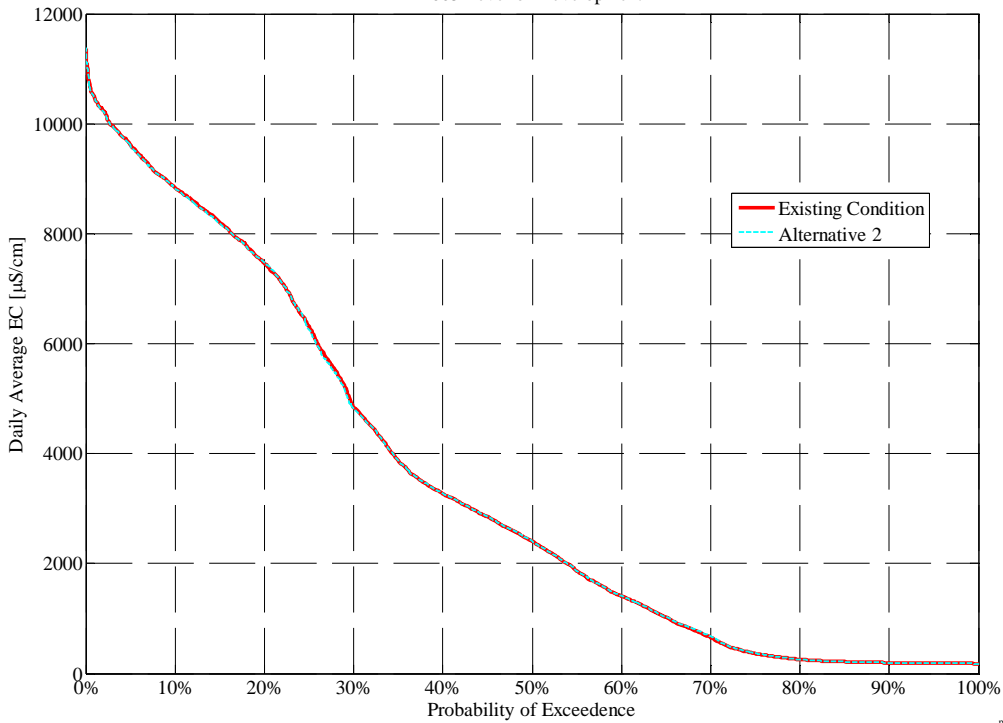
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Collinsville Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Collinsville Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

Collinsville Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Alternative 4
2005 Level of Development

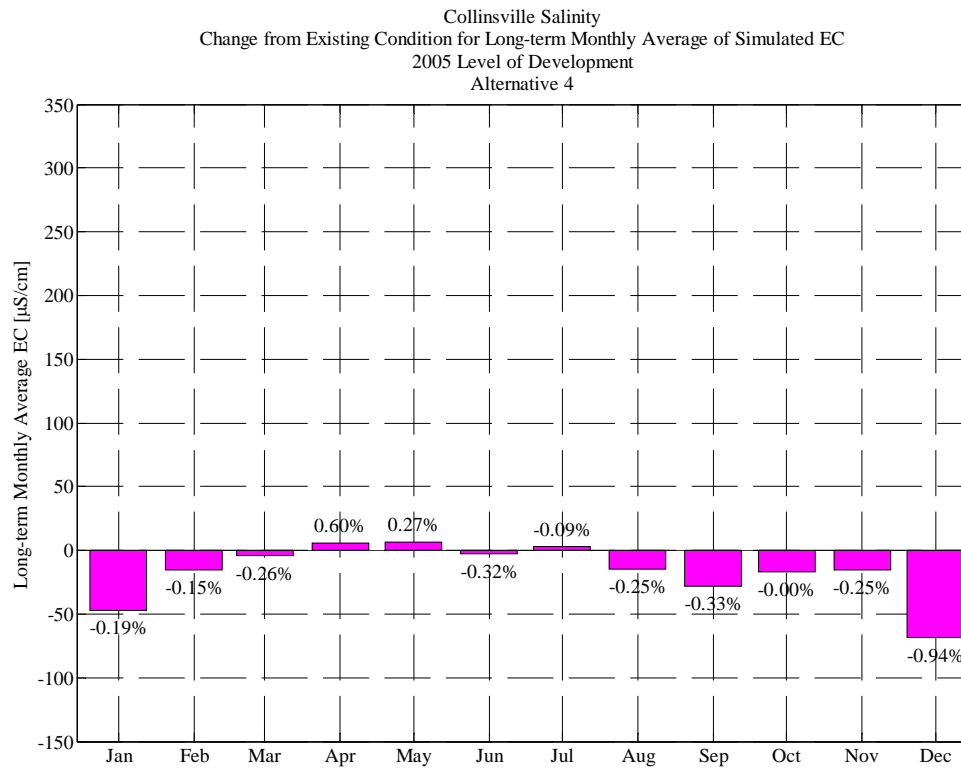
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,141	1,175	1,893	3,617	3,793	2,864	2,603	4,860	7,185	7,501	7,830	9,026
1977	9,905	10,195	7,838	6,629	5,433	4,084	4,240	6,473	8,167	8,840	9,142	9,770
1978	8,536	8,327	5,001	302	206	201	218	232	579	1,869	3,039	2,866
1979	3,006	3,139	2,676	885	248	233	373	411	1,271	2,949	5,256	7,975
1980	8,801	3,620	1,718	224	194	196	235	349	894	2,097	3,142	2,965
1981	3,018	3,101	3,578	1,222	352	280	568	1,493	3,024	4,626	6,460	7,258
1982	8,468	1,092	185	199	187	200	183	184	269	1,429	2,313	866
1983	695	230	190	213	193	184	188	182	186	204	361	270
1984	733	204	182	193	195	187	315	581	1,996	2,062	2,641	1,237
1985	1,331	604	201	907	1,387	1,338	1,230	1,770	3,025	4,331	6,237	8,496
1986	8,648	8,083	3,939	775	186	190	235	314	1,197	2,372	2,914	1,233
1987	1,313	1,457	3,692	3,547	1,250	352	1,191	2,399	3,131	4,367	7,199	9,011
1988	9,694	9,305	4,099	515	597	2,177	2,518	3,405	3,931	5,698	8,228	9,491
1989	10,130	9,547	7,366	4,643	4,144	356	264	973	2,821	4,454	6,038	7,652
1990	8,801	8,708	8,802	2,835	1,439	1,515	2,050	4,125	6,353	7,517	8,533	9,847
1991	9,622	9,634	10,034	7,211	5,045	679	865	3,658	6,476	7,258	8,247	9,535
Avg	5,865	4,901	3,837	2,120	1,553	940	1,080	1,963	3,157	4,223	5,474	6,094
W/AN/BN	5,555	3,528	1,984	399	201	199	250	322	913	1,855	2,810	2,487
D/C	6,106	5,970	5,278	3,458	2,604	1,516	1,725	3,240	4,902	6,066	7,546	8,899

Percent (%) Change from Existing Condition for Collinsville Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.2%	-0.1%	0.0%	0.0%	0.0%	-0.9%	1.0%	0.9%	0.3%	0.0%	-0.9%	-0.5%
1977	0.1%	-0.4%	-6.3%	-5.5%	-2.1%	-0.9%	-0.3%	-0.1%	-0.1%	0.8%	1.2%	1.0%
1978	-2.5%	-2.8%	-0.3%	0.5%	0.0%	0.0%	-0.2%	0.0%	1.8%	0.7%	0.1%	0.0%
1979	0.0%	-0.2%	2.3%	2.8%	0.2%	-0.2%	2.5%	2.1%	0.3%	-0.3%	0.0%	-0.1%
1980	0.5%	1.1%	0.7%	0.1%	0.0%	0.1%	0.6%	0.3%	-1.8%	-0.8%	-0.2%	-0.1%
1981	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	1.5%	0.8%	0.2%	0.1%	0.1%	-0.1%
1982	-0.1%	-0.3%	0.0%	-0.1%	-0.1%	0.1%	0.0%	-0.1%	0.7%	0.3%	-0.1%	0.1%
1983	3.0%	0.9%	0.1%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.8%	0.2%	0.3%	0.2%	0.1%
1985	0.0%	-0.2%	0.0%	1.2%	1.9%	0.9%	3.0%	1.0%	1.5%	-0.1%	-3.3%	-1.6%
1986	0.4%	-2.4%	-4.6%	5.9%	0.1%	0.1%	0.2%	-2.1%	-8.1%	-3.6%	-1.4%	-0.4%
1987	0.0%	-2.3%	-1.6%	-0.3%	0.2%	-0.7%	-1.3%	-0.2%	0.0%	0.4%	0.2%	0.0%
1988	0.0%	0.0%	-0.4%	-0.6%	-0.1%	0.1%	1.8%	1.1%	0.1%	0.7%	-1.2%	-1.6%
1989	-0.1%	2.9%	-7.1%	-8.9%	-2.2%	-1.4%	-0.1%	0.0%	-0.1%	0.1%	2.1%	-1.0%
1990	-1.3%	0.1%	2.1%	2.9%	0.7%	-0.4%	-0.3%	0.0%	0.0%	0.1%	0.2%	0.1%
1991	-0.3%	-0.4%	0.2%	-0.9%	-1.7%	-0.9%	-0.2%	-0.2%	-0.1%	0.0%	-0.9%	-1.4%
Avg	0.0%	-0.3%	-0.9%	-0.2%	-0.1%	-0.3%	0.6%	0.3%	-0.3%	-0.1%	-0.2%	-0.3%
W/AN/BN	0.2%	-0.5%	-0.3%	1.3%	0.0%	0.0%	0.7%	0.1%	-1.0%	-0.5%	-0.2%	0.0%
D/C	-0.2%	0.0%	-1.5%	-1.3%	-0.3%	-0.5%	0.6%	0.4%	0.2%	0.2%	-0.3%	-0.6%

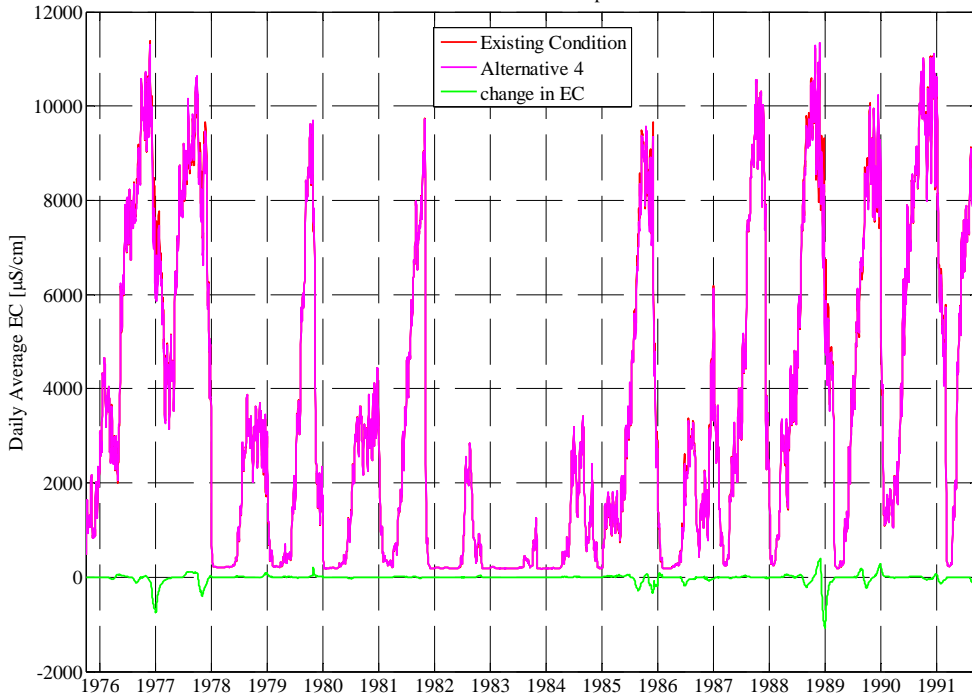


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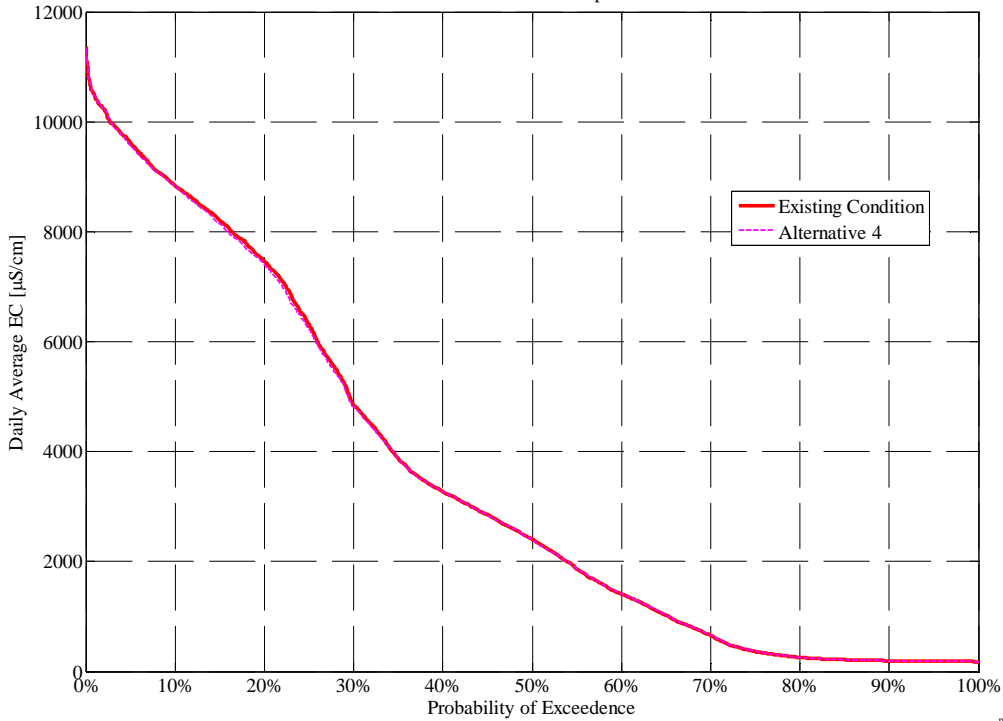
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07-Jan-2010 DS

Collinsville Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Collinsville Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Emmaton

Existing Condition

Emmaton Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	245	259	329	744	736	509	514	1,357	2,497	2,090	2,496	3,078
1977	3,763	3,781	2,613	1,755	1,433	925	938	2,021	3,016	3,354	3,332	3,812
1978	3,336	3,099	1,091	208	194	191	194	198	219	359	585	540
1979	601	609	442	269	213	197	210	216	319	561	1,316	2,574
1980	2,931	795	338	188	187	184	195	211	265	420	612	554
1981	604	588	648	318	196	188	221	352	668	1,015	1,729	2,036
1982	2,917	311	180	192	181	191	179	180	187	333	422	225
1983	201	184	181	194	185	181	181	178	180	189	191	180
1984	209	178	179	184	185	181	203	229	450	381	509	271
1985	276	203	182	236	268	273	284	376	635	911	1,756	2,907
1986	2,858	2,562	892	252	183	183	203	209	330	446	579	275
1987	292	296	747	724	278	196	317	497	672	923	2,519	3,352
1988	3,442	3,126	843	226	226	488	480	723	920	1,384	3,152	3,828
1989	3,861	2,931	2,223	1,020	992	194	191	239	577	958	1,498	2,523
1990	2,823	2,514	2,727	541	304	308	387	1,024	2,052	2,127	2,966	3,951
1991	3,635	3,476	3,616	2,110	1,173	245	262	911	2,057	1,985	3,007	3,791
Avg	2,000	1,557	1,077	573	433	290	310	558	940	1,090	1,667	2,119
W/AN/BN	1,865	1,105	472	212	190	187	195	203	278	384	602	660
D/C	2,105	1,908	1,547	853	623	370	400	833	1,455	1,638	2,495	3,253

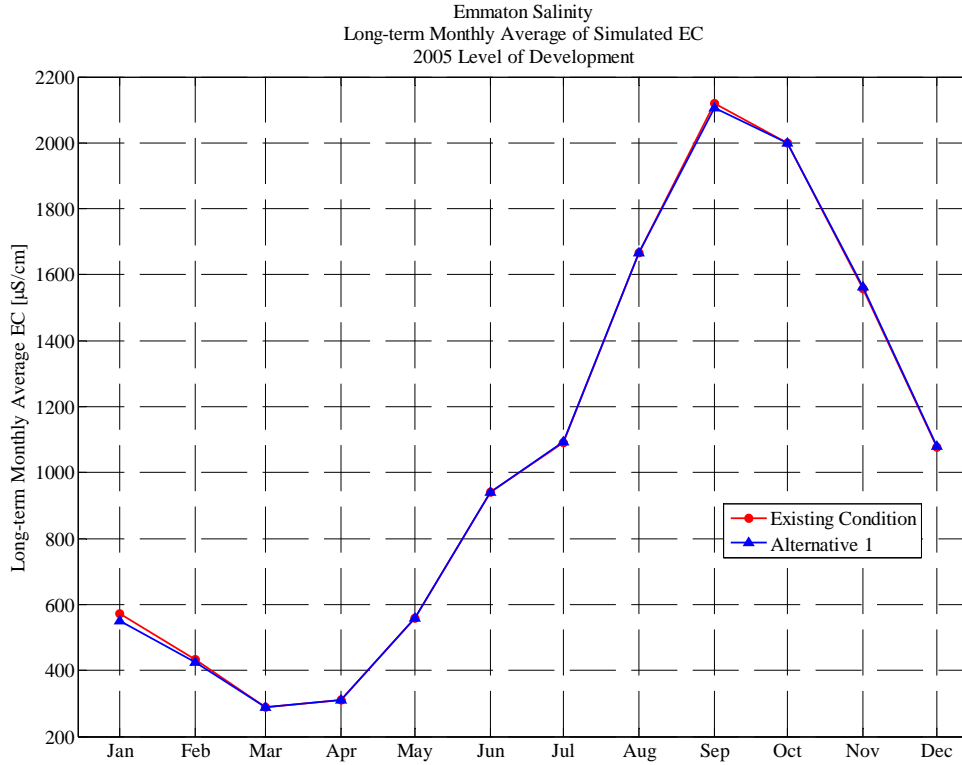
Alternative 1

Emmaton Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 1
2005 Level of Development

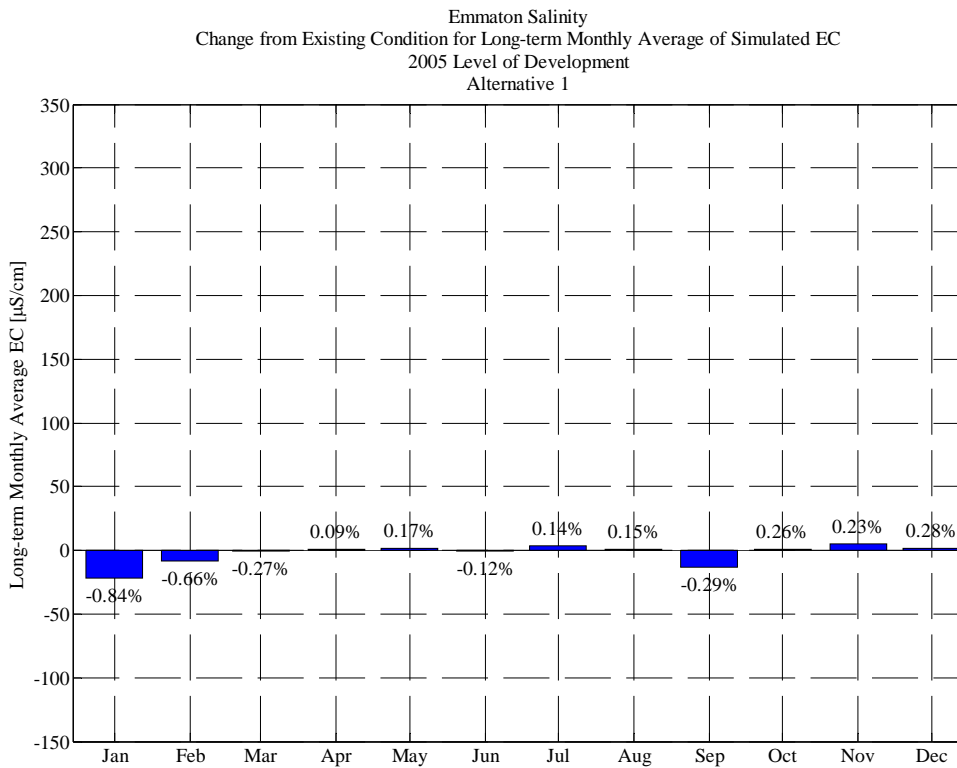
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	245	259	329	743	735	504	519	1,375	2,509	2,087	2,459	3,075
1977	3,763	3,806	2,606	1,752	1,433	924	938	2,022	3,016	3,353	3,335	3,805
1978	3,367	3,113	1,093	208	194	191	194	197	219	361	586	541
1979	601	604	451	271	213	196	210	216	323	564	1,319	2,574
1980	2,930	795	341	188	187	184	195	210	263	417	612	554
1981	600	589	648	318	196	188	221	353	668	1,014	1,729	2,046
1982	2,922	312	180	192	180	191	179	180	187	333	422	230
1983	209	185	182	194	185	181	181	178	180	189	191	180
1984	210	178	179	184	185	181	203	229	450	381	510	271
1985	276	205	182	237	271	268	283	379	637	908	1,790	2,915
1986	2,861	2,563	894	252	183	183	203	209	324	440	578	274
1987	295	298	747	724	278	196	317	497	668	919	2,529	3,348
1988	3,440	3,126	843	226	226	493	489	733	918	1,395	3,105	3,749
1989	3,837	2,901	2,253	1,043	999	194	191	239	573	961	1,535	2,417
1990	2,757	2,504	2,758	547	304	307	385	1,024	2,050	2,132	2,975	3,917
1991	3,697	3,553	3,574	1,731	1,027	240	261	908	2,050	2,035	3,012	3,795
Avg	2,001	1,562	1,079	551	425	289	311	559	940	1,093	1,668	2,106
W/AN/BN	1,871	1,107	474	213	189	187	195	203	278	384	602	661
D/C	2,101	1,916	1,549	813	608	368	401	837	1,454	1,645	2,497	3,229

Percent (%) Change from Existing Condition for Emmatton Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-1.1%	0.8%	1.3%	0.5%	-0.1%	-1.5%	-0.1%
1977	0.0%	0.7%	-0.3%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.2%
1978	0.9%	0.5%	0.2%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.3%	0.5%	0.2%	0.1%
1979	0.0%	-0.7%	2.0%	0.9%	0.0%	0.0%	0.0%	-0.2%	1.3%	0.7%	0.2%	0.0%
1980	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.8%	-0.7%	-0.1%	0.0%
1981	-0.7%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.1%	-0.1%	0.0%	0.5%
1982	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%	2.1%
1983	3.8%	0.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.2%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.2%	0.0%	0.0%	0.2%	0.1%	0.0%
1985	0.0%	1.3%	0.2%	0.5%	1.0%	-1.9%	-0.2%	0.7%	0.3%	-0.3%	1.9%	0.3%
1986	0.1%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	-0.1%	-1.7%	-1.3%	-0.3%	-0.2%
1987	0.8%	0.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	-0.5%	-0.4%	0.4%	-0.1%
1988	0.0%	0.0%	0.1%	0.1%	0.1%	0.9%	1.8%	1.3%	-0.2%	0.8%	-1.5%	-2.1%
1989	-0.6%	-1.0%	1.4%	2.3%	0.8%	0.1%	0.0%	0.1%	-0.5%	0.3%	2.5%	-4.2%
1990	-2.3%	-0.4%	1.2%	1.0%	0.2%	-0.4%	-0.4%	0.0%	-0.1%	0.2%	0.3%	-0.9%
1991	1.7%	2.2%	-1.2%	-18.0%	-12.5%	-1.8%	-0.4%	-0.3%	-0.4%	2.5%	0.1%	0.1%
Avg	0.3%	0.2%	0.3%	-0.8%	-0.7%	-0.3%	0.1%	0.2%	-0.1%	0.1%	0.2%	-0.3%
W/AN/BN	0.8%	0.0%	0.5%	0.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.1%	0.0%	0.3%
D/C	-0.1%	0.4%	0.1%	-1.6%	-1.2%	-0.5%	0.2%	0.4%	-0.1%	0.3%	0.3%	-0.7%

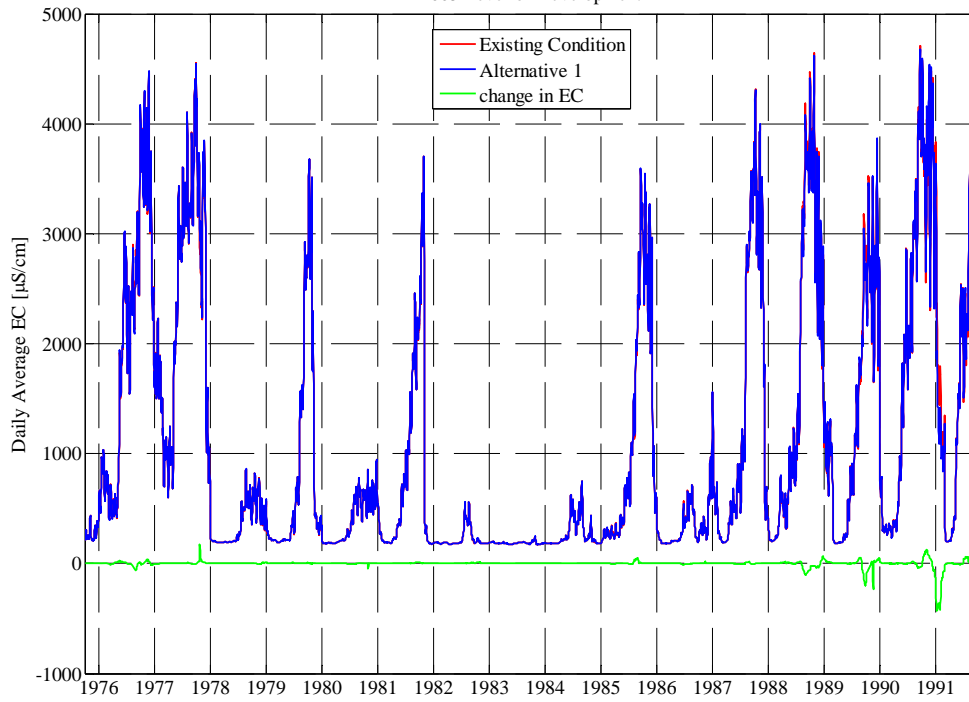


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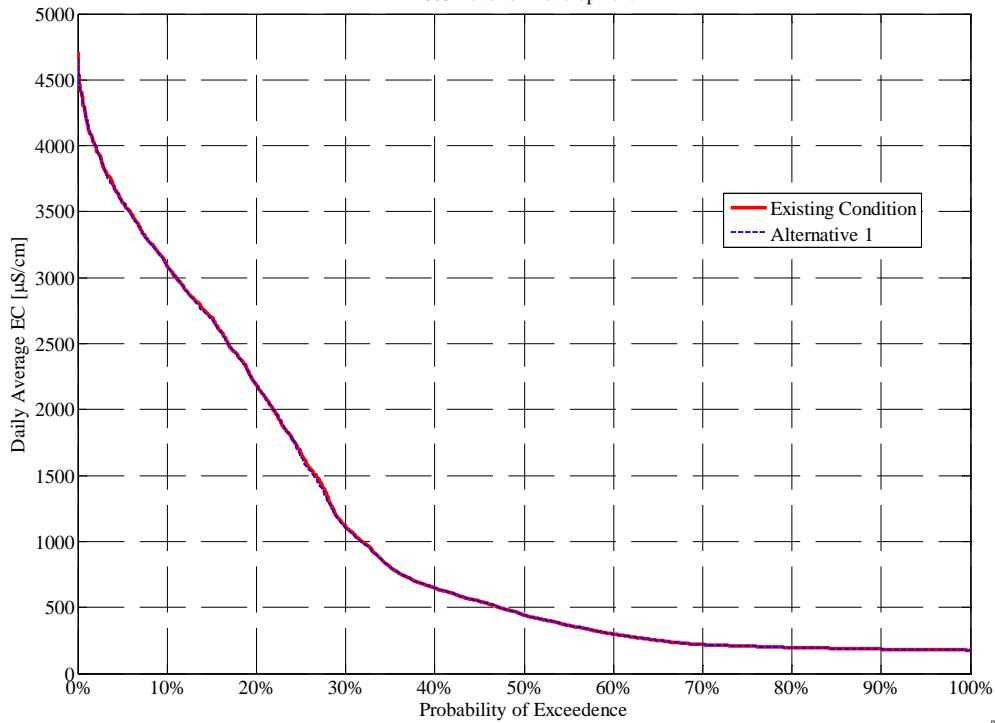
p_lve_wq_feir.m
07-Jan-2010 DS

Emmaton Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Emmaton Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

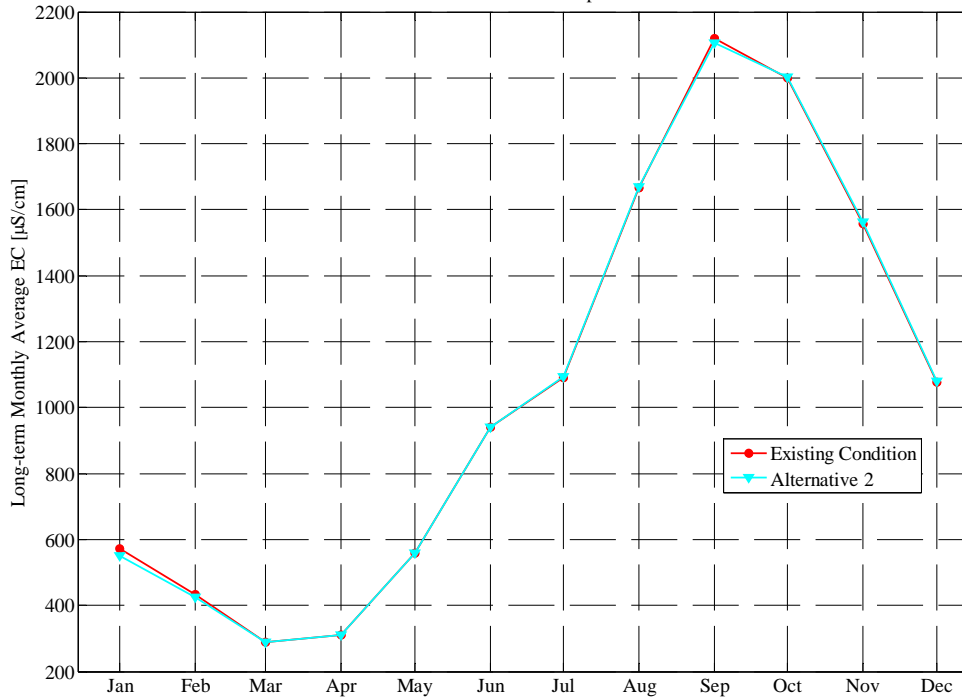
Emmaton Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	245	258	329	743	735	504	518	1,374	2,508	2,087	2,458	3,075
1977	3,763	3,801	2,606	1,755	1,434	925	939	2,022	3,016	3,353	3,335	3,808
1978	3,360	3,106	1,093	208	194	191	194	197	219	361	586	541
1979	601	604	452	272	213	196	210	216	323	565	1,319	2,574
1980	2,930	795	341	188	187	184	195	210	263	417	612	554
1981	600	589	648	318	196	188	221	353	668	1,014	1,729	2,046
1982	2,922	313	180	192	180	191	179	180	187	333	422	230
1983	209	185	182	194	185	181	181	178	179	189	191	180
1984	213	178	179	184	185	181	203	229	450	382	510	271
1985	276	206	182	237	271	269	284	379	637	908	1,790	2,915
1986	2,861	2,564	894	252	183	183	203	209	324	441	578	274
1987	294	298	747	724	278	196	313	496	669	919	2,530	3,349
1988	3,441	3,126	843	226	226	493	489	733	918	1,397	3,105	3,745
1989	3,850	2,906	2,257	1,047	1,001	194	191	239	573	961	1,536	2,414
1990	2,755	2,505	2,761	548	304	307	385	1,024	2,050	2,132	2,975	3,916
1991	3,699	3,556	3,572	1,738	1,030	240	261	909	2,050	2,033	3,012	3,794
Avg	2,001	1,562	1,079	552	425	289	310	559	940	1,093	1,668	2,105
W/AN/BN	1,871	1,107	474	213	189	187	195	203	278	384	602	661
D/C	2,103	1,916	1,550	815	608	368	400	836	1,454	1,645	2,497	3,229

Percent (%) Change from Existing Condition for Emmaton Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

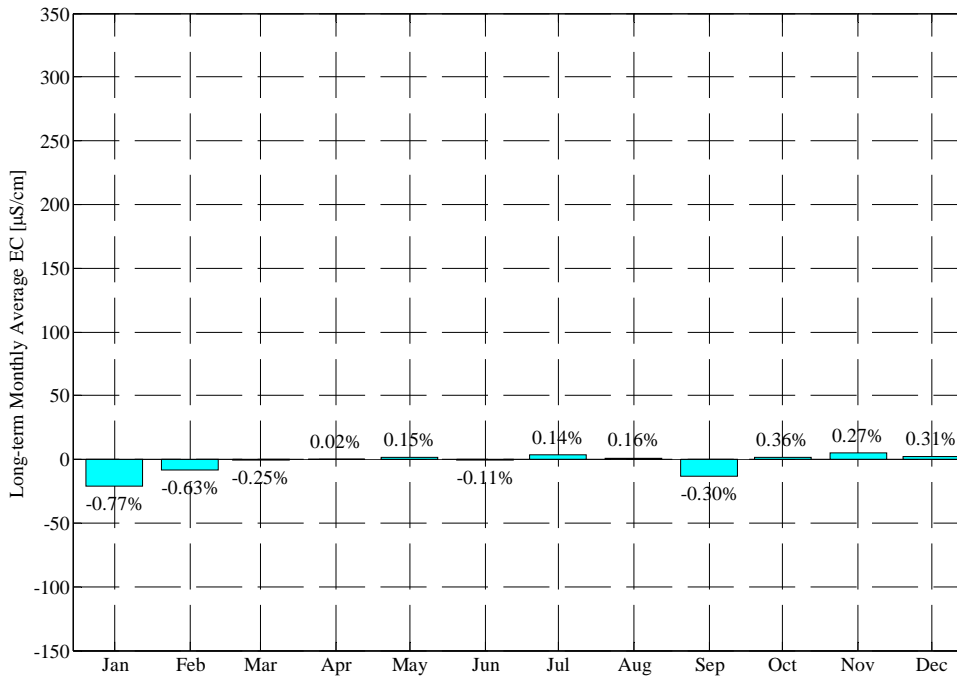
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-1.1%	0.8%	1.3%	0.4%	-0.1%	-1.5%	-0.1%
1977	0.0%	0.5%	-0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.1%
1978	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.3%	0.5%	0.2%	0.1%
1979	0.0%	-0.8%	2.1%	0.9%	0.0%	0.0%	0.0%	-0.2%	1.3%	0.7%	0.2%	0.0%
1980	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.8%	-0.7%	-0.1%	0.0%
1981	-0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	-0.1%	0.0%	0.5%
1982	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%	2.1%
1983	3.9%	0.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1984	1.8%	0.1%	0.0%	0.0%	-0.1%	0.1%	0.2%	0.0%	0.0%	0.2%	0.1%	0.0%
1985	0.0%	1.6%	0.3%	0.5%	1.0%	-1.7%	-0.1%	0.7%	0.4%	-0.3%	1.9%	0.3%
1986	0.1%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	-0.1%	-1.7%	-1.3%	-0.3%	-0.2%
1987	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	-1.4%	-0.2%	-0.4%	-0.4%	0.4%	-0.1%
1988	0.0%	0.0%	0.1%	0.0%	0.1%	0.9%	1.7%	1.3%	-0.2%	0.9%	-1.5%	-2.2%
1989	-0.3%	-0.8%	1.5%	2.7%	0.9%	0.1%	0.0%	0.1%	-0.5%	0.3%	2.6%	-4.3%
1990	-2.4%	-0.4%	1.3%	1.1%	0.2%	-0.4%	-0.4%	0.0%	-0.1%	0.2%	0.3%	-0.9%
1991	1.8%	2.3%	-1.2%	-17.6%	-12.2%	-1.8%	-0.4%	-0.3%	-0.3%	2.5%	0.2%	0.1%
Avg	0.4%	0.3%	0.3%	-0.8%	-0.6%	-0.2%	0.0%	0.2%	-0.1%	0.1%	0.2%	-0.3%
W/AN/BN	0.9%	0.1%	0.5%	0.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.1%	0.0%	0.3%
D/C	-0.1%	0.4%	0.2%	-1.5%	-1.1%	-0.4%	0.0%	0.4%	-0.1%	0.3%	0.3%	-0.8%

Emmaton Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development

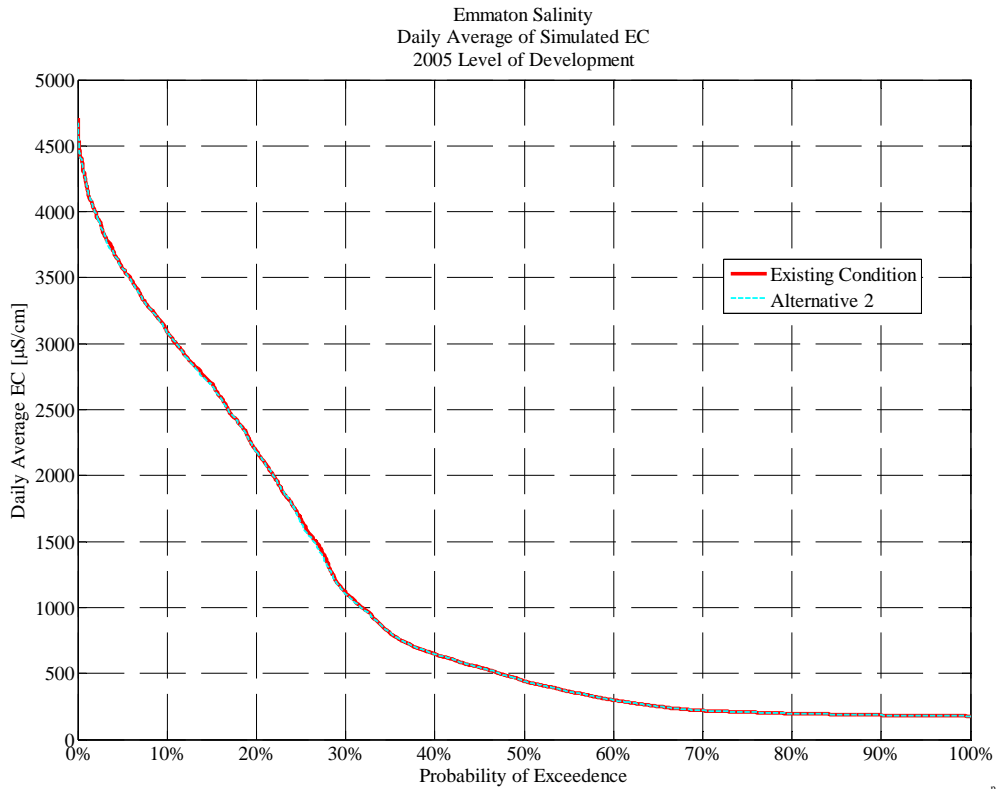
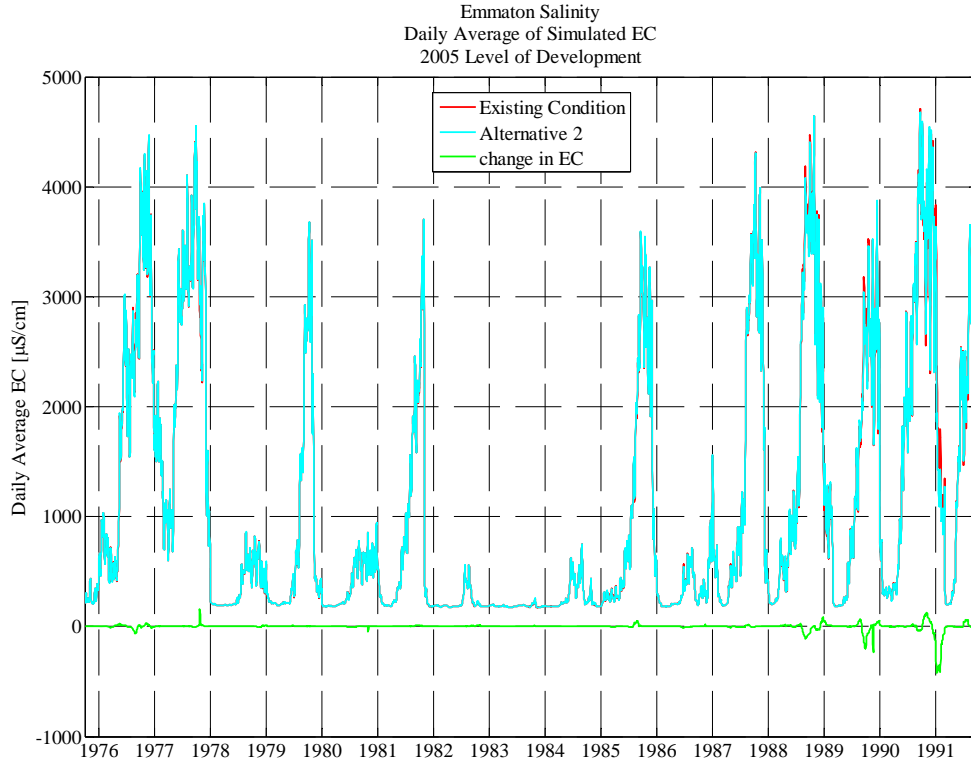


p_lve_wq_feir.m
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Emmaton Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



p_lve_wq_feir.m
 07-Jan-2010 DS



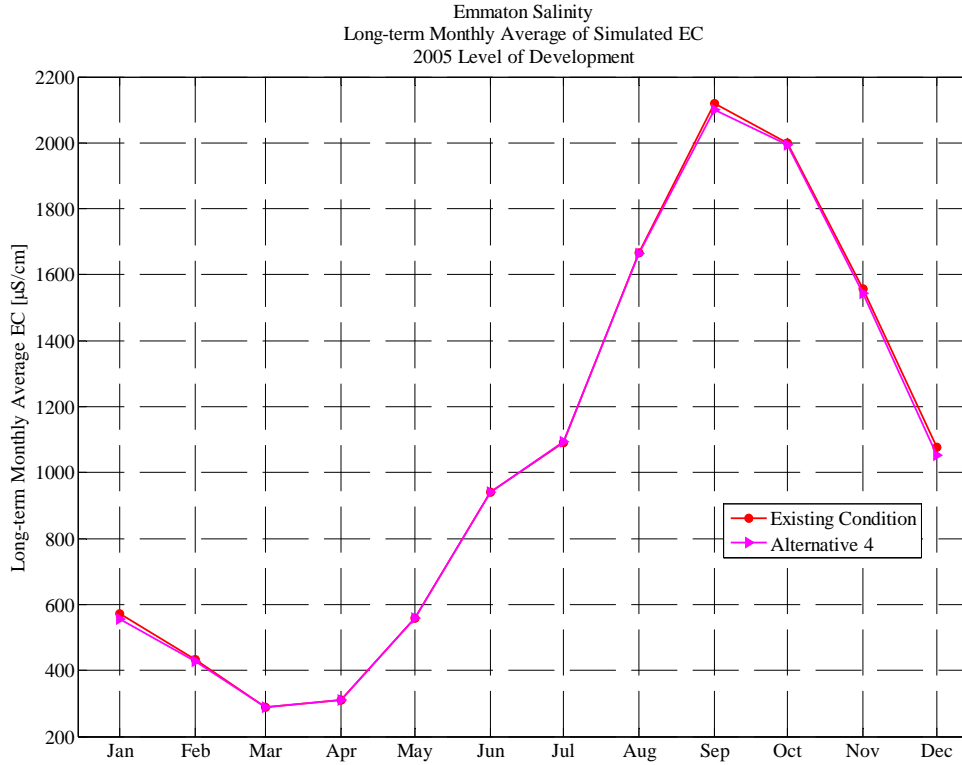
Alternative 4

**Emmaton Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2005 Level of Development**

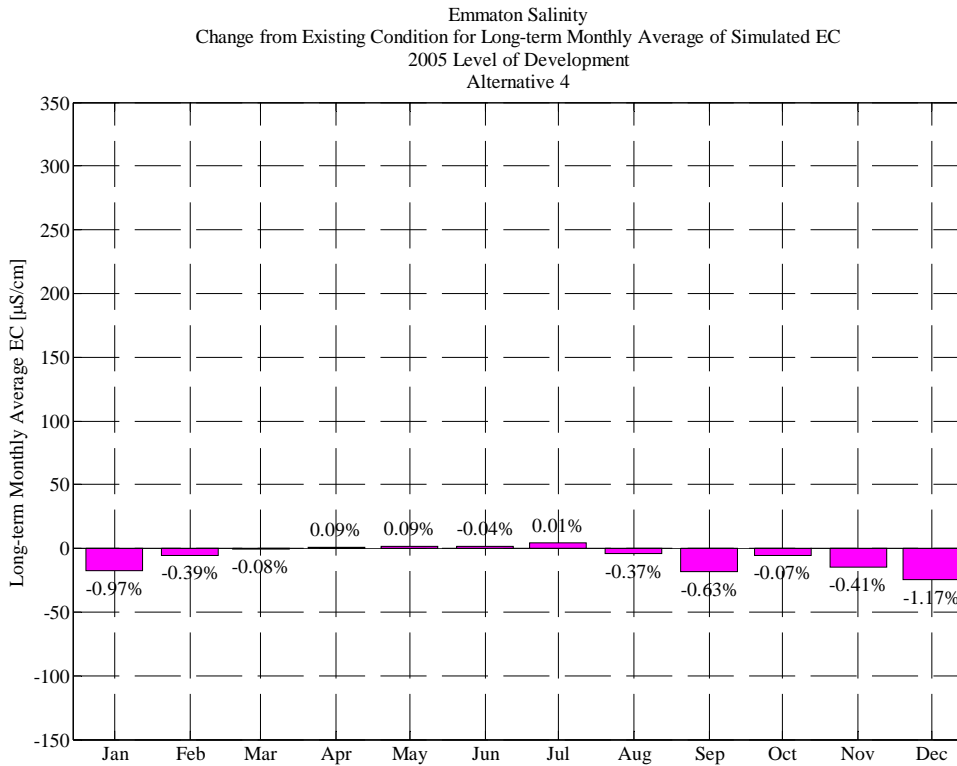
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	245	259	329	744	736	504	518	1,372	2,507	2,087	2,458	3,077
1977	3,765	3,754	2,355	1,611	1,399	918	939	2,024	3,013	3,405	3,398	3,860
1978	3,187	2,960	1,085	208	194	191	194	197	219	361	585	541
1979	601	604	454	273	213	197	210	216	318	558	1,317	2,569
1980	3,006	795	339	188	187	184	195	210	263	417	611	554
1981	604	588	648	318	196	188	221	353	669	1,015	1,732	2,034
1982	2,910	311	180	192	180	191	179	180	187	333	421	225
1983	203	184	182	194	185	181	181	178	180	189	191	180
1984	209	178	179	184	185	181	203	229	451	382	510	271
1985	276	202	182	237	271	275	288	377	681	906	1,638	2,845
1986	2,928	2,349	860	258	183	183	203	208	308	430	565	273
1987	293	305	732	721	279	196	313	495	668	930	2,530	3,351
1988	3,441	3,126	839	226	226	493	488	736	917	1,407	3,106	3,721
1989	3,849	3,069	2,015	881	958	193	191	239	574	961	1,545	2,430
1990	2,762	2,540	2,830	560	306	307	385	1,024	2,050	2,135	2,969	3,963
1991	3,621	3,457	3,631	2,087	1,146	244	262	909	2,055	1,986	3,024	3,714
Avg	1,994	1,542	1,052	555	428	289	311	559	941	1,094	1,663	2,100
W/AN/BN	1,863	1,054	468	214	189	187	195	202	275	382	600	659
D/C	2,095	1,922	1,507	821	613	369	401	837	1,460	1,648	2,489	3,222

**Percent (%) Change from Existing Condition for Emmaton Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.2%	-0.1%	0.0%	0.0%	0.0%	-1.0%	0.7%	1.1%	0.4%	-0.1%	-1.5%	0.0%
1977	0.1%	-0.7%	-9.9%	-8.2%	-2.4%	-0.7%	0.1%	0.1%	-0.1%	1.5%	2.0%	1.2%
1978	-4.5%	-4.5%	-0.6%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.3%	0.5%	0.1%	0.1%
1979	0.0%	-0.9%	2.5%	1.6%	0.0%	0.0%	0.0%	-0.3%	-0.1%	-0.5%	0.1%	-0.2%
1980	2.5%	0.0%	0.3%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.8%	-0.7%	-0.2%	-0.1%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.1%	0.2%	-0.1%
1982	-0.2%	-0.1%	0.0%	0.0%	-0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	-0.3%	0.1%
1983	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.3%	0.2%	0.1%
1985	0.1%	-0.1%	0.0%	0.5%	1.1%	0.5%	1.3%	0.4%	7.4%	-0.6%	-6.7%	-2.1%
1986	2.5%	-8.3%	-3.6%	2.4%	0.0%	0.0%	0.0%	-0.8%	-6.5%	-3.5%	-2.5%	-0.8%
1987	0.3%	2.9%	-2.0%	-0.4%	0.1%	0.0%	-1.4%	-0.3%	-0.5%	0.8%	0.4%	0.0%
1988	0.0%	0.0%	-0.4%	-0.1%	0.0%	0.9%	1.6%	1.8%	-0.3%	1.6%	-1.5%	-2.8%
1989	-0.3%	4.7%	-9.3%	-13.6%	-3.4%	-0.5%	-0.1%	0.0%	-0.5%	0.3%	3.2%	-3.7%
1990	-2.2%	1.0%	3.8%	3.4%	0.7%	-0.3%	-0.4%	-0.1%	-0.1%	0.4%	0.1%	0.3%
1991	-0.4%	-0.5%	0.4%	-1.1%	-2.3%	-0.4%	-0.1%	-0.2%	-0.1%	0.1%	0.5%	-2.0%
Avg	-0.1%	-0.4%	-1.2%	-1.0%	-0.4%	-0.1%	0.1%	0.1%	0.0%	0.0%	-0.4%	-0.6%
W/AN/BN	0.2%	-2.0%	-0.2%	0.6%	0.0%	0.0%	0.0%	-0.2%	-1.0%	-0.6%	-0.4%	-0.1%
D/C	-0.3%	0.8%	-1.9%	-2.2%	-0.7%	-0.2%	0.2%	0.3%	0.7%	0.5%	-0.4%	-1.0%

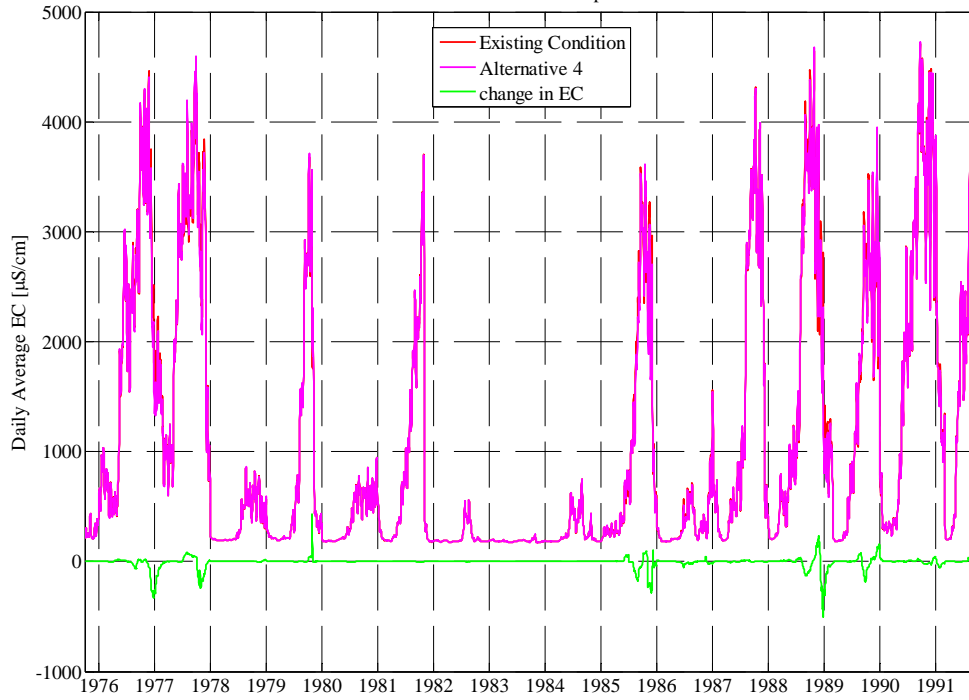


p_lve_wq_feir.m
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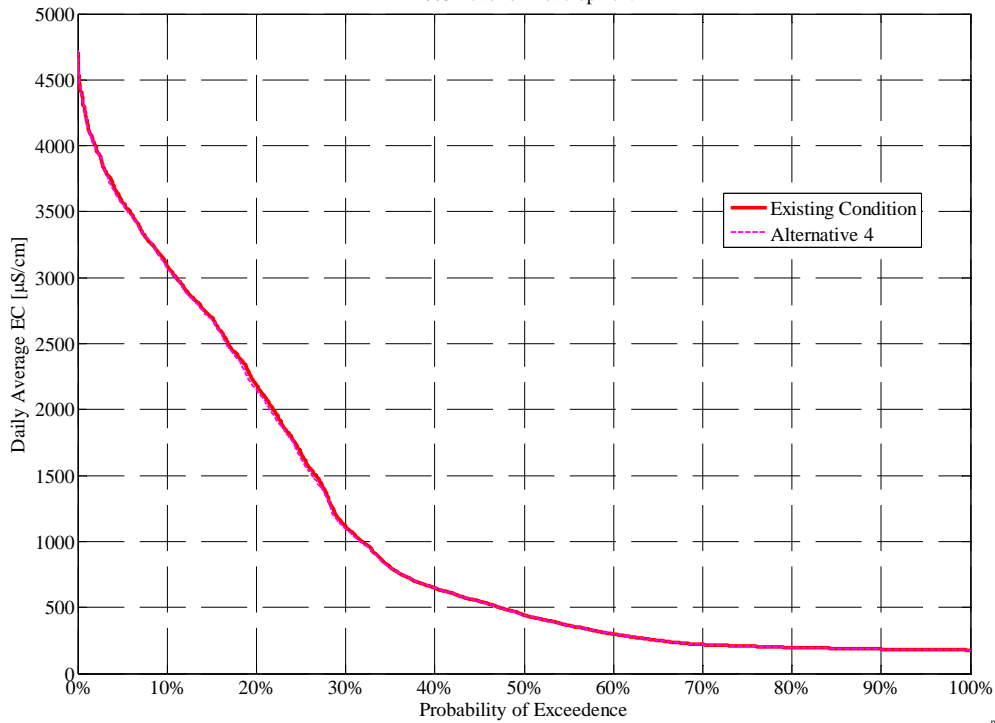
p_lve_wq_feir.m
07-Jan-2010 DS

Emmaton Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Emmaton Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jersey Point

Existing Condition

Jersey Point Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	304	231	506	848	910	673	383	721	1,467	2,915	2,513	3,089
1977	2,531	2,733	2,027	1,949	1,155	639	609	1,094	1,870	2,099	2,278	2,634
1978	2,094	2,151	1,794	356	259	256	274	242	225	380	757	700
1979	397	396	779	413	279	242	243	263	259	808	1,568	2,603
1980	2,783	1,208	673	263	251	228	227	253	246	321	658	681
1981	384	390	1,226	677	240	208	253	306	449	1,586	2,488	2,836
1982	2,568	1,033	208	235	219	240	205	187	197	256	390	219
1983	210	200	219	279	273	244	208	192	201	212	199	187
1984	249	193	212	227	215	199	232	257	316	551	637	323
1985	221	283	204	233	290	264	267	309	436	1,387	2,261	2,976
1986	2,593	2,466	1,518	388	263	254	253	239	256	563	615	260
1987	219	243	1,039	1,048	427	234	271	368	471	1,412	1,771	2,407
1988	2,481	2,396	1,559	359	246	342	365	462	562	1,725	2,165	2,636
1989	2,514	2,544	2,072	1,465	784	280	223	232	445	1,556	2,295	2,491
1990	2,499	2,784	2,571	1,067	351	275	299	562	1,199	2,563	2,554	2,785
1991	2,345	2,363	2,733	1,661	948	360	267	536	1,342	2,747	2,298	2,600
Avg	1,524	1,351	1,209	717	444	308	286	389	621	1,317	1,590	1,839
W/AN/BN	1,556	1,092	772	309	251	237	235	233	243	441	689	710
D/C	1,500	1,552	1,549	1,034	595	364	326	510	916	1,999	2,292	2,717

Alternative 1

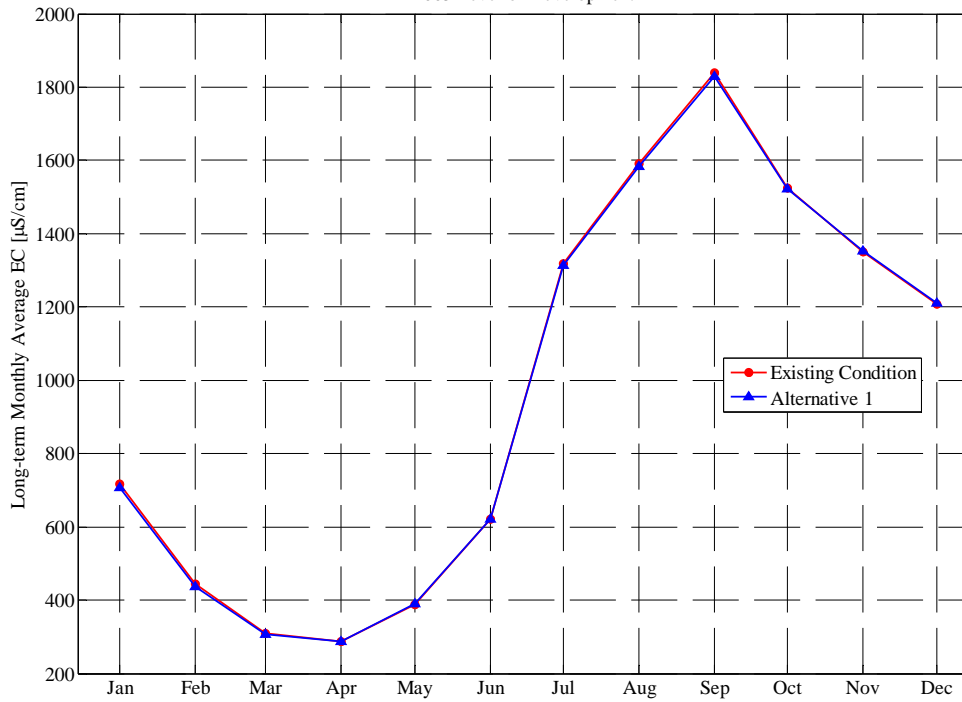
**Jersey Point Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	303	231	506	847	909	660	384	730	1,475	2,927	2,462	2,990
1977	2,519	2,725	2,018	1,945	1,155	638	609	1,094	1,869	2,098	2,267	2,626
1978	2,098	2,161	1,797	356	259	256	274	241	224	382	760	702
1979	398	399	797	420	279	242	242	262	260	817	1,572	2,608
1980	2,787	1,209	684	264	251	228	225	252	245	319	658	682
1981	386	393	1,227	677	241	208	251	304	449	1,589	2,491	2,840
1982	2,573	1,038	208	234	218	240	205	187	197	256	393	224
1983	227	202	220	277	273	244	208	192	201	212	199	187
1984	251	193	212	227	215	199	232	256	316	553	638	323
1985	221	297	208	235	296	259	266	309	438	1,391	2,217	2,974
1986	2,599	2,469	1,522	389	263	255	253	238	254	554	613	261
1987	220	243	1,038	1,048	427	234	272	368	473	1,427	1,775	2,410
1988	2,481	2,396	1,561	359	246	343	371	465	565	1,732	2,120	2,566
1989	2,464	2,507	2,119	1,511	793	281	224	232	448	1,543	2,361	2,532
1990	2,447	2,771	2,588	1,080	353	275	299	562	1,198	2,560	2,503	2,743
1991	2,401	2,431	2,675	1,433	809	343	265	535	1,336	2,677	2,299	2,604
Avg	1,523	1,354	1,211	706	437	307	286	389	622	1,315	1,583	1,829
W/AN/BN	1,562	1,096	777	310	251	238	234	233	243	442	690	712
D/C	1,494	1,555	1,549	1,015	581	360	327	511	917	1,994	2,277	2,698

**Percent (%) Change from Existing Condition for Jersey Point Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

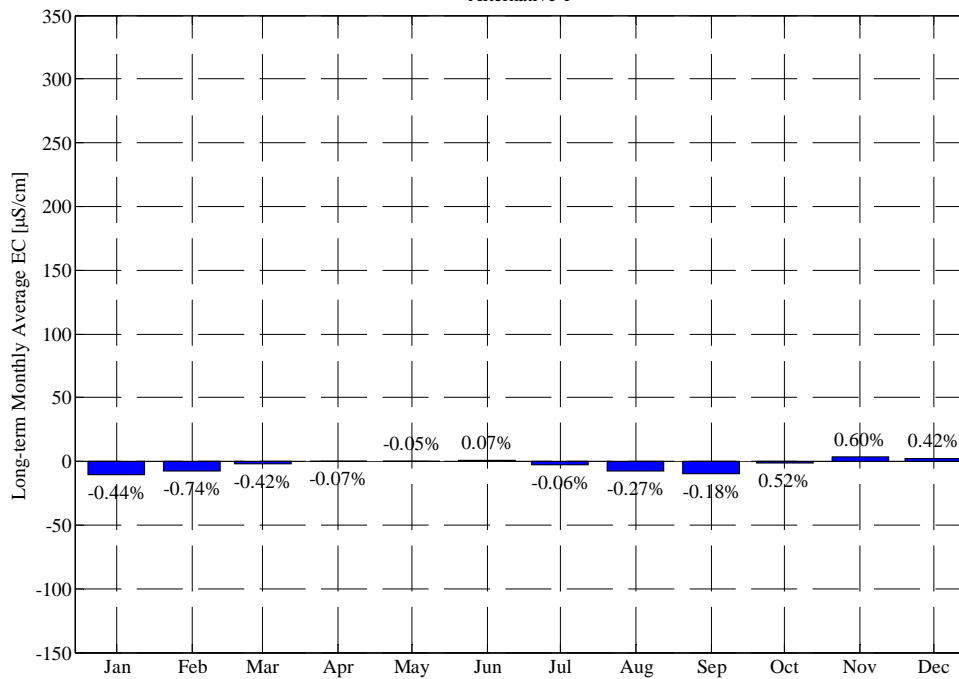
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.5%	-0.2%	-0.1%	-0.1%	-0.1%	-2.0%	0.1%	1.2%	0.5%	0.4%	-2.0%	-3.2%
1977	-0.5%	-0.3%	-0.4%	-0.2%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.5%	-0.3%
1978	0.2%	0.5%	0.2%	0.0%	-0.1%	-0.1%	-0.3%	-0.4%	-0.1%	0.6%	0.3%	0.2%
1979	0.2%	0.7%	2.3%	1.8%	-0.1%	0.0%	-0.6%	-0.5%	0.5%	1.1%	0.3%	0.2%
1980	0.1%	0.1%	1.6%	0.4%	0.0%	0.1%	-0.5%	-0.5%	-0.1%	-0.3%	0.0%	0.1%
1981	0.5%	0.7%	0.1%	0.1%	0.0%	-0.1%	-0.7%	-0.5%	0.0%	0.2%	0.1%	0.1%
1982	0.2%	0.5%	0.1%	-0.3%	-0.3%	0.2%	-0.1%	0.0%	-0.1%	0.1%	0.8%	2.1%
1983	8.2%	1.0%	0.1%	-0.6%	-0.2%	0.1%	-0.3%	-0.2%	0.0%	-0.2%	-0.1%	0.0%
1984	0.6%	0.1%	-0.1%	-0.1%	-0.1%	0.4%	0.1%	-0.3%	-0.1%	0.4%	0.2%	0.0%
1985	0.0%	5.1%	1.6%	0.7%	1.8%	-2.1%	-0.1%	0.2%	0.3%	0.3%	-2.0%	0.0%
1986	0.3%	0.1%	0.3%	0.4%	0.0%	0.6%	-0.2%	-0.4%	-0.8%	-1.6%	-0.4%	0.1%
1987	0.6%	0.2%	0.0%	0.0%	0.1%	0.3%	0.5%	-0.1%	0.5%	1.0%	0.2%	0.1%
1988	0.0%	0.0%	0.1%	0.2%	0.1%	0.3%	1.8%	0.8%	0.6%	0.4%	-2.1%	-2.6%
1989	-2.0%	-1.5%	2.3%	3.1%	1.2%	0.4%	0.0%	0.1%	0.6%	-0.8%	2.8%	1.6%
1990	-2.1%	-0.5%	0.7%	1.3%	0.4%	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	-2.0%	-1.5%
1991	2.4%	2.9%	-2.1%	-13.7%	-14.6%	-4.7%	-0.7%	-0.2%	-0.4%	-2.6%	0.1%	0.2%
Avg	0.5%	0.6%	0.4%	-0.4%	-0.7%	-0.4%	-0.1%	0.0%	0.1%	-0.1%	-0.3%	-0.2%
W/AN/BN	1.4%	0.4%	0.6%	0.2%	-0.1%	0.2%	-0.3%	-0.3%	-0.1%	0.0%	0.2%	0.4%
D/C	-0.2%	0.7%	0.2%	-1.0%	-1.2%	-0.9%	0.1%	0.2%	0.2%	-0.1%	-0.6%	-0.6%

Jersey Point Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



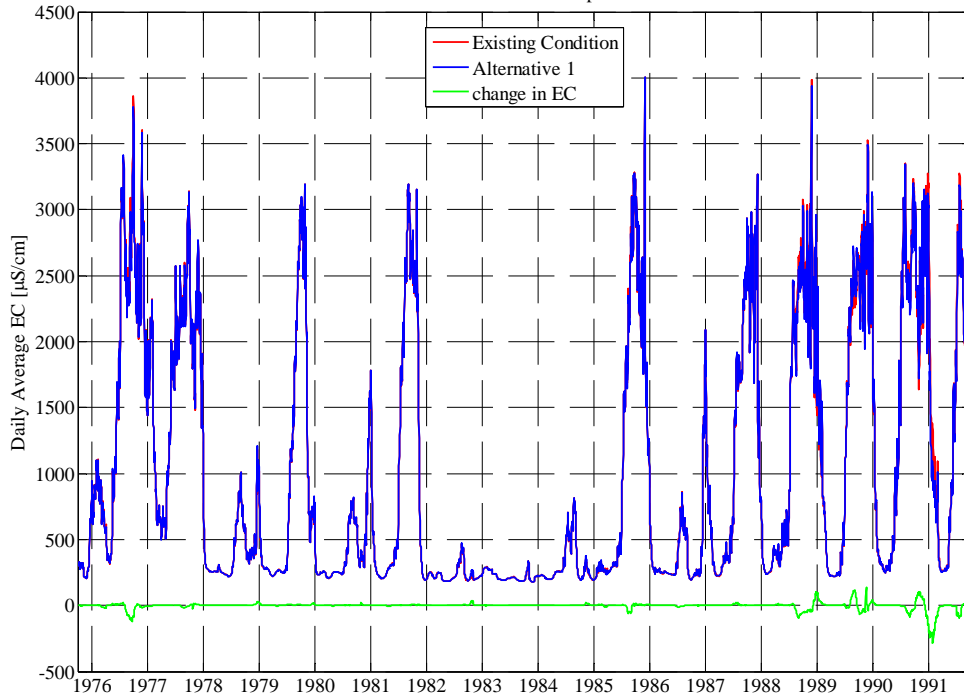
p_lve_wq_feir.m
 07-Jan-2010 DS

Jersey Point Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



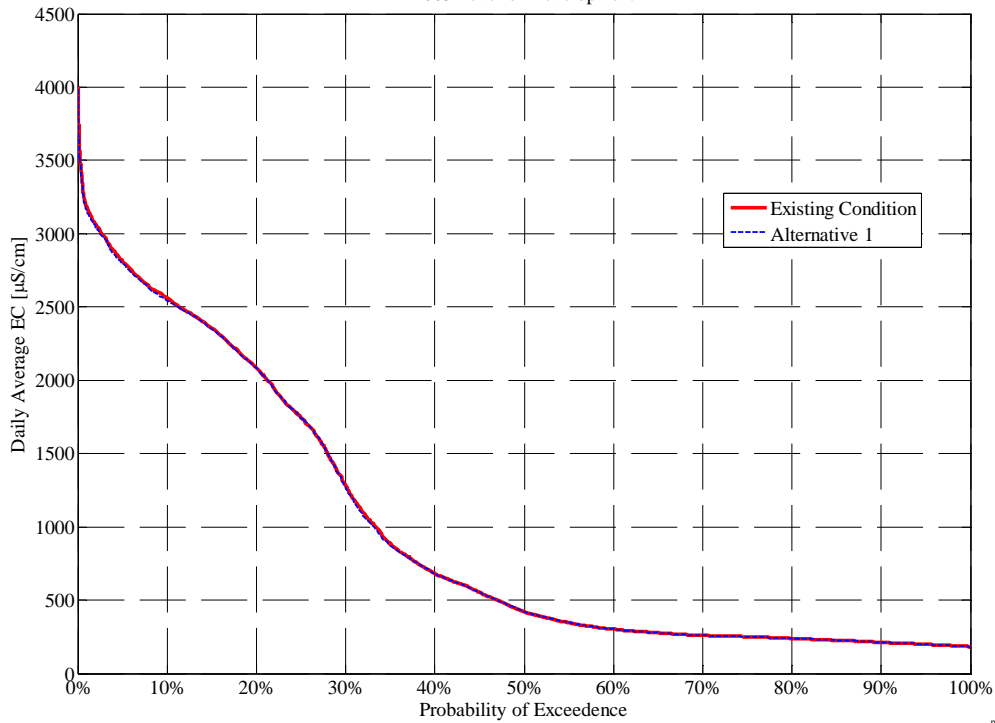
p_lve_wq_feir.m
 07-Jan-2010 DS

Jersey Point Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jersey Point Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

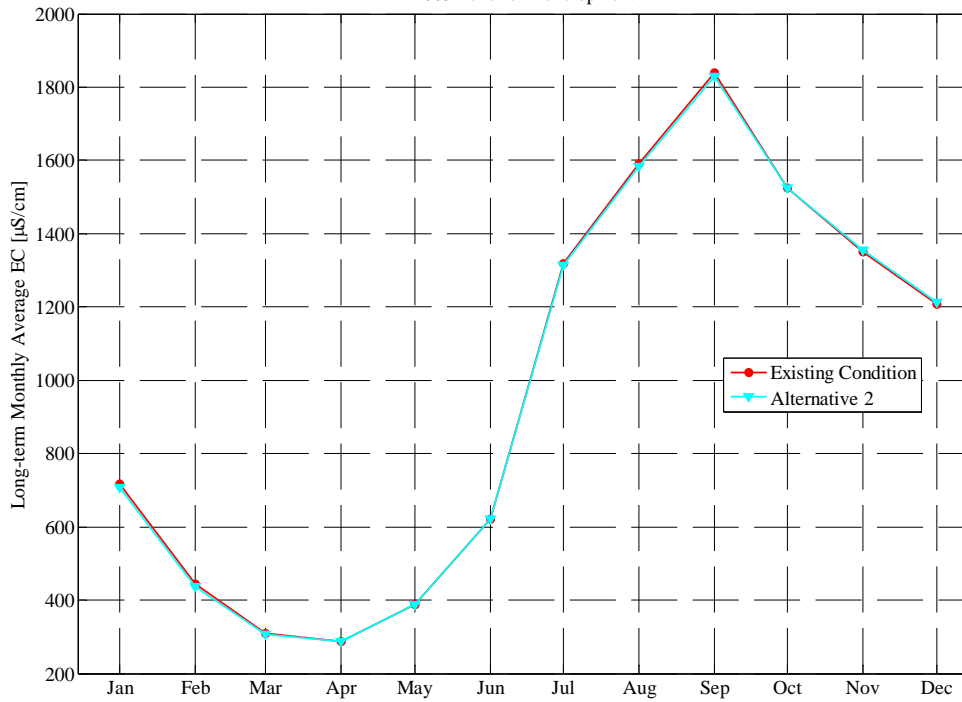
Jersey Point Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	301	231	506	847	909	660	384	729	1,475	2,926	2,460	2,987
1977	2,519	2,726	2,024	1,950	1,156	639	609	1,094	1,869	2,098	2,271	2,629
1978	2,094	2,155	1,797	357	259	256	274	241	224	382	760	702
1979	398	399	797	421	279	242	242	262	260	817	1,572	2,608
1980	2,786	1,209	684	264	251	228	225	252	245	319	658	682
1981	386	393	1,227	678	241	208	251	304	449	1,589	2,491	2,840
1982	2,573	1,050	208	234	218	240	205	187	197	256	393	224
1983	227	202	220	276	273	244	208	191	201	212	199	187
1984	261	194	212	226	215	199	232	256	316	553	638	323
1985	221	300	208	235	296	259	266	309	438	1,391	2,217	2,974
1986	2,598	2,469	1,522	389	262	255	253	238	254	554	613	261
1987	220	243	1,038	1,048	427	234	270	366	473	1,427	1,774	2,410
1988	2,481	2,396	1,561	359	246	343	371	465	565	1,728	2,114	2,562
1989	2,476	2,508	2,127	1,519	795	281	224	232	448	1,543	2,362	2,534
1990	2,446	2,769	2,589	1,081	353	275	299	562	1,198	2,560	2,502	2,741
1991	2,403	2,434	2,672	1,436	812	343	265	535	1,336	2,680	2,299	2,604
Avg	1,524	1,355	1,212	707	437	307	286	389	622	1,315	1,583	1,829
W/AN/BN	1,562	1,097	777	309	251	238	234	233	243	442	690	712
D/C	1,495	1,556	1,550	1,017	582	360	327	511	917	1,994	2,277	2,698

Percent (%) Change from Existing Condition for Jersey Point Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

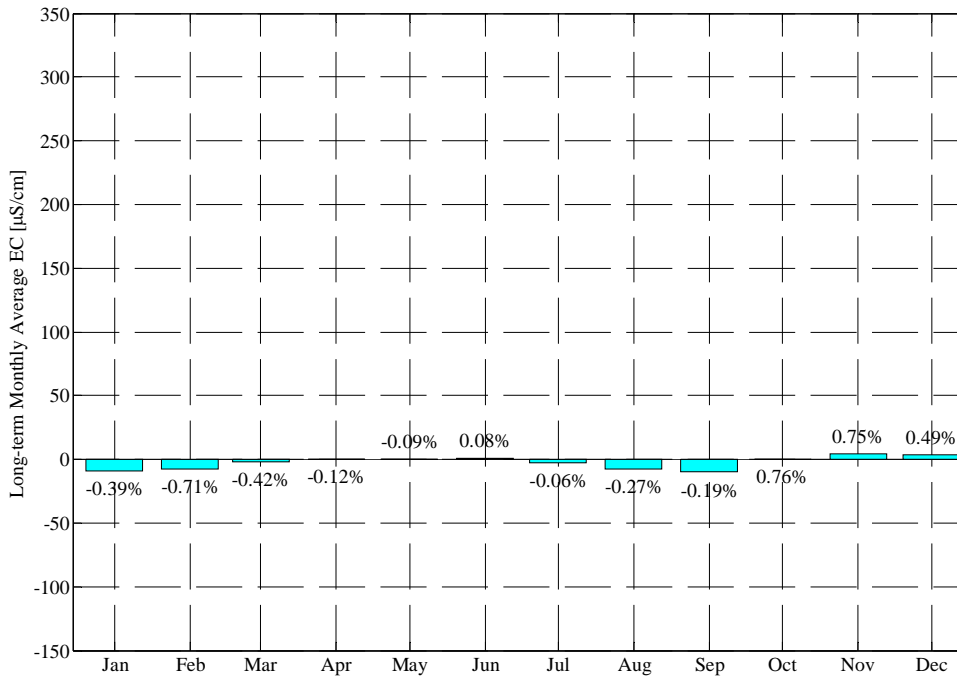
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.8%	-0.3%	-0.1%	-0.1%	-0.1%	-2.0%	0.1%	1.2%	0.5%	0.4%	-2.1%	-3.3%
1977	-0.5%	-0.3%	-0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.2%
1978	0.0%	0.2%	0.1%	0.1%	-0.1%	-0.1%	-0.3%	-0.4%	-0.1%	0.7%	0.3%	0.2%
1979	0.2%	0.7%	2.4%	1.8%	0.0%	0.0%	-0.6%	-0.5%	0.5%	1.1%	0.3%	0.2%
1980	0.1%	0.1%	1.6%	0.4%	0.0%	0.1%	-0.6%	-0.5%	-0.1%	-0.3%	0.0%	0.1%
1981	0.5%	0.7%	0.1%	0.1%	0.1%	-0.1%	-0.7%	-0.5%	0.0%	0.2%	0.1%	0.1%
1982	0.2%	1.7%	0.3%	-0.3%	-0.3%	0.2%	-0.1%	0.0%	-0.1%	0.1%	0.8%	2.1%
1983	8.2%	1.0%	0.1%	-0.8%	-0.2%	0.0%	-0.3%	-0.3%	-0.1%	-0.2%	-0.1%	0.1%
1984	4.7%	0.8%	-0.1%	-0.3%	-0.2%	0.4%	0.1%	-0.3%	0.0%	0.4%	0.2%	0.0%
1985	0.0%	6.1%	2.0%	0.7%	1.9%	-1.9%	-0.1%	0.1%	0.3%	0.3%	-1.9%	-0.1%
1986	0.2%	0.2%	0.3%	0.4%	-0.1%	0.4%	-0.1%	-0.3%	-0.7%	-1.6%	-0.3%	0.1%
1987	0.5%	0.1%	0.0%	0.0%	0.1%	0.1%	-0.5%	-0.6%	0.6%	1.0%	0.2%	0.1%
1988	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	1.8%	0.8%	0.6%	0.2%	-2.3%	-2.8%
1989	-1.5%	-1.4%	2.6%	3.7%	1.5%	0.5%	0.1%	0.1%	0.6%	-0.8%	2.9%	1.7%
1990	-2.1%	-0.6%	0.7%	1.4%	0.4%	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	-2.0%	-1.6%
1991	2.5%	3.0%	-2.2%	-13.6%	-14.3%	-4.7%	-0.6%	-0.2%	-0.4%	-2.5%	0.0%	0.2%
Avg	0.8%	0.8%	0.5%	-0.4%	-0.7%	-0.4%	-0.1%	-0.1%	0.1%	-0.1%	-0.3%	-0.2%
W/AN/BN	1.9%	0.7%	0.7%	0.2%	-0.1%	0.1%	-0.3%	-0.3%	-0.1%	0.0%	0.2%	0.4%
D/C	-0.2%	0.8%	0.3%	-0.8%	-1.2%	-0.9%	0.0%	0.1%	0.2%	-0.1%	-0.6%	-0.7%

Jersey Point Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development

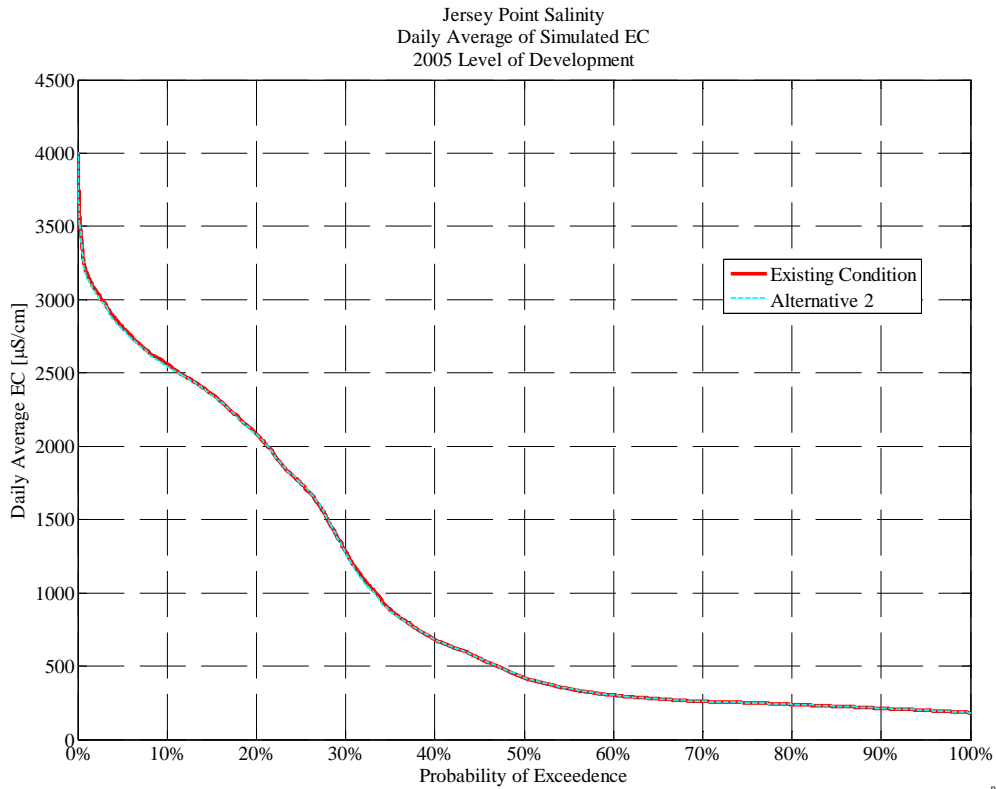
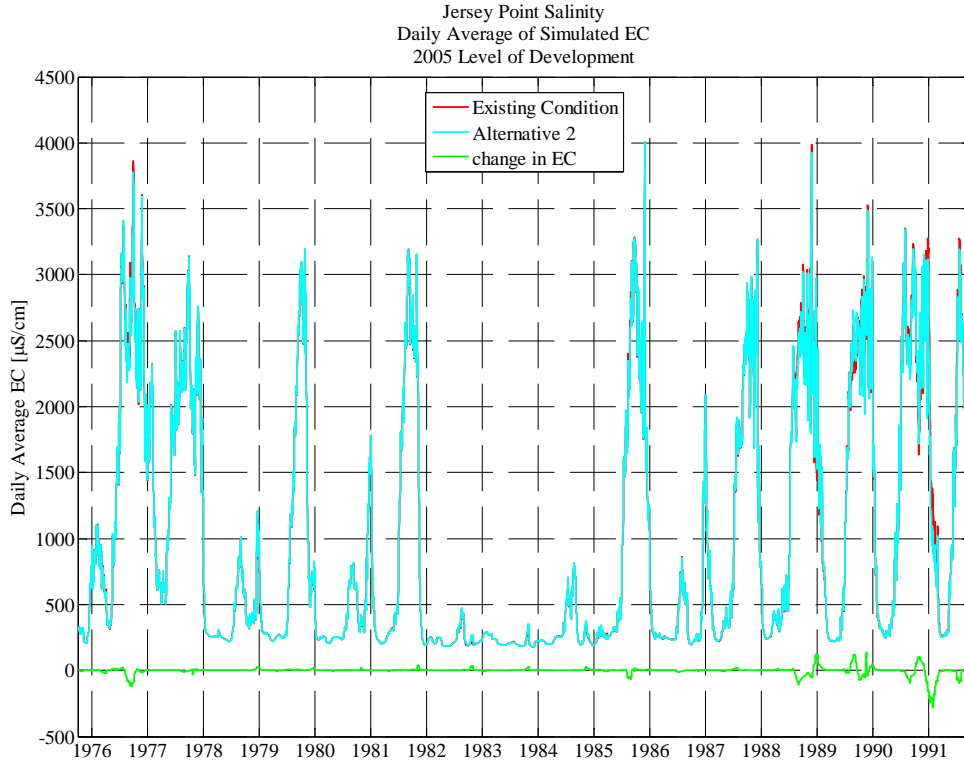


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Jersey Point Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



p_lve_wq_feir.m
 07-Jan-2010 DS



Alternative 4

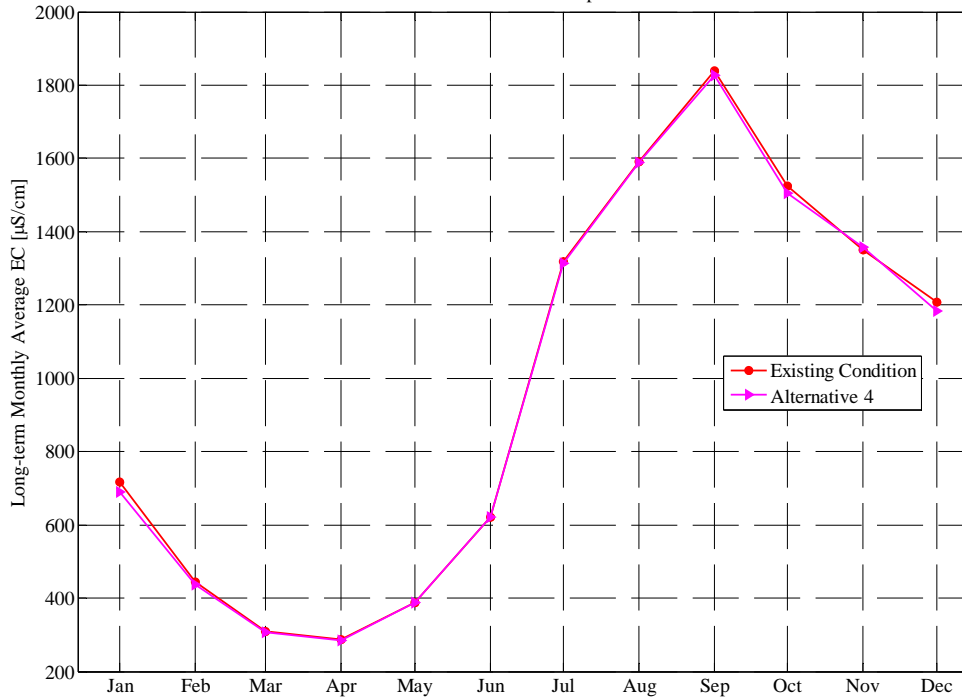
Jersey Point Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Alternative 4
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	301	231	506	848	910	661	383	728	1,474	2,926	2,461	2,991
1977	2,521	2,697	1,805	1,749	1,098	624	604	1,090	1,868	2,131	2,324	2,671
1978	1,999	2,031	1,787	358	259	256	274	242	224	382	759	701
1979	397	401	816	427	279	242	241	261	258	818	1,571	2,607
1980	2,712	1,168	676	263	251	228	225	252	246	319	657	681
1981	384	390	1,226	677	241	208	251	304	449	1,588	2,495	2,832
1982	2,561	1,031	208	234	218	240	205	187	197	256	395	220
1983	211	200	220	278	273	244	208	192	201	212	199	187
1984	249	193	212	227	215	199	231	256	316	555	639	323
1985	221	282	204	235	296	266	266	308	418	1,373	2,291	2,934
1986	2,534	2,662	1,560	393	263	254	253	238	249	538	641	271
1987	218	238	1,018	1,040	427	234	270	365	473	1,398	1,760	2,404
1988	2,481	2,396	1,556	358	246	343	371	464	564	1,687	2,065	2,535
1989	2,503	2,735	1,779	1,194	738	274	223	232	448	1,547	2,366	2,543
1990	2,452	2,716	2,628	1,112	356	276	299	562	1,198	2,560	2,568	2,797
1991	2,329	2,347	2,741	1,645	925	357	267	535	1,340	2,739	2,211	2,522
Avg	1,505	1,357	1,184	690	437	307	286	388	620	1,314	1,588	1,826
W/AN/BN	1,523	1,098	783	311	251	238	234	232	242	440	694	713
D/C	1,490	1,559	1,496	984	582	360	326	510	915	1,994	2,282	2,692

Percent (%) Change from Existing Condition for Jersey Point Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development

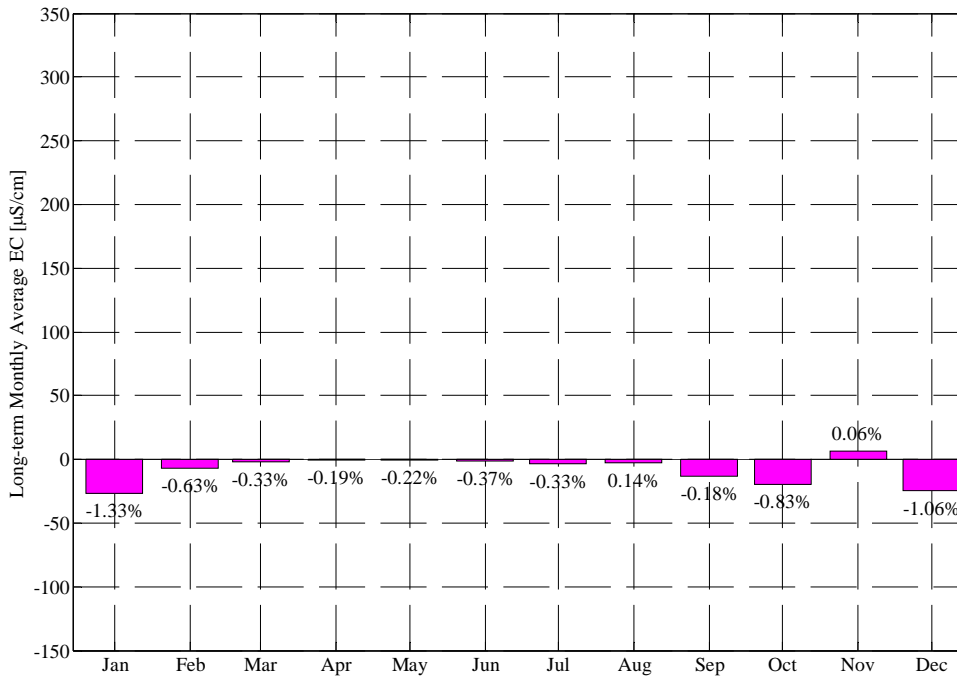
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-1.0%	-0.3%	0.0%	0.0%	0.0%	-1.8%	0.0%	1.0%	0.5%	0.4%	-2.1%	-3.2%
1977	-0.4%	-1.3%	-11.0%	-10.3%	-5.0%	-2.4%	-0.9%	-0.4%	-0.1%	1.5%	2.0%	1.4%
1978	-4.5%	-5.5%	-0.4%	0.4%	-0.1%	-0.1%	-0.3%	-0.3%	-0.2%	0.6%	0.2%	0.1%
1979	0.2%	1.2%	4.9%	3.4%	0.1%	0.0%	-0.7%	-0.9%	-0.3%	1.3%	0.2%	0.2%
1980	-2.6%	-3.3%	0.4%	0.0%	0.1%	0.2%	-0.5%	-0.4%	-0.1%	-0.3%	-0.2%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.7%	-0.5%	0.1%	0.1%	0.3%	-0.2%
1982	-0.3%	-0.1%	0.0%	-0.3%	-0.3%	0.2%	0.0%	-0.1%	-0.1%	0.1%	1.4%	0.5%
1983	0.8%	0.1%	0.2%	-0.2%	-0.1%	0.0%	-0.2%	-0.2%	0.0%	-0.1%	-0.1%	0.0%
1984	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.1%	-0.4%	-0.3%	0.0%	0.7%	0.3%	0.0%
1985	0.0%	-0.1%	0.0%	0.7%	1.9%	0.7%	-0.1%	-0.4%	-4.3%	-1.0%	1.3%	-1.4%
1986	-2.3%	8.0%	2.8%	1.4%	0.2%	0.3%	-0.1%	-0.5%	-2.7%	-4.4%	4.2%	4.2%
1987	-0.2%	-2.0%	-2.0%	-0.8%	0.0%	0.1%	-0.5%	-0.7%	0.5%	-1.0%	-0.6%	-0.1%
1988	0.0%	0.0%	-0.2%	-0.3%	0.0%	0.3%	1.7%	0.6%	0.4%	-2.2%	-4.6%	-3.8%
1989	-0.4%	7.5%	-14.1%	-18.5%	-5.8%	-2.2%	-0.2%	0.0%	0.7%	-0.5%	3.1%	2.1%
1990	-1.9%	-2.4%	2.2%	4.2%	1.4%	0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.5%	0.4%
1991	-0.7%	-0.7%	0.3%	-1.0%	-2.4%	-0.8%	0.0%	-0.2%	-0.1%	-0.3%	-3.8%	-3.0%
Avg	-0.8%	0.1%	-1.1%	-1.3%	-0.6%	-0.3%	-0.2%	-0.2%	-0.4%	-0.3%	0.1%	-0.2%
W/AN/BN	-1.2%	0.0%	1.1%	0.7%	0.0%	0.1%	-0.3%	-0.4%	-0.5%	-0.3%	0.9%	0.7%
D/C	-0.5%	0.1%	-2.8%	-2.9%	-1.1%	-0.7%	-0.1%	-0.1%	-0.3%	-0.3%	-0.4%	-0.9%

Jersey Point Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



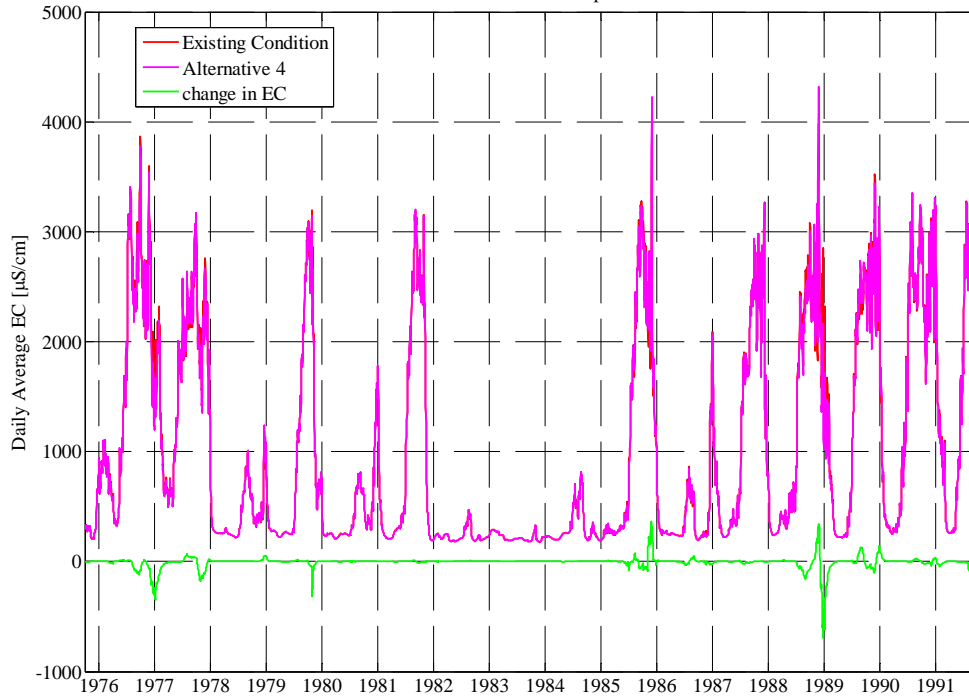
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Jersey Point Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



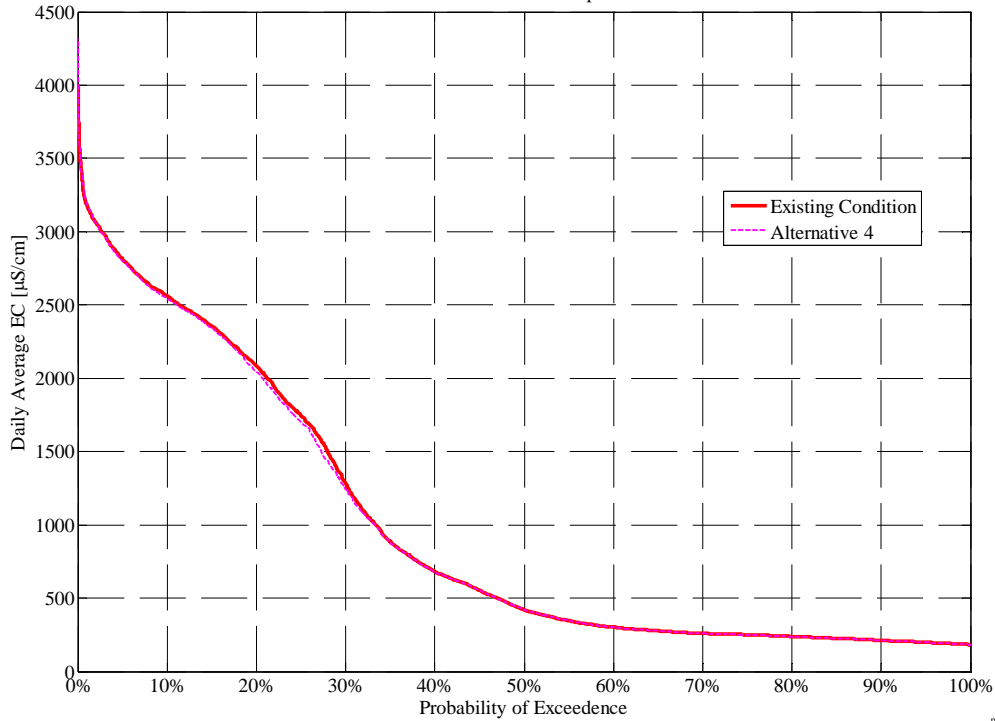
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Jersey Point Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jersey Point Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
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Clifton Court Forebay

Existing Condition

**Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	305	321	347	519	624	612	506	466	517	694	790	715
1977	781	734	850	778	910	876	660	609	618	675	692	717
1978	784	727	820	742	581	551	288	260	365	303	292	304
1979	318	334	376	566	419	345	382	310	365	289	409	581
1980	696	626	442	375	336	230	339	367	379	354	288	288
1981	314	341	440	629	591	692	443	374	394	396	629	758
1982	673	546	443	573	350	323	187	177	329	349	276	244
1983	207	221	273	288	289	246	191	200	212	230	216	222
1984	245	176	230	302	253	314	338	314	383	280	273	287
1985	302	296	343	455	532	626	422	393	400	369	575	727
1986	728	637	715	688	507	284	256	256	373	301	325	340
1987	358	344	401	650	632	709	438	376	394	372	530	630
1988	705	723	778	680	907	851	565	501	448	401	633	737
1989	774	722	808	756	868	835	651	536	312	389	618	676
1990	695	704	857	817	679	726	574	590	456	615	756	752
1991	824	720	829	928	882	870	704	593	440	656	790	718
Avg	544	511	559	609	585	568	434	395	399	417	506	543
W/AN/BN	522	467	471	505	391	328	283	269	344	301	297	323
D/C	562	545	628	690	736	755	552	493	442	507	668	715

Alternative 1

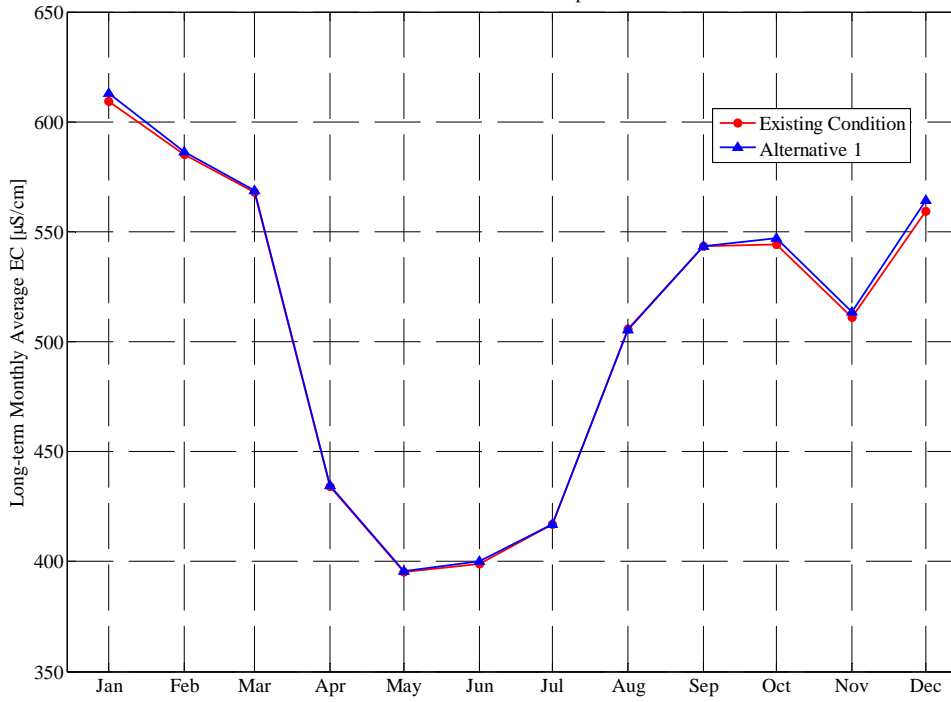
**Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	307	322	356	521	627	612	507	465	520	701	790	698
1977	777	736	853	778	914	876	660	609	616	674	692	716
1978	788	729	824	744	581	551	289	260	366	304	292	304
1979	321	333	384	572	419	345	381	310	367	290	410	584
1980	702	632	443	375	335	230	340	367	380	358	289	288
1981	317	344	446	632	594	687	443	374	393	397	633	763
1982	680	549	451	576	350	322	187	178	329	350	277	243
1983	206	220	273	288	289	246	191	200	212	230	215	222
1984	246	176	230	301	252	316	338	314	385	281	273	288
1985	307	295	351	461	538	637	423	393	401	370	569	725
1986	747	644	720	693	506	284	256	256	376	303	324	342
1987	368	349	407	655	637	718	438	376	393	375	539	638
1988	716	732	784	687	909	853	566	500	449	402	631	721
1989	762	718	807	771	876	837	655	542	315	386	629	696
1990	685	702	862	823	689	727	576	593	458	614	752	745
1991	825	737	839	932	864	859	700	595	441	639	768	716
Avg	547	514	564	613	586	569	434	396	400	417	505	543
W/AN/BN	527	469	475	507	390	328	283	269	345	302	297	325
D/C	563	548	634	696	739	756	552	494	443	506	667	713

**Percent (%) Change from Existing Condition for Clifton Court Forebay Entrance Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

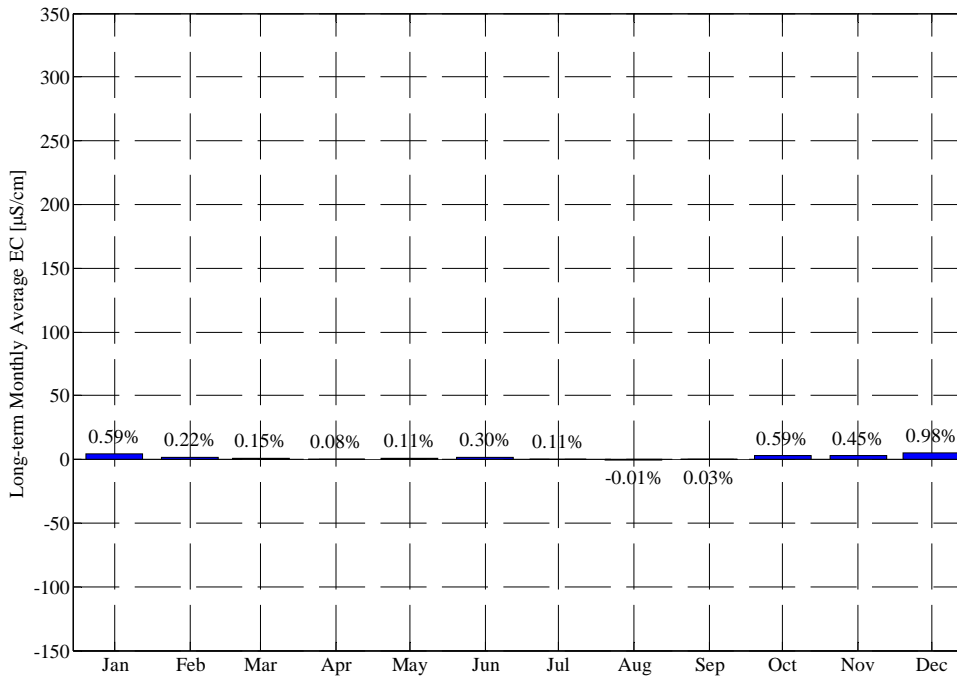
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.5%	0.4%	2.4%	0.5%	0.6%	0.0%	0.1%	-0.2%	0.5%	1.0%	0.0%	-2.3%
1977	-0.6%	0.3%	0.3%	0.0%	0.5%	0.1%	0.0%	0.0%	-0.2%	-0.2%	-0.1%	-0.2%
1978	0.5%	0.3%	0.5%	0.2%	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	0.2%	0.2%
1979	0.9%	-0.1%	2.2%	1.2%	0.0%	0.0%	-0.2%	0.1%	0.7%	0.4%	0.3%	0.6%
1980	0.9%	0.9%	0.3%	-0.2%	-0.2%	0.0%	0.2%	0.1%	0.4%	1.3%	0.3%	0.1%
1981	0.9%	0.9%	1.3%	0.5%	0.4%	-0.8%	0.0%	-0.1%	-0.1%	0.2%	0.6%	0.7%
1982	1.0%	0.6%	1.7%	0.5%	-0.2%	-0.1%	0.1%	0.1%	0.1%	0.5%	0.3%	-0.6%
1983	-0.6%	-0.3%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.4%	0.2%
1984	0.4%	-0.3%	0.1%	-0.3%	-0.4%	0.5%	0.1%	0.0%	0.6%	0.3%	0.1%	0.4%
1985	1.5%	-0.5%	2.3%	1.3%	1.2%	1.8%	0.3%	0.0%	0.2%	0.2%	-1.1%	-0.2%
1986	2.6%	1.1%	0.7%	0.7%	0.0%	0.0%	0.1%	0.1%	1.0%	0.5%	-0.2%	0.7%
1987	2.8%	1.5%	1.5%	0.8%	0.9%	1.4%	0.0%	-0.2%	-0.3%	0.7%	1.8%	1.2%
1988	1.6%	1.2%	0.7%	0.9%	0.2%	0.2%	0.0%	-0.1%	0.2%	0.1%	-0.3%	-2.1%
1989	-1.6%	-0.6%	-0.1%	1.9%	0.9%	0.3%	0.5%	1.1%	0.9%	-0.7%	1.8%	3.0%
1990	-1.4%	-0.3%	0.7%	0.8%	1.5%	0.2%	0.4%	0.5%	0.5%	-0.1%	-0.5%	-1.0%
1991	0.1%	2.3%	1.2%	0.5%	-2.1%	-1.2%	-0.5%	0.3%	0.2%	-2.5%	-2.8%	-0.3%
Avg	0.6%	0.5%	1.0%	0.6%	0.2%	0.1%	0.1%	0.1%	0.3%	0.1%	0.0%	0.0%
W/AN/BN	0.8%	0.3%	0.8%	0.3%	-0.1%	0.1%	0.1%	0.1%	0.4%	0.5%	0.1%	0.2%
D/C	0.4%	0.6%	1.1%	0.8%	0.5%	0.2%	0.1%	0.2%	0.2%	-0.2%	-0.1%	-0.1%

Clifton Court Forebay Entrance Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



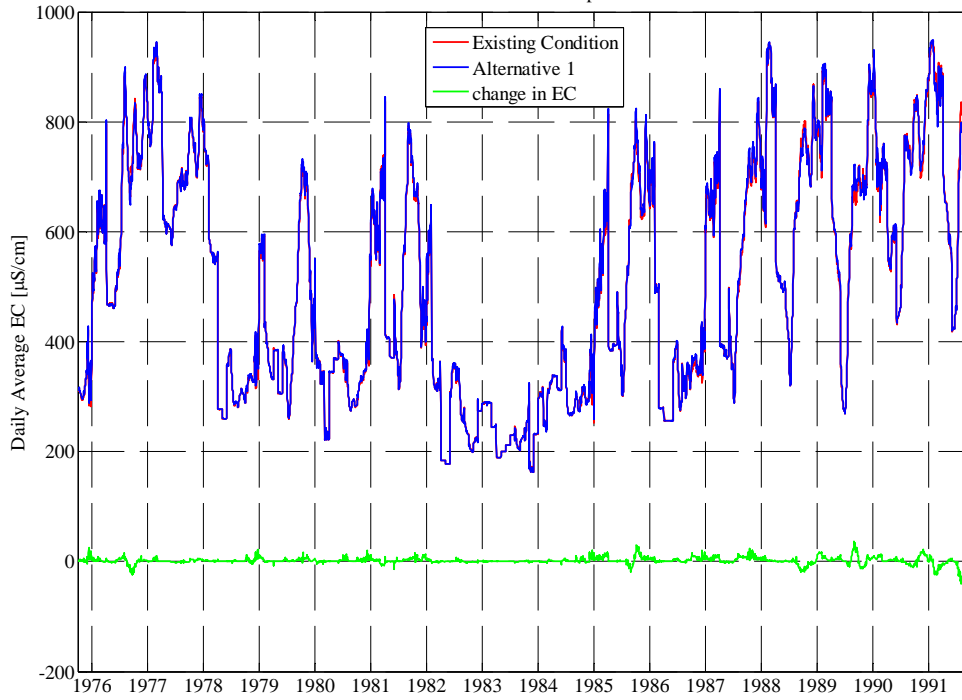
p_lve_wq_feir.m
 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



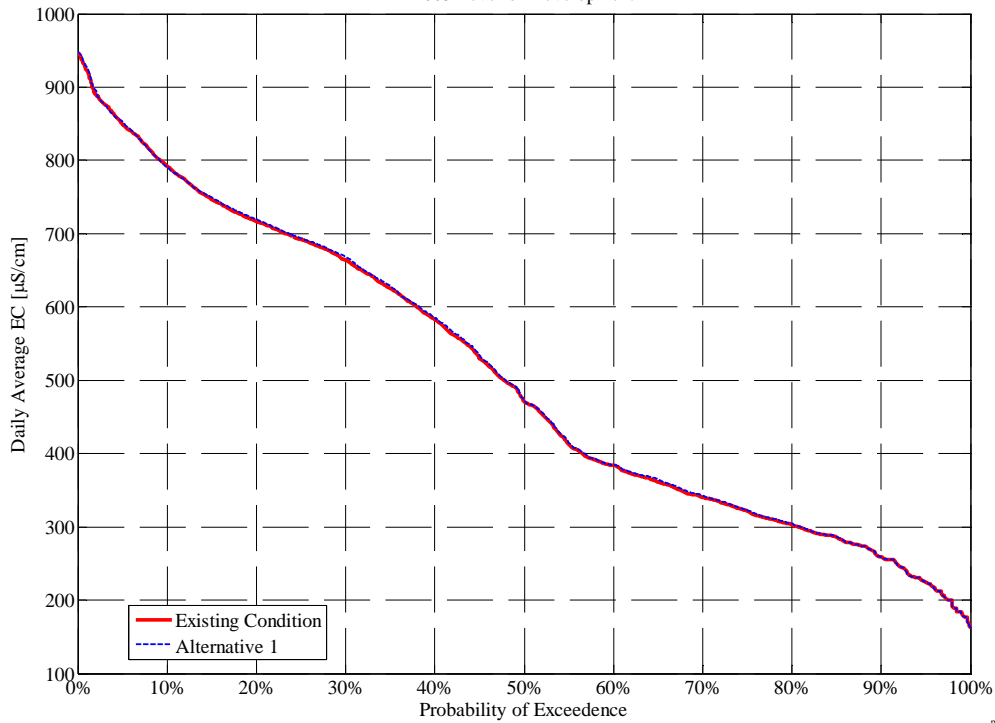
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 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

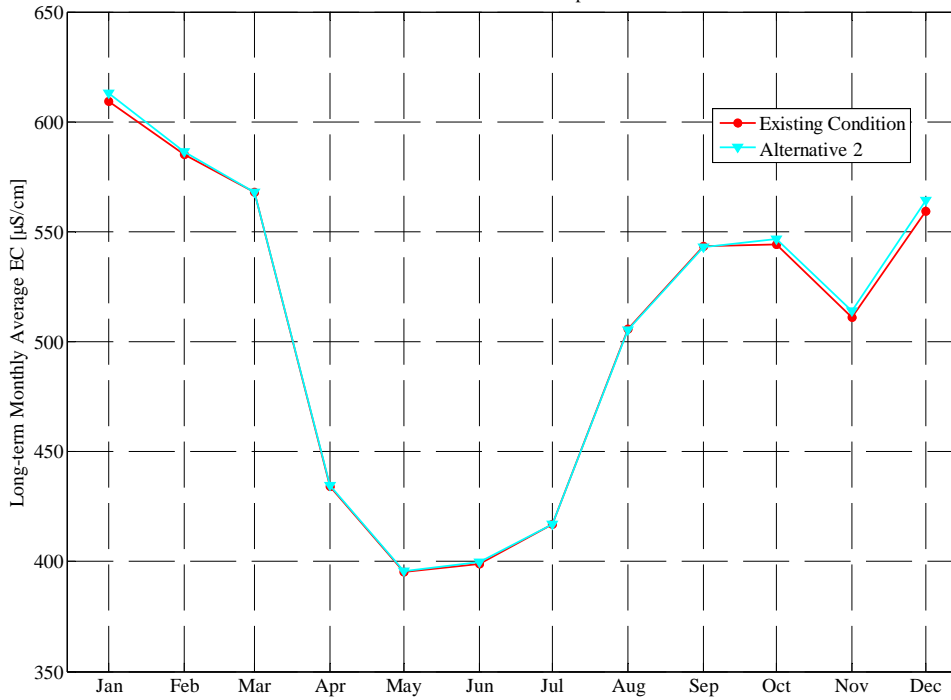
**Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	307	323	356	521	627	612	507	465	520	700	790	698
1977	775	736	853	779	914	877	661	609	616	674	692	717
1978	788	728	823	744	581	551	289	260	366	304	292	304
1979	321	333	384	572	419	345	381	310	367	290	410	584
1980	702	632	443	375	336	229	340	367	380	358	289	288
1981	317	344	446	632	594	687	443	374	393	397	633	763
1982	680	551	451	576	350	322	187	178	328	350	277	243
1983	206	220	273	288	289	246	191	200	212	230	216	222
1984	245	176	230	301	252	316	338	314	382	281	273	288
1985	307	294	350	460	537	635	423	393	399	370	569	724
1986	744	644	720	692	506	284	257	256	377	303	324	342
1987	367	349	407	655	637	709	438	376	393	375	539	638
1988	716	732	783	686	909	853	566	500	449	401	630	720
1989	762	720	806	773	877	838	655	542	315	386	630	697
1990	685	701	862	824	689	727	576	593	458	614	752	745
1991	825	737	839	932	864	859	700	595	441	640	769	716
Avg	547	514	564	613	586	568	434	396	400	417	505	543
W/AN/BN	527	469	475	507	390	328	283	269	345	302	297	324
D/C	562	549	633	696	739	755	552	494	443	506	667	713

**Percent (%) Change from Existing Condition for Clifton Court Forebay Entrance Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development**

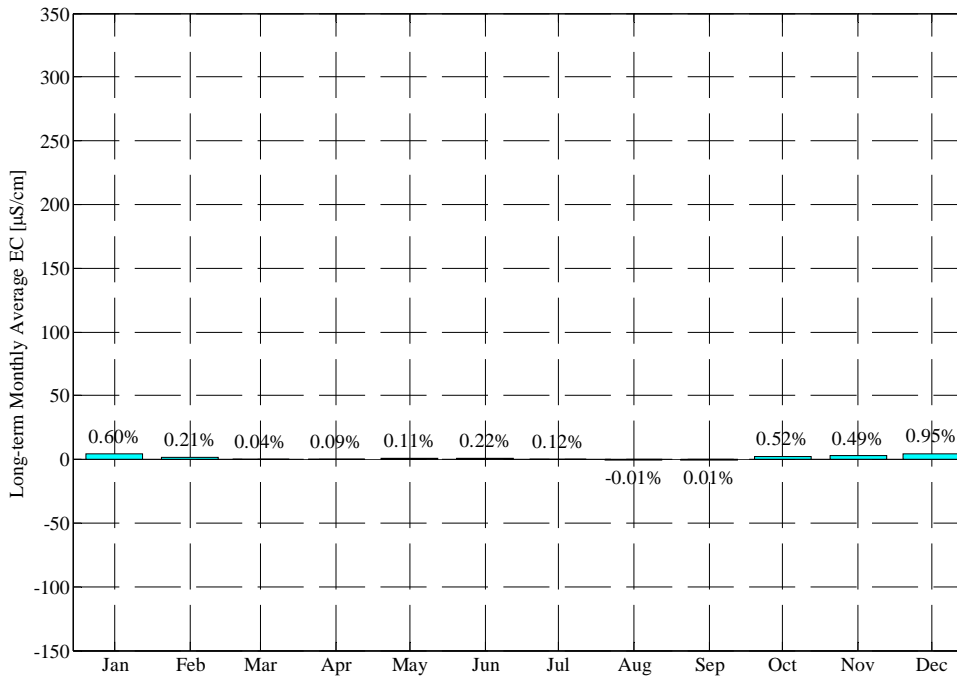
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.5%	0.5%	2.4%	0.5%	0.6%	0.0%	0.1%	-0.2%	0.5%	1.0%	-0.1%	-2.4%
1977	-0.7%	0.3%	0.3%	0.1%	0.5%	0.1%	0.0%	0.0%	-0.2%	-0.2%	-0.1%	0.0%
1978	0.6%	0.2%	0.4%	0.2%	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	0.2%	0.2%
1979	0.9%	-0.1%	2.2%	1.2%	0.0%	0.0%	-0.2%	0.1%	0.7%	0.4%	0.3%	0.6%
1980	0.8%	0.9%	0.3%	-0.2%	-0.1%	-0.1%	0.2%	0.1%	0.4%	1.3%	0.3%	0.1%
1981	0.9%	0.9%	1.3%	0.5%	0.4%	-0.8%	0.0%	-0.1%	-0.1%	0.2%	0.6%	0.7%
1982	1.0%	0.9%	1.8%	0.5%	-0.2%	-0.2%	0.1%	0.1%	-0.2%	0.4%	0.3%	-0.6%
1983	-0.6%	-0.3%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.4%	0.0%
1984	0.0%	-0.2%	0.1%	-0.3%	-0.5%	0.5%	0.1%	0.0%	-0.2%	0.3%	0.1%	0.5%
1985	1.5%	-0.6%	1.9%	1.0%	1.0%	1.5%	0.2%	0.0%	-0.1%	0.2%	-1.0%	-0.4%
1986	2.2%	1.1%	0.7%	0.6%	0.0%	0.0%	0.2%	0.1%	1.2%	0.5%	-0.2%	0.8%
1987	2.5%	1.4%	1.5%	0.8%	0.9%	0.0%	-0.1%	-0.2%	-0.4%	0.7%	1.8%	1.2%
1988	1.6%	1.3%	0.7%	0.9%	0.2%	0.2%	0.0%	-0.1%	0.2%	0.0%	-0.6%	-2.2%
1989	-1.6%	-0.3%	-0.1%	2.2%	1.0%	0.4%	0.5%	1.1%	0.9%	-0.7%	1.9%	3.1%
1990	-1.5%	-0.4%	0.6%	0.9%	1.6%	0.2%	0.4%	0.5%	0.5%	0.0%	-0.5%	-1.0%
1991	0.1%	2.3%	1.2%	0.5%	-2.1%	-1.2%	-0.5%	0.3%	0.2%	-2.4%	-2.7%	-0.3%
Avg	0.5%	0.5%	1.0%	0.6%	0.2%	0.0%	0.1%	0.1%	0.2%	0.1%	0.0%	0.0%
W/AN/BN	0.7%	0.4%	0.8%	0.3%	-0.1%	0.0%	0.1%	0.1%	0.3%	0.5%	0.1%	0.2%
D/C	0.4%	0.6%	1.1%	0.8%	0.4%	0.0%	0.1%	0.2%	0.2%	-0.1%	-0.1%	-0.2%

Clifton Court Forebay Entrance Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



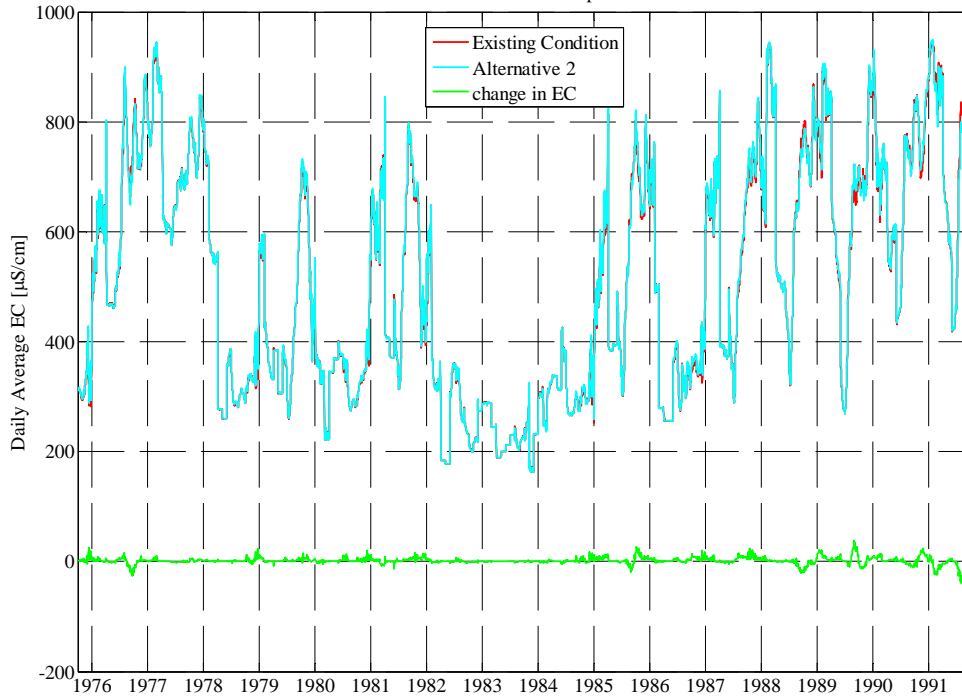
p_lve_wq_feir.m
 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



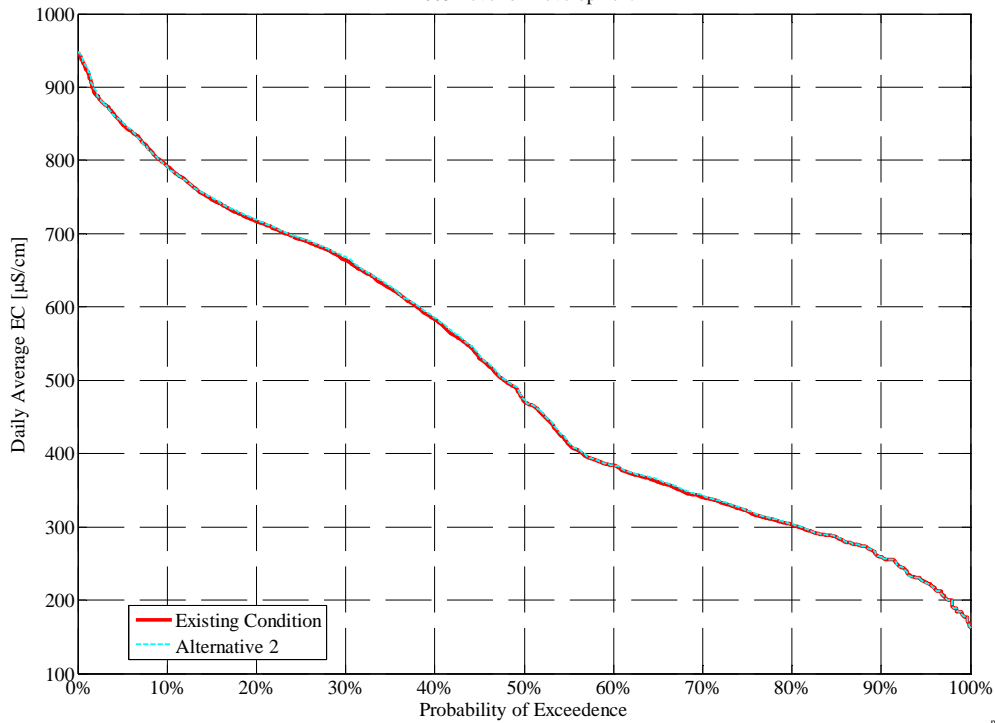
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 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Alternative 4

**Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 4

2005 Level of Development

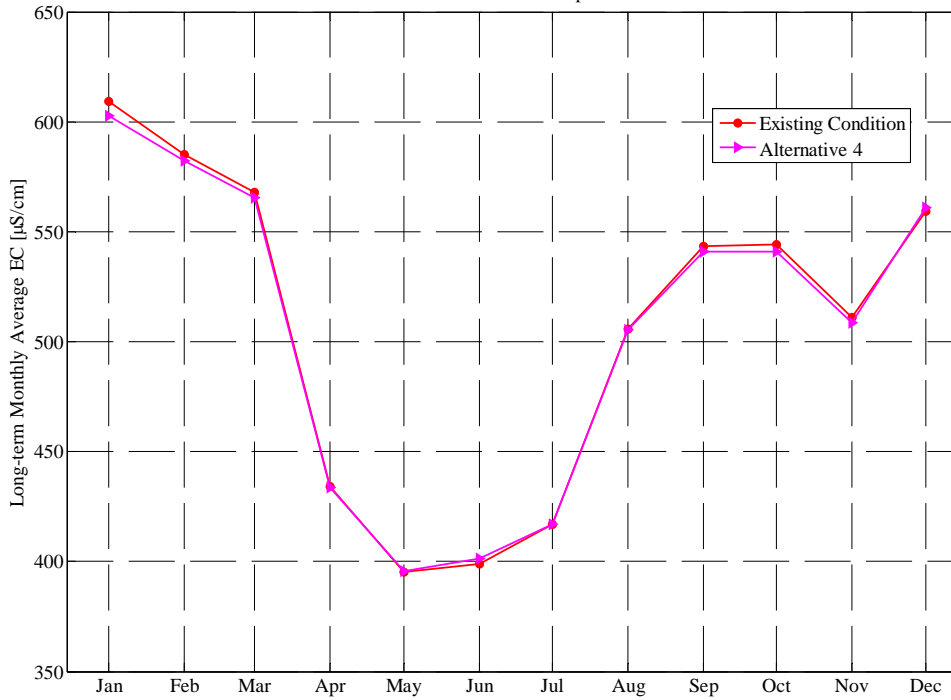
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	306	322	347	519	624	612	506	466	518	697	784	693
1977	767	726	834	727	898	862	656	608	618	677	704	729
1978	787	697	803	741	580	551	288	260	363	304	292	304
1979	319	333	379	572	419	345	381	310	363	290	412	582
1980	693	602	439	375	336	229	339	367	379	355	288	288
1981	314	341	440	629	584	686	443	375	392	396	630	759
1982	671	545	442	569	350	322	188	177	327	349	276	244
1983	207	221	273	288	289	246	191	200	212	230	216	222
1984	245	176	230	302	253	314	338	314	381	281	273	287
1985	302	296	343	452	528	620	421	393	448	374	587	731
1986	719	649	755	692	507	284	256	256	371	300	313	324
1987	358	363	403	646	631	708	438	376	391	369	525	629
1988	705	724	778	680	907	851	566	501	449	395	606	701
1989	749	734	831	689	845	821	649	539	312	387	630	698
1990	685	693	847	832	684	727	576	592	457	615	758	757
1991	826	717	829	930	883	869	704	596	444	654	790	708
Avg	541	509	561	603	582	566	434	396	401	417	505	541
W/AN/BN	520	460	474	506	391	327	283	269	342	301	296	321
D/C	557	546	628	678	732	751	551	494	448	507	668	712

**Percent (%) Change from Existing Condition for Clifton Court Forebay Entrance Salinity
(Alternative 4 - Existing Condition) / Existing Condition**

2005 Level of Development

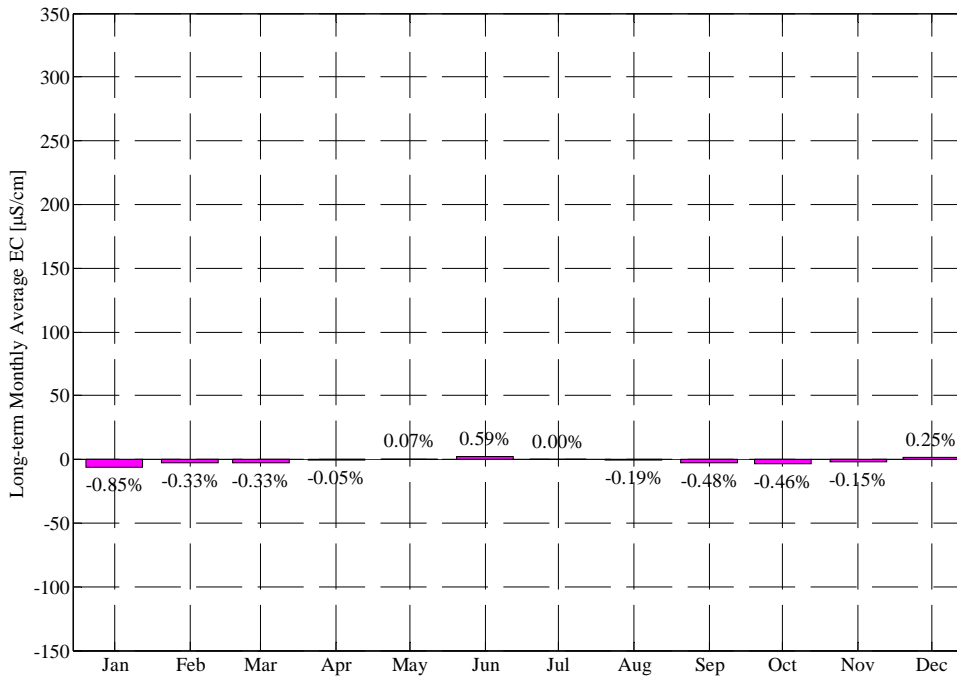
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	-0.8%	-3.0%
1977	-1.8%	-1.2%	-1.9%	-6.6%	-1.3%	-1.5%	-0.7%	-0.1%	0.0%	0.2%	1.7%	1.6%
1978	0.4%	-4.1%	-2.1%	-0.2%	-0.1%	0.0%	0.0%	0.0%	-0.7%	0.2%	0.1%	0.0%
1979	0.1%	-0.2%	1.0%	1.2%	0.1%	0.0%	-0.2%	0.0%	-0.6%	0.3%	0.6%	0.2%
1980	-0.5%	-3.8%	-0.6%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	-1.2%	-0.9%	0.0%	0.0%	-0.5%	0.1%	0.3%	0.1%
1982	-0.3%	-0.1%	-0.4%	-0.7%	-0.1%	-0.1%	0.1%	0.0%	-0.6%	0.2%	-0.1%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%
1984	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	-0.5%	0.3%	0.2%	0.1%
1985	0.2%	0.0%	0.0%	-0.6%	-0.7%	-0.9%	0.0%	0.0%	12.0%	1.4%	2.1%	0.5%
1986	-1.2%	1.8%	5.7%	0.6%	0.1%	0.0%	0.0%	0.0%	-0.3%	-0.4%	-3.8%	-4.8%
1987	0.0%	5.4%	0.6%	-0.6%	-0.2%	-0.1%	0.0%	0.0%	-0.9%	-0.9%	-1.0%	-0.2%
1988	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.3%	-1.4%	-4.3%	-4.8%
1989	-3.3%	1.7%	2.9%	-8.8%	-2.7%	-1.6%	-0.4%	0.5%	0.1%	-0.5%	1.9%	3.2%
1990	-1.4%	-1.6%	-1.1%	1.8%	0.7%	0.1%	0.4%	0.3%	0.4%	0.1%	0.2%	0.6%
1991	0.2%	-0.5%	0.1%	0.2%	0.1%	0.0%	0.0%	0.5%	0.8%	-0.2%	0.0%	-1.5%
Avg	-0.5%	-0.2%	0.3%	-0.9%	-0.3%	-0.3%	0.0%	0.1%	0.6%	0.0%	-0.2%	-0.5%
W/AN/BN	-0.2%	-0.9%	0.5%	0.1%	0.0%	-0.1%	0.0%	0.0%	-0.4%	0.1%	-0.4%	-0.6%
D/C	-0.7%	0.4%	0.1%	-1.6%	-0.6%	-0.6%	-0.1%	0.1%	1.4%	-0.1%	0.0%	-0.4%

Clifton Court Forebay Entrance Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



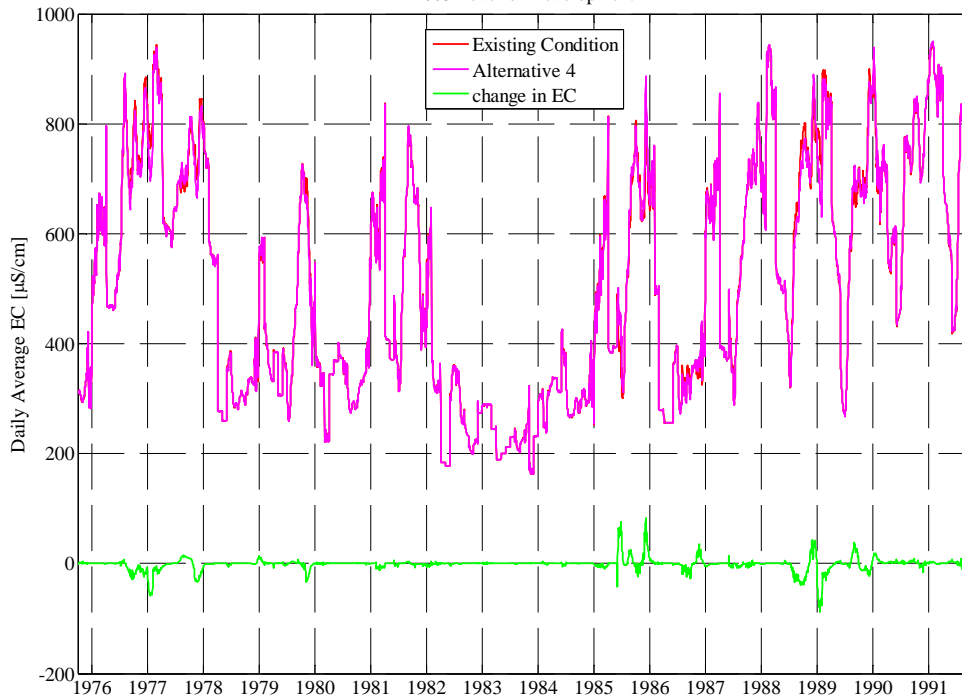
p_lve_wq_feir.m
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Clifton Court Forebay Entrance Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



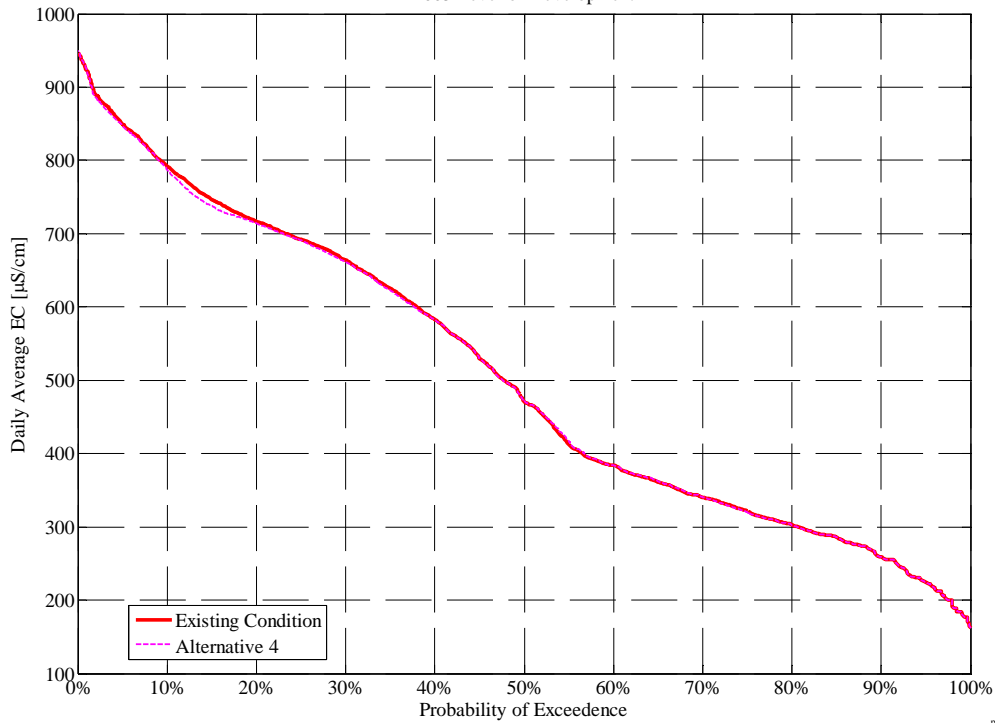
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 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jones Pumping Plant

Existing Condition

Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	331	350	446	563	666	646	541	476	522	694	765	714
1977	744	722	845	792	938	929	673	613	618	674	692	714
1978	779	728	825	762	599	574	304	279	394	377	338	341
1979	357	368	464	599	414	343	392	333	380	324	435	583
1980	656	614	519	381	351	232	351	384	390	408	332	329
1981	350	367	507	653	633	723	487	396	413	420	631	743
1982	660	563	496	622	344	340	195	193	363	387	306	252
1983	201	221	280	354	319	278	206	207	223	239	209	232
1984	281	177	254	303	247	325	361	340	403	332	325	331
1985	333	341	428	505	581	661	471	412	420	399	584	713
1986	701	638	726	710	545	304	265	273	403	359	372	374
1987	374	363	456	669	671	735	480	393	406	395	541	631
1988	695	723	784	705	930	929	595	504	455	408	637	728
1989	757	720	809	772	911	893	683	561	327	398	624	674
1990	697	713	853	831	706	825	635	625	465	616	746	740
1991	812	717	829	933	906	914	727	620	450	659	790	717
Avg	545	520	595	635	610	603	460	413	415	443	521	551
W/AN/BN	519	473	509	533	403	342	296	287	365	347	331	349
D/C	566	557	662	714	771	806	588	511	453	518	668	708

Alternative 1

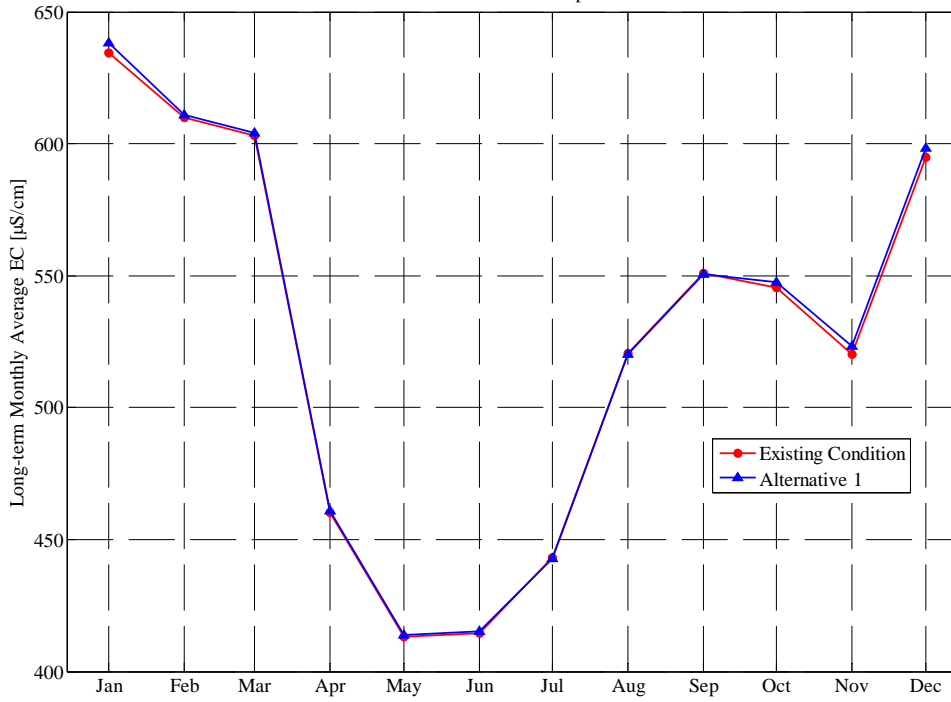
**Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	333	353	449	564	668	646	542	475	524	700	766	700
1977	739	724	847	793	939	929	673	613	616	673	691	713
1978	783	730	829	764	599	574	305	280	394	379	338	342
1979	359	370	469	603	414	343	391	336	382	325	436	586
1980	661	619	520	381	351	232	352	385	390	410	333	330
1981	353	372	509	655	634	717	487	396	413	420	635	748
1982	665	566	502	624	344	342	195	193	363	388	307	251
1983	201	221	280	354	319	278	207	207	223	239	209	232
1984	282	178	254	304	247	326	361	341	404	333	326	332
1985	336	340	432	508	585	670	471	412	420	399	579	712
1986	717	644	730	715	545	306	267	274	405	360	371	376
1987	384	368	459	674	675	746	481	393	405	397	550	638
1988	703	731	789	712	930	929	595	504	456	408	635	713
1989	745	715	809	785	915	895	685	565	329	395	634	690
1990	689	711	859	838	715	826	637	626	467	615	743	734
1991	814	731	838	941	894	909	725	621	451	643	770	714
Avg	548	523	598	638	611	604	461	414	415	443	520	551
W/AN/BN	524	475	512	535	403	343	297	288	366	348	331	350
D/C	566	560	666	719	773	808	588	512	454	517	667	707

**Percent (%) Change from Existing Condition for Jones Pumping Plant Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

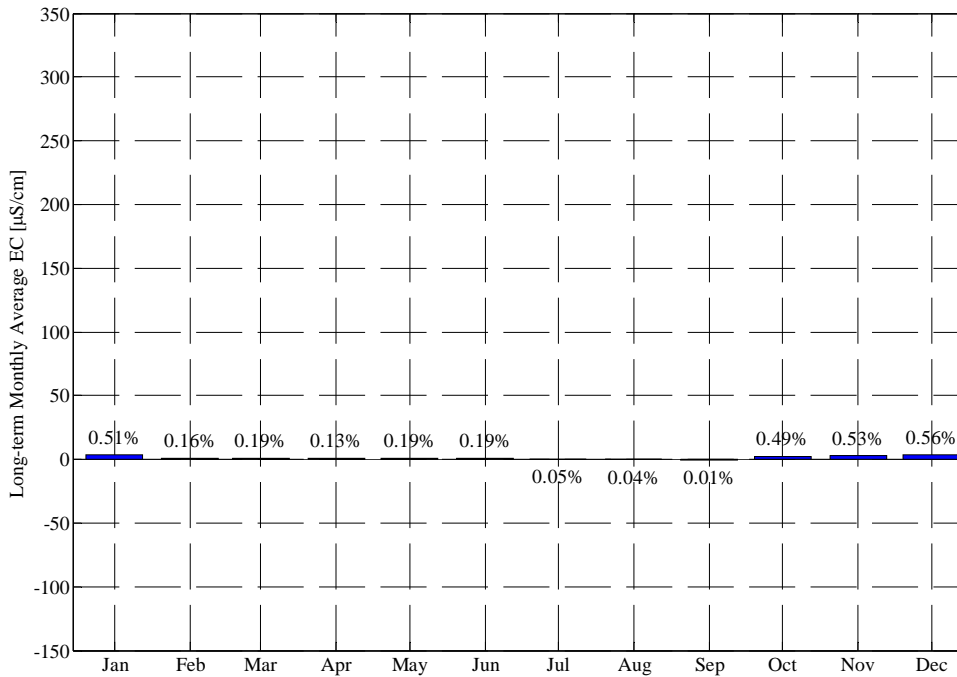
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.7%	0.8%	0.8%	0.2%	0.3%	0.0%	0.0%	-0.1%	0.5%	0.9%	0.1%	-2.0%
1977	-0.6%	0.2%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	-0.2%	-0.3%	-0.1%	-0.2%
1978	0.5%	0.3%	0.5%	0.3%	0.0%	0.0%	0.4%	0.4%	0.0%	0.4%	0.1%	0.1%
1979	0.6%	0.7%	1.0%	0.7%	0.1%	0.0%	-0.1%	0.7%	0.4%	0.6%	0.2%	0.5%
1980	0.7%	0.8%	0.2%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.5%	0.3%	0.3%
1981	0.8%	1.2%	0.5%	0.3%	0.3%	-0.8%	0.0%	0.0%	-0.1%	0.1%	0.6%	0.7%
1982	0.9%	0.5%	1.3%	0.4%	0.0%	0.3%	0.0%	0.2%	0.0%	0.3%	0.2%	-0.3%
1983	-0.3%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	-0.1%	0.1%
1984	0.3%	0.1%	0.1%	0.1%	-0.1%	0.5%	0.0%	0.1%	0.4%	0.4%	0.4%	0.4%
1985	0.9%	-0.3%	0.9%	0.7%	0.7%	1.3%	0.1%	0.0%	0.1%	0.2%	-0.8%	-0.2%
1986	2.2%	0.9%	0.6%	0.8%	0.1%	0.4%	0.7%	0.4%	0.5%	0.3%	-0.1%	0.5%
1987	2.7%	1.3%	0.6%	0.7%	0.6%	1.5%	0.2%	0.0%	-0.3%	0.6%	1.6%	1.1%
1988	1.0%	1.1%	0.6%	0.9%	0.1%	0.1%	0.0%	0.0%	0.2%	0.1%	-0.3%	-2.0%
1989	-1.6%	-0.7%	-0.1%	1.7%	0.5%	0.2%	0.3%	0.7%	0.8%	-0.6%	1.6%	2.4%
1990	-1.2%	-0.3%	0.7%	0.8%	1.3%	0.2%	0.2%	0.2%	0.5%	-0.1%	-0.4%	-0.9%
1991	0.3%	2.0%	1.1%	0.8%	-1.3%	-0.6%	-0.3%	0.2%	0.2%	-2.6%	-2.6%	-0.3%
Avg	0.5%	0.5%	0.6%	0.5%	0.2%	0.2%	0.1%	0.2%	0.2%	0.1%	0.0%	0.0%
W/AN/BN	0.7%	0.5%	0.5%	0.3%	0.0%	0.2%	0.2%	0.3%	0.2%	0.4%	0.1%	0.2%
D/C	0.3%	0.6%	0.6%	0.7%	0.3%	0.2%	0.1%	0.1%	0.2%	-0.2%	0.0%	-0.2%

Jones Pumping Plant Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



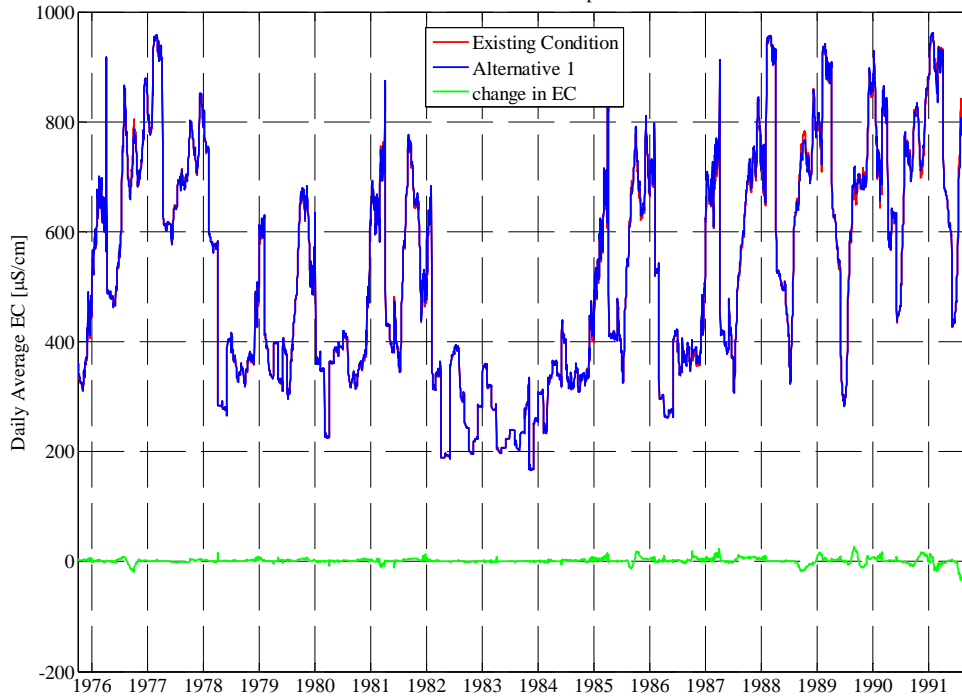
p_lve_wq_feir.m
 07-Jan-2010 DS

Jones Pumping Plant Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



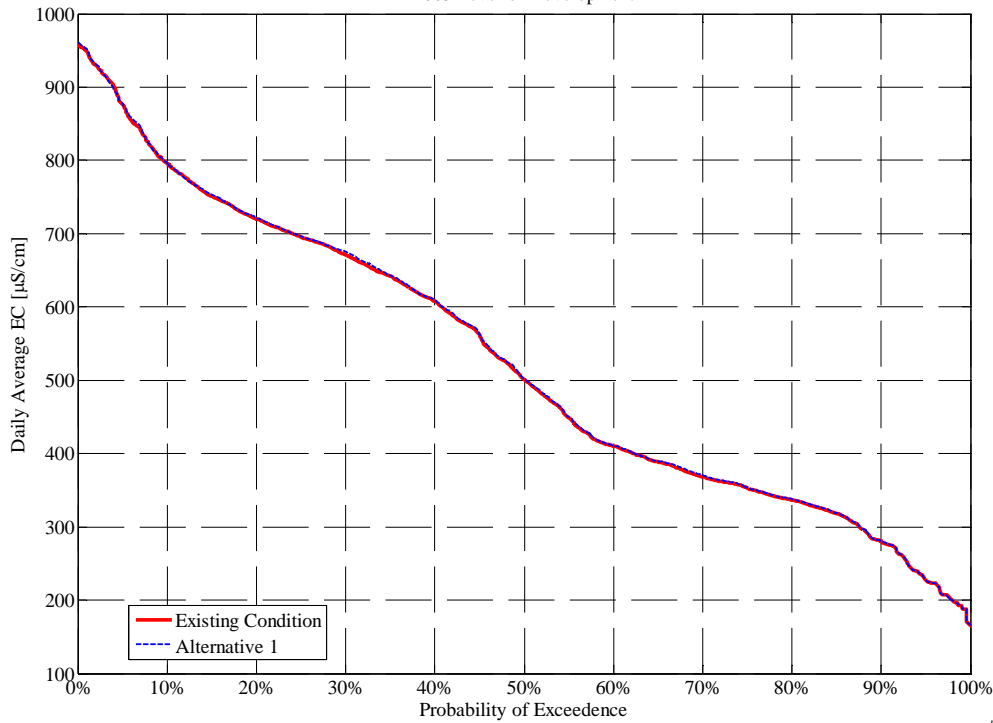
p_lve_wq_feir.m
 07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

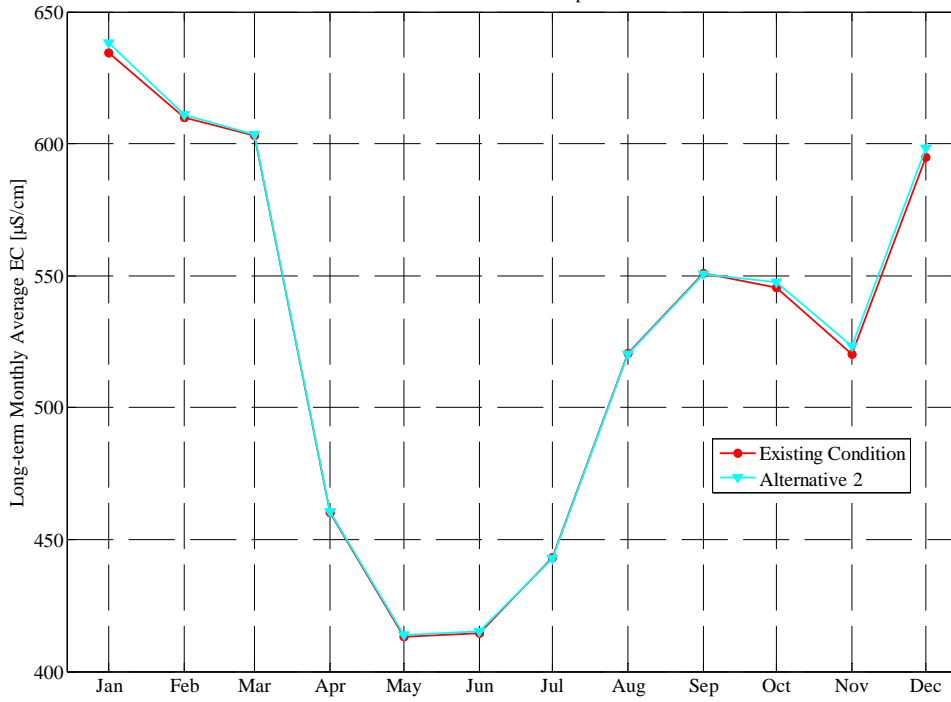
Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	333	353	449	564	668	646	542	475	524	700	766	700
1977	738	724	847	793	940	930	673	613	617	673	691	714
1978	783	729	828	764	599	574	305	280	394	379	338	342
1979	359	370	469	603	414	343	391	336	382	325	436	586
1980	661	619	520	381	351	231	352	385	390	410	333	330
1981	353	372	509	655	634	717	487	396	413	420	635	748
1982	665	567	503	624	344	342	195	193	363	388	307	251
1983	201	221	280	354	319	278	206	207	223	239	209	232
1984	281	177	254	303	246	326	361	341	402	333	326	332
1985	336	340	431	508	584	668	471	412	419	399	579	711
1986	714	643	730	713	545	305	267	275	405	360	371	376
1987	383	368	459	674	675	735	480	393	405	397	550	638
1988	703	731	789	712	930	929	595	504	456	408	633	712
1989	745	717	809	787	916	895	685	565	330	395	634	691
1990	688	710	859	838	715	826	637	626	467	615	743	734
1991	814	732	839	941	894	909	725	621	451	643	771	715
Avg	547	523	598	638	611	603	461	414	415	443	520	551
W/AN/BN	524	475	512	535	403	343	297	288	366	348	332	350
D/C	566	561	665	719	773	806	588	512	454	517	667	707

Percent (%) Change from Existing Condition for Jones Pumping Plant Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

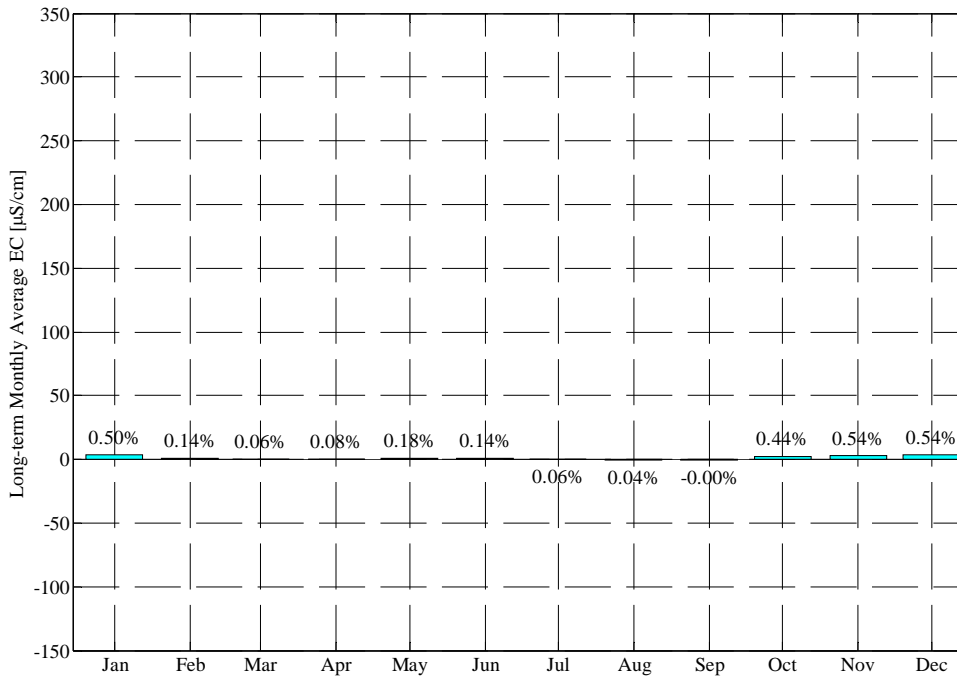
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.8%	0.8%	0.8%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.5%	0.9%	0.1%	-2.1%
1977	-0.7%	0.3%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	-0.2%	-0.2%	-0.1%	0.0%
1978	0.6%	0.2%	0.4%	0.3%	0.0%	0.0%	0.4%	0.4%	0.0%	0.4%	0.1%	0.1%
1979	0.6%	0.6%	1.0%	0.7%	0.1%	0.0%	-0.1%	0.7%	0.4%	0.6%	0.2%	0.5%
1980	0.7%	0.8%	0.2%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.5%	0.3%	0.3%
1981	0.8%	1.2%	0.5%	0.3%	0.3%	-0.8%	0.0%	0.0%	-0.1%	0.1%	0.6%	0.7%
1982	0.9%	0.8%	1.3%	0.4%	0.0%	0.3%	0.0%	0.2%	-0.1%	0.3%	0.2%	-0.3%
1983	-0.3%	-0.1%	0.1%	0.0%	-0.1%	0.0%	-0.4%	0.0%	0.0%	0.0%	-0.1%	0.0%
1984	0.0%	-0.1%	0.0%	-0.1%	-0.3%	0.4%	0.1%	0.1%	-0.3%	0.4%	0.4%	0.4%
1985	0.9%	-0.3%	0.7%	0.6%	0.5%	1.1%	0.1%	0.0%	-0.1%	0.2%	-0.7%	-0.3%
1986	1.8%	0.9%	0.6%	0.5%	0.1%	0.1%	0.7%	0.4%	0.5%	0.4%	-0.1%	0.5%
1987	2.4%	1.2%	0.6%	0.7%	0.6%	0.0%	0.0%	0.0%	-0.3%	0.6%	1.6%	1.1%
1988	1.1%	1.1%	0.6%	0.9%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	-0.6%	-2.1%
1989	-1.6%	-0.5%	-0.1%	2.0%	0.6%	0.2%	0.3%	0.7%	0.8%	-0.6%	1.7%	2.4%
1990	-1.3%	-0.4%	0.7%	0.8%	1.3%	0.2%	0.2%	0.2%	0.5%	-0.1%	-0.4%	-0.9%
1991	0.3%	2.1%	1.2%	0.8%	-1.3%	-0.6%	-0.3%	0.2%	0.2%	-2.5%	-2.5%	-0.3%
Avg	0.4%	0.5%	0.5%	0.5%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%
W/AN/BN	0.6%	0.4%	0.5%	0.2%	0.0%	0.1%	0.1%	0.3%	0.1%	0.4%	0.1%	0.2%
D/C	0.3%	0.6%	0.6%	0.7%	0.3%	0.0%	0.1%	0.1%	0.2%	-0.2%	0.0%	-0.2%

Jones Pumping Plant Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



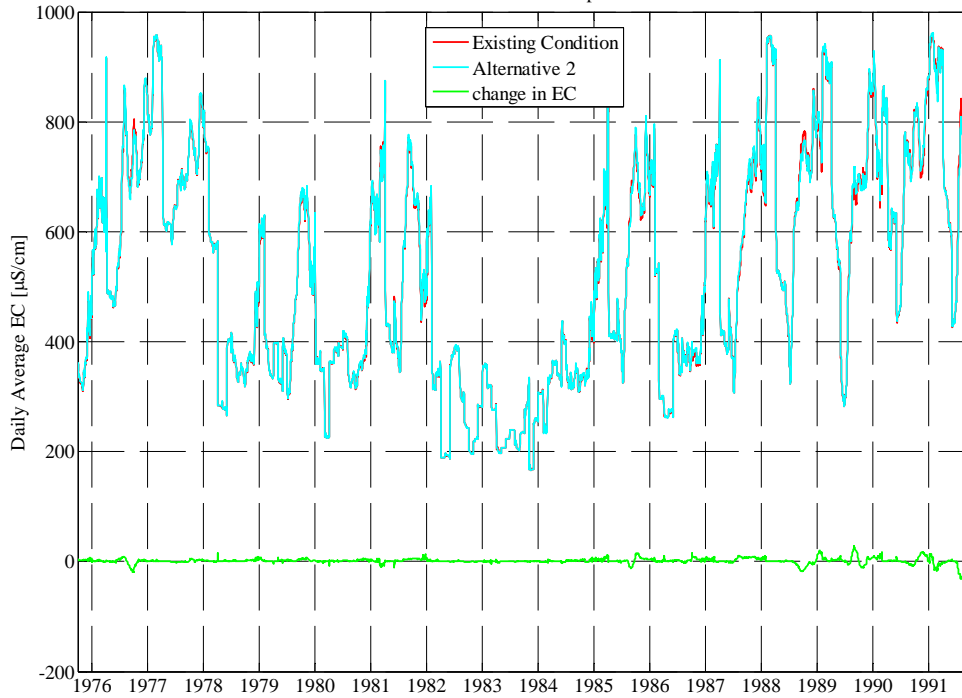
p_lve_wq_feir.m
 07-Jan-2010 DS

Jones Pumping Plant Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



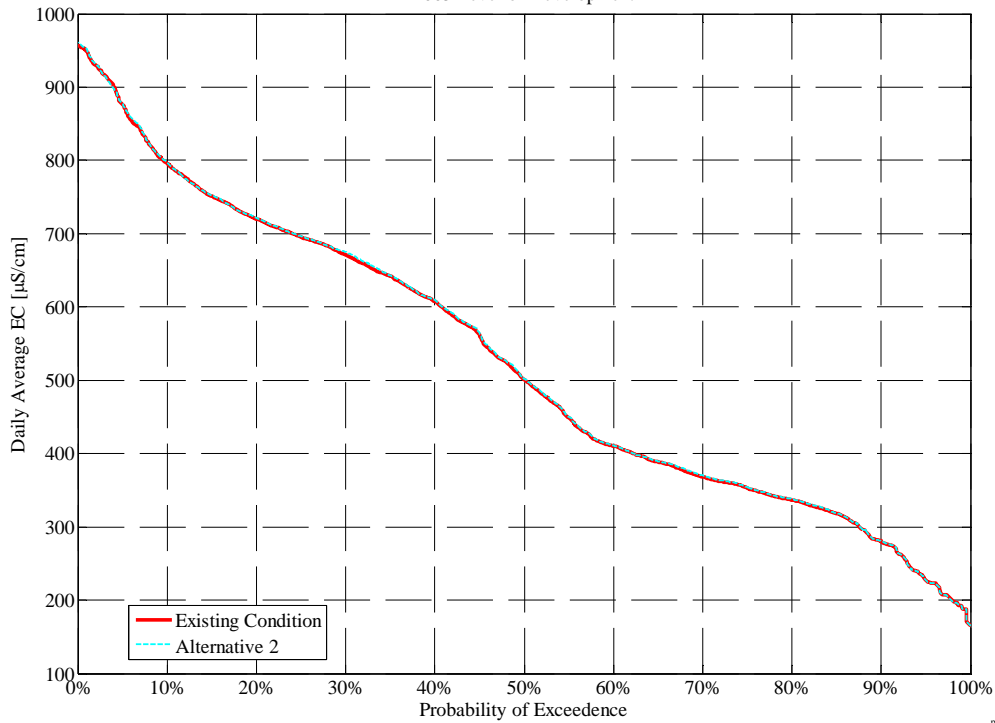
p_lve_wq_feir.m
 07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

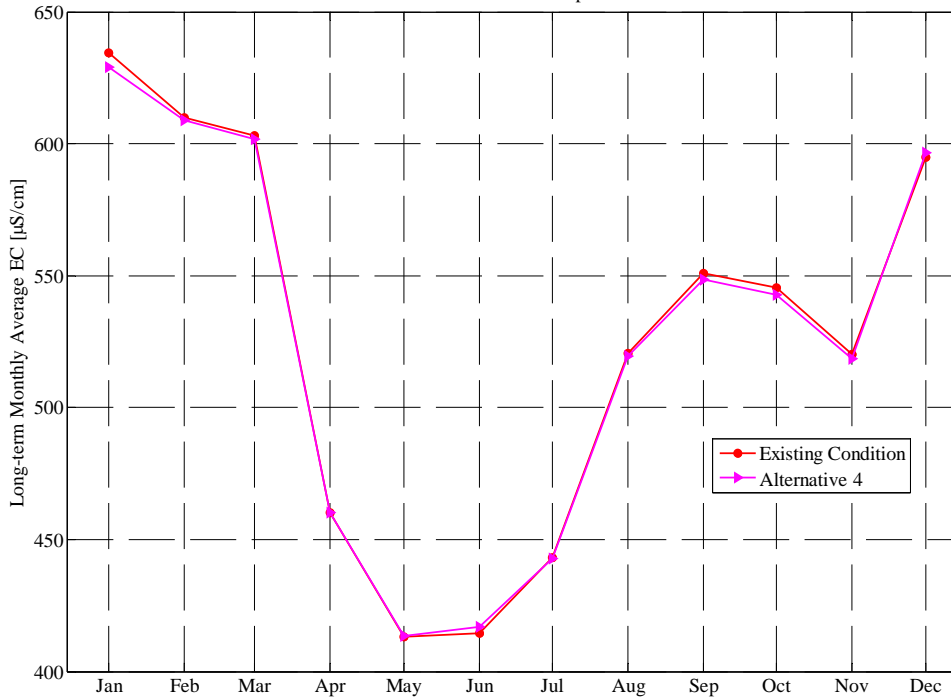
**Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Alternative 4
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	331	350	445	563	666	646	541	476	523	697	760	696
1977	730	714	836	749	934	922	670	612	618	675	703	724
1978	782	702	810	761	599	574	304	279	393	378	338	341
1979	357	367	467	604	414	343	391	333	378	324	437	584
1980	654	595	517	381	351	232	351	384	390	408	332	329
1981	350	367	506	653	629	716	487	396	412	420	633	744
1982	658	562	495	618	344	341	195	193	362	388	306	252
1983	201	221	280	354	319	278	206	207	223	239	209	232
1984	281	177	254	303	247	325	361	340	402	332	325	331
1985	333	341	428	503	578	655	471	412	462	404	593	716
1986	700	645	760	713	545	305	266	273	402	358	362	361
1987	375	379	458	665	670	735	480	393	403	392	536	630
1988	696	723	784	705	930	929	595	504	456	402	611	696
1989	734	730	831	713	898	886	682	563	327	396	634	692
1990	689	703	844	845	710	826	637	626	467	616	747	744
1991	813	715	829	936	906	914	727	622	454	658	787	705
Avg	543	518	597	629	609	602	460	413	417	443	520	549
W/AN/BN	519	467	512	534	403	342	296	287	364	347	330	347
D/C	561	558	662	704	769	803	588	512	458	518	667	705

**Percent (%) Change from Existing Condition for Jones Pumping Plant Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development**

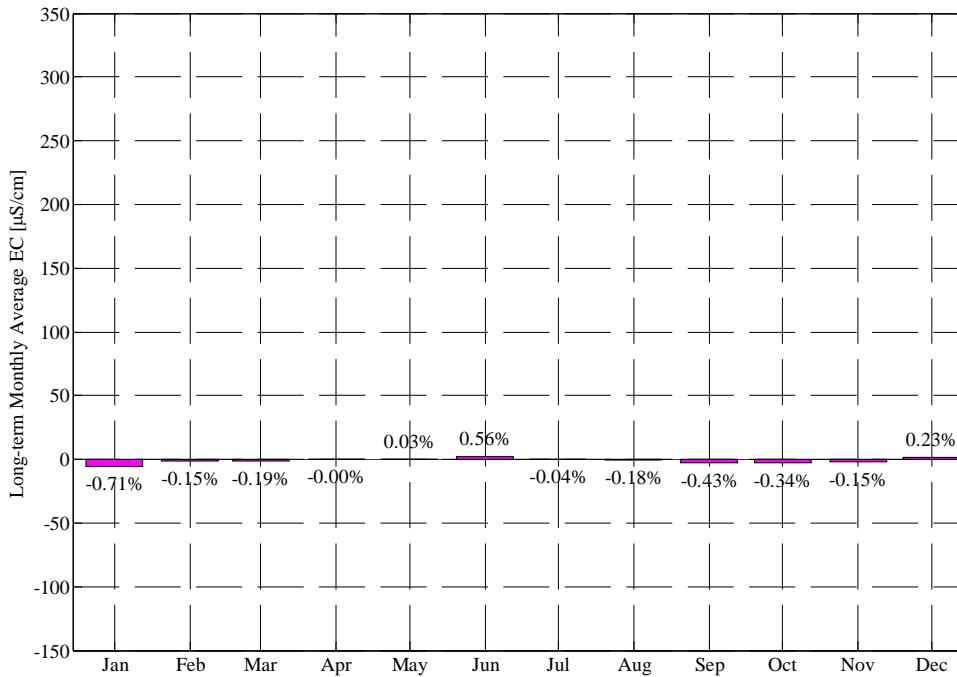
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	-0.6%	-2.6%
1977	-1.9%	-1.1%	-1.1%	-5.5%	-0.4%	-0.7%	-0.4%	-0.1%	0.0%	0.2%	1.6%	1.5%
1978	0.4%	-3.5%	-1.8%	-0.2%	0.0%	0.0%	0.0%	0.0%	-0.4%	0.1%	0.1%	0.0%
1979	0.1%	-0.1%	0.6%	0.9%	0.1%	0.0%	-0.1%	0.0%	-0.4%	0.2%	0.5%	0.1%
1980	-0.3%	-3.2%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	-0.7%	-0.9%	0.0%	0.0%	-0.3%	0.1%	0.2%	0.1%
1982	-0.2%	-0.1%	-0.3%	-0.5%	-0.1%	0.3%	0.0%	0.0%	-0.3%	0.1%	-0.1%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.4%	0.2%	0.1%	0.0%
1985	0.1%	0.0%	0.0%	-0.3%	-0.5%	-0.8%	0.0%	0.0%	10.1%	1.3%	1.6%	0.4%
1986	-0.2%	1.2%	4.7%	0.5%	0.0%	0.1%	0.4%	0.0%	-0.2%	-0.3%	-2.7%	-3.6%
1987	0.2%	4.4%	0.4%	-0.5%	-0.1%	0.0%	0.0%	0.0%	-0.7%	-0.7%	-0.9%	-0.1%
1988	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	-1.5%	-4.2%	-4.4%
1989	-3.0%	1.4%	2.7%	-7.7%	-1.4%	-0.8%	-0.2%	0.3%	0.0%	-0.4%	1.7%	2.6%
1990	-1.2%	-1.4%	-1.1%	1.6%	0.6%	0.1%	0.2%	0.1%	0.4%	0.0%	0.1%	0.5%
1991	0.2%	-0.2%	0.0%	0.3%	0.1%	0.0%	0.0%	0.3%	0.7%	-0.2%	-0.5%	-1.6%
Avg	-0.3%	-0.2%	0.2%	-0.7%	-0.2%	-0.2%	0.0%	0.0%	0.6%	0.0%	-0.2%	-0.4%
W/AN/BN	0.0%	-0.8%	0.4%	0.1%	0.0%	0.1%	0.0%	0.0%	-0.2%	0.0%	-0.3%	-0.5%
D/C	-0.6%	0.4%	0.1%	-1.3%	-0.3%	-0.4%	0.0%	0.1%	1.2%	-0.1%	-0.1%	-0.4%

Jones Pumping Plant Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



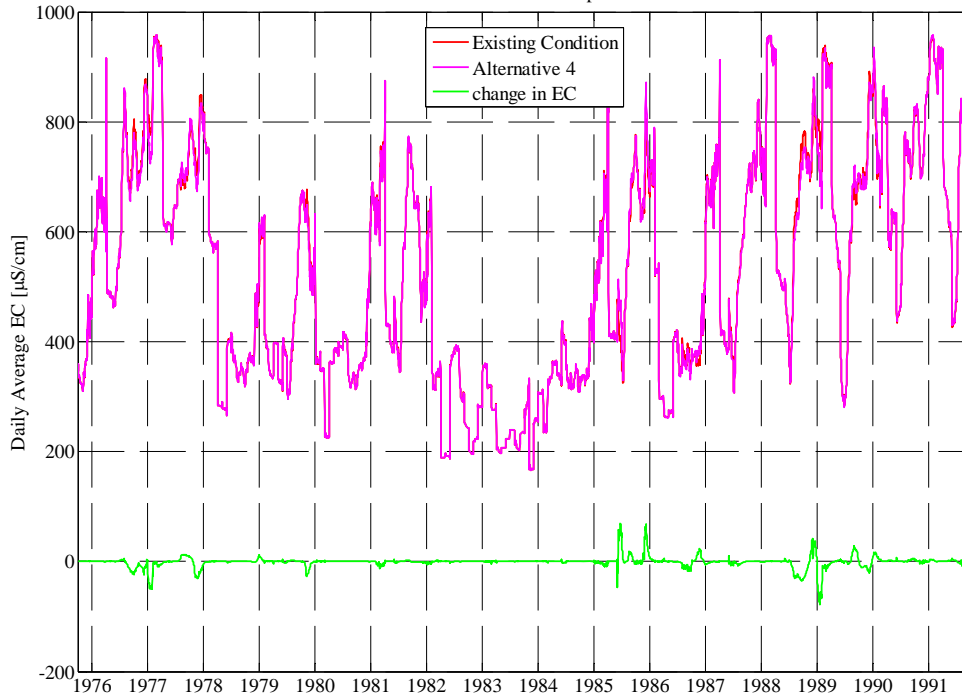
p_lve_wq_feir.m
 07-Jan-2010 DS

Jones Pumping Plant Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



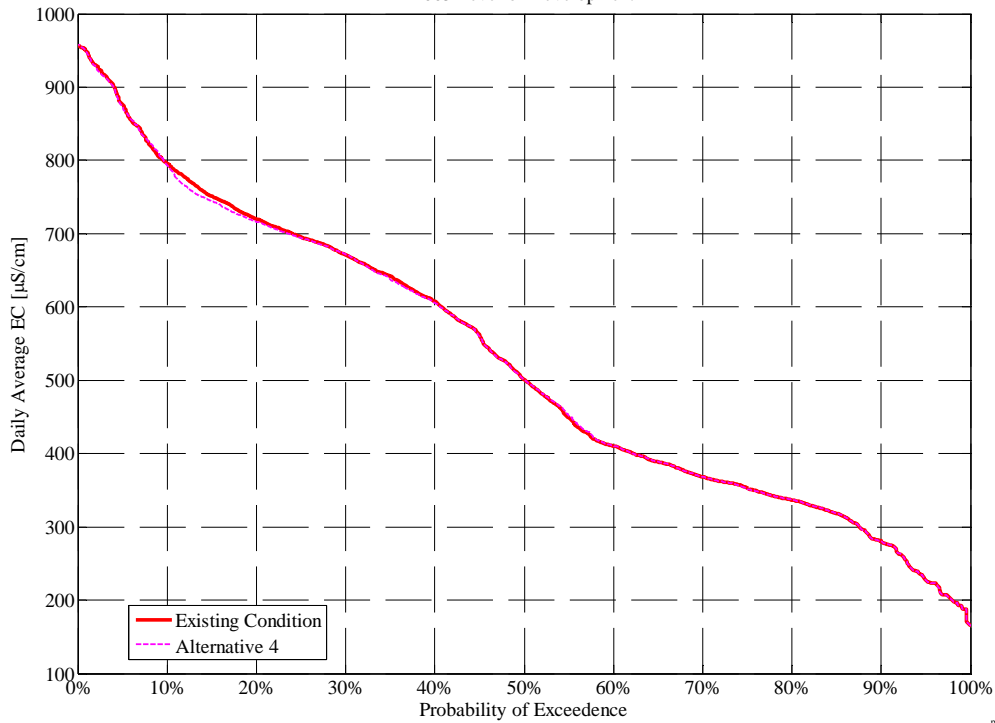
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 07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

City of Stockton Intake

Existing Condition

City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	307	343	237	319	373	346	457	430	380	483	485	457
1977	464	455	519	523	587	569	516	471	431	439	430	438
1978	468	478	577	505	530	488	333	274	350	267	230	246
1979	309	332	256	455	415	328	360	329	290	233	289	379
1980	425	432	307	332	317	236	314	352	356	331	236	229
1981	314	338	312	425	347	453	519	399	288	298	429	478
1982	424	369	253	391	303	310	203	184	311	335	247	232
1983	208	216	263	290	286	244	204	203	216	234	206	216
1984	251	188	233	290	247	293	337	326	295	223	216	243
1985	315	284	228	279	362	410	486	398	289	281	396	465
1986	450	427	478	411	383	291	271	265	350	243	237	275
1987	343	348	272	442	386	463	537	400	284	285	360	408
1988	457	478	546	418	503	515	521	445	321	307	423	458
1989	472	467	520	510	538	505	425	333	234	303	428	434
1990	431	476	582	534	407	413	358	370	335	437	493	474
1991	483	462	545	625	575	588	500	369	310	469	490	446
Avg	382	381	383	422	410	403	396	347	315	323	350	367
W/AN/BN	362	349	338	382	355	313	289	276	310	267	237	260
D/C	398	406	418	453	453	473	480	402	319	367	437	451

Alternative 1

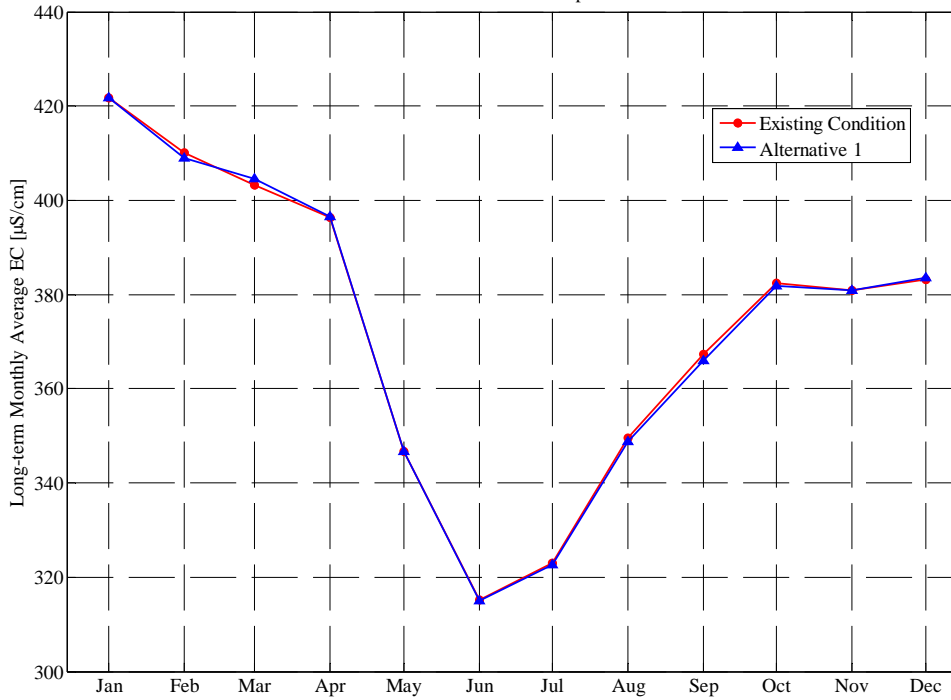
**City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	308	343	237	319	374	346	455	429	381	485	483	446
1977	460	454	517	522	587	569	515	466	427	438	429	437
1978	466	476	578	505	530	488	333	273	350	267	230	247
1979	308	330	257	457	415	328	360	328	291	234	289	380
1980	425	433	308	332	317	236	314	353	357	332	236	229
1981	314	339	313	425	346	452	517	399	288	298	430	478
1982	425	370	254	390	303	310	203	184	311	335	247	230
1983	206	216	264	290	286	244	204	202	216	234	205	216
1984	251	188	233	290	247	295	337	326	295	223	216	244
1985	316	280	229	279	360	423	491	399	289	282	391	460
1986	452	428	479	412	383	291	271	264	351	244	237	275
1987	346	349	273	442	386	472	539	401	283	287	362	410
1988	457	478	547	418	504	520	522	445	320	308	420	449
1989	466	462	519	522	544	506	426	336	234	301	434	443
1990	424	477	585	538	408	413	358	371	335	437	489	468
1991	483	468	545	606	551	580	499	370	310	458	480	445
Avg	382	381	384	422	409	405	397	347	315	323	349	366
W/AN/BN	362	349	339	382	355	313	289	276	310	267	237	260
D/C	397	406	418	452	451	476	480	402	319	366	435	448

**Percent (%) Change from Existing Condition for City of Stockton Intake Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

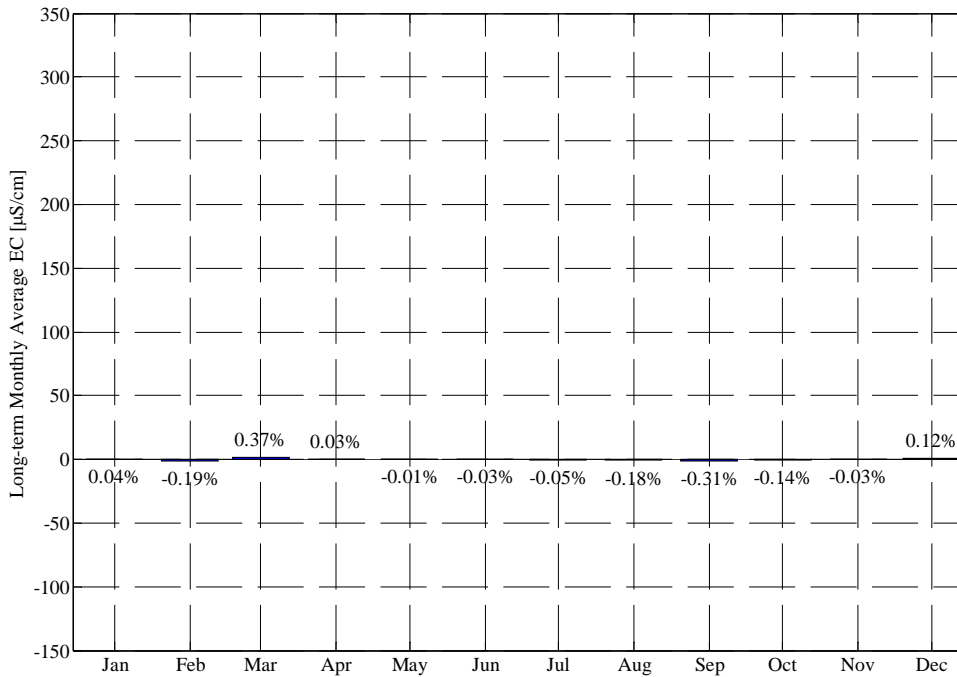
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.3%	0.1%	0.0%	0.0%	0.2%	0.0%	-0.4%	-0.2%	0.2%	0.4%	-0.5%	-2.5%
1977	-0.9%	-0.2%	-0.4%	-0.2%	0.0%	0.0%	-0.2%	-1.0%	-0.9%	-0.2%	-0.2%	-0.3%
1978	-0.2%	-0.3%	0.2%	0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.1%	0.1%	0.2%
1979	-0.1%	-0.5%	0.4%	0.4%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.3%	0.2%	0.2%
1980	0.1%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	0.2%
1981	0.1%	0.4%	0.1%	0.1%	-0.2%	-0.2%	-0.2%	0.0%	0.0%	0.1%	0.2%	0.1%
1982	0.2%	0.2%	0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.2%	-0.9%
1983	-0.6%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%
1984	-0.1%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
1985	0.1%	-1.4%	0.1%	-0.1%	-0.4%	3.3%	1.1%	0.1%	0.1%	0.2%	-1.2%	-0.9%
1986	0.6%	0.3%	0.2%	0.2%	0.0%	0.1%	-0.1%	-0.1%	0.4%	0.6%	0.1%	0.0%
1987	0.9%	0.2%	0.1%	-0.1%	0.1%	1.9%	0.5%	0.0%	-0.3%	0.7%	0.7%	0.3%
1988	0.0%	0.0%	0.1%	0.1%	0.2%	1.0%	0.1%	0.0%	-0.2%	0.1%	-0.6%	-2.0%
1989	-1.2%	-0.9%	-0.1%	2.4%	1.1%	0.2%	0.3%	0.8%	0.1%	-0.6%	1.5%	2.2%
1990	-1.5%	0.3%	0.5%	0.7%	0.3%	0.2%	-0.1%	0.1%	0.1%	-0.1%	-0.9%	-1.3%
1991	0.1%	1.3%	0.1%	-3.0%	-4.2%	-1.3%	-0.3%	0.2%	0.0%	-2.5%	-2.1%	-0.2%
Avg	-0.1%	0.0%	0.1%	0.0%	-0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.3%
W/AN/BN	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%
D/C	-0.2%	0.0%	0.1%	0.0%	-0.3%	0.6%	0.1%	0.0%	-0.1%	-0.2%	-0.4%	-0.5%

City of Stockton Intake Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



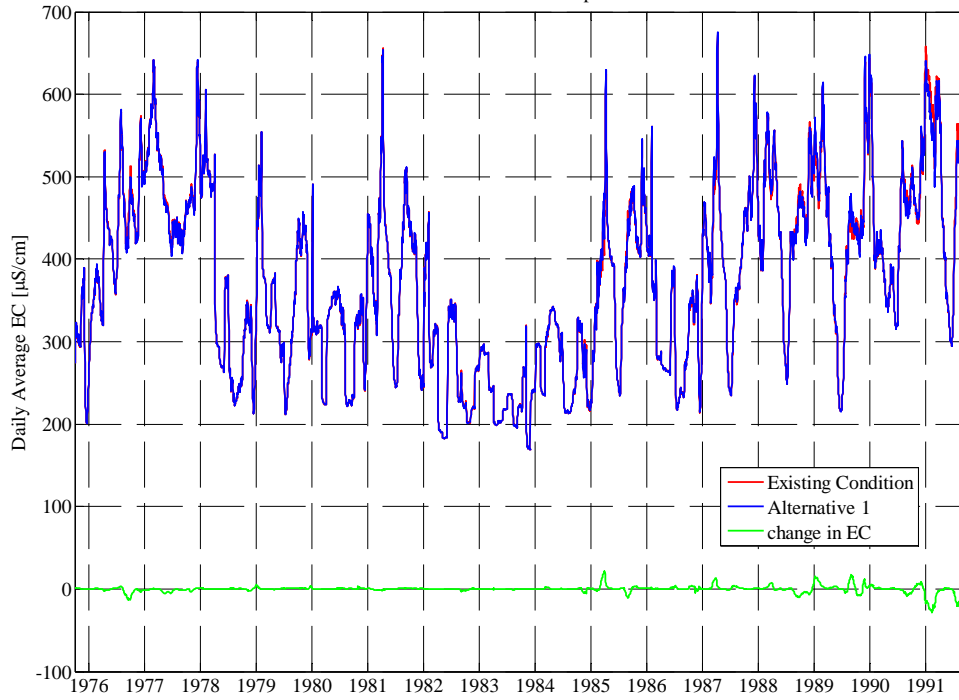
p_lve_wq_feir.m
 07-Jan-2010 DS

City of Stockton Intake Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



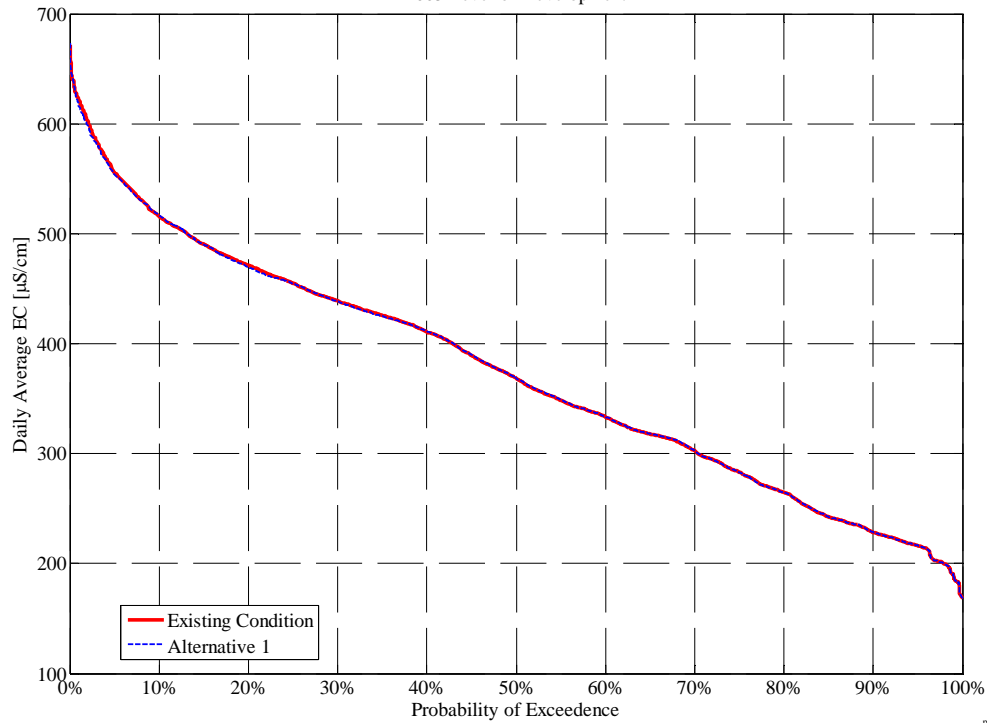
p_lve_wq_feir.m
 07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

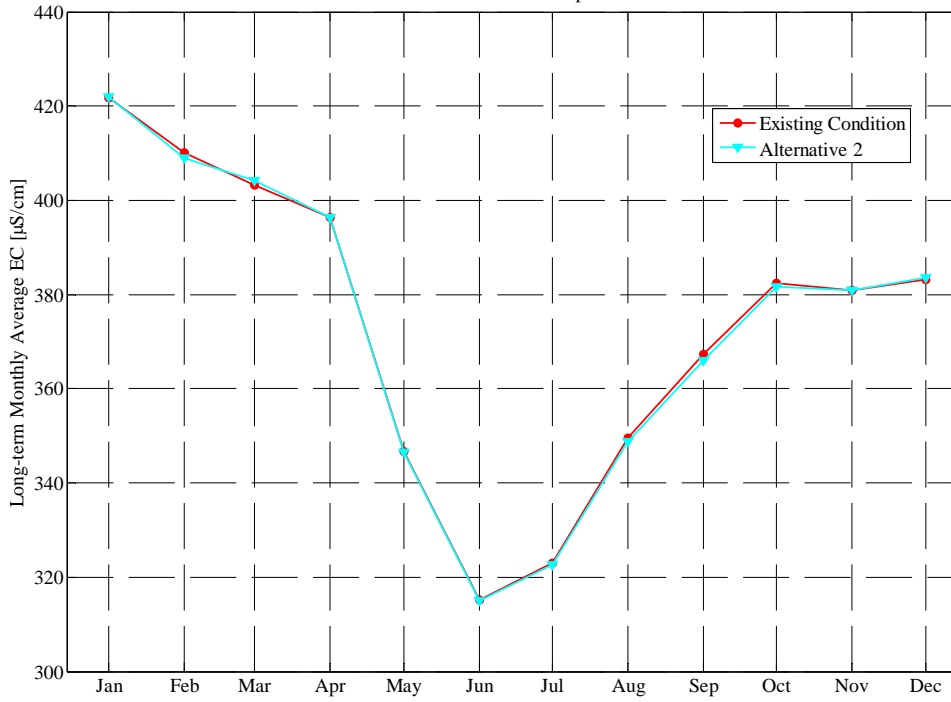
City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	308	343	237	319	374	346	455	429	381	485	483	445
1977	460	454	518	523	588	569	515	467	427	438	429	437
1978	466	476	578	505	530	488	333	273	350	267	230	247
1979	308	330	257	457	415	328	360	328	291	234	289	379
1980	425	433	308	332	317	236	314	353	357	332	236	229
1981	314	339	313	425	346	452	518	399	288	298	430	478
1982	425	371	254	390	303	310	203	184	311	335	247	230
1983	206	216	264	290	286	244	204	202	216	234	205	215
1984	249	188	233	290	247	295	337	326	295	223	217	244
1985	316	279	229	279	360	422	491	399	289	282	391	460
1986	452	428	479	412	383	291	271	264	351	244	237	275
1987	345	349	273	442	386	465	536	400	283	287	362	410
1988	457	478	547	418	504	520	522	445	320	307	419	448
1989	467	463	520	524	545	506	426	336	234	302	435	444
1990	424	476	585	538	409	413	358	371	335	437	489	468
1991	484	468	545	606	551	580	499	370	311	458	481	445
Avg	382	381	384	422	409	404	396	347	315	323	349	366
W/AN/BN	362	349	339	382	355	313	289	276	310	267	237	260
D/C	397	406	418	453	451	475	480	402	319	366	435	449

Percent (%) Change from Existing Condition for City of Stockton Intake Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

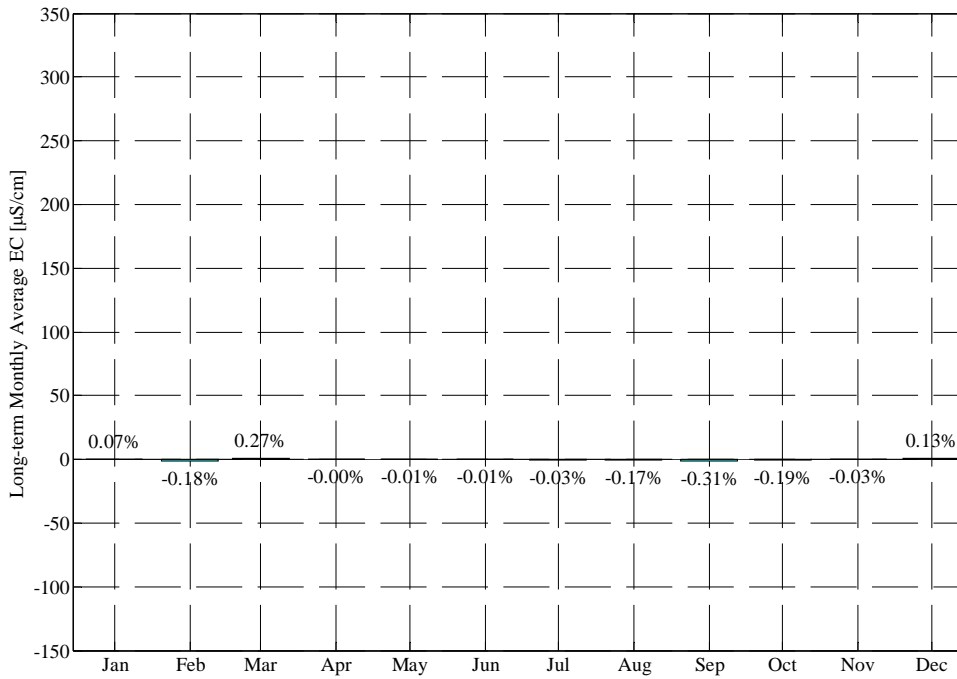
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.5%	0.1%	0.0%	0.0%	0.2%	0.0%	-0.4%	-0.2%	0.2%	0.4%	-0.6%	-2.6%
1977	-1.0%	-0.2%	-0.3%	0.0%	0.1%	0.1%	-0.2%	-1.0%	-0.9%	-0.2%	-0.2%	-0.1%
1978	-0.2%	-0.4%	0.1%	0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.1%	0.1%	0.2%
1979	-0.1%	-0.6%	0.4%	0.4%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.3%	0.2%	0.2%
1980	0.1%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	0.2%
1981	0.1%	0.4%	0.1%	0.1%	-0.2%	-0.2%	-0.2%	0.0%	0.0%	0.2%	0.2%	0.1%
1982	0.2%	0.5%	0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.2%	-0.9%
1983	-0.6%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.2%	-0.2%
1984	-0.9%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
1985	0.2%	-1.7%	0.1%	-0.1%	-0.4%	3.1%	1.0%	0.1%	0.1%	0.3%	-1.2%	-0.9%
1986	0.6%	0.3%	0.2%	0.2%	0.0%	0.0%	-0.1%	-0.1%	0.4%	0.6%	0.1%	0.0%
1987	0.7%	0.1%	0.1%	-0.1%	0.0%	0.6%	-0.1%	-0.1%	-0.3%	0.7%	0.7%	0.3%
1988	0.1%	0.1%	0.1%	0.1%	0.3%	1.0%	0.1%	0.0%	-0.2%	0.0%	-0.8%	-2.2%
1989	-1.2%	-0.8%	-0.1%	2.9%	1.2%	0.3%	0.3%	0.8%	0.2%	-0.6%	1.6%	2.3%
1990	-1.5%	0.1%	0.5%	0.8%	0.3%	0.2%	0.0%	0.1%	0.1%	-0.1%	-0.9%	-1.3%
1991	0.1%	1.4%	0.1%	-3.1%	-4.2%	-1.3%	-0.3%	0.2%	0.1%	-2.4%	-2.0%	-0.2%
Avg	-0.2%	0.0%	0.1%	0.1%	-0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.3%
W/AN/BN	-0.1%	0.0%	0.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%	-0.1%
D/C	-0.2%	-0.1%	0.1%	0.1%	-0.3%	0.4%	0.0%	0.0%	-0.1%	-0.2%	-0.3%	-0.5%

City of Stockton Intake Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



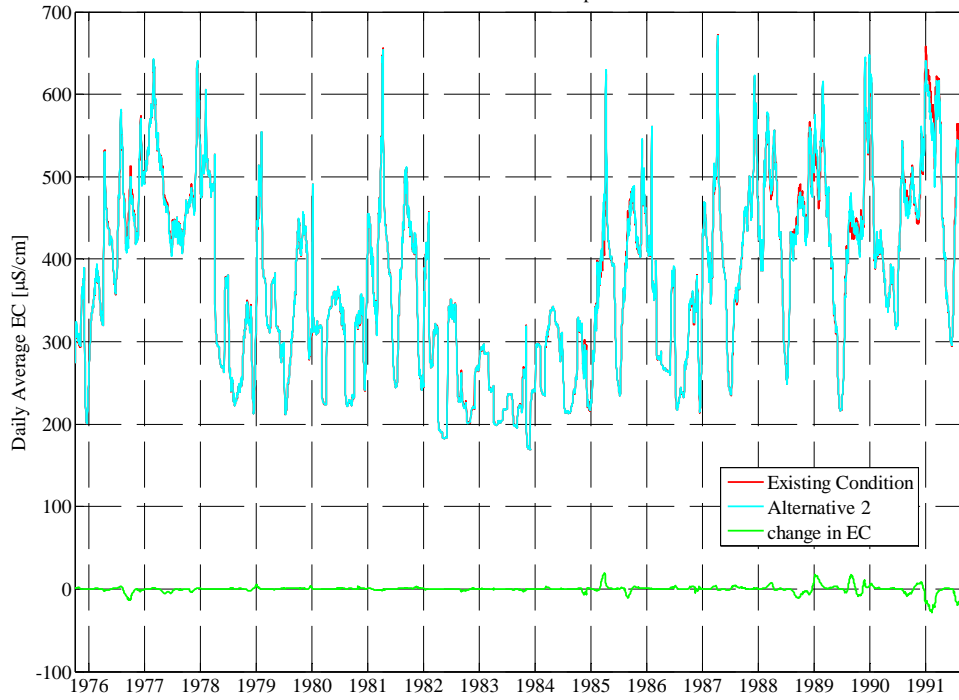
p_lve_wq_feir.m
 07-Jan-2010 DS

City of Stockton Intake Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



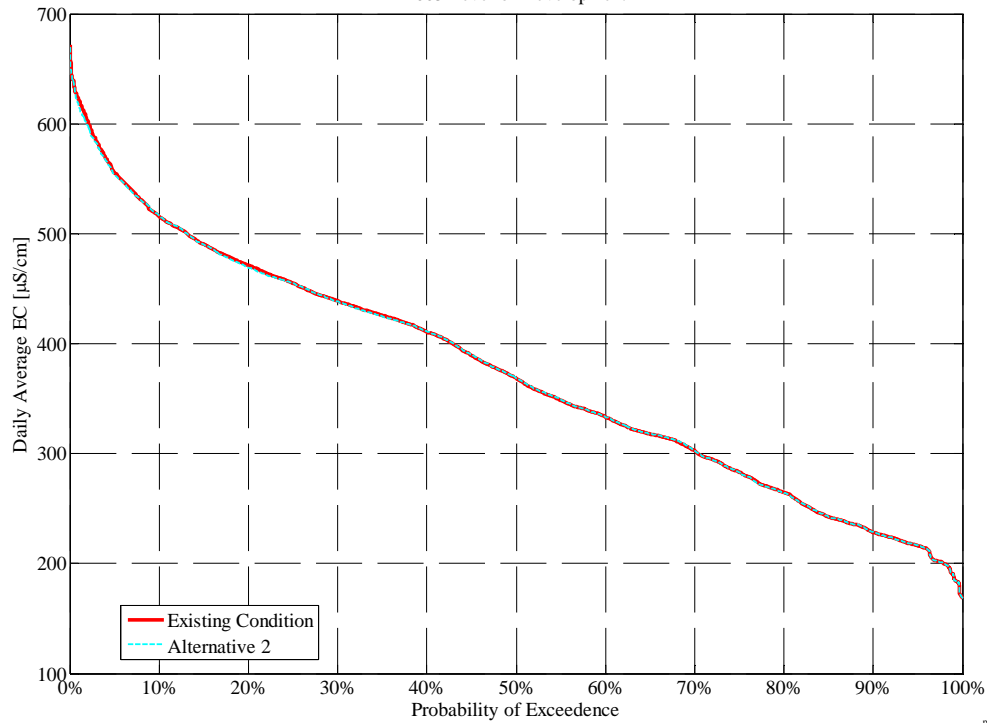
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City of Stockton Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

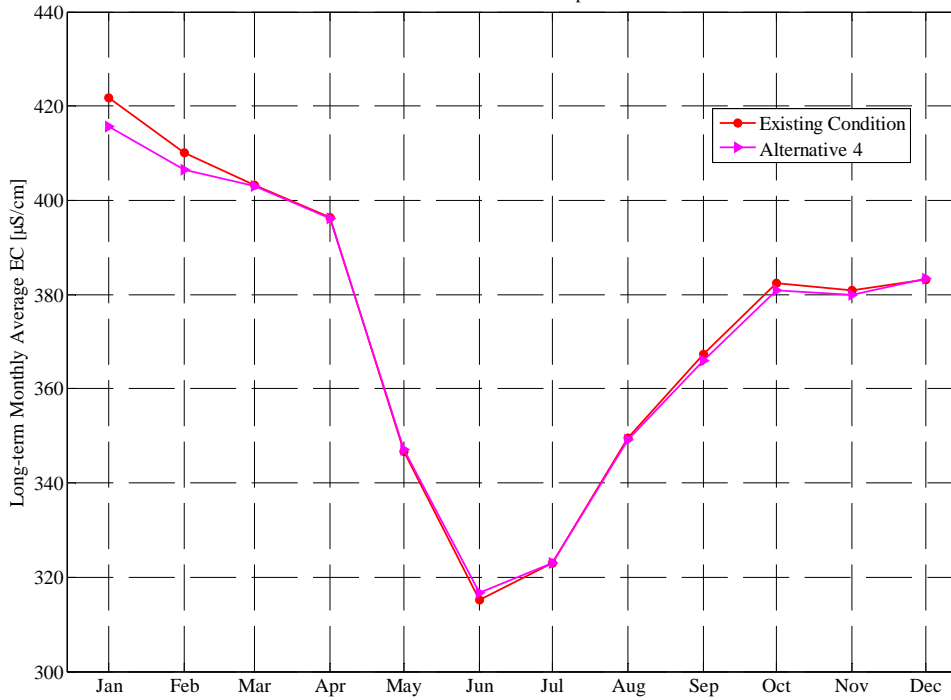
**City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	308	343	237	319	373	346	455	429	380	485	482	445
1977	460	452	501	479	562	563	517	473	432	441	437	444
1978	463	462	565	504	530	488	333	273	350	267	230	246
1979	308	329	259	459	415	328	360	328	290	233	290	379
1980	421	419	305	332	317	236	314	352	357	332	236	229
1981	314	338	312	425	345	451	518	399	288	298	430	478
1982	423	369	254	389	303	310	203	184	310	335	246	232
1983	208	216	263	290	286	244	204	202	216	234	205	216
1984	251	188	233	290	247	293	336	326	295	223	217	244
1985	316	284	228	278	359	409	485	398	310	283	402	466
1986	448	434	506	414	383	291	271	264	350	243	234	267
1987	343	358	274	438	385	466	536	400	283	283	356	408
1988	457	478	546	417	503	519	522	447	321	302	408	444
1989	466	480	528	444	507	500	425	335	234	302	435	445
1990	425	468	577	547	410	413	358	370	337	438	494	477
1991	486	463	544	626	578	590	504	374	315	468	484	437
Avg	381	380	383	416	407	403	396	347	317	323	349	366
W/AN/BN	360	345	341	383	355	313	289	276	310	267	237	259
D/C	397	407	416	441	447	473	480	403	322	367	436	449

**Percent (%) Change from Existing Condition for City of Stockton Intake Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development**

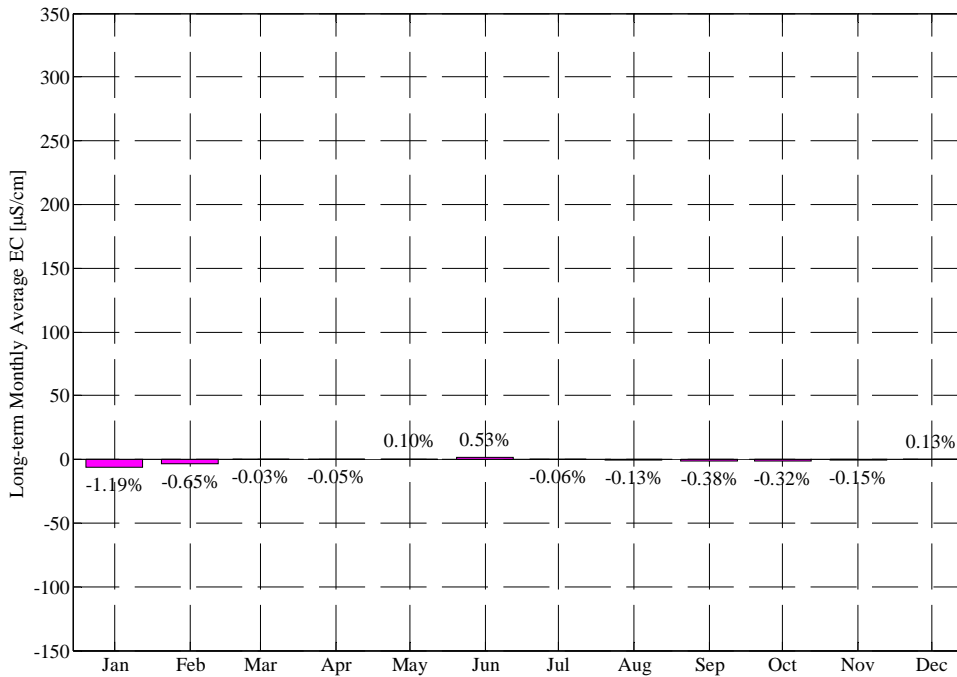
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.5%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.4%	-0.2%	0.1%	0.4%	-0.7%	-2.6%
1977	-1.0%	-0.7%	-3.6%	-8.4%	-4.3%	-1.0%	0.1%	0.3%	0.1%	0.5%	1.6%	1.3%
1978	-0.9%	-3.3%	-2.2%	-0.2%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.1%	0.0%
1979	-0.1%	-0.9%	1.3%	0.9%	0.0%	0.0%	-0.2%	-0.2%	-0.1%	0.2%	0.5%	0.1%
1980	-0.8%	-3.1%	-0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%
1981	0.0%	0.0%	0.0%	0.0%	-0.5%	-0.4%	-0.2%	-0.1%	-0.1%	0.1%	0.2%	0.0%
1982	-0.2%	-0.2%	0.3%	-0.3%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.4%	0.0%
1983	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.1%	-0.1%	-0.1%	0.1%	0.1%	0.1%
1985	0.1%	0.0%	0.0%	-0.5%	-0.8%	-0.2%	-0.3%	-0.1%	7.4%	0.6%	1.7%	0.3%
1986	-0.4%	1.5%	5.8%	0.7%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	-1.0%	-3.0%
1987	-0.1%	2.7%	0.6%	-0.9%	-0.2%	0.6%	-0.1%	-0.1%	-0.5%	-0.7%	-1.0%	-0.2%
1988	0.0%	0.0%	0.0%	-0.1%	0.1%	0.9%	0.0%	0.3%	0.0%	-1.6%	-3.4%	-3.2%
1989	-1.3%	2.9%	1.5%	-12.9%	-5.8%	-1.0%	-0.1%	0.4%	-0.1%	-0.5%	1.7%	2.5%
1990	-1.4%	-1.7%	-0.8%	2.5%	0.6%	0.0%	-0.1%	0.0%	0.5%	0.1%	0.2%	0.6%
1991	0.6%	0.3%	-0.1%	0.2%	0.5%	0.3%	0.6%	1.5%	1.5%	-0.3%	-1.4%	-2.1%
Avg	-0.3%	-0.2%	0.1%	-1.2%	-0.6%	0.0%	0.0%	0.1%	0.5%	-0.1%	-0.1%	-0.4%
W/AN/BN	-0.3%	-0.9%	0.7%	0.2%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	-0.1%	-0.4%
D/C	-0.3%	0.4%	-0.3%	-2.2%	-1.1%	-0.1%	0.0%	0.2%	1.0%	-0.1%	-0.1%	-0.4%

City of Stockton Intake Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



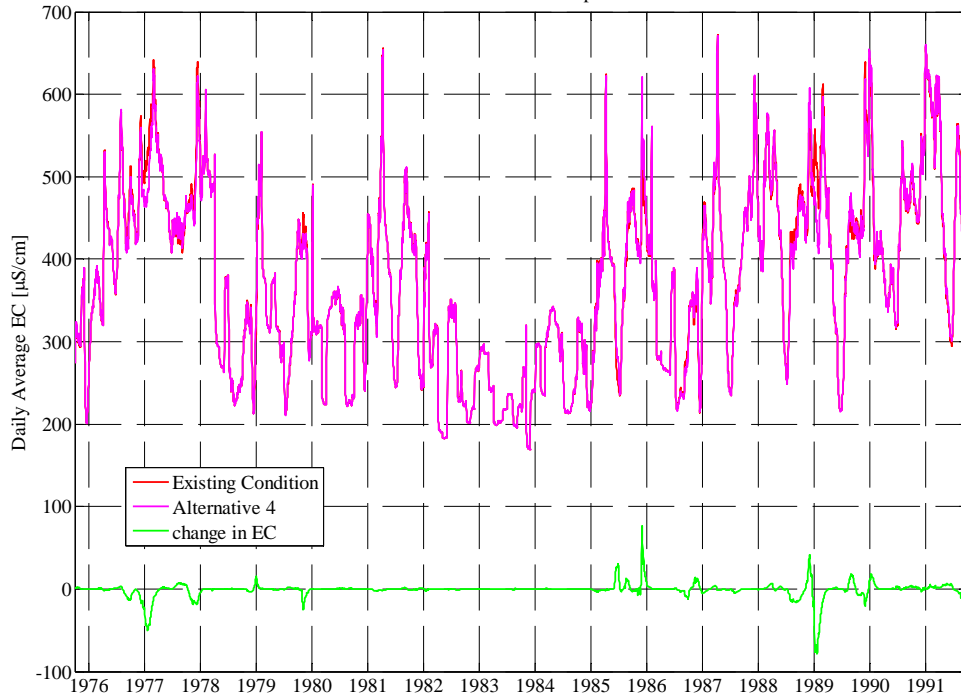
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 07-Jan-2010 DS

City of Stockton Intake Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



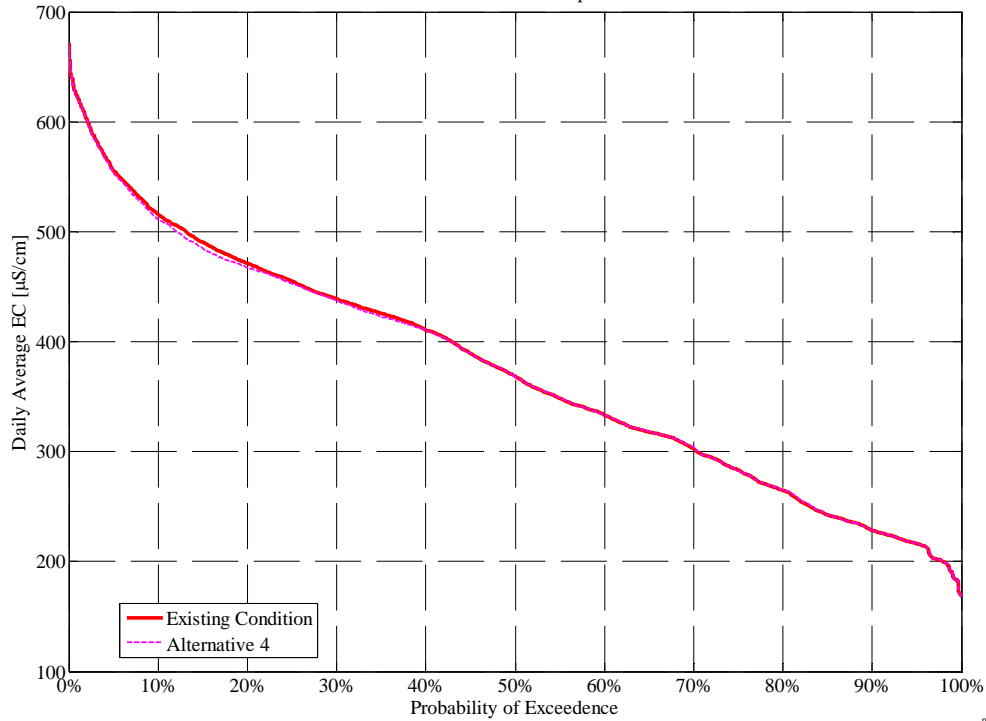
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 07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Antioch

Existing Condition

San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	523	386	919	1,770	1,993	1,460	819	1,709	3,198	5,081	4,875	5,863
1977	5,133	5,546	4,208	4,007	2,375	1,400	1,471	2,544	3,890	4,219	4,689	5,293
1978	4,172	4,387	3,311	433	259	256	271	242	255	804	1,609	1,525
1979	990	1,053	1,400	593	277	243	244	266	420	1,608	3,110	5,027
1980	5,449	2,336	1,046	285	252	232	224	254	313	730	1,523	1,534
1981	969	1,014	2,169	966	266	215	264	448	1,068	2,844	4,272	5,019
1982	5,062	1,469	213	237	222	240	208	188	200	468	942	348
1983	314	209	219	281	276	247	212	194	201	213	215	199
1984	378	207	211	225	215	199	230	277	637	1,089	1,308	620
1985	403	404	208	368	546	480	367	507	1,055	2,521	4,034	5,549
1986	5,135	4,806	2,637	521	257	255	253	242	400	1,177	1,352	461
1987	330	445	1,957	1,945	708	261	390	753	1,123	2,575	3,606	4,898
1988	5,123	4,960	2,676	444	280	686	788	1,100	1,352	3,269	4,320	5,191
1989	5,140	5,067	4,241	2,836	1,577	328	225	347	1,074	2,707	3,888	4,742
1990	5,115	5,321	4,927	1,814	590	491	656	1,418	2,730	4,723	4,922	5,505
1991	4,733	4,907	5,350	3,319	2,119	514	351	1,293	3,016	4,802	4,478	5,228
Avg	3,061	2,657	2,231	1,253	763	469	436	736	1,308	2,427	3,072	3,563
W/AN/BN	3,071	2,067	1,291	368	251	239	234	238	347	870	1,437	1,388
D/C	3,052	3,117	2,962	1,941	1,162	648	592	1,124	2,056	3,638	4,343	5,254

Alternative 1

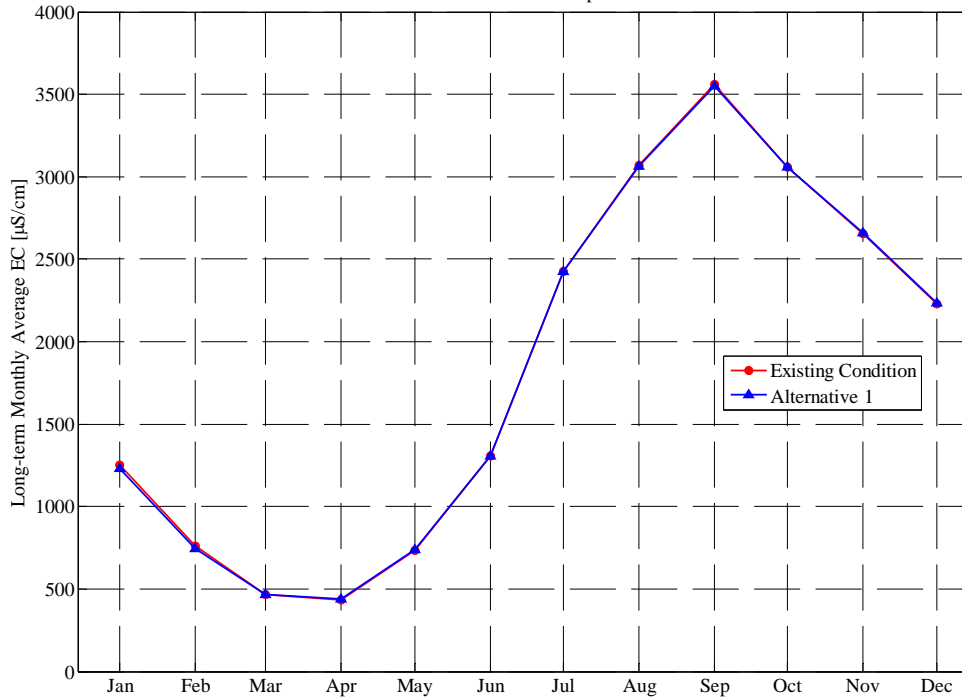
**San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	521	385	918	1,769	1,991	1,435	830	1,734	3,212	5,090	4,799	5,744
1977	5,125	5,530	4,195	4,000	2,375	1,399	1,471	2,544	3,889	4,218	4,666	5,278
1978	4,172	4,404	3,316	433	259	255	271	241	256	811	1,614	1,528
1979	992	1,062	1,431	607	277	243	243	265	425	1,624	3,116	5,034
1980	5,452	2,337	1,061	287	252	232	223	253	310	725	1,522	1,535
1981	975	1,020	2,170	967	267	215	264	448	1,069	2,847	4,273	5,028
1982	5,072	1,471	213	236	221	240	208	188	200	471	948	372
1983	365	216	219	279	276	247	211	193	201	212	215	200
1984	381	207	211	225	215	199	231	277	637	1,092	1,311	620
1985	402	423	212	373	560	454	365	511	1,059	2,521	4,014	5,556
1986	5,131	4,810	2,644	523	257	256	252	242	390	1,158	1,348	462
1987	328	441	1,957	1,945	709	260	393	756	1,129	2,582	3,604	4,902
1988	5,122	4,961	2,679	445	280	681	810	1,113	1,362	3,284	4,245	5,090
1989	5,056	5,007	4,322	2,904	1,590	329	225	348	1,079	2,700	3,975	4,763
1990	5,023	5,301	4,959	1,835	592	489	655	1,418	2,729	4,722	4,845	5,442
1991	4,844	5,016	5,245	2,871	1,840	488	349	1,290	3,005	4,776	4,509	5,239
Avg	3,060	2,662	2,234	1,231	747	464	438	739	1,310	2,427	3,063	3,550
W/AN/BN	3,081	2,072	1,299	370	251	239	234	237	346	870	1,439	1,393
D/C	3,044	3,121	2,962	1,901	1,134	639	596	1,129	2,059	3,638	4,326	5,227

**Percent (%) Change from Existing Condition for San Joaquin River at Antioch Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

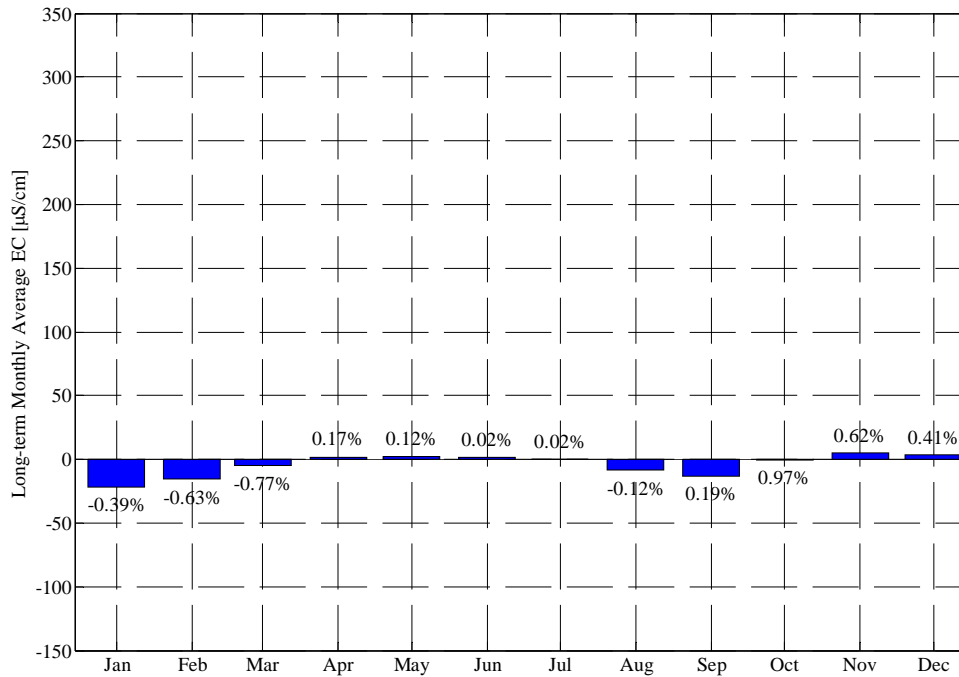
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.4%	-0.2%	-0.1%	-0.1%	-0.1%	-1.7%	1.4%	1.5%	0.4%	0.2%	-1.6%	-2.0%
1977	-0.1%	-0.3%	-0.3%	-0.2%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.5%	-0.3%
1978	0.0%	0.4%	0.2%	0.0%	-0.1%	-0.1%	-0.3%	-0.4%	0.4%	0.9%	0.3%	0.2%
1979	0.2%	0.8%	2.2%	2.3%	0.0%	0.0%	-0.2%	-0.5%	1.2%	1.0%	0.2%	0.1%
1980	0.1%	0.1%	1.4%	0.6%	0.0%	0.1%	-0.4%	-0.5%	-1.0%	-0.7%	-0.1%	0.1%
1981	0.7%	0.6%	0.0%	0.1%	0.3%	-0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.2%
1982	0.2%	0.2%	0.1%	-0.3%	-0.4%	0.2%	0.0%	0.0%	0.0%	0.6%	0.7%	6.7%
1983	16.1%	3.4%	0.0%	-0.7%	-0.2%	0.0%	-0.3%	-0.2%	-0.1%	-0.2%	0.0%	0.2%
1984	0.8%	0.2%	-0.1%	-0.1%	-0.1%	0.3%	0.3%	-0.1%	0.0%	0.3%	0.2%	0.0%
1985	-0.2%	4.8%	2.1%	1.4%	2.5%	-5.4%	-0.5%	0.9%	0.4%	0.0%	-0.5%	0.1%
1986	-0.1%	0.1%	0.3%	0.5%	0.0%	0.6%	-0.2%	-0.3%	-2.4%	-1.7%	-0.3%	0.1%
1987	-0.6%	-0.8%	0.0%	0.0%	0.1%	-0.4%	0.9%	0.4%	0.5%	0.3%	0.0%	0.1%
1988	0.0%	0.0%	0.1%	0.2%	0.0%	-0.7%	2.8%	1.1%	0.8%	0.5%	-1.7%	-2.0%
1989	-1.6%	-1.2%	1.9%	2.4%	0.8%	0.5%	0.0%	0.1%	0.5%	-0.3%	2.2%	0.5%
1990	-1.8%	-0.4%	0.6%	1.2%	0.3%	-0.5%	-0.1%	0.0%	-0.1%	0.0%	-1.6%	-1.1%
1991	2.4%	2.2%	-2.0%	-13.5%	-13.2%	-5.0%	-0.7%	-0.2%	-0.4%	-0.5%	0.7%	0.2%
Avg	1.0%	0.6%	0.4%	-0.4%	-0.6%	-0.8%	0.2%	0.1%	0.0%	0.0%	-0.1%	0.2%
W/AN/BN	2.5%	0.7%	0.6%	0.3%	-0.1%	0.2%	-0.2%	-0.3%	-0.3%	0.0%	0.1%	1.1%
D/C	-0.2%	0.5%	0.3%	-0.9%	-1.0%	-1.5%	0.4%	0.4%	0.2%	0.0%	-0.3%	-0.5%

San Joaquin River at Antioch Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



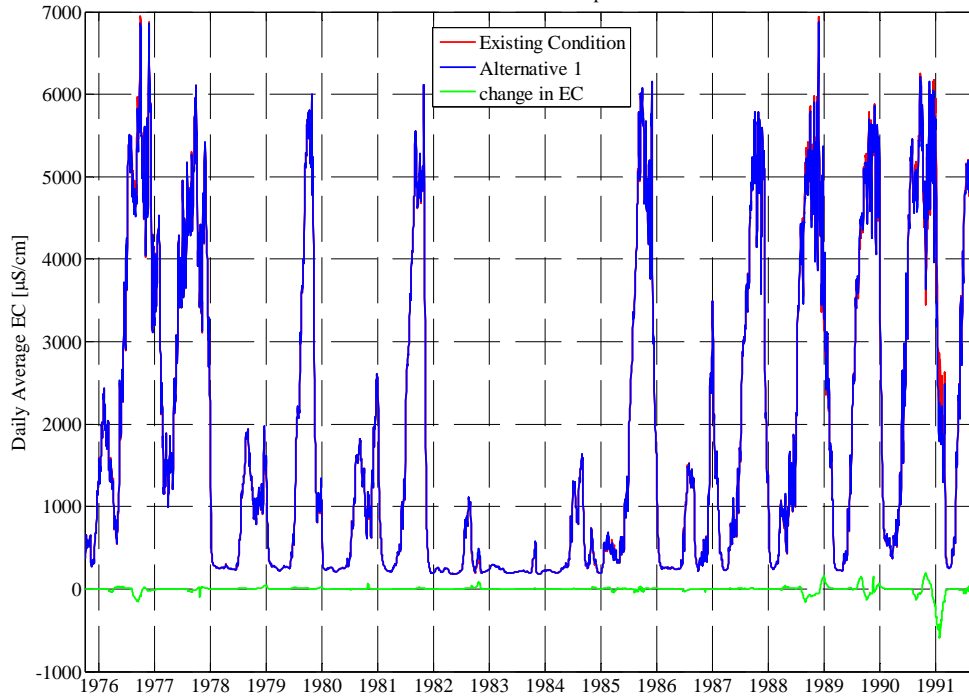
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



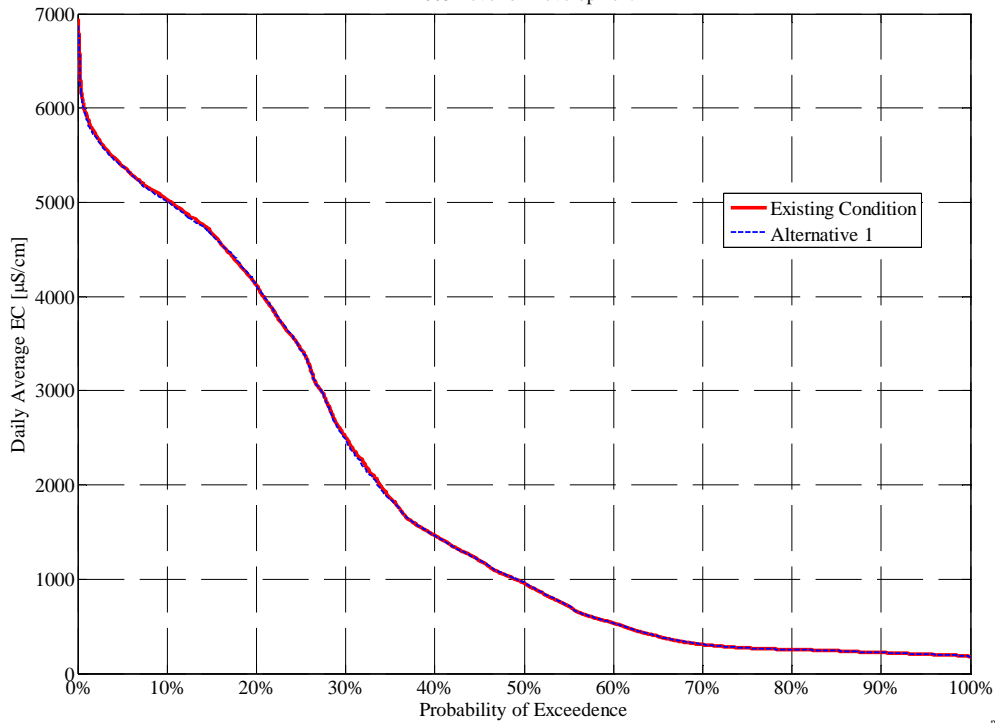
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 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

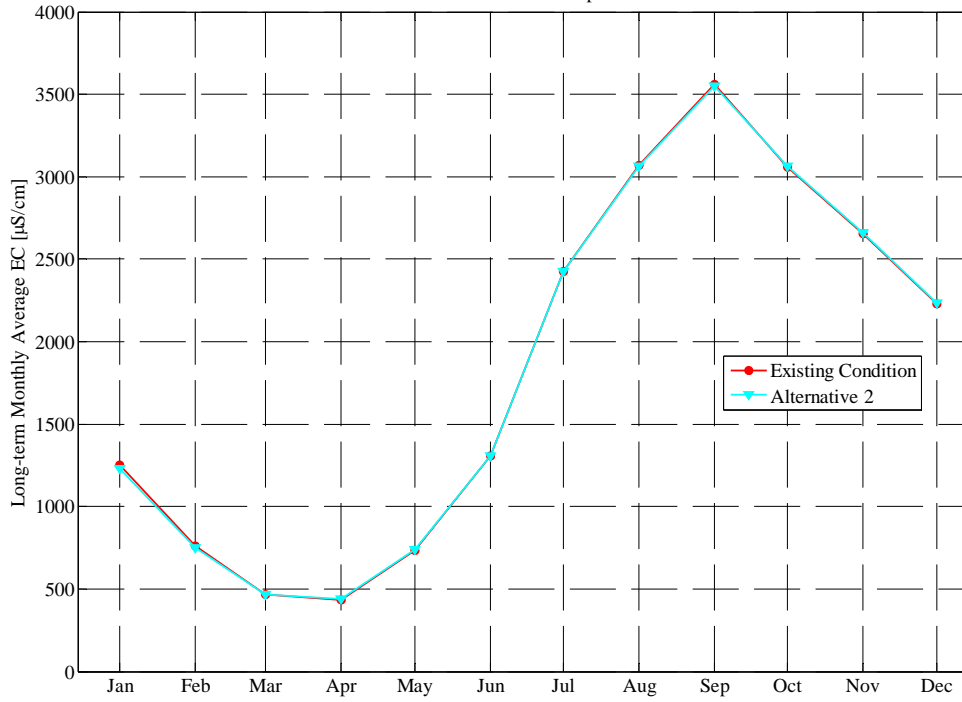
San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	519	385	918	1,768	1,991	1,435	829	1,733	3,211	5,090	4,797	5,740
1977	5,126	5,533	4,206	4,008	2,377	1,400	1,471	2,545	3,889	4,218	4,676	5,284
1978	4,165	4,396	3,315	433	259	255	271	241	256	811	1,614	1,528
1979	992	1,062	1,432	607	277	243	243	265	425	1,624	3,116	5,033
1980	5,451	2,337	1,061	287	252	232	223	253	310	725	1,522	1,535
1981	975	1,020	2,170	967	267	215	265	448	1,069	2,847	4,274	5,028
1982	5,072	1,477	214	236	221	240	208	188	200	471	948	372
1983	365	216	219	278	276	247	211	193	201	212	215	201
1984	401	210	210	224	215	199	231	277	637	1,093	1,311	620
1985	402	427	213	373	560	456	365	511	1,059	2,521	4,014	5,555
1986	5,130	4,811	2,644	523	257	256	252	242	390	1,158	1,348	462
1987	329	441	1,957	1,945	709	261	388	752	1,131	2,583	3,603	4,902
1988	5,123	4,961	2,679	445	280	681	810	1,112	1,362	3,282	4,235	5,083
1989	5,079	5,011	4,334	2,916	1,593	330	225	348	1,079	2,700	3,978	4,764
1990	5,021	5,299	4,962	1,837	592	489	655	1,419	2,729	4,722	4,842	5,440
1991	4,849	5,020	5,240	2,877	1,847	489	349	1,290	3,005	4,778	4,508	5,238
Avg	3,062	2,663	2,236	1,233	748	464	437	739	1,310	2,427	3,062	3,549
W/AN/BN	3,082	2,073	1,299	370	251	239	234	237	346	870	1,439	1,393
D/C	3,047	3,122	2,964	1,904	1,135	639	595	1,129	2,059	3,638	4,325	5,226

Percent (%) Change from Existing Condition for San Joaquin River at Antioch Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

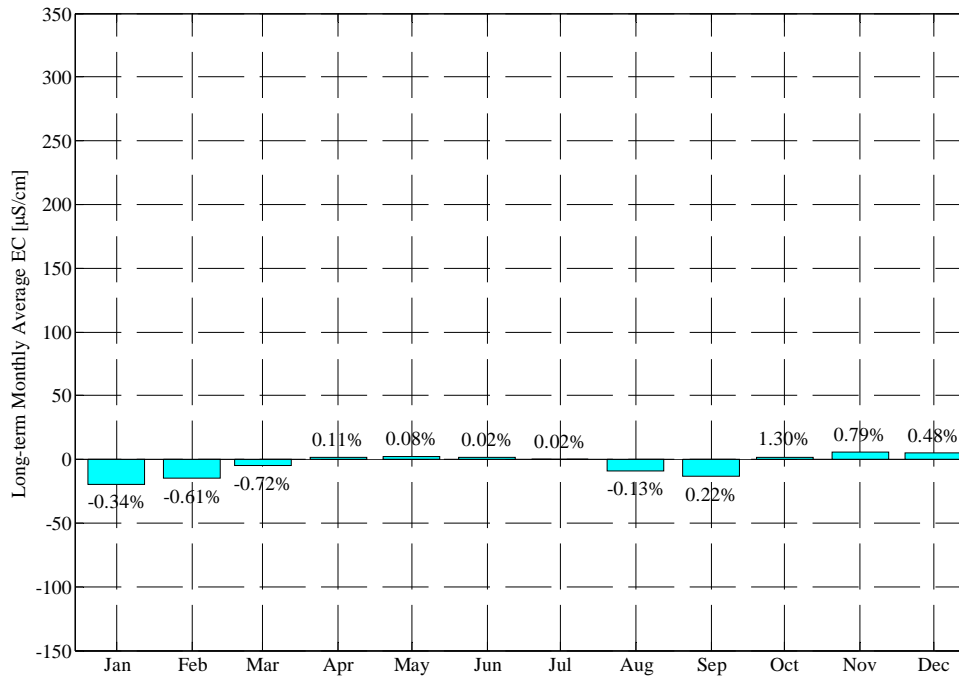
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.8%	-0.3%	-0.1%	-0.1%	-0.1%	-1.7%	1.3%	1.4%	0.4%	0.2%	-1.6%	-2.1%
1977	-0.1%	-0.2%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.2%
1978	-0.2%	0.2%	0.1%	0.1%	-0.1%	-0.1%	-0.3%	-0.4%	0.4%	0.9%	0.3%	0.2%
1979	0.2%	0.8%	2.3%	2.3%	0.0%	0.0%	-0.2%	-0.5%	1.2%	1.0%	0.2%	0.1%
1980	0.0%	0.0%	1.4%	0.6%	0.0%	0.1%	-0.4%	-0.5%	-1.0%	-0.7%	-0.1%	0.1%
1981	0.7%	0.6%	0.0%	0.1%	0.3%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.2%
1982	0.2%	0.5%	0.4%	-0.3%	-0.4%	0.2%	0.0%	0.0%	0.0%	0.6%	0.7%	6.7%
1983	16.1%	3.4%	0.1%	-0.9%	-0.3%	0.0%	-0.3%	-0.3%	-0.1%	-0.2%	0.1%	0.7%
1984	5.9%	1.6%	-0.1%	-0.3%	-0.2%	0.3%	0.3%	-0.1%	0.0%	0.3%	0.2%	0.0%
1985	-0.2%	5.7%	2.5%	1.4%	2.6%	-4.9%	-0.3%	0.9%	0.4%	0.0%	-0.5%	0.1%
1986	-0.1%	0.1%	0.2%	0.5%	-0.1%	0.4%	-0.1%	-0.2%	-2.4%	-1.7%	-0.3%	0.1%
1987	-0.5%	-0.8%	0.0%	0.0%	0.1%	-0.2%	-0.4%	-0.1%	0.7%	0.3%	-0.1%	0.1%
1988	0.0%	0.0%	0.1%	0.2%	0.0%	-0.7%	2.8%	1.1%	0.7%	0.4%	-2.0%	-2.1%
1989	-1.2%	-1.1%	2.2%	2.8%	1.0%	0.5%	0.1%	0.1%	0.5%	-0.3%	2.3%	0.5%
1990	-1.8%	-0.4%	0.7%	1.3%	0.3%	-0.5%	-0.1%	0.0%	-0.1%	0.0%	-1.6%	-1.2%
1991	2.4%	2.3%	-2.0%	-13.3%	-12.8%	-4.9%	-0.7%	-0.2%	-0.4%	-0.5%	0.7%	0.2%
Avg	1.3%	0.8%	0.5%	-0.3%	-0.6%	-0.7%	0.1%	0.1%	0.0%	0.0%	-0.1%	0.2%
W/AN/BN	3.2%	1.0%	0.6%	0.3%	-0.2%	0.1%	-0.1%	-0.3%	-0.3%	0.0%	0.1%	1.1%
D/C	-0.2%	0.6%	0.4%	-0.8%	-1.0%	-1.4%	0.3%	0.4%	0.3%	0.0%	-0.3%	-0.5%

San Joaquin River at Antioch Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



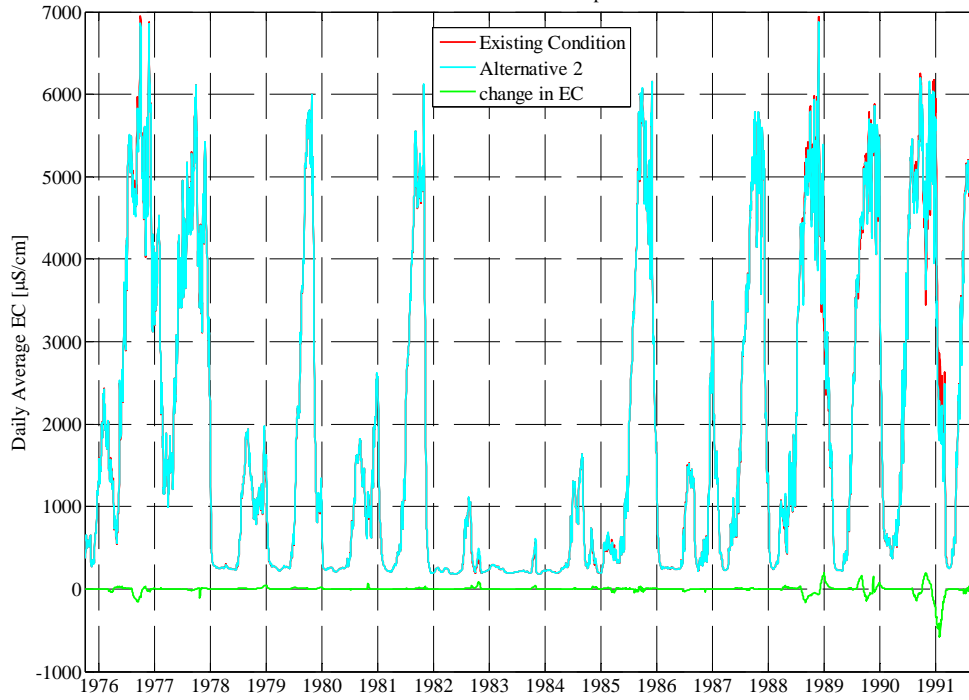
p_lve_wq_feir.m
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San Joaquin River at Antioch Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



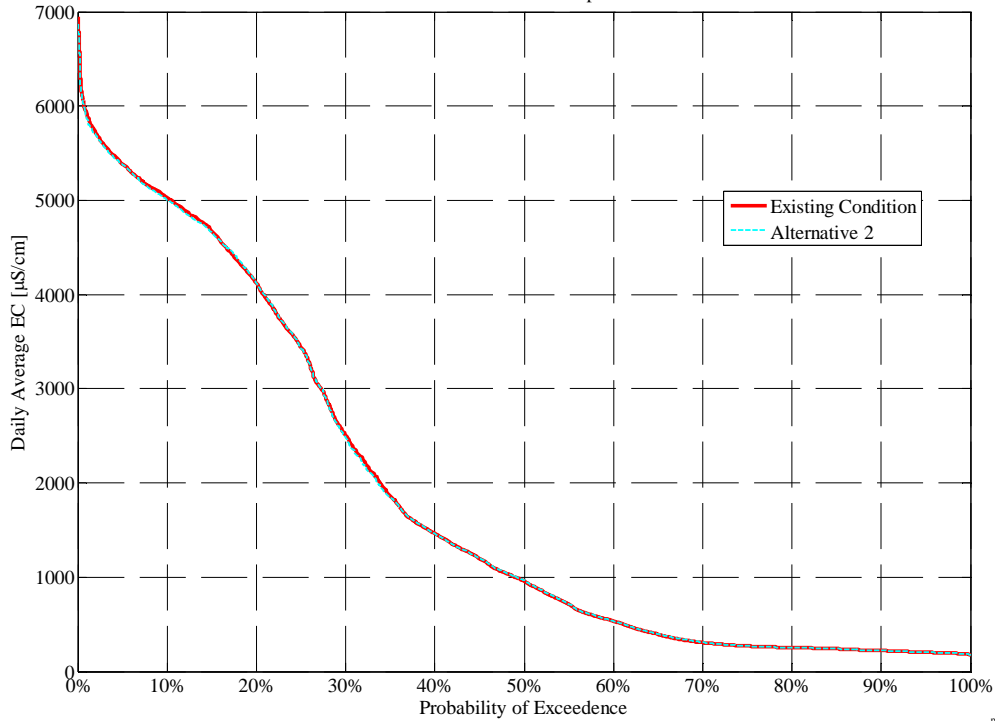
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 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

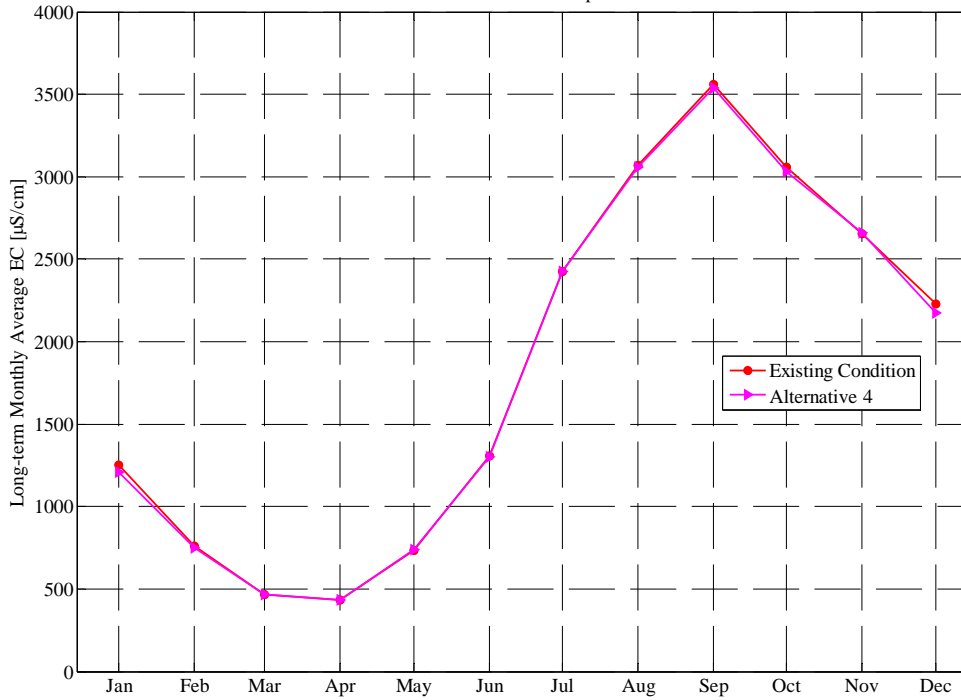
**San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	519	385	918	1,770	1,993	1,437	828	1,730	3,211	5,090	4,797	5,745
1977	5,130	5,488	3,789	3,674	2,277	1,366	1,454	2,529	3,885	4,272	4,761	5,356
1978	4,003	4,197	3,299	437	259	255	271	241	256	810	1,612	1,526
1979	992	1,068	1,452	615	278	243	243	265	419	1,615	3,111	5,031
1980	5,364	2,310	1,053	285	252	232	223	253	310	724	1,520	1,533
1981	969	1,014	2,169	966	267	215	264	449	1,070	2,847	4,279	5,014
1982	5,051	1,466	213	236	221	240	208	188	200	470	952	350
1983	321	209	219	280	276	247	211	193	201	212	214	199
1984	378	207	211	225	215	199	230	277	638	1,095	1,312	620
1985	402	403	208	373	560	485	373	509	985	2,507	3,978	5,448
1986	5,060	4,962	2,596	528	258	255	252	241	374	1,124	1,381	487
1987	328	396	1,917	1,934	709	261	388	750	1,129	2,572	3,595	4,894
1988	5,123	4,961	2,669	442	280	681	809	1,107	1,359	3,250	4,159	5,040
1989	5,138	5,353	3,687	2,418	1,516	320	225	347	1,080	2,703	3,987	4,783
1990	5,031	5,255	5,043	1,885	597	491	655	1,417	2,729	4,724	4,945	5,521
1991	4,698	4,879	5,366	3,271	2,068	509	351	1,290	3,013	4,795	4,312	5,101
Avg	3,032	2,660	2,176	1,209	752	465	437	737	1,304	2,426	3,057	3,541
W/AN/BN	3,024	2,060	1,292	372	251	239	234	237	343	864	1,443	1,392
D/C	3,038	3,126	2,863	1,859	1,141	641	594	1,126	2,051	3,640	4,313	5,211

**Percent (%) Change from Existing Condition for San Joaquin River at Antioch Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development**

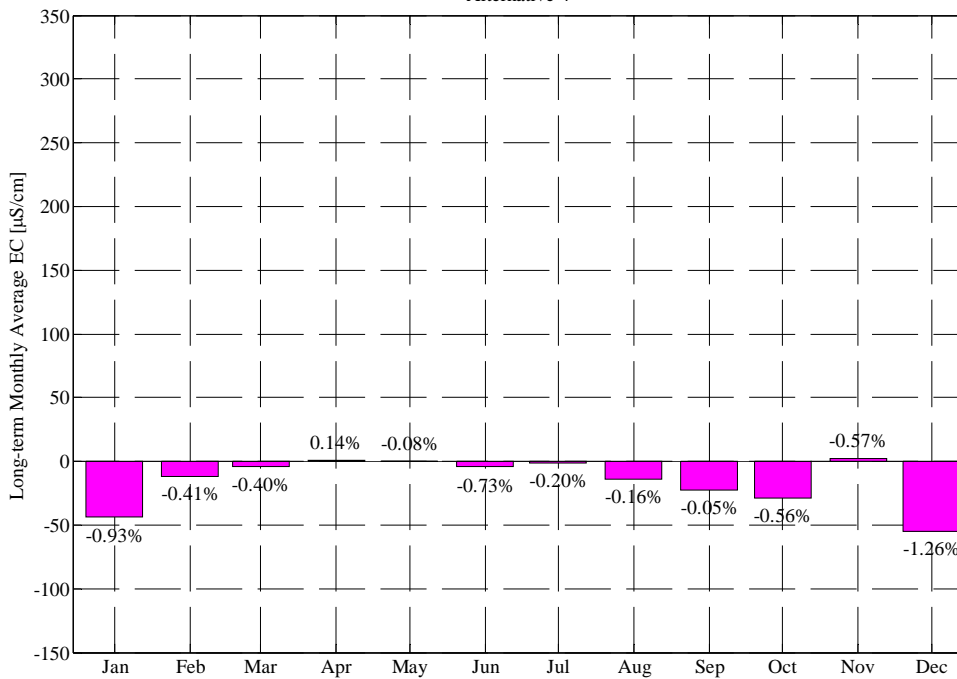
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.8%	-0.3%	0.0%	0.0%	0.0%	-1.6%	1.2%	1.2%	0.4%	0.2%	-1.6%	-2.0%
1977	0.0%	-1.0%	-10.0%	-8.3%	-4.1%	-2.4%	-1.2%	-0.6%	-0.1%	1.3%	1.5%	1.2%
1978	-4.1%	-4.3%	-0.4%	0.8%	-0.1%	-0.1%	-0.3%	-0.4%	0.4%	0.8%	0.2%	0.1%
1979	0.2%	1.4%	3.7%	3.7%	0.2%	0.0%	-0.3%	-0.7%	-0.1%	0.4%	0.0%	0.1%
1980	-1.6%	-1.1%	0.7%	0.0%	0.1%	0.2%	-0.4%	-0.5%	-1.0%	-0.7%	-0.2%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.3%	-0.1%	0.0%	0.2%	0.2%	0.1%	0.2%	-0.1%
1982	-0.2%	-0.2%	0.0%	-0.4%	-0.4%	0.2%	0.0%	-0.1%	0.0%	0.5%	1.0%	0.6%
1983	2.1%	0.4%	0.2%	-0.2%	-0.2%	0.0%	-0.2%	-0.2%	0.0%	-0.1%	-0.1%	0.0%
1984	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	-0.2%	-0.2%	0.1%	0.5%	0.3%	0.0%
1985	-0.1%	-0.2%	-0.1%	1.4%	2.7%	1.2%	1.8%	0.5%	-6.6%	-0.5%	-1.4%	-1.8%
1986	-1.4%	3.3%	-1.5%	1.3%	0.2%	0.4%	-0.1%	-0.7%	-6.5%	-4.6%	2.1%	5.5%
1987	-0.5%	-10.9%	-2.0%	-0.6%	0.1%	-0.2%	-0.4%	-0.4%	0.5%	-0.1%	-0.3%	-0.1%
1988	0.0%	0.0%	-0.3%	-0.4%	-0.1%	-0.7%	2.6%	0.6%	0.6%	-0.6%	-3.7%	-2.9%
1989	0.0%	5.6%	-13.1%	-14.7%	-3.9%	-2.3%	-0.2%	0.0%	0.5%	-0.1%	2.5%	0.9%
1990	-1.6%	-1.2%	2.4%	3.9%	1.2%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.4%	0.3%
1991	-0.7%	-0.6%	0.3%	-1.4%	-2.4%	-1.0%	-0.1%	-0.2%	-0.1%	-0.1%	-3.7%	-2.4%
Avg	-0.6%	-0.6%	-1.3%	-0.9%	-0.4%	-0.4%	0.1%	-0.1%	-0.7%	-0.2%	-0.2%	0.0%
W/AN/BN	-0.7%	-0.1%	0.4%	0.7%	0.0%	0.1%	-0.2%	-0.4%	-1.0%	-0.4%	0.5%	0.9%
D/C	-0.4%	-1.0%	-2.5%	-2.2%	-0.7%	-0.8%	0.4%	0.1%	-0.5%	0.0%	-0.7%	-0.8%

San Joaquin River at Antioch Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



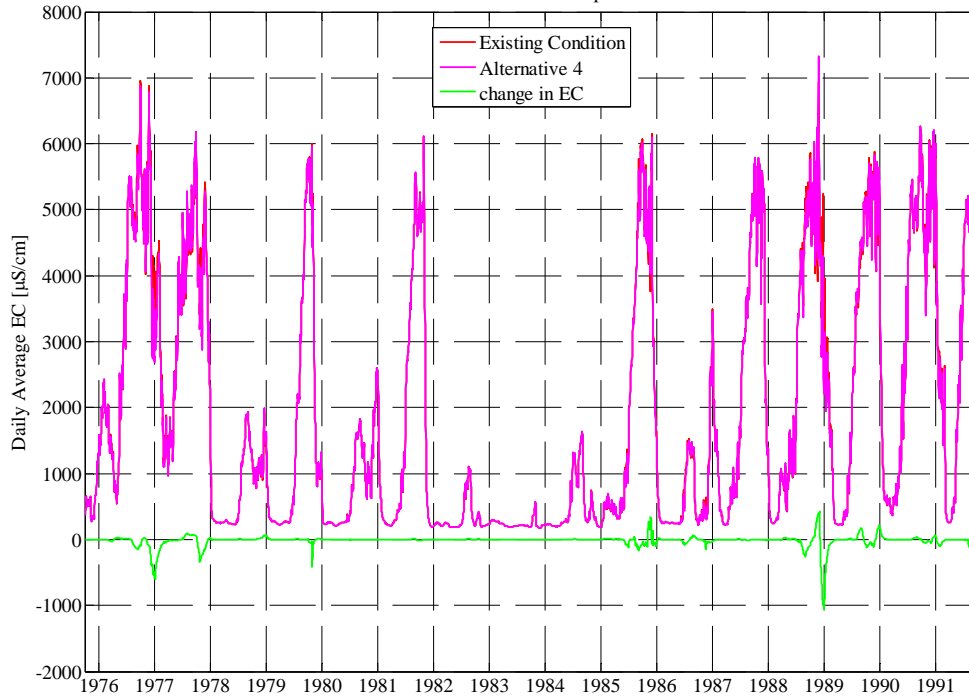
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



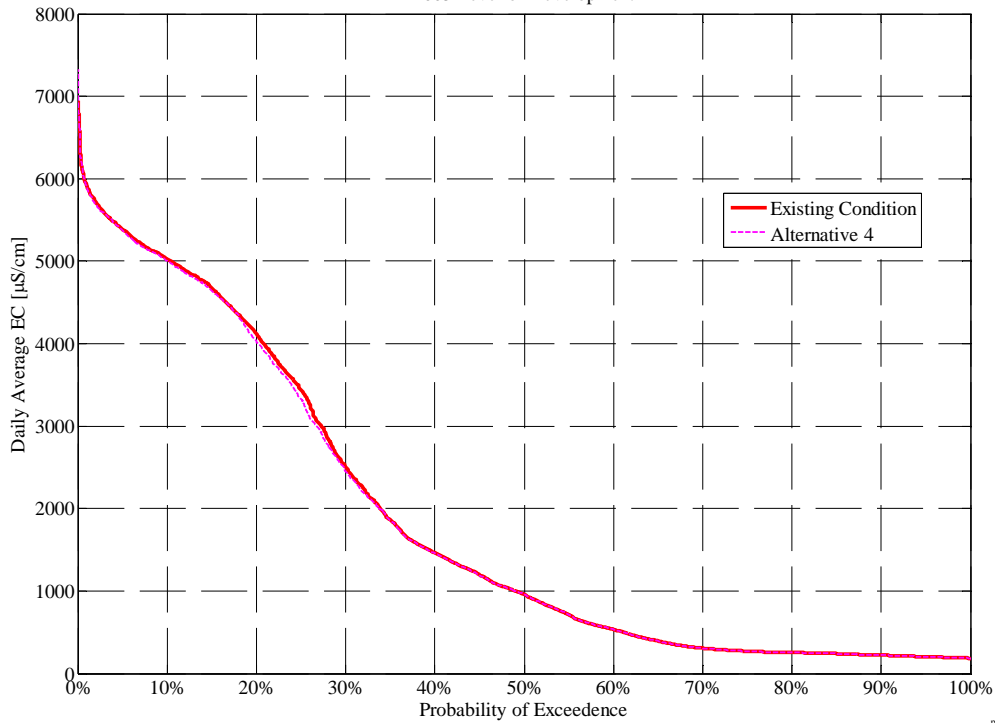
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 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Old River at Rock Slough

Existing Condition

Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	246	227	245	403	432	374	387	410	553	956	1,016	994
1977	1,104	1,005	1,086	827	805	602	490	495	717	851	910	998
1978	1,040	890	950	502	373	368	335	294	271	232	284	299
1979	255	249	313	416	352	300	379	370	273	294	499	806
1980	974	738	377	347	415	377	367	394	299	241	259	283
1981	256	250	434	534	271	249	442	471	305	490	850	1,009
1982	902	607	232	320	306	330	222	195	233	237	224	207
1983	194	216	334	379	321	258	227	218	232	264	214	192
1984	197	216	246	304	260	229	344	377	277	259	272	249
1985	215	225	208	218	241	252	413	442	300	440	767	1,018
1986	973	830	820	442	410	407	302	287	272	260	283	233
1987	242	249	334	641	370	290	424	444	304	456	688	854
1988	975	963	880	413	415	400	421	402	345	497	858	1,023
1989	1,033	952	966	753	583	450	355	289	243	498	830	898
1990	902	937	1,112	792	354	311	312	327	438	829	1,001	1,034
1991	1,093	899	1,097	1,051	685	515	406	329	457	902	1,021	964
Avg	663	591	602	521	412	357	364	359	345	482	624	691
W/AN/BN	648	535	467	387	348	324	311	305	265	255	291	324
D/C	674	634	707	626	462	383	406	401	407	658	882	977

Alternative 1

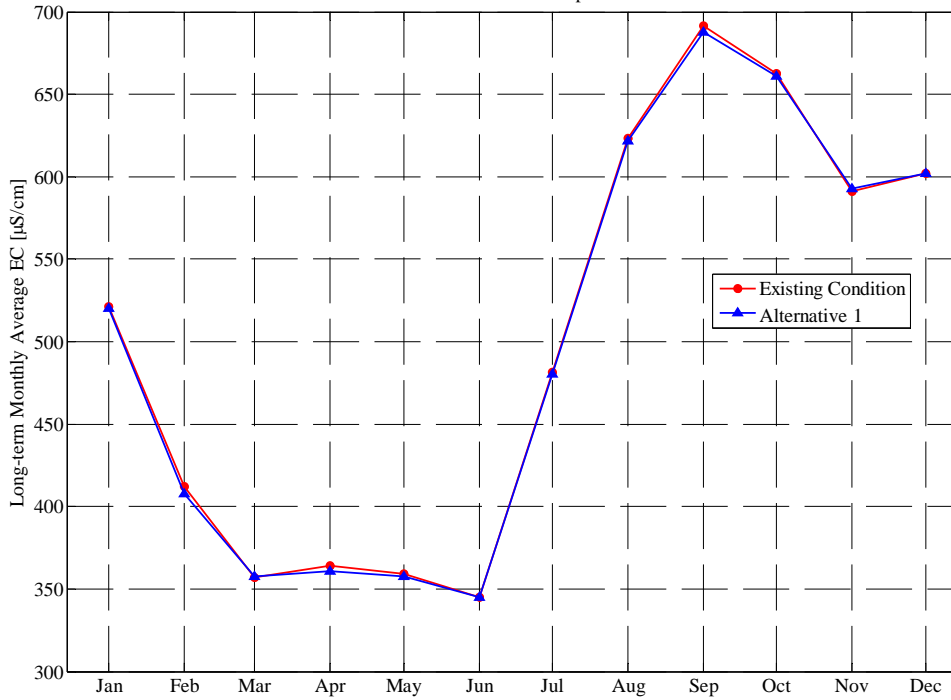
Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	247	228	245	403	432	373	377	407	556	961	1,008	963
1977	1,087	1,004	1,082	824	804	602	490	494	717	851	909	995
1978	1,038	892	952	502	372	367	332	295	271	232	284	299
1979	255	249	317	422	353	301	374	369	273	296	501	807
1980	976	739	380	347	419	386	362	392	300	242	259	283
1981	256	252	435	534	271	249	433	463	304	491	851	1,010
1982	905	610	233	318	305	336	224	195	233	238	225	206
1983	193	216	323	375	319	258	226	216	231	260	213	192
1984	197	216	245	302	259	232	343	375	277	258	272	249
1985	215	228	210	219	242	256	413	440	300	441	754	1,013
1986	997	833	821	442	410	401	297	288	274	259	282	233
1987	245	252	334	642	369	294	418	438	302	462	694	857
1988	975	964	881	413	417	414	416	401	344	498	853	991
1989	1,012	938	965	778	594	453	355	290	243	493	846	920
1990	880	935	1,115	802	356	312	312	330	438	827	993	1,018
1991	1,097	929	1,097	997	608	486	400	330	456	874	999	963
Avg	661	593	602	520	408	357	361	358	345	480	621	688
W/AN/BN	652	536	467	387	348	326	308	304	266	255	291	324
D/C	668	636	707	624	455	382	402	399	407	655	879	970

Percent (%) Change from Existing Condition for Old River at Rock Slough Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development

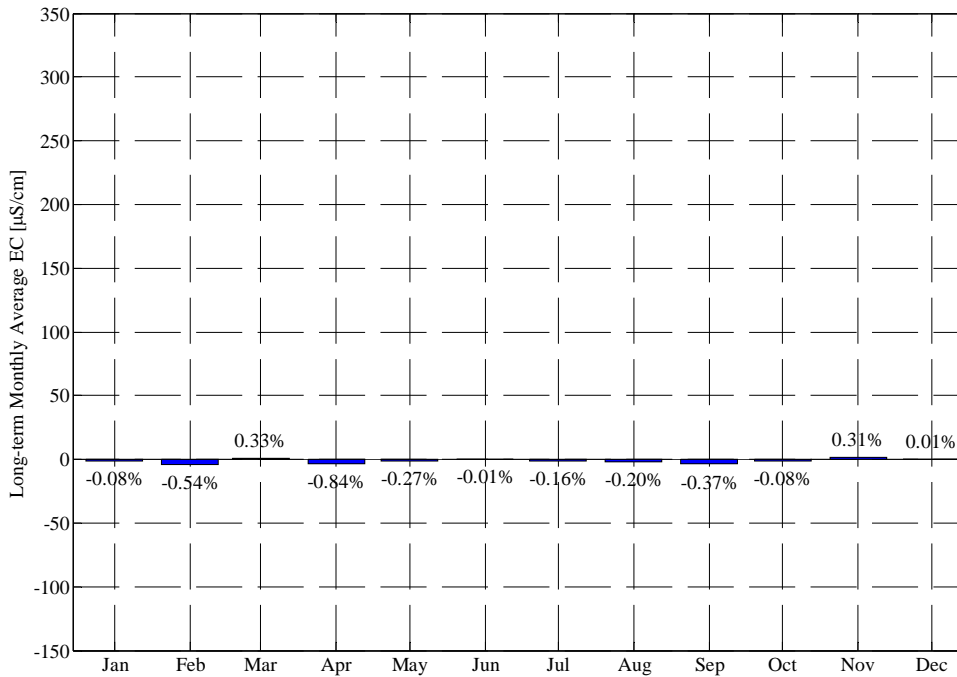
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	0.0%	0.0%	0.0%	0.0%	-0.3%	-2.6%	-0.8%	0.5%	0.5%	-0.8%	-3.1%
1977	-1.6%	-0.1%	-0.4%	-0.3%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.2%	-0.3%
1978	-0.1%	0.2%	0.3%	0.1%	-0.1%	-0.1%	-0.9%	0.5%	-0.2%	0.1%	0.3%	0.2%
1979	0.1%	-0.2%	1.1%	1.4%	0.0%	0.1%	-1.4%	-0.3%	-0.1%	0.7%	0.4%	0.2%
1980	0.2%	0.2%	0.9%	0.0%	0.8%	2.4%	-1.4%	-0.4%	0.3%	0.5%	0.0%	0.0%
1981	0.1%	0.5%	0.1%	0.1%	-0.2%	-0.2%	-2.0%	-1.8%	-0.2%	0.2%	0.2%	0.2%
1982	0.3%	0.4%	0.2%	-0.6%	-0.5%	1.9%	0.9%	0.2%	0.0%	0.1%	0.1%	-0.5%
1983	-0.2%	-0.2%	-3.3%	-0.9%	-0.5%	0.0%	-0.1%	-0.9%	-0.3%	-1.8%	-0.4%	0.0%
1984	0.1%	-0.1%	-0.2%	-0.7%	-0.2%	1.1%	-0.4%	-0.5%	-0.1%	0.0%	0.1%	0.0%
1985	0.2%	1.3%	0.9%	0.1%	0.3%	1.5%	0.0%	-0.3%	0.0%	0.4%	-1.7%	-0.4%
1986	2.5%	0.4%	0.2%	0.1%	0.0%	-1.5%	-1.7%	0.3%	0.7%	-0.4%	-0.3%	0.0%
1987	1.2%	1.1%	0.0%	0.1%	0.0%	1.4%	-1.6%	-1.2%	-0.5%	1.2%	0.9%	0.3%
1988	0.0%	0.1%	0.1%	0.0%	0.6%	3.6%	-1.2%	-0.4%	-0.2%	0.2%	-0.7%	-3.1%
1989	-2.1%	-1.5%	-0.1%	3.4%	1.9%	0.8%	0.1%	0.5%	0.0%	-1.0%	2.0%	2.4%
1990	-2.4%	-0.3%	0.3%	1.2%	0.5%	0.2%	0.1%	0.6%	0.1%	-0.1%	-0.8%	-1.6%
1991	0.4%	3.3%	0.1%	-5.2%	-11.2%	-5.6%	-1.3%	0.2%	-0.3%	-3.1%	-2.1%	-0.1%
Avg	-0.1%	0.3%	0.0%	-0.1%	-0.5%	0.3%	-0.8%	-0.3%	0.0%	-0.2%	-0.2%	-0.4%
W/AN/BN	0.4%	0.1%	-0.1%	-0.1%	0.0%	0.6%	-0.7%	-0.1%	0.1%	-0.1%	0.0%	0.0%
D/C	-0.4%	0.5%	0.1%	-0.1%	-0.9%	0.2%	-0.9%	-0.4%	-0.1%	-0.2%	-0.4%	-0.6%

Old River at Rock Slough Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



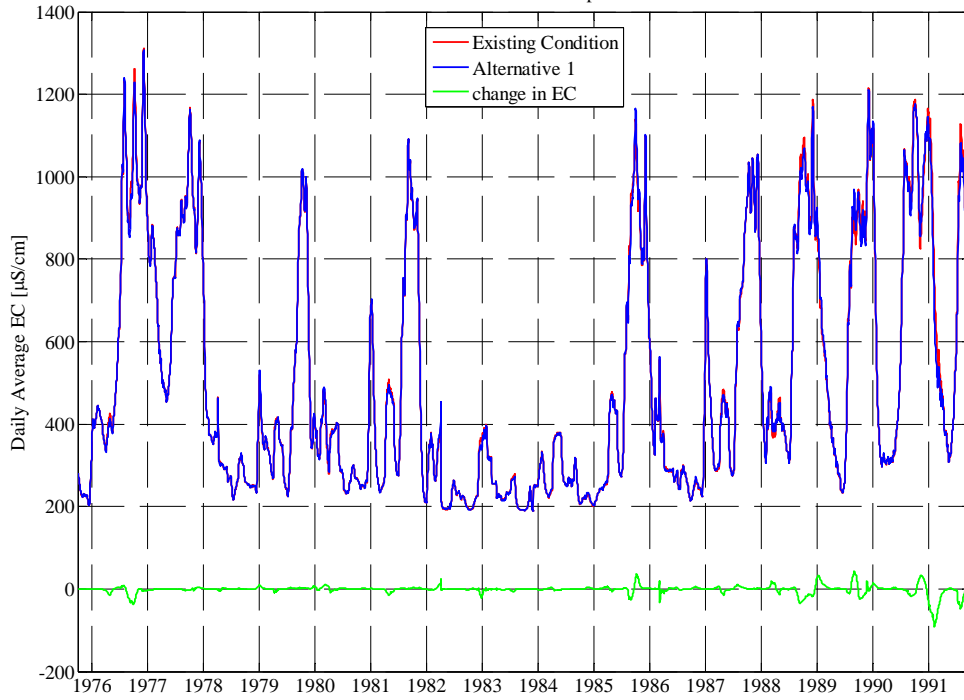
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 07-Jan-2010 DS

Old River at Rock Slough Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



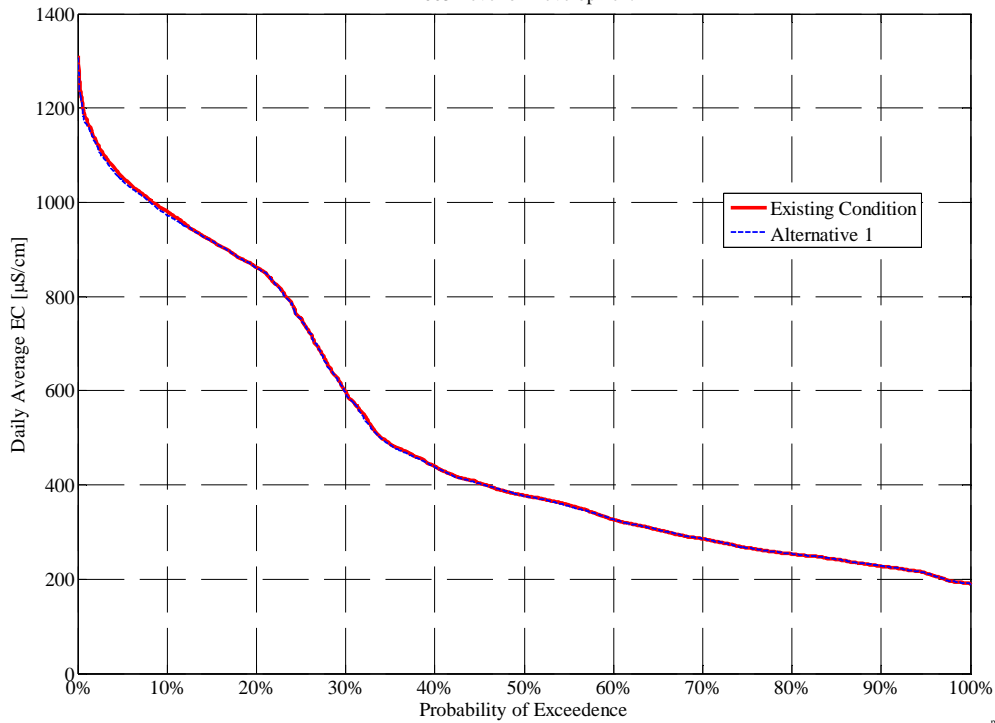
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Old River at Rock Slough Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River at Rock Slough Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

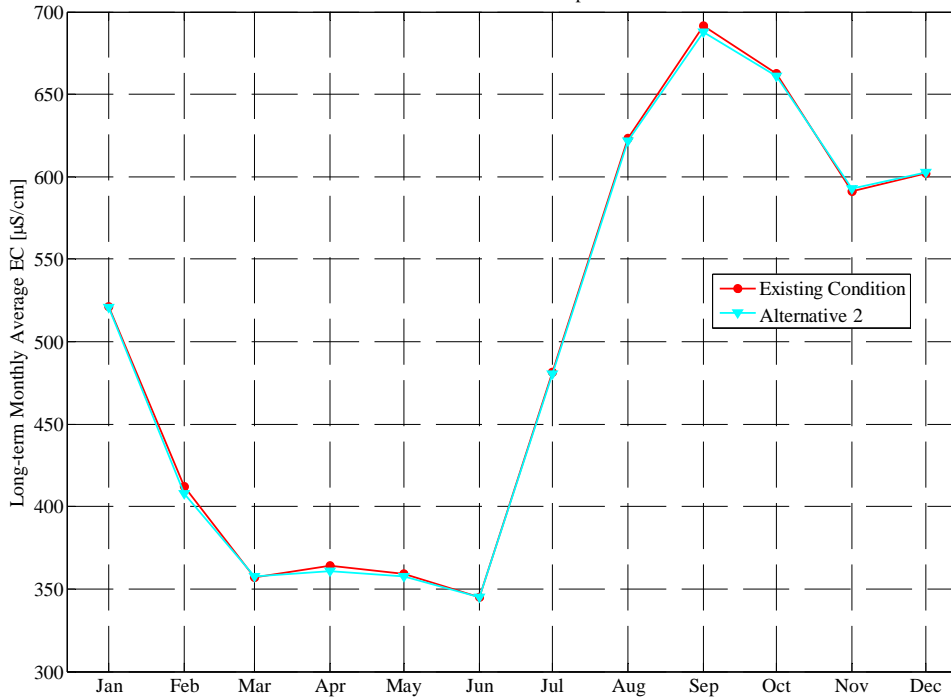
Alternative 2**Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)****Alternative 2****2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	247	228	245	403	432	373	377	407	556	960	1,007	962
1977	1,086	1,004	1,082	826	805	602	490	494	717	851	910	996
1978	1,038	889	951	502	372	367	332	295	271	232	284	299
1979	255	249	317	422	353	301	374	369	273	296	501	807
1980	976	739	380	347	416	383	362	392	300	242	259	283
1981	256	252	435	534	271	249	433	463	304	491	851	1,010
1982	905	614	234	318	305	336	224	195	233	238	225	206
1983	193	216	325	383	319	258	228	218	232	260	213	192
1984	198	215	245	299	258	232	343	375	277	259	272	249
1985	215	229	211	219	242	256	413	440	300	442	754	1,013
1986	996	834	821	442	409	409	298	288	275	259	282	233
1987	245	251	334	642	369	291	413	436	302	462	694	857
1988	975	964	881	413	417	414	416	401	345	497	850	989
1989	1,013	941	965	783	596	454	356	291	243	493	847	921
1990	880	934	1,115	803	356	312	312	330	439	828	993	1,018
1991	1,098	930	1,097	996	609	487	401	330	456	875	1,000	963
Avg	661	593	602	521	408	358	361	358	345	480	621	687
W/AN/BN	652	536	468	388	347	326	309	305	266	255	291	324
D/C	668	637	707	624	455	382	401	399	407	655	878	970

Percent (%) Change from Existing Condition for Old River at Rock Slough Salinity**(Alternative 2 - Existing Condition) / Existing Condition****2005 Level of Development**

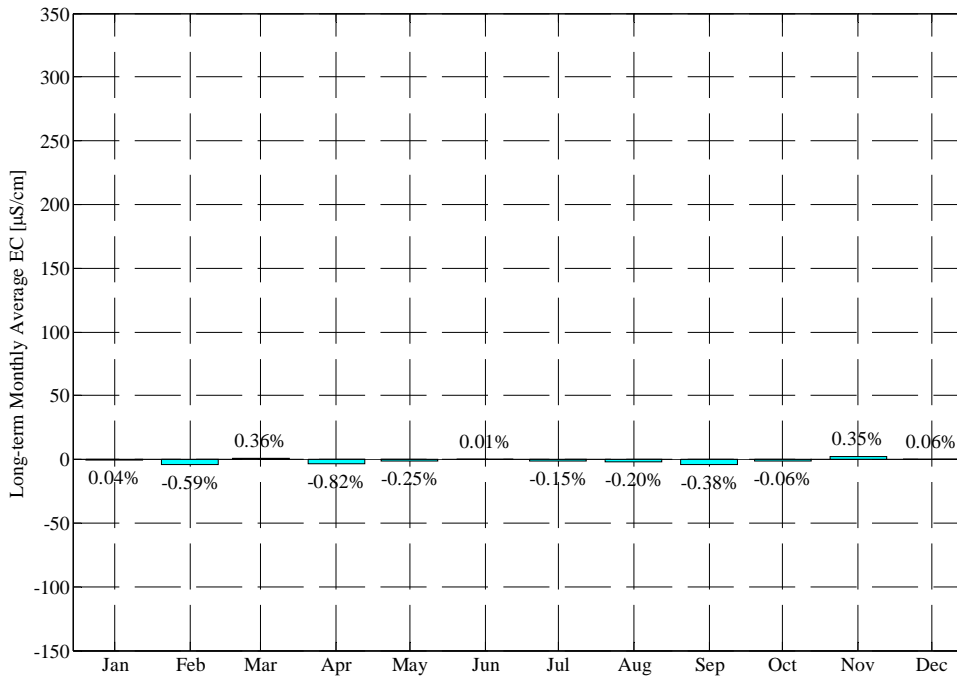
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.2%	0.0%	0.0%	0.0%	0.0%	-0.3%	-2.5%	-0.8%	0.5%	0.5%	-0.9%	-3.2%
1977	-1.6%	-0.1%	-0.4%	0.0%	0.0%	0.1%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.2%
1978	-0.1%	-0.1%	0.2%	0.0%	-0.1%	-0.1%	-0.9%	0.5%	-0.2%	0.1%	0.3%	0.2%
1979	0.1%	-0.2%	1.2%	1.5%	0.0%	0.1%	-1.4%	-0.3%	-0.1%	0.7%	0.4%	0.2%
1980	0.2%	0.1%	0.9%	0.0%	0.0%	1.8%	-1.4%	-0.4%	0.3%	0.5%	0.0%	0.0%
1981	0.1%	0.5%	0.1%	0.1%	-0.2%	-0.2%	-2.0%	-1.8%	-0.2%	0.2%	0.2%	0.2%
1982	0.3%	1.1%	0.5%	-0.6%	-0.5%	1.9%	0.9%	0.2%	-0.1%	0.1%	0.1%	-0.5%
1983	-0.2%	-0.2%	-2.8%	1.1%	-0.5%	0.0%	0.7%	-0.1%	0.0%	-1.6%	-0.4%	-0.2%
1984	0.4%	-0.4%	-0.3%	-1.7%	-0.6%	1.0%	-0.4%	-0.5%	-0.1%	0.0%	0.1%	0.1%
1985	0.3%	1.5%	1.1%	0.1%	0.3%	1.4%	-0.1%	-0.4%	0.0%	0.4%	-1.7%	-0.4%
1986	2.4%	0.4%	0.2%	0.1%	-0.2%	0.4%	-1.2%	0.4%	0.8%	-0.3%	-0.2%	0.0%
1987	1.0%	0.9%	0.0%	0.1%	0.0%	0.4%	-2.7%	-1.7%	-0.6%	1.2%	0.9%	0.3%
1988	0.1%	0.1%	0.1%	0.0%	0.6%	3.6%	-1.2%	-0.3%	-0.1%	0.0%	-1.0%	-3.3%
1989	-1.9%	-1.2%	-0.1%	4.0%	2.2%	0.9%	0.2%	0.6%	0.1%	-1.0%	2.1%	2.5%
1990	-2.5%	-0.4%	0.2%	1.3%	0.6%	0.2%	0.1%	0.7%	0.1%	-0.1%	-0.8%	-1.6%
1991	0.4%	3.4%	0.1%	-5.2%	-11.1%	-5.5%	-1.3%	0.2%	-0.2%	-3.0%	-2.0%	-0.1%
Avg	-0.1%	0.3%	0.1%	0.0%	-0.6%	0.4%	-0.8%	-0.2%	0.0%	-0.1%	-0.2%	-0.4%
W/AN/BN	0.4%	0.1%	0.0%	0.1%	-0.2%	0.7%	-0.5%	0.0%	0.1%	-0.1%	0.0%	0.0%
D/C	-0.5%	0.5%	0.1%	0.0%	-0.9%	0.1%	-1.1%	-0.4%	-0.1%	-0.2%	-0.4%	-0.6%

Old River at Rock Slough Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



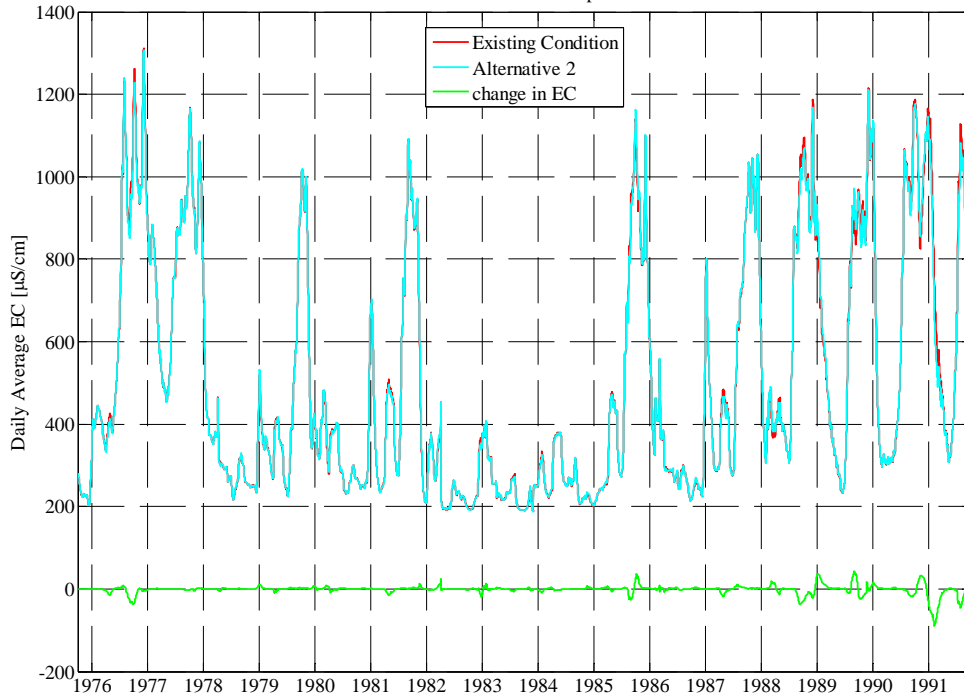
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Old River at Rock Slough Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



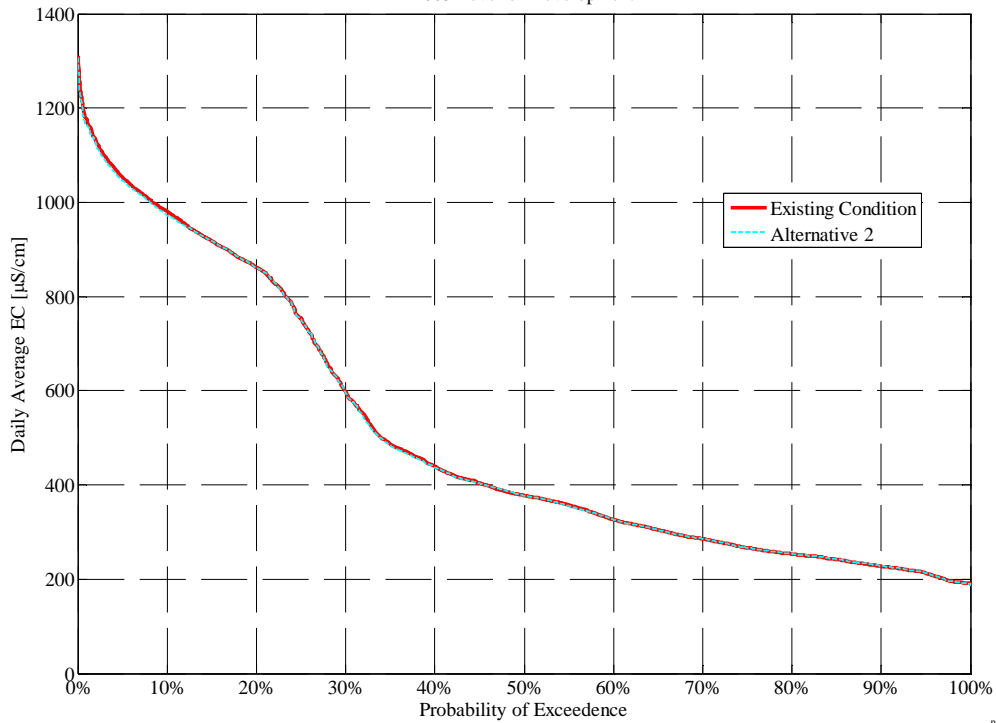
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Old River at Rock Slough Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River at Rock Slough Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

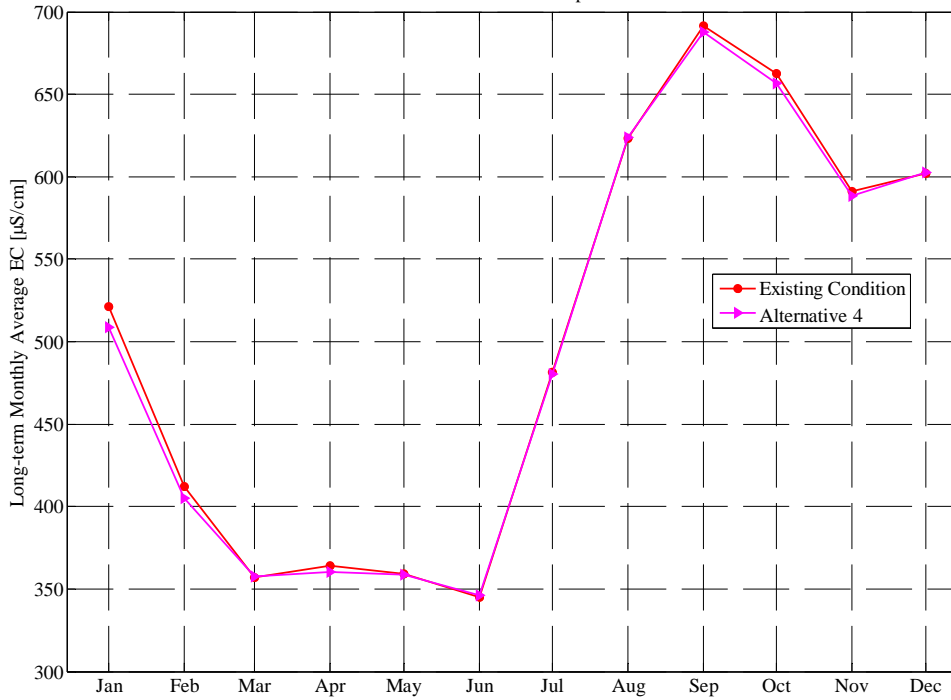
Alternative 4**Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)****Alternative 4****2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	247	227	245	403	432	373	378	407	555	960	1,007	963
1977	1,086	997	1,034	728	752	592	492	495	717	857	932	1,015
1978	1,028	830	926	502	372	367	332	295	270	232	284	299
1979	255	248	324	430	353	301	373	373	272	296	503	807
1980	967	699	374	345	420	388	363	393	300	242	259	283
1981	256	250	434	534	271	248	435	468	305	490	852	1,009
1982	899	606	232	318	304	336	222	195	233	238	225	208
1983	194	216	328	376	319	258	224	216	232	261	213	192
1984	197	216	245	302	259	229	342	377	277	259	273	249
1985	215	225	208	218	241	252	406	438	319	437	784	1,016
1986	966	861	891	448	411	414	299	287	272	256	284	233
1987	241	261	333	635	369	291	414	438	302	451	680	853
1988	974	963	879	412	417	413	416	406	346	484	827	975
1989	1,012	995	991	609	523	433	354	291	243	494	848	924
1990	882	920	1,105	823	360	312	312	330	438	827	1,003	1,040
1991	1,092	895	1,094	1,051	679	513	406	332	457	899	1,008	937
Avg	657	588	603	508	405	357	361	359	346	480	624	688
W/AN/BN	644	525	474	389	348	327	308	305	265	255	292	324
D/C	667	637	703	601	449	381	401	401	409	656	882	970

Percent (%) Change from Existing Condition for Old River at Rock Slough Salinity**(Alternative 4 - Existing Condition) / Existing Condition****2005 Level of Development**

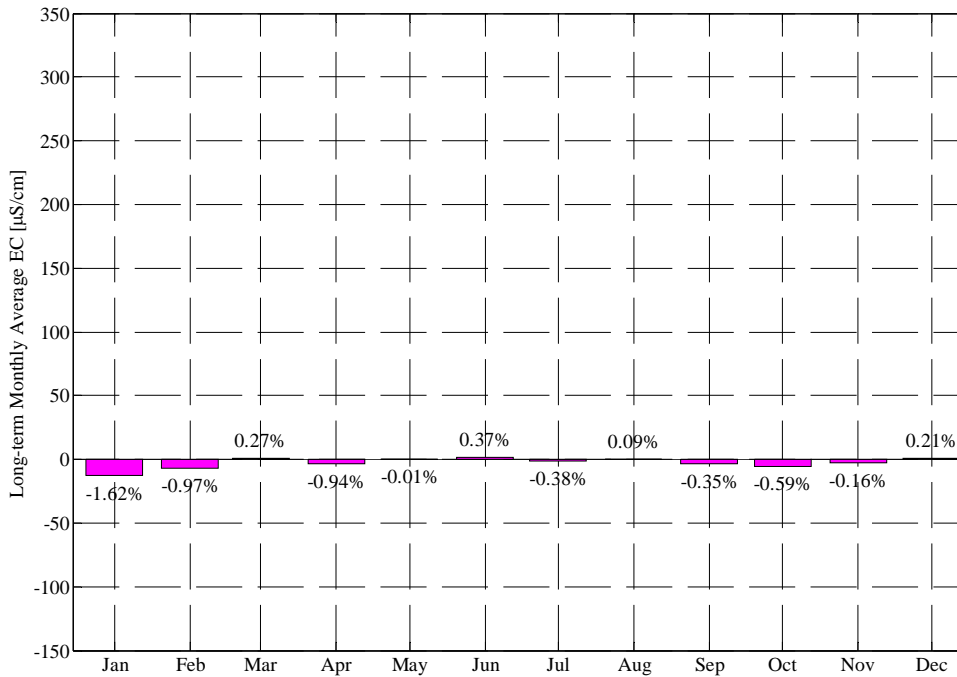
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	-0.1%	0.0%	0.0%	0.0%	-0.3%	-2.3%	-0.8%	0.4%	0.5%	-0.9%	-3.2%
1977	-1.6%	-0.9%	-4.8%	-11.9%	-6.6%	-1.6%	0.3%	0.2%	0.0%	0.7%	2.3%	1.7%
1978	-1.1%	-6.7%	-2.5%	0.0%	-0.2%	-0.1%	-0.8%	0.3%	-0.3%	0.0%	0.1%	0.1%
1979	0.0%	-0.3%	3.4%	3.4%	0.1%	0.1%	-1.5%	0.7%	-0.3%	0.8%	0.7%	0.1%
1980	-0.7%	-5.2%	-0.6%	-0.3%	1.1%	2.9%	-1.2%	-0.1%	0.3%	0.3%	-0.1%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.3%	-1.7%	-0.8%	-0.1%	0.1%	0.3%	0.0%
1982	-0.4%	-0.2%	0.0%	-0.7%	-0.6%	1.9%	0.1%	0.1%	-0.1%	0.1%	0.1%	0.2%
1983	0.1%	0.0%	-2.0%	-0.7%	-0.4%	0.0%	-1.0%	-0.9%	-0.2%	-1.1%	-0.2%	0.0%
1984	0.0%	0.0%	-0.2%	-0.4%	-0.1%	0.1%	-0.7%	-0.1%	0.0%	0.1%	0.2%	0.1%
1985	0.1%	0.0%	0.0%	-0.1%	0.1%	0.1%	-1.7%	-0.8%	6.5%	-0.6%	2.3%	-0.2%
1986	-0.7%	3.7%	8.6%	1.4%	0.2%	1.7%	-1.0%	0.2%	-1.1%	-1.8%	0.4%	-0.2%
1987	-0.7%	4.8%	-0.2%	-1.1%	-0.3%	0.3%	-2.5%	-1.2%	-0.5%	-1.2%	-1.2%	-0.1%
1988	0.0%	0.0%	-0.1%	-0.2%	0.6%	3.4%	-1.1%	1.0%	0.2%	-2.6%	-3.7%	-4.6%
1989	-2.1%	4.6%	2.6%	-19.2%	-10.2%	-3.8%	-0.4%	0.6%	0.0%	-0.7%	2.2%	2.9%
1990	-2.2%	-1.9%	-0.7%	3.9%	1.8%	0.4%	0.1%	0.7%	0.1%	-0.2%	0.2%	0.6%
1991	0.0%	-0.5%	-0.3%	0.0%	-0.8%	-0.5%	0.1%	0.8%	0.0%	-0.4%	-1.3%	-2.8%
Avg	-0.6%	-0.2%	0.2%	-1.6%	-1.0%	0.3%	-0.9%	0.0%	0.4%	-0.4%	0.1%	-0.3%
W/AN/BN	-0.4%	-1.2%	1.0%	0.4%	0.0%	0.9%	-0.9%	0.0%	-0.1%	-0.2%	0.2%	0.0%
D/C	-0.7%	0.7%	-0.4%	-3.2%	-1.7%	-0.3%	-1.0%	0.0%	0.7%	-0.5%	0.0%	-0.6%

Old River at Rock Slough Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



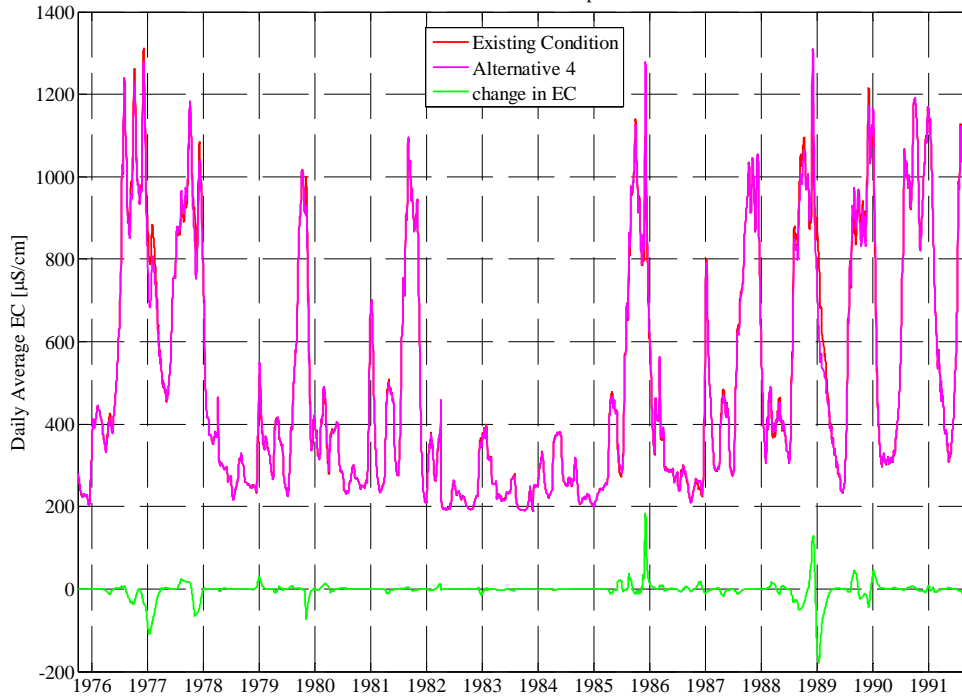
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Old River at Rock Slough Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



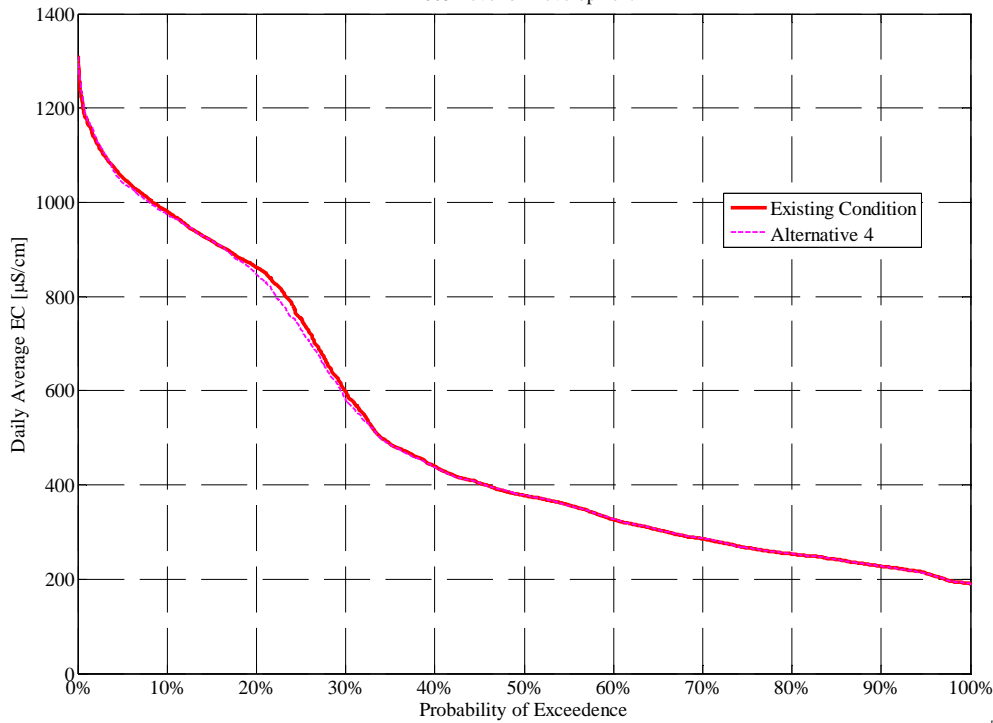
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Old River at Rock Slough Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River at Rock Slough Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Barker Slough at North Bay Aqueduct

Existing Condition

**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	192	190	202	210	229	228	220	218	215	213	206	198
1977	198	204	208	219	241	257	263	268	261	234	217	212
1978	217	222	236	326	589	550	559	342	225	206	204	205
1979	209	212	209	288	485	512	337	255	220	210	203	201
1980	198	198	216	341	535	641	405	269	214	204	204	205
1981	208	213	212	236	288	252	243	219	212	215	202	198
1982	203	207	240	375	576	458	563	392	226	205	205	199
1983	198	228	314	366	578	709	686	384	235	197	197	197
1984	198	203	256	390	278	257	237	217	209	207	201	206
1985	209	226	270	284	279	263	269	238	229	214	206	204
1986	209	212	225	301	441	640	522	317	223	209	206	206
1987	209	211	210	217	244	263	267	271	228	210	205	207
1988	210	221	223	276	394	416	340	257	237	213	206	207
1989	209	221	212	221	234	253	258	237	223	209	206	205
1990	205	202	205	224	288	351	304	263	218	217	210	208
1991	215	211	217	221	240	253	341	268	219	208	206	207
Avg	205	211	229	281	370	394	363	276	225	211	205	204
W/AN/BN	205	212	242	341	498	538	473	311	222	206	203	203
D/C	206	211	218	234	271	282	278	249	227	215	207	205

Alternative 1

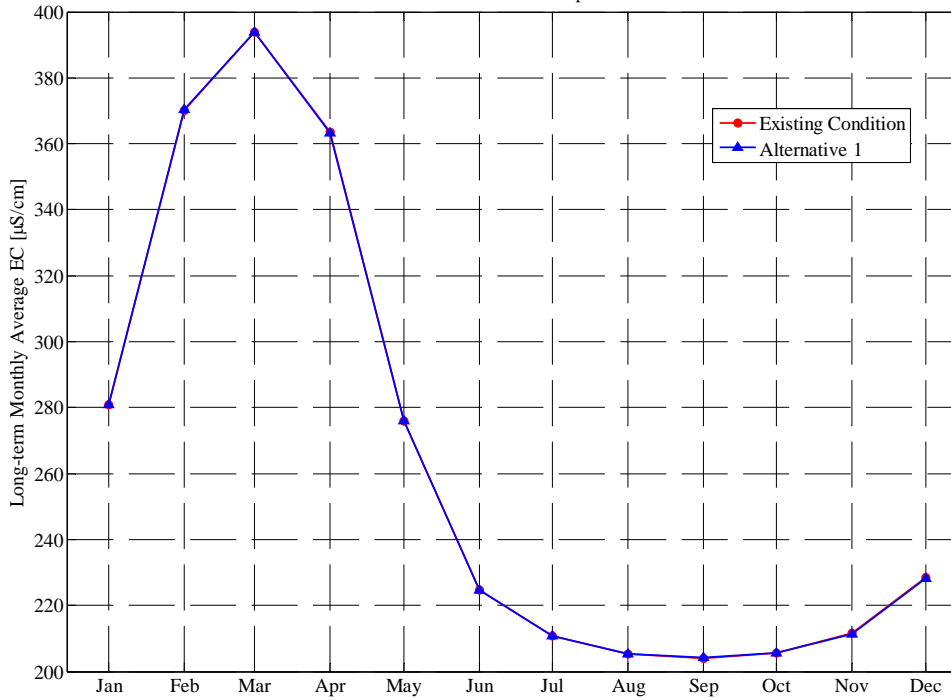
**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	192	191	202	210	230	228	220	218	216	213	206	198
1977	198	202	204	218	241	257	264	268	262	235	218	212
1978	218	222	236	325	590	549	558	342	225	206	204	205
1979	209	212	209	288	485	512	337	255	220	210	203	201
1980	198	198	216	341	535	641	405	270	214	204	204	205
1981	208	213	212	236	288	252	243	219	212	215	202	198
1982	203	207	240	375	576	458	564	392	226	205	205	199
1983	198	228	314	365	577	710	686	384	235	197	197	197
1984	198	203	256	390	278	256	237	217	209	207	201	206
1985	209	226	270	284	279	263	268	238	229	214	206	204
1986	209	212	225	301	441	640	522	318	223	209	206	206
1987	209	211	210	217	244	263	267	271	228	210	205	207
1988	210	221	223	276	394	416	340	257	237	213	206	207
1989	209	221	212	221	234	253	258	237	224	209	206	205
1990	206	202	206	224	290	350	301	263	218	219	211	208
1991	215	212	217	221	239	252	341	267	218	207	206	207
Avg	206	211	228	281	370	394	363	276	225	211	205	204
W/AN/BN	205	212	242	341	498	538	473	311	222	206	203	203
D/C	206	211	217	234	271	281	278	249	227	215	207	205

**Percent (%) Change from Existing Condition for Barker Slough at North Bay Aqueduct
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

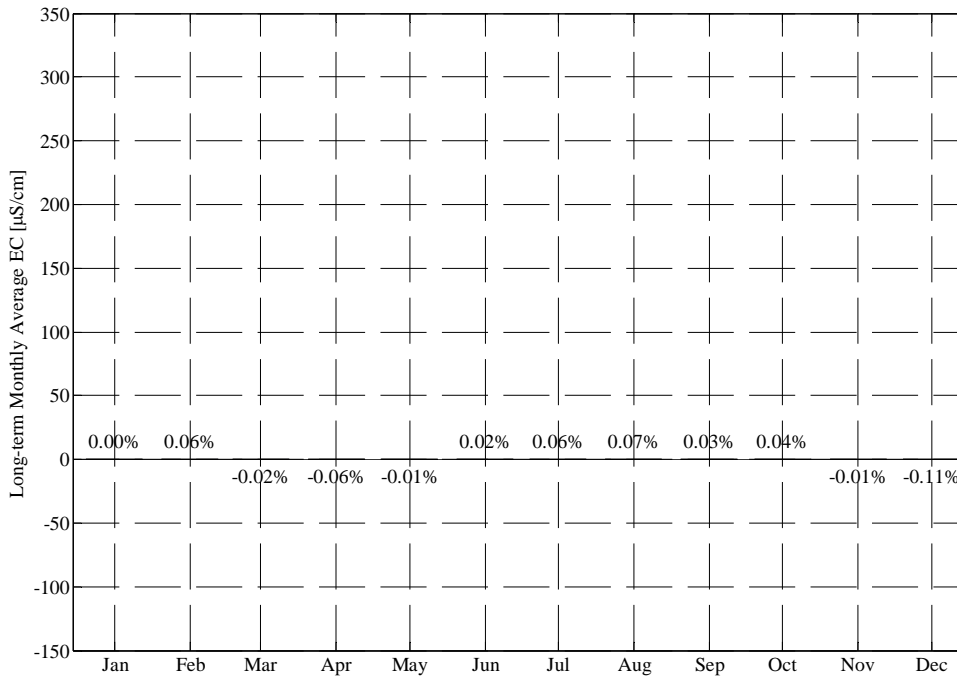
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.1%	0.1%	0.0%	0.2%	0.0%	0.0%	-0.2%	0.1%	0.0%	0.0%	0.0%
1977	0.0%	-1.0%	-1.9%	-0.2%	0.0%	0.0%	0.2%	0.1%	0.3%	0.4%	0.4%	0.1%
1978	0.1%	0.1%	-0.2%	0.0%	0.2%	-0.2%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%
1982	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
1986	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%
1987	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.2%	-0.1%	-0.1%	0.0%	0.0%
1989	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	0.0%	0.0%
1990	0.2%	0.2%	0.1%	0.1%	0.9%	-0.1%	-1.0%	-0.2%	0.2%	0.7%	0.6%	0.2%
1991	0.1%	0.2%	0.1%	0.0%	-0.2%	-0.1%	0.0%	-0.2%	-0.3%	-0.3%	0.0%	0.0%
Avg	0.0%	0.0%	-0.1%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.1%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.1%	-0.1%	-0.2%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.1%	0.0%

Barker Slough at North Bay Aqueduct Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



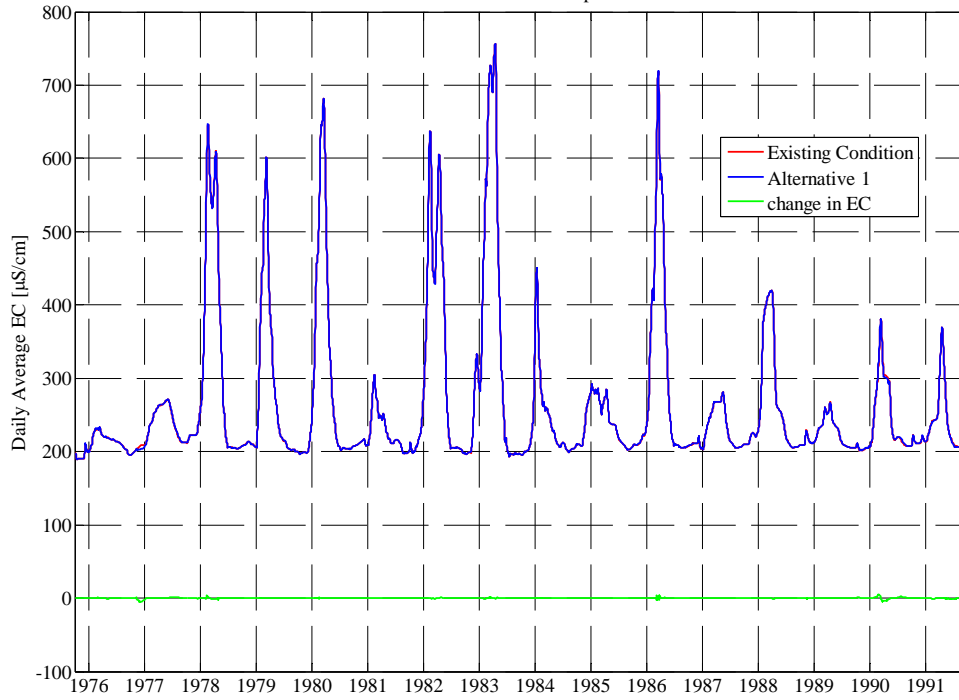
p_lve_wq_feir.m
 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



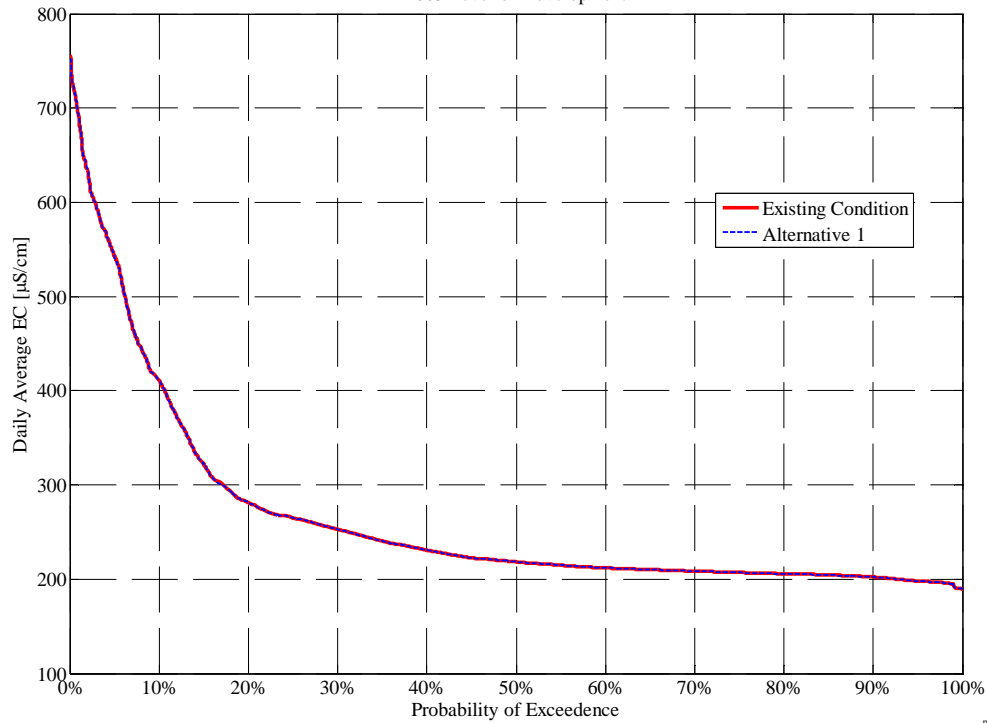
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 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

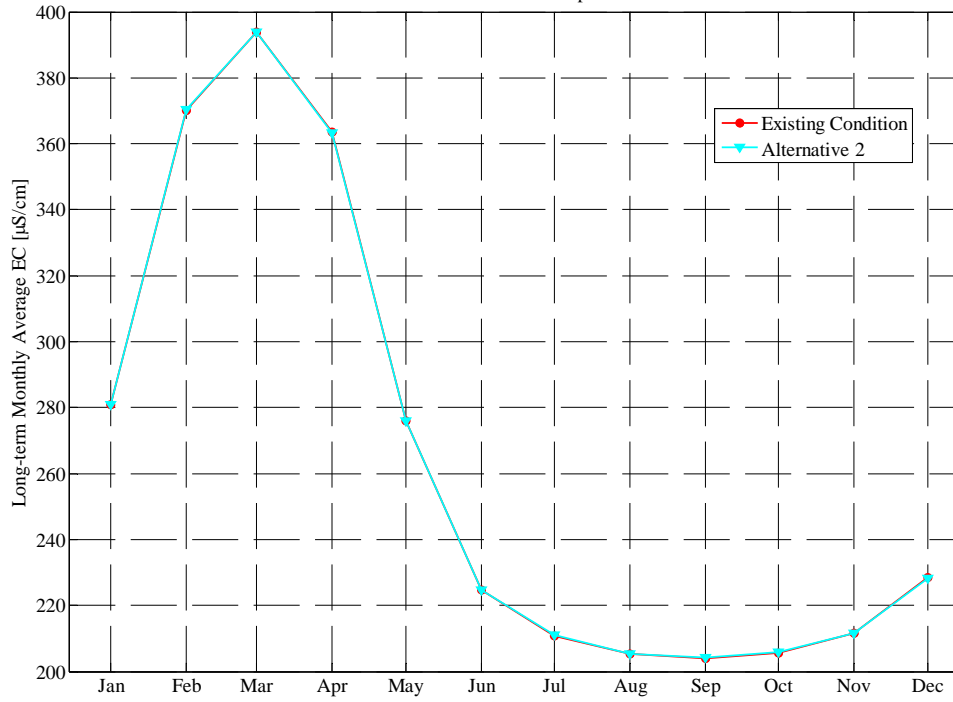
Alternative 2**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 2****2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	192	191	202	210	230	228	220	218	216	213	206	198
1977	198	203	204	218	241	257	264	268	262	236	218	213
1978	218	222	236	325	591	549	558	342	225	206	204	205
1979	209	212	209	288	485	512	337	255	220	210	203	201
1980	198	198	216	341	535	641	405	270	214	204	204	205
1981	208	213	212	236	288	252	243	219	212	215	202	198
1982	203	207	240	375	576	458	564	392	226	205	205	199
1983	198	228	314	366	577	710	686	384	235	197	197	197
1984	198	203	256	390	278	257	237	217	209	207	201	206
1985	209	226	270	284	279	263	268	238	229	214	206	204
1986	209	212	225	301	441	640	522	318	223	209	206	206
1987	209	211	210	217	244	263	267	271	228	210	205	207
1988	210	221	223	276	394	416	340	257	237	213	206	207
1989	213	222	212	221	234	253	258	237	223	209	206	205
1990	206	202	206	224	290	350	301	263	218	219	211	208
1991	215	212	217	221	239	252	341	267	218	207	206	207
Avg	206	211	228	281	370	394	363	276	225	211	205	204
W/AN/BN	205	212	242	341	498	538	473	311	222	206	203	203
D/C	207	211	217	234	271	282	278	249	227	215	207	205

**Percent (%) Change from Existing Condition for Barker Slough at North Bay Aqueduct
(Alternative 2 - Existing Condition) / Existing Condition****2005 Level of Development**

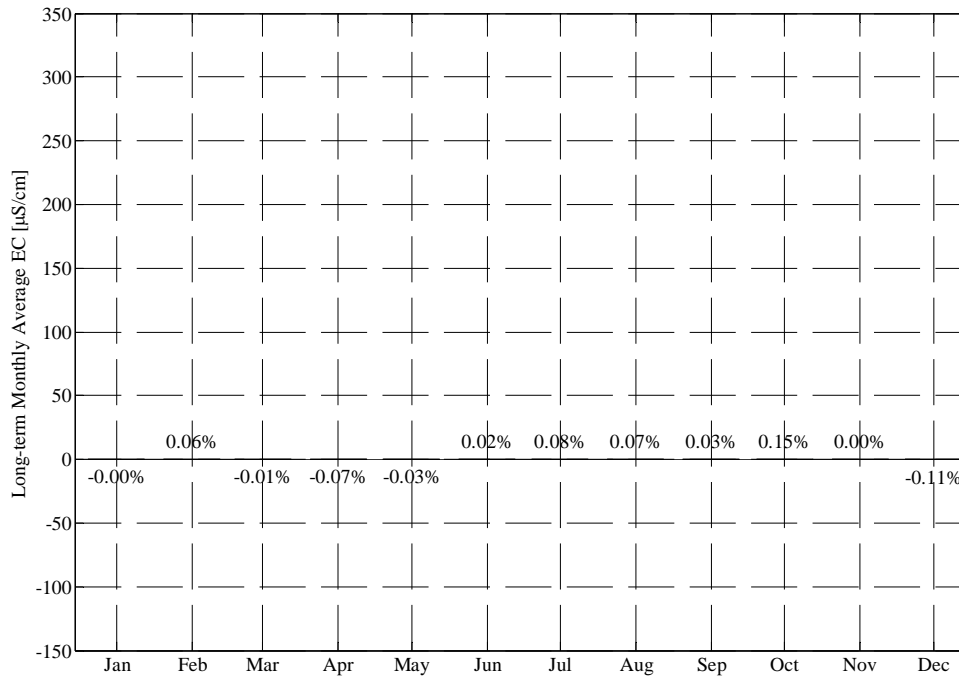
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.1%	0.1%	0.0%	0.3%	0.1%	0.0%	-0.2%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	-0.9%	-2.0%	-0.2%	0.0%	0.1%	0.1%	0.0%	0.4%	0.8%	0.5%	0.2%
1978	0.1%	0.1%	-0.2%	-0.1%	0.2%	-0.1%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
1986	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%
1987	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.0%
1989	1.8%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	0.0%	0.0%
1990	0.2%	0.2%	0.1%	0.1%	0.8%	-0.1%	-1.0%	-0.2%	0.2%	0.7%	0.6%	0.2%
1991	0.1%	0.2%	0.1%	0.0%	-0.2%	-0.1%	0.0%	-0.2%	-0.3%	-0.3%	0.0%	0.0%
Avg	0.1%	0.0%	-0.1%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.1%	0.0%
W/AN/BN	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.2%	0.0%	-0.2%	0.0%	0.1%	0.0%	-0.1%	-0.1%	0.0%	0.1%	0.1%	0.0%

Barker Slough at North Bay Aqueduct Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



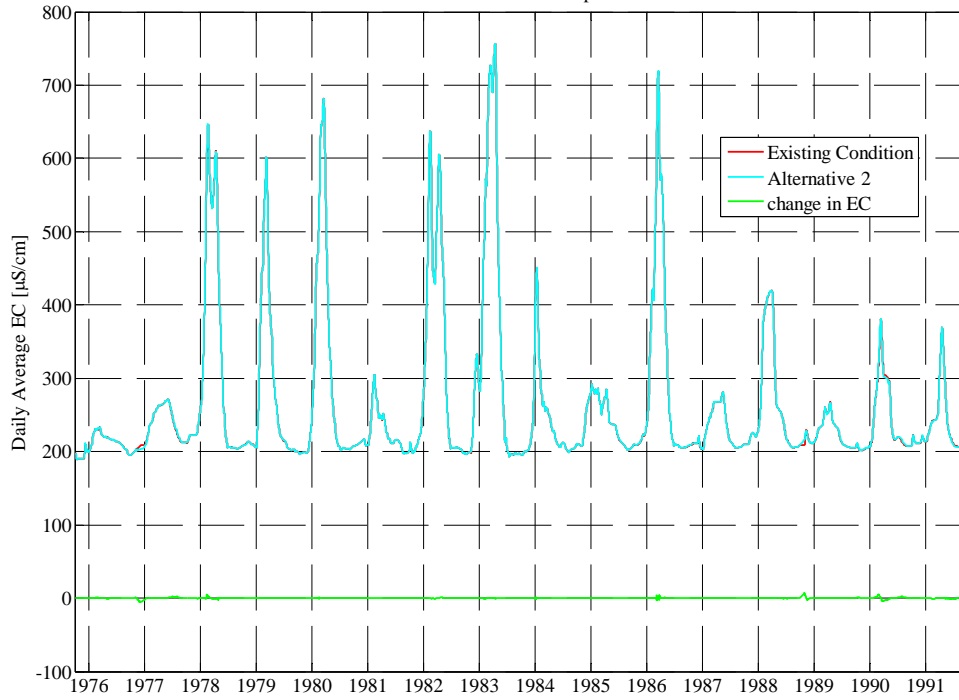
p_lve_wq_feir.m
 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



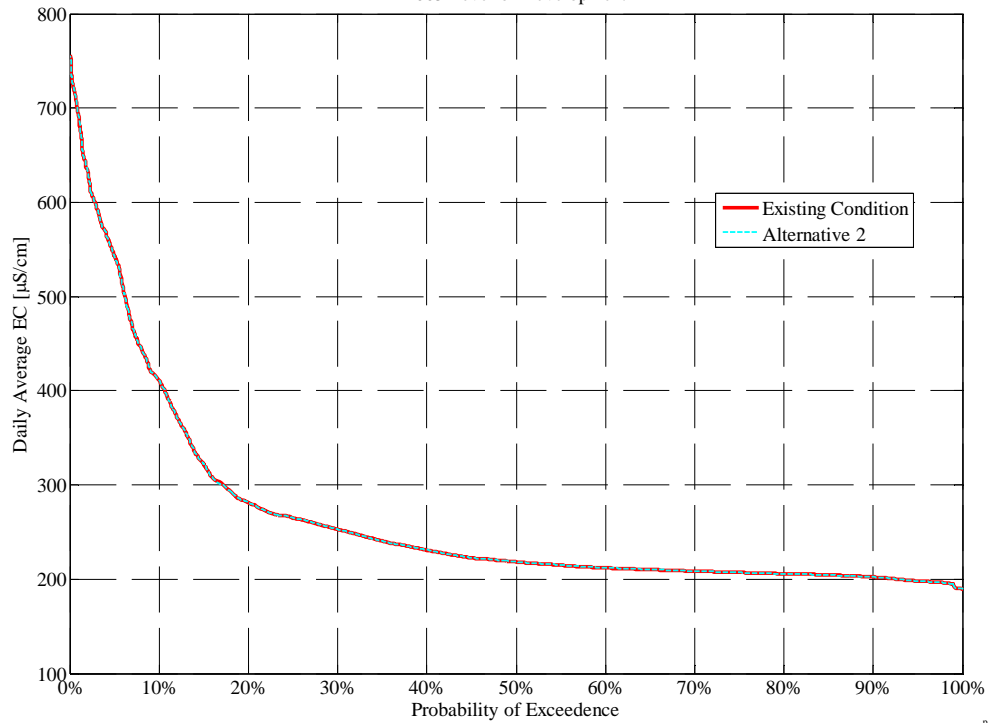
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 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 4

2005 Level of Development

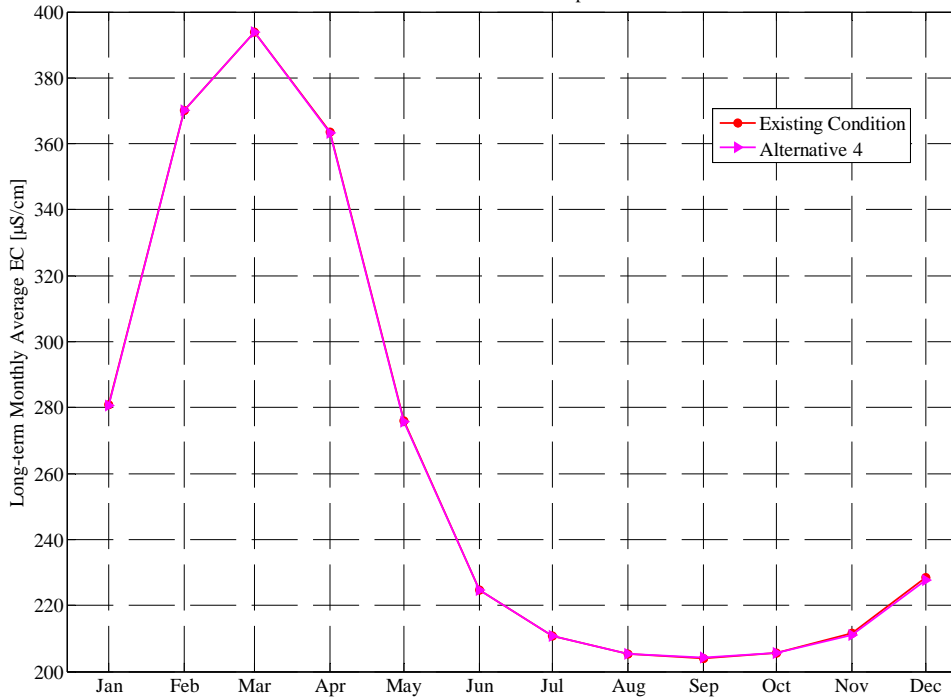
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	192	191	202	210	230	228	220	218	216	213	206	198
1977	198	202	203	216	241	257	263	268	262	237	218	213
1978	218	222	236	325	588	550	560	342	225	206	204	205
1979	209	212	209	288	485	512	337	255	220	210	203	201
1980	198	199	216	341	535	641	405	270	214	204	204	205
1981	208	213	212	236	288	252	243	219	212	215	202	198
1982	203	207	240	375	576	458	564	392	226	205	205	199
1983	198	228	314	366	577	710	686	384	235	197	197	197
1984	198	203	256	390	278	257	237	217	209	207	201	206
1985	209	226	270	284	279	263	268	238	229	214	206	204
1986	209	209	219	301	442	641	521	316	222	209	205	206
1987	208	211	210	217	244	262	267	271	228	210	205	207
1988	210	220	224	276	393	415	341	257	236	212	206	207
1989	210	221	212	221	234	253	258	237	223	209	206	205
1990	205	202	205	224	289	351	303	263	218	219	211	208
1991	215	212	216	221	240	253	341	267	218	207	206	207
Avg	206	211	228	281	370	394	363	276	225	211	205	204
W/AN/BN	205	212	241	341	497	538	473	311	221	205	203	203
D/C	206	211	217	234	271	281	278	249	227	215	207	205

**Percent (%) Change from Existing Condition for Barker Slough at North Bay Aqueduct
(Alternative 4 - Existing Condition) / Existing Condition**

2005 Level of Development

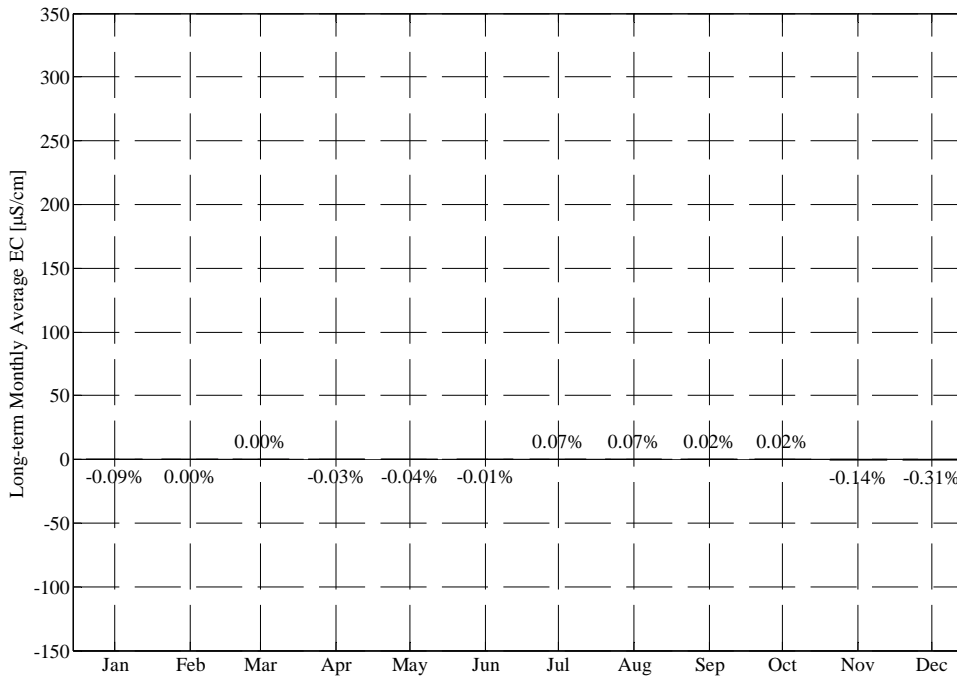
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.1%	0.1%	0.0%	0.3%	0.2%	0.0%	-0.3%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	-1.0%	-2.5%	-1.3%	-0.2%	0.0%	0.0%	0.0%	0.5%	0.9%	0.6%	0.3%
1978	0.2%	0.2%	-0.3%	-0.2%	-0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
1980	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.1%	0.3%	0.1%	-0.1%
1986	0.0%	-1.2%	-2.6%	-0.1%	0.2%	0.1%	-0.2%	-0.4%	-0.3%	-0.2%	-0.2%	-0.2%
1987	-0.2%	-0.2%	0.0%	0.1%	-0.1%	-0.2%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	-0.3%	0.4%	-0.1%	-0.3%	-0.1%	0.0%	0.0%	-0.5%	-0.3%	0.0%	0.1%
1989	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
1990	-0.1%	-0.1%	0.0%	0.1%	0.3%	0.0%	-0.4%	0.0%	0.2%	0.6%	0.5%	0.2%
1991	0.1%	0.1%	-0.1%	-0.1%	0.1%	0.1%	0.0%	-0.1%	-0.1%	-0.2%	0.0%	0.0%
Avg	0.0%	-0.1%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
W/AN/BN	0.0%	-0.1%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
D/C	0.0%	-0.1%	-0.2%	-0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.1%	0.1%

Barker Slough at North Bay Aqueduct Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



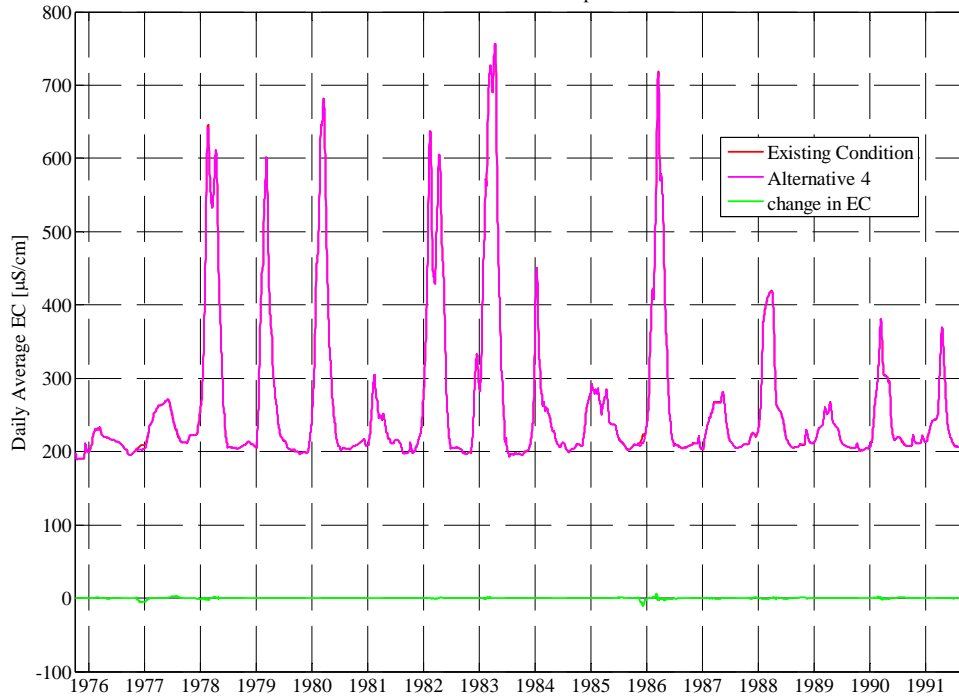
p_lve_wq_feir.m
 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



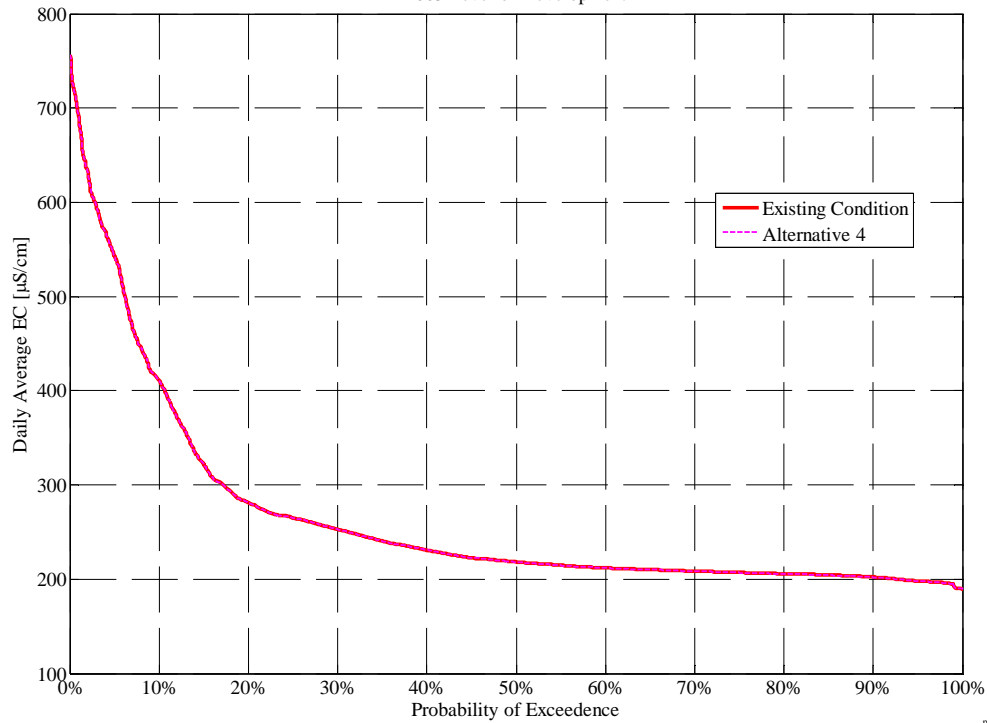
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 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake

Existing Condition

**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	198	198	201	205	210	237	224	209	206	202	195	196
1977	198	206	208	210	211	251	238	217	206	203	203	201
1978	205	213	382	747	801	797	612	345	245	205	200	200
1979	201	205	208	675	766	559	354	259	215	204	199	199
1980	201	202	327	639	757	640	398	272	223	204	200	200
1981	200	205	208	414	311	225	262	224	206	202	199	198
1982	199	201	426	709	639	646	716	525	254	206	202	201
1983	199	200	200	680	782	791	662	395	250	208	199	198
1984	198	201	493	553	465	283	247	216	204	202	198	198
1985	200	200	200	200	201	215	281	232	208	202	198	198
1986	199	204	205	510	744	789	548	305	234	207	200	200
1987	201	206	207	208	208	211	256	227	205	199	196	200
1988	204	208	211	573	649	393	294	231	208	201	197	202
1989	207	211	213	213	213	227	257	223	203	198	196	196
1990	197	201	204	205	205	245	289	235	208	202	198	200
1991	206	209	209	211	213	228	317	269	211	199	197	201
Avg	201	204	256	434	461	421	372	274	218	203	199	199
W/AN/BN	200	204	320	645	708	644	505	331	232	205	200	199
D/C	201	205	207	271	269	248	269	230	207	201	198	199

Alternative 1

**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

**Alternative 1
2005 Level of Development**

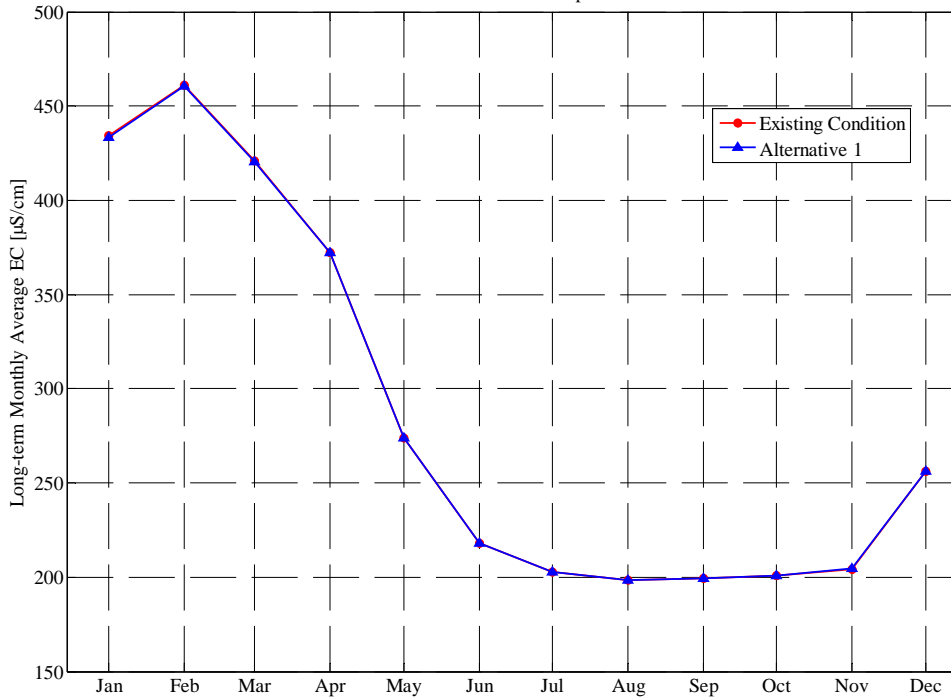
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	198	197	200	204	209	237	224	209	206	202	195	196
1977	198	206	208	209	210	249	238	217	206	203	203	201
1978	205	214	384	732	791	793	611	345	245	205	200	200
1979	201	205	207	674	766	559	355	259	215	204	199	199
1980	201	202	326	639	757	640	398	272	223	204	200	200
1981	200	205	208	414	311	225	262	224	206	202	199	198
1982	199	201	426	709	638	645	716	525	254	206	202	201
1983	199	200	200	685	783	792	662	395	251	208	199	198
1984	198	201	494	553	465	283	247	216	204	202	198	198
1985	200	200	200	200	201	215	281	232	208	202	198	198
1986	200	204	206	508	744	789	548	305	234	207	200	200
1987	201	206	207	208	209	211	256	227	205	199	196	200
1988	204	208	211	573	649	393	294	231	209	201	197	202
1989	207	211	213	214	213	227	257	223	203	198	196	196
1990	197	201	204	205	206	245	288	235	208	202	198	200
1991	206	209	209	211	213	227	317	269	211	199	197	201
Avg	201	204	256	434	460	421	372	274	218	203	199	199
W/AN/BN	200	204	320	643	707	643	505	331	232	205	200	199
D/C	201	205	207	271	269	248	269	230	207	201	198	199

**Percent (%) Change from Existing Condition for Cache Slough at City of Vallejo Intake
(Alternative 1 - Existing Condition) / Existing Condition**

2005 Level of Development

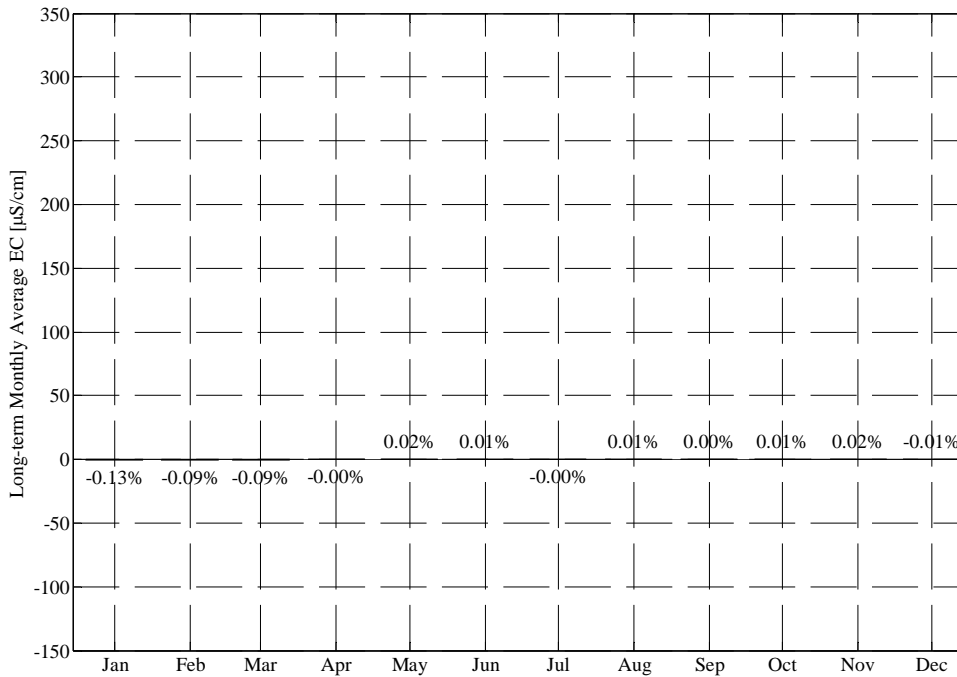
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.1%	-0.4%	-0.4%	-0.4%	-0.1%	0.0%	0.2%	-0.1%	0.1%	0.0%	0.0%	0.0%
1977	0.1%	0.1%	-0.1%	-0.3%	-0.7%	-0.8%	0.0%	0.2%	0.1%	0.0%	0.0%	-0.1%
1978	0.1%	0.5%	0.5%	-2.0%	-1.2%	-0.5%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1986	0.0%	0.0%	0.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%
1989	-0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	-0.1%	0.0%	0.0%	0.1%	0.0%	-0.2%	0.0%	0.0%	0.1%	0.0%	0.1%
1991	0.0%	0.0%	0.1%	0.1%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
Avg	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.1%	0.0%	-0.2%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Cache Slough at City of Vallejo Intake Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



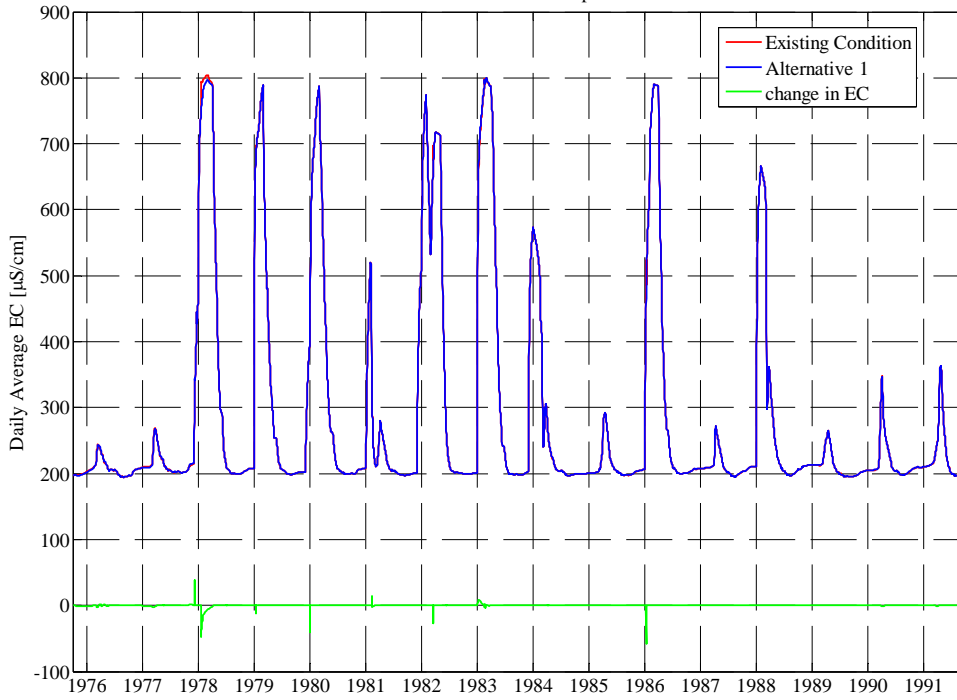
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



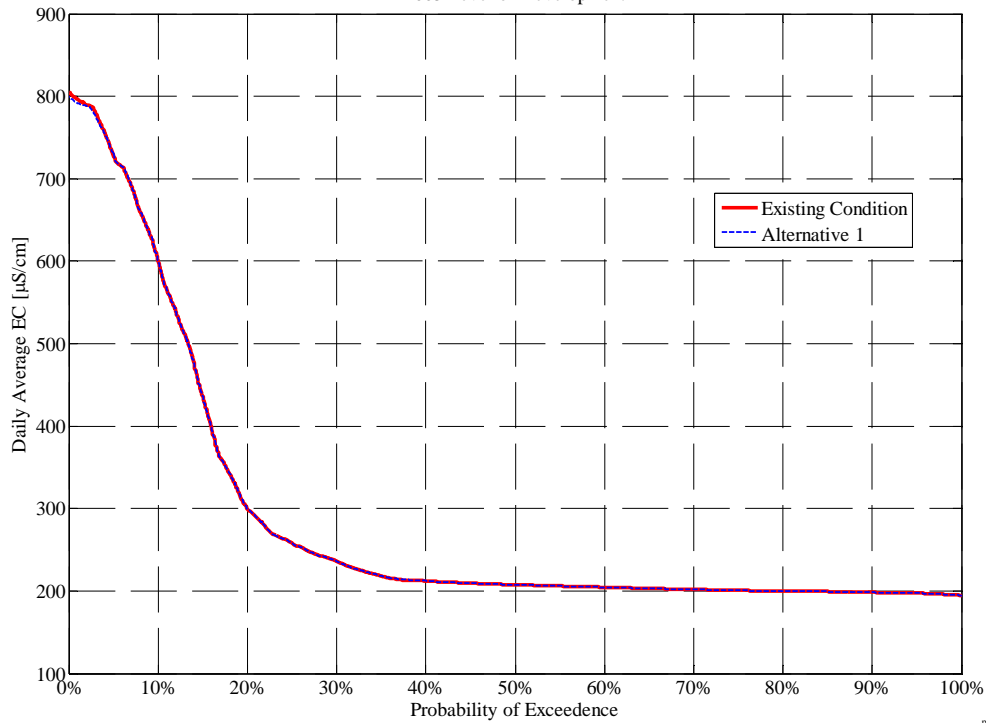
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 2

2005 Level of Development

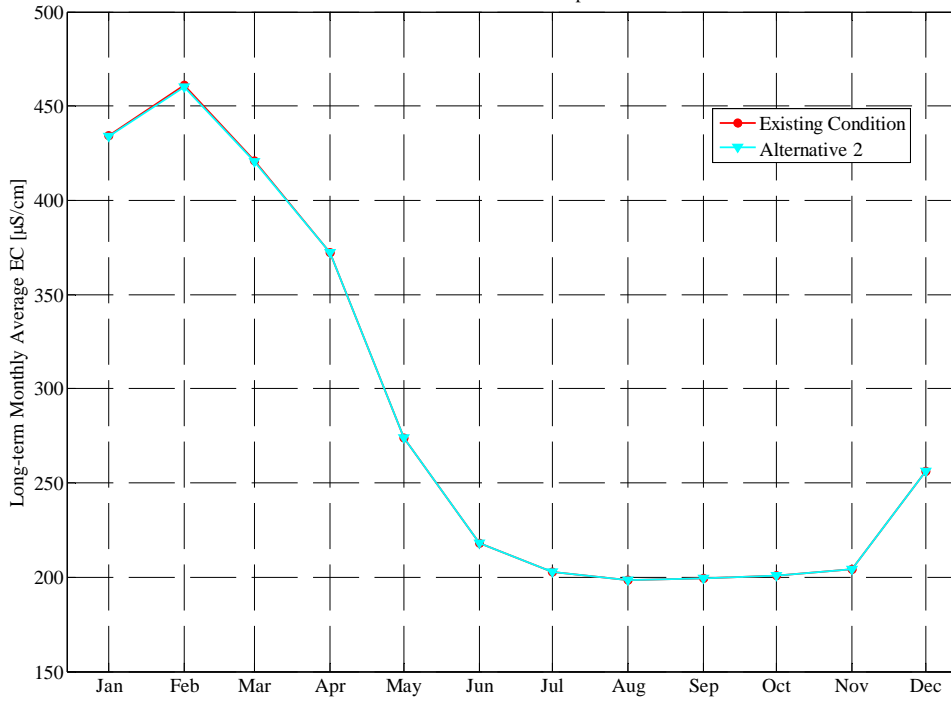
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	198	197	200	204	209	237	224	209	206	202	195	196
1977	198	205	208	209	210	249	238	217	206	203	203	201
1978	205	214	384	732	791	793	611	345	245	205	200	200
1979	201	205	207	674	766	559	355	259	216	204	199	199
1980	201	202	326	639	757	640	398	272	223	204	200	200
1981	200	205	208	414	311	225	262	224	206	202	199	198
1982	199	201	426	709	638	645	716	525	254	206	202	201
1983	199	200	200	685	783	792	662	395	250	208	199	198
1984	198	201	494	553	465	283	248	216	204	202	198	198
1985	200	200	200	200	201	215	281	232	208	202	198	198
1986	200	204	206	510	744	789	548	305	234	207	200	200
1987	201	206	207	208	209	211	256	227	205	199	196	200
1988	204	208	211	573	649	393	294	231	209	201	197	202
1989	207	211	212	213	212	227	257	223	203	198	196	196
1990	197	201	204	205	206	245	288	235	208	202	198	200
1991	206	209	209	211	213	227	317	269	211	199	197	201
Avg	201	204	256	434	460	421	372	274	218	203	199	199
W/AN/BN	200	204	320	643	707	643	505	331	232	205	200	199
D/C	201	205	207	271	269	248	269	230	207	201	198	199

**Percent (%) Change from Existing Condition for Cache Slough at City of Vallejo Intake
(Alternative 2 - Existing Condition) / Existing Condition**

2005 Level of Development

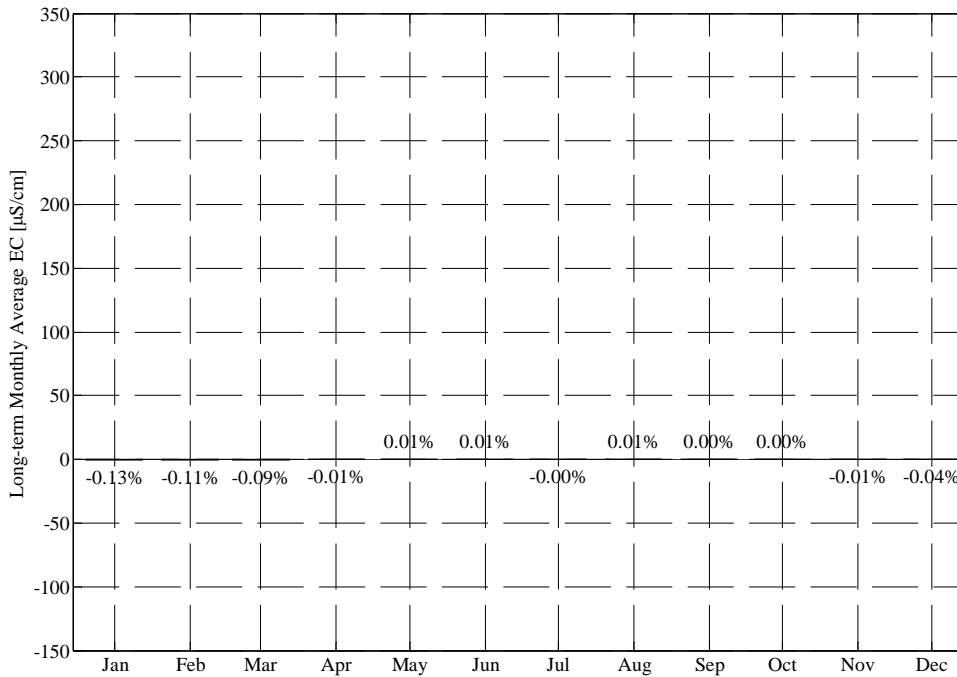
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.1%	-0.4%	-0.4%	-0.4%	-0.1%	0.0%	0.2%	-0.1%	0.1%	0.0%	0.0%	0.0%
1977	0.1%	-0.1%	-0.1%	-0.4%	-0.7%	-0.8%	0.0%	0.2%	0.1%	0.1%	0.0%	-0.1%
1978	0.1%	0.5%	0.5%	-2.0%	-1.2%	-0.5%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
1989	-0.1%	-0.2%	-0.3%	-0.3%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%	0.1%	0.0%	0.1%
1991	0.0%	0.0%	0.1%	0.1%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
Avg	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.1%	0.0%	-0.2%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Cache Slough at City of Vallejo Intake Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



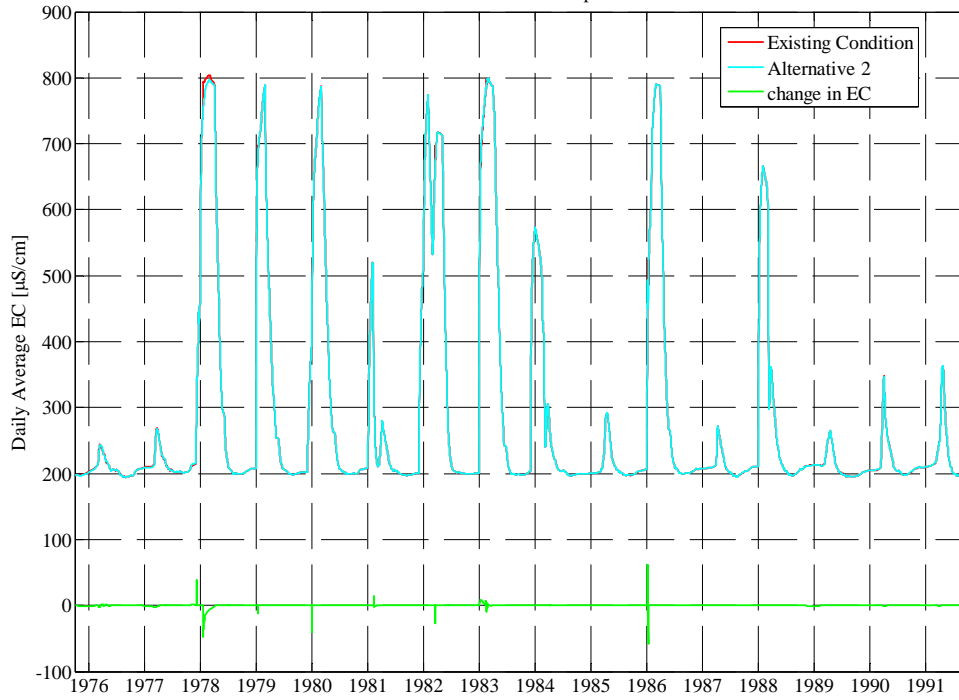
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



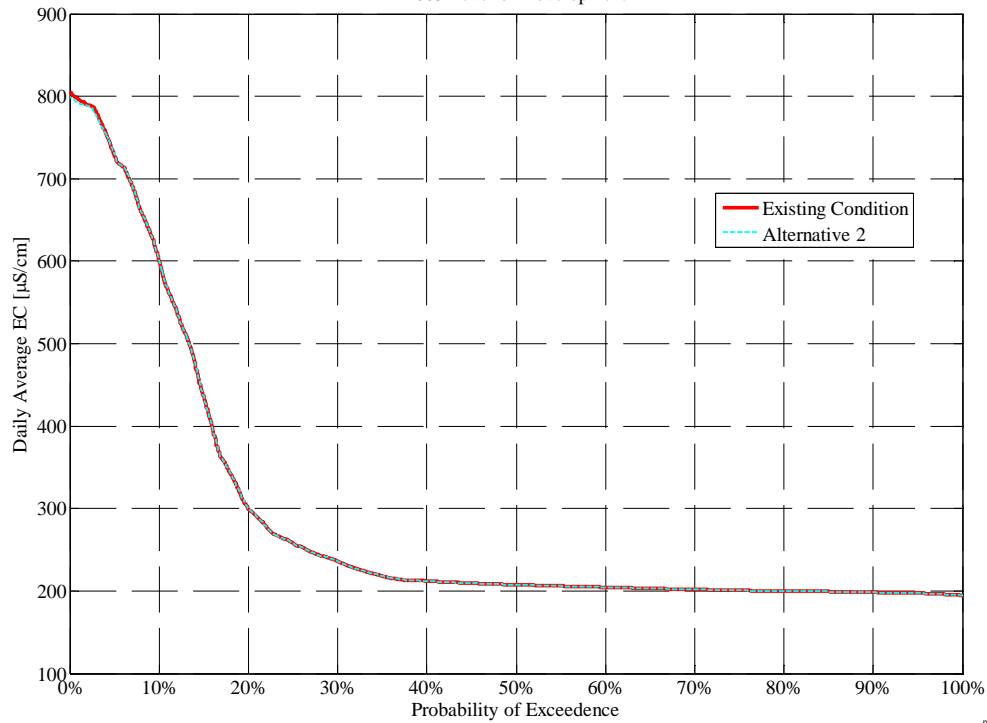
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 4

2005 Level of Development

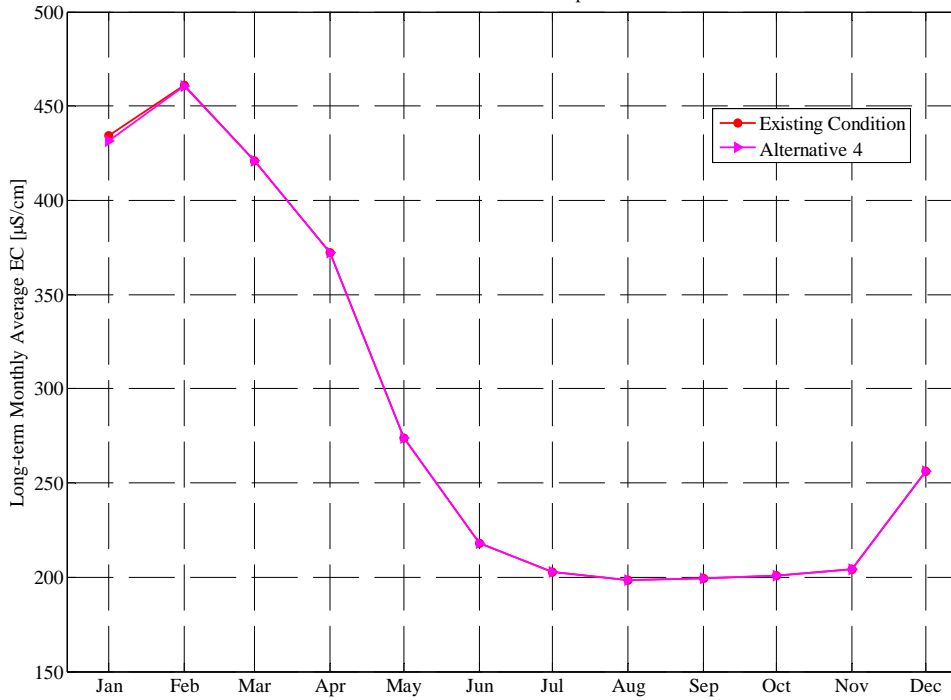
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	198	197	200	204	209	237	224	209	206	202	195	196
1977	198	206	208	209	209	249	239	217	206	203	203	202
1978	205	214	381	752	808	800	613	345	245	205	200	200
1979	201	205	207	675	767	559	354	259	215	204	199	199
1980	201	202	326	640	758	640	398	272	223	204	200	200
1981	200	205	208	414	311	225	262	224	206	202	199	198
1982	199	201	426	709	638	645	716	525	254	206	202	201
1983	199	200	200	686	784	792	662	395	250	208	199	198
1984	198	201	493	553	465	283	248	216	204	202	198	198
1985	200	200	200	200	201	215	281	232	208	202	198	198
1986	199	204	206	453	729	785	547	305	233	206	200	200
1987	201	206	207	208	209	211	256	227	205	199	196	200
1988	204	209	211	574	649	393	294	231	208	201	198	202
1989	207	211	213	213	213	227	257	223	203	198	196	196
1990	197	201	204	205	205	245	288	235	208	202	198	200
1991	206	209	209	211	213	228	317	269	211	199	197	202
Avg	201	204	256	432	461	421	372	274	218	203	199	199
W/AN/BN	200	204	320	638	707	643	505	331	232	205	200	199
D/C	201	205	207	271	269	248	269	230	207	201	198	199

**Percent (%) Change from Existing Condition for Cache Slough at City of Vallejo Intake
(Alternative 4 - Existing Condition) / Existing Condition**

2005 Level of Development

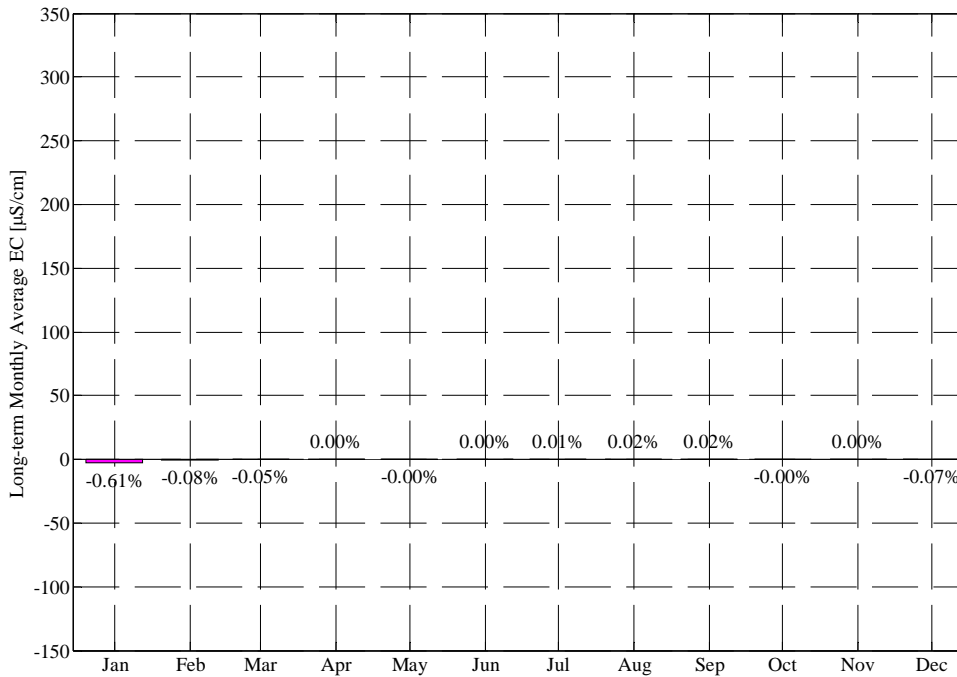
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.1%	-0.4%	-0.4%	-0.4%	-0.1%	0.0%	0.2%	-0.1%	0.1%	0.0%	0.0%	0.0%
1977	0.1%	0.1%	-0.1%	-0.3%	-0.7%	-0.9%	0.0%	0.2%	0.1%	0.1%	0.2%	0.0%
1978	0.1%	0.4%	-0.3%	0.7%	0.8%	0.4%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	-0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	-0.1%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	0.1%	-0.1%
1986	-0.1%	0.0%	0.1%	-11.2%	-2.0%	-0.5%	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%	-0.1%
1987	-0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.1%
1988	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
1991	0.0%	0.0%	0.1%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Avg	0.0%	0.0%	-0.1%	-0.6%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.1%	-0.1%	-1.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	-0.1%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Cache Slough at City of Vallejo Intake Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



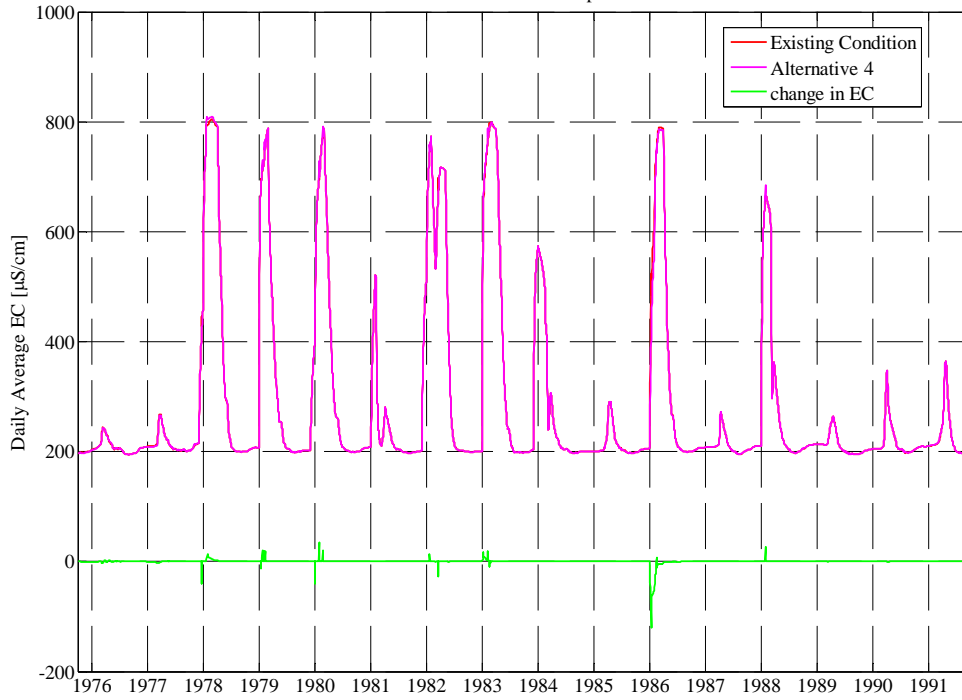
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



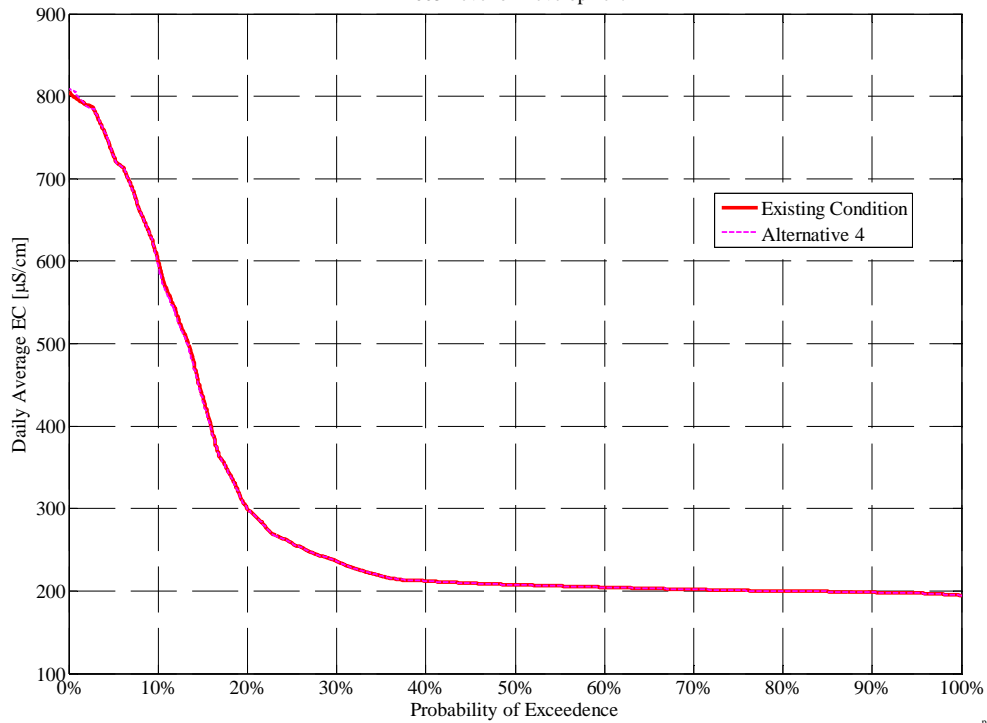
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River near Tracy Road Bridge

Existing Condition

**Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	406	522	811	841	947	968	520	469	564	665	666	665
1977	568	669	848	905	956	976	650	611	665	689	704	710
1978	734	757	872	819	609	593	291	265	405	556	516	471
1979	512	532	758	726	400	336	386	315	452	632	572	555
1980	473	569	801	379	343	230	345	372	389	462	469	491
1981	458	521	751	795	929	913	454	383	605	665	650	632
1982	535	638	806	774	332	321	188	180	378	417	363	257
1983	196	218	276	325	300	255	199	201	213	232	197	237
1984	357	172	236	304	237	340	343	321	494	604	546	470
1985	412	511	791	796	837	915	434	403	613	666	631	600
1986	527	602	792	872	539	287	260	260	417	582	508	452
1987	409	455	733	808	946	940	442	380	609	669	612	629
1988	565	649	838	897	954	972	564	497	592	667	654	682
1989	607	681	829	904	955	961	679	594	659	673	666	643
1990	679	701	830	953	962	970	739	647	619	670	727	726
1991	706	706	854	956	963	960	719	654	623	670	764	732
Avg	509	557	739	753	700	684	451	409	518	595	578	559
W/AN/BN	476	498	649	600	394	338	288	273	392	498	453	419
D/C	534	602	809	873	939	953	578	515	616	670	675	669

Alternative 1

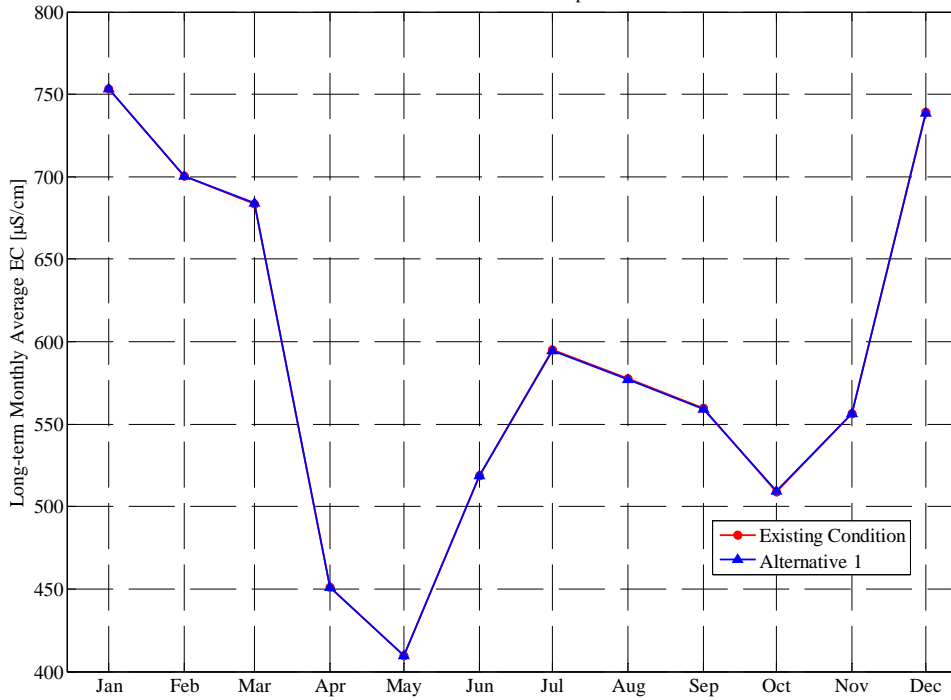
**Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	406	522	810	841	947	968	520	469	566	665	666	665
1977	568	668	847	905	956	976	650	611	664	688	704	710
1978	734	757	871	819	609	593	291	265	405	556	516	471
1979	512	532	758	726	400	336	387	315	452	632	572	555
1980	473	569	801	379	343	230	346	372	389	462	468	491
1981	459	521	750	795	929	913	454	383	604	665	650	632
1982	535	638	806	775	332	322	188	180	378	417	363	257
1983	196	218	276	324	300	255	199	201	213	232	197	237
1984	357	173	236	306	238	341	343	321	494	604	546	470
1985	412	512	791	796	837	915	434	403	613	666	631	600
1986	527	602	793	872	539	288	263	261	417	582	509	453
1987	411	455	732	808	945	940	442	380	612	669	615	632
1988	566	648	837	897	954	972	564	497	591	667	653	679
1989	608	681	829	904	955	961	680	594	659	673	666	643
1990	679	702	830	953	962	970	739	647	620	670	726	724
1991	706	706	853	956	963	960	720	654	623	670	749	727
Avg	509	557	739	753	700	684	451	409	519	595	577	559
W/AN/BN	476	499	649	600	394	338	288	274	392	498	453	419
D/C	535	602	809	873	939	953	578	515	617	670	673	668

**Percent (%) Change from Existing Condition for Old River near Tracy Road Bridge Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

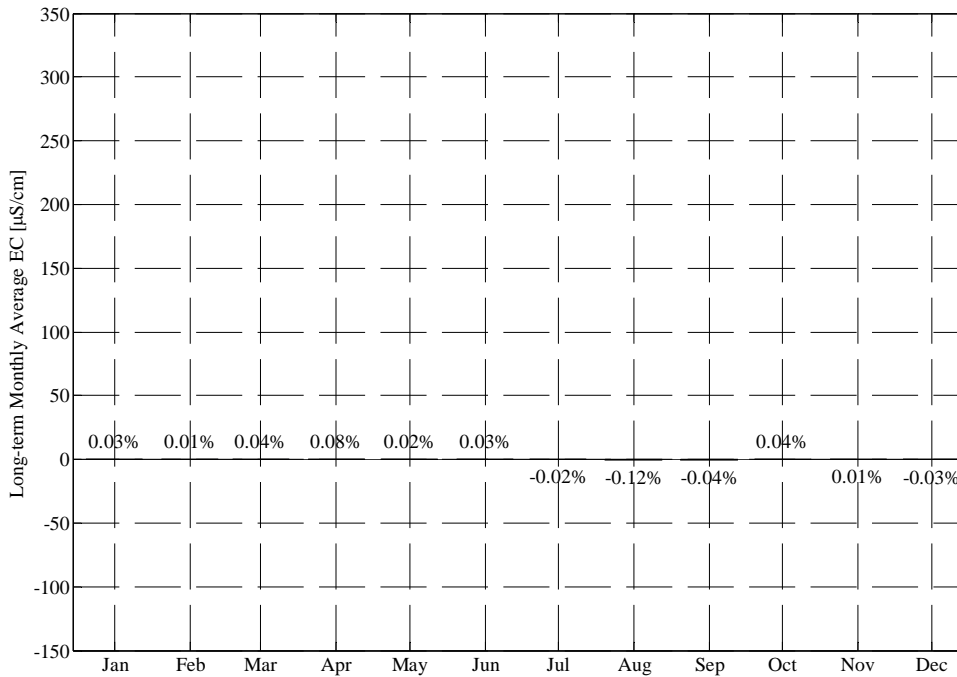
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	-0.1%
1977	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.1%	-0.1%
1978	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%
1984	-0.2%	0.5%	0.0%	0.4%	0.3%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.9%	0.2%	0.0%	0.0%	0.2%	0.2%
1987	0.5%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	0.4%
1988	0.1%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	-0.1%	-0.4%
1989	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	-0.1%	-0.3%
1991	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	-2.0%	-0.6%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%
W/AN/BN	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	-0.1%

Old River near Tracy Road Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



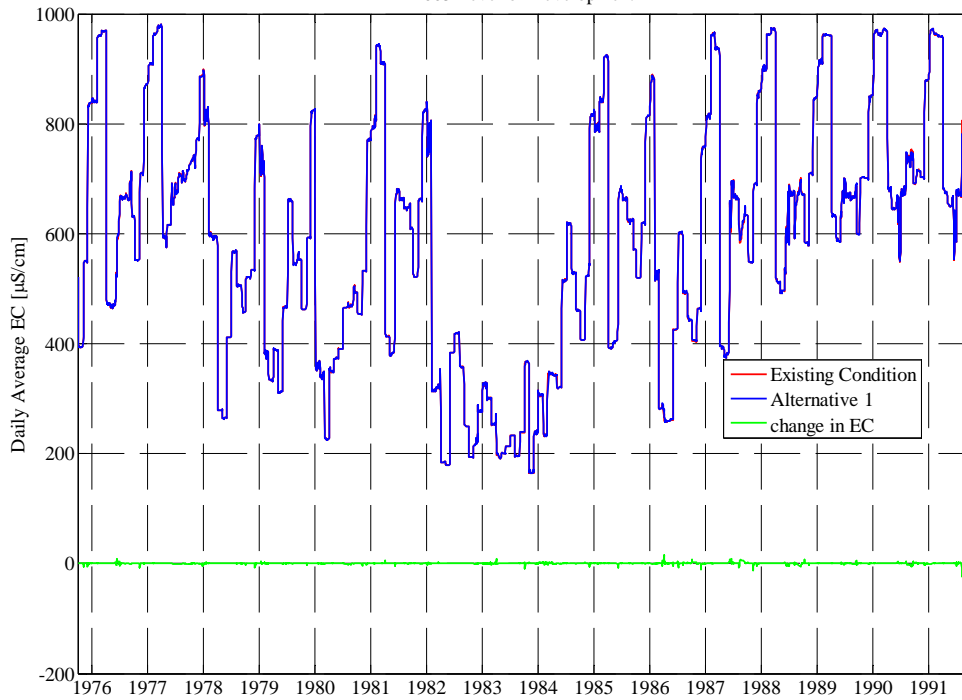
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Tracy Road Bridge Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



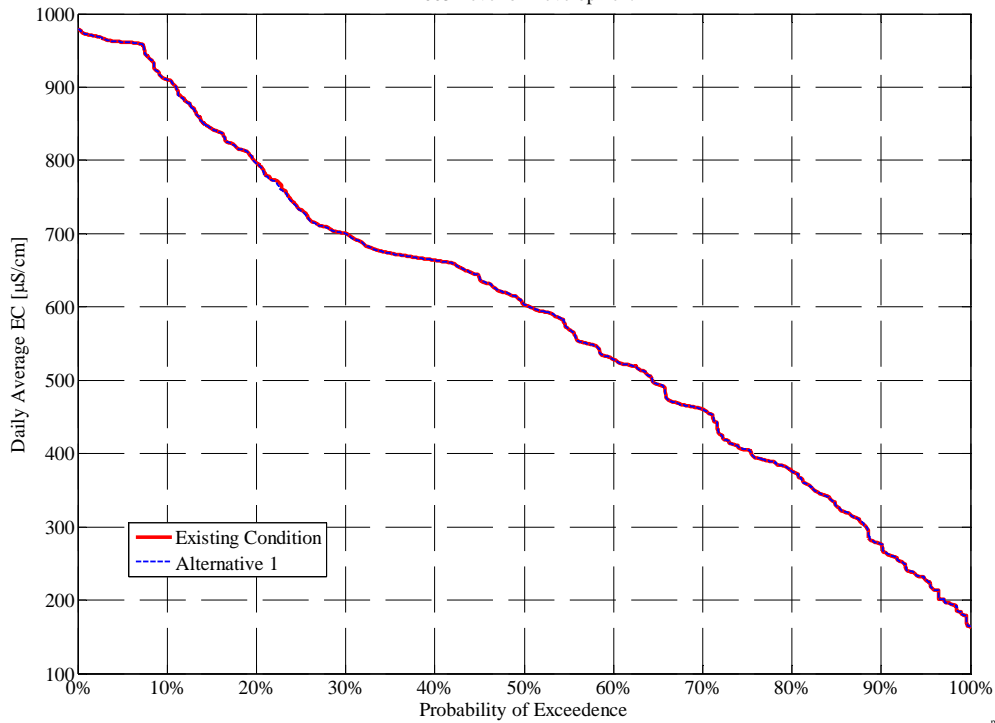
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Old River near Tracy Road Bridge Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River near Tracy Road Bridge Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

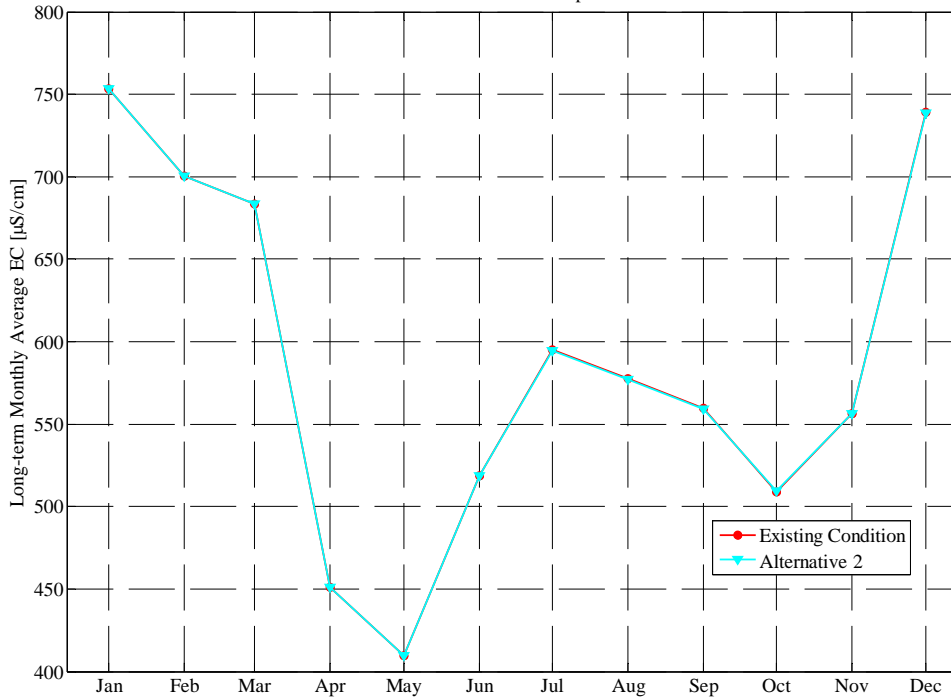
Alternative 2**Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 2****2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	406	522	810	841	947	968	520	469	566	665	666	665
1977	568	669	844	906	957	976	650	611	664	688	704	710
1978	734	757	872	819	609	593	291	265	405	556	516	471
1979	512	532	757	727	400	336	387	315	452	632	572	555
1980	473	569	801	379	343	230	346	372	389	462	468	491
1981	459	521	751	796	928	913	454	383	604	665	650	632
1982	535	638	806	774	332	322	188	180	378	417	363	257
1983	196	218	276	325	300	255	198	201	213	232	197	237
1984	357	172	236	305	237	341	343	321	494	604	546	470
1985	412	512	791	796	837	915	434	403	613	666	631	600
1986	527	602	793	869	539	288	263	261	417	582	509	453
1987	411	455	732	809	947	940	442	380	612	669	615	632
1988	566	649	837	897	954	972	564	497	591	667	652	679
1989	608	681	829	904	955	961	680	594	659	673	666	643
1990	679	702	830	953	962	970	739	647	620	670	726	724
1991	706	706	853	956	963	960	720	654	623	670	749	728
Avg	509	556	739	753	701	684	451	410	519	595	577	559
W/AN/BN	476	498	649	600	394	338	288	274	392	498	453	419
D/C	535	602	809	873	939	953	578	515	617	670	673	668

**Percent (%) Change from Existing Condition for Old River near Tracy Road Bridge
(Alternative 2 - Existing Condition) / Existing Condition****2005 Level of Development**

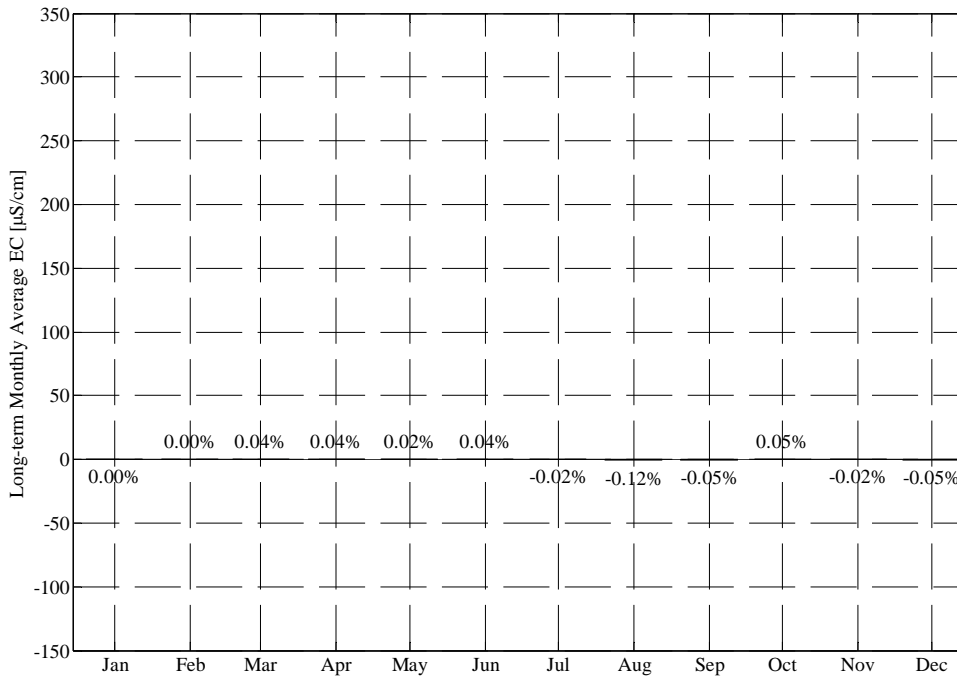
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	-0.1%
1977	0.0%	-0.1%	-0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.1%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%	0.0%
1981	0.0%	0.0%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	-0.1%	0.0%	0.0%	-0.2%	0.1%	-0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	-0.3%	0.0%	0.2%	0.9%	0.2%	0.0%	0.0%	0.2%	0.2%
1987	0.5%	0.0%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	0.4%
1988	0.1%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	-0.3%	-0.5%
1989	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	-0.1%	-0.3%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	-1.9%	-0.6%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	-0.1%

Old River near Tracy Road Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development

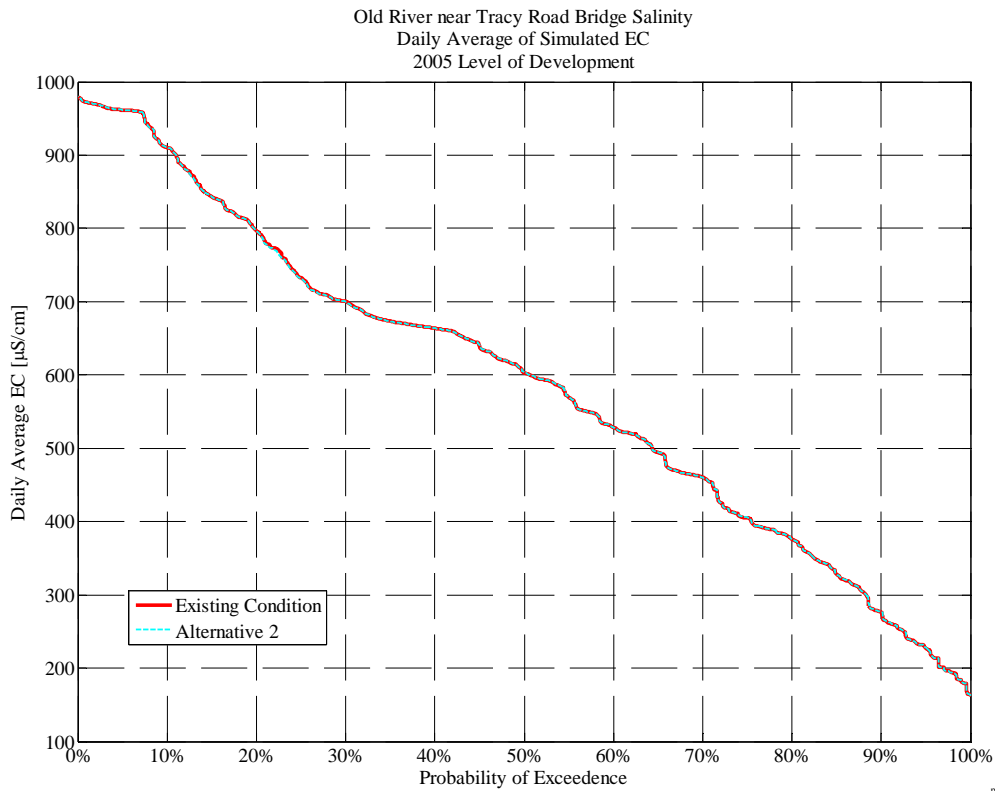
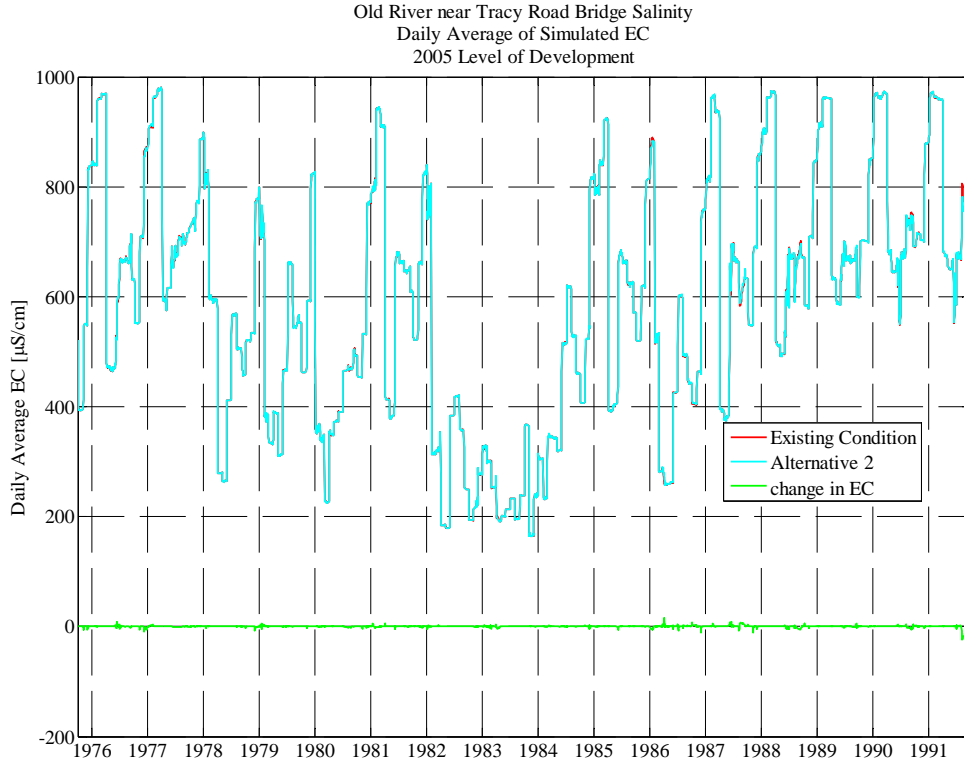


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Old River near Tracy Road Bridge Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



p_lve_wq_feir.m
 07-Jan-2010 DS



Alternative 4

**Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 4

2005 Level of Development

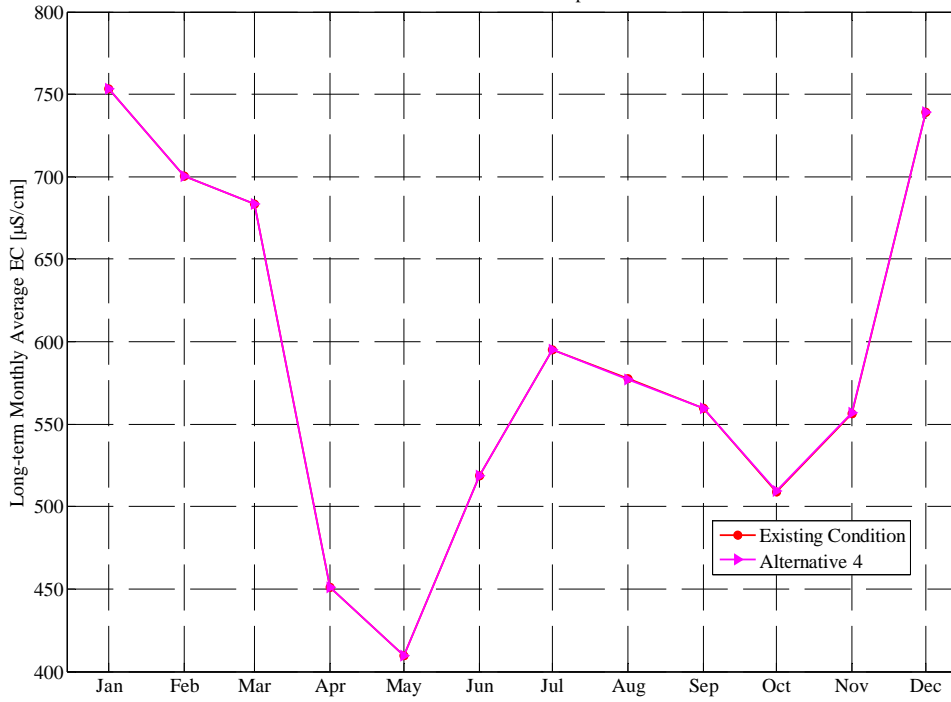
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	406	522	809	842	948	968	520	469	565	665	666	666
1977	568	669	847	905	956	976	650	611	665	690	711	719
1978	736	757	872	819	609	593	291	265	405	555	518	471
1979	512	532	758	725	400	336	387	315	452	632	572	555
1980	473	569	801	378	343	230	345	372	389	462	469	491
1981	458	521	751	795	929	913	454	383	605	665	650	632
1982	535	638	806	774	332	321	188	180	378	417	363	257
1983	196	218	276	325	300	255	199	201	213	232	197	237
1984	357	172	236	304	237	341	343	321	494	604	546	470
1985	412	511	792	796	837	915	434	403	601	667	631	600
1986	527	603	793	870	539	288	263	261	417	582	510	453
1987	411	455	733	808	946	940	442	380	618	669	609	628
1988	565	649	838	897	954	972	564	497	595	668	637	672
1989	606	681	829	904	955	961	679	594	659	673	666	643
1990	679	702	833	953	962	970	739	647	620	670	727	728
1991	706	706	853	956	963	960	719	654	624	670	762	733
Avg	509	557	739	753	701	684	451	409	519	595	577	560
W/AN/BN	477	498	649	599	394	338	288	274	392	498	453	419
D/C	535	602	809	873	939	953	578	515	617	671	673	669

**Percent (%) Change from Existing Condition for Old River near Tracy Road Bridge
(Alternative 4 - Existing Condition) / Existing Condition**

2005 Level of Development

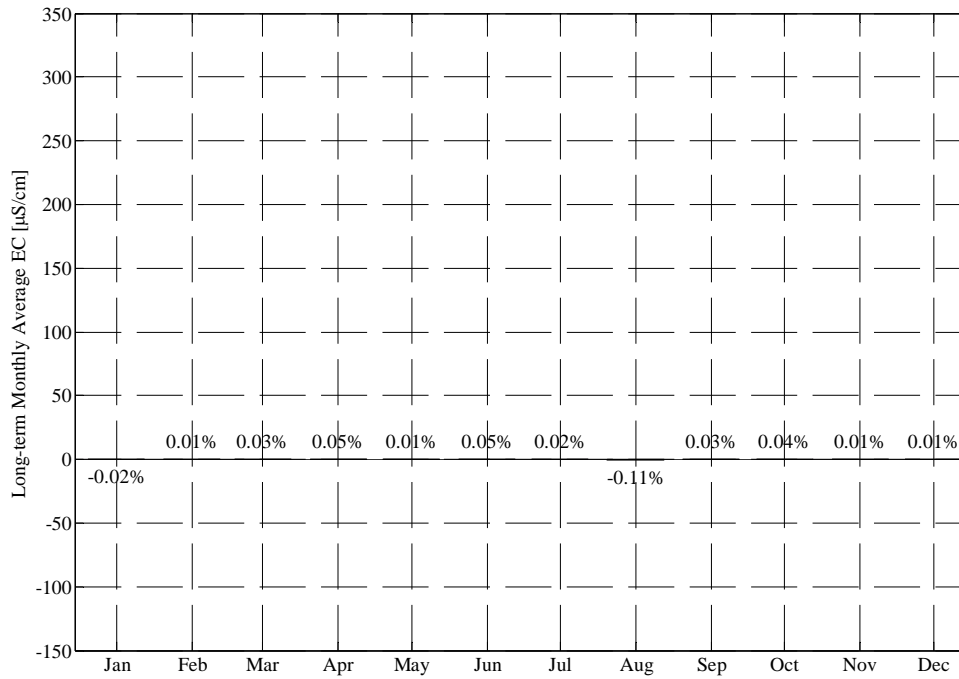
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	-0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.2%
1977	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.3%
1978	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.3%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-2.0%	0.2%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	-0.2%	0.0%	0.2%	0.8%	0.2%	0.0%	0.0%	0.2%	0.4%
1987	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	-0.5%	-0.2%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.1%	-2.5%	-1.5%
1989	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
1990	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	-0.2%	0.1%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	0.0%

Old River near Tracy Road Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



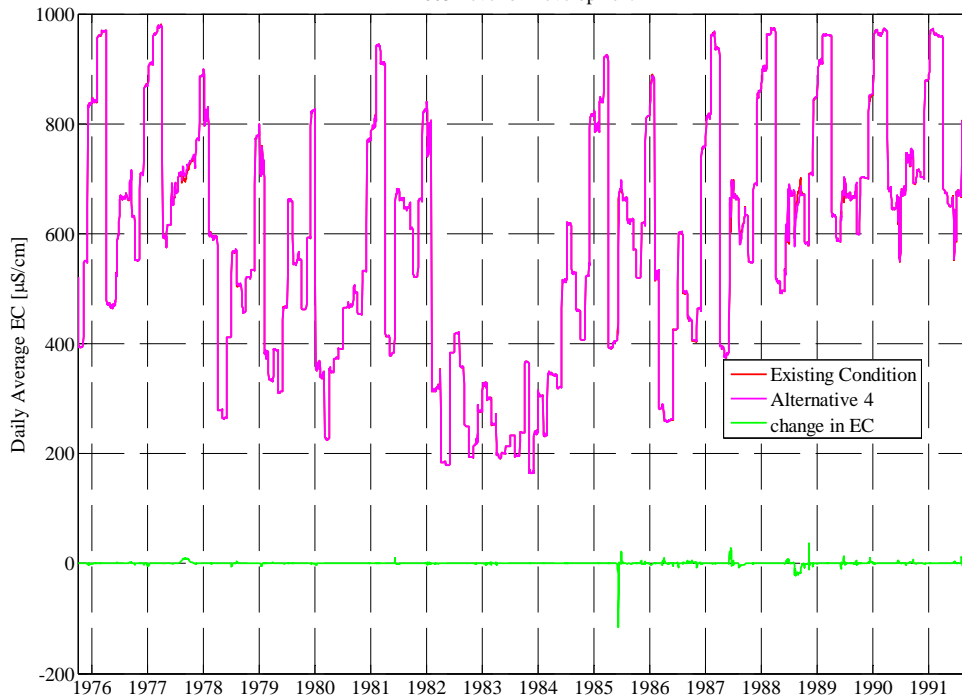
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Old River near Tracy Road Bridge Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



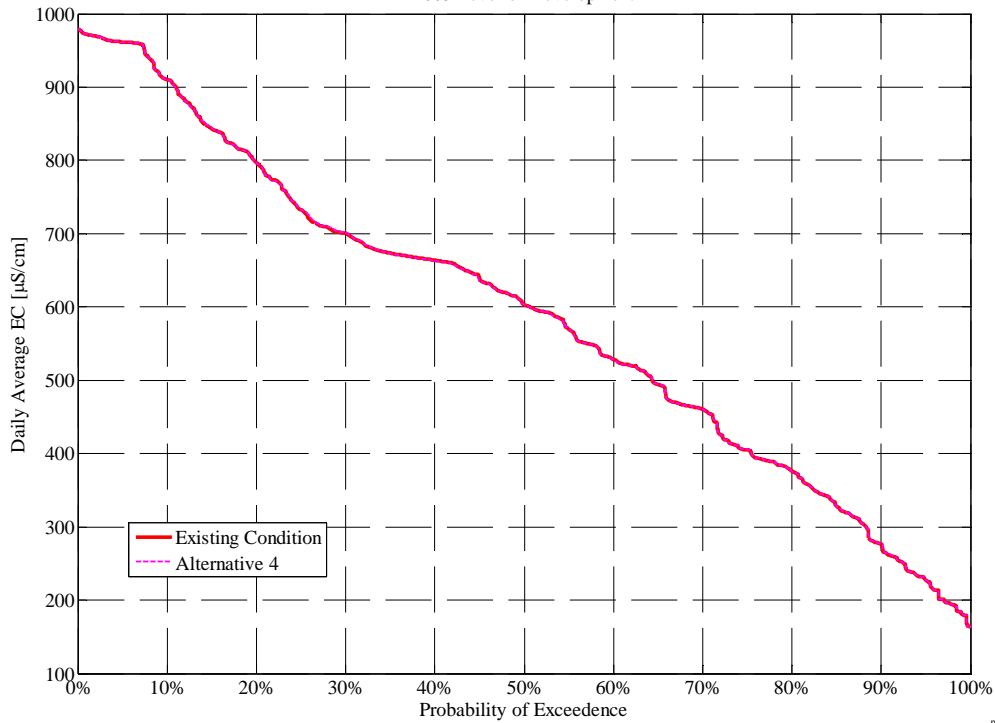
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Old River near Tracy Road Bridge Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Tracy Road Bridge Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River

Existing Condition

**Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	394	538	825	826	948	959	478	454	651	657	636	628
1977	549	697	862	892	950	962	588	607	664	667	658	717
1978	710	761	877	772	581	573	281	258	404	555	493	451
1979	510	528	768	685	370	327	380	305	441	645	537	545
1980	461	583	813	347	317	222	339	365	384	458	453	485
1981	448	524	763	774	926	903	419	369	648	655	638	606
1982	520	650	814	719	314	303	185	176	377	413	346	250
1983	192	207	273	276	285	232	189	199	211	229	190	235
1984	359	166	227	296	223	334	333	309	490	605	518	453
1985	404	506	800	774	829	913	397	389	648	656	612	567
1986	515	608	804	852	486	278	255	254	416	587	482	436
1987	398	455	747	792	946	925	398	366	648	657	654	628
1988	545	678	849	878	949	961	520	484	652	662	656	662
1989	576	698	839	896	950	953	630	575	656	660	654	598
1990	692	697	845	949	952	958	671	639	666	662	655	680
1991	704	696	870	950	953	952	671	641	662	662	656	716
Avg	499	562	749	730	686	672	421	399	538	589	552	541
W/AN/BN	467	501	654	564	368	324	280	267	389	499	431	408
D/C	523	610	822	859	934	943	530	503	655	660	646	645

Alternative 1

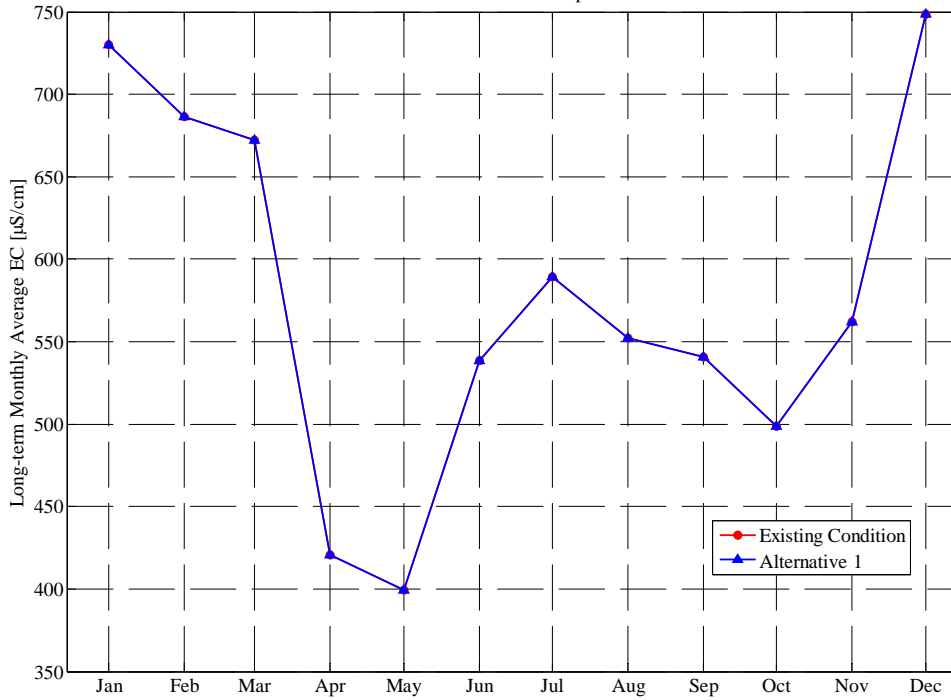
**Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	394	538	825	826	948	959	478	454	651	657	636	628
1977	549	697	862	892	950	962	588	607	664	667	658	717
1978	710	761	877	772	581	573	281	258	404	555	493	451
1979	510	528	768	685	370	327	380	305	441	645	537	545
1980	461	583	813	347	317	222	339	365	384	458	453	485
1981	448	524	763	774	926	903	419	369	648	655	638	606
1982	520	650	814	719	314	303	185	176	377	413	346	250
1983	192	207	273	276	285	232	189	199	211	229	190	235
1984	359	166	227	296	223	334	333	309	490	605	518	453
1985	404	506	800	774	829	913	397	389	648	656	612	567
1986	515	608	804	852	486	278	255	254	416	587	482	436
1987	398	455	747	792	946	925	398	366	648	657	654	628
1988	545	678	849	878	949	961	520	484	652	662	656	662
1989	576	698	839	896	950	953	630	575	656	660	654	598
1990	692	697	845	949	952	958	671	639	665	662	655	680
1991	704	696	870	950	953	952	671	641	662	662	656	716
Avg	499	562	749	730	686	672	421	399	538	589	552	541
W/AN/BN	467	501	654	564	368	324	280	267	389	499	431	408
D/C	523	610	822	859	934	943	530	503	655	660	646	645

**Percent (%) Change from Existing Condition for Old River near Middle River Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

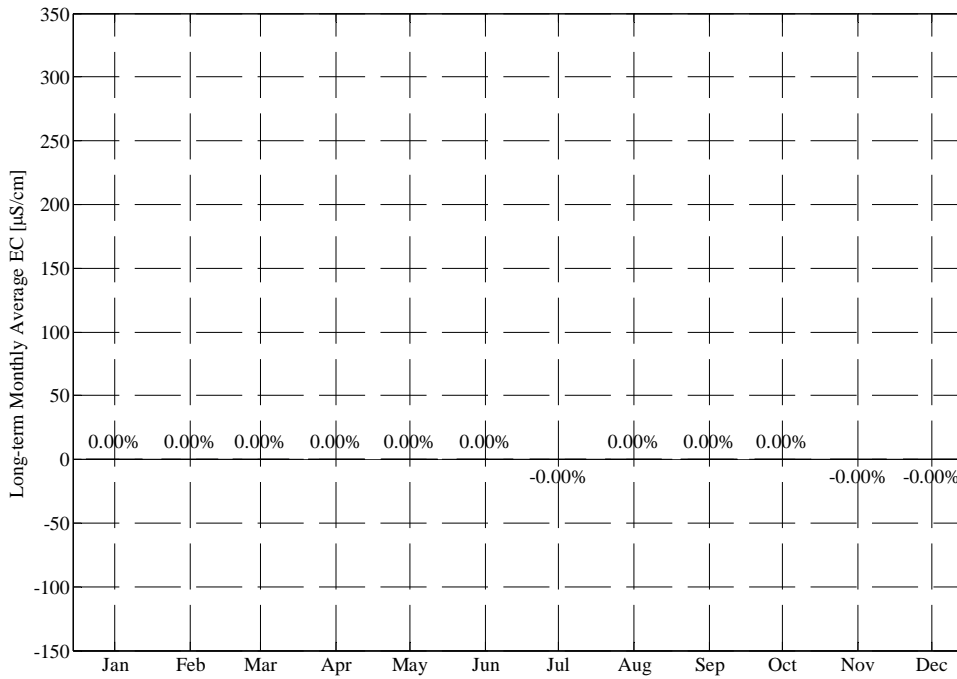
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Old River near Middle River Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



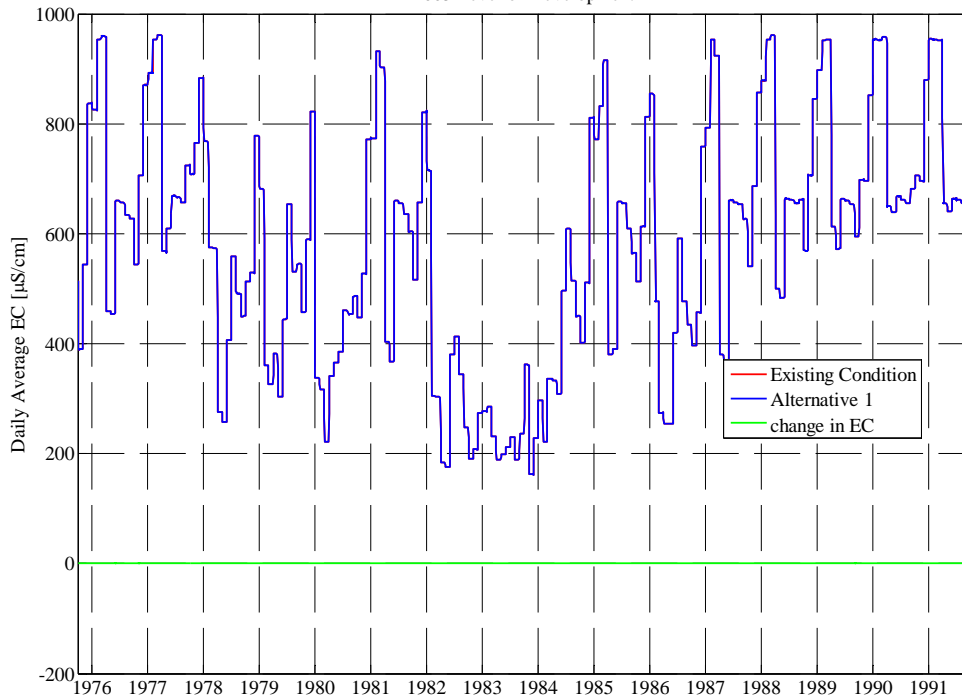
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



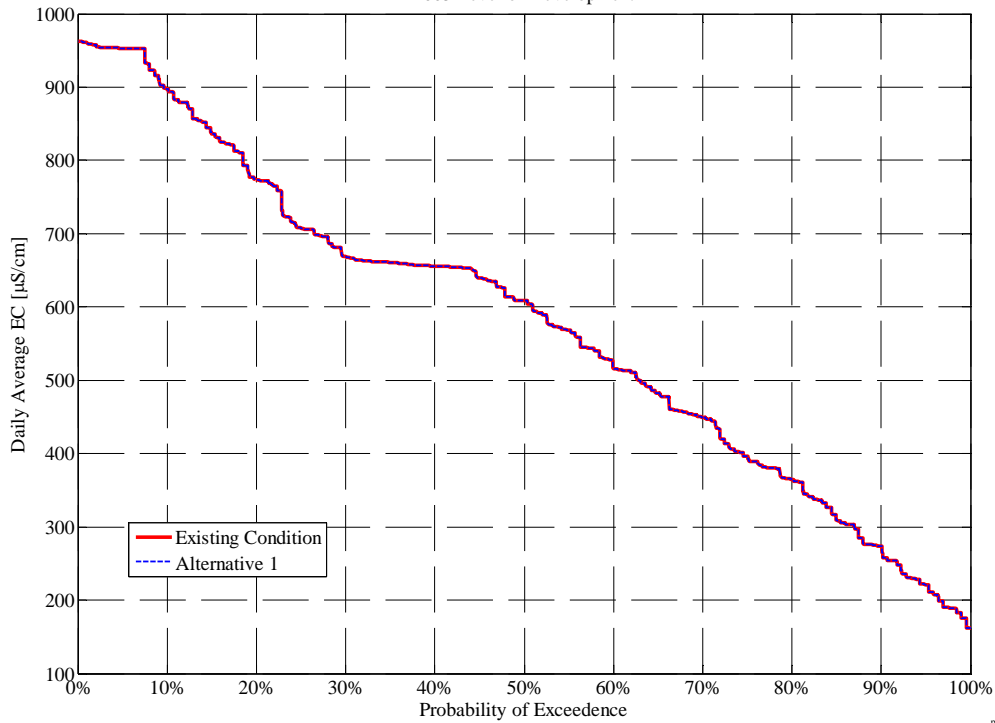
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Alternative 2

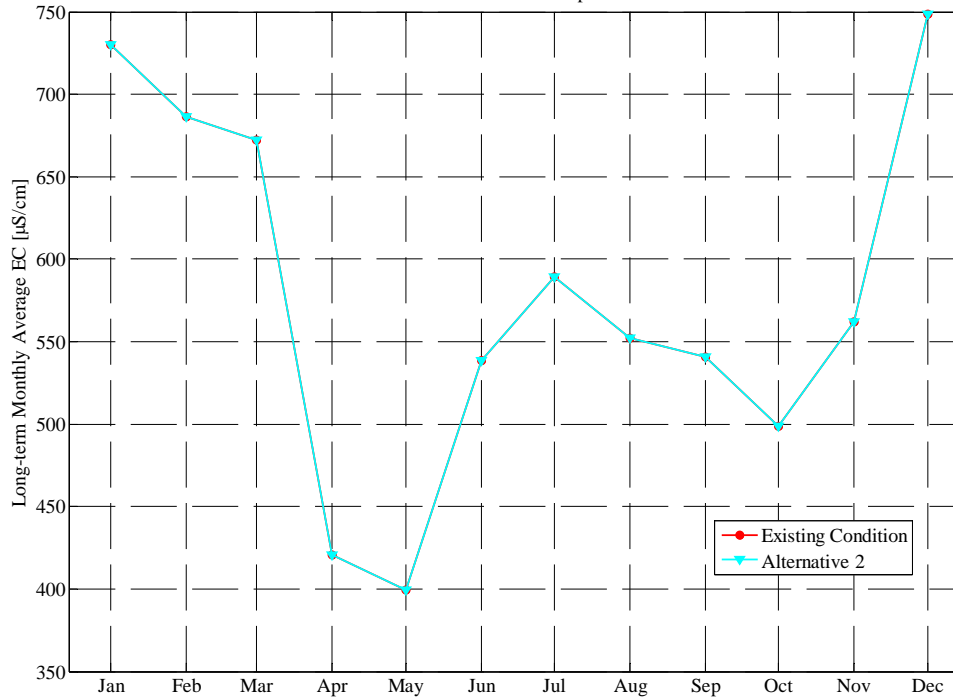
Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2005 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	394	538	825	826	948	959	478	454	651	657	636	628
1977	549	697	862	892	950	962	588	607	664	667	658	717
1978	710	761	877	772	581	573	281	258	404	555	493	451
1979	510	528	768	685	370	327	380	305	441	645	537	545
1980	461	583	813	347	317	222	339	365	384	458	453	485
1981	448	524	763	774	926	903	419	369	648	655	638	606
1982	520	650	814	719	314	303	185	176	377	413	346	250
1983	192	207	273	276	285	232	189	199	211	229	190	235
1984	359	166	227	296	223	334	333	309	490	605	518	453
1985	404	506	800	774	829	913	397	389	648	656	612	567
1986	515	608	804	852	486	278	255	254	416	587	482	436
1987	398	455	747	792	946	925	398	366	648	657	654	628
1988	545	678	849	878	949	961	520	484	652	662	656	662
1989	576	698	839	896	950	953	630	575	656	660	654	598
1990	692	697	845	949	952	958	671	639	665	662	655	680
1991	704	696	870	950	953	952	671	641	662	662	656	716
Avg	499	562	749	730	686	672	421	399	538	589	552	541
W/AN/BN	467	501	654	564	368	324	280	267	389	499	431	408
D/C	523	610	822	859	934	943	530	503	655	660	646	645

Percent (%) Change from Existing Condition for Old River near Middle River Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development

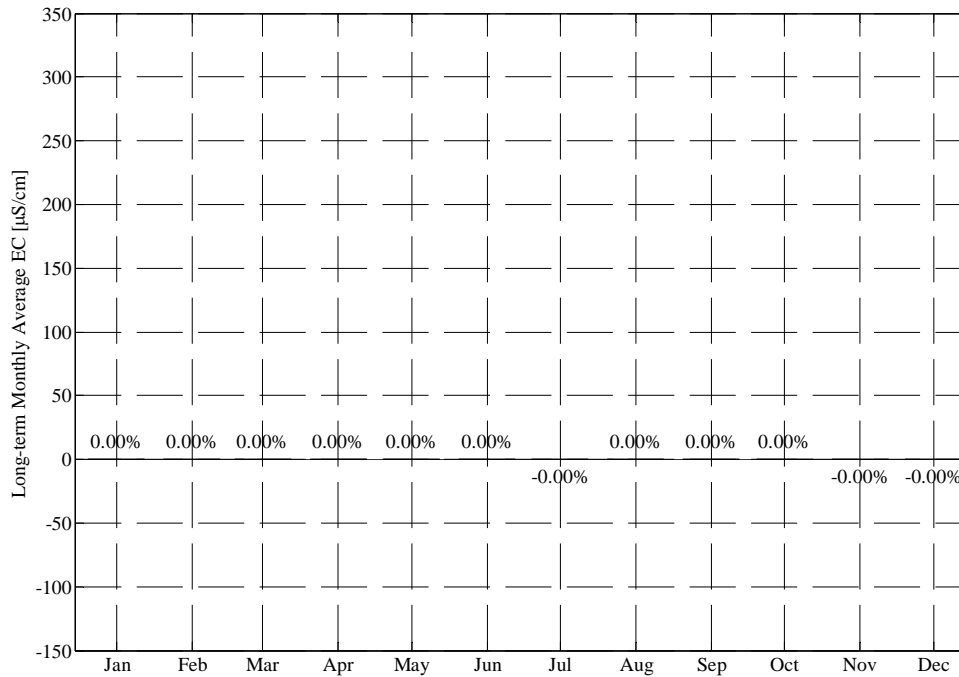
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Old River near Middle River Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



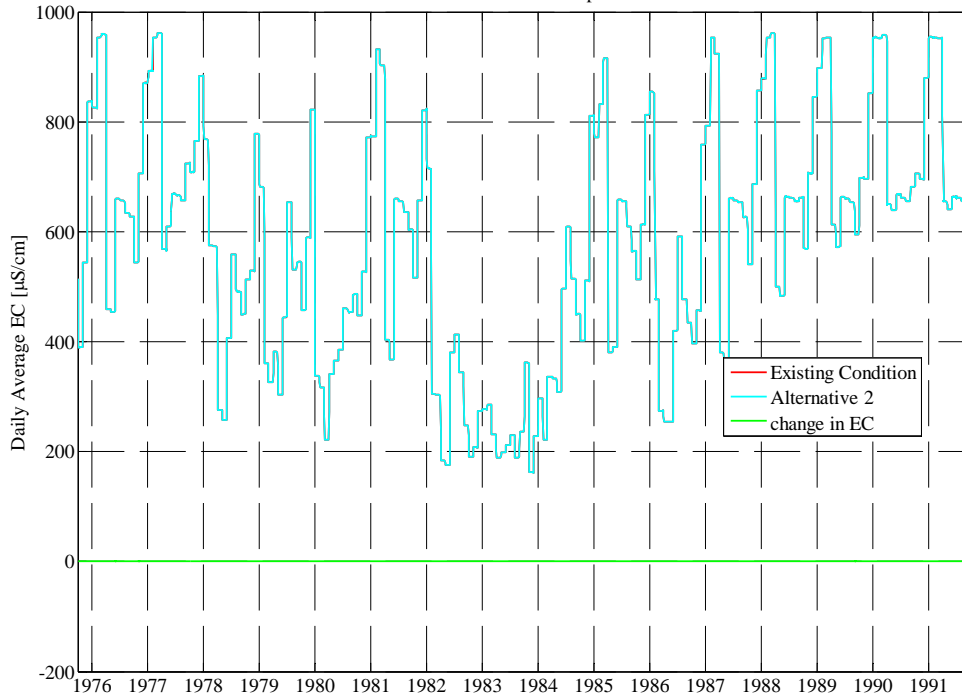
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



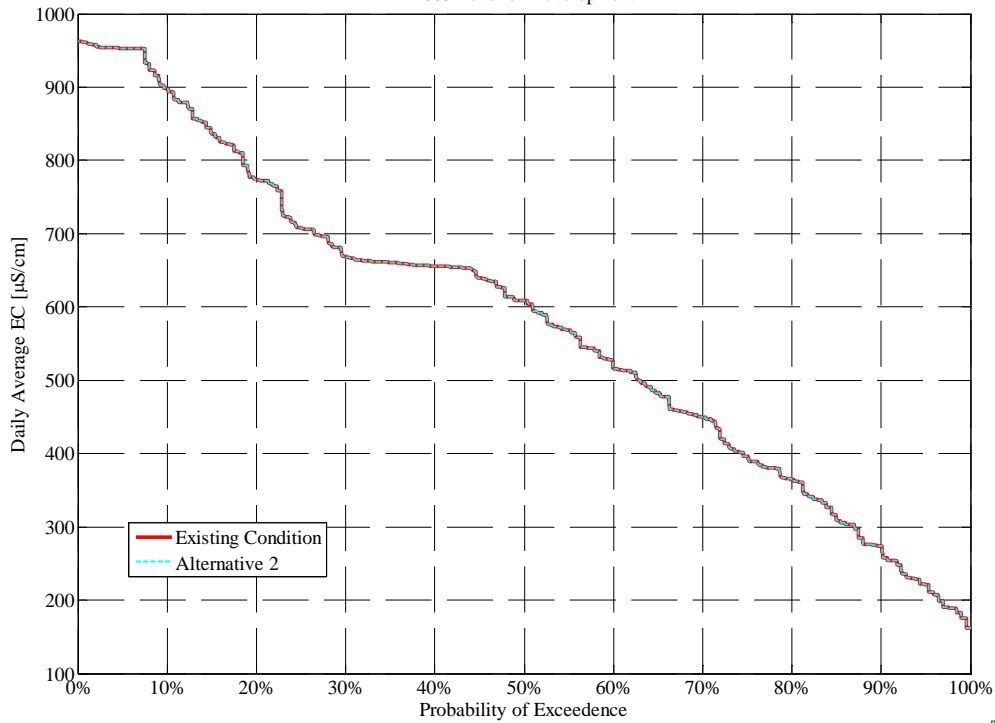
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River near Middle River Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

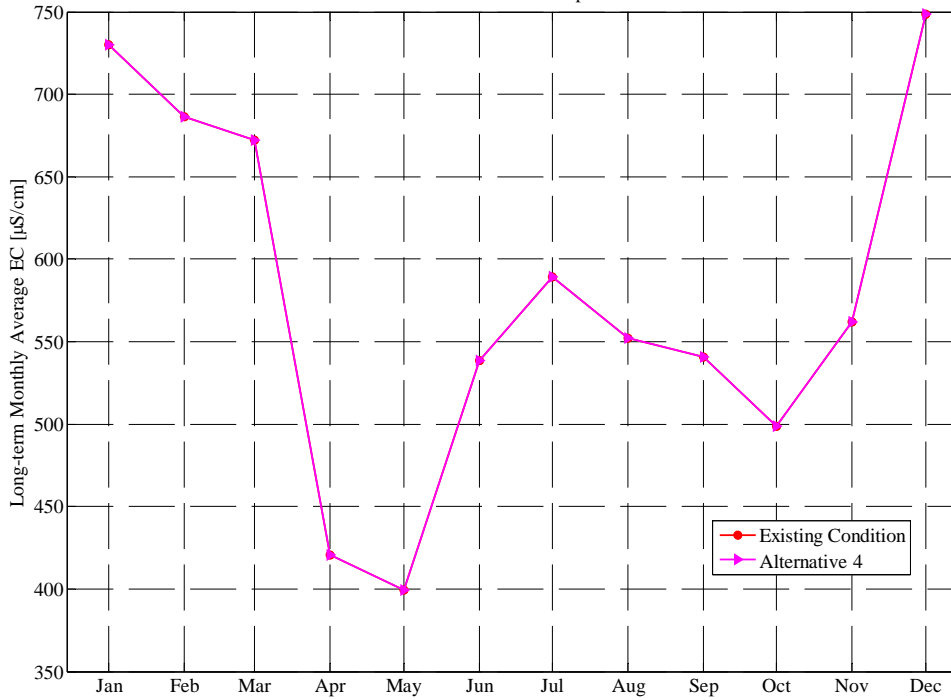
**Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	394	538	825	826	948	959	478	454	651	657	636	628
1977	549	697	862	892	950	962	588	607	664	667	658	717
1978	710	761	877	772	581	573	281	258	404	555	493	451
1979	510	528	768	685	370	327	380	305	441	645	537	545
1980	461	583	813	347	317	222	339	365	384	458	453	485
1981	448	524	763	774	926	903	419	369	648	655	638	606
1982	520	650	814	719	314	303	185	176	377	413	346	250
1983	192	207	273	276	285	232	189	199	211	229	190	235
1984	359	166	227	296	223	334	333	309	490	605	518	453
1985	404	506	800	774	829	913	397	389	648	656	612	567
1986	515	608	804	852	486	278	255	254	417	587	482	436
1987	398	455	747	792	946	925	398	366	648	657	654	628
1988	545	678	849	878	949	961	520	484	652	662	656	662
1989	576	698	839	896	950	953	630	575	656	660	654	598
1990	692	697	845	949	952	958	671	639	665	662	655	680
1991	704	696	870	950	953	952	671	641	662	662	656	716
Avg	499	562	749	730	686	672	421	399	538	589	552	541
W/AN/BN	467	501	654	564	368	324	280	267	389	499	431	408
D/C	523	610	822	859	934	943	530	503	655	660	646	645

**Percent (%) Change from Existing Condition for Old River near Middle River Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development**

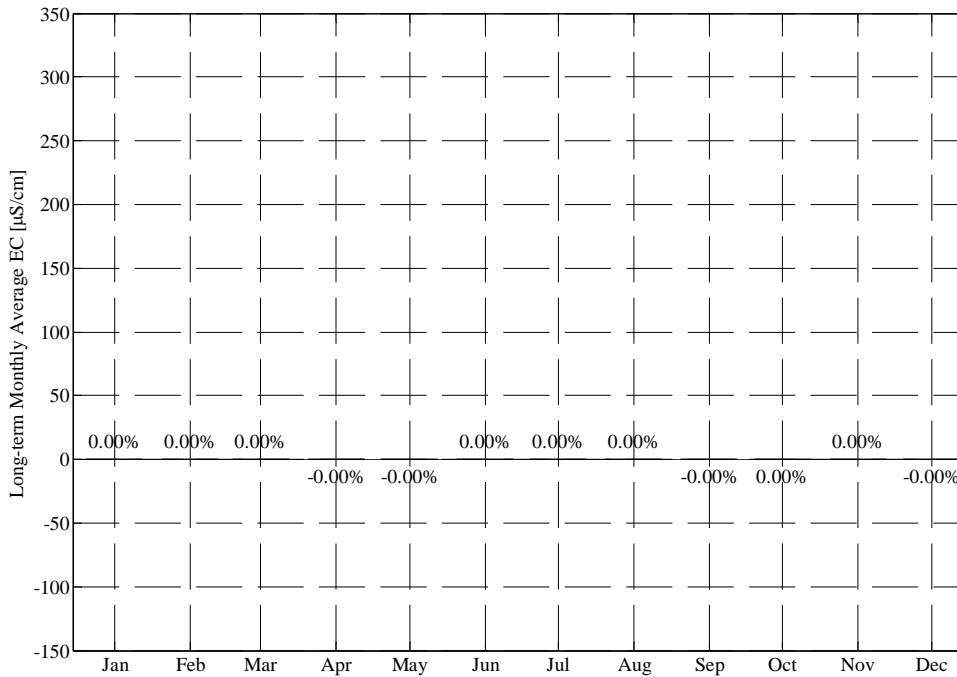
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Old River near Middle River Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



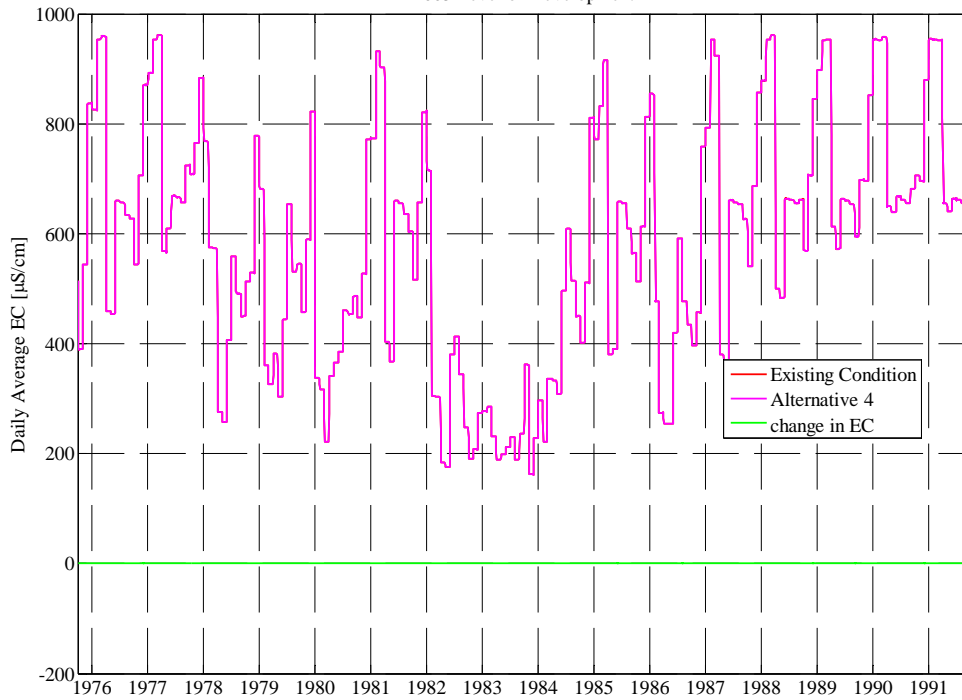
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



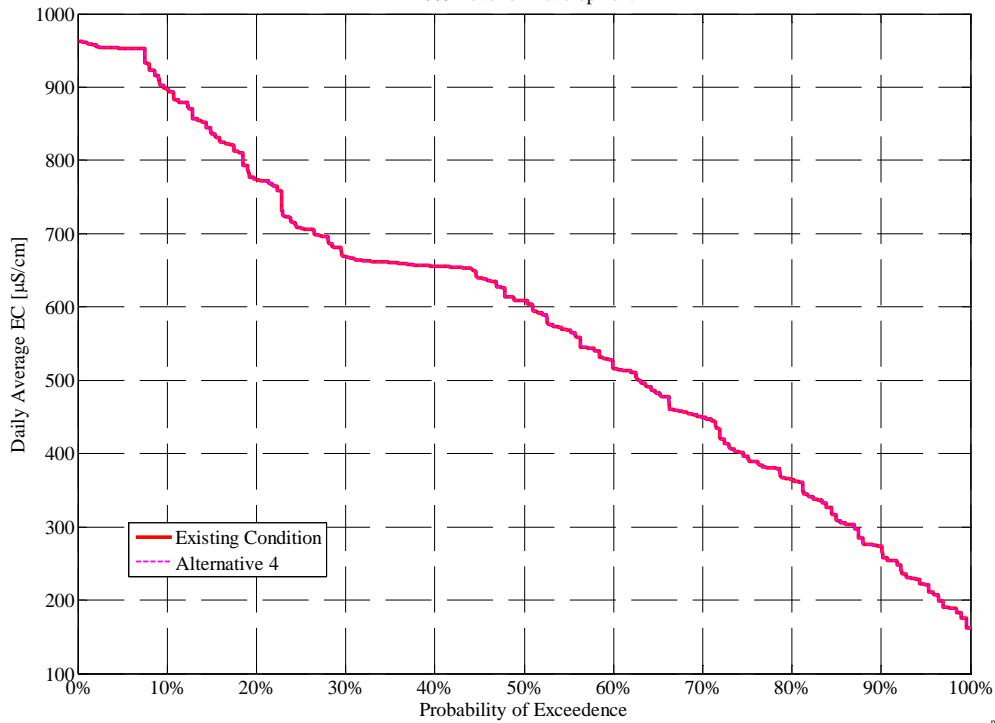
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River near Middle River Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Brandt Bridge

Existing Condition

**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	392	537	817	825	945	959	483	454	646	658	636	627
1977	547	696	857	892	948	962	596	606	660	664	657	717
1978	708	760	873	774	580	572	282	258	403	554	493	450
1979	509	527	765	684	369	326	379	305	439	643	536	543
1980	459	582	805	348	316	222	338	364	384	458	453	483
1981	446	522	757	773	922	903	419	368	642	656	638	605
1982	518	650	811	719	314	302	185	176	376	412	346	250
1983	192	207	272	276	284	232	189	199	210	229	190	234
1984	357	166	227	295	222	333	332	309	488	603	519	452
1985	402	504	793	773	828	911	398	389	642	656	612	566
1986	513	608	799	851	486	277	254	254	415	587	482	435
1987	396	453	740	789	942	925	402	365	641	658	653	627
1988	542	678	842	877	946	960	527	484	648	666	655	661
1989	572	697	835	893	947	953	638	576	651	669	656	598
1990	691	695	839	947	952	957	685	639	663	673	656	679
1991	703	695	863	947	952	952	678	642	661	672	656	716
Avg	497	561	744	729	685	672	424	399	536	591	552	540
W/AN/BN	465	500	650	564	367	323	280	266	388	498	431	407
D/C	521	609	816	857	931	943	536	503	650	664	646	644

Alternative 1

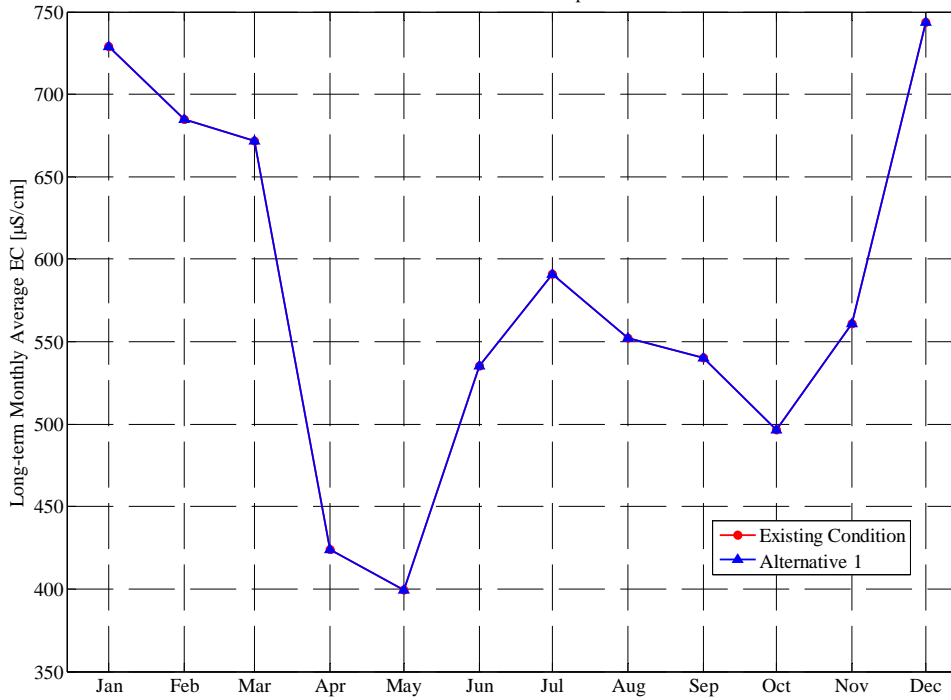
**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	392	537	817	825	945	959	483	454	646	658	636	627
1977	547	696	857	892	948	962	596	606	660	664	657	717
1978	708	760	873	774	580	572	282	258	403	554	493	450
1979	509	527	765	684	369	326	379	305	439	643	536	543
1980	459	582	805	348	316	222	338	364	384	458	453	483
1981	446	522	757	773	922	903	419	368	642	656	638	605
1982	518	650	811	719	314	302	185	176	376	412	346	250
1983	192	207	272	276	284	232	189	199	210	229	190	234
1984	357	166	227	295	222	333	332	309	488	603	519	452
1985	402	504	793	773	828	911	398	389	642	656	612	566
1986	513	608	799	851	486	277	254	254	415	587	482	435
1987	396	453	741	789	942	925	402	365	641	658	653	627
1988	542	678	842	877	946	960	527	484	648	666	655	661
1989	572	697	835	893	947	953	638	576	651	669	656	598
1990	691	695	839	947	952	957	685	639	663	673	656	679
1991	703	695	863	947	952	952	678	642	661	670	655	716
Avg	497	561	744	729	685	672	424	399	536	591	552	540
W/AN/BN	465	500	650	564	367	323	280	266	388	498	431	407
D/C	521	609	816	857	931	943	536	502	650	663	646	644

**Percent (%) Change from Existing Condition for San Joaquin River at Brandt Bridge Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

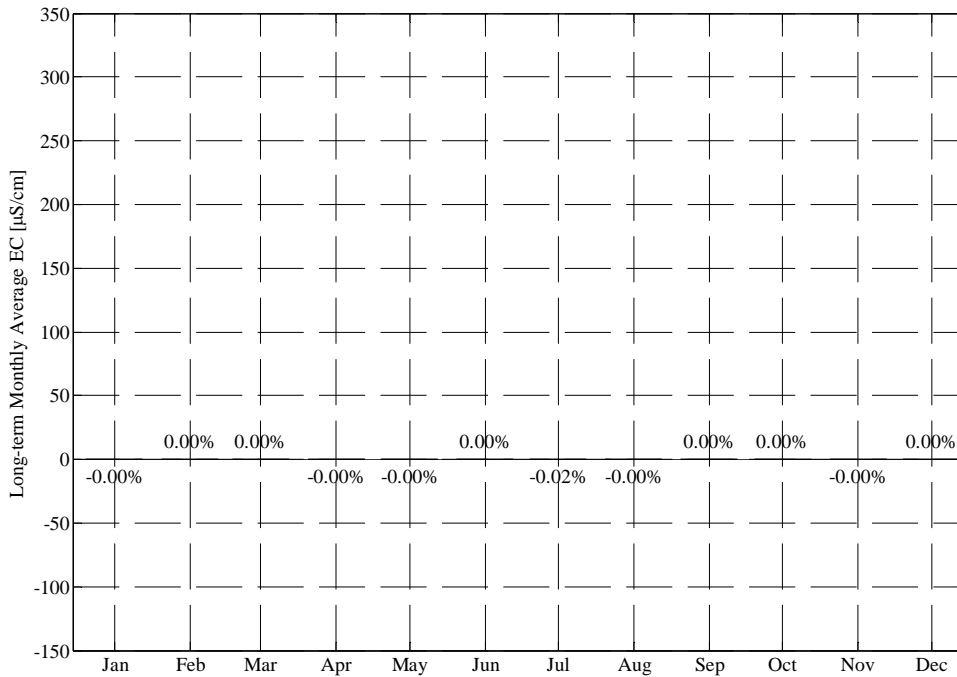
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Brandt Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



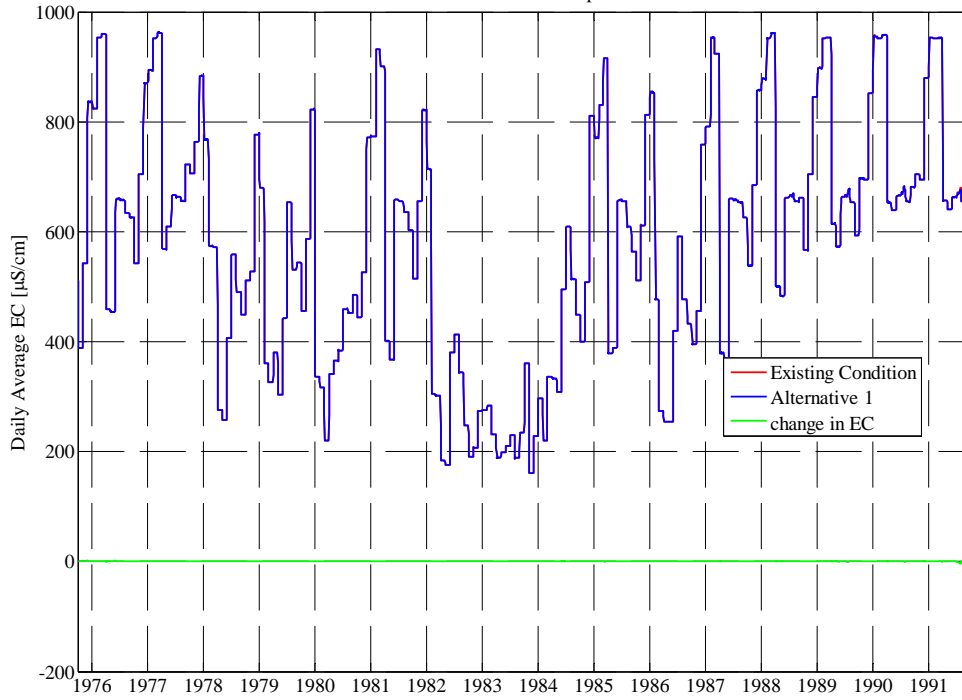
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



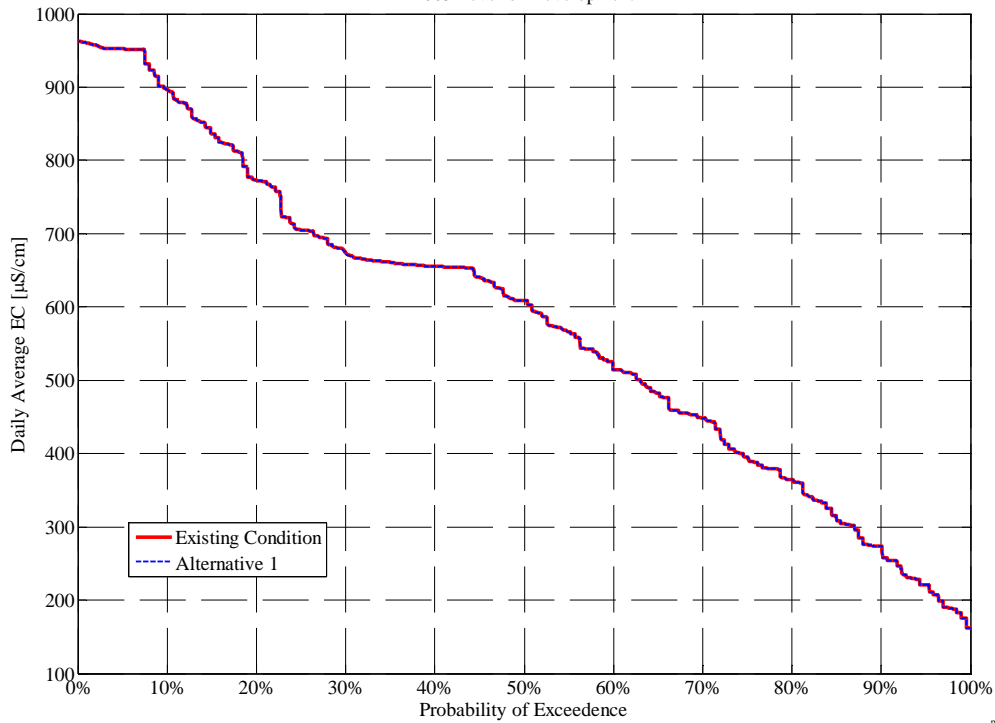
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 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

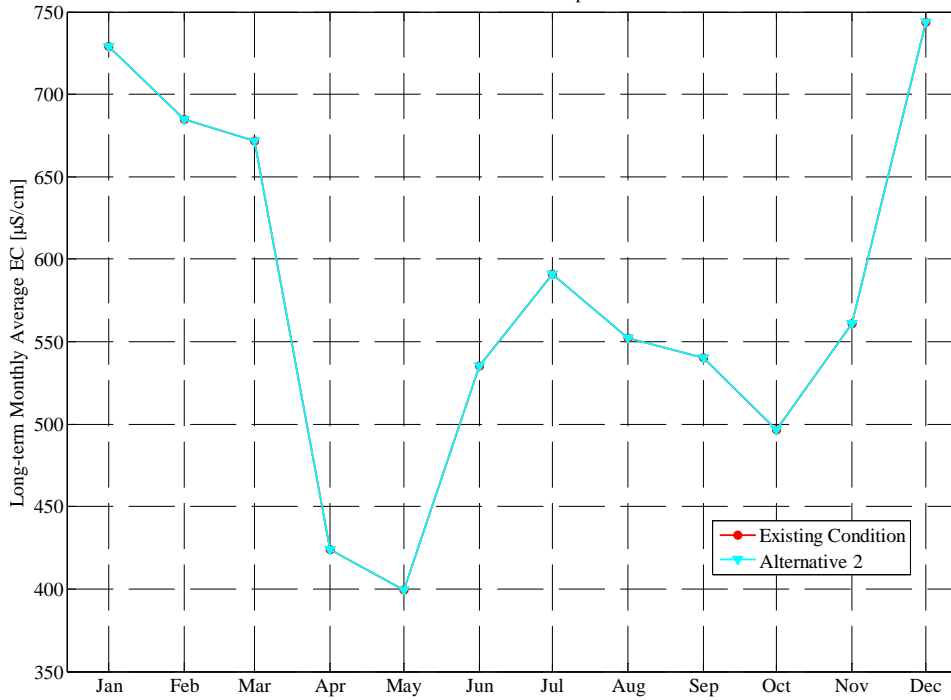
Alternative 2**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 2****2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	392	537	817	825	945	959	483	454	646	658	636	627
1977	547	696	857	892	948	962	596	606	660	664	657	717
1978	708	760	873	774	580	572	282	258	403	554	493	450
1979	509	527	765	684	369	326	379	305	439	643	536	543
1980	459	582	805	348	316	222	338	364	384	458	453	483
1981	446	522	757	773	922	903	419	368	642	656	638	605
1982	518	650	811	719	314	302	185	176	376	412	346	250
1983	192	207	272	276	284	232	189	199	210	229	190	234
1984	357	166	227	295	222	333	332	309	488	603	519	452
1985	402	504	793	773	828	911	398	389	642	656	612	566
1986	513	608	799	851	486	277	254	254	415	587	482	435
1987	396	453	741	789	942	925	402	365	641	658	653	627
1988	542	678	842	877	946	960	527	484	648	666	655	661
1989	572	697	835	893	947	953	638	576	651	669	656	598
1990	691	695	839	947	952	957	685	639	663	673	656	679
1991	703	695	863	947	952	952	678	642	661	670	655	716
Avg	497	561	744	729	685	672	424	399	536	591	552	540
W/AN/BN	465	500	650	564	367	323	280	266	388	498	431	407
D/C	521	609	816	857	931	943	536	502	650	663	646	644

**Percent (%) Change from Existing Condition for San Joaquin River at Brandt Bridge
(Alternative 2 - Existing Condition) / Existing Condition****2005 Level of Development**

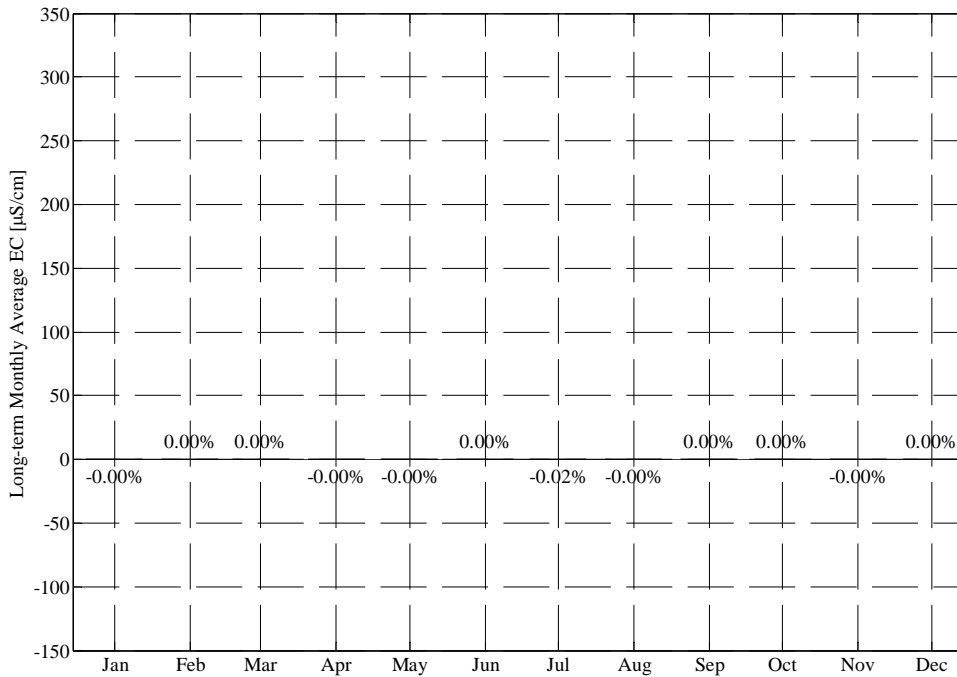
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Brandt Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development

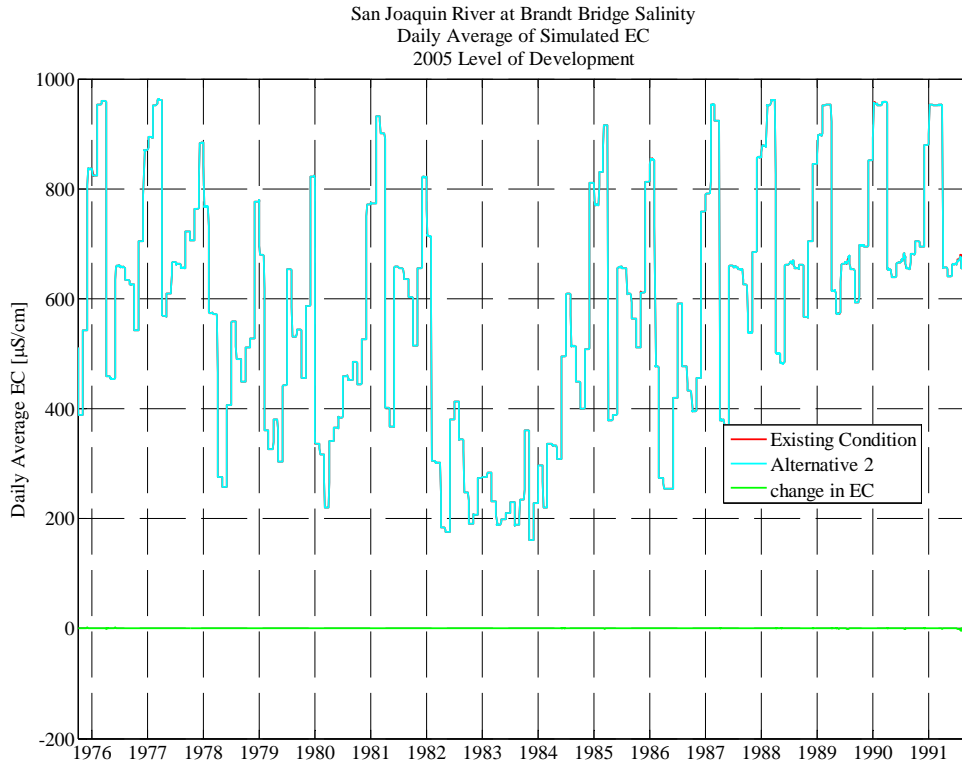


p_lve_wq_feir.m
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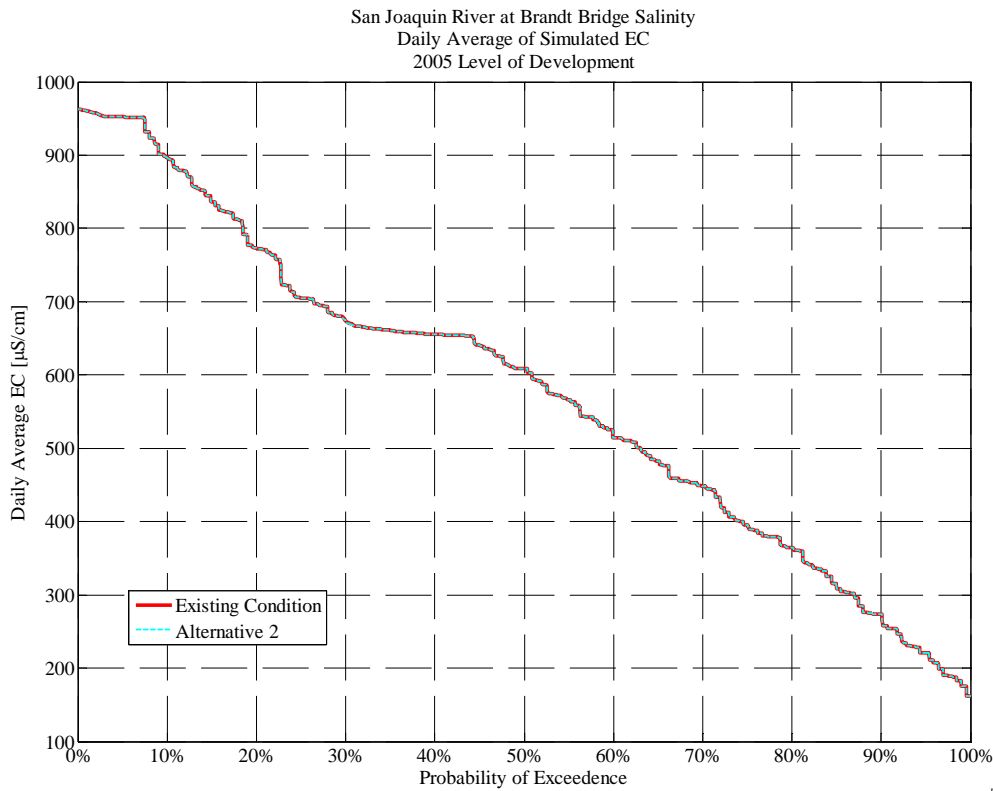
San Joaquin River at Brandt Bridge Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 4

2005 Level of Development

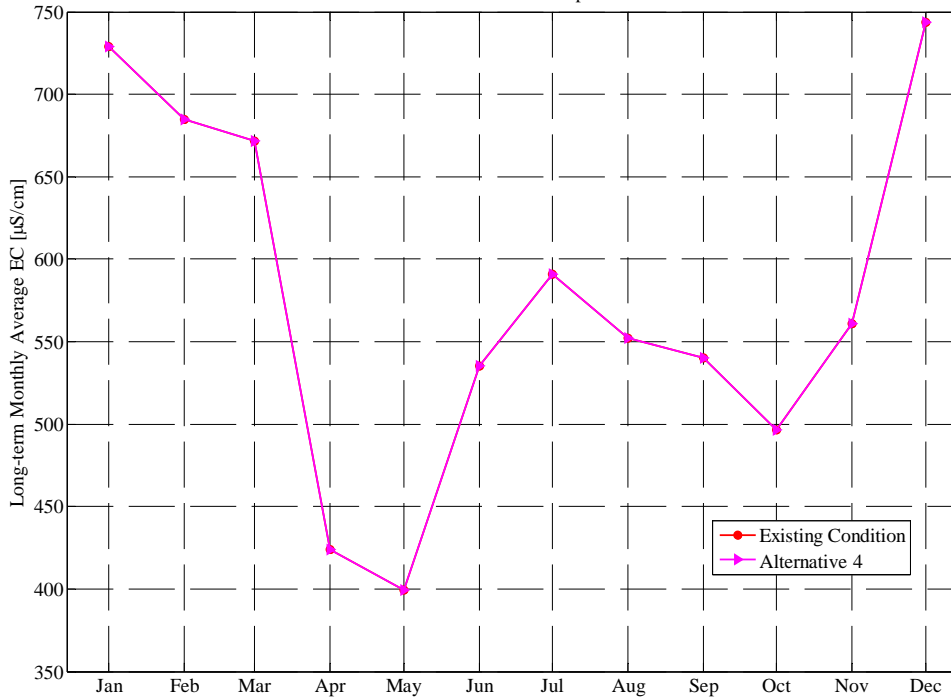
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	392	537	817	825	945	959	483	454	646	658	636	627
1977	547	696	857	892	948	962	596	606	660	664	657	717
1978	708	760	873	774	580	572	282	258	403	554	493	450
1979	509	527	765	684	369	326	379	305	439	643	536	543
1980	459	582	805	348	316	222	338	364	384	458	453	483
1981	446	522	757	773	922	903	419	368	642	656	638	605
1982	518	650	811	719	314	302	185	176	376	412	346	250
1983	192	207	272	276	284	232	189	199	210	229	190	234
1984	357	166	227	295	222	333	332	309	488	603	519	452
1985	402	504	793	773	828	911	398	389	642	656	612	566
1986	513	608	799	851	486	277	254	254	416	587	482	435
1987	396	453	741	789	942	925	402	365	641	658	653	627
1988	542	678	842	877	946	960	527	484	648	666	655	661
1989	572	697	836	893	947	953	638	576	651	669	656	598
1990	691	695	839	947	952	957	685	639	663	673	656	679
1991	703	695	863	947	952	952	678	642	661	671	656	716
Avg	497	561	744	729	685	672	424	399	536	591	552	540
W/AN/BN	465	500	650	564	367	323	280	266	388	498	431	407
D/C	521	609	816	857	931	943	536	502	650	663	646	644

**Percent (%) Change from Existing Condition for San Joaquin River at Brandt Bridge
(Alternative 4 - Existing Condition) / Existing Condition**

2005 Level of Development

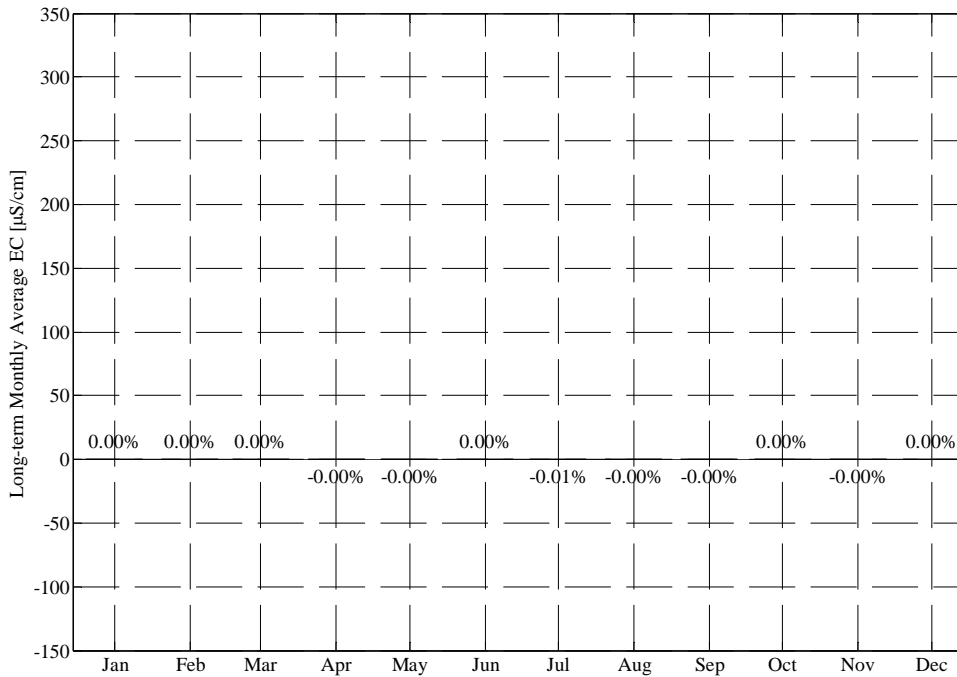
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Brandt Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



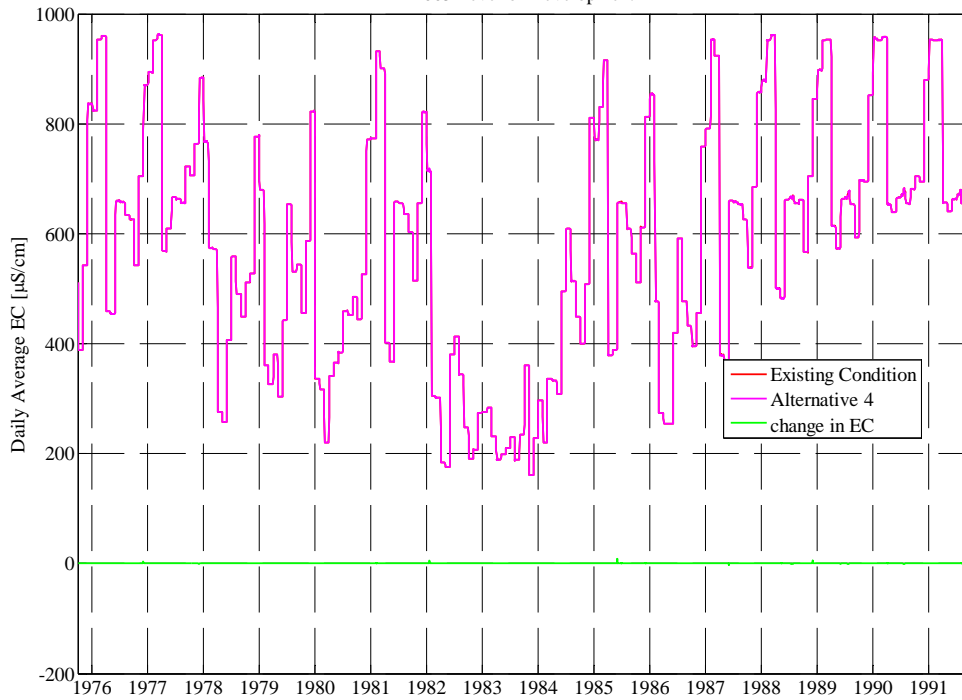
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



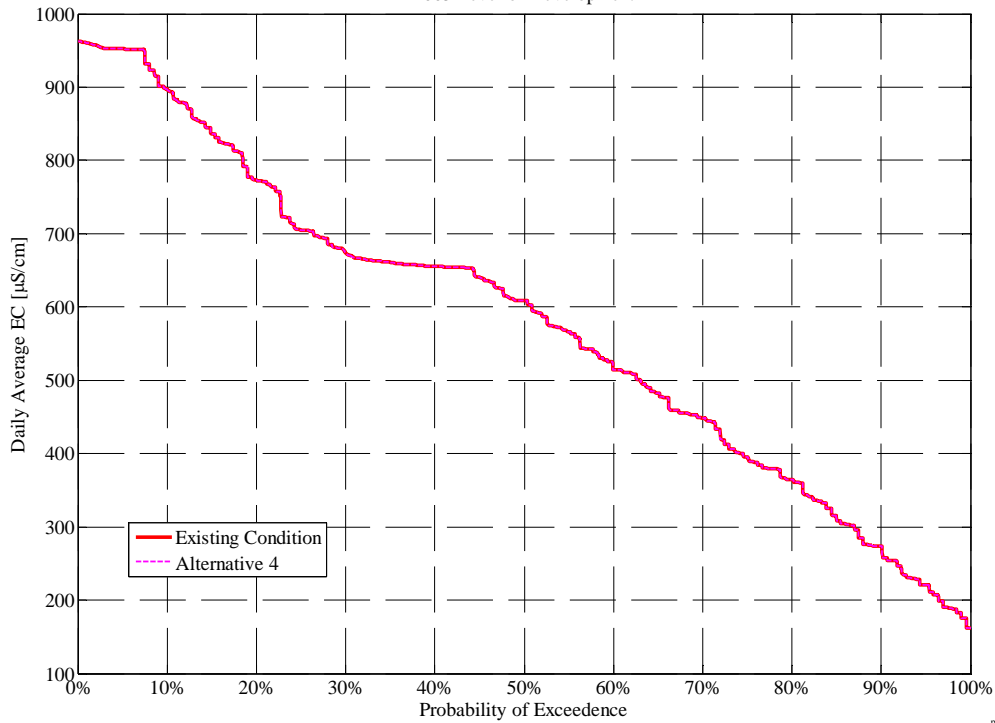
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 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
 Daily Average of Simulated EC
 2005 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis

Existing Condition

**San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Existing Condition
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	388	541	834	820	949	949	449	441	648	649	631	624
1977	541	703	868	888	950	950	546	603	649	649	650	721
1978	705	763	879	758	572	565	274	254	401	553	484	445
1979	508	526	775	674	359	324	378	299	430	647	525	539
1980	455	586	820	335	313	220	337	361	380	456	447	481
1981	443	525	770	768	930	900	397	358	648	648	631	599
1982	514	654	817	702	304	296	183	173	376	409	338	246
1983	190	204	272	268	282	226	187	198	208	227	185	233
1984	359	161	226	296	220	333	327	301	484	602	508	444
1985	400	505	806	769	829	913	372	380	647	649	604	560
1986	510	610	810	847	470	271	253	250	414	586	471	430
1987	393	453	756	788	949	917	367	353	648	649	649	621
1988	537	683	854	872	950	954	490	472	648	649	649	657
1989	564	703	842	893	950	951	596	557	647	647	648	592
1990	696	694	850	950	950	950	625	634	649	648	649	677
1991	701	692	877	950	950	950	641	629	649	648	649	718
Avg	494	563	754	724	683	667	401	391	533	582	545	537
W/AN/BN	463	500	657	554	360	319	277	262	385	497	423	403
D/C	518	611	829	855	934	937	498	492	648	648	640	641

Alternative 1

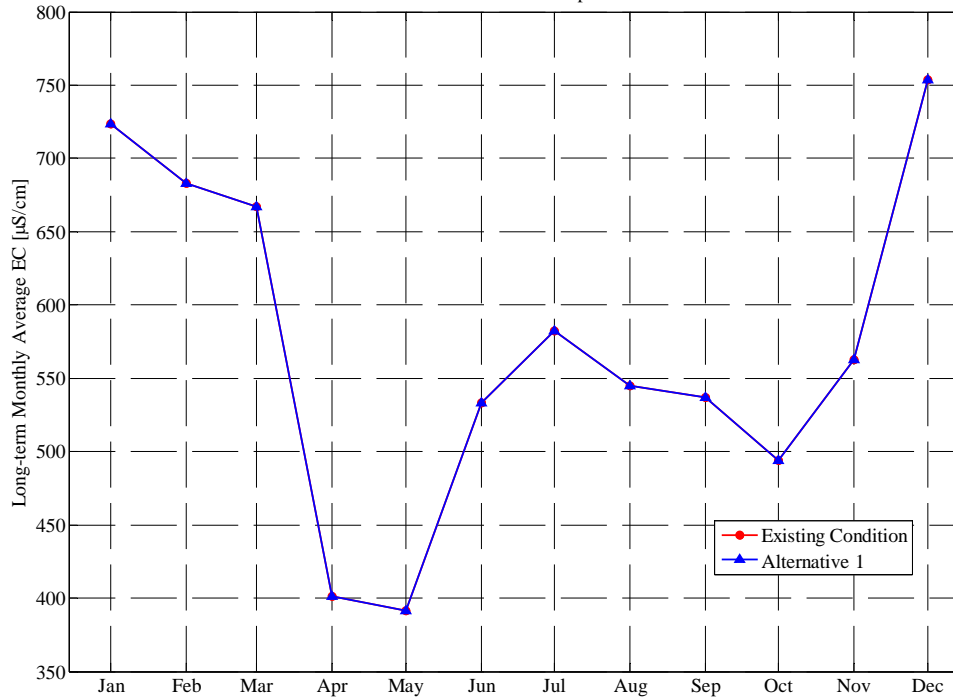
**San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	388	541	834	820	949	949	449	441	648	649	631	624
1977	541	703	868	888	950	950	546	603	649	649	650	721
1978	705	763	879	758	572	565	274	254	401	553	484	445
1979	508	526	775	674	359	324	378	299	430	647	525	539
1980	455	586	820	335	313	220	337	361	380	456	447	481
1981	443	525	770	768	930	900	397	358	648	648	631	599
1982	514	654	817	702	304	296	183	173	376	409	338	246
1983	190	204	272	268	282	226	187	198	208	227	185	233
1984	359	161	226	296	220	333	327	301	484	602	508	444
1985	400	505	806	769	829	913	373	380	647	649	604	560
1986	510	610	810	847	470	271	253	250	414	586	471	430
1987	393	453	756	788	949	917	367	353	648	649	649	621
1988	537	683	854	872	950	954	490	472	648	649	649	657
1989	564	703	842	893	950	951	596	557	647	647	648	592
1990	696	694	850	950	950	950	625	634	649	648	649	677
1991	701	692	877	950	950	950	641	629	649	648	649	718
Avg	494	563	754	724	683	667	401	391	533	582	545	537
W/AN/BN	463	500	657	554	360	319	277	262	385	497	423	403
D/C	518	611	829	855	934	937	498	492	648	648	640	641

**Percent (%) Change from Existing Condition for San Joaquin River at Vernalis Salinity
(Alternative 1 - Existing Condition) / Existing Condition
2005 Level of Development**

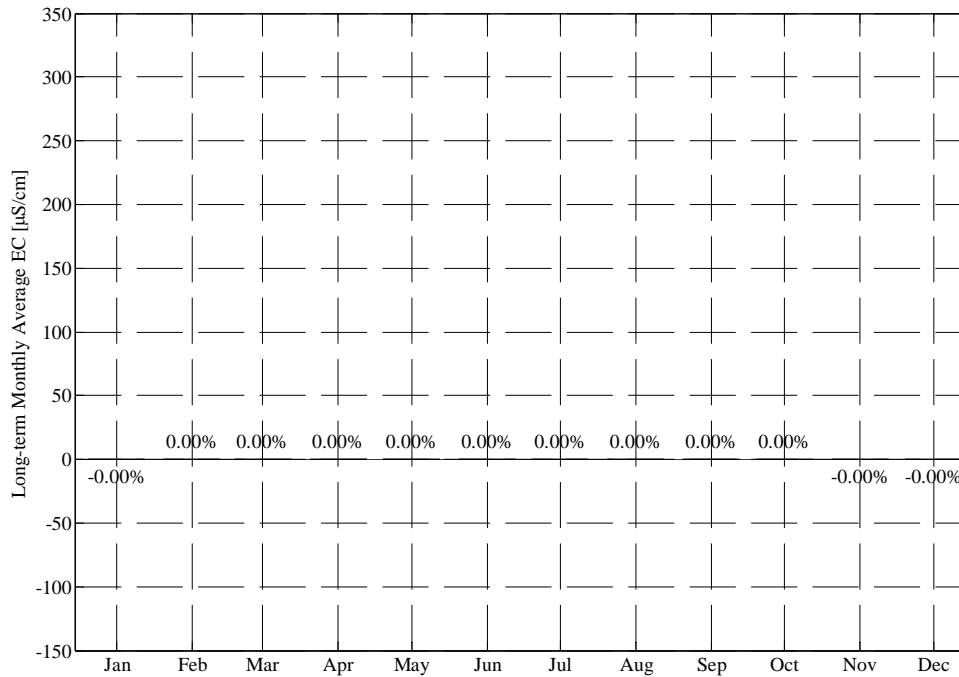
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Vernalis Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



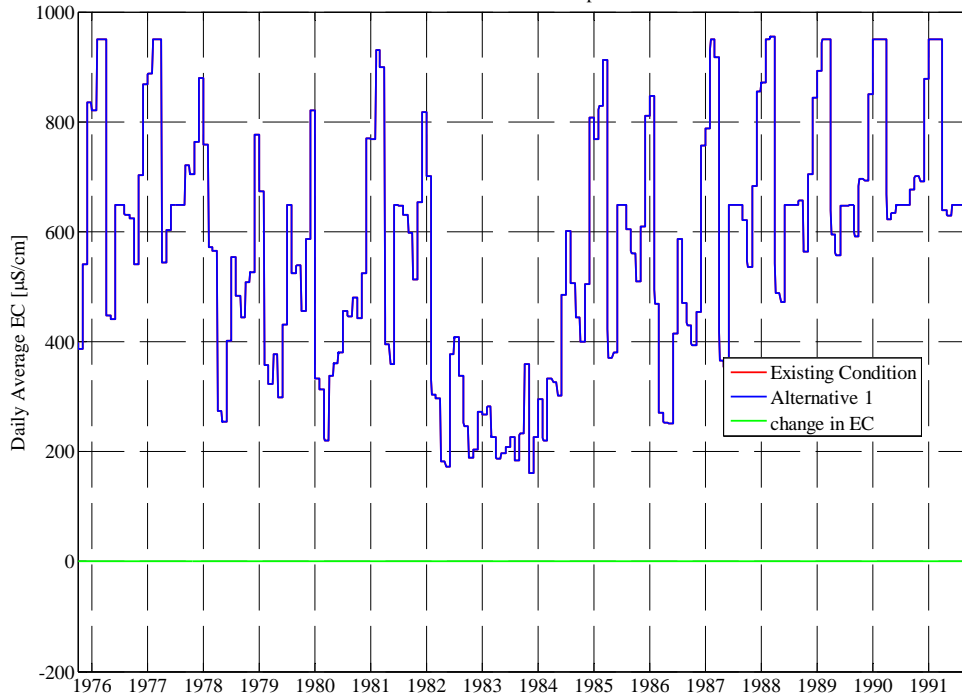
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 1



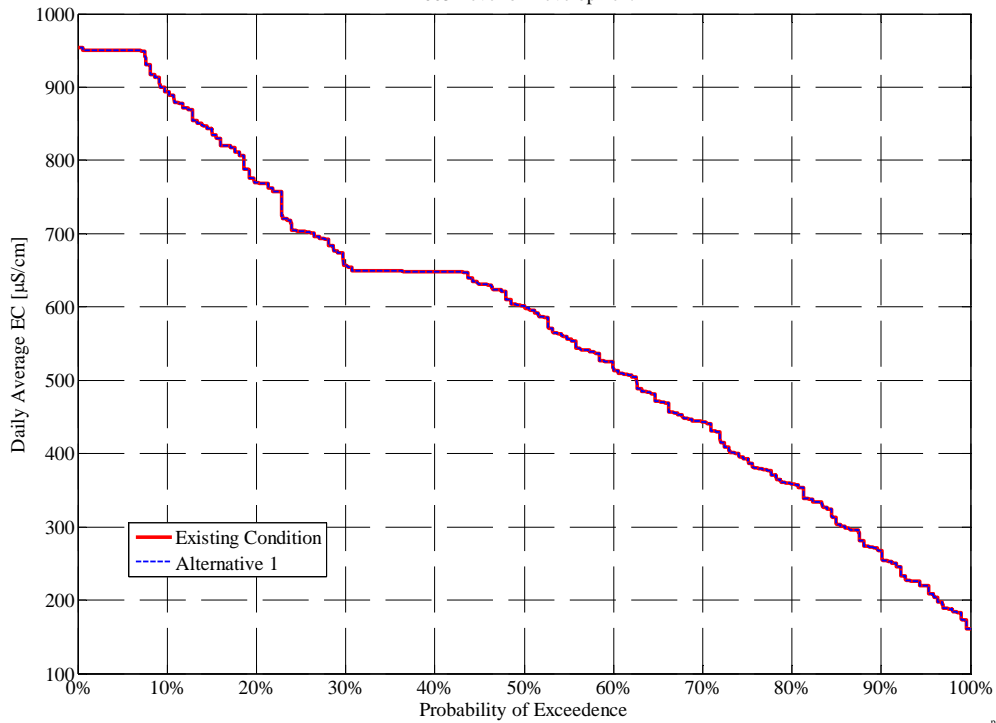
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

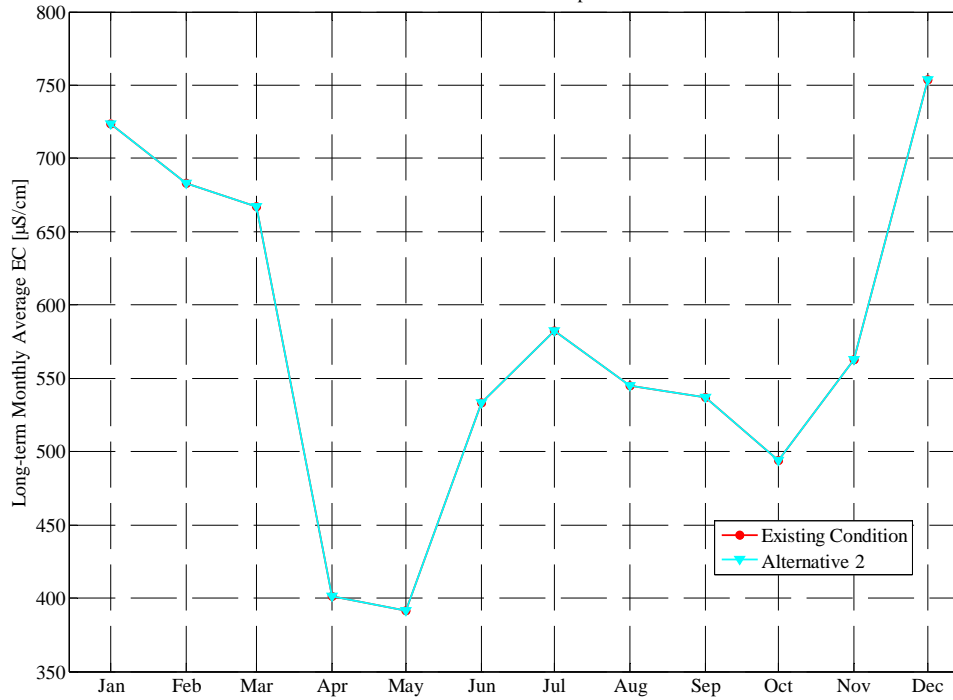
**San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	388	541	834	820	949	949	449	441	648	649	631	624
1977	541	703	868	888	950	950	546	603	649	649	650	721
1978	705	763	879	758	572	565	274	254	401	553	484	445
1979	508	526	775	674	359	324	378	299	430	647	525	539
1980	455	586	820	335	313	220	337	361	380	456	447	481
1981	443	525	770	768	930	900	397	358	648	648	631	599
1982	514	654	817	702	304	296	183	173	376	409	338	246
1983	190	204	272	268	282	226	187	198	208	227	185	233
1984	359	161	226	296	220	333	327	301	484	602	508	444
1985	400	505	806	769	829	913	373	380	647	649	604	560
1986	510	610	810	847	470	271	253	250	414	586	471	430
1987	393	453	756	788	949	917	367	353	648	649	649	621
1988	537	683	854	872	950	954	490	472	648	649	649	657
1989	564	703	842	893	950	951	596	557	647	647	648	592
1990	696	694	850	950	950	950	625	634	649	648	649	677
1991	701	692	877	950	950	950	641	629	649	648	649	718
Avg	494	563	754	724	683	667	401	391	533	582	545	537
W/AN/BN	463	500	657	554	360	319	277	262	385	497	423	403
D/C	518	611	829	855	934	937	498	492	648	648	640	641

**Percent (%) Change from Existing Condition for San Joaquin River at Vernalis Salinity
(Alternative 2 - Existing Condition) / Existing Condition
2005 Level of Development**

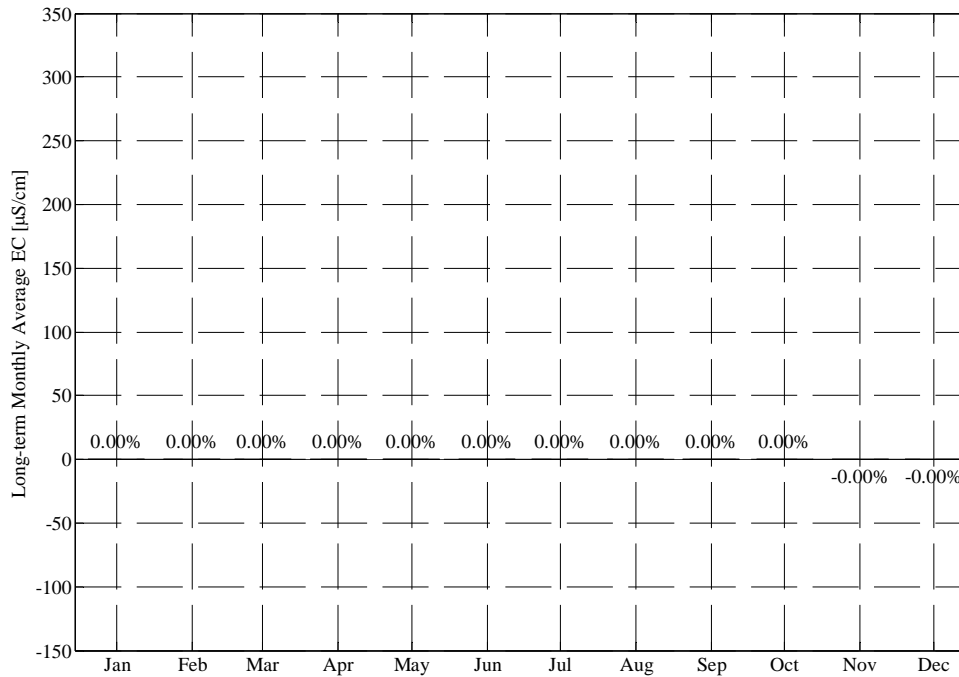
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Vernalis Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



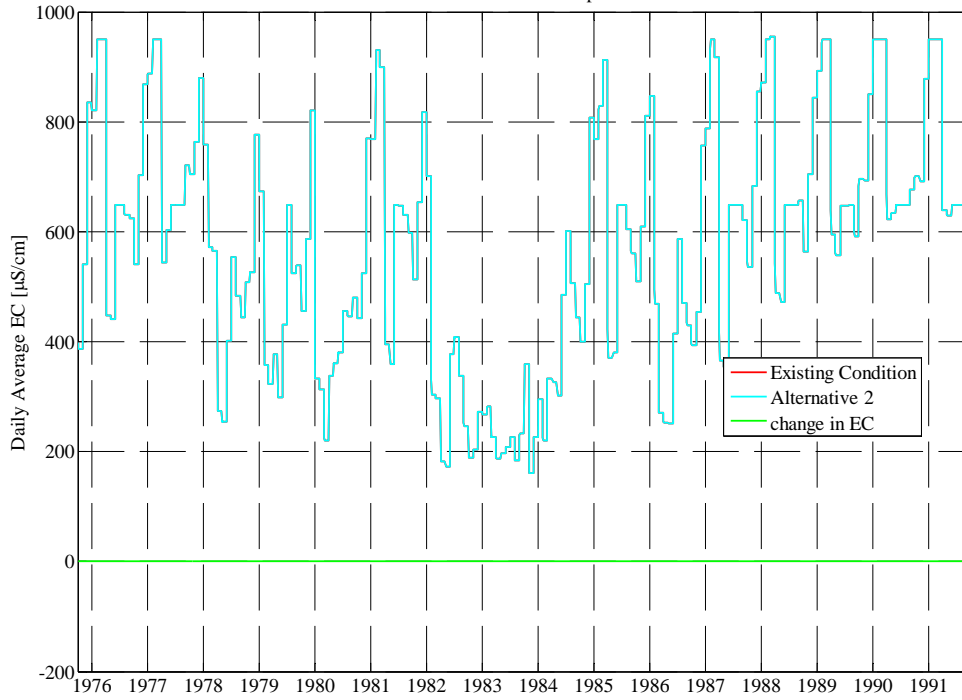
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 2



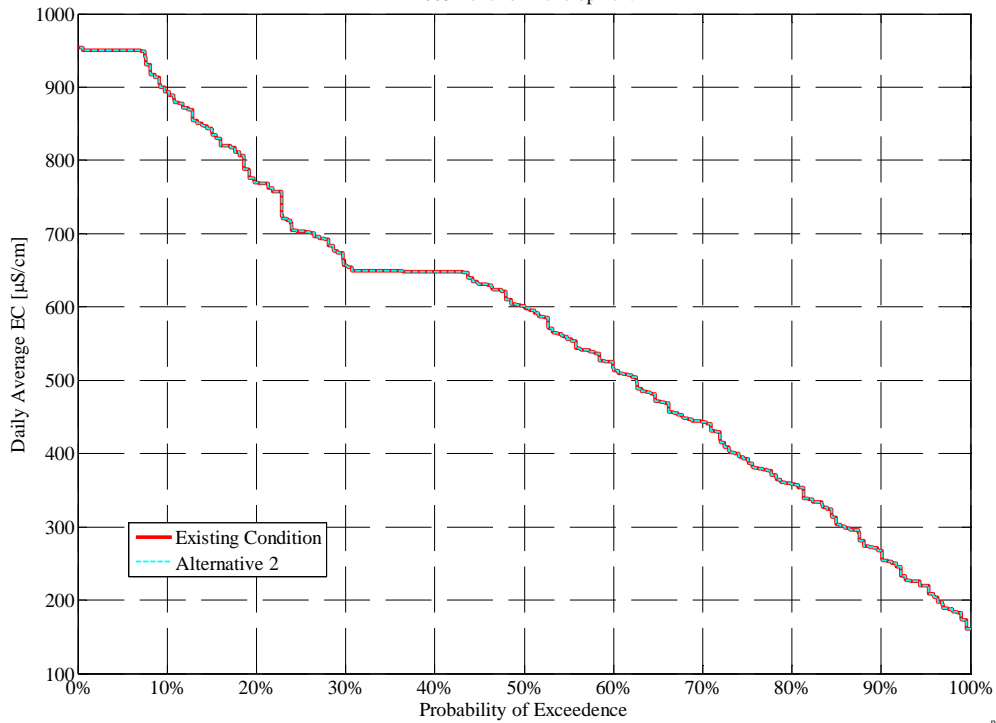
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

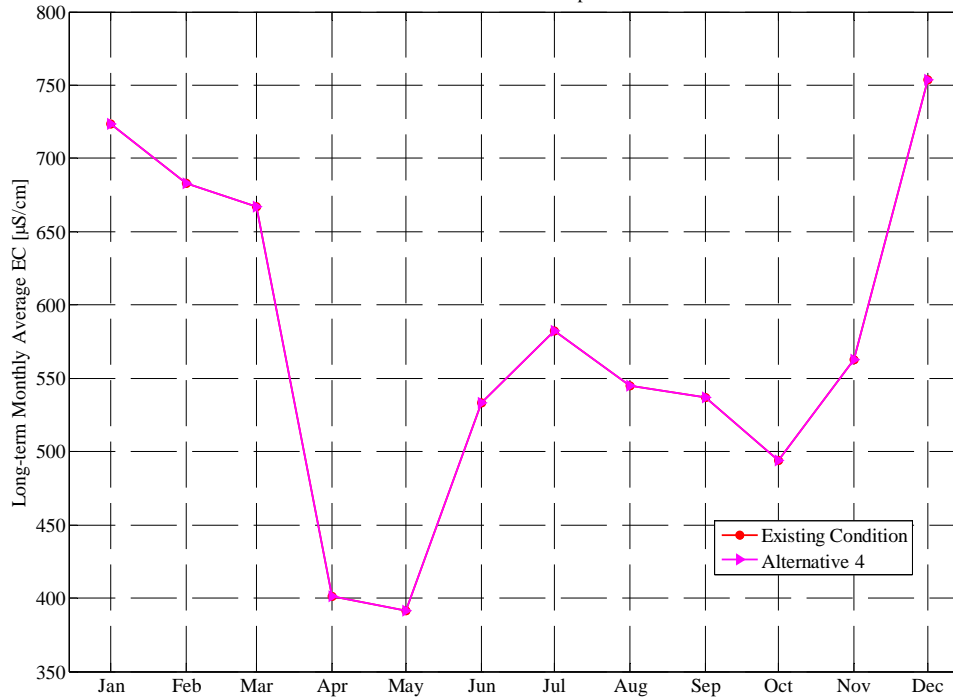
**San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2005 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	388	541	834	820	949	949	449	441	648	649	631	624
1977	541	703	868	888	950	950	546	603	649	649	650	721
1978	705	763	879	758	572	565	274	254	401	553	484	445
1979	508	526	775	674	359	324	378	299	430	647	525	539
1980	455	586	820	335	313	220	337	361	380	456	447	481
1981	443	525	770	768	930	900	397	358	648	648	631	599
1982	514	654	817	702	304	296	183	173	376	409	338	246
1983	190	204	272	268	282	226	187	198	208	227	185	233
1984	359	161	226	296	220	333	327	301	484	602	508	444
1985	400	505	806	769	829	913	373	380	647	649	604	560
1986	510	610	810	847	470	271	253	250	414	586	471	430
1987	393	453	756	788	949	917	367	353	648	649	649	621
1988	537	683	854	872	950	954	490	472	648	649	649	657
1989	564	703	842	893	950	951	596	557	647	647	648	592
1990	696	694	850	950	950	950	625	634	649	648	649	677
1991	701	692	877	950	950	950	641	629	649	648	649	718
Avg	494	563	754	724	683	667	401	391	533	582	545	537
W/AN/BN	463	500	657	554	360	319	277	262	385	497	423	403
D/C	518	611	829	855	934	937	498	492	648	648	640	641

**Percent (%) Change from Existing Condition for San Joaquin River at Vernalis Salinity
(Alternative 4 - Existing Condition) / Existing Condition
2005 Level of Development**

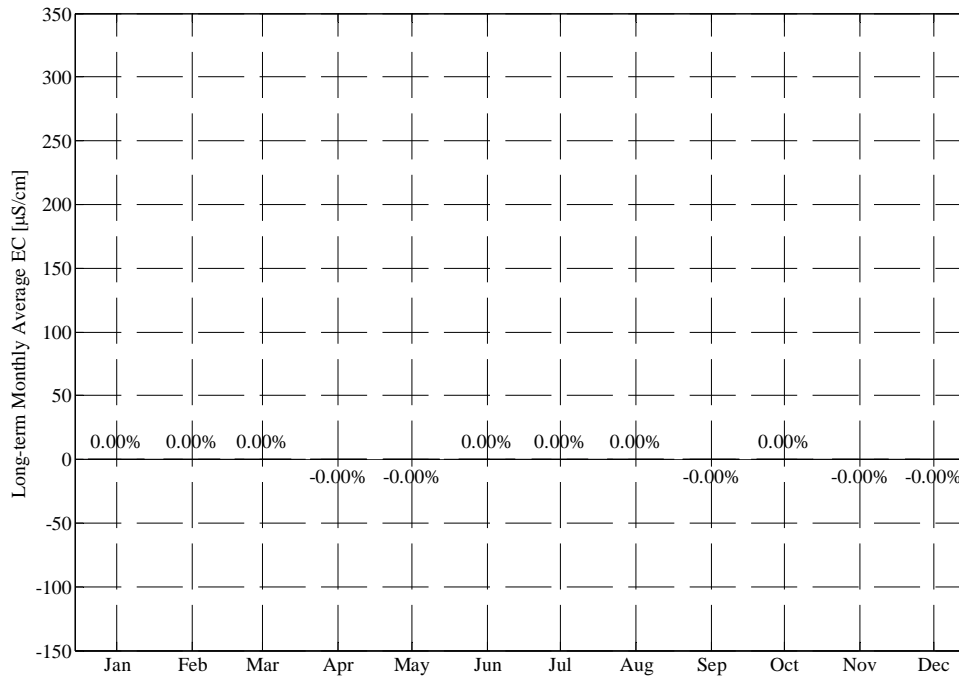
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Vernalis Salinity
 Long-term Monthly Average of Simulated EC
 2005 Level of Development



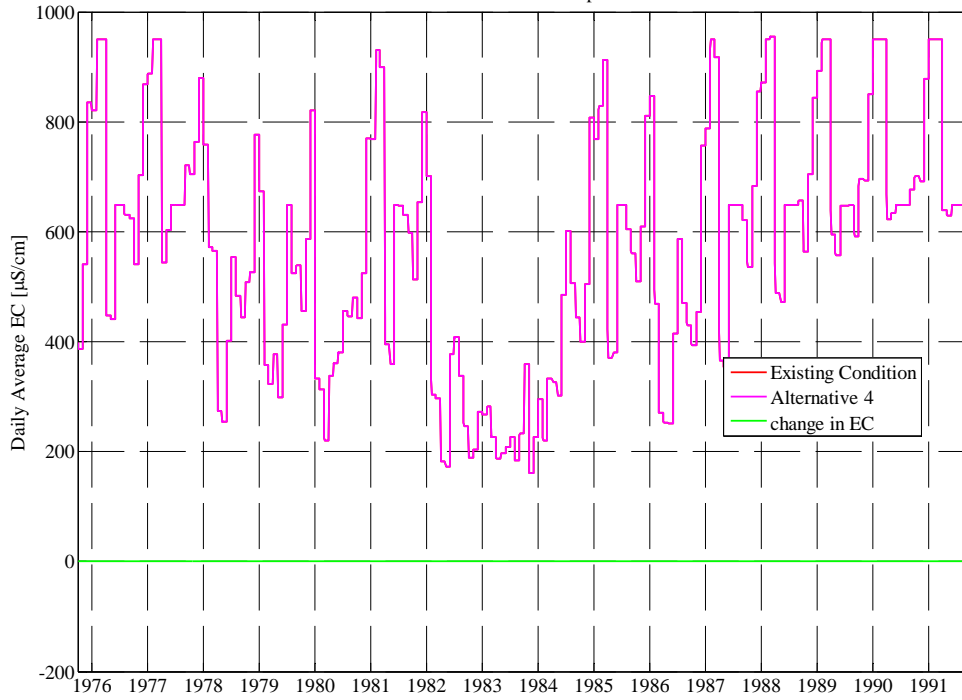
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
 Change from Existing Condition for Long-term Monthly Average of Simulated EC
 2005 Level of Development
 Alternative 4



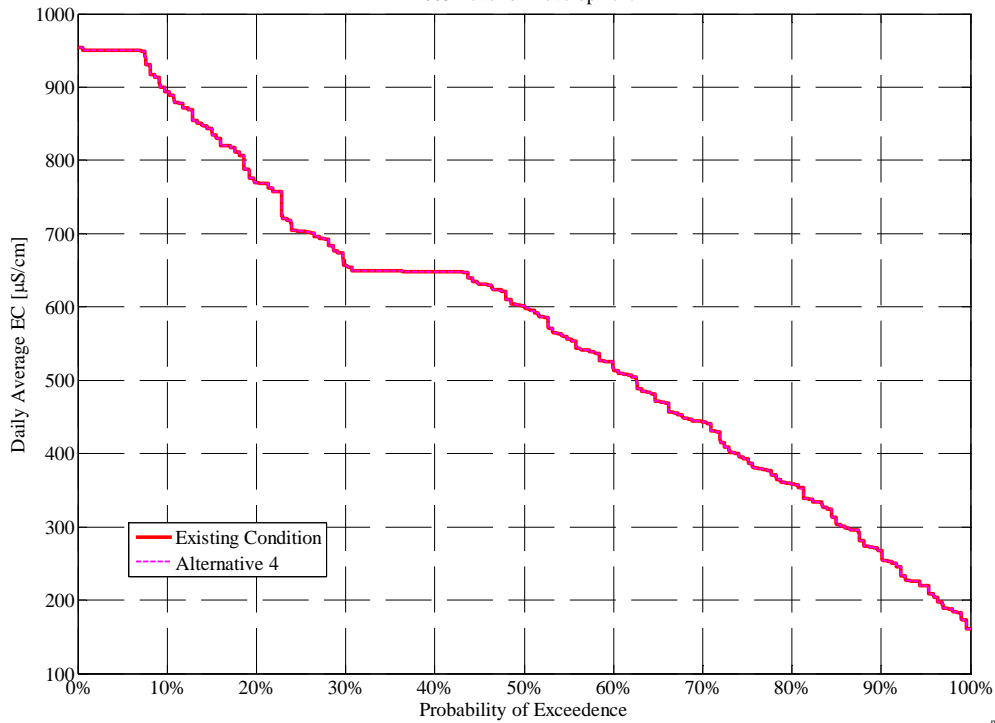
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 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
Daily Average of Simulated EC
2005 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
Daily Average of Simulated EC
2005 Level of Development



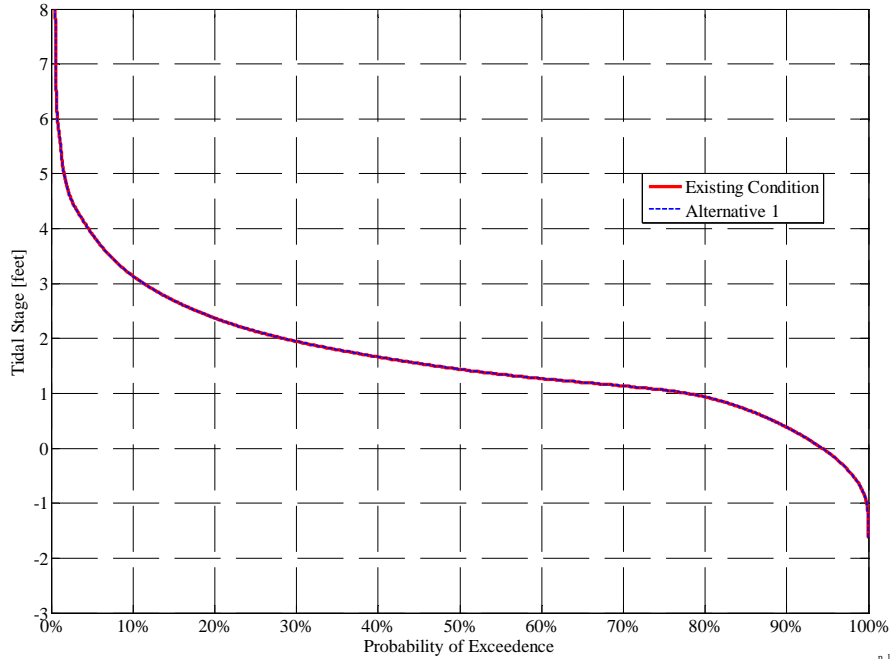
p_lve_wq_feir.m
07-Jan-2010 DS

Water Level

Middle River near Howard Road Bridge

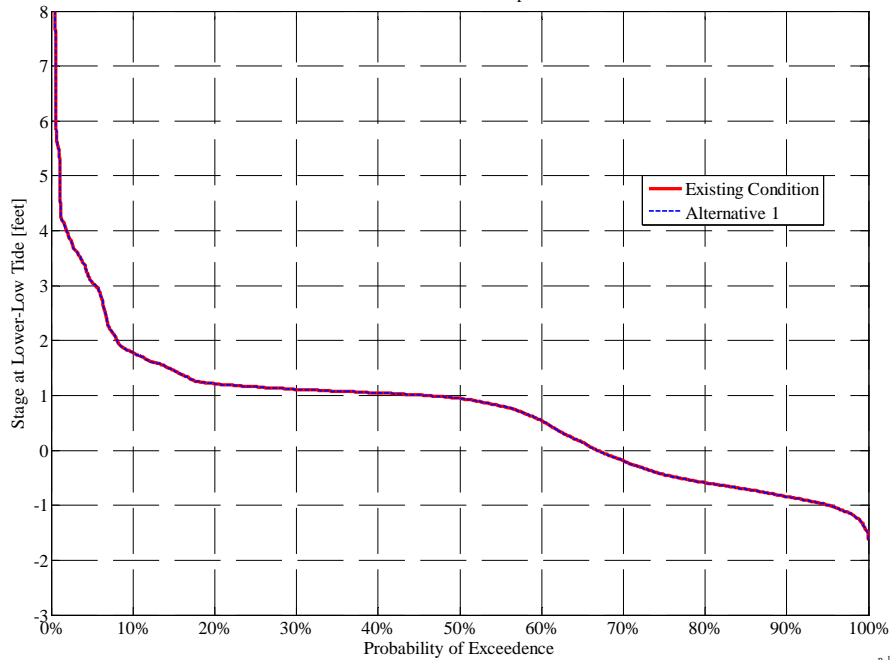
Alternative 1

Middle River near Howard Road Bridge
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

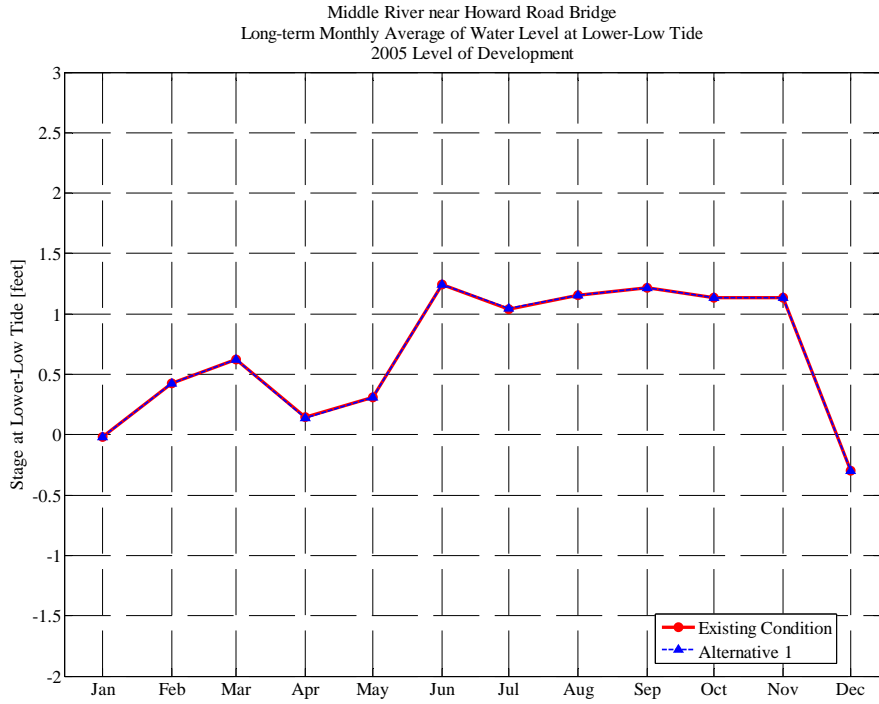


p_lve_stage_feir.m
07-Jan-2010 DS

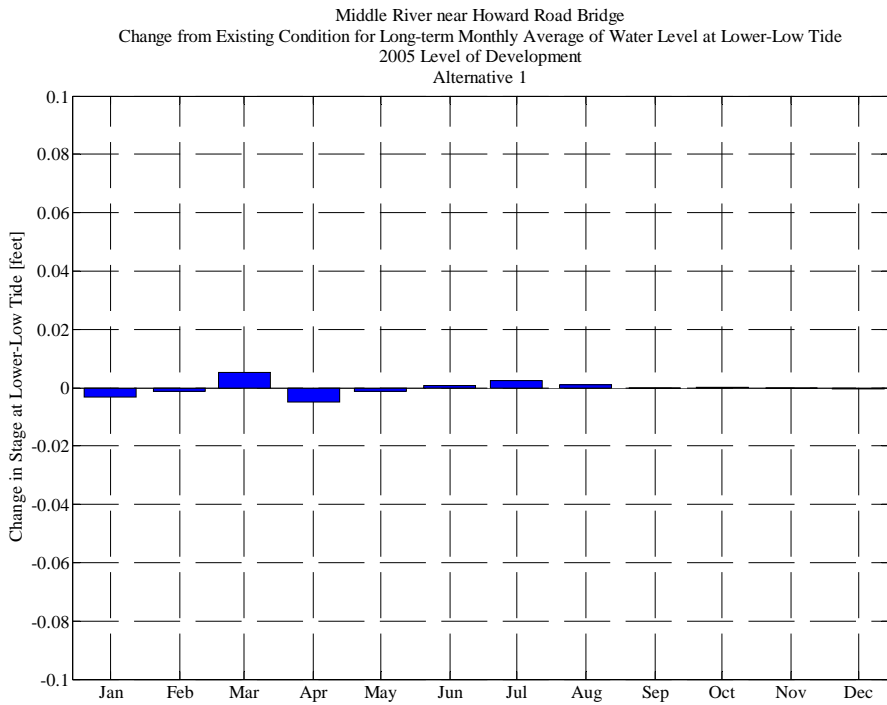
Middle River near Howard Road Bridge
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



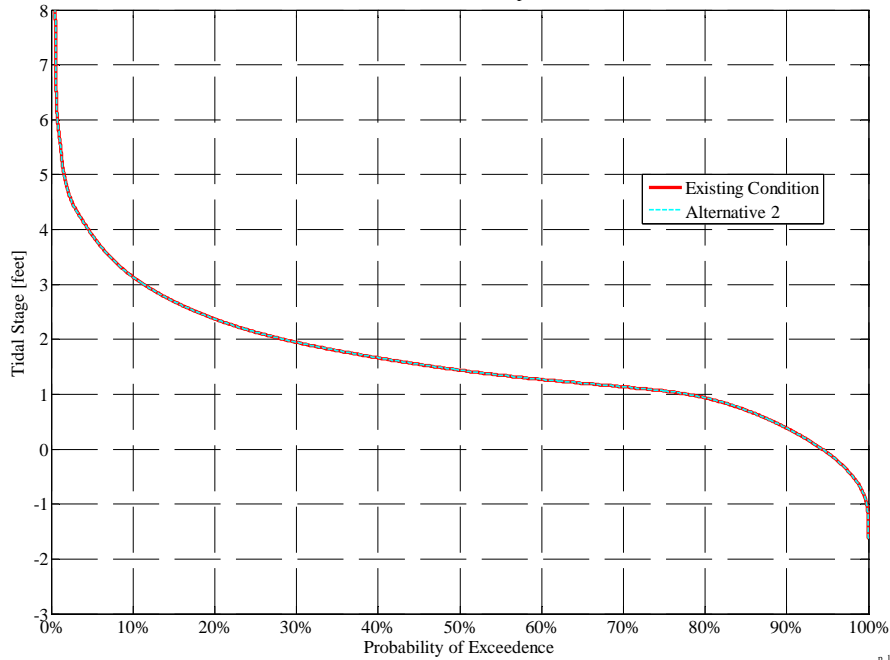
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

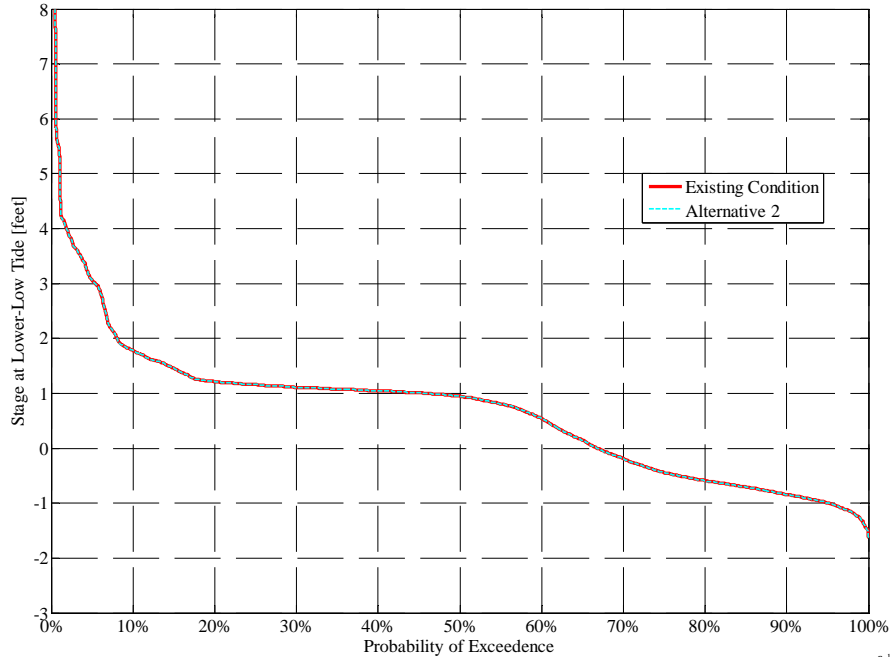
Alternative 2

Middle River near Howard Road Bridge
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

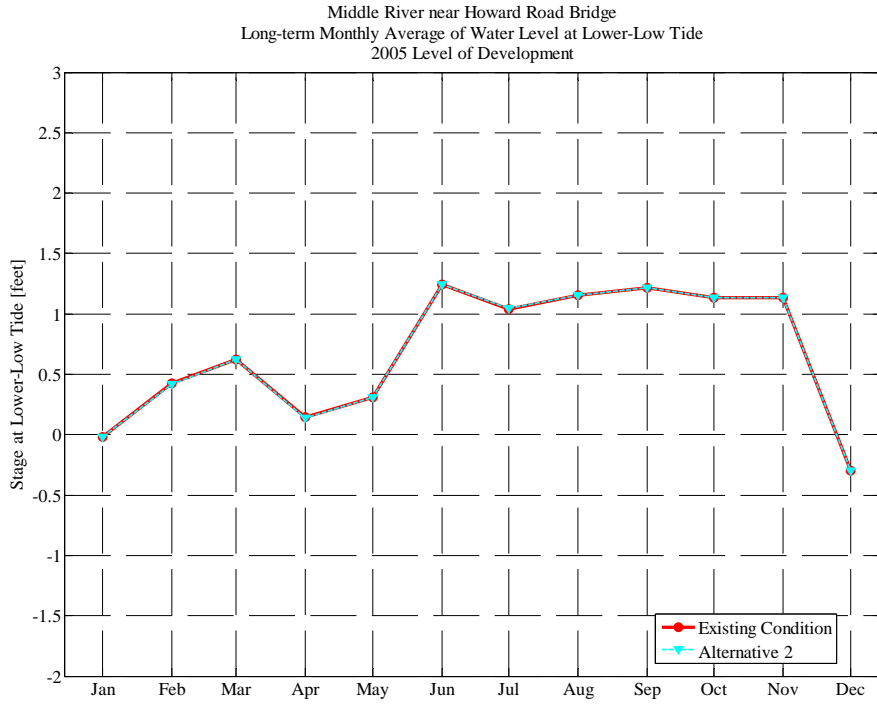


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07-Jan-2010 DS

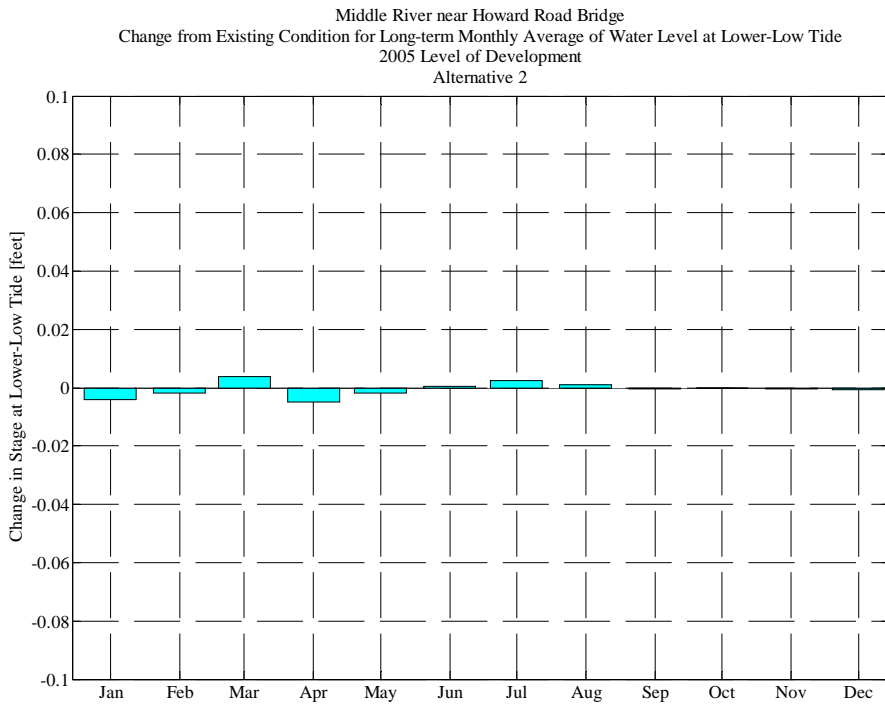
Middle River near Howard Road Bridge
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



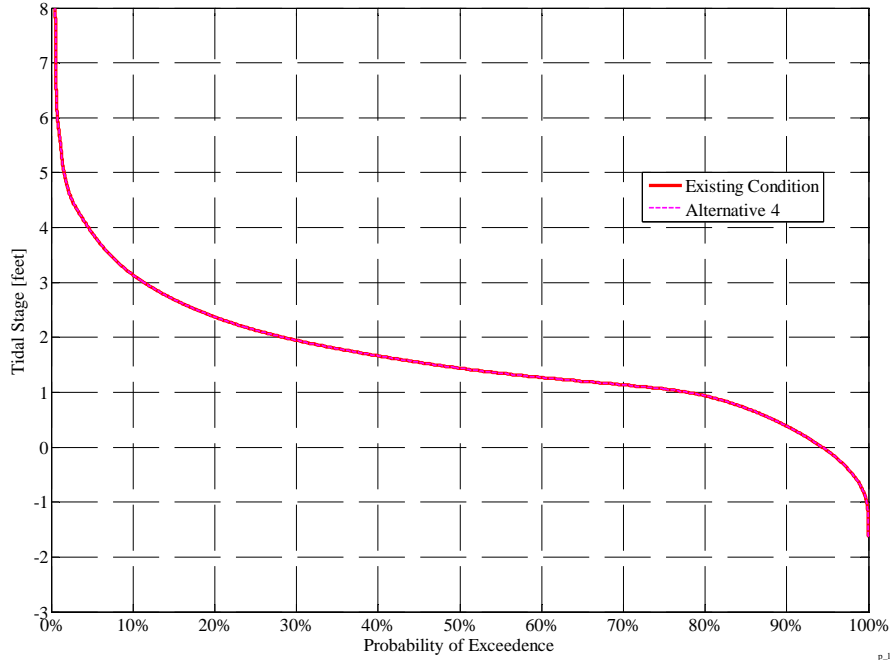
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

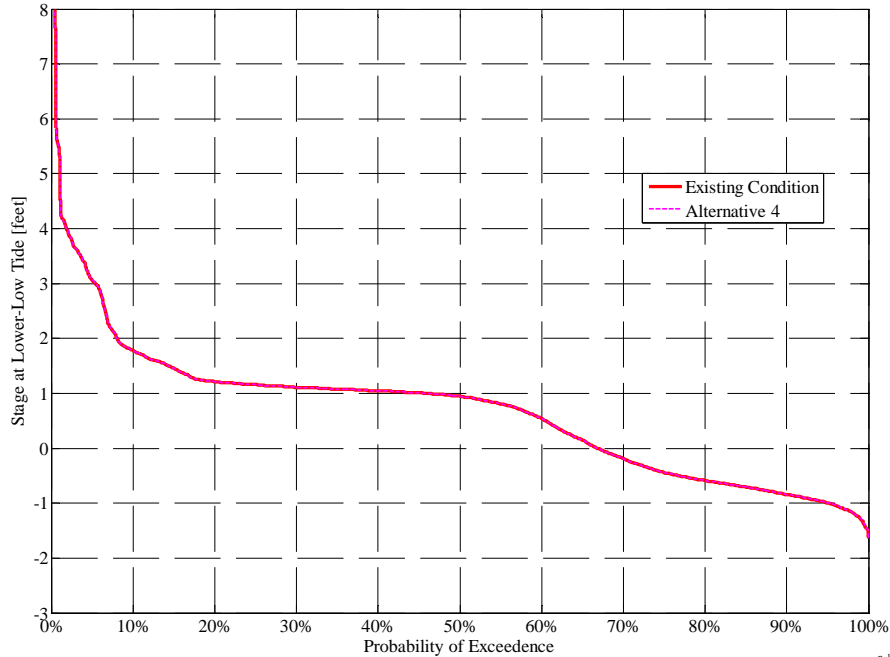
Alternative 4

Middle River near Howard Road Bridge
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

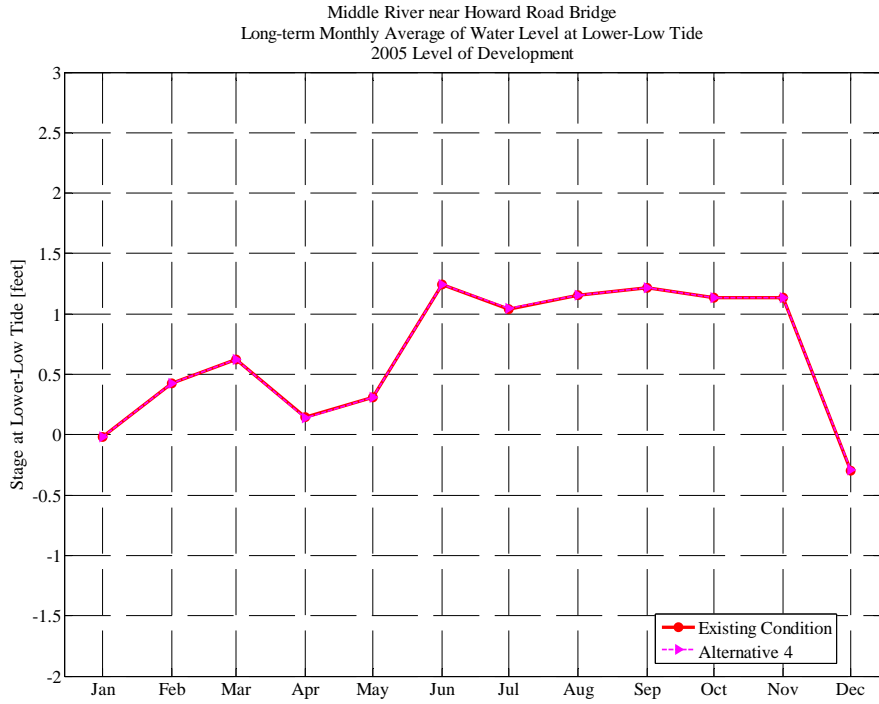


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07-Jan-2010 DS

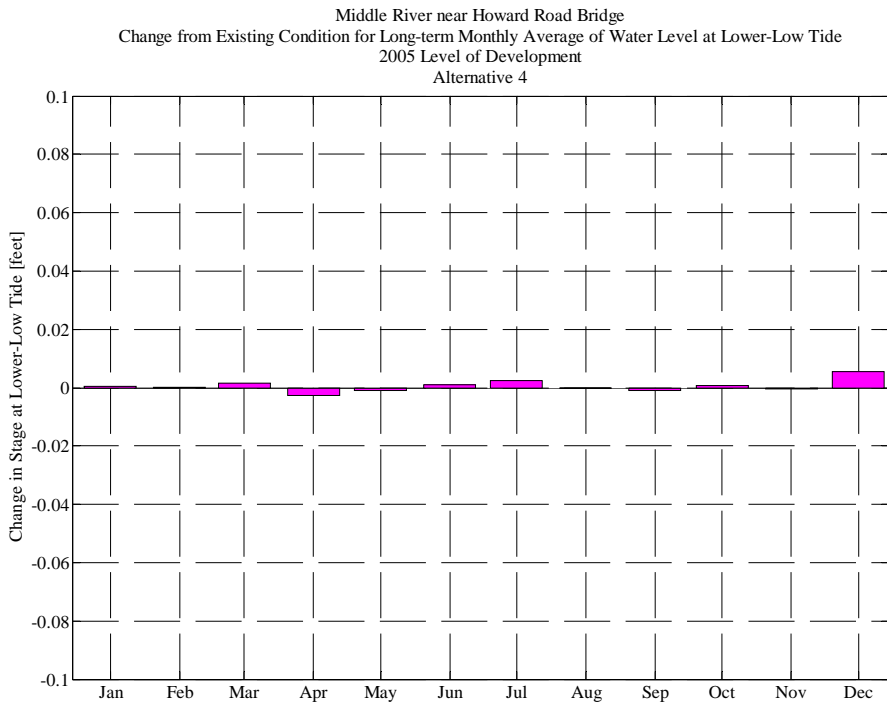
Middle River near Howard Road Bridge
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

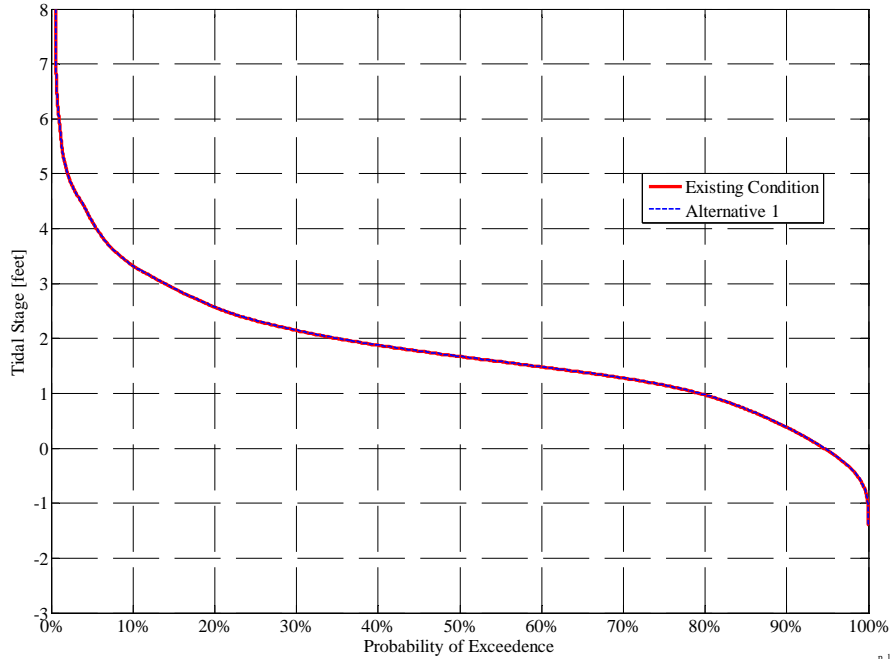


p_lve_stage_feir.m
07-Jan-2010 DS

Old River near Tracy Road Bridge

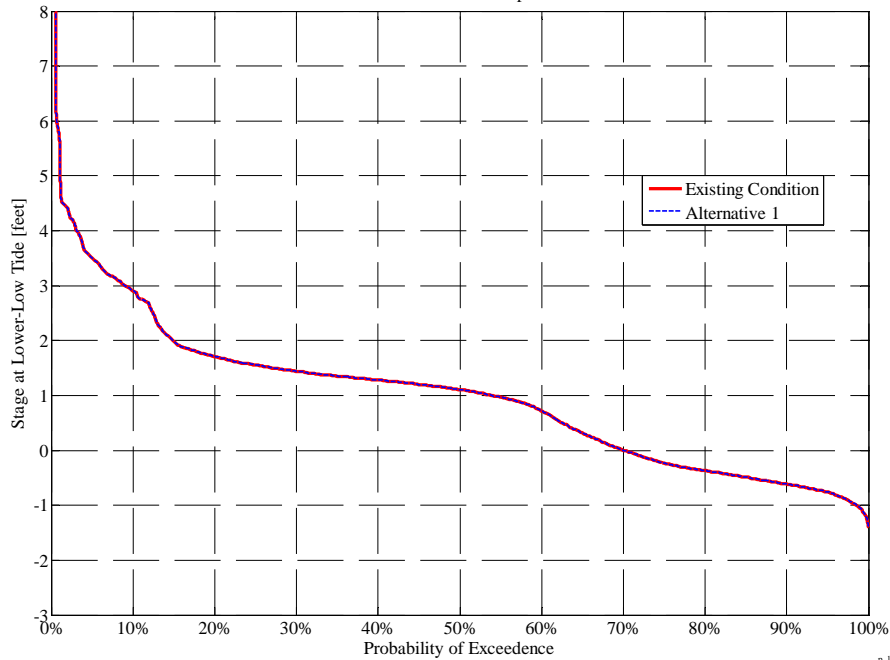
Alternative 1

Old River near Tracy Road Bridge
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

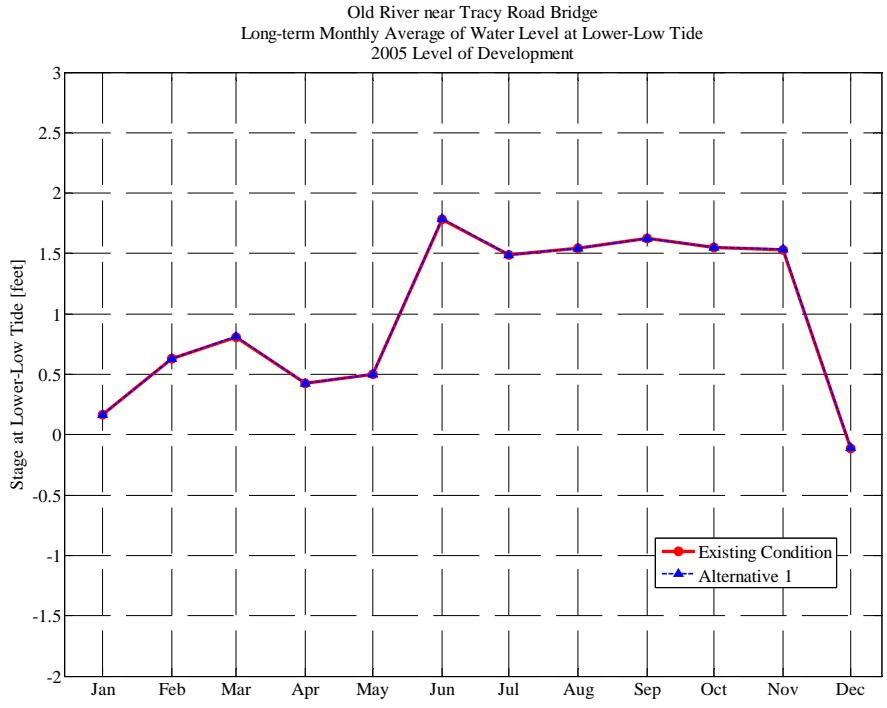


p_lve_stage_feir.m
07-Jan-2010 DS

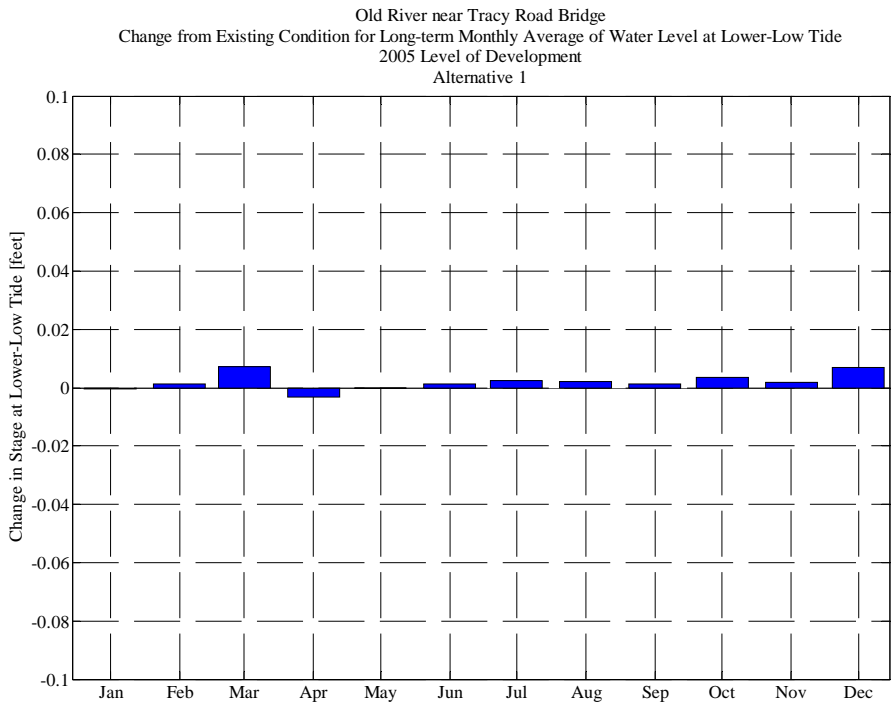
Old River near Tracy Road Bridge
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



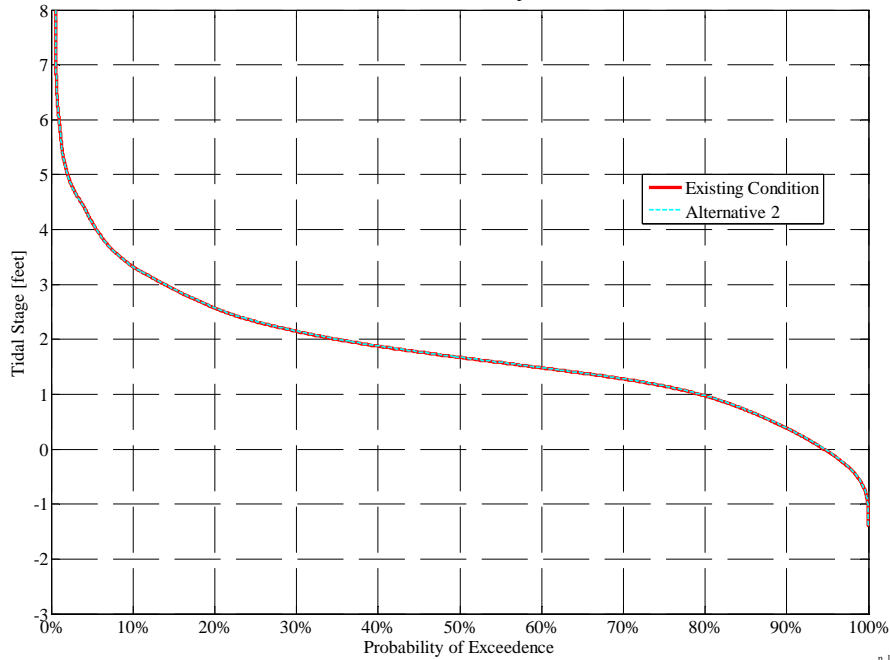
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

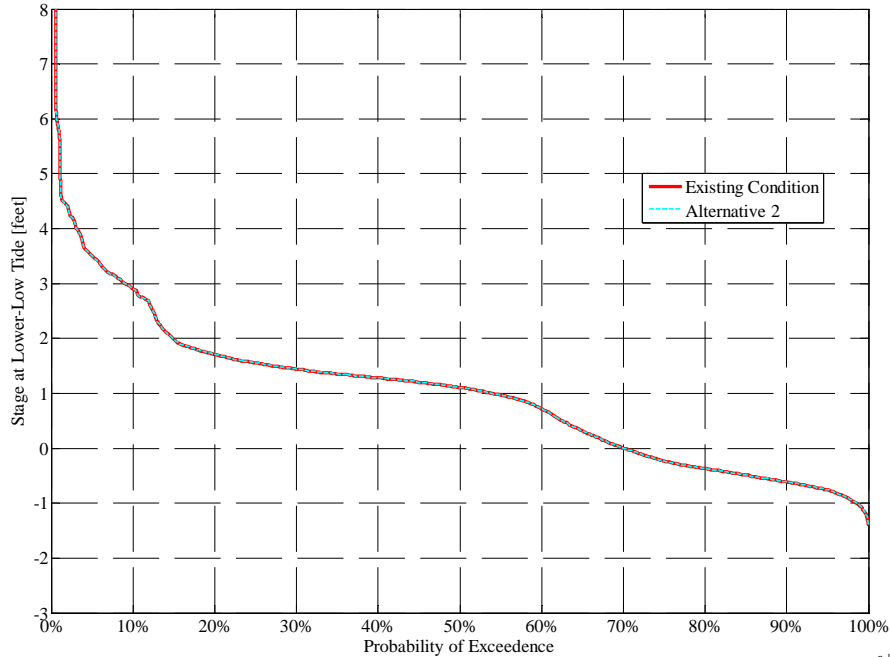
Alternative 2

Old River near Tracy Road Bridge
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

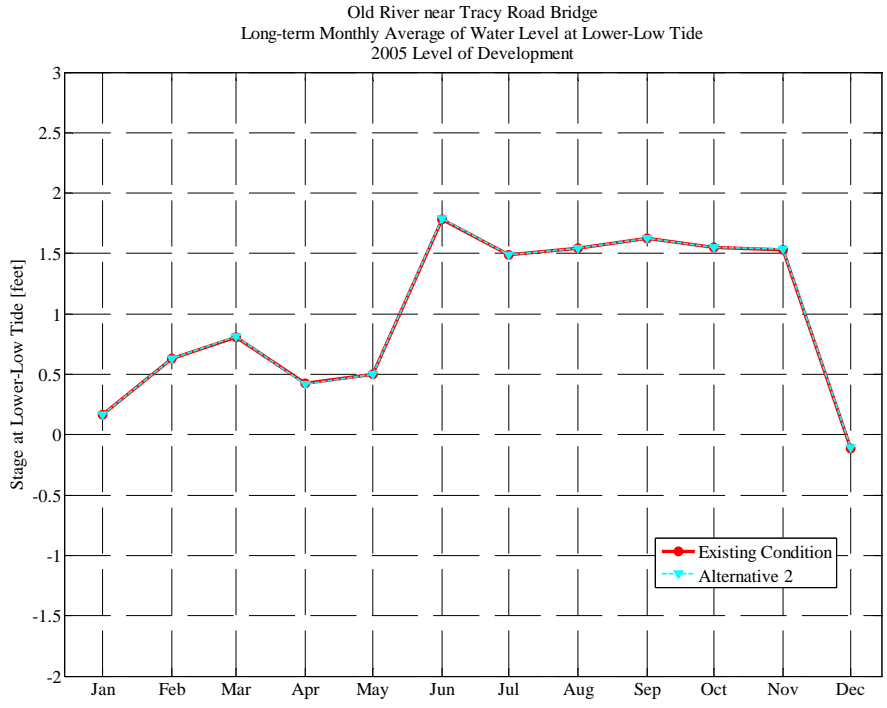


p_lve_stage_feir.m
07-Jan-2010 DS

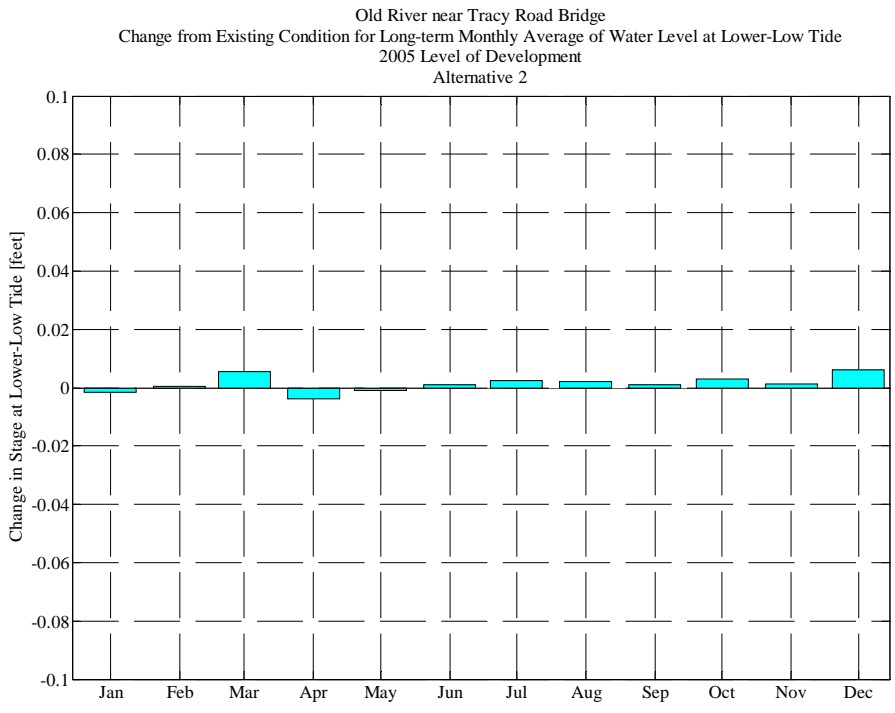
Old River near Tracy Road Bridge
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



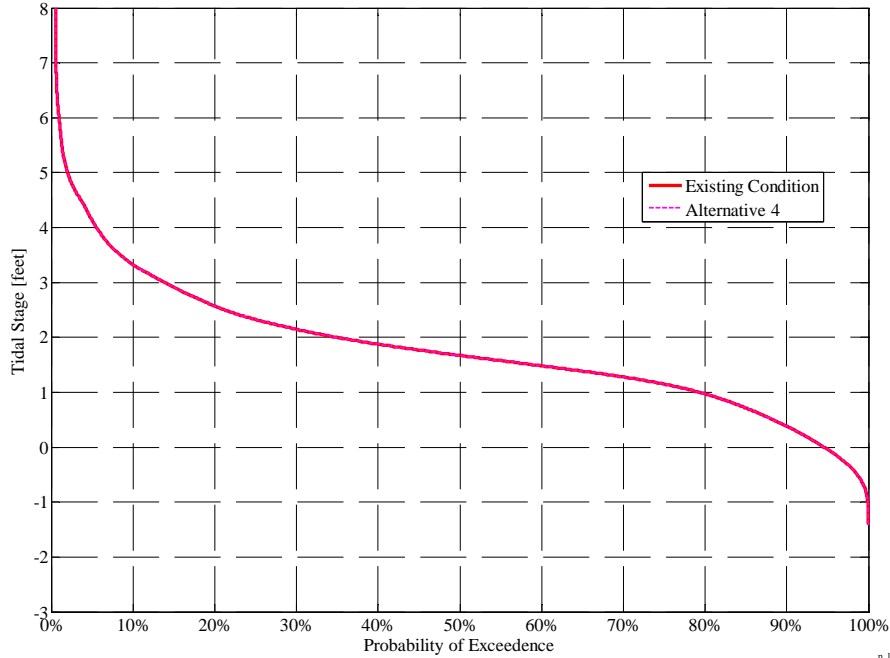
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

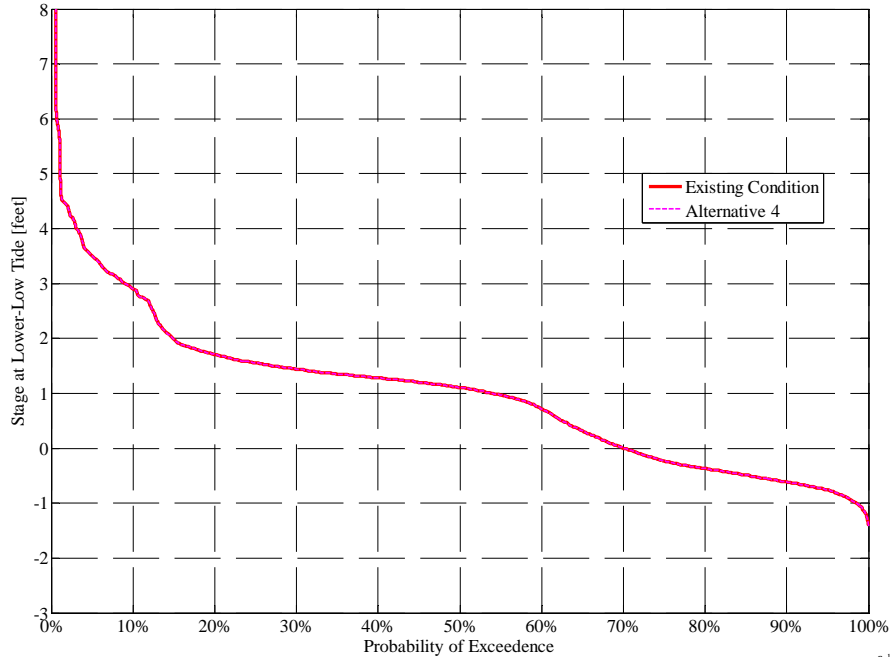
Alternative 4

Old River near Tracy Road Bridge
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

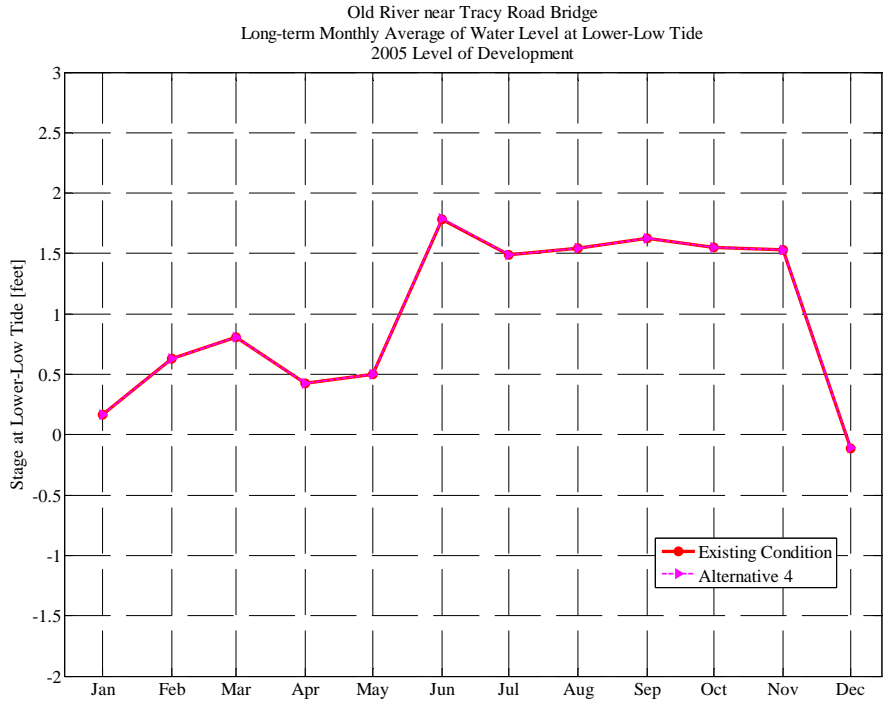


p_lve_stage_feir.m
07-Jan-2010 DS

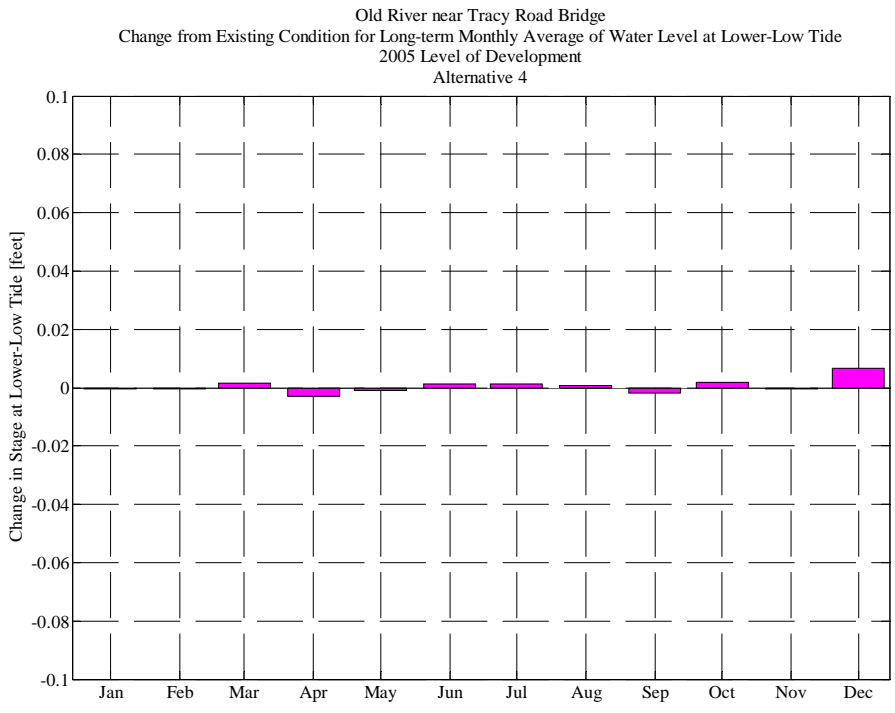
Old River near Tracy Road Bridge
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

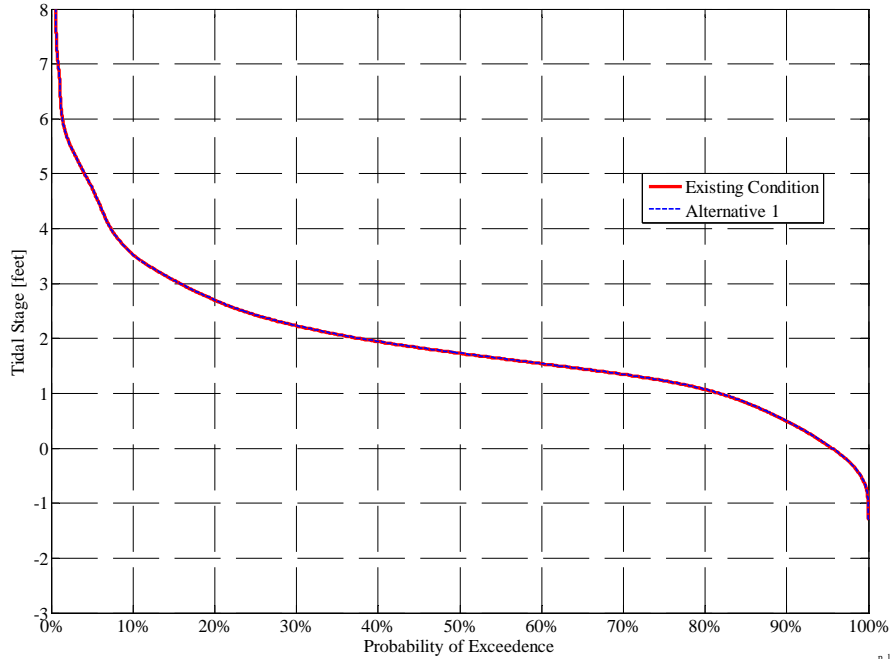


p_lve_stage_feir.m
07-Jan-2010 DS

Doughty Cut above Grant Line Canal Barrier

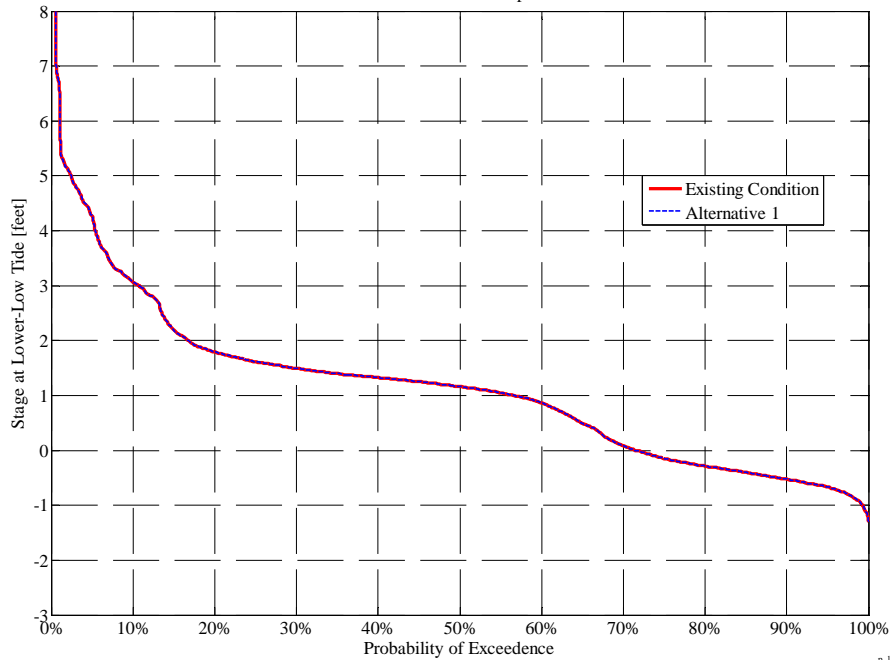
Alternative 1

Doughty Cut above Grant Line Canal Barrier
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

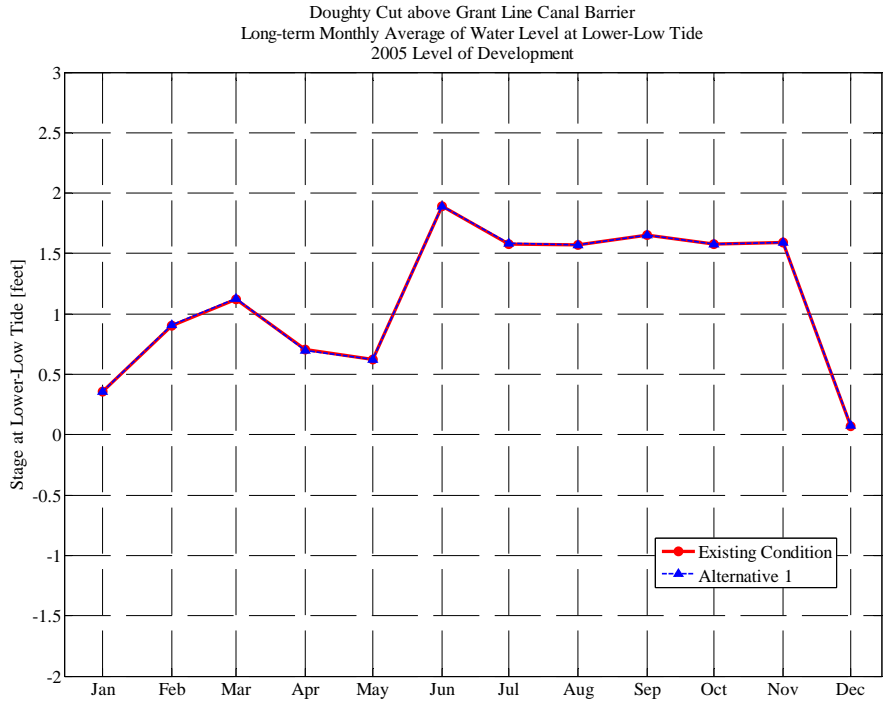


p_lve_stage_feir.m
07-Jan-2010 DS

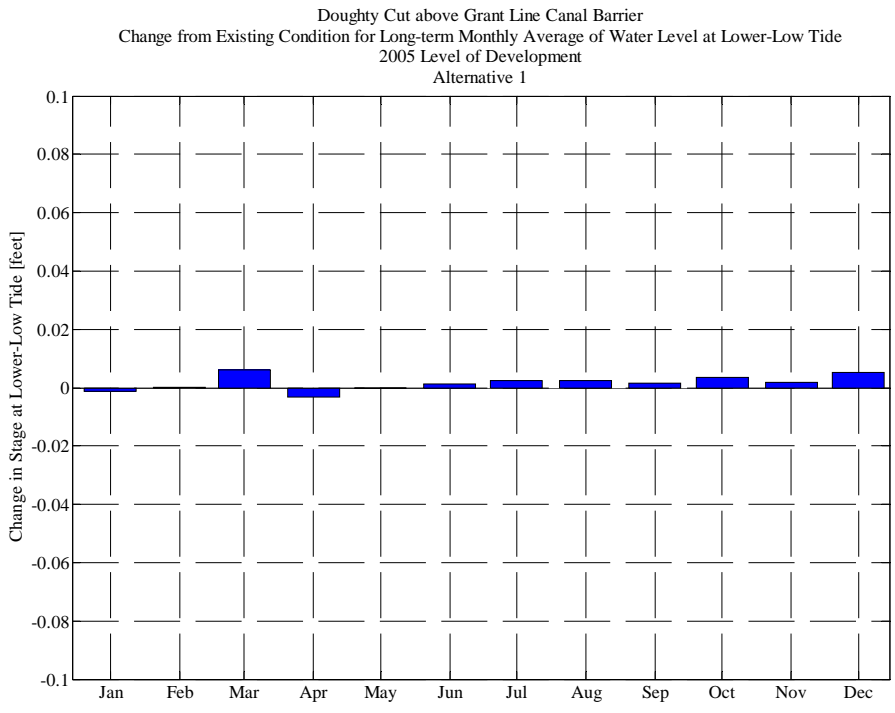
Doughty Cut above Grant Line Canal Barrier
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



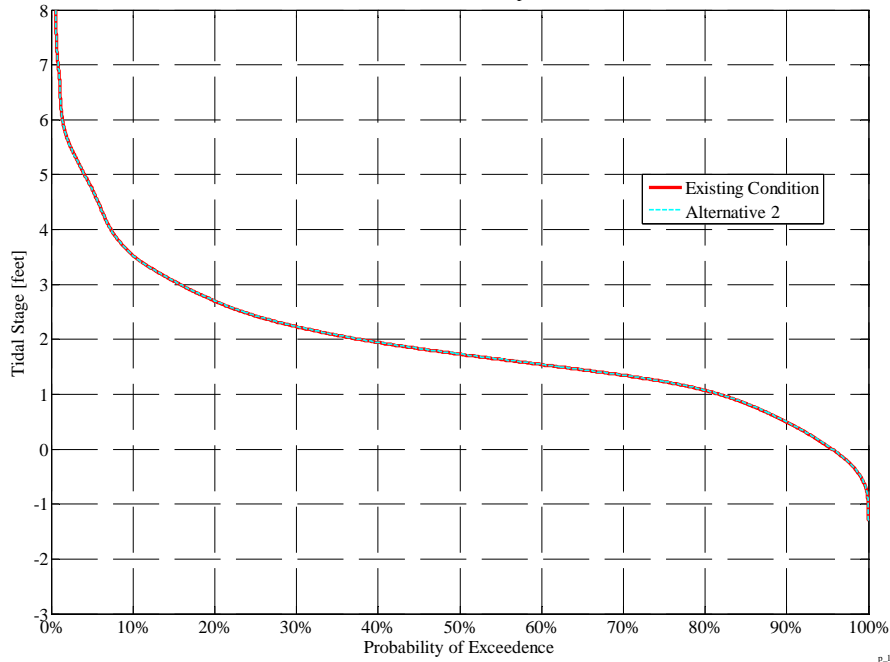
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

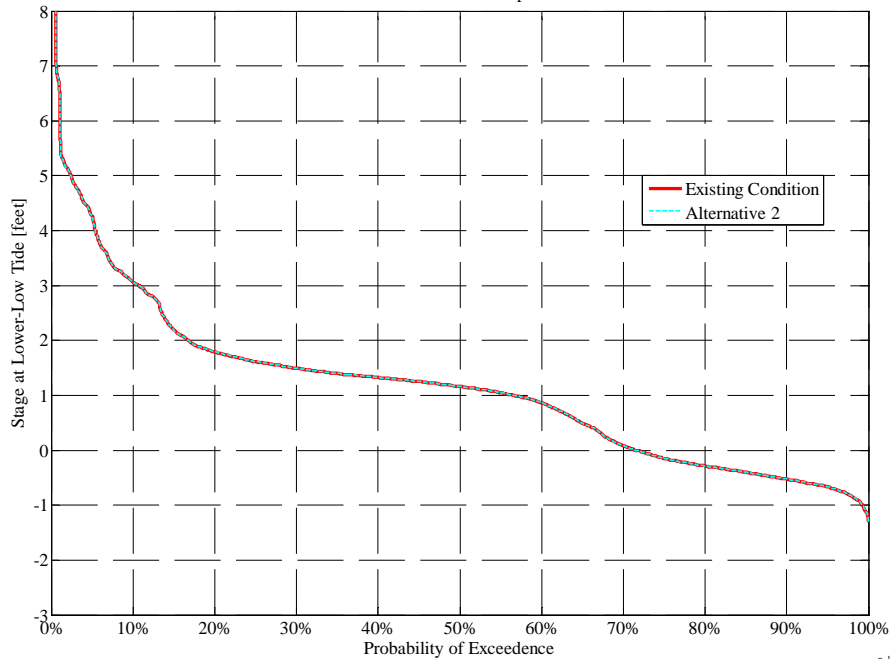
Alternative 2

Doughty Cut above Grant Line Canal Barrier
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

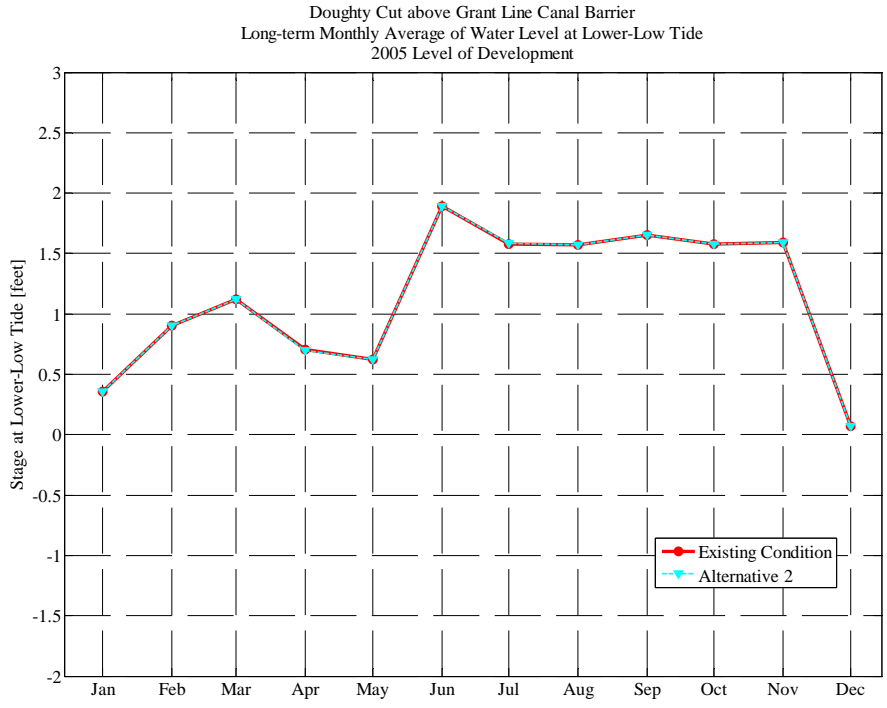


p_lve_stage_feir.m
07-Jan-2010 DS

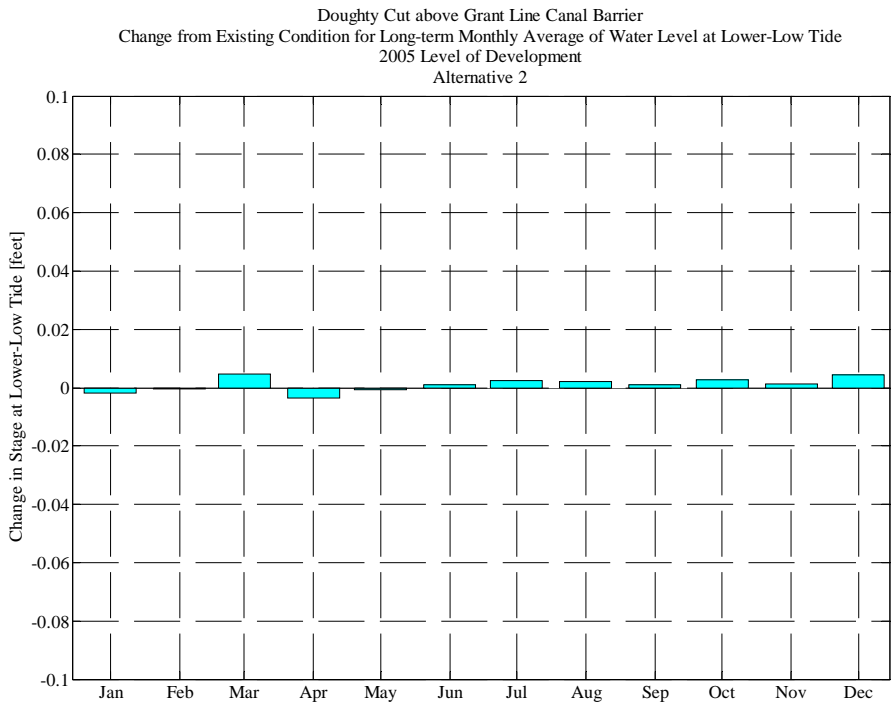
Doughty Cut above Grant Line Canal Barrier
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



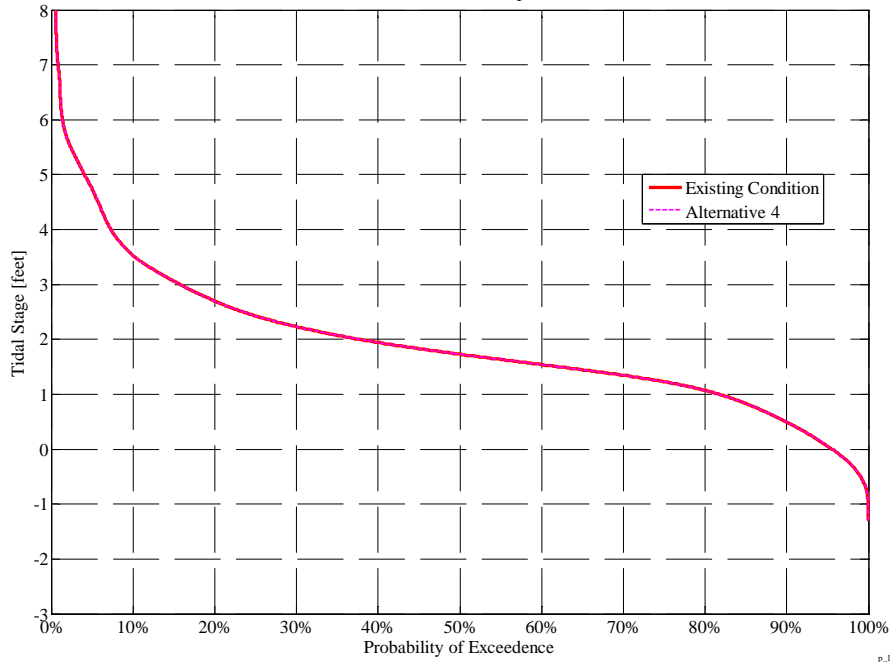
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

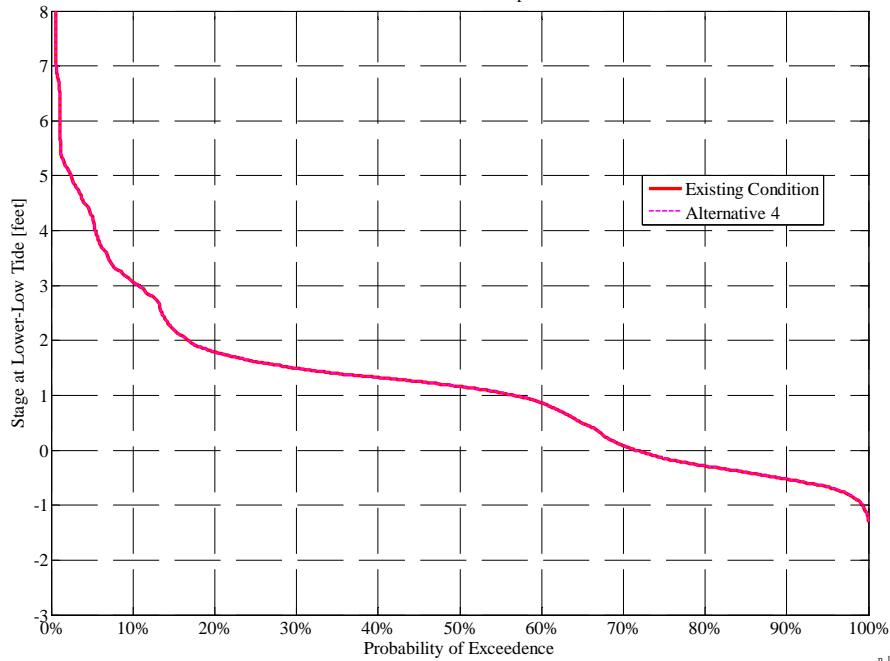
Alternative 4

Doughty Cut above Grant Line Canal Barrier
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

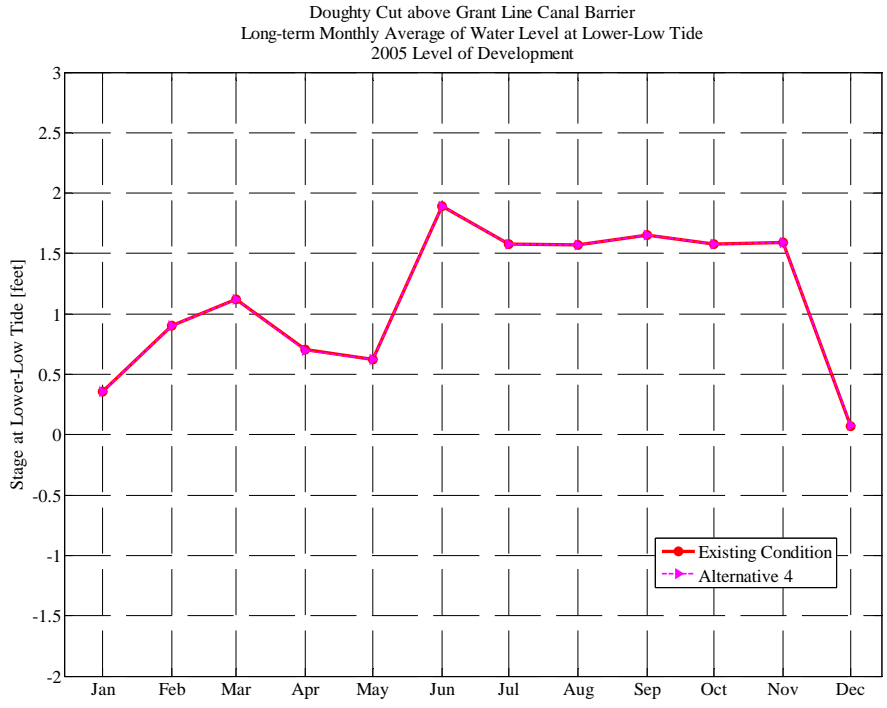


p_lve_stage_feir.m
07-Jan-2010 DS

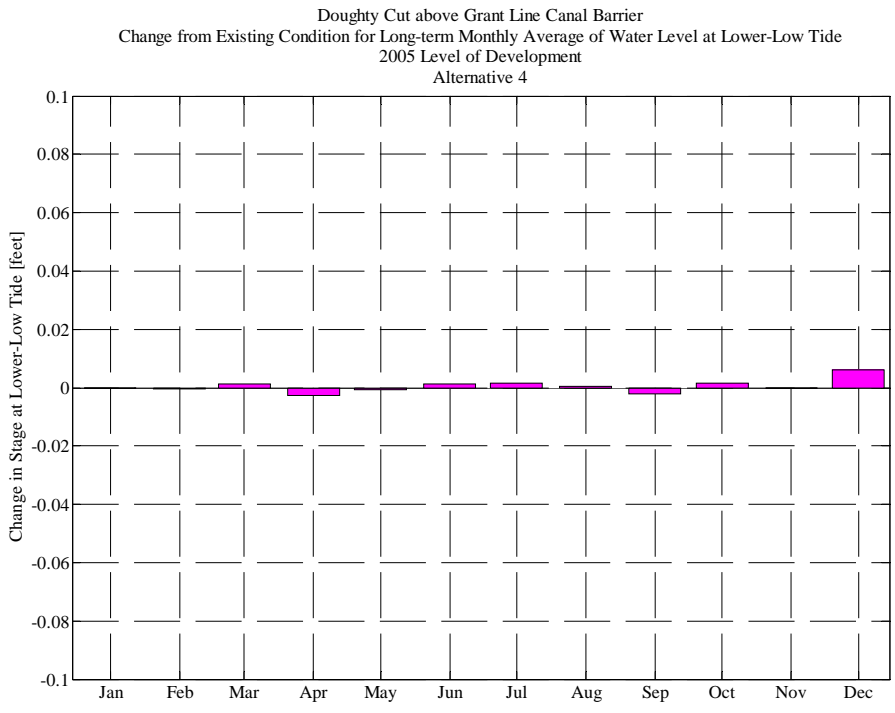
Doughty Cut above Grant Line Canal Barrier
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

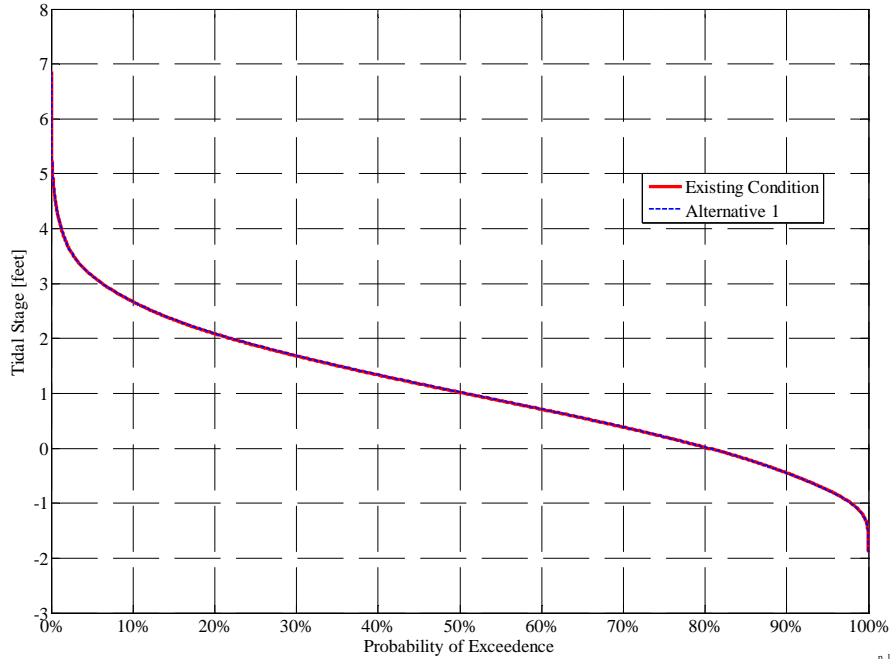


p_lve_stage_feir.m
07-Jan-2010 DS

East of Coney Island

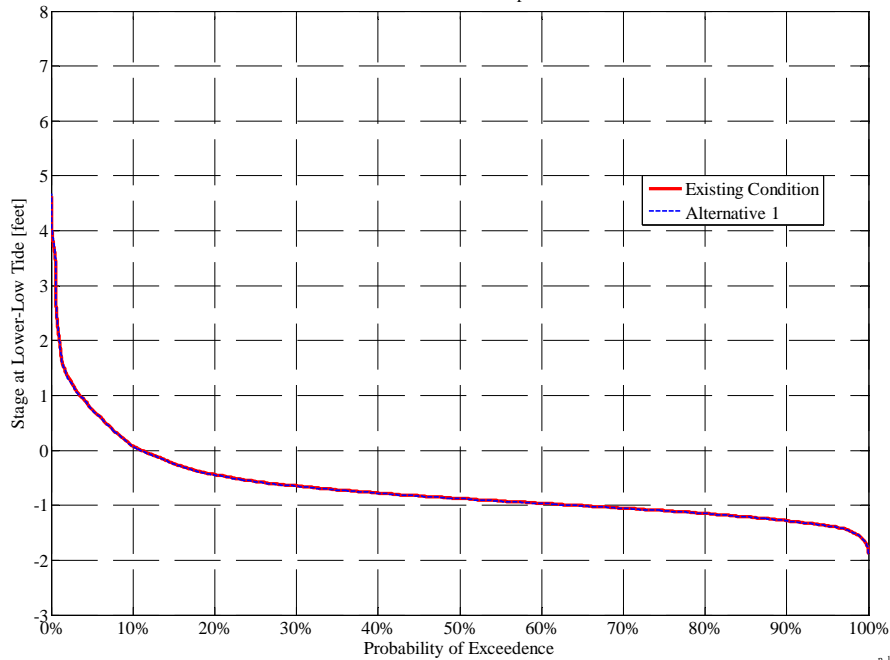
Alternative 1

East of Coney Island
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

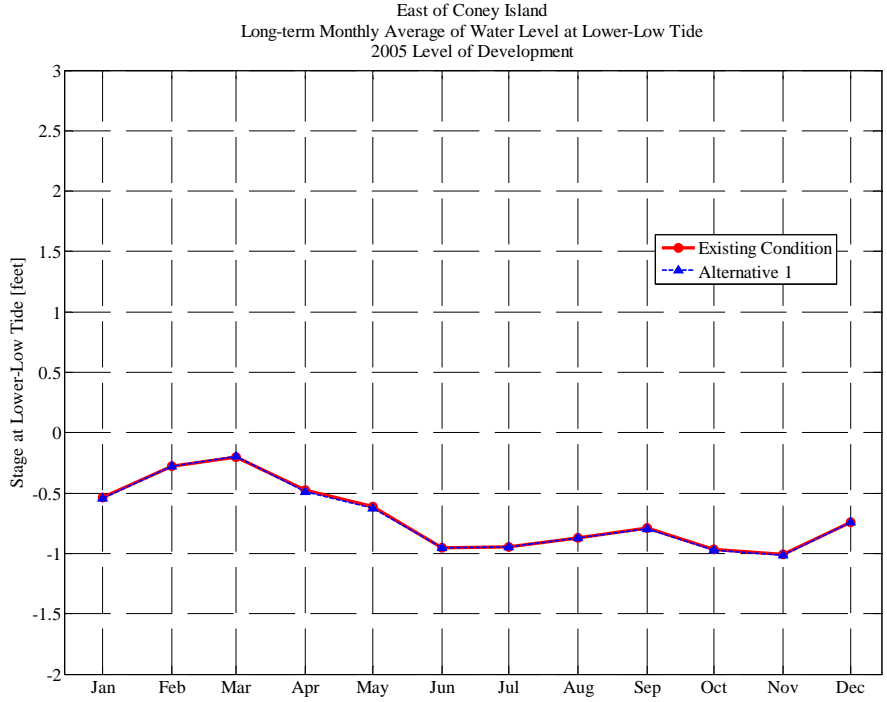


p_lve_stage_feir.m
07-Jan-2010 DS

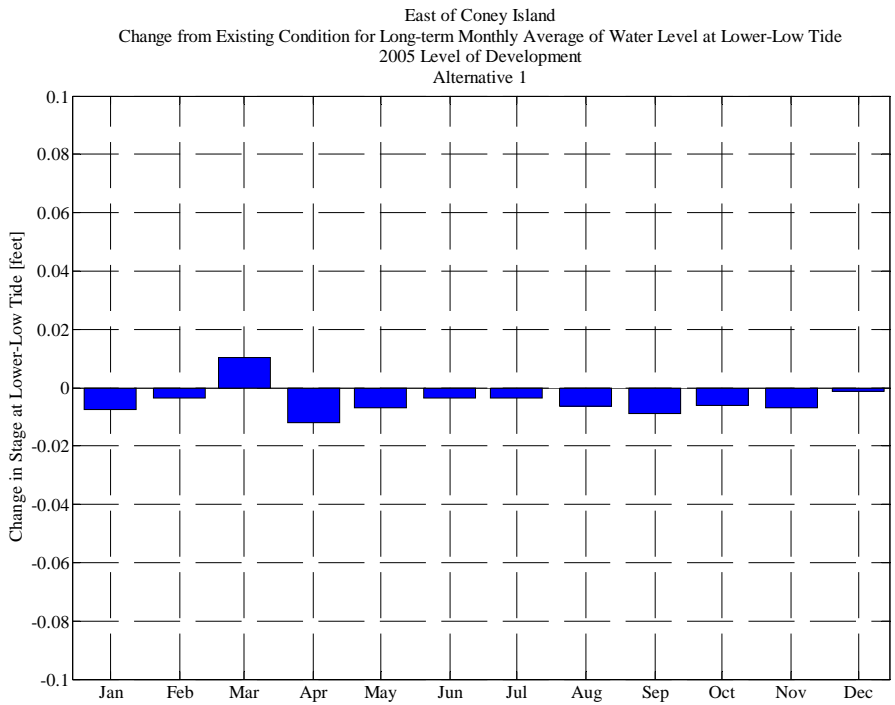
East of Coney Island
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



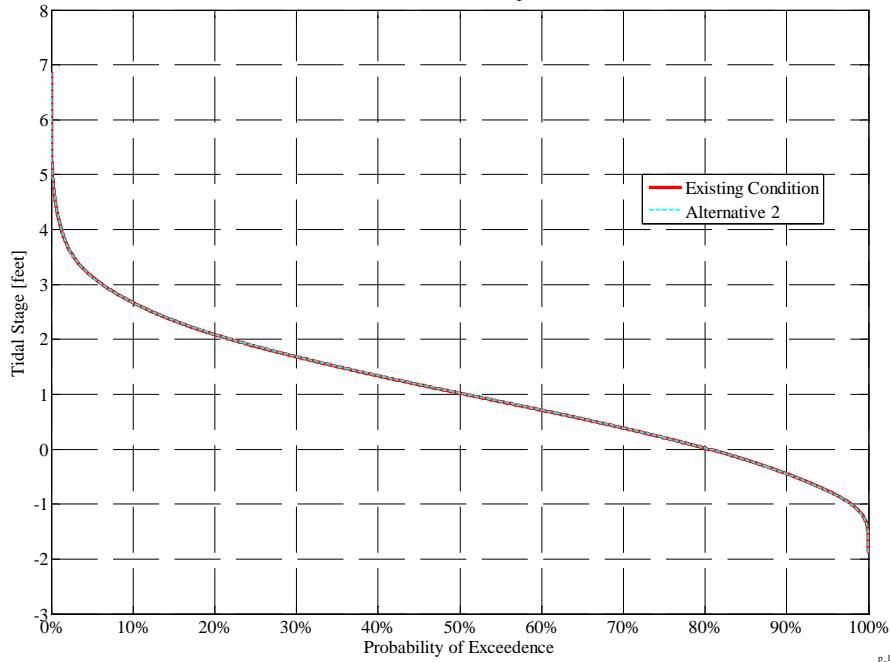
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

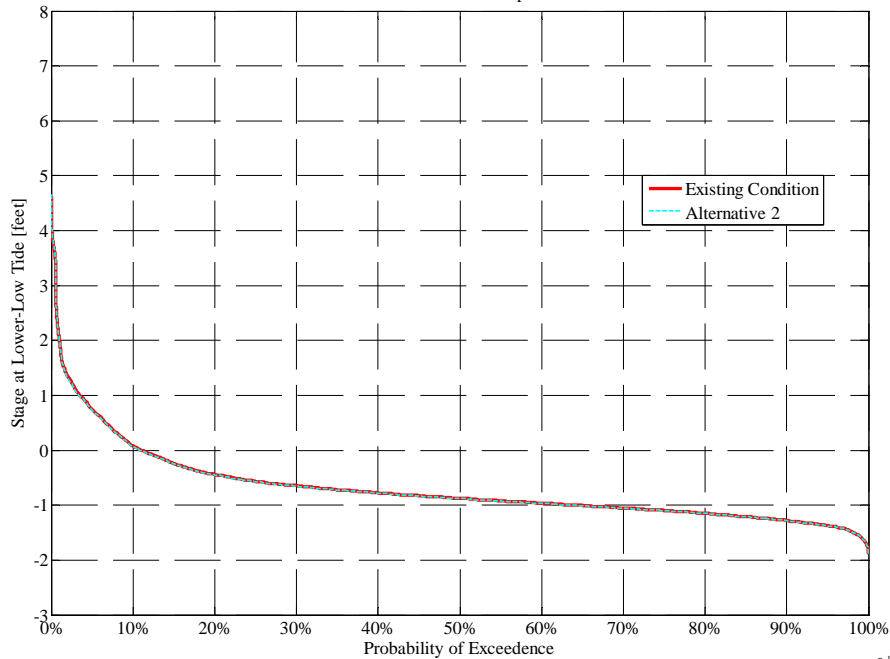
Alternative 2

East of Coney Island
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

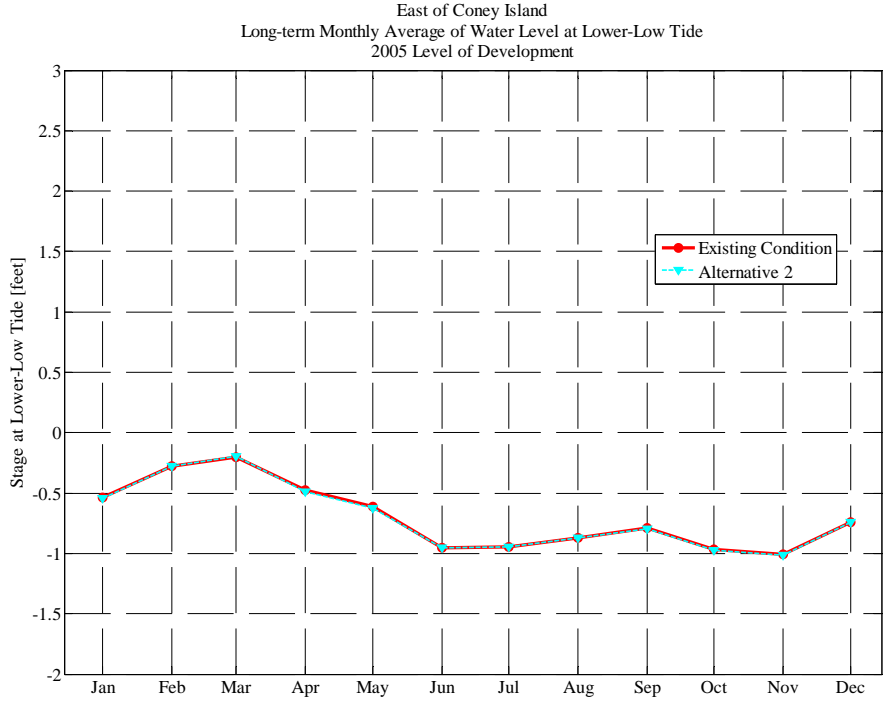


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07-Jan-2010 DS

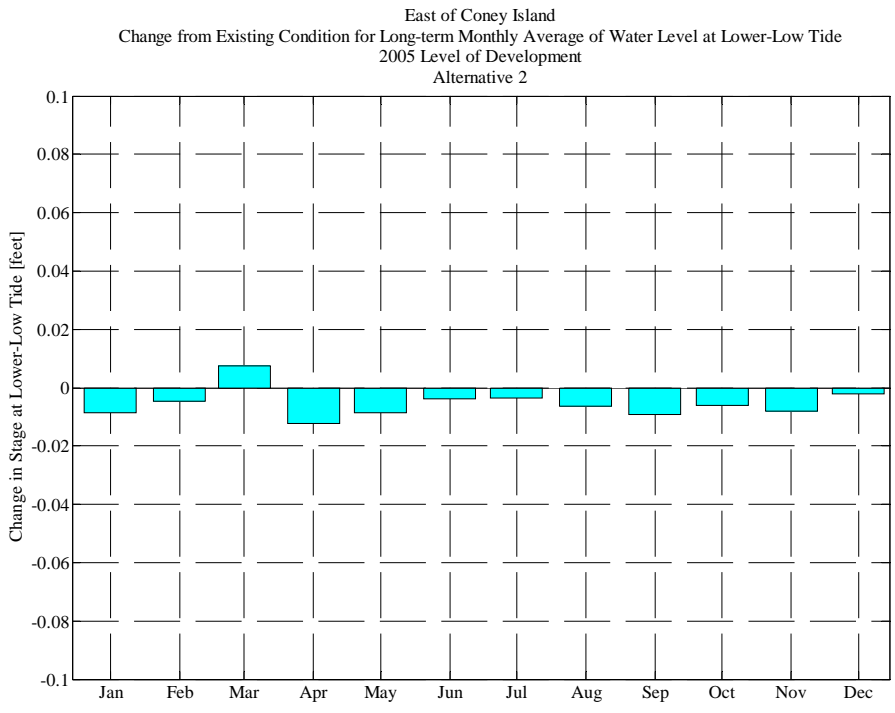
East of Coney Island
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



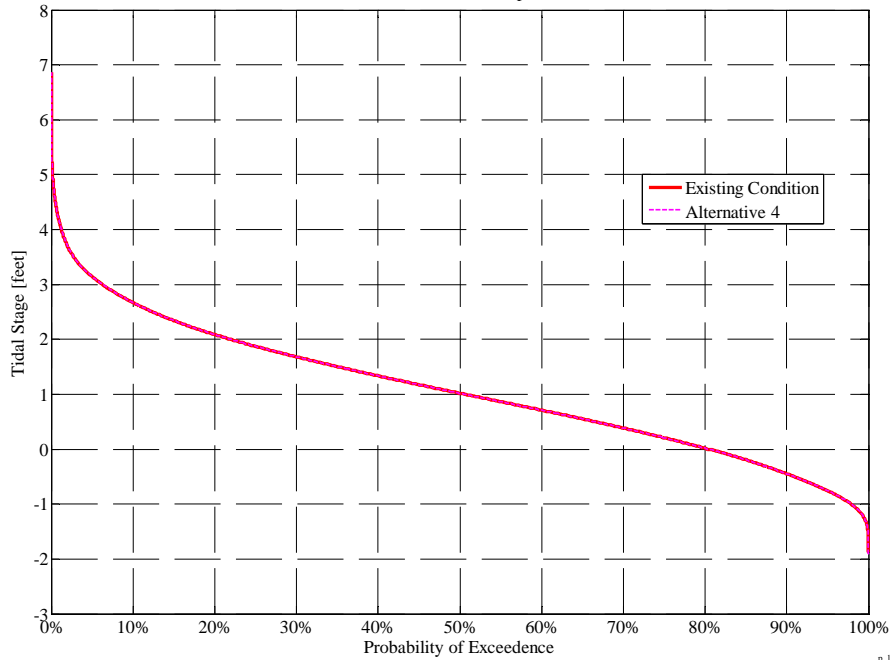
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

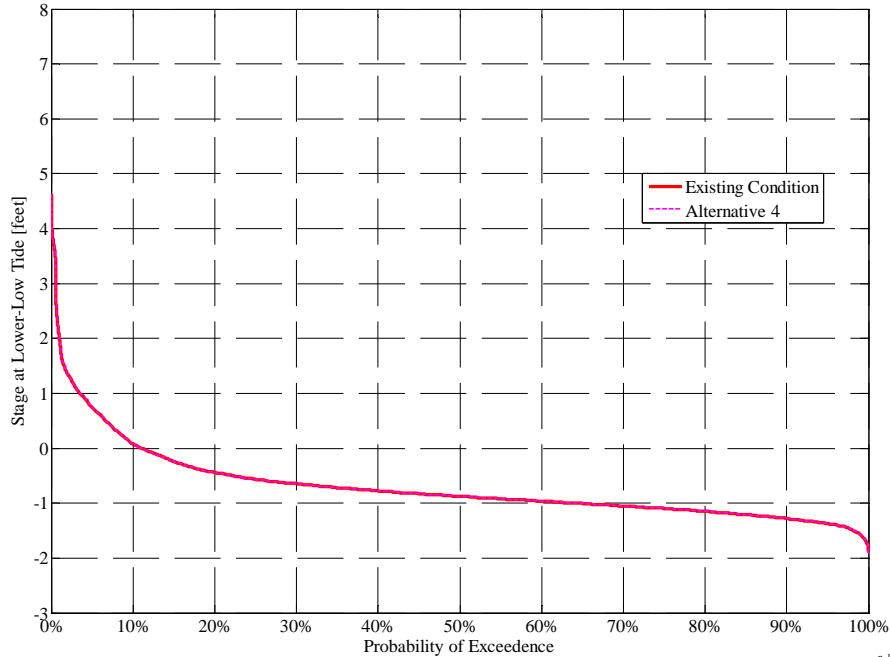
Alternative 4

East of Coney Island
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

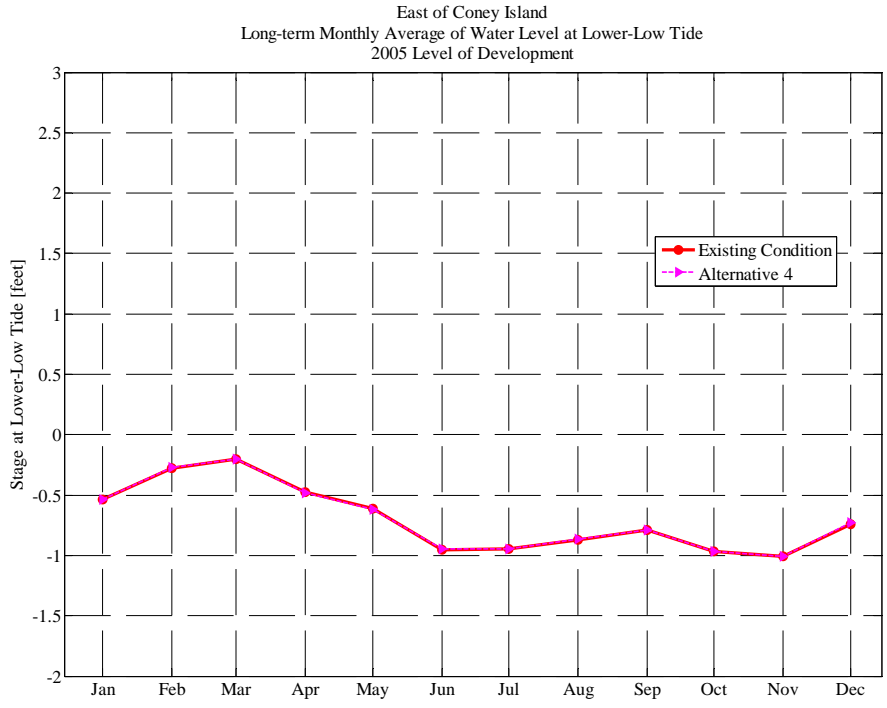


p_lve_stage_feir.m
07-Jan-2010 DS

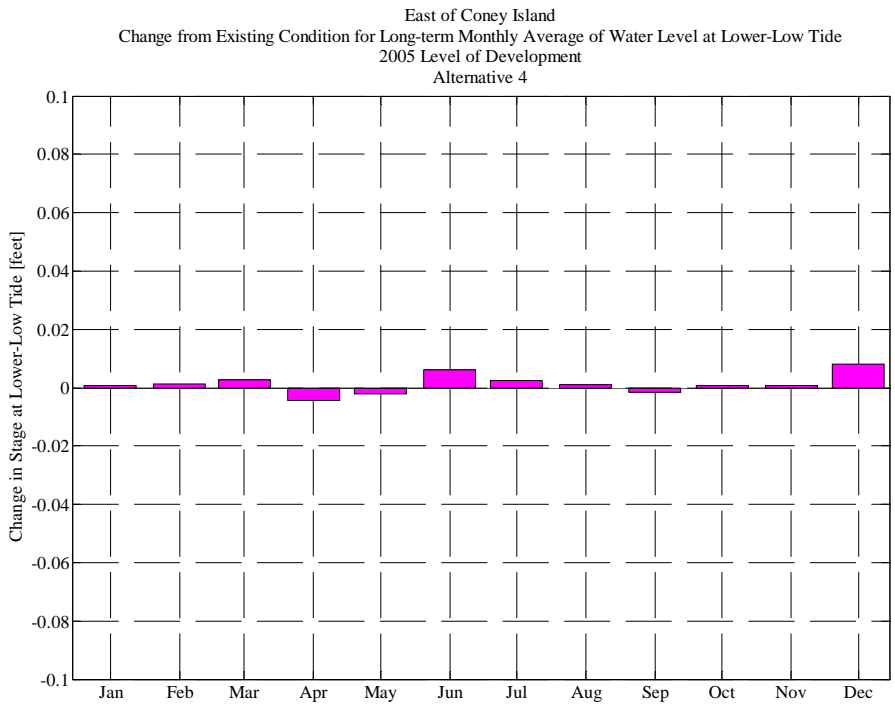
East of Coney Island
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



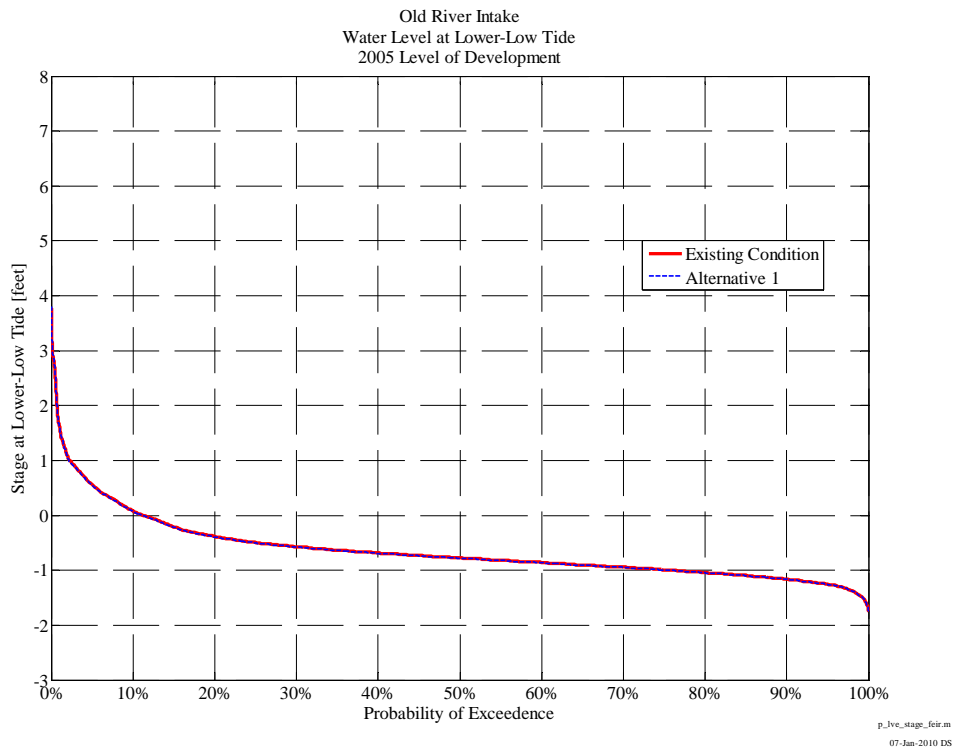
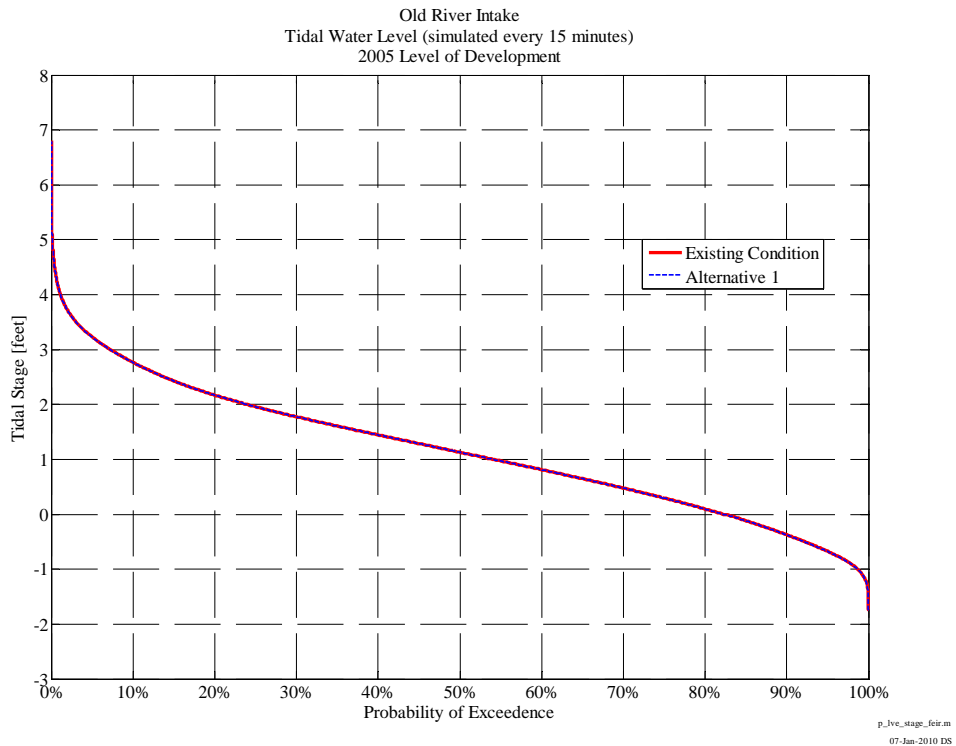
p_lve_stage_feir.m
07-Jan-2010 DS

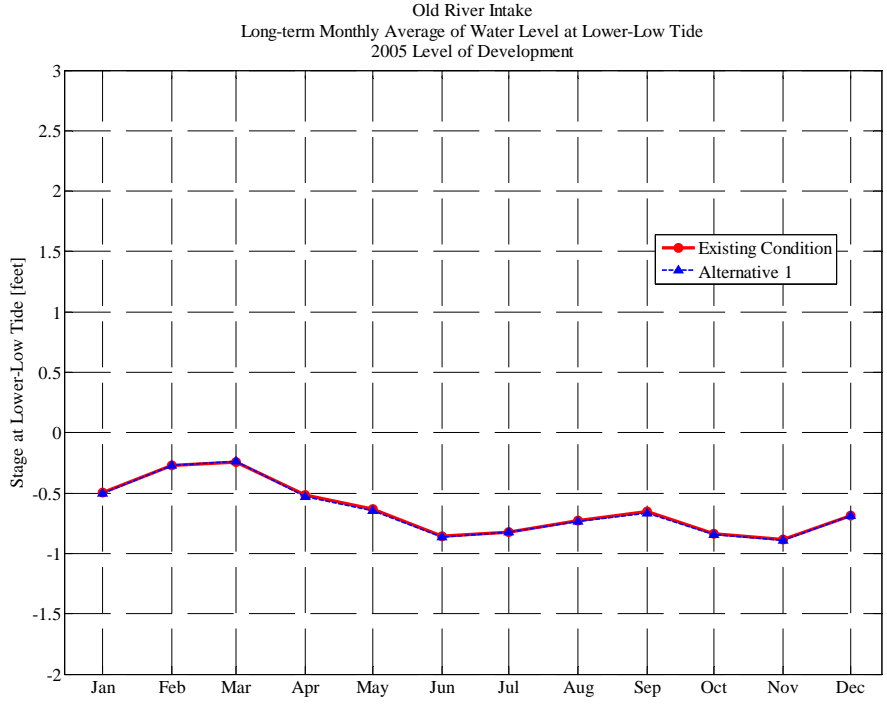


p_lve_stage_feir.m
07-Jan-2010 DS

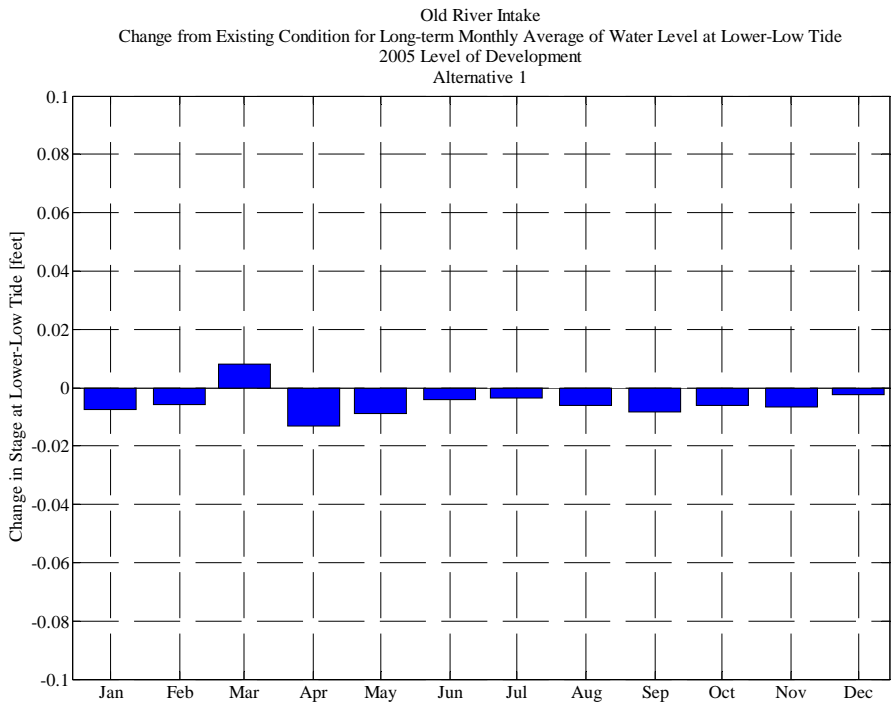
Old River Intake

Alternative 1





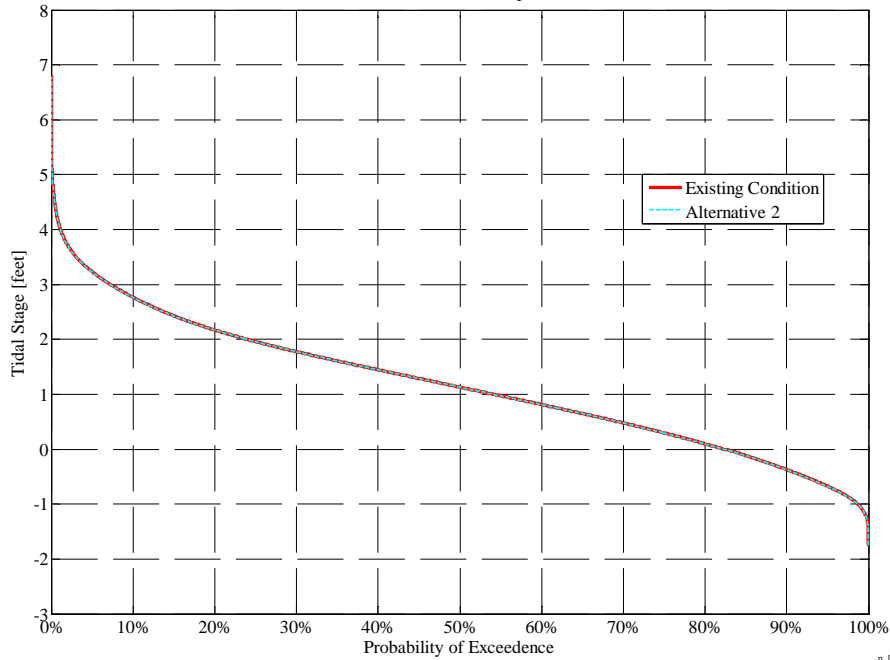
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

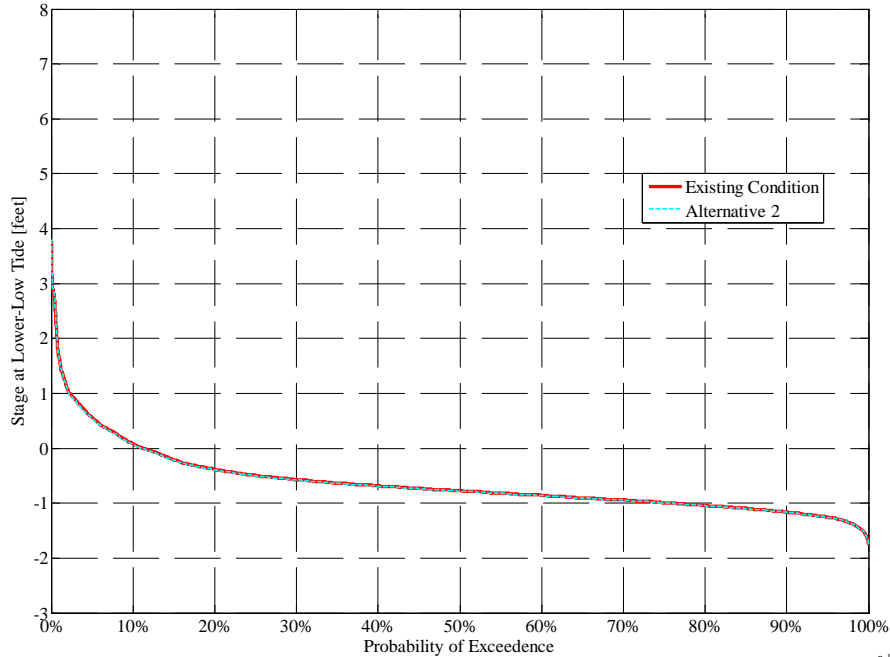
Alternative 2

Old River Intake
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

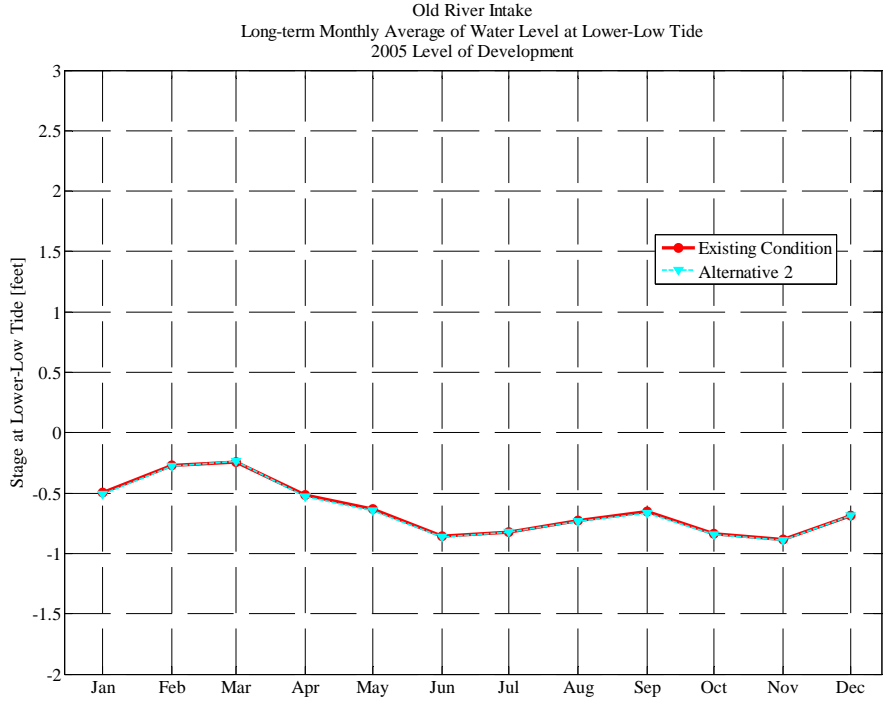


p_lve_stage_feir.m
07-Jan-2010 DS

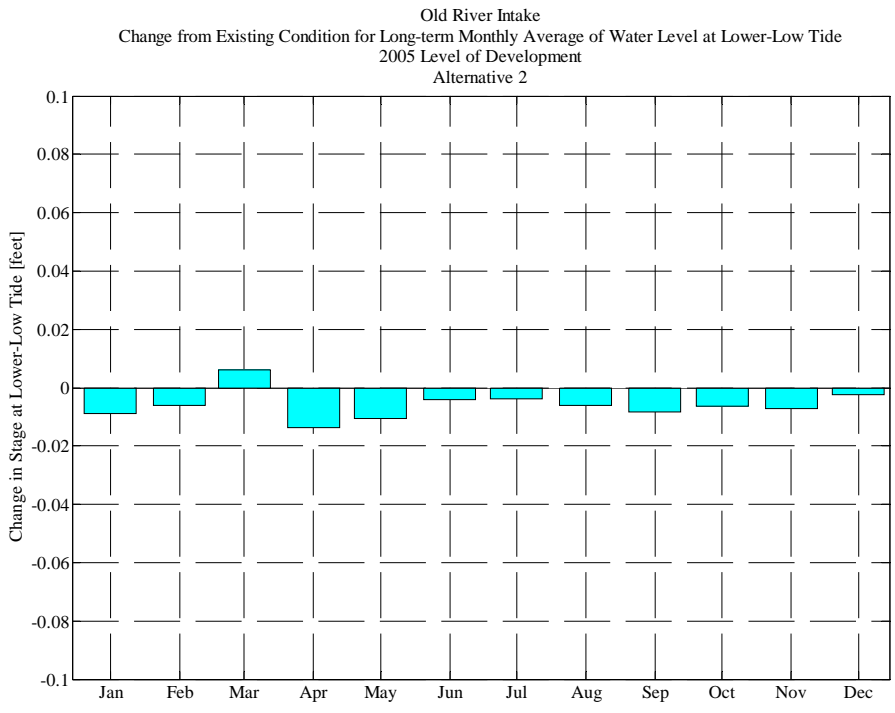
Old River Intake
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



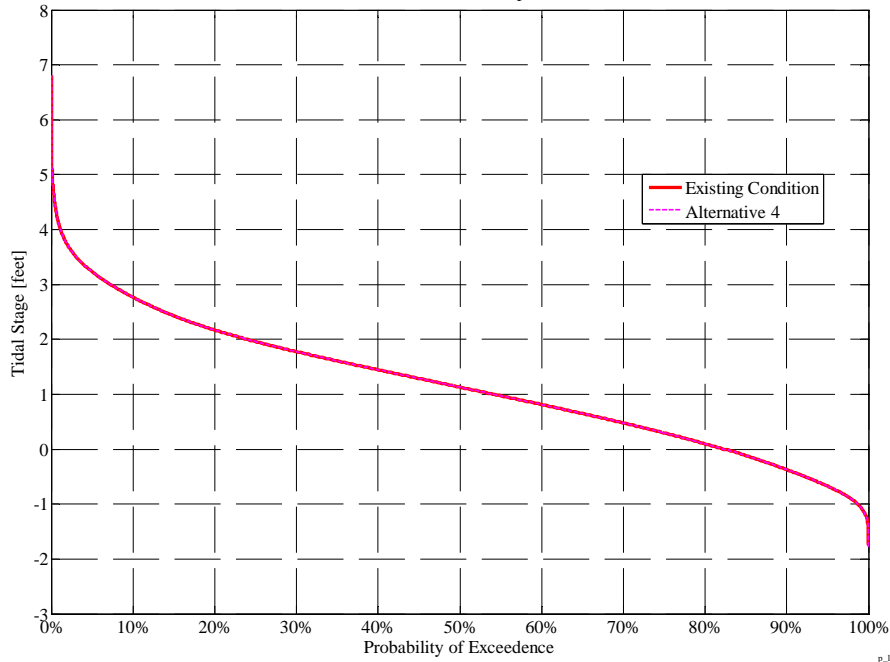
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

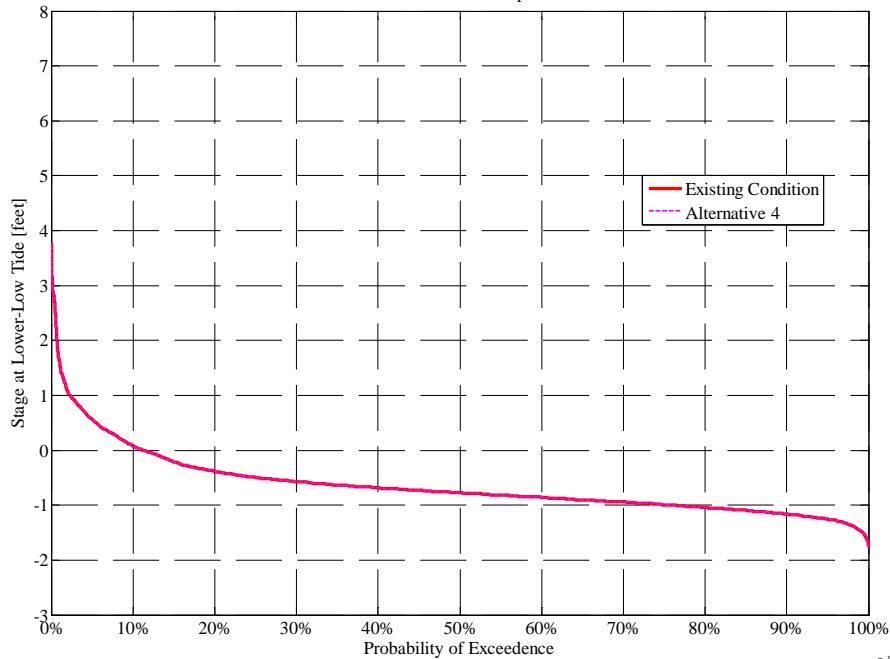
Alternative 4

Old River Intake
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

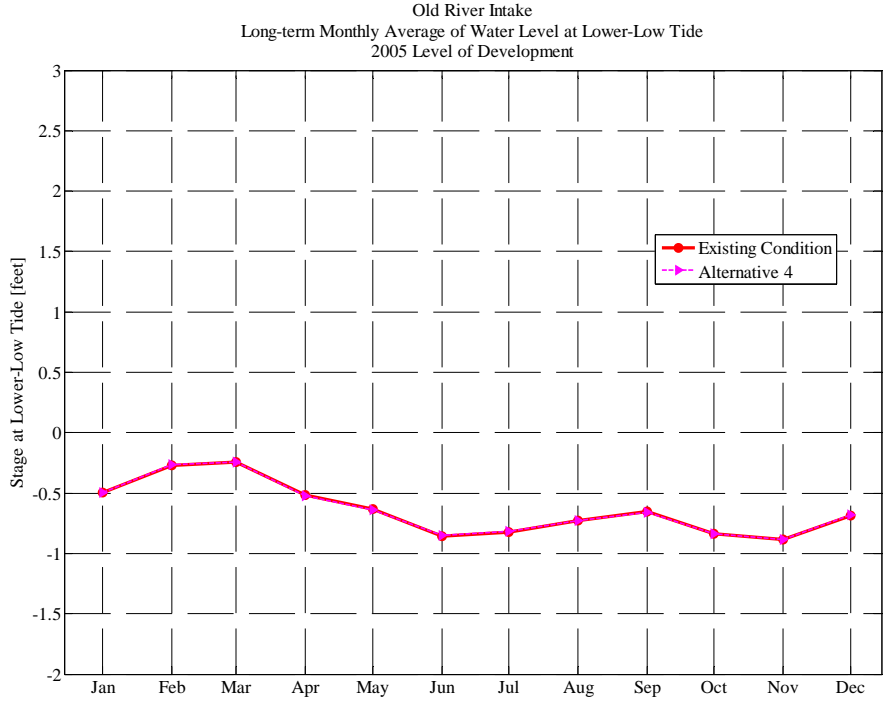


p_lve_stage_feir.m
07-Jan-2010 DS

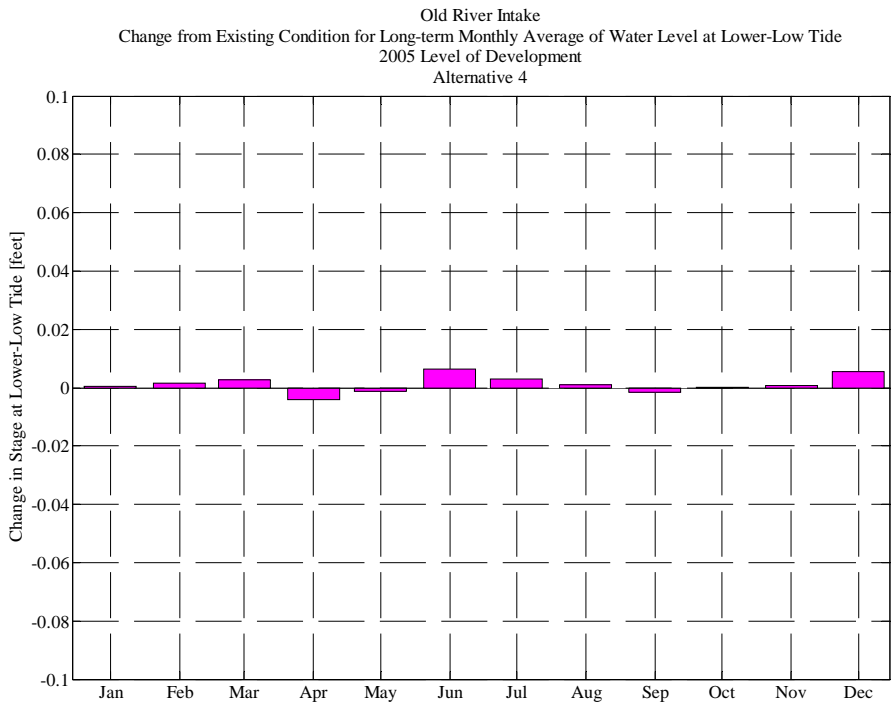
Old River Intake
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

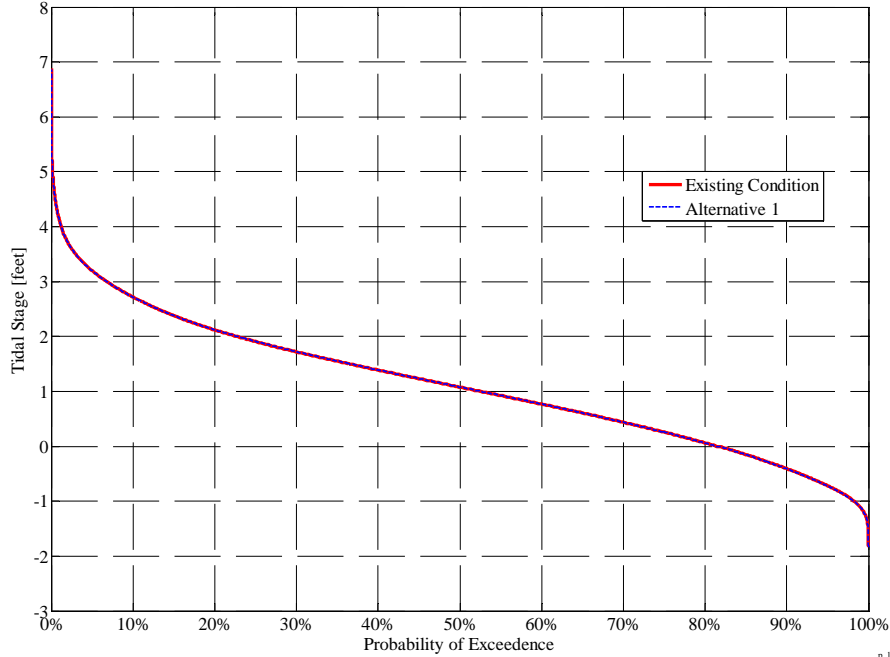


p_lve_stage_feir.m
07-Jan-2010 DS

Victoria Canal Intake

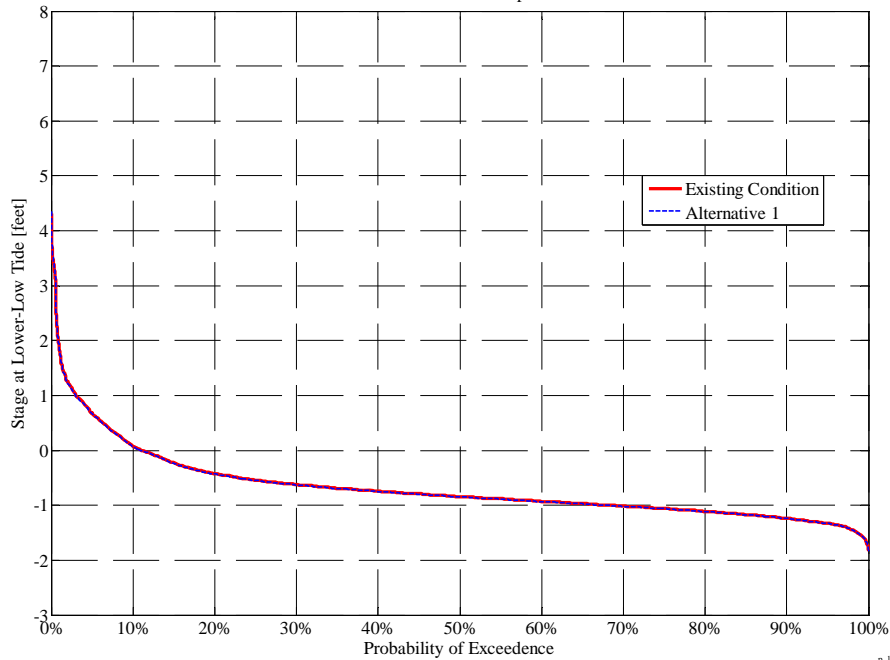
Alternative 1

Victoria Canal Intake
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

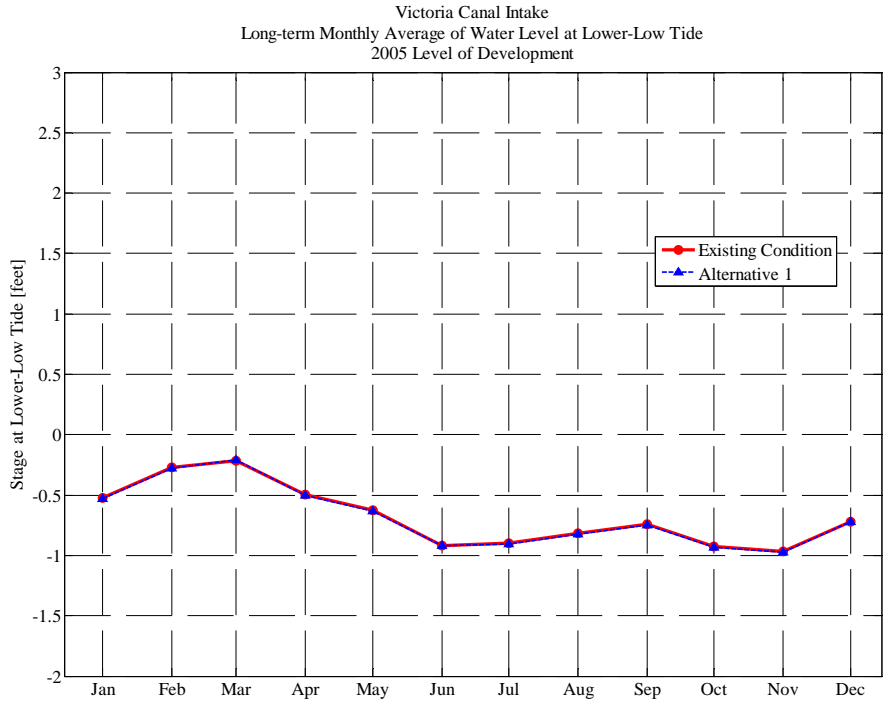


p_lve_stage_feir.m
07-Jan-2010 DS

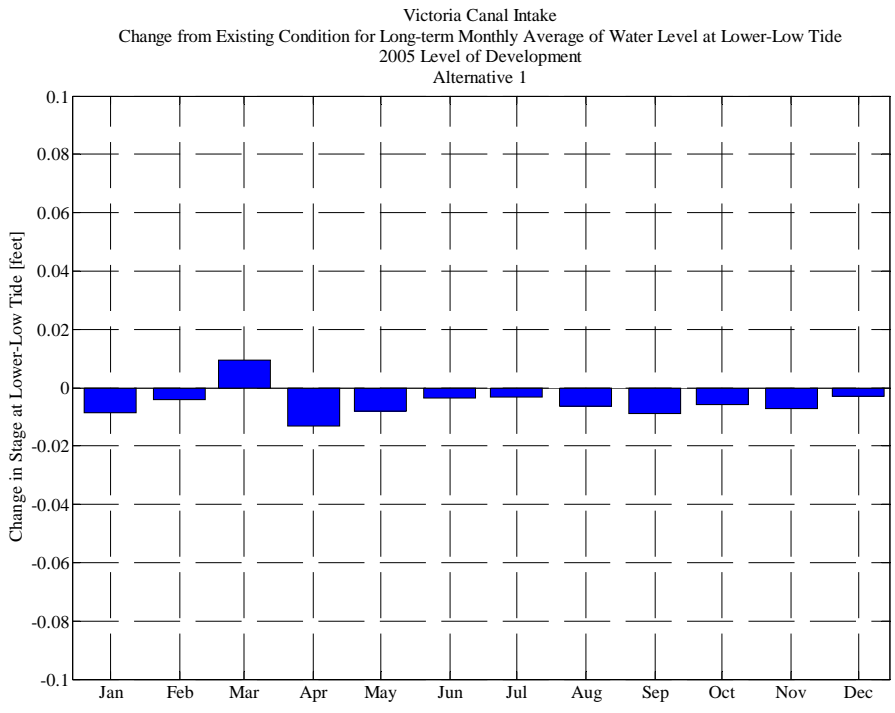
Victoria Canal Intake
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



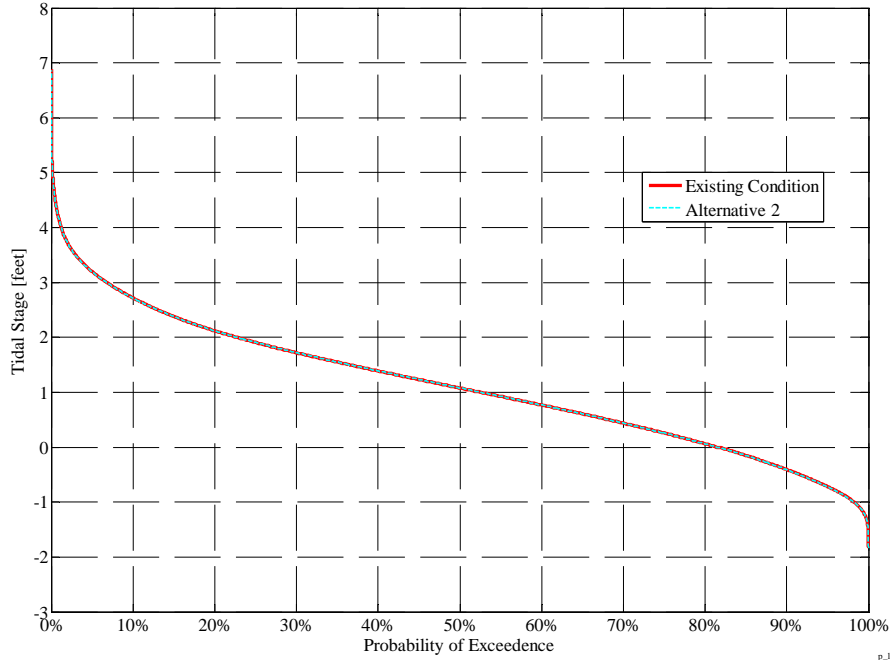
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

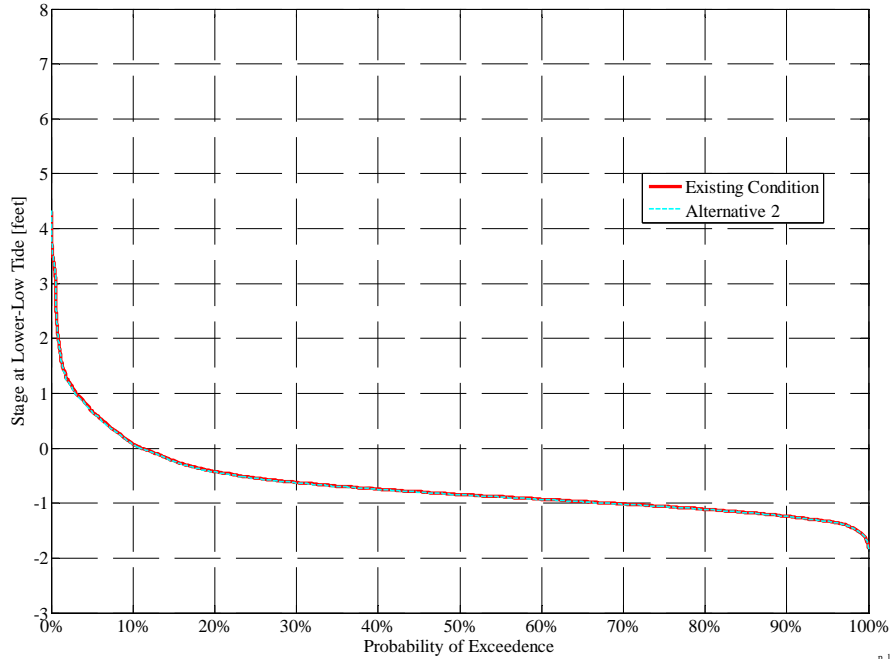
Alternative 2

Victoria Canal Intake
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

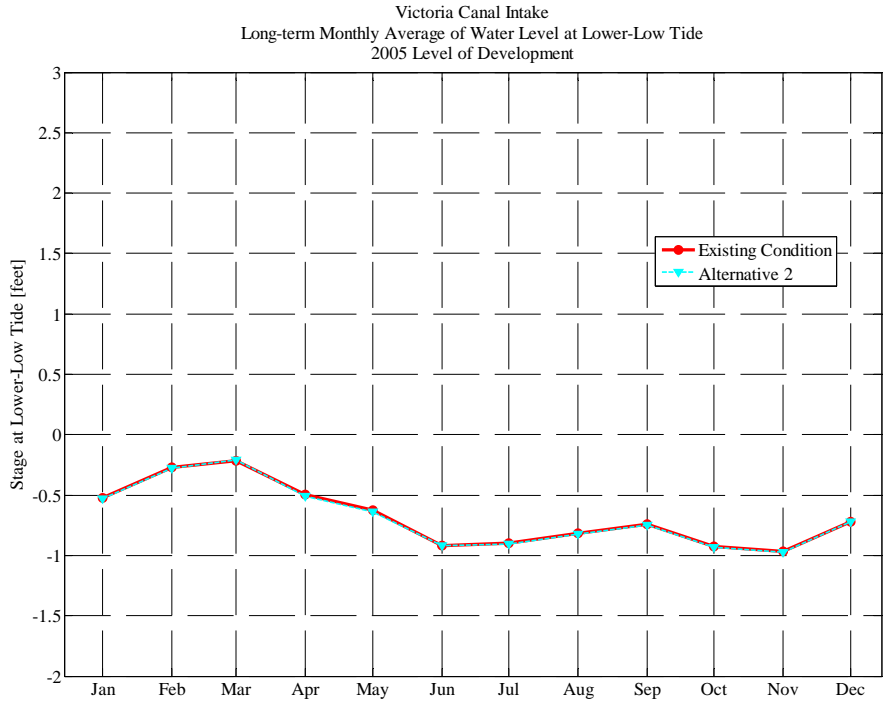


p_lve_stage_feir.m
07-Jan-2010 DS

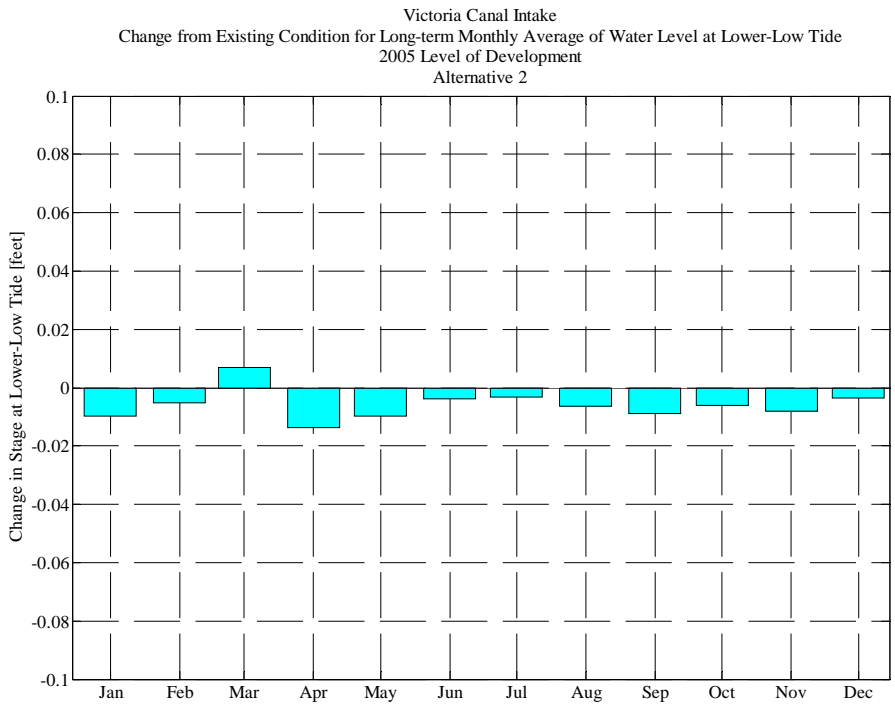
Victoria Canal Intake
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



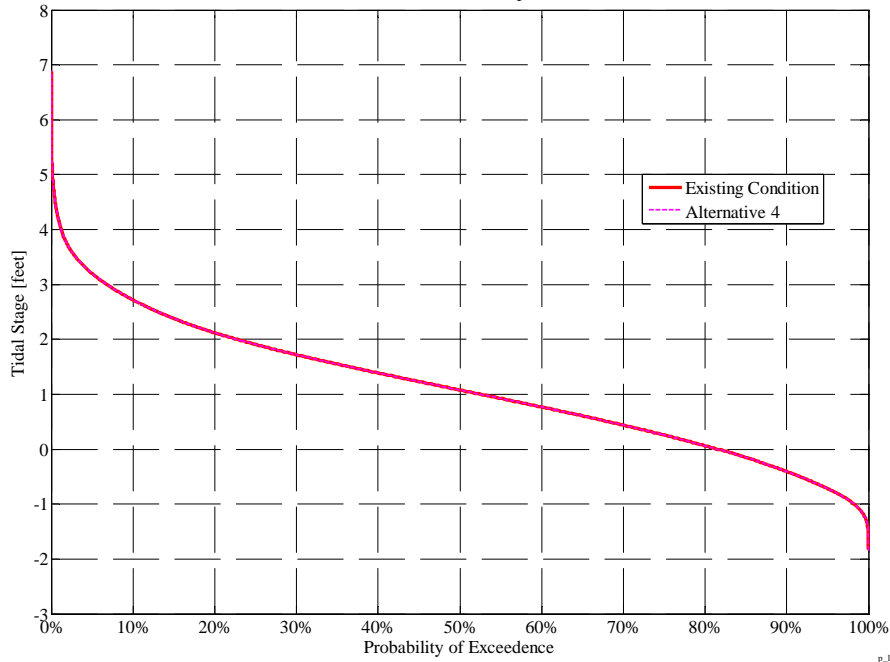
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

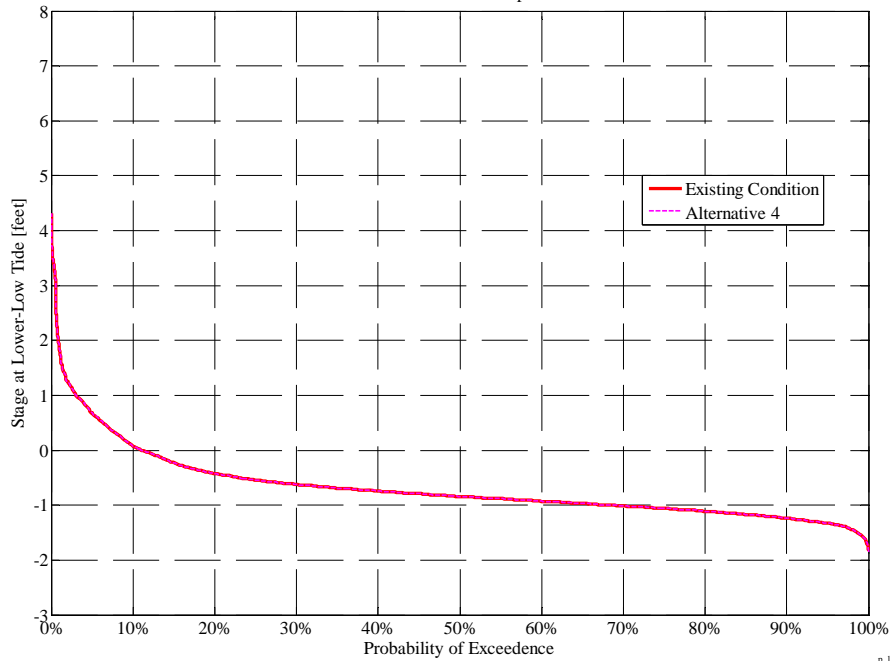
Alternative 4

Victoria Canal Intake
Tidal Water Level (simulated every 15 minutes)
2005 Level of Development

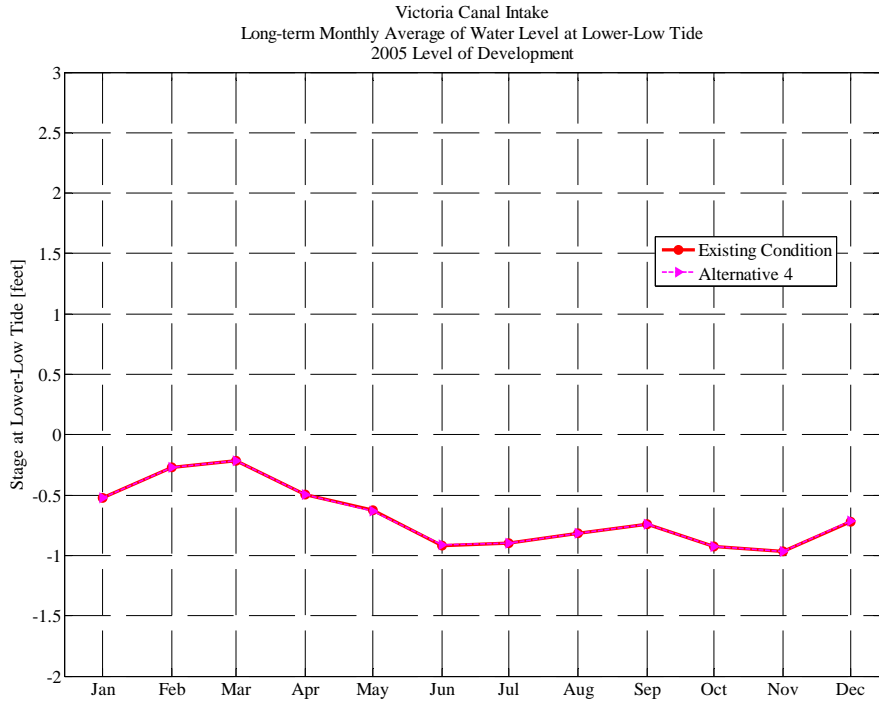


p_lve_stage_feir.m
07-Jan-2010 DS

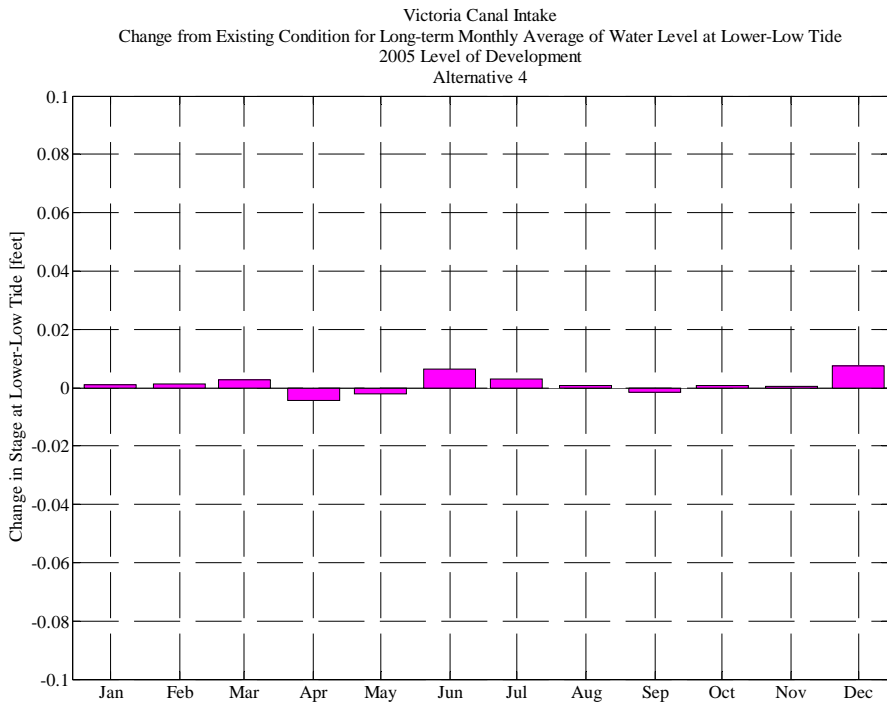
Victoria Canal Intake
Water Level at Lower-Low Tide
2005 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

2030 Level of Development

Water Quality

Chipps Island

Future Without Project

**Chipps Island Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,392	3,403	4,696	6,820	7,517	5,953	5,635	8,717	11,532	11,672	12,620	13,849
1977	14,949	12,465	11,977	8,965	6,937	7,471	8,141	10,645	11,621	12,365	12,832	13,637
1978	13,543	13,538	9,282	449	214	202	227	455	1,912	4,739	6,745	6,531
1979	6,685	6,827	5,964	2,242	417	429	1,005	1,184	3,362	6,684	9,695	12,626
1980	13,383	7,610	4,912	316	205	204	500	986	2,390	4,890	6,816	6,695
1981	6,665	6,814	7,441	3,179	1,160	786	1,526	3,905	6,441	8,837	11,021	11,502
1982	12,489	2,794	190	200	189	201	185	193	746	3,638	5,573	3,207
1983	2,544	471	194	216	211	200	190	182	185	288	1,213	969
1984	2,453	294	187	195	233	241	853	1,919	4,748	5,160	6,051	3,372
1985	3,717	2,126	414	2,382	3,775	3,538	3,199	4,629	6,638	8,839	10,813	12,851
1986	13,189	13,061	8,881	2,427	203	201	348	967	3,267	5,627	6,574	3,670
1987	3,716	3,923	7,223	7,286	3,450	1,039	3,076	5,371	6,579	8,811	11,612	13,442
1988	14,319	13,941	7,872	1,335	1,834	4,997	5,397	6,842	7,898	10,186	12,849	14,398
1989	14,615	14,145	12,040	8,858	7,997	734	625	2,724	6,072	8,521	10,653	12,170
1990	13,387	13,671	13,465	6,194	3,886	4,032	4,957	7,691	10,399	12,239	12,774	14,113
1991	13,447	13,383	14,631	11,005	8,519	1,365	1,969	6,669	10,497	12,132	12,611	13,903
Avg	9,531	8,029	6,836	3,879	2,922	1,974	2,365	3,943	5,893	7,789	9,403	9,808
W/AN/BN	9,184	6,371	4,230	864	239	240	473	841	2,373	4,432	6,095	5,296
D/C	9,801	9,319	8,862	6,225	5,008	3,324	3,836	6,355	8,631	10,400	11,976	13,318

Alternative 1

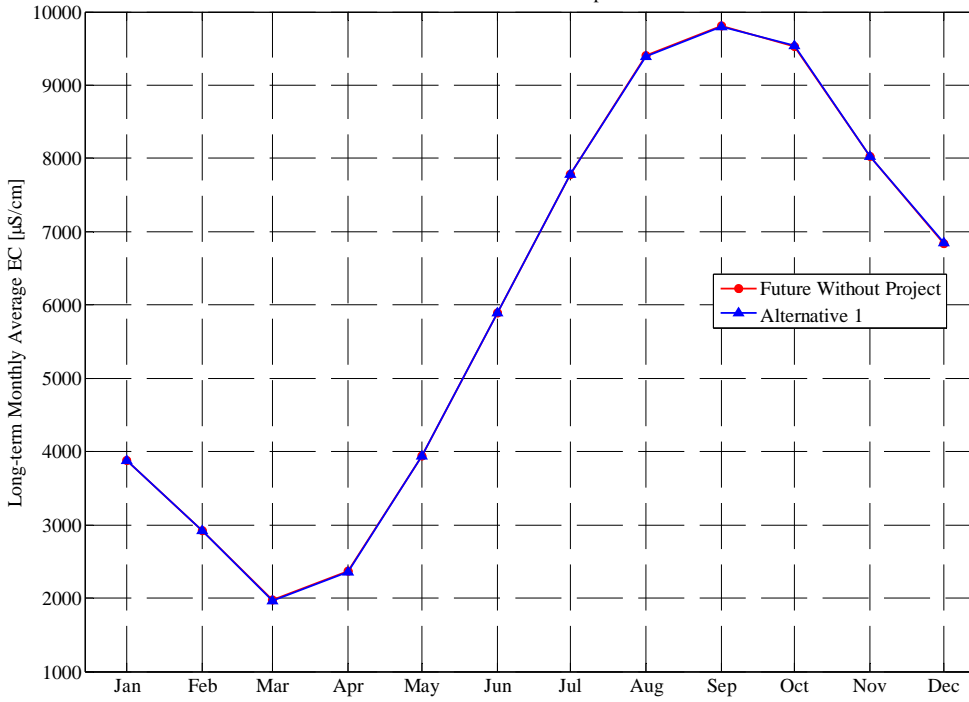
Chippis Island Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,391	3,402	4,698	6,817	7,515	5,952	5,637	8,722	11,529	11,675	12,625	13,797
1977	14,860	12,530	12,080	8,809	6,810	7,434	8,128	10,640	11,620	12,362	12,815	13,612
1978	13,583	13,589	9,281	448	214	202	227	455	1,911	4,740	6,745	6,533
1979	6,684	6,903	6,010	2,242	417	429	1,005	1,183	3,360	6,682	9,696	12,628
1980	13,384	7,453	4,963	323	204	204	499	984	2,388	4,890	6,818	6,697
1981	6,664	6,812	7,440	3,180	1,160	785	1,526	3,908	6,440	8,833	11,011	11,534
1982	12,525	2,800	190	200	189	201	185	193	746	3,637	5,575	3,291
1983	2,762	511	194	215	210	200	190	182	185	288	1,225	975
1984	2,461	295	187	195	233	239	850	1,918	4,744	5,157	6,051	3,372
1985	3,718	2,239	427	2,382	3,774	3,459	3,170	4,629	6,639	8,835	10,828	12,881
1986	13,208	13,069	8,891	2,421	203	202	351	969	3,264	5,627	6,550	3,659
1987	3,690	3,912	7,224	7,285	3,450	1,027	3,065	5,371	6,578	8,810	11,585	13,387
1988	14,286	13,898	7,865	1,340	1,835	4,999	5,385	6,818	7,881	10,210	12,776	14,284
1989	14,560	14,037	12,103	8,978	8,038	736	625	2,725	6,068	8,536	10,623	12,165
1990	13,403	13,675	13,468	6,194	3,886	4,031	4,957	7,694	10,398	12,235	12,783	14,120
1991	13,454	13,390	14,634	11,004	8,517	1,364	1,969	6,669	10,496	12,096	12,593	13,909
Avg	9,540	8,032	6,853	3,877	2,916	1,967	2,361	3,941	5,890	7,788	9,394	9,803
W/AN/BN	9,230	6,374	4,245	863	239	240	472	841	2,371	4,432	6,094	5,308
D/C	9,781	9,322	8,882	6,221	4,998	3,310	3,829	6,353	8,627	10,399	11,960	13,299

Percent (%) Change from Future Without Project for Chippis Island Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

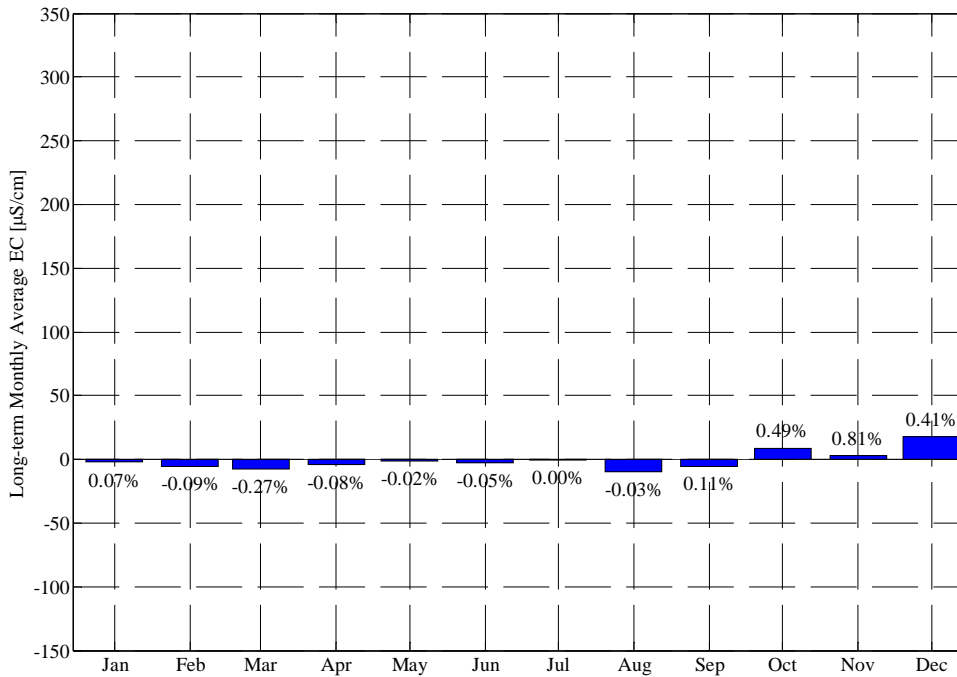
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.4%
1977	-0.6%	0.5%	0.9%	-1.7%	-1.8%	-0.5%	-0.2%	-0.1%	0.0%	0.0%	-0.1%	-0.2%
1978	0.3%	0.4%	0.0%	-0.2%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%
1979	0.0%	1.1%	0.8%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	-2.1%	1.0%	2.2%	-0.1%	0.1%	-0.1%	-0.2%	-0.1%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.3%
1982	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%
1983	8.6%	8.5%	0.0%	-0.5%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	1.0%	0.6%
1984	0.3%	0.2%	0.0%	0.0%	0.0%	-1.0%	-0.4%	-0.1%	-0.1%	-0.1%	0.0%	0.0%
1985	0.0%	5.3%	3.2%	0.0%	0.0%	-2.2%	-0.9%	0.0%	0.0%	0.0%	0.1%	0.2%
1986	0.1%	0.1%	0.1%	-0.3%	0.0%	0.2%	0.8%	0.2%	-0.1%	0.0%	-0.4%	-0.3%
1987	-0.7%	-0.3%	0.0%	0.0%	0.0%	-1.1%	-0.3%	0.0%	0.0%	0.0%	-0.2%	-0.4%
1988	-0.2%	-0.3%	-0.1%	0.4%	0.1%	0.0%	-0.2%	-0.4%	-0.2%	0.2%	-0.6%	-0.8%
1989	-0.4%	-0.8%	0.5%	1.3%	0.5%	0.3%	0.0%	0.0%	-0.1%	0.2%	-0.3%	0.0%
1990	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
1991	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.1%	0.0%
Avg	0.5%	0.8%	0.4%	0.1%	-0.1%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.1%
W/AN/BN	1.4%	1.2%	0.3%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.4%
D/C	-0.2%	0.5%	0.5%	0.0%	-0.1%	-0.4%	-0.2%	0.0%	0.0%	0.0%	-0.1%	-0.1%

Chipps Island Salinity
Long-term Monthly Average of Simulated EC
2030 Level of Development



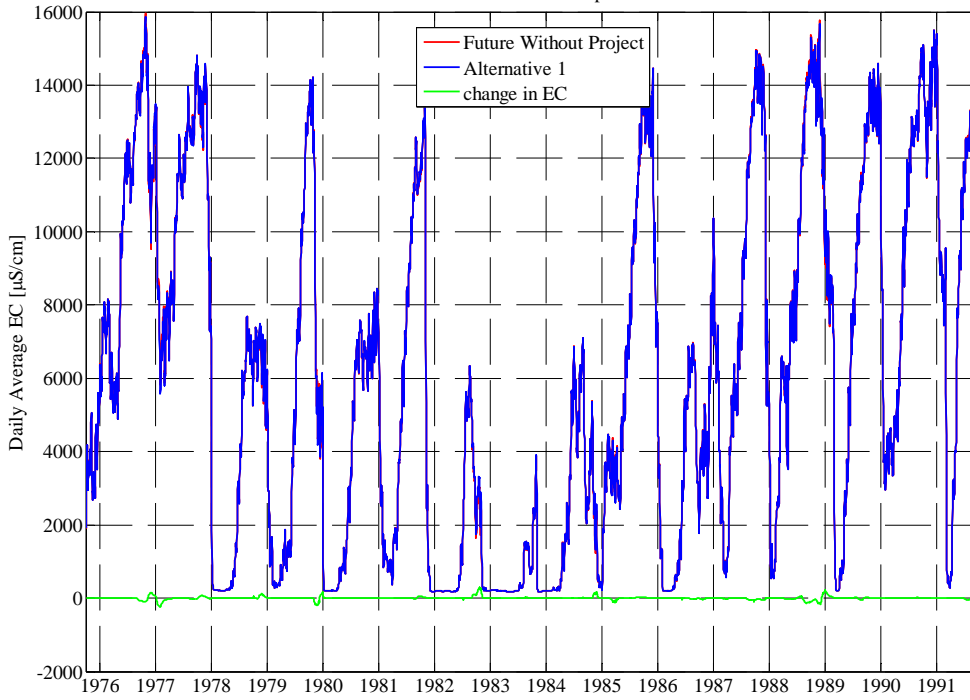
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07-Jan-2010 DS

Chipps Island Salinity
Change from Future Without Project for Long-term Monthly Average of Simulated EC
2030 Level of Development
Alternative 1



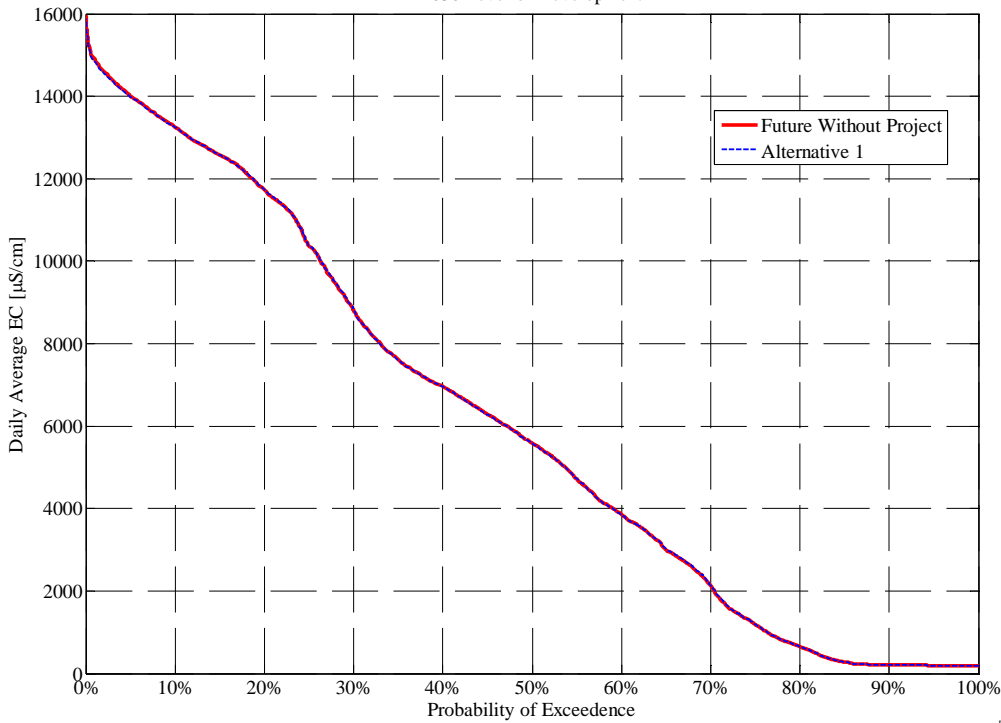
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07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

**Chippis Island Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

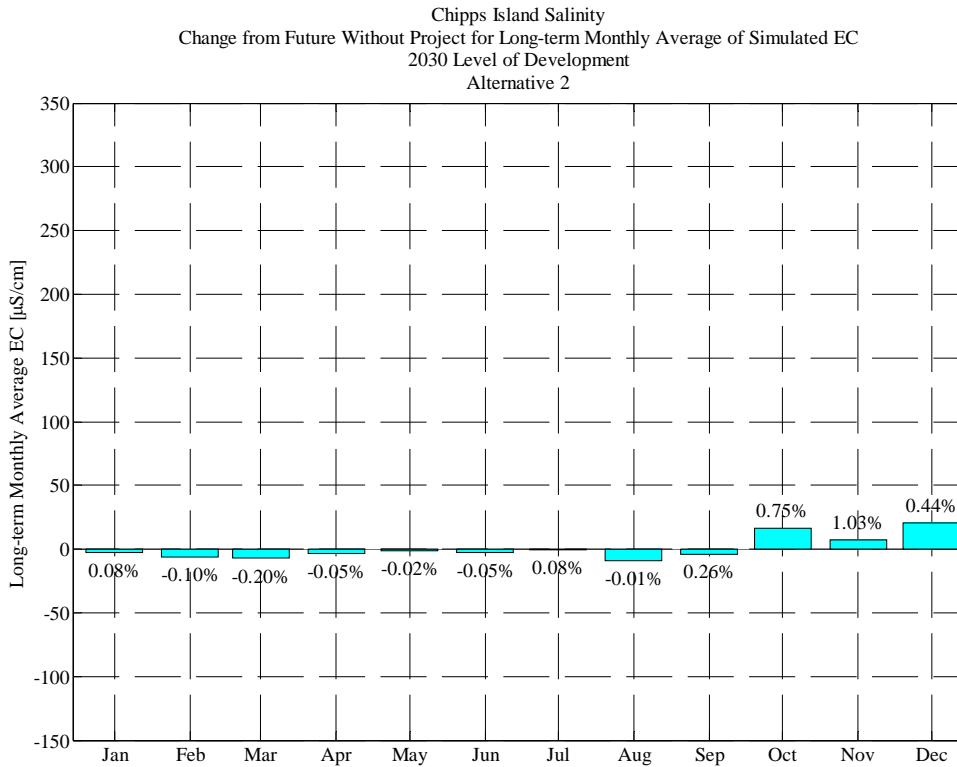
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,391	3,402	4,697	6,818	7,516	5,952	5,637	8,722	11,529	11,674	12,623	13,794
1977	14,858	12,545	12,095	8,795	6,797	7,431	8,127	10,639	11,620	12,363	12,815	13,612
1978	13,591	13,599	9,292	448	214	202	227	455	1,911	4,740	6,745	6,533
1979	6,684	6,903	6,011	2,242	417	429	1,005	1,183	3,360	6,682	9,696	12,628
1980	13,385	7,453	4,963	323	204	204	500	985	2,388	4,890	6,818	6,697
1981	6,664	6,812	7,441	3,180	1,160	786	1,527	3,908	6,440	8,833	11,012	11,532
1982	12,523	2,813	190	200	189	201	185	193	746	3,637	5,575	3,290
1983	2,764	511	194	215	210	200	190	181	185	291	1,228	997
1984	2,557	302	187	195	234	239	850	1,918	4,744	5,157	6,051	3,372
1985	3,718	2,246	428	2,383	3,775	3,459	3,170	4,629	6,638	8,836	10,830	12,886
1986	13,210	13,071	8,892	2,421	203	202	351	969	3,266	5,628	6,550	3,659
1987	3,696	3,915	7,224	7,285	3,451	1,039	3,076	5,373	6,577	8,810	11,586	13,388
1988	14,286	13,898	7,866	1,340	1,835	4,999	5,385	6,818	7,881	10,210	12,777	14,284
1989	14,569	14,044	12,113	8,987	8,042	736	625	2,725	6,068	8,535	10,623	12,168
1990	13,405	13,676	13,468	6,194	3,886	4,032	4,957	7,694	10,397	12,235	12,781	14,118
1991	13,452	13,388	14,633	11,004	8,517	1,364	1,969	6,669	10,496	12,099	12,594	13,907
Avg	9,547	8,036	6,856	3,877	2,916	1,967	2,361	3,941	5,890	7,789	9,394	9,804
W/AN/BN	9,245	6,379	4,247	864	239	240	473	841	2,371	4,432	6,095	5,311
D/C	9,782	9,325	8,885	6,221	4,998	3,311	3,830	6,353	8,627	10,399	11,960	13,299

**Percent (%) Change from Future Without Project for Chippis Island Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.4%
1977	-0.6%	0.6%	1.0%	-1.9%	-2.0%	-0.5%	-0.2%	-0.1%	0.0%	0.0%	-0.1%	-0.2%
1978	0.4%	0.5%	0.1%	-0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	1.1%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	-2.1%	1.0%	2.2%	-0.2%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.3%
1982	0.3%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%
1983	8.6%	8.5%	0.0%	-0.5%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	1.3%	1.3%	3.0%
1984	4.2%	2.7%	0.0%	-0.1%	0.1%	-0.9%	-0.4%	-0.1%	-0.1%	-0.1%	0.0%	0.0%
1985	0.0%	5.7%	3.4%	0.0%	0.0%	-2.2%	-0.9%	0.0%	0.0%	0.0%	0.2%	0.3%
1986	0.2%	0.1%	0.1%	-0.2%	0.0%	0.1%	0.8%	0.2%	0.0%	0.0%	-0.4%	-0.3%
1987	-0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.4%
1988	-0.2%	-0.3%	-0.1%	0.4%	0.1%	0.0%	-0.2%	-0.3%	-0.2%	0.2%	-0.6%	-0.8%
1989	-0.3%	-0.7%	0.6%	1.5%	0.6%	0.4%	0.0%	0.0%	-0.1%	0.2%	-0.3%	0.0%
1990	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.1%	0.0%
Avg	0.8%	1.0%	0.4%	0.1%	-0.1%	-0.2%	-0.1%	0.0%	0.0%	0.1%	0.0%	0.3%
W/AN/BN	1.9%	1.6%	0.3%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%	0.2%	0.1%	0.8%
D/C	-0.2%	0.6%	0.6%	0.0%	-0.2%	-0.3%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%

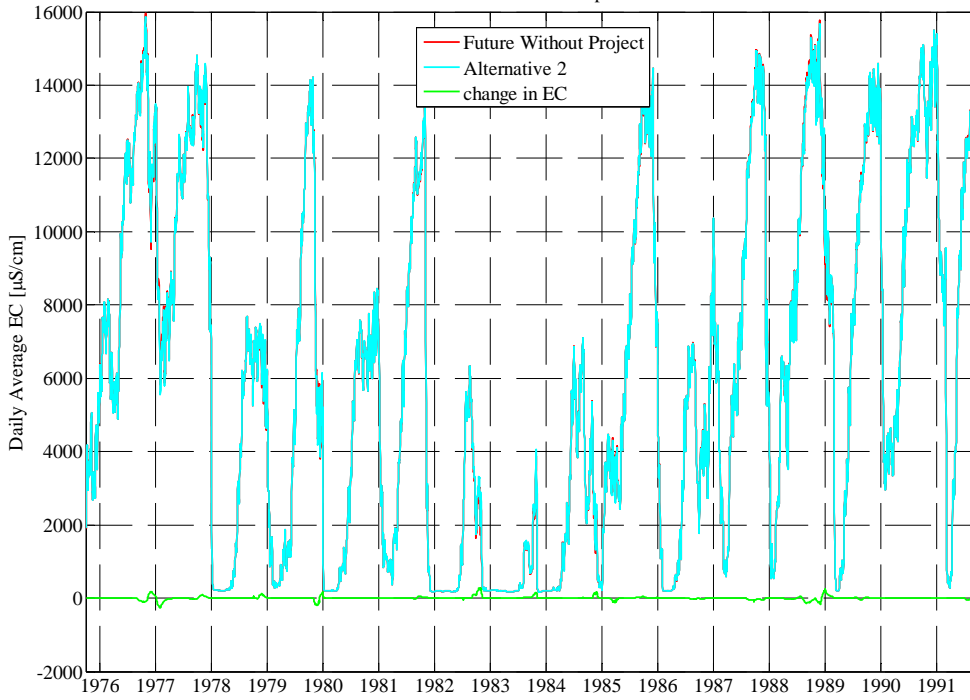


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07-Jan-2010 DS



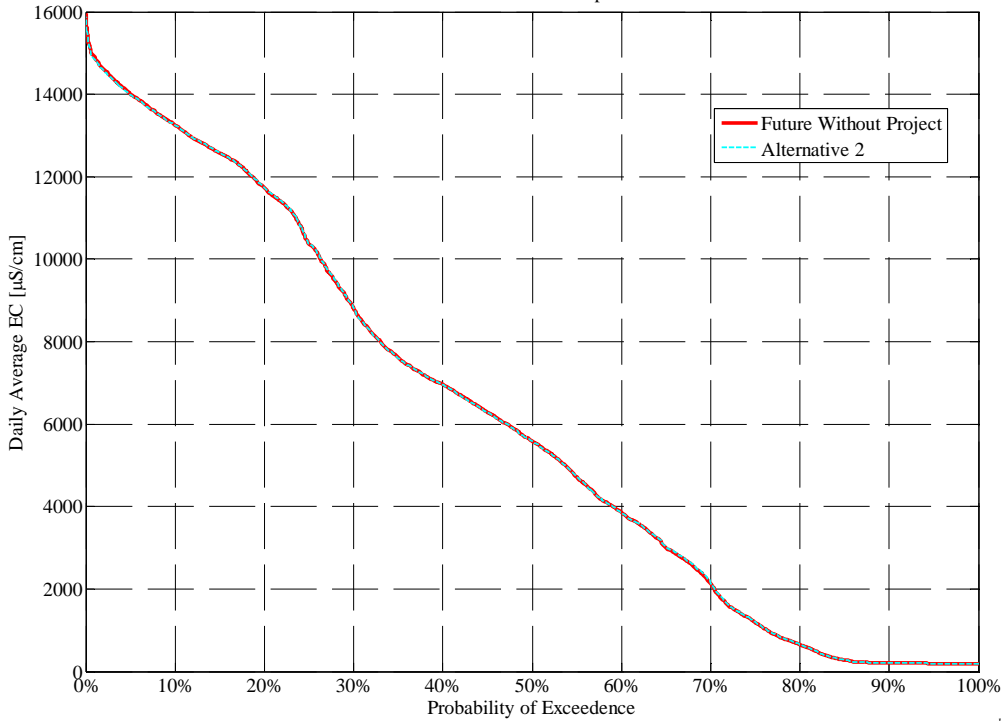
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07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Chipps Island Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

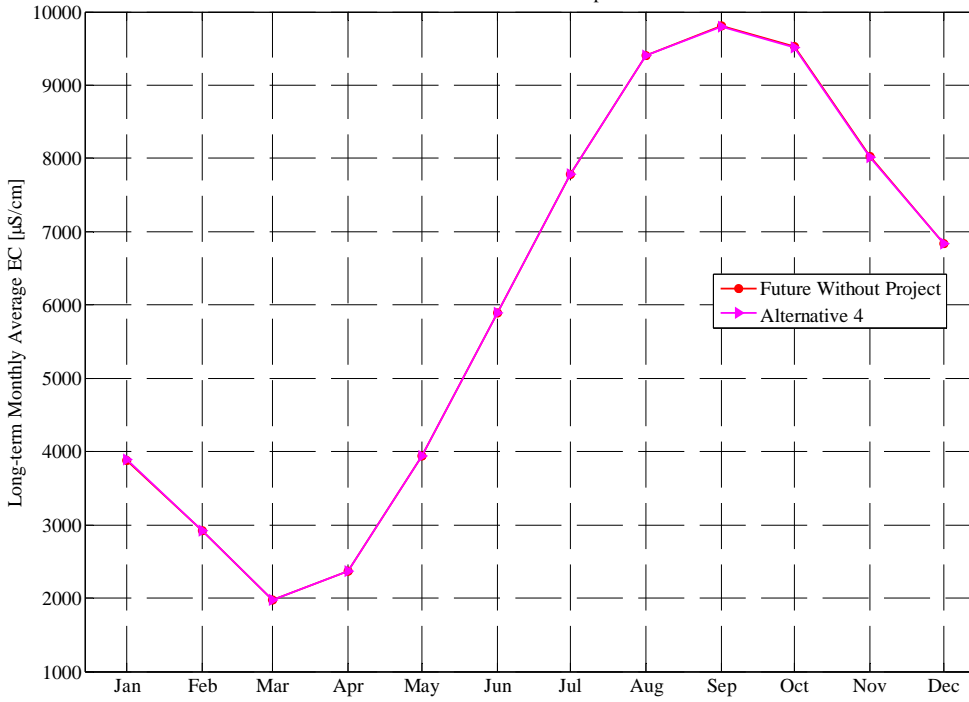
Chippis Island Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	3,392	3,403	4,697	6,821	7,517	5,953	5,635	8,717	11,532	11,671	12,619	13,790
1977	14,860	12,492	12,066	9,094	7,016	7,497	8,150	10,649	11,664	12,405	12,838	13,633
1978	13,563	13,462	9,222	447	215	202	227	455	1,911	4,739	6,745	6,533
1979	6,681	6,906	6,077	2,261	415	429	1,007	1,206	3,369	6,673	9,772	12,684
1980	13,426	7,529	4,852	315	205	204	500	1,001	2,403	4,892	6,817	6,695
1981	6,666	6,814	7,440	3,178	1,159	785	1,526	3,906	6,441	8,837	11,026	11,487
1982	12,472	2,794	190	200	189	201	185	193	746	3,637	5,573	3,208
1983	2,546	471	194	216	211	200	190	182	185	288	1,213	969
1984	2,453	294	187	195	233	241	853	1,920	4,749	5,163	6,054	3,372
1985	3,718	2,127	414	2,381	3,775	3,538	3,199	4,629	6,638	8,839	10,810	12,846
1986	13,186	13,060	8,880	2,415	203	202	348	967	3,267	5,627	6,546	3,647
1987	3,722	3,911	7,202	7,276	3,444	1,038	3,075	5,371	6,578	8,814	11,633	13,474
1988	14,334	13,942	7,873	1,335	1,834	4,999	5,382	6,814	7,880	10,179	12,762	14,182
1989	14,493	14,070	12,018	8,889	8,011	734	625	2,724	6,072	8,528	10,639	12,134
1990	13,361	13,660	13,465	6,192	3,885	4,031	4,957	7,691	10,399	12,233	12,798	14,131
1991	13,465	13,400	14,638	11,004	8,518	1,365	1,969	6,670	10,499	12,075	12,586	13,916
Avg	9,521	8,021	6,838	3,889	2,927	1,976	2,364	3,943	5,896	7,788	9,402	9,794
W/AN/BN	9,190	6,360	4,229	864	239	240	473	846	2,376	4,431	6,103	5,301
D/C	9,779	9,313	8,868	6,241	5,018	3,327	3,835	6,352	8,634	10,398	11,968	13,288

Percent (%) Change from Future Without Project for Chippis Island Salinity
(Alternative 4 - Future Without Project) / Future Without Project
2030 Level of Development

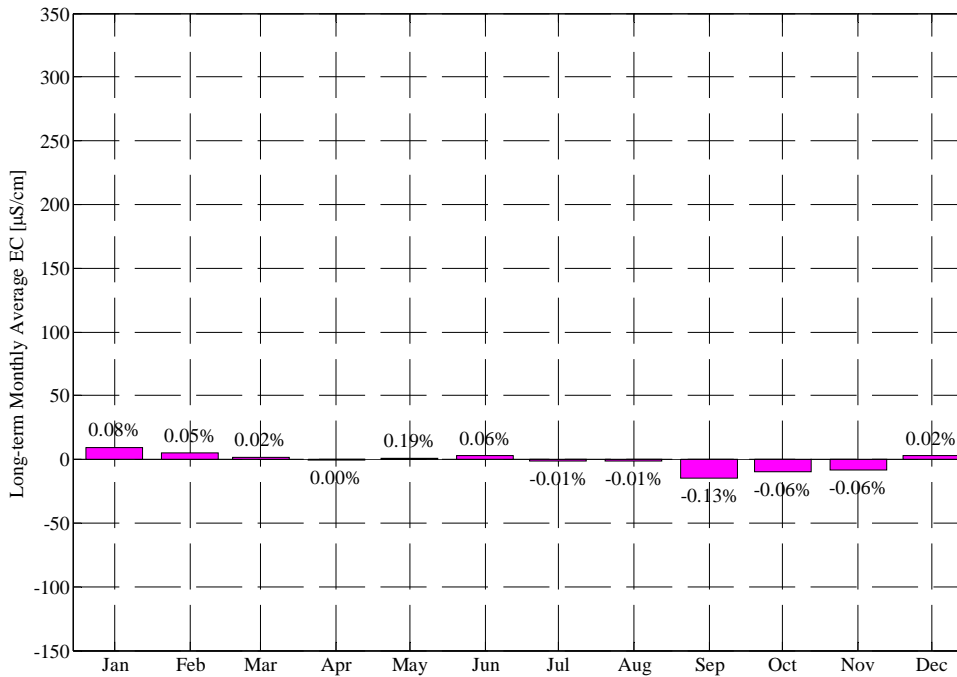
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.4%
1977	-0.6%	0.2%	0.7%	1.4%	1.1%	0.3%	0.1%	0.0%	0.4%	0.3%	0.1%	0.0%
1978	0.1%	-0.6%	-0.6%	-0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	-0.1%	1.2%	1.9%	0.8%	-0.3%	-0.1%	0.2%	1.8%	0.2%	-0.2%	0.8%	0.5%
1980	0.3%	-1.1%	-1.2%	-0.2%	0.0%	0.0%	0.0%	1.5%	0.5%	0.1%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1982	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	-0.5%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.4%	-0.6%
1987	0.2%	-0.3%	-0.3%	-0.1%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
1988	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	-0.3%	-0.4%	-0.2%	-0.1%	-0.7%	-1.5%
1989	-0.8%	-0.5%	-0.2%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	-0.1%	-0.3%
1990	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%
1991	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.5%	-0.2%	0.1%
Avg	-0.1%	-0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	-0.1%
W/AN/BN	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.1%	0.0%	0.1%	0.0%
D/C	-0.1%	-0.1%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%

Chipps Island Salinity
Long-term Monthly Average of Simulated EC
2030 Level of Development

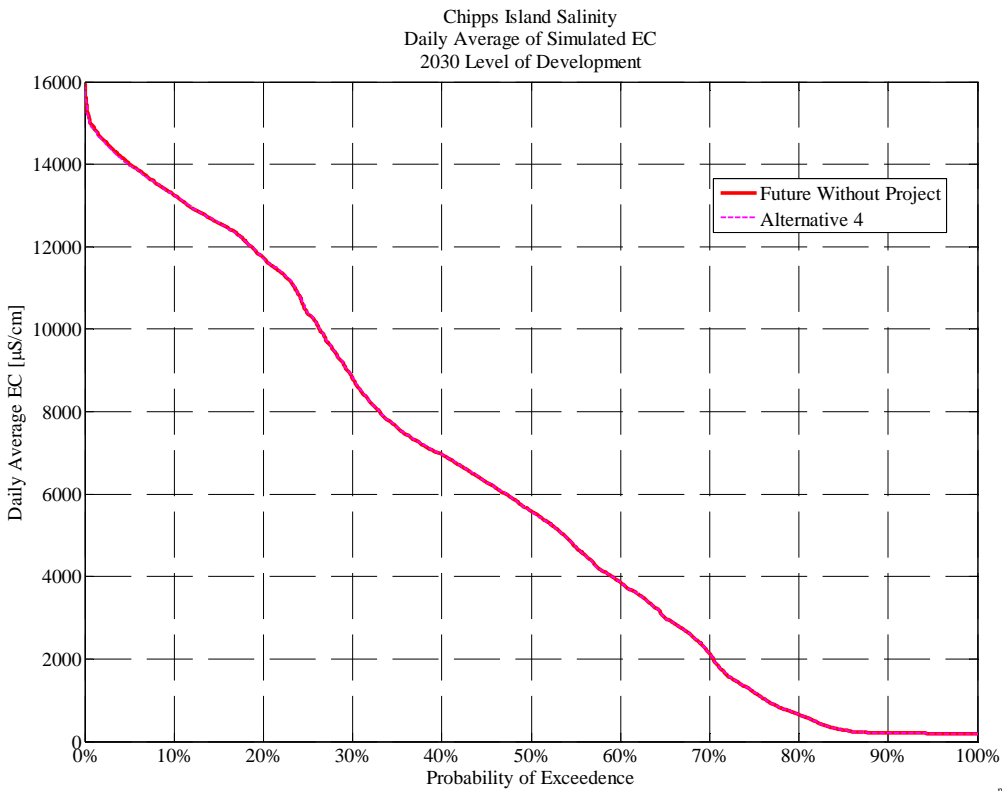
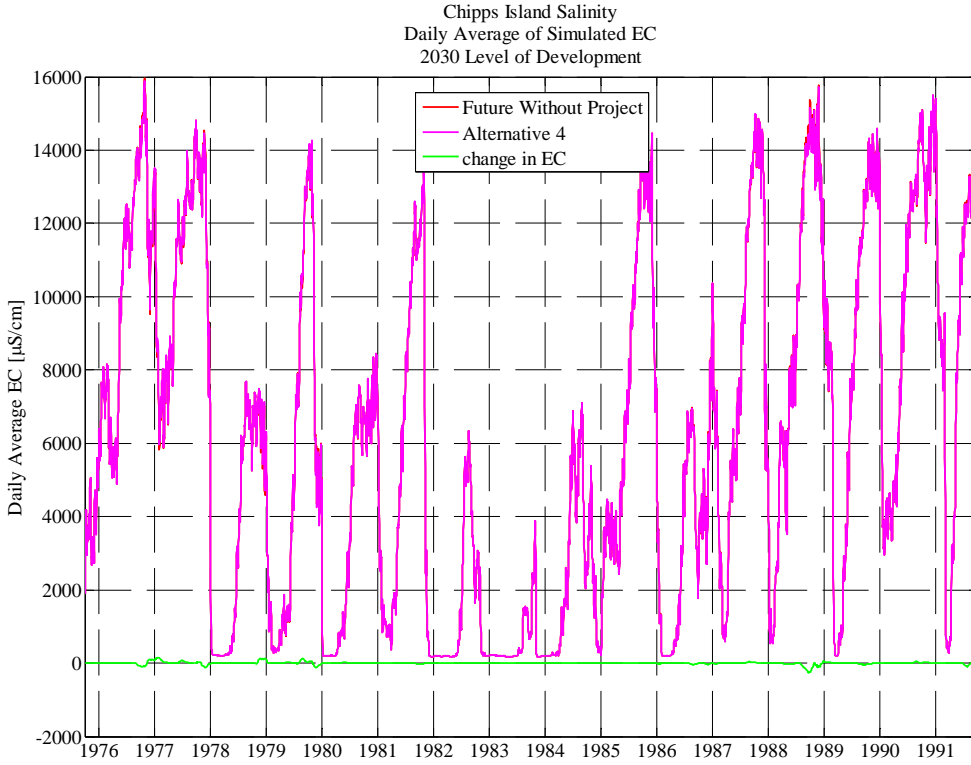


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Chipps Island Salinity
Change from Future Without Project for Long-term Monthly Average of Simulated EC
2030 Level of Development
Alternative 4



p_lve_wq_feir.m
07-Jan-2010 DS



Collinsville

Future Without Project

**Collinsville Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,149	1,174	1,835	3,217	3,613	2,464	2,358	4,884	7,232	6,860	7,935	9,100
1977	10,376	7,630	7,179	4,659	3,182	3,502	4,029	6,407	7,183	7,711	8,224	9,044
1978	8,919	8,900	4,732	287	205	200	215	231	614	1,910	3,048	2,862
1979	3,046	3,150	2,433	777	244	230	336	377	1,269	3,028	5,320	7,990
1980	8,734	3,652	1,807	228	196	199	232	324	778	1,995	3,108	2,953
1981	3,036	3,141	3,437	1,119	340	262	476	1,534	3,012	4,531	6,249	6,620
1982	7,836	1,124	186	199	187	198	181	181	269	1,435	2,307	1,064
1983	757	229	190	211	194	184	186	181	184	202	384	284
1984	781	205	182	193	194	187	299	579	2,010	2,053	2,641	1,110
1985	1,380	623	202	860	1,319	1,198	1,071	1,877	3,140	4,549	6,126	8,180
1986	8,534	8,168	4,365	813	186	190	225	330	1,236	2,377	2,954	1,272
1987	1,346	1,448	3,641	3,471	1,186	332	1,200	2,365	3,080	4,634	7,270	8,924
1988	9,638	9,262	3,786	458	602	2,180	2,262	3,351	3,961	5,769	8,461	9,925
1989	9,977	9,367	7,203	4,337	3,967	349	249	955	2,830	4,293	6,030	7,496
1990	8,721	8,989	8,754	2,653	1,367	1,468	2,019	4,041	6,271	7,493	8,014	9,582
1991	8,735	8,823	10,134	6,303	4,309	625	716	3,419	6,400	7,391	8,032	9,375
Avg	5,810	4,743	3,754	1,862	1,331	860	1,003	1,940	3,092	4,139	5,381	5,986
W/AN/BN	5,515	3,633	1,985	387	201	198	239	315	909	1,857	2,823	2,505
D/C	6,040	5,606	5,130	3,009	2,209	1,375	1,598	3,204	4,790	5,915	7,371	8,694

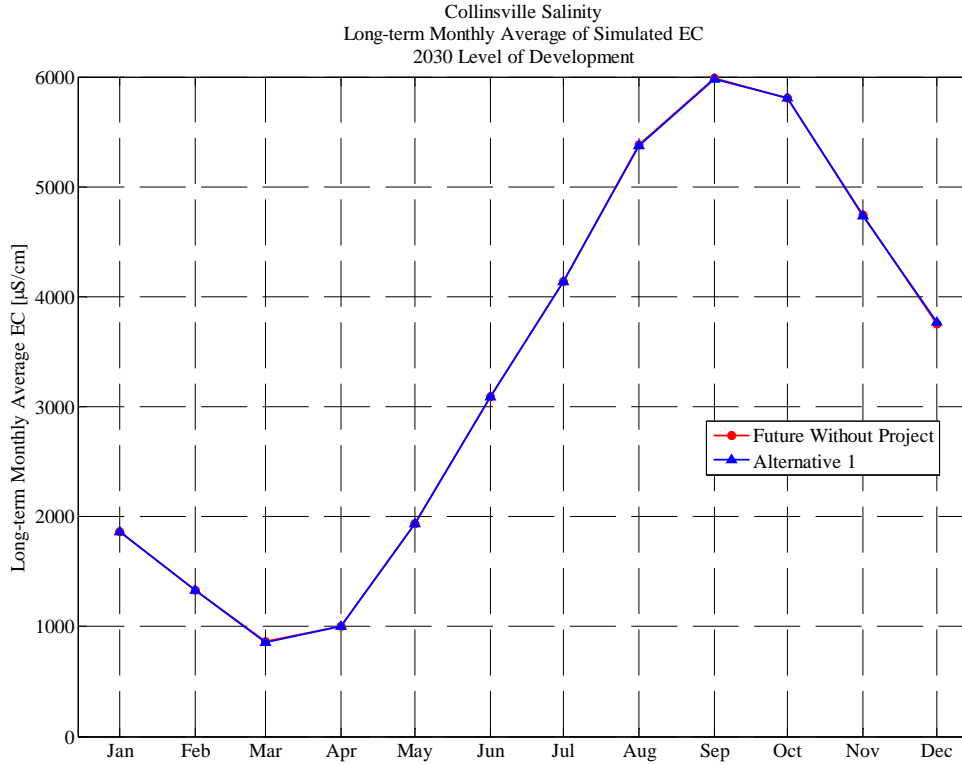
Alternative 1

Collinsville Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 1
2030 Level of Development

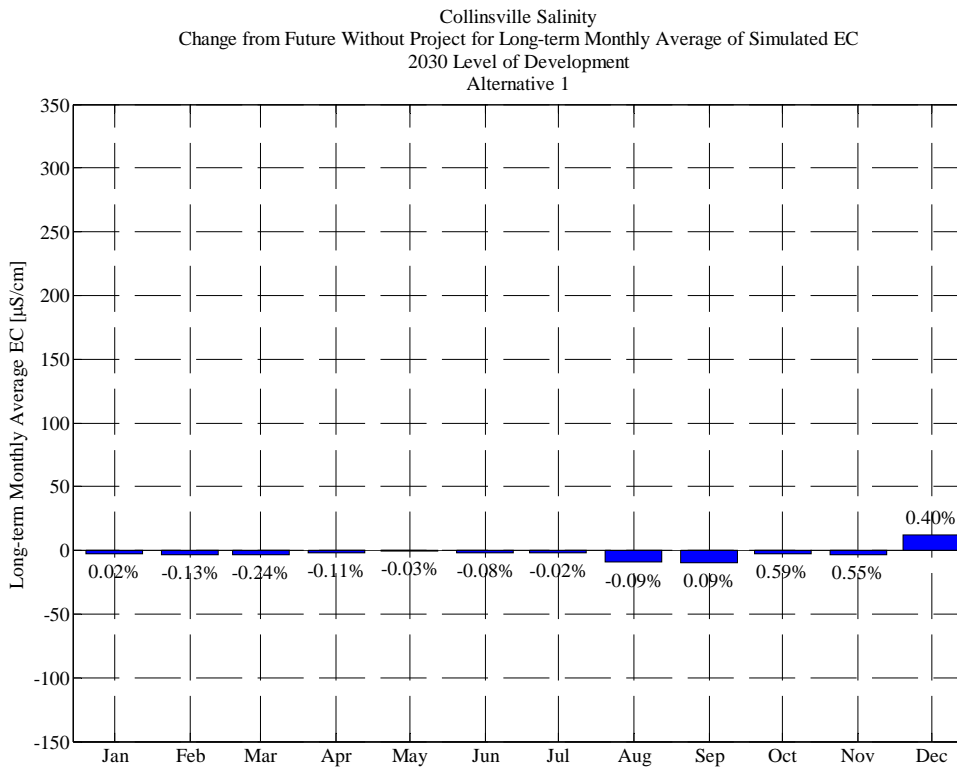
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,148	1,174	1,837	3,215	3,612	2,463	2,360	4,889	7,230	6,863	7,940	9,040
1977	10,265	7,690	7,268	4,538	3,102	3,480	4,022	6,403	7,183	7,708	8,209	9,021
1978	8,960	8,953	4,732	286	205	199	215	231	613	1,910	3,047	2,863
1979	3,039	3,215	2,474	780	244	230	336	377	1,267	3,026	5,321	7,992
1980	8,735	3,555	1,837	231	195	199	232	324	777	1,995	3,109	2,954
1981	3,036	3,138	3,436	1,120	340	262	476	1,536	3,011	4,527	6,240	6,653
1982	7,870	1,126	186	199	187	198	181	181	269	1,436	2,307	1,099
1983	843	240	190	210	194	184	186	181	184	202	388	285
1984	785	206	182	193	194	187	299	579	2,006	2,050	2,640	1,109
1985	1,381	659	205	860	1,319	1,159	1,059	1,877	3,140	4,546	6,139	8,208
1986	8,549	8,174	4,371	811	186	190	226	330	1,235	2,377	2,935	1,263
1987	1,329	1,440	3,642	3,470	1,186	330	1,197	2,366	3,079	4,628	7,253	8,885
1988	9,611	9,220	3,781	460	602	2,183	2,255	3,333	3,948	5,796	8,376	9,776
1989	9,894	9,218	7,229	4,415	3,992	350	249	955	2,826	4,306	6,003	7,500
1990	8,739	8,993	8,756	2,653	1,367	1,467	2,019	4,044	6,269	7,487	8,027	9,589
1991	8,741	8,829	10,136	6,302	4,307	625	716	3,419	6,398	7,344	8,015	9,383
Avg	5,808	4,739	3,766	1,859	1,327	857	1,002	1,939	3,090	4,138	5,372	5,976
W/AN/BN	5,540	3,638	1,996	387	201	198	239	315	907	1,857	2,821	2,510
D/C	6,016	5,596	5,143	3,004	2,203	1,369	1,595	3,202	4,787	5,912	7,356	8,673

Percent (%) Change from Future Without Project for Collinsville Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

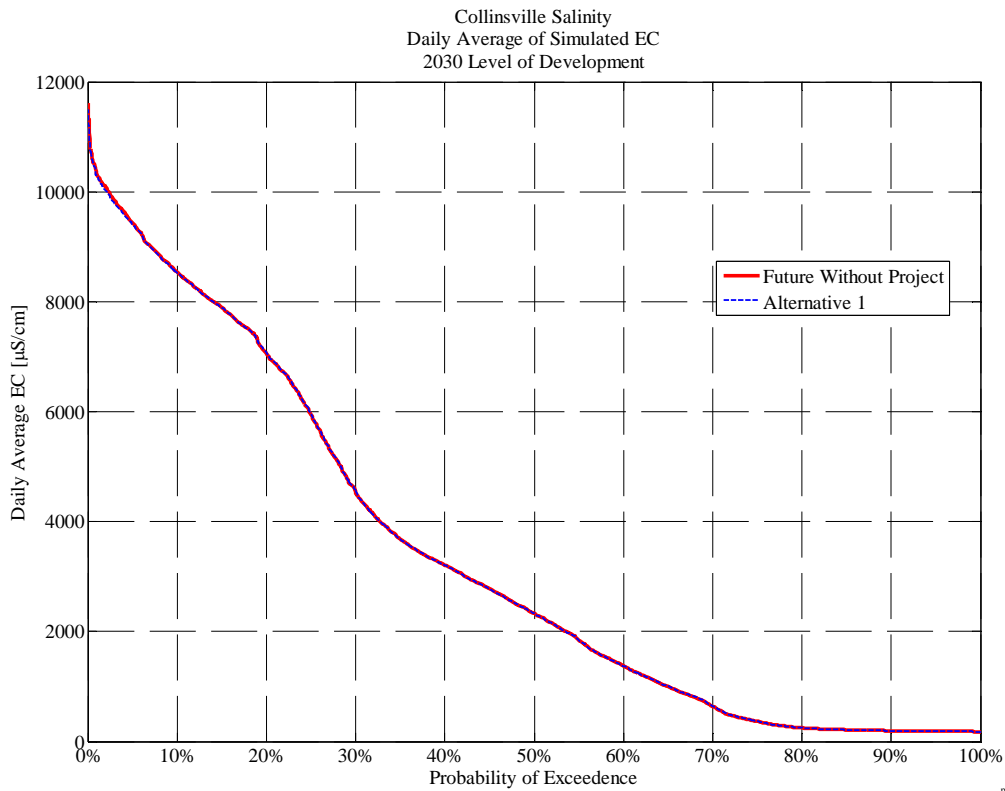
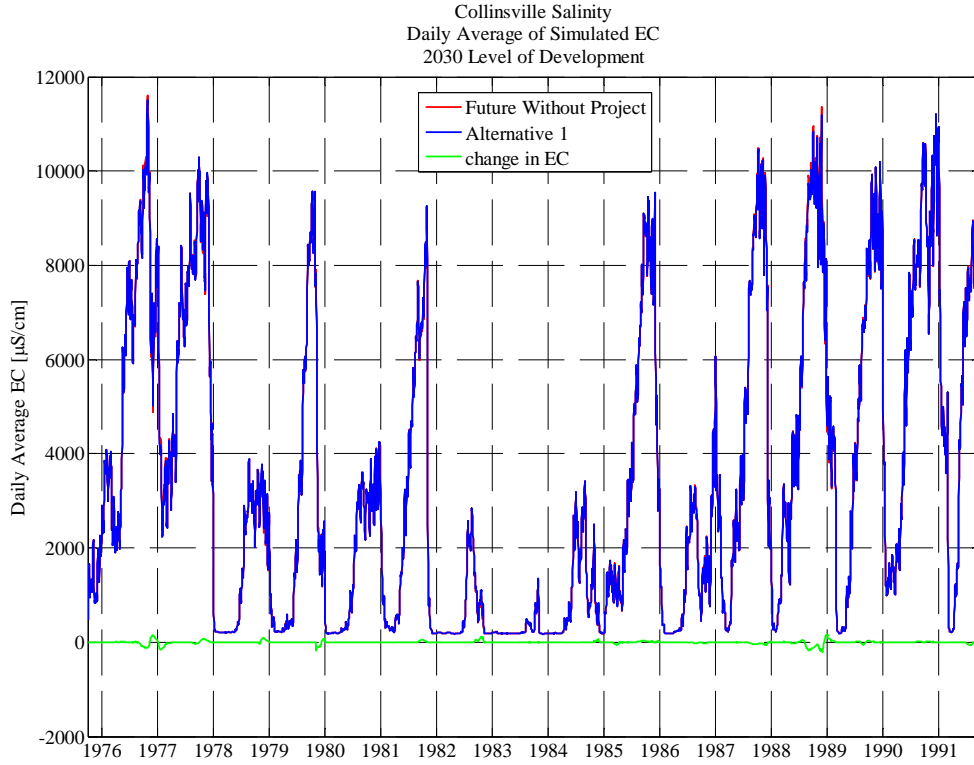
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.1%	-0.1%	0.1%	-0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	-0.7%
1977	-1.1%	0.8%	1.2%	-2.6%	-2.5%	-0.6%	-0.2%	-0.1%	0.0%	0.0%	-0.2%	-0.3%
1978	0.5%	0.6%	0.0%	-0.2%	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.1%
1979	-0.2%	2.1%	1.7%	0.4%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%
1980	0.0%	-2.7%	1.6%	1.2%	-0.1%	0.1%	0.0%	-0.2%	-0.2%	0.0%	0.0%	0.0%
1981	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	-0.1%	0.5%
1982	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%
1983	11.3%	4.6%	0.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.5%
1984	0.4%	0.1%	0.0%	0.0%	0.0%	0.1%	-0.1%	0.0%	-0.2%	-0.1%	0.0%	0.0%
1985	0.1%	5.7%	1.3%	0.0%	0.0%	-3.2%	-1.1%	0.0%	0.0%	-0.1%	0.2%	0.4%
1986	0.2%	0.1%	0.1%	-0.2%	0.0%	0.1%	0.1%	0.1%	-0.1%	0.0%	-0.6%	-0.7%
1987	-1.3%	-0.6%	0.0%	0.0%	0.0%	-0.6%	-0.3%	0.1%	0.0%	-0.1%	-0.2%	-0.4%
1988	-0.3%	-0.5%	-0.2%	0.3%	0.1%	0.1%	-0.3%	-0.6%	-0.3%	0.5%	-1.0%	-1.5%
1989	-0.8%	-1.6%	0.4%	1.8%	0.6%	0.3%	0.0%	0.1%	-0.1%	0.3%	-0.4%	0.0%
1990	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.2%	0.1%
1991	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.2%	0.1%
Avg	0.6%	0.5%	0.4%	0.0%	-0.1%	-0.2%	-0.1%	0.0%	-0.1%	0.0%	-0.1%	0.1%
W/AN/BN	1.8%	0.7%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.5%
D/C	-0.3%	0.4%	0.3%	-0.1%	-0.2%	-0.5%	-0.2%	0.0%	-0.1%	0.0%	-0.2%	-0.2%



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



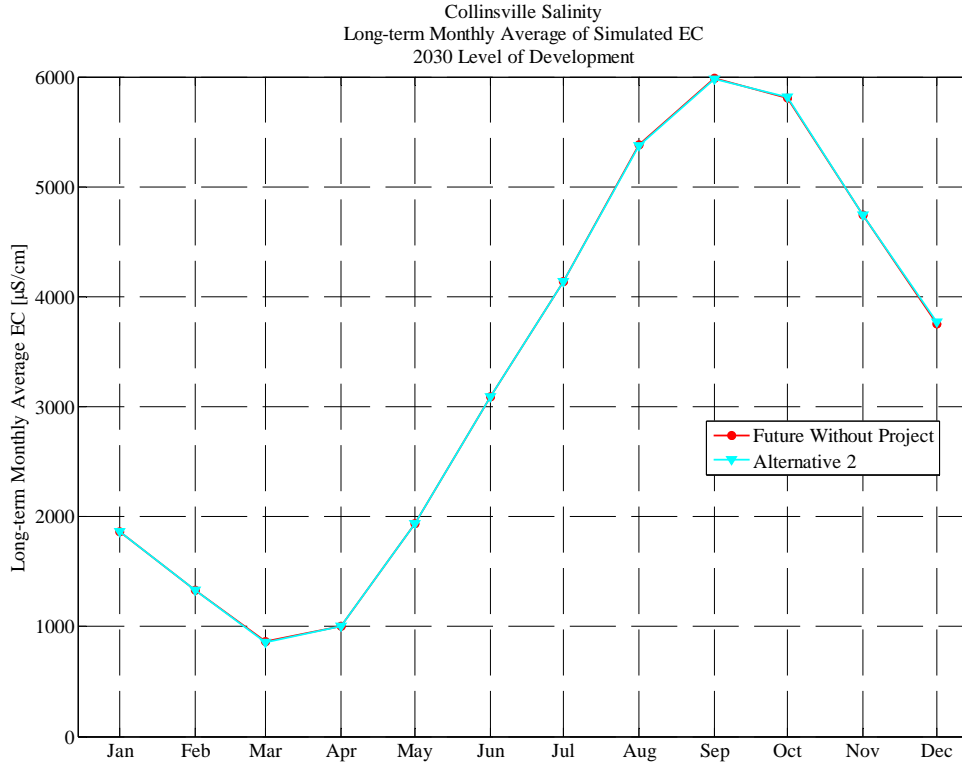
Alternative 2

Collinsville Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 2
2030 Level of Development

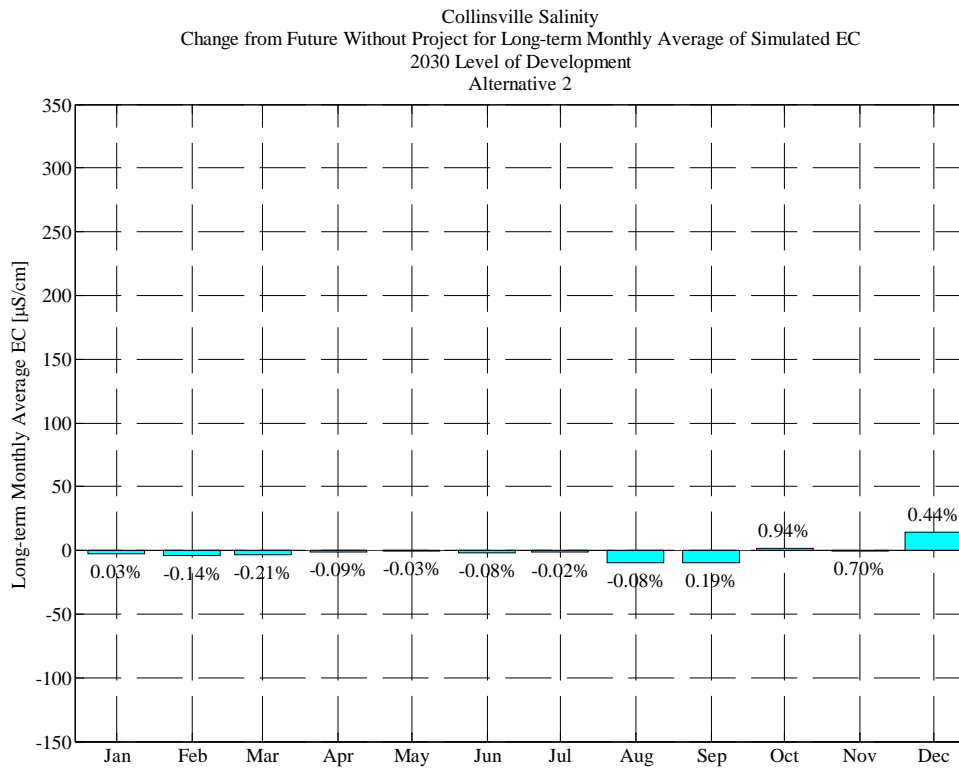
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,148	1,174	1,836	3,216	3,612	2,464	2,360	4,889	7,230	6,861	7,937	9,035
1977	10,262	7,704	7,281	4,529	3,095	3,478	4,021	6,402	7,183	7,708	8,209	9,020
1978	8,969	8,963	4,741	287	205	199	215	231	613	1,910	3,047	2,863
1979	3,040	3,215	2,474	780	244	230	336	377	1,267	3,026	5,321	7,992
1980	8,736	3,555	1,837	231	195	199	232	324	777	1,995	3,109	2,954
1981	3,036	3,138	3,437	1,120	340	262	476	1,536	3,011	4,527	6,241	6,651
1982	7,868	1,129	186	199	187	198	181	181	269	1,436	2,307	1,099
1983	843	240	190	210	193	184	186	181	184	202	389	290
1984	824	208	182	193	194	187	299	579	2,006	2,051	2,640	1,110
1985	1,381	661	205	860	1,319	1,159	1,059	1,877	3,140	4,546	6,141	8,213
1986	8,550	8,176	4,372	812	186	190	226	330	1,235	2,377	2,935	1,263
1987	1,333	1,442	3,642	3,470	1,186	332	1,201	2,366	3,078	4,628	7,254	8,885
1988	9,611	9,220	3,780	460	602	2,183	2,255	3,333	3,948	5,796	8,377	9,776
1989	9,907	9,227	7,240	4,423	3,995	350	249	955	2,826	4,305	6,003	7,503
1990	8,741	8,994	8,757	2,653	1,366	1,467	2,019	4,044	6,270	7,488	8,024	9,588
1991	8,740	8,828	10,135	6,302	4,307	625	716	3,419	6,398	7,347	8,016	9,381
Avg	5,812	4,742	3,768	1,859	1,327	857	1,002	1,939	3,090	4,138	5,372	5,977
W/AN/BN	5,547	3,641	1,997	387	201	198	239	315	907	1,857	2,821	2,510
D/C	6,018	5,599	5,146	3,004	2,203	1,369	1,595	3,202	4,787	5,912	7,356	8,673

Percent (%) Change from Future Without Project for Collinsville Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	-0.1%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.7%
1977	-1.1%	1.0%	1.4%	-2.8%	-2.7%	-0.7%	-0.2%	-0.1%	0.0%	0.0%	-0.2%	-0.3%
1978	0.6%	0.7%	0.2%	-0.1%	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.1%
1979	-0.2%	2.1%	1.7%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%
1980	0.0%	-2.7%	1.6%	1.2%	-0.1%	0.0%	0.0%	-0.1%	-0.2%	0.0%	0.0%	0.0%
1981	0.0%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	-0.1%	0.5%
1982	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%
1983	11.4%	4.6%	0.0%	-0.4%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	0.0%	1.1%	2.0%
1984	5.4%	1.4%	0.0%	-0.1%	0.0%	0.1%	-0.1%	-0.1%	-0.2%	-0.1%	0.0%	0.0%
1985	0.1%	6.1%	1.4%	0.0%	0.0%	-3.2%	-1.1%	0.0%	0.0%	-0.1%	0.2%	0.4%
1986	0.2%	0.1%	0.2%	-0.1%	0.0%	0.1%	0.1%	0.1%	-0.1%	0.0%	-0.6%	-0.7%
1987	-1.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	-0.2%	-0.4%
1988	-0.3%	-0.4%	-0.2%	0.4%	0.0%	0.1%	-0.3%	-0.6%	-0.3%	0.5%	-1.0%	-1.5%
1989	-0.7%	-1.5%	0.5%	2.0%	0.7%	0.3%	0.0%	0.1%	-0.1%	0.3%	-0.4%	0.1%
1990	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.1%	0.1%
1991	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.2%	0.1%
Avg	0.9%	0.7%	0.4%	0.0%	-0.1%	-0.2%	-0.1%	0.0%	-0.1%	0.0%	-0.1%	0.2%
W/AN/BN	2.6%	1.0%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.7%
D/C	-0.3%	0.5%	0.4%	-0.1%	-0.2%	-0.4%	-0.2%	0.0%	-0.1%	0.0%	-0.2%	-0.2%

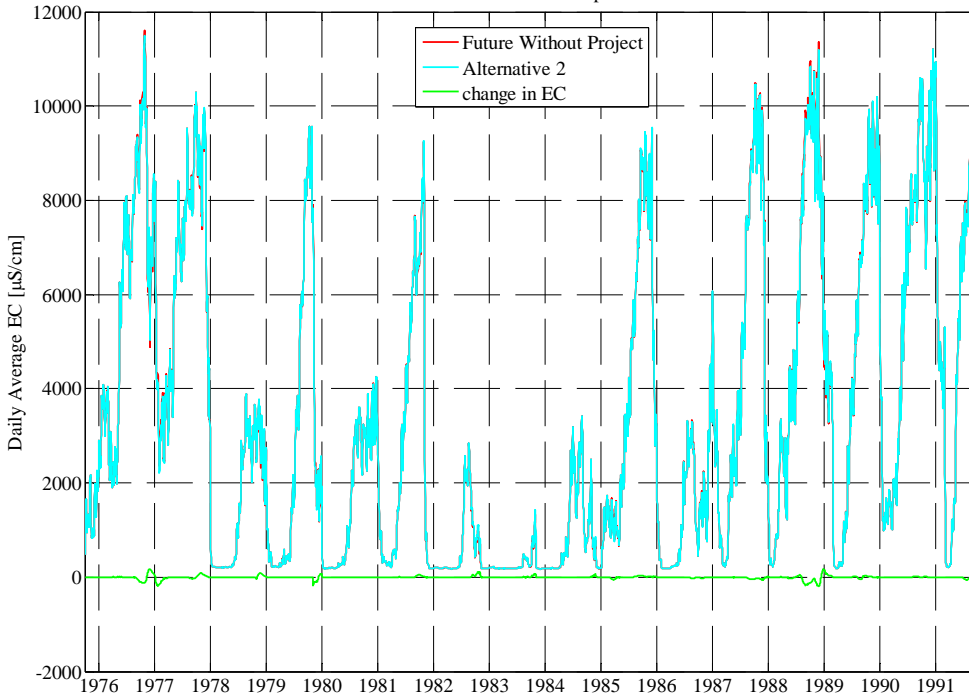


p_lve_wq_feir.m
07-Jan-2010 DS



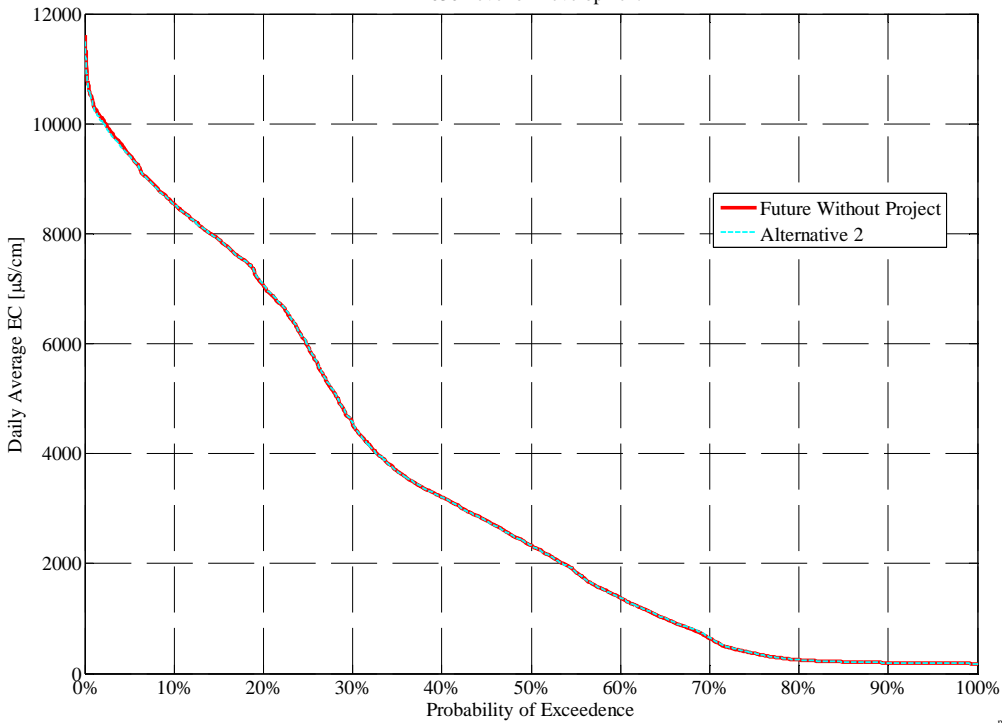
p_lve_wq_feir.m
07-Jan-2010 DS

Collinsville Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Collinsville Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

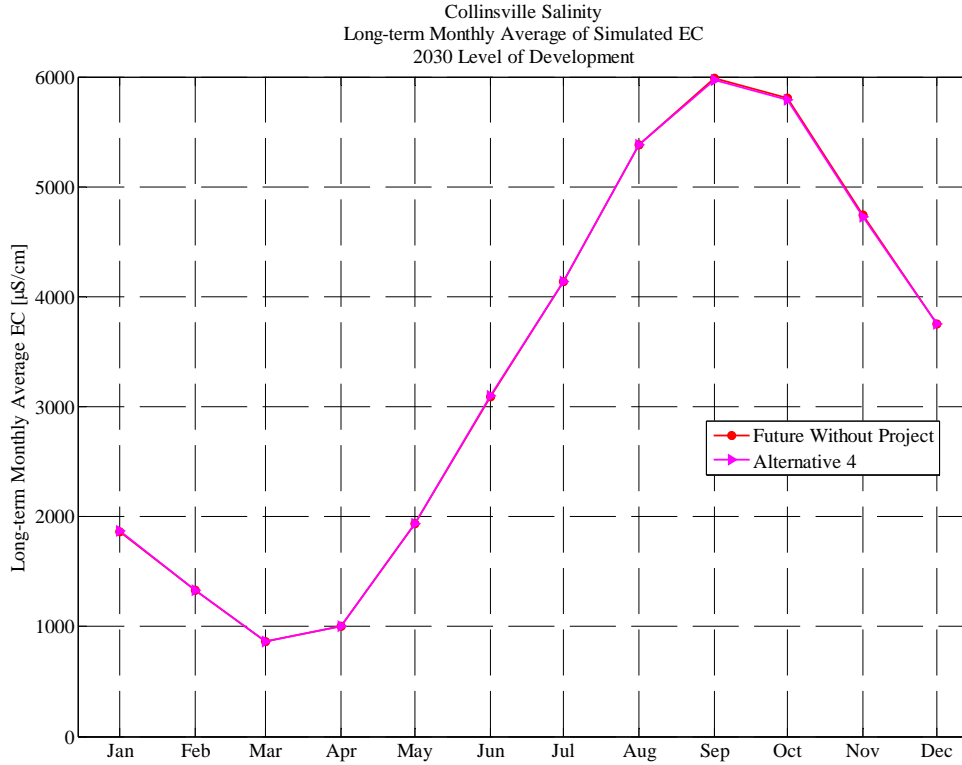
Alternative 4

Collinsville Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2030 Level of Development

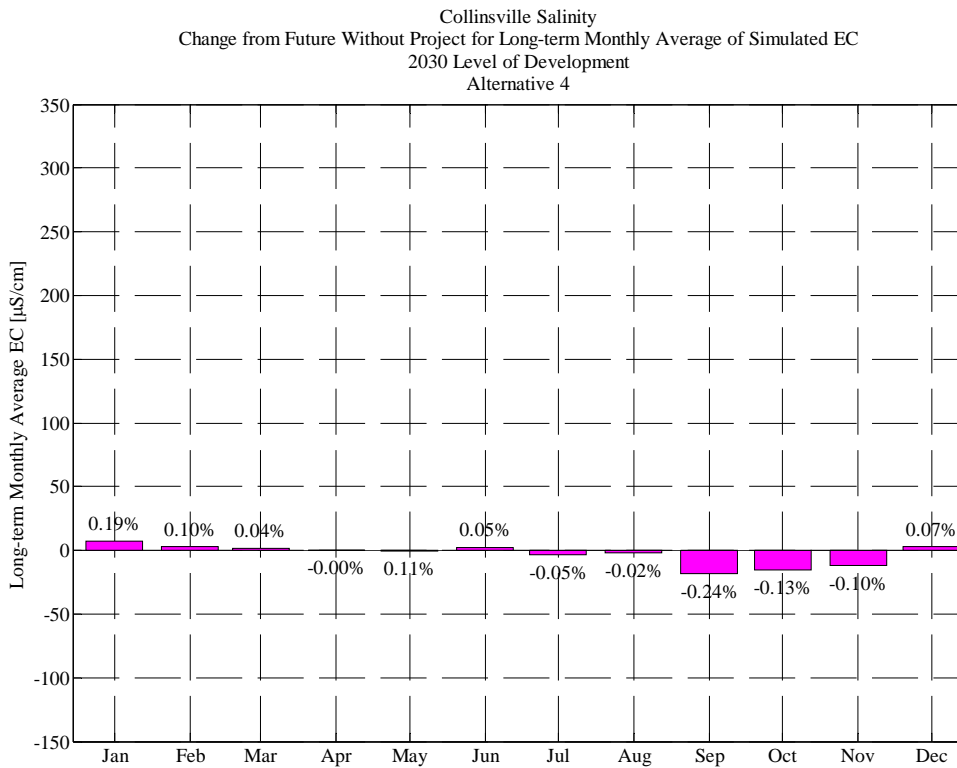
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	1,149	1,174	1,835	3,218	3,614	2,464	2,358	4,884	7,232	6,859	7,933	9,031
1977	10,264	7,652	7,286	4,757	3,231	3,518	4,035	6,411	7,229	7,746	8,229	9,039
1978	8,942	8,801	4,672	286	205	200	215	231	614	1,910	3,047	2,863
1979	3,039	3,217	2,514	791	244	230	336	382	1,270	3,016	5,396	8,061
1980	8,783	3,608	1,778	228	196	199	232	327	781	1,996	3,108	2,953
1981	3,037	3,141	3,437	1,119	340	262	476	1,534	3,013	4,531	6,253	6,605
1982	7,820	1,124	186	199	187	198	181	181	269	1,435	2,306	1,064
1983	758	230	190	211	194	184	186	181	184	202	385	284
1984	781	205	182	193	194	187	299	580	2,010	2,055	2,642	1,110
1985	1,380	623	202	860	1,319	1,197	1,071	1,877	3,140	4,549	6,124	8,176
1986	8,532	8,167	4,364	809	186	190	226	330	1,236	2,377	2,932	1,257
1987	1,350	1,445	3,639	3,467	1,183	332	1,200	2,365	3,079	4,638	7,288	8,959
1988	9,653	9,262	3,787	458	602	2,183	2,253	3,331	3,948	5,764	8,355	9,640
1989	9,785	9,228	7,137	4,347	3,973	349	249	955	2,830	4,299	6,014	7,460
1990	8,696	8,980	8,760	2,652	1,366	1,467	2,019	4,041	6,271	7,483	8,049	9,601
1991	8,753	8,840	10,141	6,302	4,307	626	716	3,419	6,402	7,317	8,008	9,391
Avg	5,795	4,731	3,757	1,869	1,334	862	1,003	1,939	3,094	4,136	5,379	5,968
W/AN/BN	5,522	3,622	1,984	388	201	198	239	316	909	1,856	2,831	2,513
D/C	6,007	5,594	5,136	3,020	2,215	1,378	1,597	3,202	4,794	5,910	7,361	8,656

Percent (%) Change from Future Without Project for Collinsville Salinity
(Alternative 4 - Future Without Project) / Future Without Project
2030 Level of Development

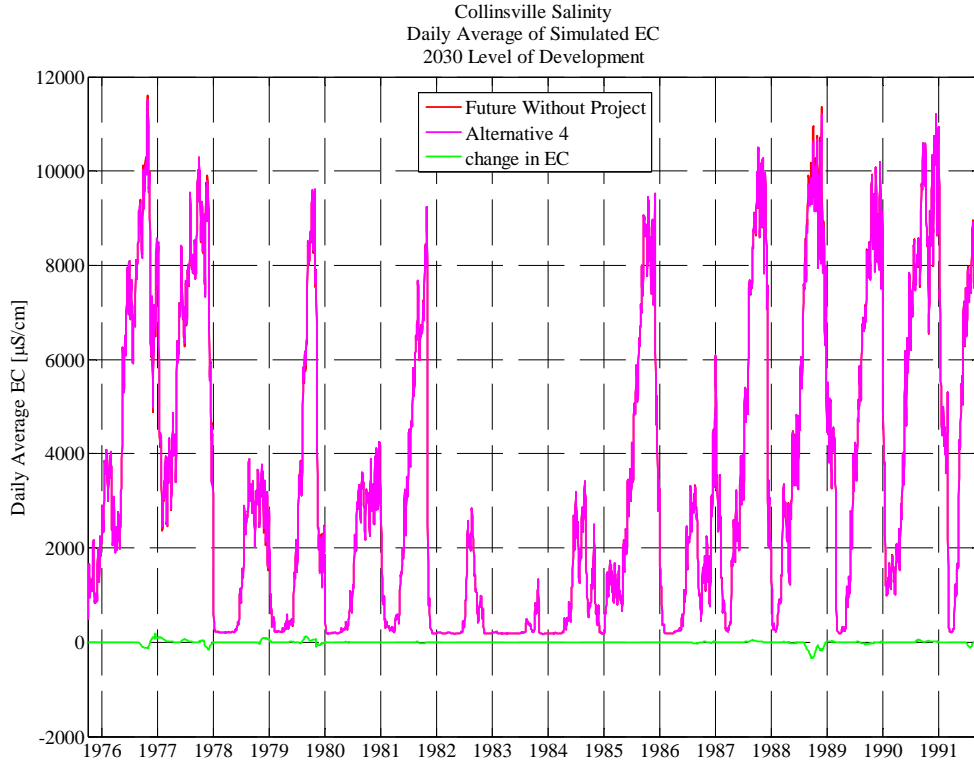
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.8%
1977	-1.1%	0.3%	1.5%	2.1%	1.5%	0.5%	0.1%	0.1%	0.6%	0.5%	0.1%	-0.1%
1978	0.3%	-1.1%	-1.3%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	-0.2%	2.1%	3.3%	1.9%	0.2%	0.0%	0.1%	1.4%	0.0%	-0.4%	1.4%	0.9%
1980	0.6%	-1.2%	-1.6%	-0.1%	0.0%	0.0%	0.0%	0.9%	0.5%	0.1%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.2%
1982	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1986	0.0%	0.0%	0.0%	-0.5%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.7%	-1.2%
1987	0.3%	-0.2%	-0.1%	-0.1%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.2%	0.4%
1988	0.2%	0.0%	0.0%	0.1%	0.0%	0.2%	-0.4%	-0.6%	-0.3%	-0.1%	-1.2%	-2.9%
1989	-1.9%	-1.5%	-0.9%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.3%	-0.5%
1990	-0.3%	-0.1%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.4%	0.2%
1991	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.0%	-0.3%	0.2%
Avg	-0.1%	-0.1%	0.1%	0.2%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	-0.2%
W/AN/BN	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.1%	0.0%
D/C	-0.3%	-0.1%	0.1%	0.2%	0.1%	0.1%	0.0%	-0.1%	0.0%	-0.1%	-0.1%	-0.4%



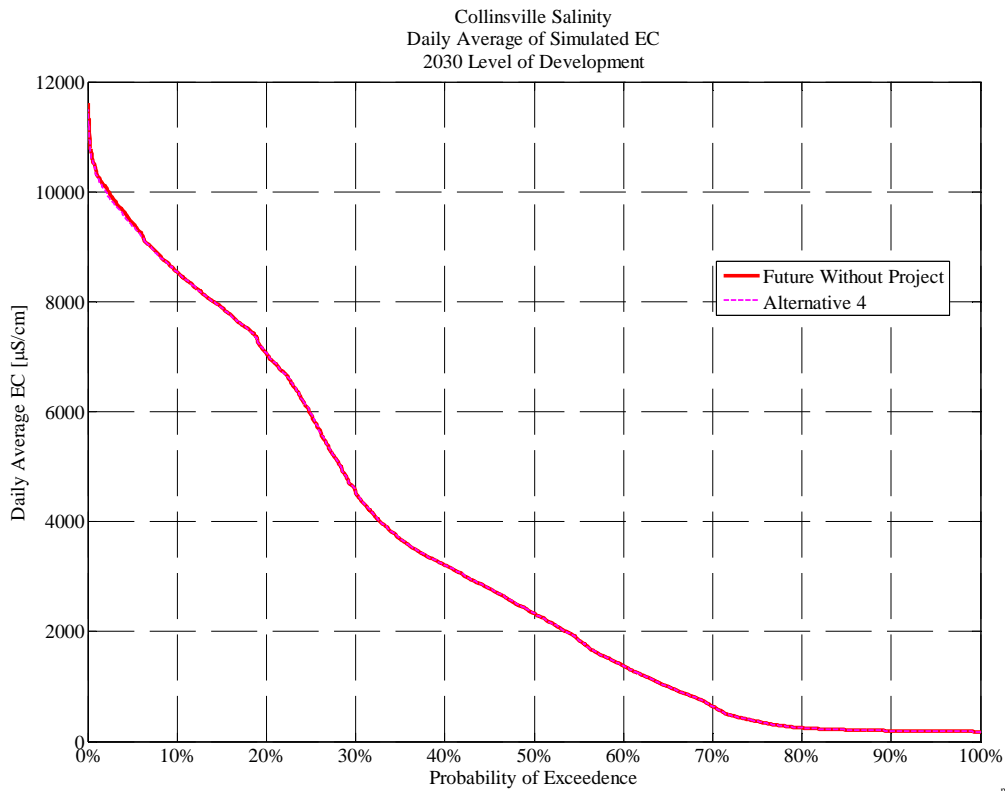
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07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Emmaton

Future Without Project

**Emmaton Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	247	259	318	628	694	427	469	1,392	2,512	1,803	2,601	3,139
1977	4,063	2,227	1,847	1,113	705	744	874	2,022	2,336	2,433	3,000	3,554
1978	3,498	3,363	1,019	208	194	190	193	196	221	366	587	540
1979	633	605	411	259	212	196	207	211	317	579	1,345	2,572
1980	2,994	808	351	188	188	184	194	207	249	400	604	553
1981	648	652	612	306	195	189	222	358	653	984	1,634	1,745
1982	2,524	318	180	192	180	190	178	179	186	335	420	245
1983	206	184	182	193	185	181	181	177	179	188	192	180
1984	214	178	179	184	185	181	202	226	451	380	509	282
1985	304	204	182	233	263	260	272	389	668	981	1,587	2,677
1986	2,945	2,488	953	266	183	183	199	205	316	430	579	282
1987	304	318	720	703	271	195	318	482	651	1,039	2,578	3,326
1988	3,410	3,107	769	219	225	486	442	758	921	1,449	3,315	4,080
1989	3,862	2,981	1,978	808	895	192	191	240	576	914	1,562	2,319
1990	2,859	2,930	2,702	528	295	300	381	985	2,001	2,105	2,482	3,867
1991	3,231	3,073	3,731	1,718	931	235	249	855	2,040	2,081	2,977	3,718
Avg	1,996	1,481	1,008	484	363	271	298	555	892	1,029	1,623	2,067
W/AN/BN	1,859	1,135	468	213	189	186	193	200	274	383	605	665
D/C	2,103	1,750	1,429	695	497	337	380	831	1,373	1,532	2,415	3,158

Alternative 1

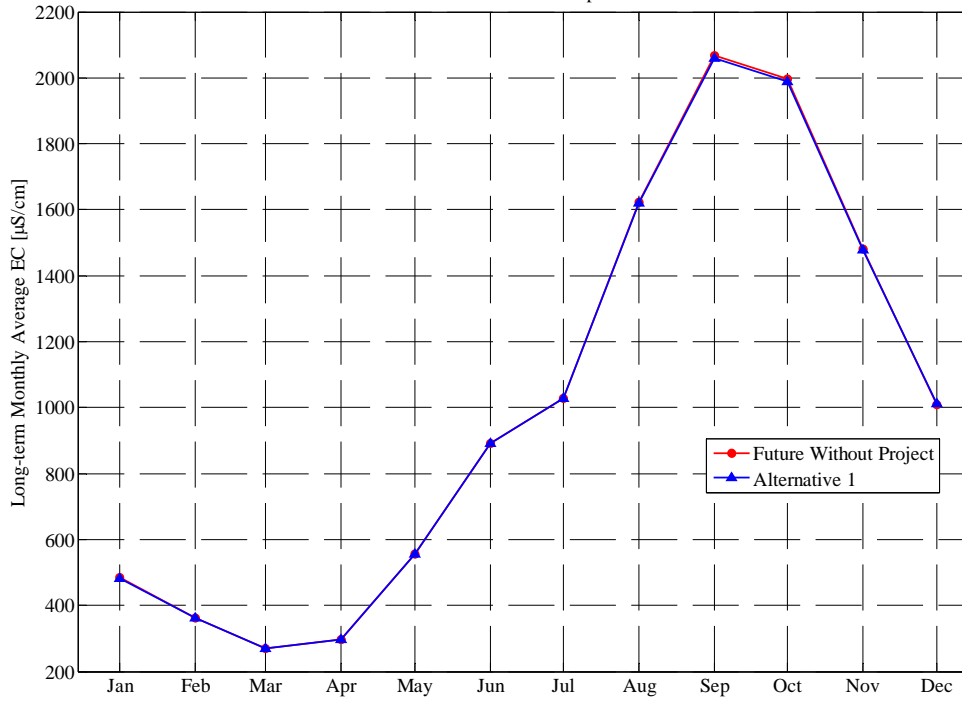
Emmaton Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	247	259	318	627	693	427	469	1,395	2,511	1,805	2,604	3,104
1977	3,988	2,252	1,881	1,075	688	739	872	2,021	2,337	2,430	3,004	3,541
1978	3,506	3,391	1,020	208	194	190	193	196	221	366	587	540
1979	625	621	421	260	212	196	207	211	317	578	1,345	2,573
1980	2,995	782	354	189	188	184	194	207	248	400	604	553
1981	648	651	612	306	195	189	222	358	653	983	1,631	1,760
1982	2,539	319	180	192	180	190	178	179	186	335	420	249
1983	213	185	182	193	185	181	181	177	179	188	192	180
1984	214	178	179	184	185	181	202	226	450	379	509	283
1985	306	207	183	233	263	257	271	389	668	979	1,592	2,693
1986	2,947	2,490	954	266	183	183	199	205	315	430	575	280
1987	301	316	720	703	271	195	318	483	651	1,036	2,579	3,310
1988	3,398	3,086	766	219	224	491	442	754	918	1,462	3,266	3,966
1989	3,786	2,890	1,964	825	902	192	191	241	576	918	1,551	2,330
1990	2,867	2,932	2,704	528	295	300	381	987	2,000	2,101	2,495	3,869
1991	3,236	3,077	3,732	1,717	930	235	249	855	2,038	2,052	2,970	3,724
Avg	1,988	1,477	1,011	483	362	271	298	555	892	1,028	1,620	2,060
W/AN/BN	1,863	1,138	470	213	189	186	193	200	274	383	605	665
D/C	2,086	1,741	1,431	693	496	336	380	831	1,372	1,529	2,410	3,144

Percent (%) Change from Future Without Project for Emmatton Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

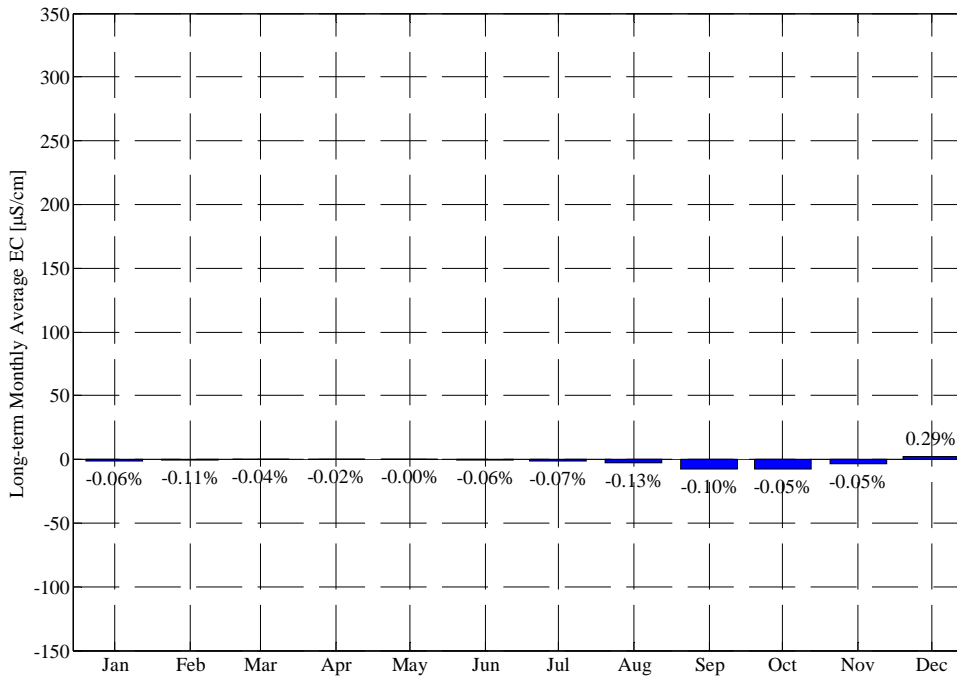
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	-0.1%	0.1%	-0.2%	-0.1%	0.0%	0.1%	0.2%	0.0%	0.1%	0.1%	-1.1%
1977	-1.9%	1.1%	1.8%	-3.4%	-2.4%	-0.7%	-0.2%	-0.1%	0.0%	-0.1%	0.1%	-0.4%
1978	0.2%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1979	-1.4%	2.6%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%
1980	0.0%	-3.2%	1.0%	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.1%
1981	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	-0.2%	0.9%
1982	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%
1983	3.4%	0.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
1984	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	-0.2%	-0.1%	0.0%	0.0%
1985	0.6%	1.4%	0.2%	0.0%	0.0%	-1.3%	-0.4%	0.0%	0.1%	-0.1%	0.3%	0.6%
1986	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.8%	-0.6%
1987	-0.7%	-0.6%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	-0.3%	0.1%	-0.5%
1988	-0.3%	-0.7%	-0.4%	0.0%	0.0%	1.0%	0.0%	-0.5%	-0.4%	0.9%	-1.5%	-2.8%
1989	-2.0%	-3.0%	-0.7%	2.2%	0.8%	0.1%	0.0%	0.0%	-0.1%	0.5%	-0.7%	0.4%
1990	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	0.5%	0.1%
1991	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-1.4%	-0.2%	0.1%
Avg	0.0%	0.0%	0.3%	-0.1%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%
W/AN/BN	0.4%	0.1%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%
D/C	-0.4%	-0.2%	0.1%	-0.2%	-0.2%	-0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.2%	-0.3%

Emmaton Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

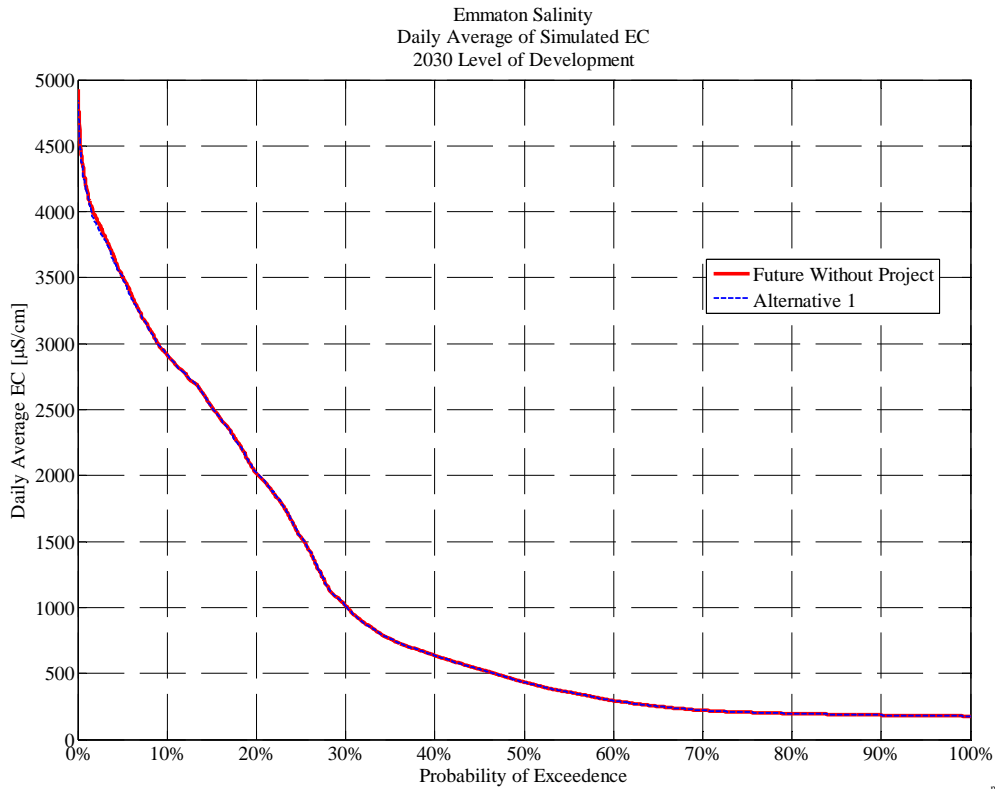
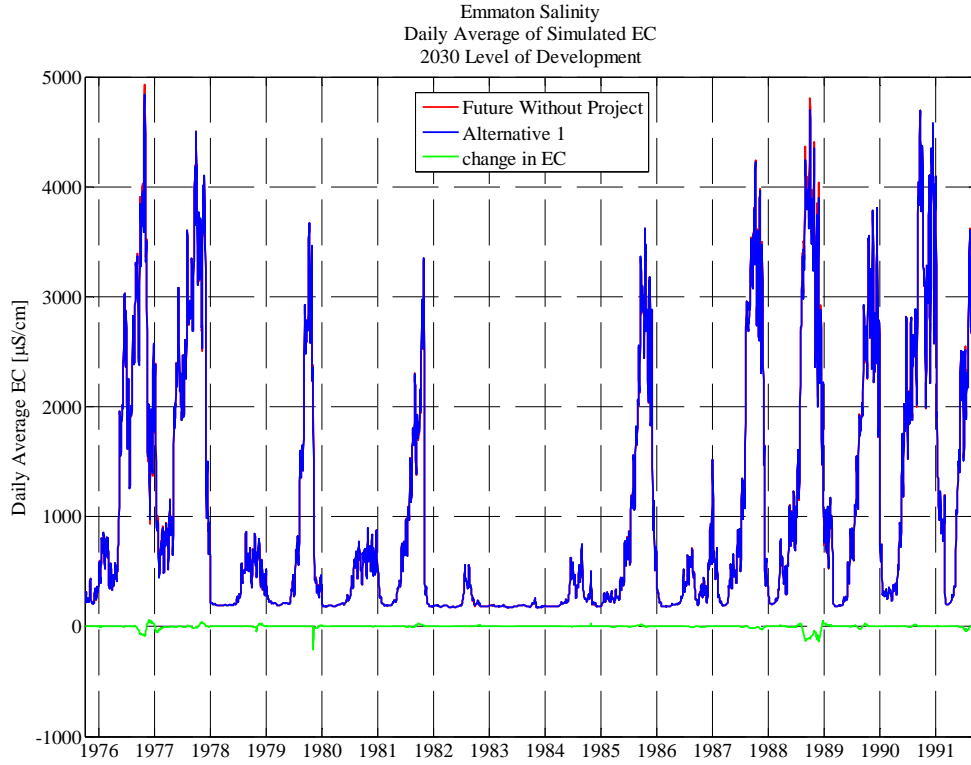


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Emmaton Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



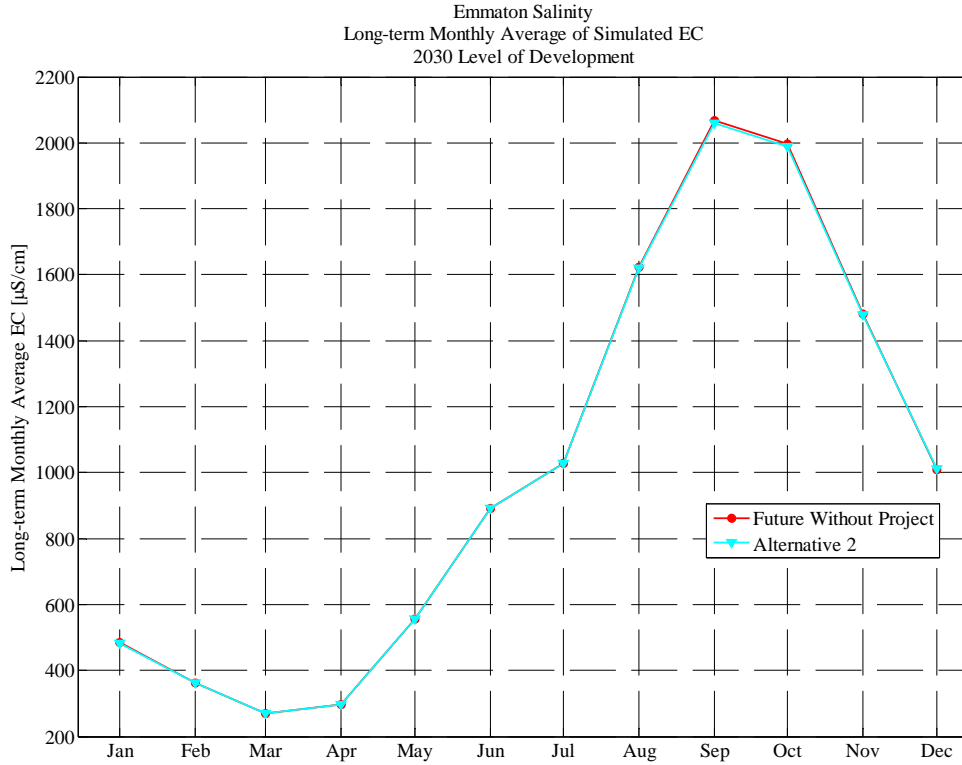
Alternative 2

**Emmaton Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

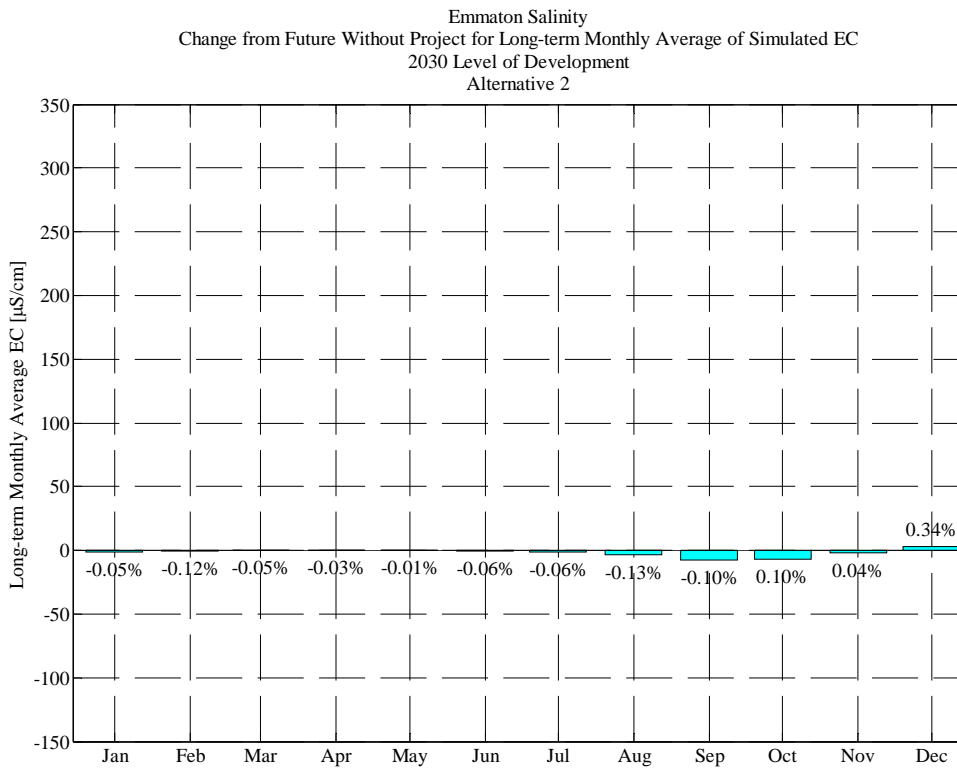
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	247	259	318	627	694	427	469	1,395	2,510	1,804	2,602	3,101
1977	3,985	2,260	1,885	1,073	686	739	872	2,021	2,337	2,431	3,004	3,541
1978	3,510	3,396	1,022	208	194	190	193	196	221	366	587	540
1979	625	621	421	260	212	196	207	211	317	578	1,345	2,574
1980	2,995	782	354	189	188	184	194	207	248	400	604	553
1981	648	651	612	306	195	189	222	358	653	983	1,631	1,760
1982	2,539	320	180	192	180	190	178	179	186	335	420	249
1983	213	185	182	193	185	181	181	177	179	188	192	180
1984	218	178	179	184	185	181	202	226	450	380	509	283
1985	306	207	183	233	263	257	271	389	668	979	1,593	2,695
1986	2,944	2,492	954	266	183	183	199	205	315	430	575	280
1987	302	316	721	703	271	195	318	482	650	1,036	2,580	3,310
1988	3,398	3,086	766	219	225	491	442	754	918	1,462	3,266	3,966
1989	3,797	2,896	1,969	827	903	192	191	241	576	918	1,551	2,331
1990	2,868	2,933	2,705	528	295	300	381	987	2,000	2,102	2,492	3,868
1991	3,234	3,076	3,732	1,718	931	235	249	856	2,038	2,054	2,970	3,723
Avg	1,989	1,479	1,011	483	362	271	298	555	892	1,028	1,620	2,060
W/AN/BN	1,864	1,139	470	213	189	186	193	200	274	383	605	665
D/C	2,087	1,743	1,432	693	496	336	380	831	1,372	1,530	2,410	3,144

**Percent (%) Change from Future Without Project for Emmatton Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	-0.1%	0.1%	-0.1%	-0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	-1.2%
1977	-1.9%	1.5%	2.1%	-3.6%	-2.6%	-0.7%	-0.2%	-0.1%	0.0%	-0.1%	0.1%	-0.4%
1978	0.3%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1979	-1.3%	2.6%	2.3%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.1%
1980	0.1%	-3.2%	1.0%	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.1%
1981	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	-0.2%	0.9%
1982	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%
1983	3.4%	0.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%
1984	2.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	-0.2%	-0.1%	0.0%	0.0%
1985	0.6%	1.5%	0.2%	0.0%	0.0%	-1.2%	-0.4%	0.0%	0.0%	-0.1%	0.4%	0.7%
1986	0.0%	0.1%	0.2%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.8%	-0.6%
1987	-0.6%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.3%	0.1%	-0.5%
1988	-0.3%	-0.7%	-0.4%	0.0%	0.0%	1.0%	0.0%	-0.6%	-0.4%	0.9%	-1.5%	-2.8%
1989	-1.7%	-2.8%	-0.5%	2.4%	0.9%	0.1%	0.0%	0.0%	-0.1%	0.4%	-0.7%	0.5%
1990	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.2%	0.4%	0.0%
1991	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-1.3%	-0.2%	0.1%
Avg	0.1%	0.0%	0.3%	-0.1%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%
W/AN/BN	0.7%	0.2%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%
D/C	-0.4%	-0.1%	0.2%	-0.1%	-0.2%	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	-0.2%	-0.3%

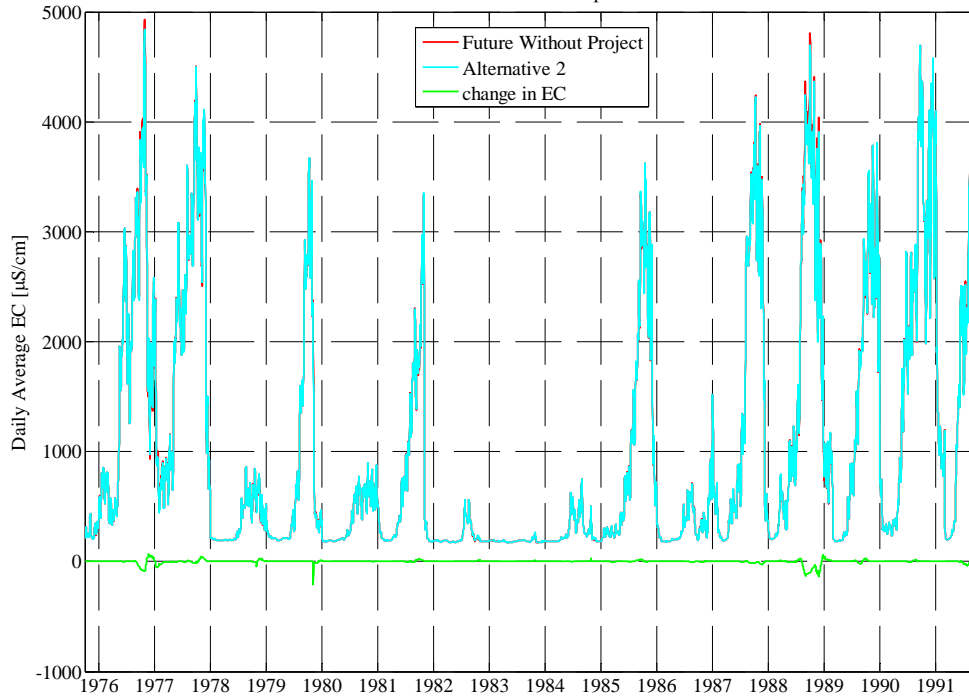


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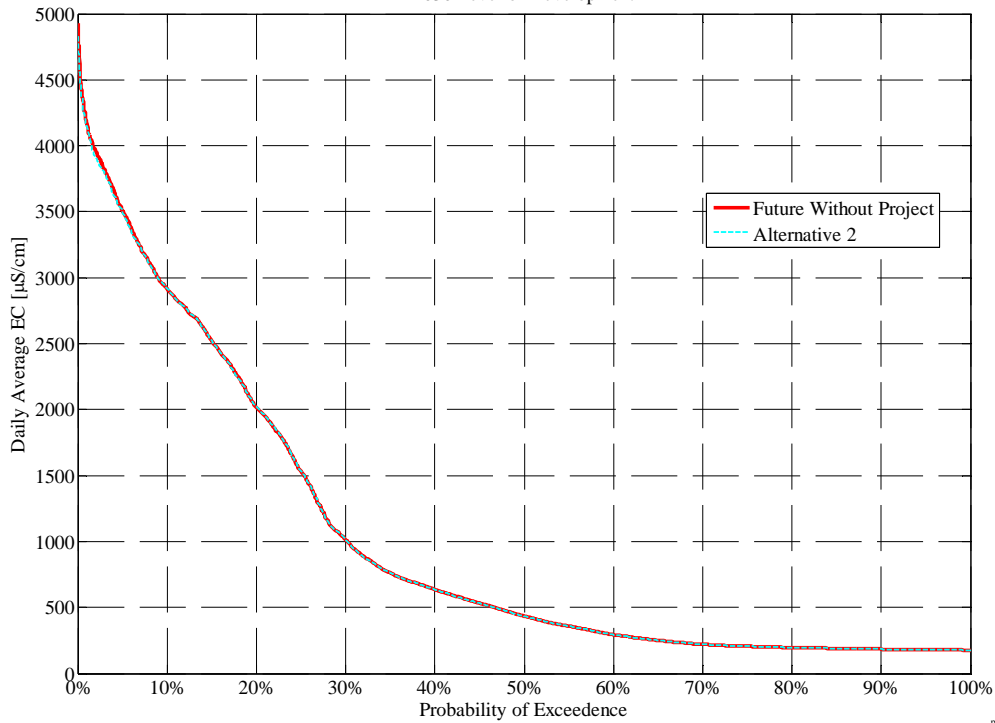
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07-Jan-2010 DS

Emmaton Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Emmaton Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

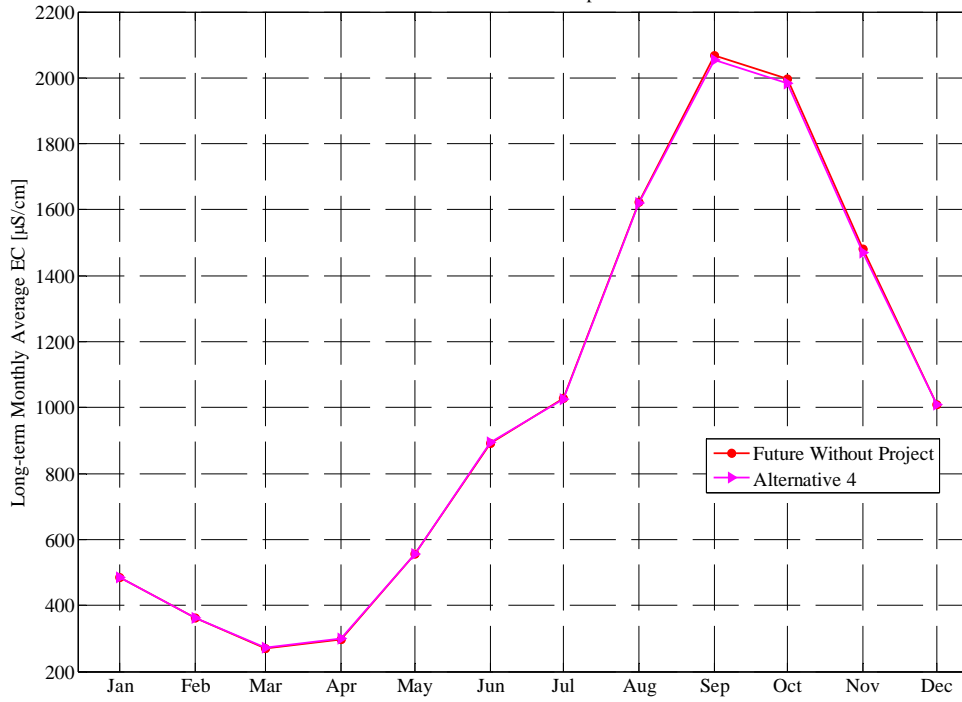
Emmaton Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	247	259	318	628	694	427	469	1,392	2,512	1,803	2,600	3,098
1977	3,986	2,235	1,907	1,141	721	752	876	2,030	2,364	2,445	3,002	3,550
1978	3,519	3,265	998	207	194	190	193	196	221	366	587	540
1979	623	619	428	262	212	196	207	211	316	575	1,378	2,615
1980	3,026	796	346	188	188	184	194	207	249	400	604	553
1981	648	652	612	306	195	189	222	357	653	984	1,636	1,737
1982	2,517	318	180	192	180	190	178	179	186	335	420	245
1983	206	184	182	193	185	181	181	177	179	188	192	180
1984	214	178	179	184	185	181	202	226	451	380	510	283
1985	304	204	182	233	263	260	272	389	668	981	1,586	2,675
1986	2,945	2,488	952	266	183	183	199	205	316	430	574	279
1987	305	315	723	703	271	195	318	482	651	1,041	2,570	3,346
1988	3,419	3,107	769	219	224	491	442	753	918	1,448	3,251	3,844
1989	3,690	2,887	1,925	806	895	192	191	240	576	916	1,554	2,299
1990	2,844	2,926	2,711	527	295	300	381	985	2,001	2,098	2,516	3,873
1991	3,244	3,082	3,735	1,717	931	235	249	856	2,039	2,035	2,964	3,729
Avg	1,984	1,470	1,009	486	364	272	298	555	894	1,027	1,621	2,053
W/AN/BN	1,864	1,121	467	213	189	186	193	200	274	382	609	671
D/C	2,076	1,741	1,431	698	499	338	380	832	1,376	1,528	2,409	3,128

Percent (%) Change from Future Without Project for Emmaton Salinity
(Alternative 4 - Future Without Project) / Future Without Project
2030 Level of Development

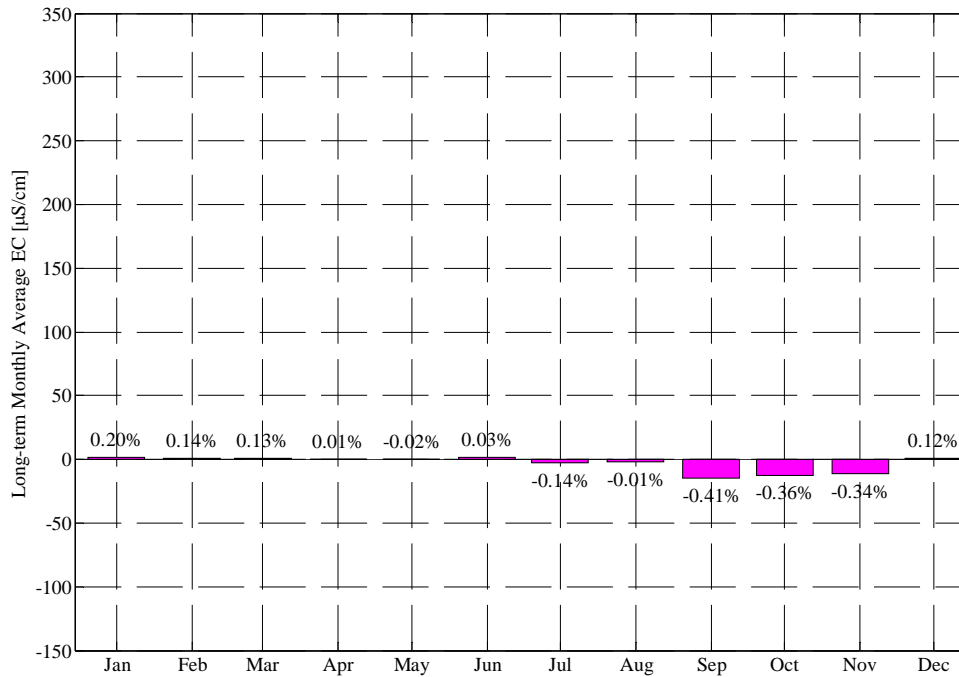
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-1.3%
1977	-1.9%	0.3%	3.2%	2.5%	2.3%	1.0%	0.2%	0.4%	1.2%	0.5%	0.1%	-0.1%
1978	0.6%	-2.9%	-2.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1979	-1.5%	2.4%	4.1%	1.4%	0.1%	0.0%	0.0%	-0.1%	-0.3%	-0.6%	2.5%	1.7%
1980	1.1%	-1.5%	-1.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.4%
1982	-0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
1986	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.9%	-0.8%
1987	0.5%	-0.8%	0.4%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	-0.3%	0.6%
1988	0.3%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	-0.6%	-0.4%	-0.1%	-1.9%	-5.8%
1989	-4.4%	-3.1%	-2.7%	-0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	-0.5%	-0.9%
1990	-0.5%	-0.2%	0.3%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.3%	1.4%	0.2%
1991	0.4%	0.3%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-2.2%	-0.4%	0.3%
Avg	-0.4%	-0.3%	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.4%
W/AN/BN	0.0%	-0.3%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.2%	0.1%
D/C	-0.6%	-0.4%	0.1%	0.2%	0.2%	0.2%	0.0%	0.0%	0.1%	-0.2%	-0.2%	-0.8%

Emmaton Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

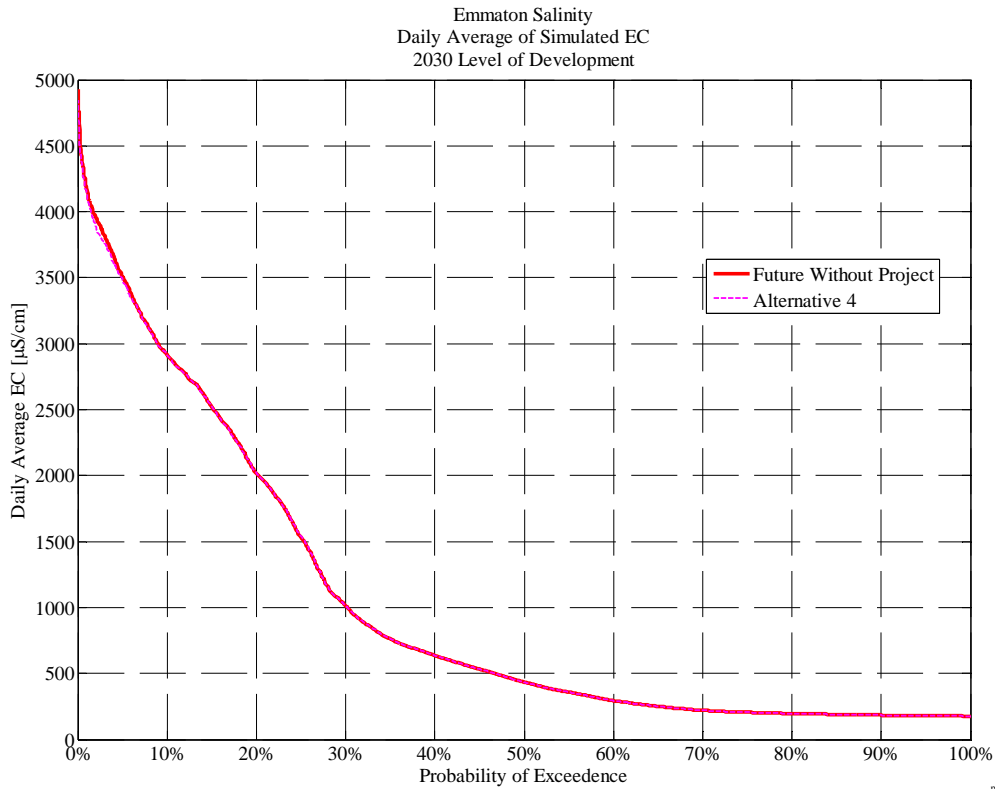
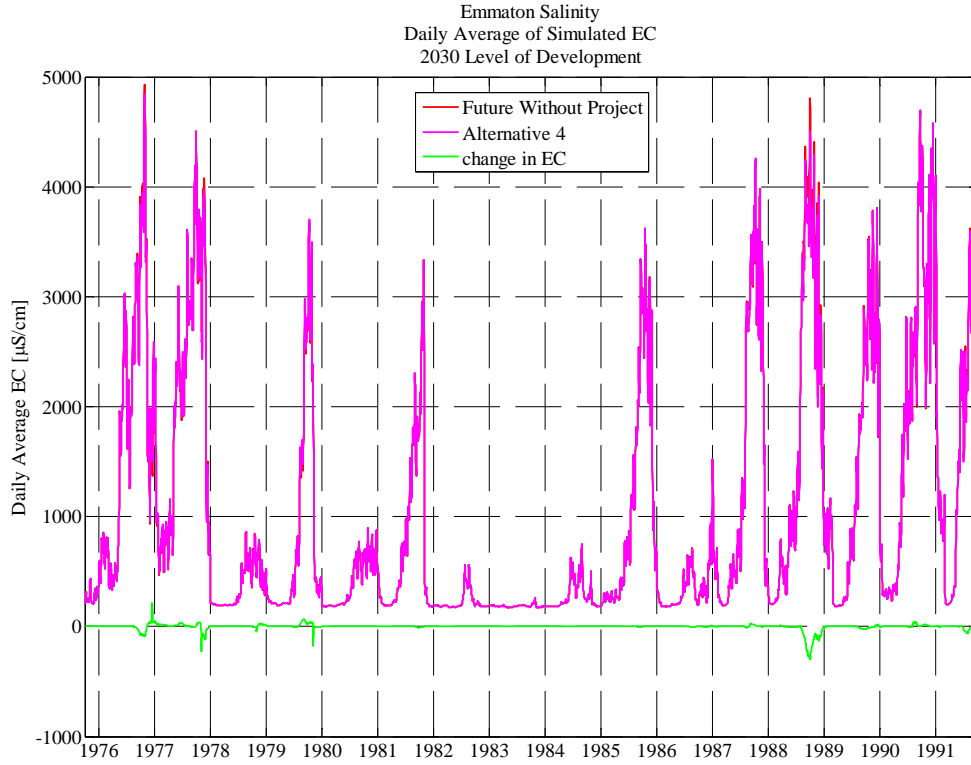


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Emmaton Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



Jersey Point

Future Without Project

**Jersey Point Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	290	227	426	714	812	572	341	735	1,505	2,475	2,461	2,903
1977	2,858	1,613	2,281	1,385	536	501	555	1,065	1,513	1,941	1,833	2,318
1978	2,181	2,308	1,732	344	255	251	267	233	221	390	775	717
1979	390	393	724	387	276	239	237	249	253	853	1,621	2,647
1980	2,646	1,058	712	266	260	234	223	244	238	310	658	673
1981	369	361	1,203	650	238	211	267	296	436	1,563	2,434	2,557
1982	2,381	1,076	210	234	216	233	197	181	194	254	389	227
1983	219	200	221	272	275	242	202	187	196	208	197	187
1984	260	192	210	225	213	197	230	248	312	548	651	659
1985	262	289	204	233	288	255	266	308	453	1,511	2,320	2,794
1986	2,365	2,407	1,633	429	260	250	237	227	248	542	621	263
1987	222	243	1,005	1,013	416	234	273	356	463	1,402	1,764	2,360
1988	2,455	2,364	1,484	337	241	333	345	457	576	1,641	2,129	2,790
1989	2,427	2,853	1,823	1,089	688	266	228	240	454	1,502	2,382	2,602
1990	2,235	2,191	2,494	1,076	349	271	294	549	1,180	2,686	2,850	2,824
1991	1,971	1,996	2,907	1,528	762	335	271	519	1,310	2,651	2,034	2,467
Avg	1,471	1,236	1,204	636	380	289	277	381	597	1,280	1,570	1,812
W/AN/BN	1,492	1,090	777	308	251	235	228	224	237	444	702	768
D/C	1,454	1,349	1,536	892	481	331	316	503	877	1,930	2,245	2,624

Alternative 1

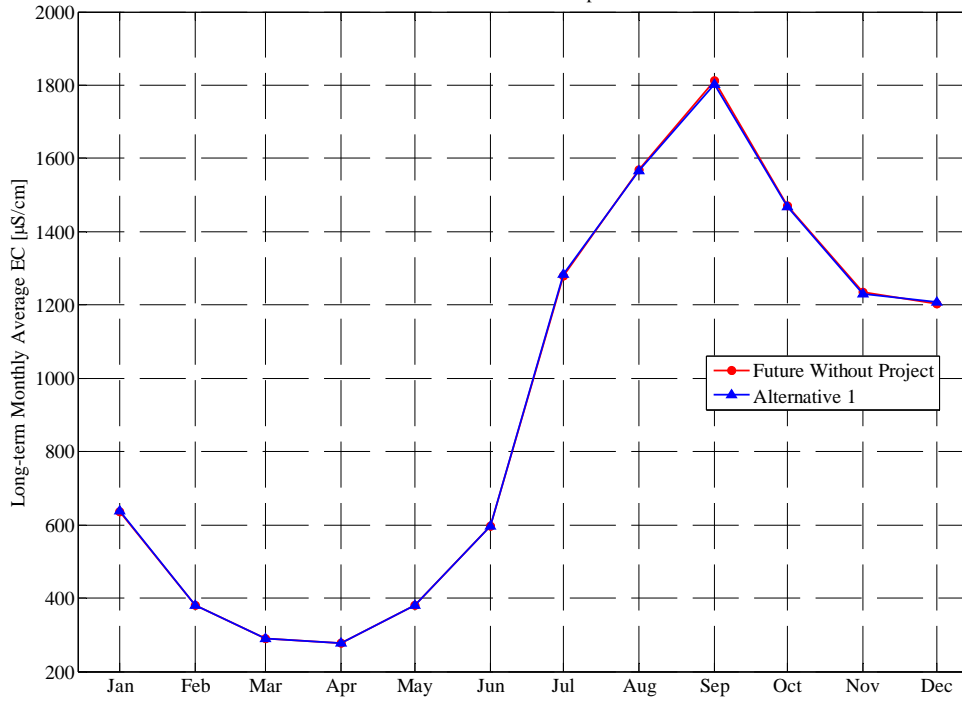
Jersey Point Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	290	227	422	711	811	572	342	737	1,504	2,478	2,467	2,849
1977	2,772	1,621	2,329	1,381	526	497	554	1,064	1,513	1,943	1,823	2,306
1978	2,207	2,332	1,731	344	255	251	266	233	221	390	775	718
1979	393	409	744	391	276	239	238	249	253	853	1,621	2,647
1980	2,647	1,043	729	271	259	234	223	244	238	311	659	674
1981	369	361	1,203	650	238	211	266	296	436	1,561	2,428	2,563
1982	2,397	1,082	210	234	216	233	197	181	194	254	390	230
1983	238	202	221	270	275	242	202	186	196	208	197	187
1984	261	193	210	225	213	198	230	247	312	547	651	660
1985	261	305	207	233	288	252	266	308	453	1,509	2,330	2,816
1986	2,384	2,412	1,637	429	260	251	237	227	248	543	614	261
1987	222	243	1,005	1,012	416	235	275	357	463	1,418	1,761	2,346
1988	2,445	2,341	1,472	337	241	333	346	456	575	1,665	2,084	2,694
1989	2,375	2,714	1,802	1,121	696	267	228	240	453	1,507	2,371	2,586
1990	2,242	2,194	2,492	1,075	349	271	295	550	1,180	2,688	2,840	2,822
1991	1,973	1,999	2,908	1,528	762	335	271	519	1,311	2,663	2,037	2,473
Avg	1,467	1,230	1,208	638	380	289	277	381	597	1,284	1,565	1,802
W/AN/BN	1,504	1,096	783	309	251	235	228	224	237	444	701	768
D/C	1,439	1,334	1,538	894	481	330	316	503	876	1,937	2,238	2,606

Percent (%) Change from Future Without Project for Jersey Point Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

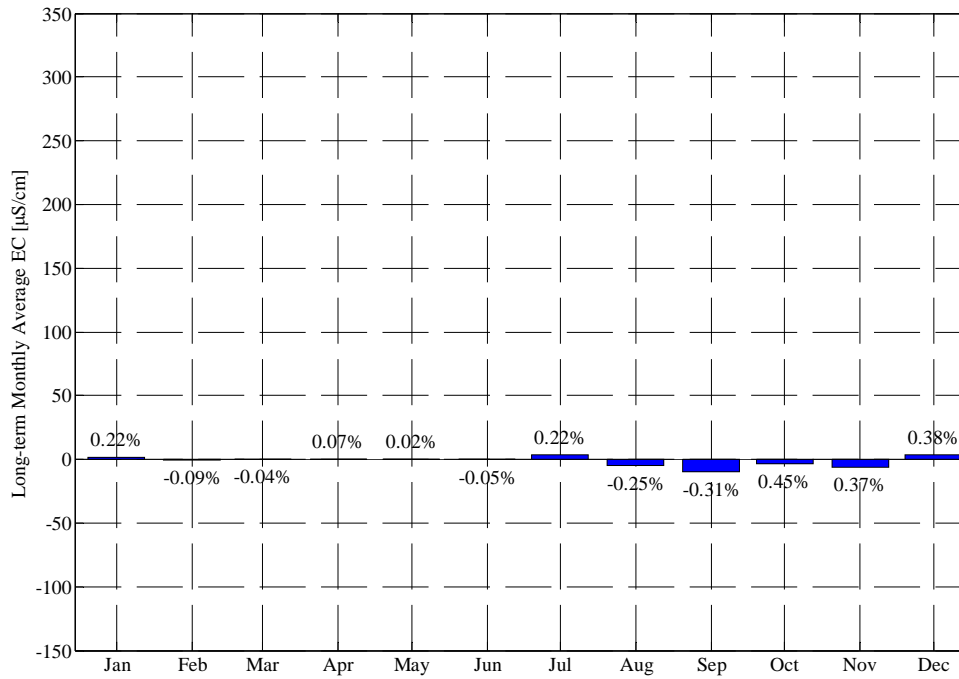
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	-0.9%	-0.4%	-0.1%	-0.1%	0.1%	0.3%	-0.1%	0.2%	0.2%	-1.9%
1977	-3.0%	0.5%	2.1%	-0.3%	-1.9%	-0.6%	-0.2%	-0.1%	0.0%	0.1%	-0.6%	-0.5%
1978	1.2%	1.1%	-0.1%	-0.1%	0.0%	-0.1%	-0.1%	0.1%	0.1%	0.1%	0.0%	0.1%
1979	0.9%	4.0%	2.8%	1.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	-1.5%	2.4%	1.6%	-0.3%	0.2%	0.0%	-0.1%	0.0%	0.1%	0.2%	0.3%
1981	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%	0.2%
1982	0.7%	0.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	1.2%
1983	8.8%	1.3%	-0.1%	-0.8%	-0.2%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%
1984	0.4%	0.1%	0.0%	-0.1%	0.0%	0.3%	0.3%	0.0%	-0.1%	-0.1%	0.0%	0.1%
1985	-0.4%	5.3%	1.5%	0.1%	0.0%	-1.3%	0.1%	0.1%	0.1%	-0.1%	0.4%	0.8%
1986	0.8%	0.2%	0.2%	0.1%	0.0%	0.3%	-0.1%	0.1%	0.1%	0.1%	-1.2%	-0.7%
1987	0.0%	-0.1%	0.0%	0.0%	0.0%	0.2%	0.5%	0.3%	0.0%	1.1%	-0.2%	-0.6%
1988	-0.4%	-1.0%	-0.8%	-0.1%	0.0%	0.0%	0.4%	-0.3%	-0.3%	1.4%	-2.1%	-3.5%
1989	-2.2%	-4.9%	-1.1%	2.9%	1.1%	0.3%	0.0%	0.0%	-0.2%	0.3%	-0.5%	-0.6%
1990	0.3%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	-0.4%	-0.1%
1991	0.1%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.1%	0.0%	0.5%	0.1%	0.2%
Avg	0.5%	0.4%	0.4%	0.2%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.2%	-0.2%	-0.3%
W/AN/BN	1.8%	0.8%	0.8%	0.2%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%
D/C	-0.6%	0.0%	0.1%	0.2%	-0.1%	-0.2%	0.1%	0.1%	-0.1%	0.4%	-0.3%	-0.7%

Jersey Point Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

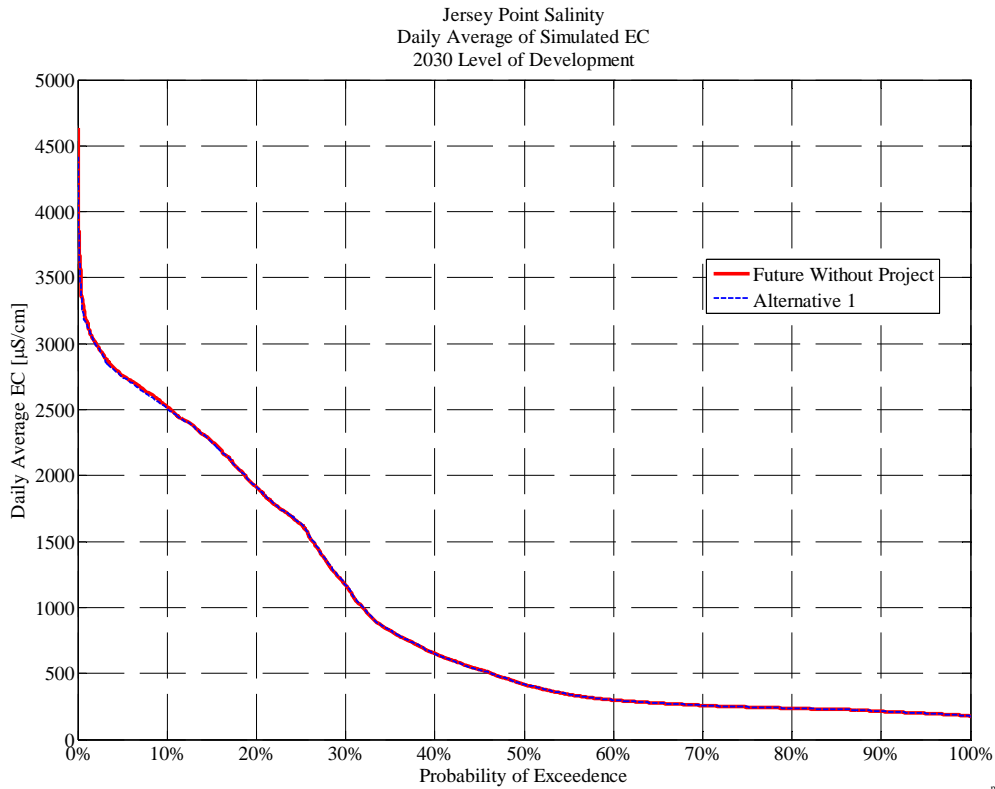
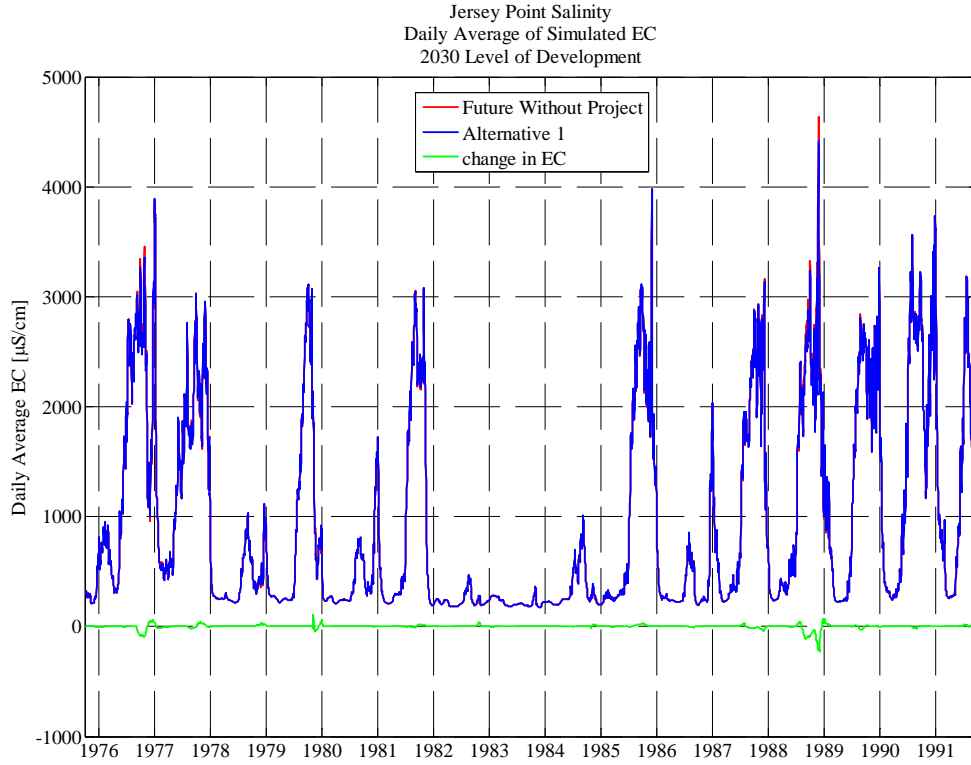


p_lve_wq_feir.m
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Jersey Point Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



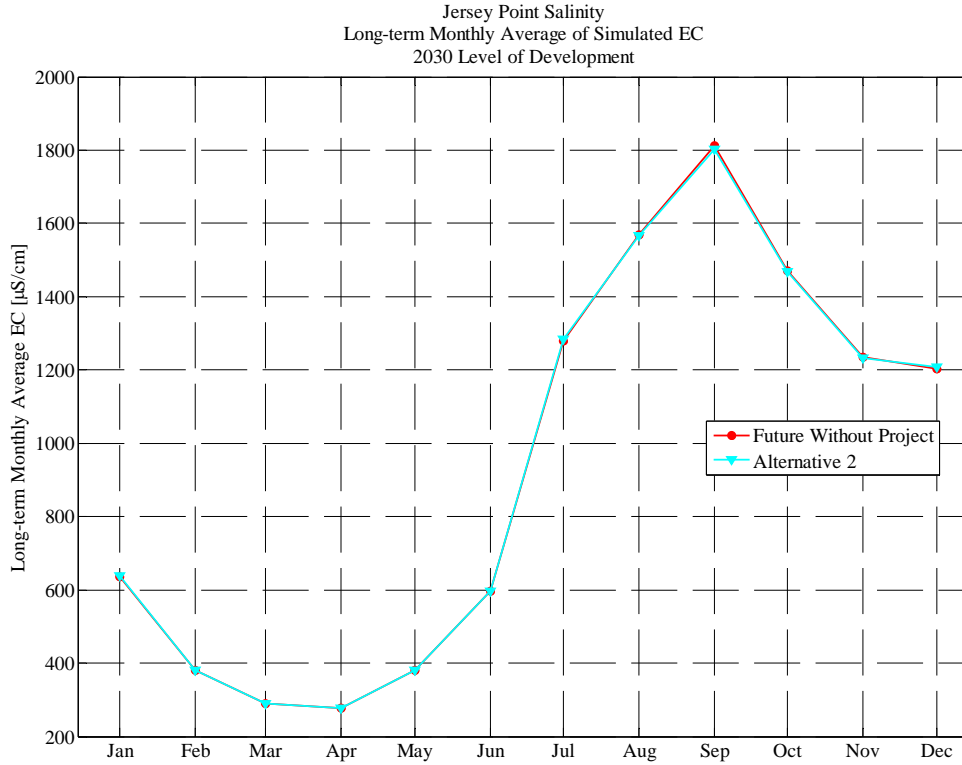
Alternative 2

**Jersey Point Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

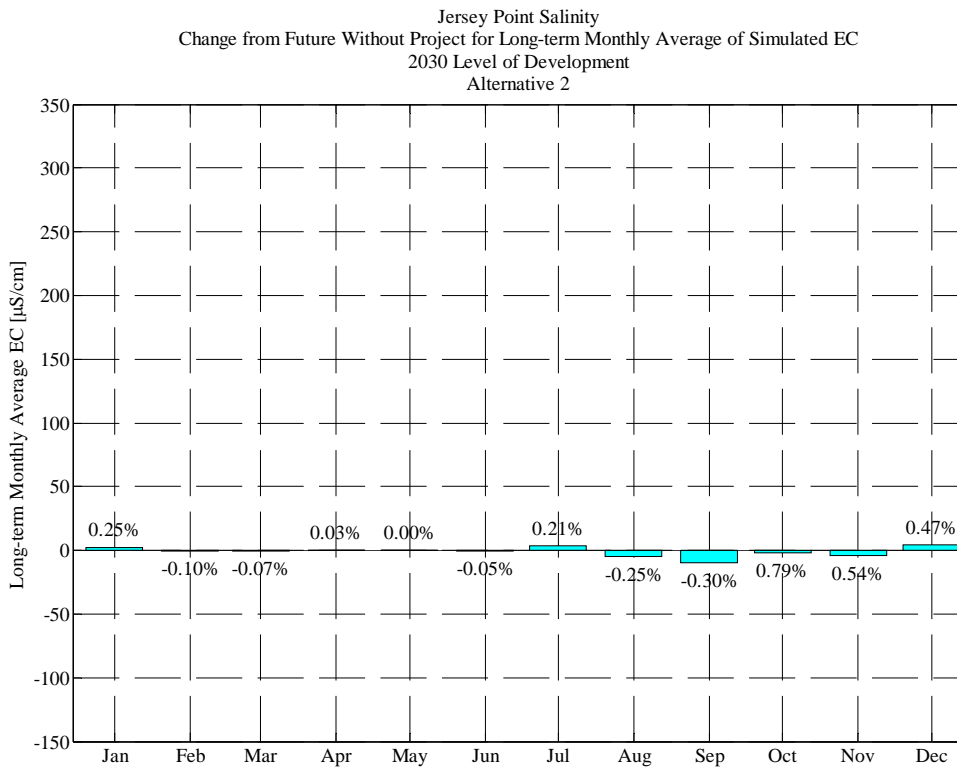
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	290	227	424	712	811	572	342	737	1,504	2,477	2,464	2,845
1977	2,770	1,625	2,336	1,379	526	497	554	1,064	1,513	1,942	1,823	2,306
1978	2,212	2,337	1,731	344	255	251	266	233	221	390	775	718
1979	393	409	744	391	276	239	238	249	253	853	1,621	2,647
1980	2,646	1,042	729	271	259	234	223	244	238	311	659	674
1981	369	361	1,203	650	238	211	267	296	436	1,561	2,429	2,562
1982	2,396	1,091	210	234	216	233	197	181	194	254	390	230
1983	239	202	221	270	275	242	202	186	196	207	197	187
1984	274	194	210	225	213	198	230	247	312	547	651	660
1985	261	306	207	233	288	252	266	308	453	1,509	2,332	2,820
1986	2,390	2,414	1,638	430	260	251	237	227	248	543	614	261
1987	222	243	1,006	1,012	416	234	273	356	463	1,418	1,761	2,347
1988	2,445	2,341	1,472	337	241	333	346	456	575	1,665	2,084	2,694
1989	2,380	2,721	1,808	1,124	697	267	228	240	453	1,507	2,371	2,586
1990	2,242	2,194	2,492	1,075	349	271	295	550	1,180	2,689	2,842	2,822
1991	1,972	1,999	2,908	1,528	762	335	271	519	1,311	2,662	2,036	2,472
Avg	1,469	1,232	1,209	638	380	289	277	381	597	1,283	1,566	1,802
W/AN/BN	1,507	1,099	783	309	251	235	228	224	237	444	701	768
D/C	1,439	1,335	1,539	895	481	330	316	503	876	1,937	2,238	2,606

**Percent (%) Change from Future Without Project for Jersey Point Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	-0.5%	-0.3%	-0.1%	-0.1%	0.1%	0.3%	-0.1%	0.1%	0.1%	-2.0%
1977	-3.1%	0.7%	2.4%	-0.4%	-2.0%	-0.7%	-0.3%	-0.1%	0.0%	0.1%	-0.6%	-0.5%
1978	1.4%	1.3%	0.0%	-0.1%	0.0%	0.0%	-0.1%	0.1%	0.1%	0.1%	0.0%	0.1%
1979	0.9%	4.0%	2.8%	1.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	-1.5%	2.4%	1.6%	-0.4%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.2%	0.3%
1981	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%	0.2%
1982	0.7%	1.5%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	1.2%
1983	8.8%	1.3%	-0.1%	-0.8%	-0.2%	0.0%	0.0%	-0.2%	-0.1%	-0.2%	-0.1%	0.2%
1984	5.2%	0.9%	0.0%	-0.2%	-0.1%	0.3%	0.3%	0.0%	-0.1%	-0.1%	0.0%	0.1%
1985	-0.4%	5.6%	1.6%	0.1%	0.0%	-1.3%	0.1%	0.1%	0.1%	-0.1%	0.5%	0.9%
1986	1.1%	0.3%	0.3%	0.1%	0.0%	0.2%	-0.1%	0.1%	0.1%	0.1%	-1.2%	-0.7%
1987	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	1.1%	-0.2%	-0.6%
1988	-0.4%	-1.0%	-0.8%	-0.1%	0.0%	0.0%	0.4%	-0.3%	-0.3%	1.4%	-2.1%	-3.5%
1989	-1.9%	-4.6%	-0.8%	3.2%	1.2%	0.3%	0.0%	0.0%	-0.2%	0.3%	-0.5%	-0.6%
1990	0.3%	0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.2%	0.0%	0.1%	-0.3%	-0.1%
1991	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%	0.1%	0.2%
Avg	0.8%	0.5%	0.5%	0.2%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	0.2%	-0.3%	-0.3%
W/AN/BN	2.6%	1.1%	0.8%	0.2%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.2%
D/C	-0.6%	0.1%	0.2%	0.3%	-0.1%	-0.2%	0.0%	0.0%	-0.1%	0.4%	-0.3%	-0.7%

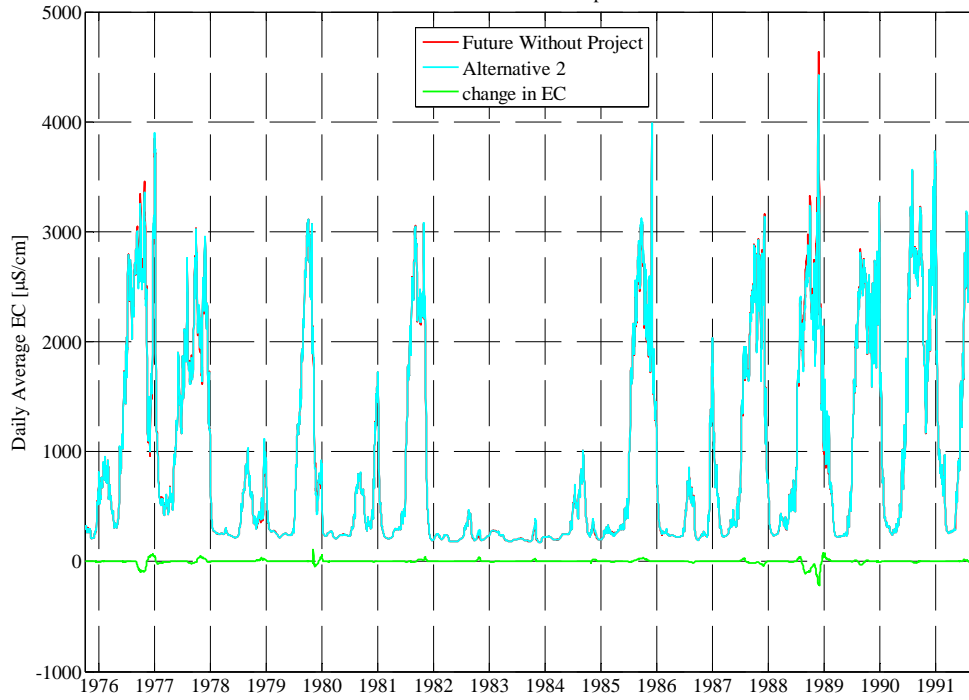


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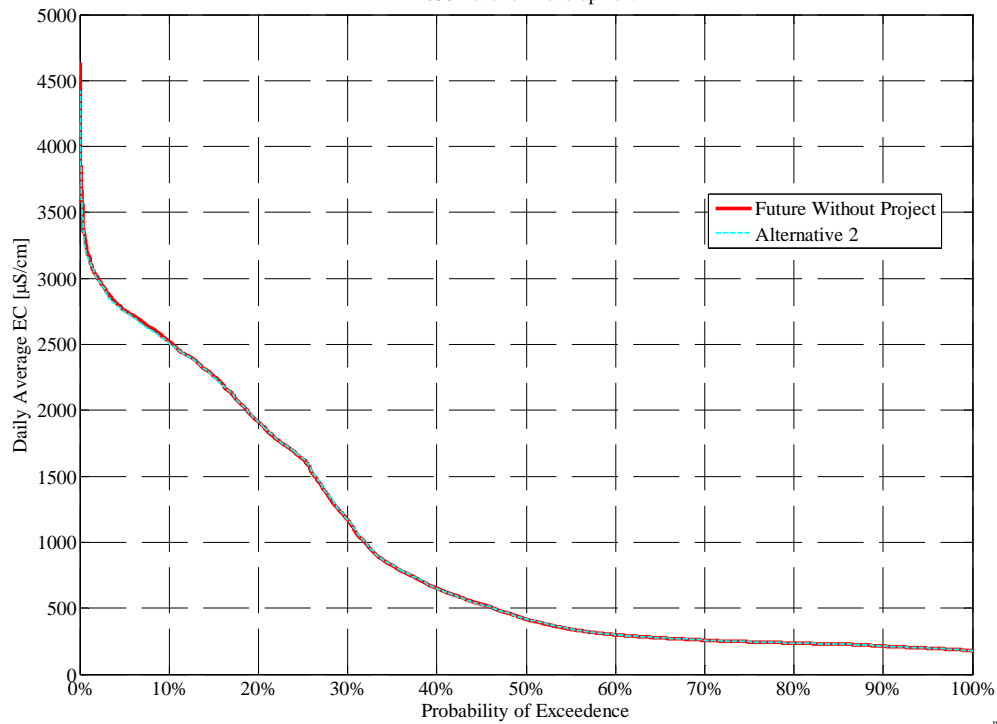
p_lve_wq_feir.m
07-Jan-2010 DS

Jersey Point Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jersey Point Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

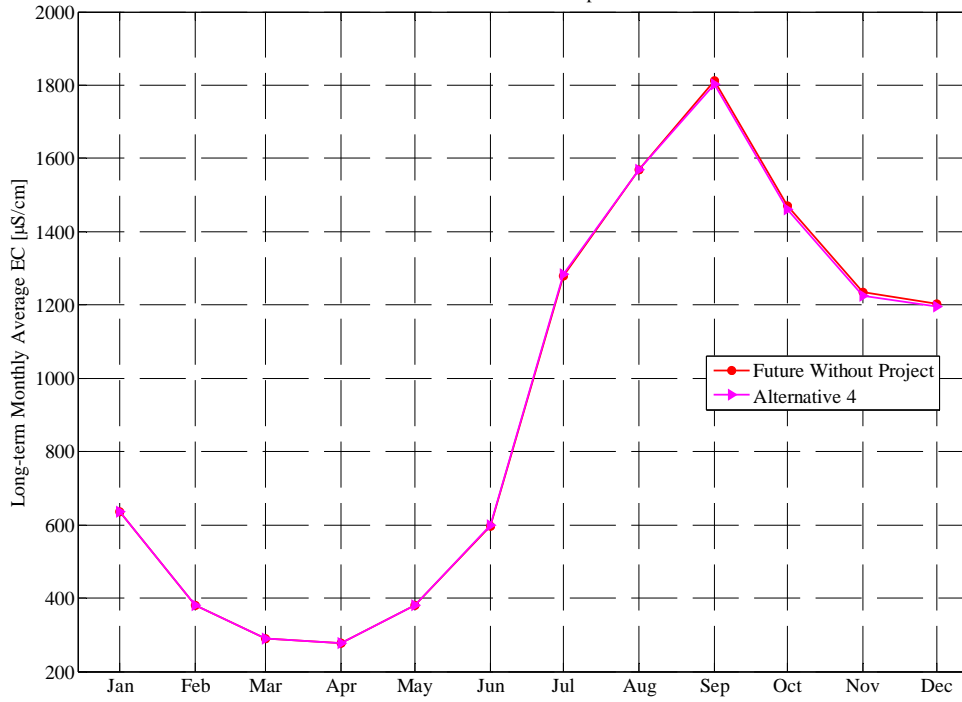
Jersey Point Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 4
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	290	227	426	714	812	572	341	735	1,505	2,473	2,459	2,840
1977	2,770	1,608	2,244	1,373	538	503	557	1,065	1,530	1,968	1,837	2,315
1978	2,194	2,278	1,693	342	255	251	267	233	221	390	775	718
1979	393	411	773	400	277	239	238	248	252	863	1,683	2,714
1980	2,681	1,061	696	266	260	234	223	243	237	311	659	673
1981	369	361	1,203	650	238	211	266	296	436	1,563	2,437	2,555
1982	2,373	1,075	210	234	216	233	197	181	194	254	389	227
1983	219	200	221	272	275	242	202	187	196	208	197	187
1984	260	192	210	225	213	197	230	248	312	549	652	660
1985	262	289	204	233	288	255	266	308	453	1,511	2,318	2,791
1986	2,362	2,406	1,632	428	260	251	238	227	248	542	612	260
1987	223	242	1,000	1,012	415	234	273	356	463	1,399	1,786	2,381
1988	2,463	2,363	1,482	337	241	333	346	456	574	1,639	2,064	2,620
1989	2,302	2,689	1,746	1,084	688	266	228	240	454	1,502	2,379	2,591
1990	2,229	2,188	2,481	1,070	348	271	294	549	1,180	2,691	2,825	2,819
1991	1,976	2,004	2,910	1,528	762	335	271	519	1,313	2,672	2,040	2,477
Avg	1,460	1,225	1,196	635	381	289	277	381	598	1,283	1,570	1,802
W/AN/BN	1,497	1,089	776	310	251	235	228	224	237	445	710	777
D/C	1,432	1,330	1,522	889	481	331	316	502	879	1,935	2,238	2,599

Percent (%) Change from Future Without Project for Jersey Point Salinity
(Alternative 4 - Future Without Project) / Future Without Project
2030 Level of Development

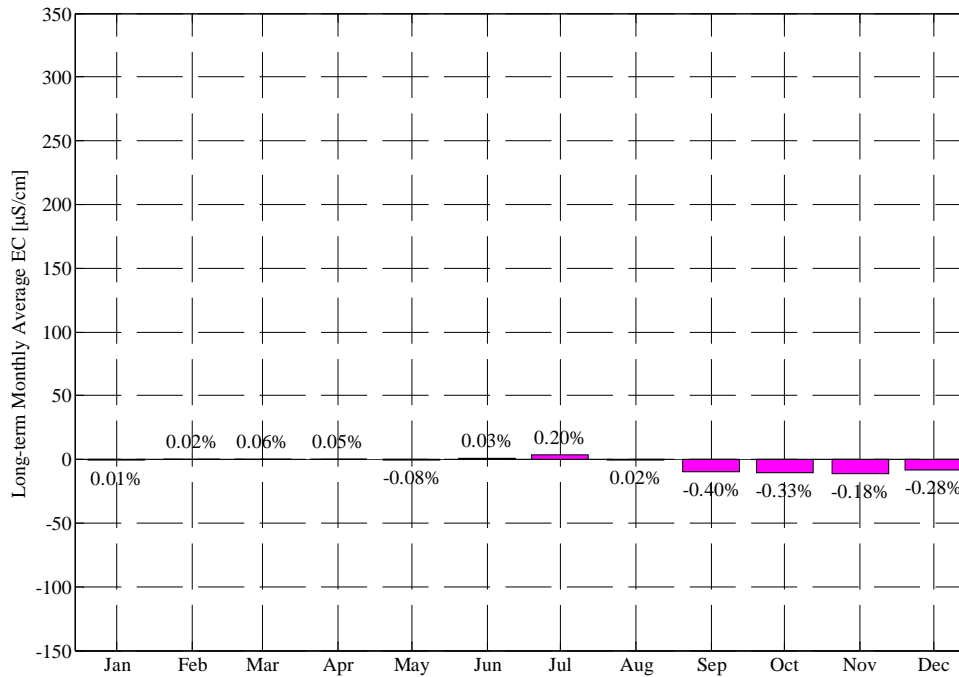
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-2.2%
1977	-3.1%	-0.3%	-1.6%	-0.9%	0.4%	0.5%	0.3%	-0.1%	1.1%	1.4%	0.2%	-0.2%
1978	0.6%	-1.3%	-2.2%	-0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.8%	4.6%	6.8%	3.4%	0.4%	0.1%	0.1%	-0.3%	-0.3%	1.1%	3.8%	2.5%
1980	1.3%	0.3%	-2.3%	-0.3%	0.0%	0.0%	0.0%	-0.4%	-0.2%	0.1%	0.1%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.1%	-0.1%
1982	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
1986	-0.1%	0.0%	0.0%	-0.2%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	-1.5%	-1.2%
1987	0.3%	-0.4%	-0.5%	-0.1%	-0.2%	0.0%	0.0%	0.0%	0.0%	-0.2%	1.2%	0.9%
1988	0.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.3%	-0.4%	-0.4%	-0.1%	-3.1%	-6.1%
1989	-5.1%	-5.7%	-4.2%	-0.5%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.4%
1990	-0.3%	-0.1%	-0.5%	-0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	-0.9%	-0.2%
1991	0.3%	0.4%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.8%	0.3%	0.4%
Avg	-0.3%	-0.2%	-0.3%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.2%	0.0%	-0.4%
W/AN/BN	0.3%	0.5%	0.3%	0.3%	0.1%	0.1%	0.0%	-0.1%	-0.1%	0.2%	0.4%	0.2%
D/C	-0.8%	-0.7%	-0.8%	-0.2%	0.0%	0.1%	0.1%	-0.1%	0.1%	0.2%	-0.3%	-0.9%

Jersey Point Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

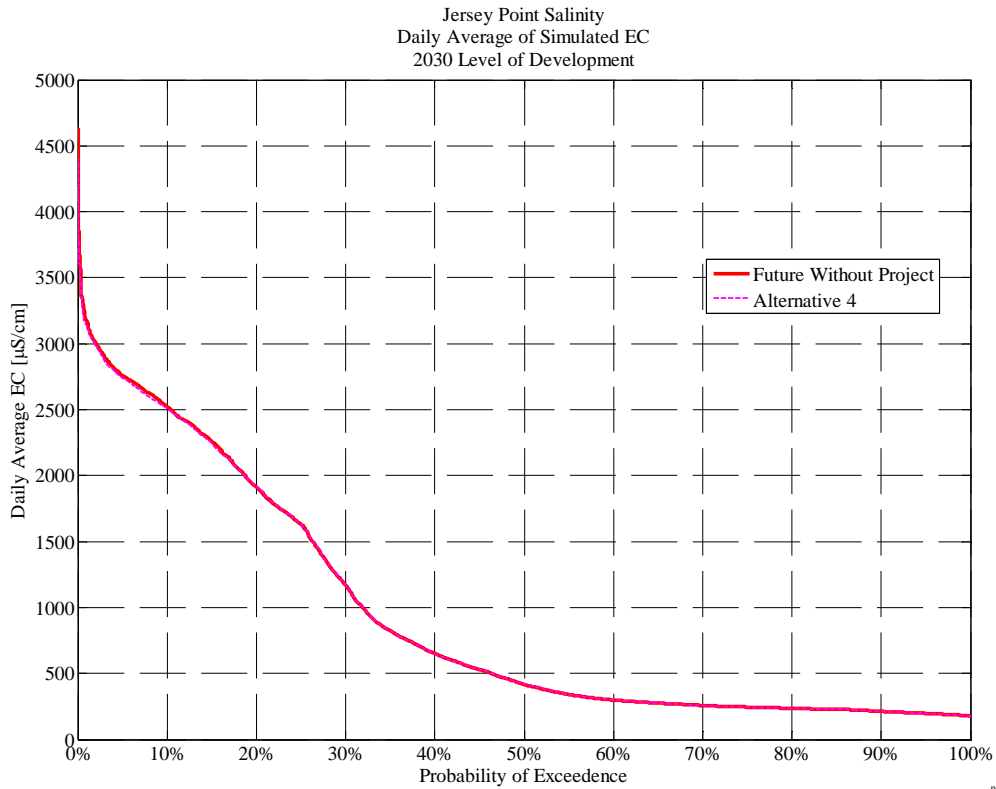
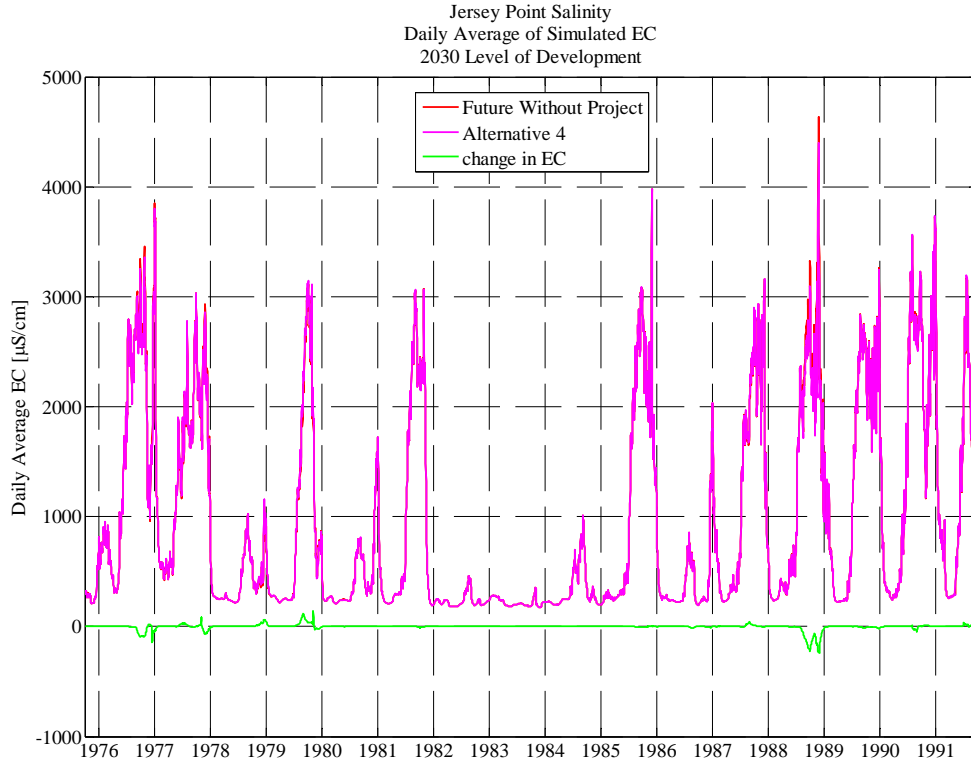


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Jersey Point Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



Clifton Court Forebay

Future No Project

**Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	302	313	343	469	560	582	461	430	498	629	676	736
1977	761	715	610	877	910	820	600	566	575	548	604	625
1978	741	701	815	717	582	544	270	243	343	295	288	300
1979	318	323	359	539	399	316	323	277	335	288	418	588
1980	684	546	414	385	319	209	301	311	339	337	280	283
1981	334	360	429	603	546	588	364	338	361	389	624	708
1982	602	531	427	561	333	303	176	167	308	333	267	236
1983	200	213	267	284	297	240	177	191	202	220	203	213
1984	238	169	227	295	236	287	301	298	364	276	270	335
1985	320	289	403	449	495	538	384	364	367	382	617	703
1986	684	607	697	668	508	257	232	245	348	292	312	334
1987	354	378	386	616	597	609	393	354	367	359	528	618
1988	690	695	736	631	868	821	486	415	422	385	599	747
1989	799	725	841	661	825	762	581	534	310	383	625	714
1990	673	637	723	775	646	724	573	567	439	631	814	763
1991	798	639	774	879	858	735	538	572	433	630	764	678
Avg	531	490	528	588	561	521	385	367	376	399	493	536
W/AN/BN	495	441	458	493	382	308	254	247	320	292	291	327
D/C	559	528	583	662	701	687	487	460	419	482	650	699

Alternative 1

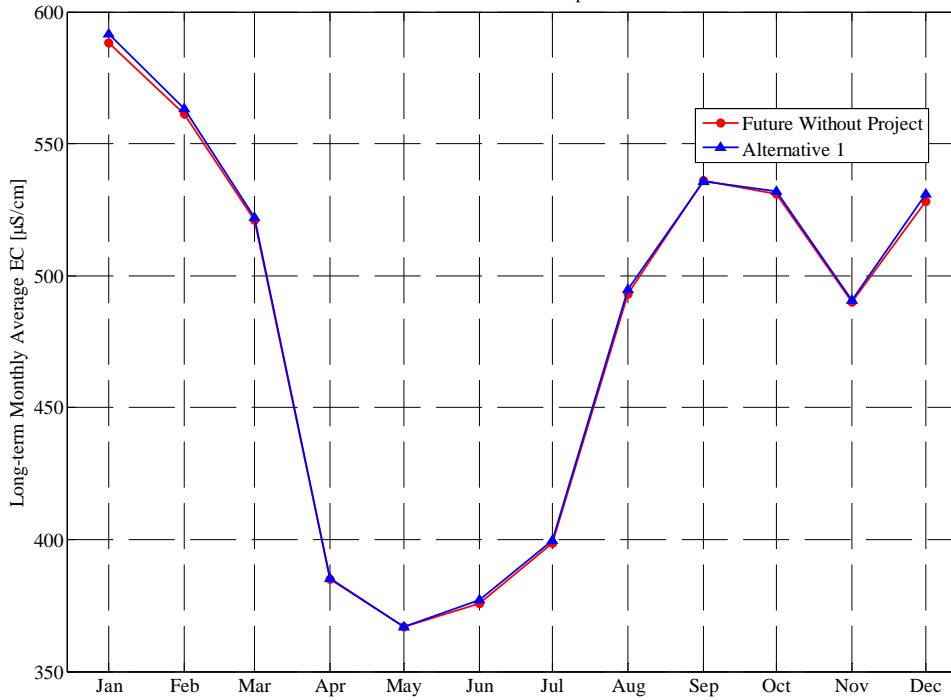
Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	303	314	351	475	563	582	462	429	498	632	681	733
1977	748	706	619	890	912	821	600	566	575	548	604	627
1978	742	707	819	719	582	544	270	243	346	296	288	300
1979	321	323	368	545	398	315	324	277	338	289	418	589
1980	688	555	416	385	319	209	302	311	339	339	281	283
1981	338	366	434	607	555	588	364	337	363	389	625	711
1982	609	534	434	565	333	303	176	166	310	335	268	235
1983	199	212	267	284	297	240	177	191	202	220	202	213
1984	239	168	227	294	234	288	302	298	366	276	270	335
1985	324	287	412	458	500	548	385	364	369	382	620	712
1986	694	612	702	672	508	257	233	245	349	292	314	335
1987	360	381	392	620	601	615	393	353	369	361	534	621
1988	696	699	735	634	869	821	486	414	422	387	603	728
1989	779	705	818	660	831	763	582	536	312	383	625	709
1990	674	638	725	776	650	725	573	569	440	632	815	762
1991	798	642	777	880	859	735	537	572	434	633	768	680
Avg	532	491	531	592	563	522	385	367	377	400	495	536
W/AN/BN	499	444	462	495	382	308	255	247	322	292	292	327
D/C	558	527	585	667	704	689	487	460	420	483	653	698

Percent (%) Change from Future Without Project for Clifton Court Forebay Entrance Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

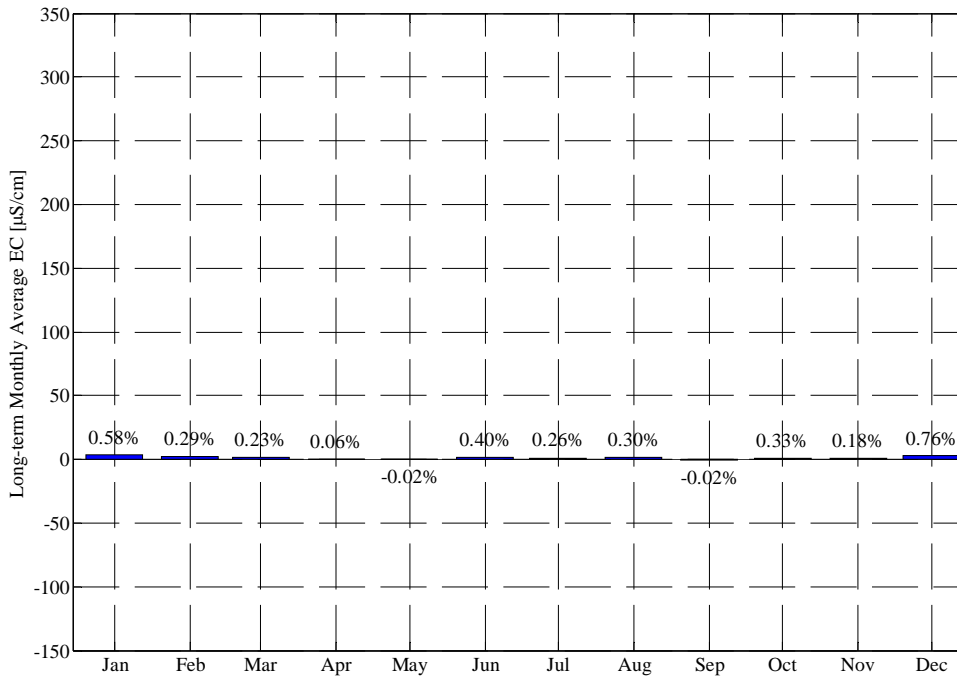
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.4%	0.4%	2.4%	1.2%	0.7%	0.0%	0.0%	-0.4%	0.2%	0.5%	0.8%	-0.3%
1977	-1.7%	-1.3%	1.4%	1.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%
1978	0.2%	0.8%	0.5%	0.2%	0.1%	0.0%	0.1%	0.0%	0.8%	0.3%	0.2%	0.1%
1979	0.8%	-0.2%	2.4%	1.1%	-0.2%	-0.1%	0.3%	0.1%	1.0%	0.3%	0.1%	0.2%
1980	0.5%	1.6%	0.5%	0.2%	-0.1%	0.0%	0.2%	0.1%	0.1%	0.7%	0.3%	0.1%
1981	1.3%	1.6%	1.3%	0.6%	1.6%	0.1%	0.0%	-0.2%	0.6%	0.0%	0.2%	0.4%
1982	1.0%	0.7%	1.8%	0.8%	-0.1%	0.0%	0.0%	-0.1%	0.6%	0.4%	0.2%	-0.1%
1983	-0.3%	-0.2%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.3%	0.2%
1984	0.5%	-0.4%	0.1%	-0.3%	-0.9%	0.4%	0.4%	0.0%	0.6%	0.1%	0.0%	-0.2%
1985	1.0%	-0.5%	2.1%	2.0%	1.0%	1.8%	0.2%	0.0%	0.4%	-0.1%	0.5%	1.2%
1986	1.4%	0.8%	0.6%	0.6%	0.0%	0.0%	0.3%	0.0%	0.5%	0.1%	0.3%	0.3%
1987	1.8%	0.9%	1.4%	0.6%	0.6%	1.0%	-0.2%	-0.3%	0.4%	0.5%	1.1%	0.5%
1988	0.8%	0.6%	-0.1%	0.5%	0.1%	0.0%	-0.1%	-0.2%	0.0%	0.6%	0.6%	-2.5%
1989	-2.5%	-2.7%	-2.8%	-0.1%	0.7%	0.2%	0.1%	0.4%	0.8%	0.1%	0.1%	-0.8%
1990	0.1%	0.3%	0.2%	0.1%	0.6%	0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	-0.2%
1991	0.0%	0.5%	0.4%	0.1%	0.1%	0.1%	-0.2%	0.1%	0.3%	0.5%	0.5%	0.3%
Avg	0.3%	0.2%	0.8%	0.6%	0.3%	0.2%	0.1%	0.0%	0.4%	0.3%	0.3%	0.0%
W/AN/BN	0.6%	0.5%	0.8%	0.4%	-0.2%	0.1%	0.2%	0.0%	0.5%	0.3%	0.1%	0.1%
D/C	0.1%	0.0%	0.7%	0.7%	0.6%	0.4%	0.0%	0.0%	0.3%	0.2%	0.4%	-0.1%

Clifton Court Forebay Entrance Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

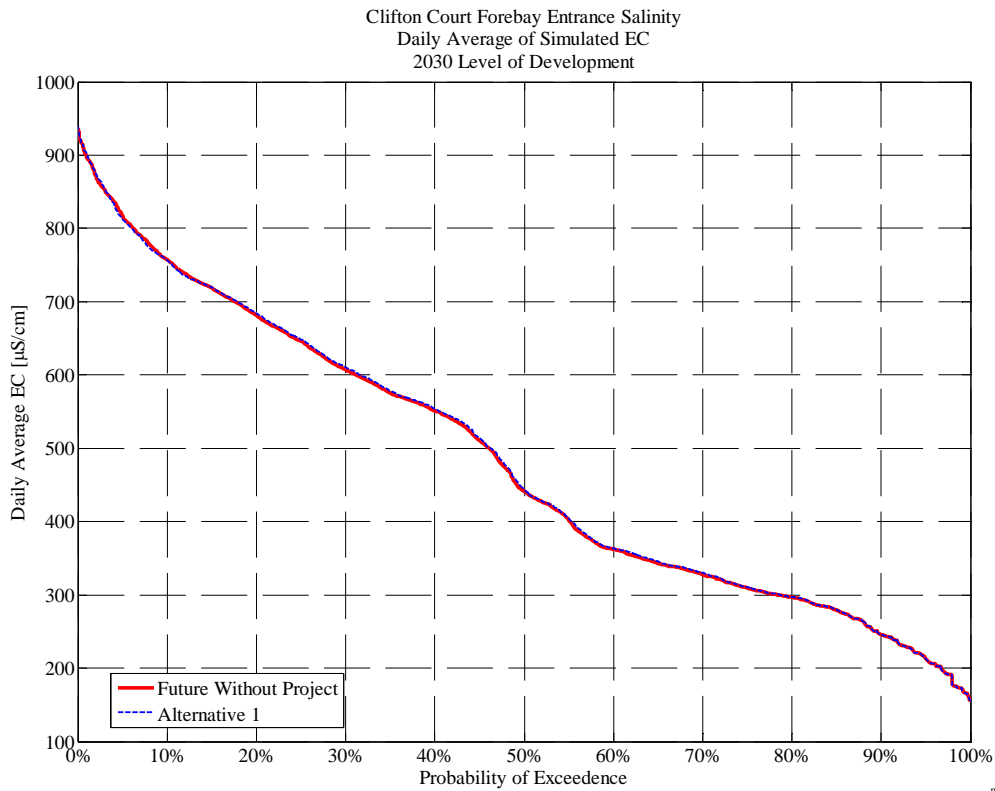
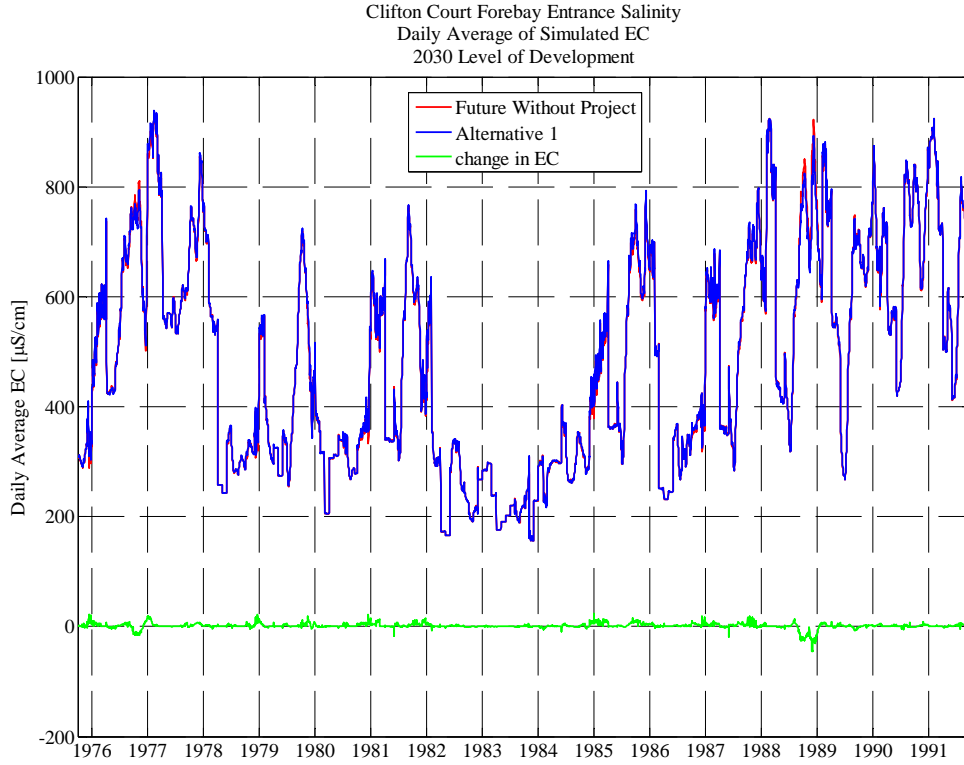


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Clifton Court Forebay Entrance Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



Alternative 2

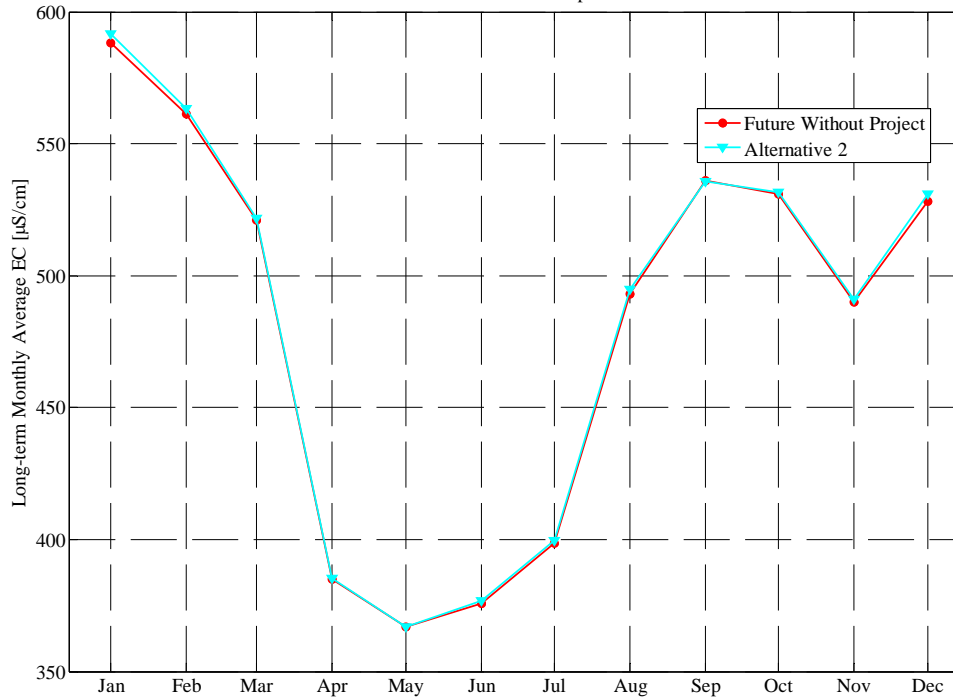
**Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	303	314	351	475	564	582	462	429	498	631	680	732
1977	747	706	620	891	913	821	600	566	575	548	604	627
1978	742	708	819	719	582	544	270	243	346	296	288	300
1979	321	323	368	545	398	315	324	277	338	289	418	589
1980	688	555	416	385	319	209	302	311	339	339	281	283
1981	338	366	434	607	555	588	364	337	363	389	625	711
1982	608	536	434	565	333	303	176	166	309	335	268	235
1983	199	212	267	284	297	240	177	191	202	220	202	213
1984	238	168	227	294	234	288	302	298	364	276	270	335
1985	324	287	408	458	500	548	385	364	368	382	621	712
1986	692	612	702	672	508	257	232	245	349	292	314	335
1987	360	381	392	620	601	609	393	353	368	361	534	621
1988	696	699	736	634	869	821	486	414	422	387	603	728
1989	780	707	819	661	831	763	582	536	312	383	625	709
1990	674	639	725	776	650	725	573	569	440	632	815	762
1991	798	642	777	880	859	735	537	572	434	633	767	679
Avg	532	491	531	592	563	522	385	367	377	400	495	536
W/AN/BN	498	445	462	495	381	308	255	247	321	292	292	327
D/C	558	527	585	667	705	688	487	460	420	483	653	698

**Percent (%) Change from Future Without Project for Clifton Court Forebay Entrance
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

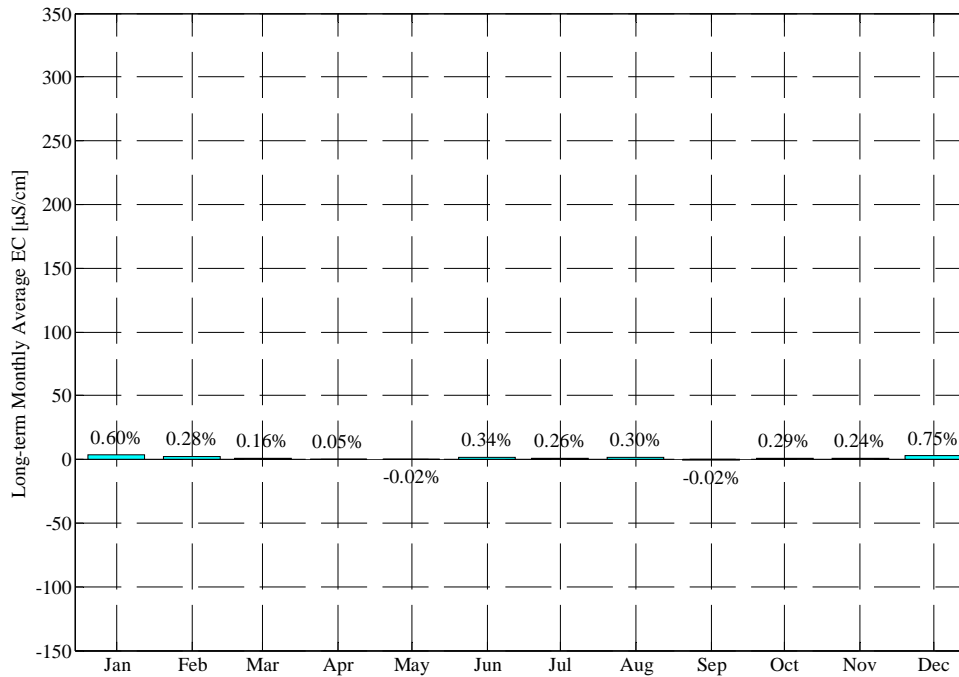
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.4%	0.4%	2.3%	1.3%	0.7%	0.0%	0.0%	-0.4%	0.2%	0.4%	0.7%	-0.5%
1977	-1.8%	-1.3%	1.6%	1.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%
1978	0.3%	1.0%	0.6%	0.3%	0.1%	0.0%	0.1%	0.0%	0.8%	0.3%	0.2%	0.1%
1979	0.8%	-0.2%	2.4%	1.1%	-0.2%	-0.1%	0.3%	0.1%	1.0%	0.3%	0.1%	0.2%
1980	0.5%	1.6%	0.5%	0.2%	-0.1%	-0.1%	0.2%	0.1%	0.1%	0.7%	0.3%	0.1%
1981	1.3%	1.6%	1.3%	0.6%	1.6%	0.1%	0.0%	-0.2%	0.6%	0.0%	0.2%	0.4%
1982	1.0%	1.0%	1.9%	0.8%	-0.1%	0.0%	0.0%	-0.2%	0.4%	0.4%	0.2%	0.0%
1983	-0.3%	-0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.2%	0.0%
1984	0.1%	-0.2%	0.0%	-0.2%	-1.0%	0.4%	0.4%	0.0%	0.1%	0.1%	0.0%	-0.2%
1985	1.0%	-0.5%	1.4%	2.0%	1.0%	1.8%	0.2%	0.0%	0.3%	-0.1%	0.6%	1.3%
1986	1.2%	0.8%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%	0.3%	0.5%
1987	1.6%	0.8%	1.5%	0.6%	0.6%	0.0%	-0.2%	-0.3%	0.3%	0.5%	1.1%	0.5%
1988	0.8%	0.6%	-0.1%	0.5%	0.1%	0.0%	-0.1%	-0.2%	0.0%	0.6%	0.7%	-2.5%
1989	-2.5%	-2.5%	-2.7%	0.0%	0.8%	0.2%	0.1%	0.4%	0.8%	0.1%	0.0%	-0.8%
1990	0.1%	0.3%	0.2%	0.1%	0.6%	0.1%	0.0%	0.2%	0.1%	0.1%	0.1%	-0.2%
1991	0.0%	0.4%	0.4%	0.1%	0.1%	0.1%	-0.2%	0.1%	0.3%	0.5%	0.5%	0.2%
Avg	0.3%	0.2%	0.7%	0.6%	0.3%	0.2%	0.0%	0.0%	0.3%	0.3%	0.3%	0.0%
W/AN/BN	0.5%	0.6%	0.8%	0.4%	-0.2%	0.0%	0.1%	0.0%	0.4%	0.3%	0.1%	0.1%
D/C	0.1%	0.0%	0.7%	0.8%	0.7%	0.3%	0.0%	-0.1%	0.3%	0.2%	0.4%	-0.1%

Clifton Court Forebay Entrance Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



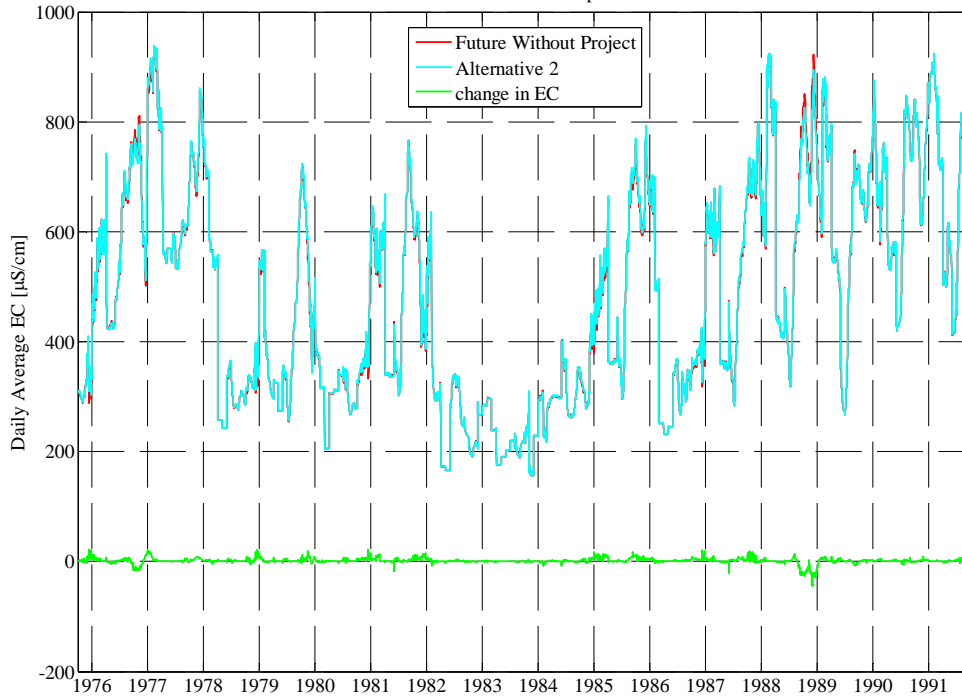
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 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



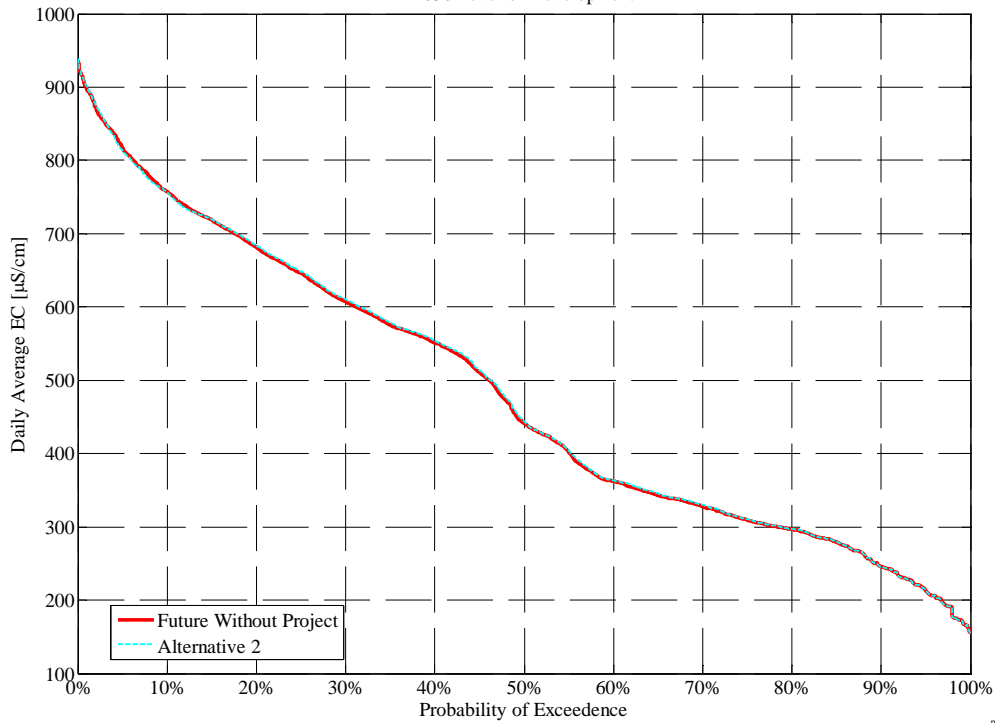
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 07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Clifton Court Forebay Entrance Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

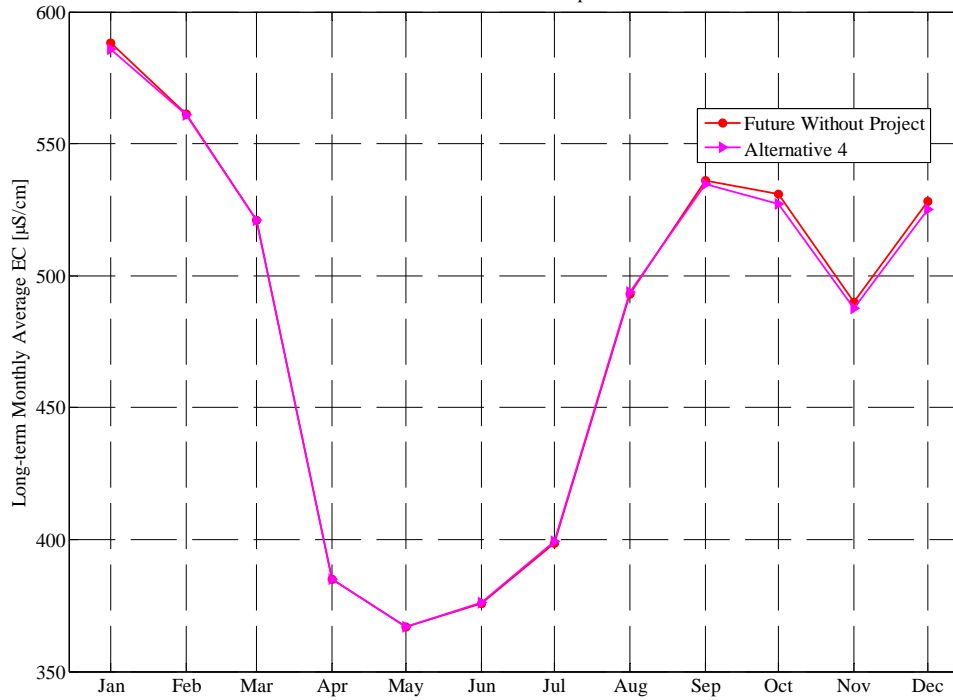
Alternative 4**Clifton Court Forebay Entrance Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 4****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	302	313	343	469	560	582	461	430	497	629	675	726
1977	740	697	603	851	907	820	601	567	577	554	608	627
1978	743	708	804	714	582	544	270	243	343	295	289	301
1979	316	322	365	547	399	316	324	277	335	290	428	608
1980	694	558	413	384	319	210	301	311	339	337	281	283
1981	334	360	429	603	546	588	364	338	361	389	624	708
1982	601	530	426	561	333	303	176	166	308	333	267	236
1983	200	213	267	284	297	240	177	191	202	220	203	213
1984	238	169	227	295	236	287	301	298	364	276	270	336
1985	320	289	403	449	495	538	384	364	367	382	617	702
1986	683	607	697	669	509	257	232	245	348	292	313	336
1987	358	371	384	615	597	609	393	354	367	358	530	622
1988	693	696	736	630	868	821	486	415	423	384	587	709
1989	746	691	809	649	823	761	581	534	310	383	625	712
1990	671	635	722	772	645	724	572	567	439	632	816	760
1991	797	642	775	880	859	735	538	572	434	636	770	680
Avg	527	488	525	586	561	521	385	367	376	399	494	535
W/AN/BN	496	444	457	493	382	308	254	247	320	292	293	330
D/C	551	522	578	658	700	687	487	460	420	483	650	694

**Percent (%) Change from Future Without Project for Clifton Court Forebay Entrance
(Alternative 4 - Future Without Project) / Future Without Project****2030 Level of Development**

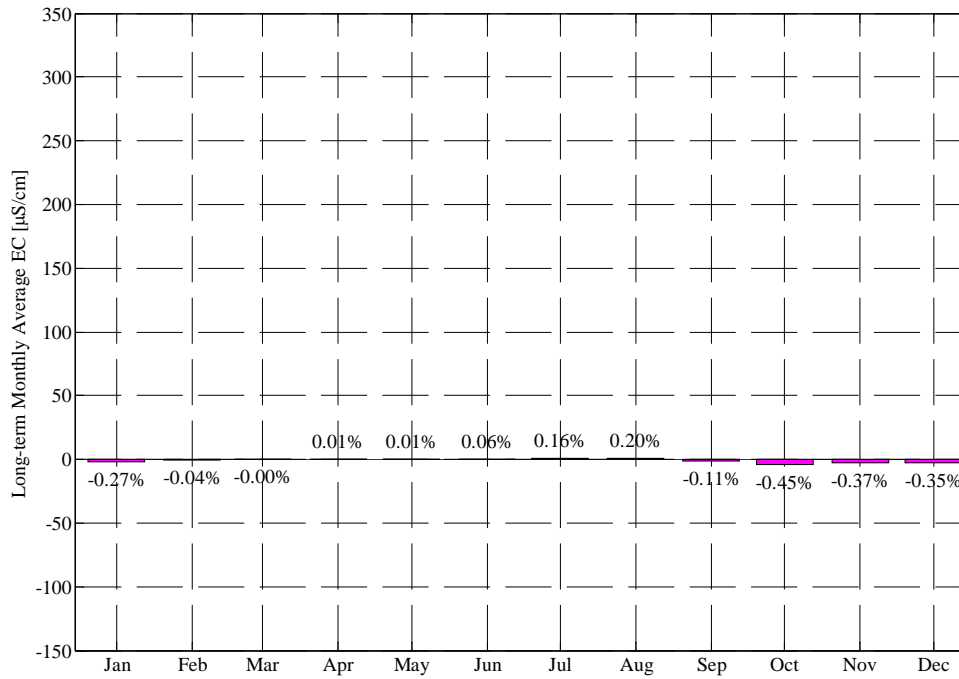
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-1.4%
1977	-2.8%	-2.6%	-1.2%	-3.0%	-0.4%	0.0%	0.2%	0.1%	0.3%	1.0%	0.7%	0.3%
1978	0.3%	1.1%	-1.3%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.2%
1979	-0.4%	-0.3%	1.5%	1.4%	0.1%	0.0%	0.1%	0.0%	0.0%	0.6%	2.3%	3.4%
1980	1.5%	2.1%	-0.2%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.1%
1981	0.2%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%	0.1%
1982	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
1986	-0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.5%
1987	1.1%	-1.8%	-0.5%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.3%	0.5%
1988	0.4%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.1%	-2.1%	-5.1%
1989	-6.7%	-4.7%	-3.8%	-1.7%	-0.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.3%
1990	-0.4%	-0.2%	-0.2%	-0.4%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	-0.4%
1991	-0.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.9%	0.8%	0.4%
Avg	-0.5%	-0.4%	-0.3%	-0.3%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	-0.1%
W/AN/BN	0.1%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.5%	0.6%
D/C	-0.9%	-1.0%	-0.6%	-0.6%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	-0.7%

Clifton Court Forebay Entrance Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

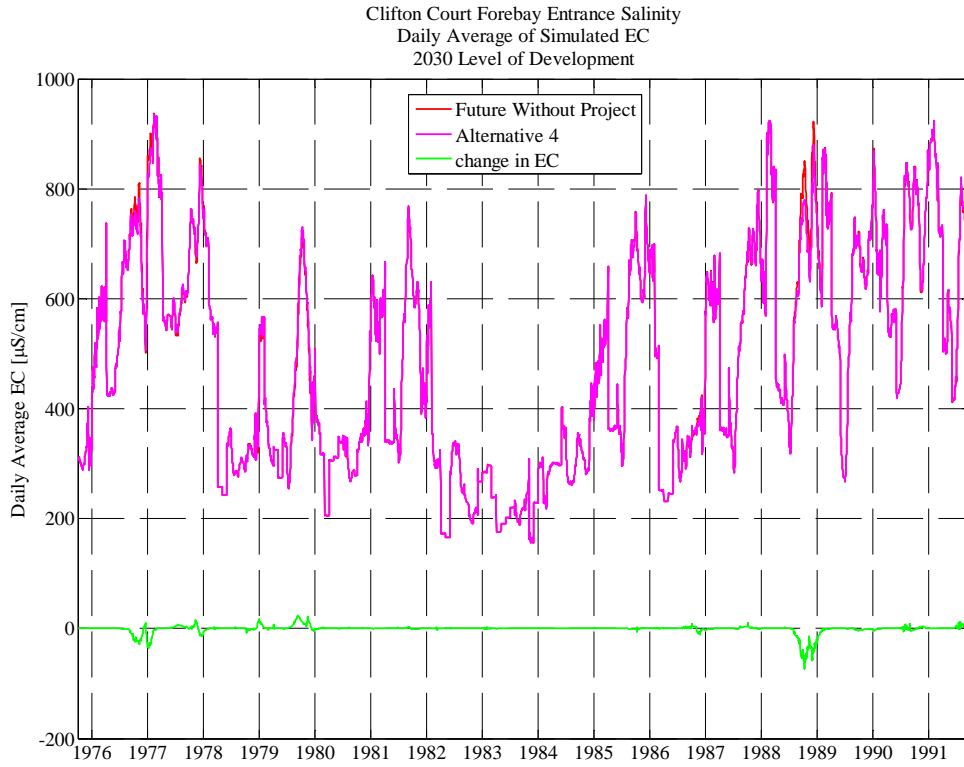


p_lve_wq_feir.m
 07-Jan-2010 DS

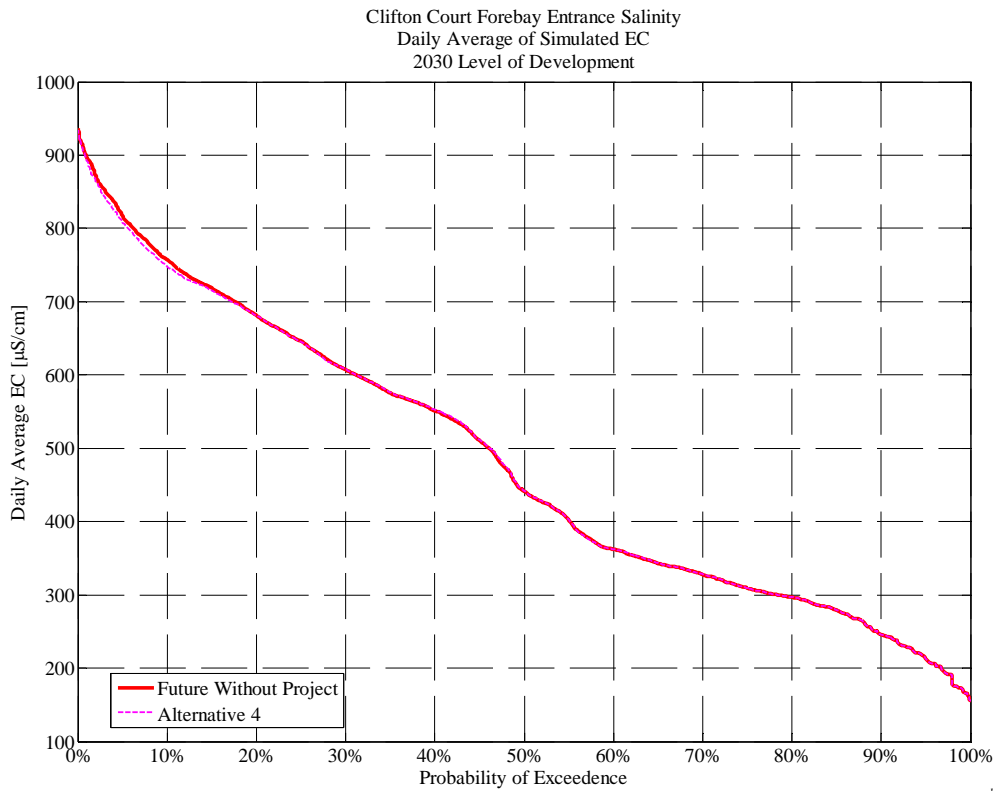
Clifton Court Forebay Entrance Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Jones Pumping Plant

Future Without Project

**Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	323	337	416	506	597	614	496	440	499	633	667	715
1977	716	700	635	870	930	895	622	571	577	549	605	628
1978	734	699	815	736	602	568	285	262	370	358	323	331
1979	351	353	440	571	389	309	334	299	349	316	431	583
1980	645	539	486	388	360	218	314	330	346	385	314	320
1981	358	383	489	622	583	610	403	358	380	408	622	694
1982	589	538	473	607	323	317	182	182	339	366	287	241
1983	191	211	273	346	325	272	193	198	213	230	192	222
1984	270	170	250	297	228	295	322	324	382	322	314	362
1985	337	325	442	493	538	567	424	378	386	405	614	687
1986	664	602	700	685	540	283	243	263	370	341	348	363
1987	369	387	438	631	632	632	431	371	377	381	536	616
1988	678	691	738	653	903	898	520	424	425	386	602	733
1989	777	716	834	678	879	816	602	548	322	390	627	701
1990	665	635	723	783	673	827	635	598	447	632	800	744
1991	786	641	770	862	881	758	550	585	441	632	762	677
Avg	528	495	558	608	587	555	410	383	389	421	503	538
W/AN/BN	492	444	491	519	395	323	268	265	338	331	316	346
D/C	557	535	610	677	735	735	520	475	428	491	648	688

Alternative 1

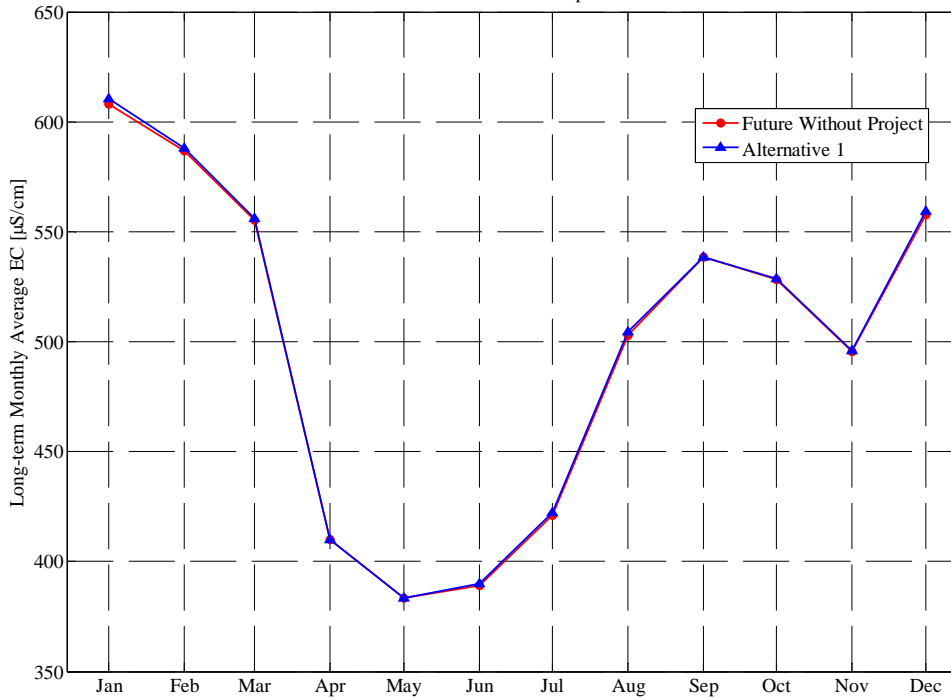
**Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	325	339	421	510	599	614	496	439	499	635	672	713
1977	705	693	643	881	931	896	622	571	577	550	606	631
1978	735	704	819	738	602	568	286	262	372	360	324	332
1979	352	354	445	574	389	309	335	301	351	318	431	584
1980	648	545	488	388	360	218	315	331	346	386	315	320
1981	361	387	492	625	588	611	403	358	381	408	623	696
1982	593	541	479	609	323	317	182	182	340	367	288	241
1983	190	210	273	346	326	272	193	198	213	230	192	222
1984	271	170	250	296	227	296	324	325	383	323	314	362
1985	339	324	447	499	542	575	424	378	387	405	617	695
1986	672	606	704	690	541	284	243	263	371	341	350	364
1987	375	390	440	634	635	638	431	371	378	383	541	618
1988	682	694	738	656	903	899	520	423	425	388	605	718
1989	758	698	813	678	883	817	602	550	324	391	627	696
1990	666	637	725	784	677	827	635	599	448	633	800	743
1991	786	643	773	862	883	758	550	585	443	636	766	679
Avg	529	496	559	611	588	556	410	383	390	422	504	538
W/AN/BN	495	447	494	520	396	324	268	266	339	332	316	346
D/C	555	534	610	681	738	737	520	475	429	492	651	688

**Percent (%) Change from Future Without Project for Jones Pumping Plant Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development**

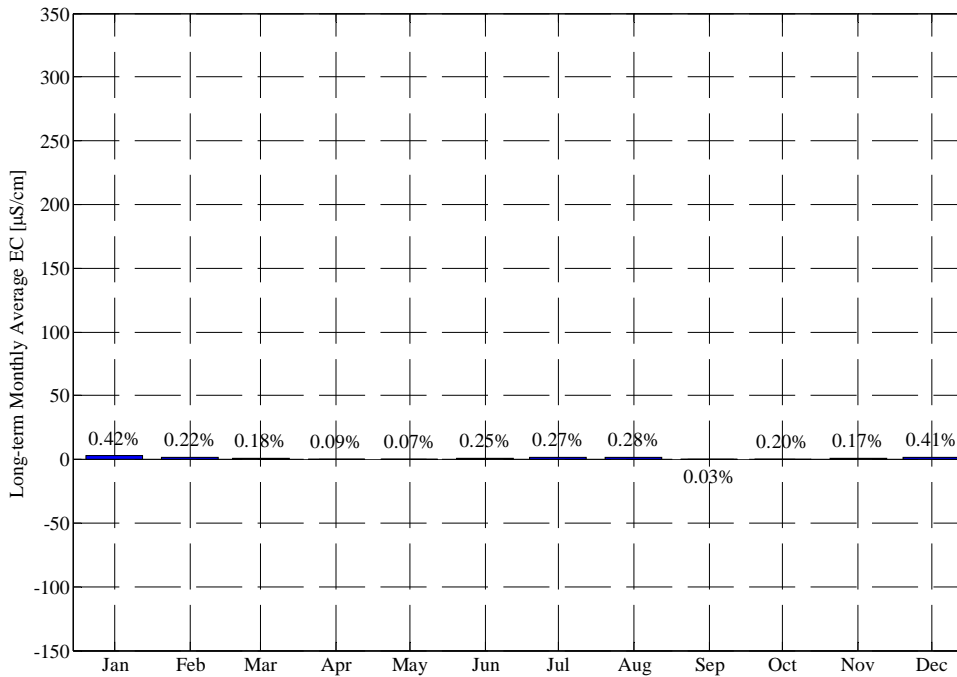
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.6%	0.6%	1.1%	0.7%	0.3%	0.0%	0.0%	-0.1%	0.1%	0.4%	0.7%	-0.3%
1977	-1.5%	-1.1%	1.1%	1.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.6%
1978	0.2%	0.8%	0.5%	0.3%	0.1%	0.0%	0.4%	0.0%	0.4%	0.4%	0.2%	0.2%
1979	0.2%	0.2%	1.2%	0.5%	0.0%	0.0%	0.3%	0.6%	0.6%	0.4%	0.0%	0.3%
1980	0.4%	1.2%	0.4%	0.2%	-0.1%	0.0%	0.2%	0.3%	0.0%	0.4%	0.3%	0.1%
1981	0.8%	1.1%	0.5%	0.5%	0.9%	0.1%	0.0%	0.0%	0.4%	0.0%	0.2%	0.3%
1982	0.7%	0.6%	1.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.1%	0.0%
1983	-0.2%	-0.1%	0.1%	0.0%	0.2%	-0.1%	-0.2%	0.0%	0.0%	0.0%	-0.1%	0.2%
1984	0.5%	-0.3%	-0.1%	-0.4%	-0.5%	0.2%	0.6%	0.1%	0.4%	0.3%	0.1%	0.0%
1985	0.6%	-0.2%	1.1%	1.2%	0.7%	1.3%	0.1%	0.0%	0.2%	0.0%	0.5%	1.1%
1986	1.2%	0.6%	0.5%	0.8%	0.1%	0.3%	0.1%	0.0%	0.2%	0.1%	0.3%	0.2%
1987	1.6%	0.7%	0.6%	0.5%	0.4%	0.9%	0.1%	-0.1%	0.4%	0.5%	0.9%	0.4%
1988	0.5%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.6%	0.6%	-2.0%
1989	-2.4%	-2.6%	-2.5%	-0.1%	0.5%	0.1%	0.0%	0.3%	0.7%	0.1%	0.0%	-0.6%
1990	0.0%	0.3%	0.3%	0.2%	0.6%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	-0.2%
1991	0.0%	0.4%	0.4%	0.0%	0.2%	0.0%	0.0%	0.1%	0.3%	0.6%	0.5%	0.3%
Avg	0.2%	0.2%	0.4%	0.4%	0.2%	0.2%	0.1%	0.1%	0.2%	0.3%	0.3%	0.0%
W/AN/BN	0.4%	0.4%	0.6%	0.3%	0.0%	0.1%	0.2%	0.1%	0.3%	0.3%	0.1%	0.1%
D/C	0.0%	0.0%	0.3%	0.5%	0.4%	0.3%	0.0%	0.0%	0.2%	0.3%	0.4%	-0.1%

Jones Pumping Plant Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

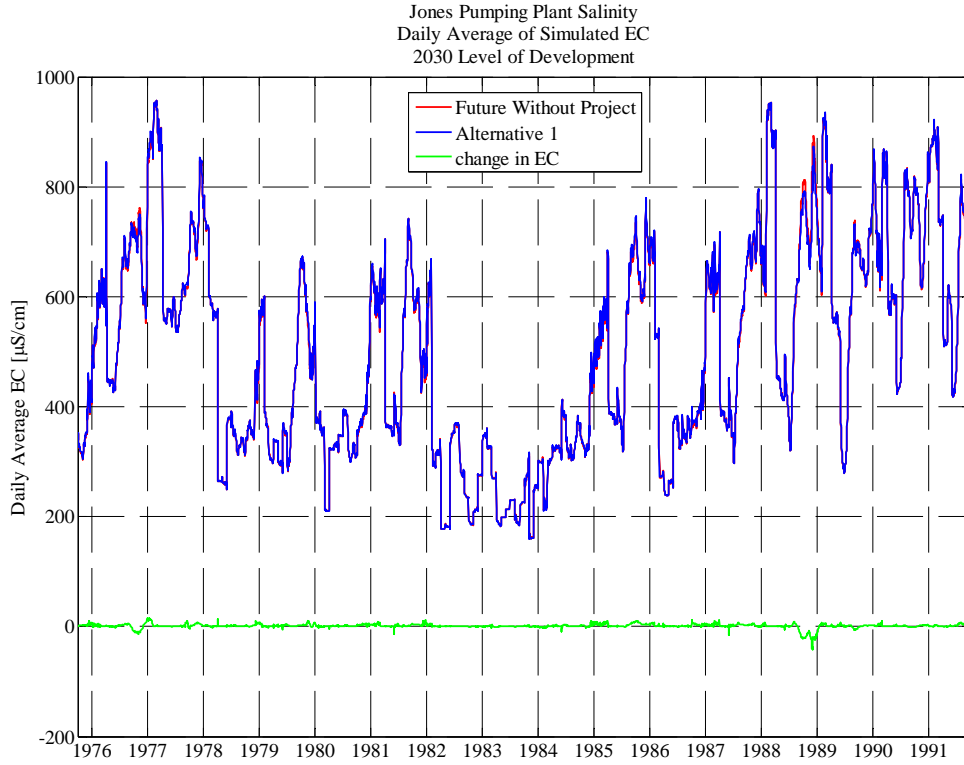


p_lve_wq_feir.m
 07-Jan-2010 DS

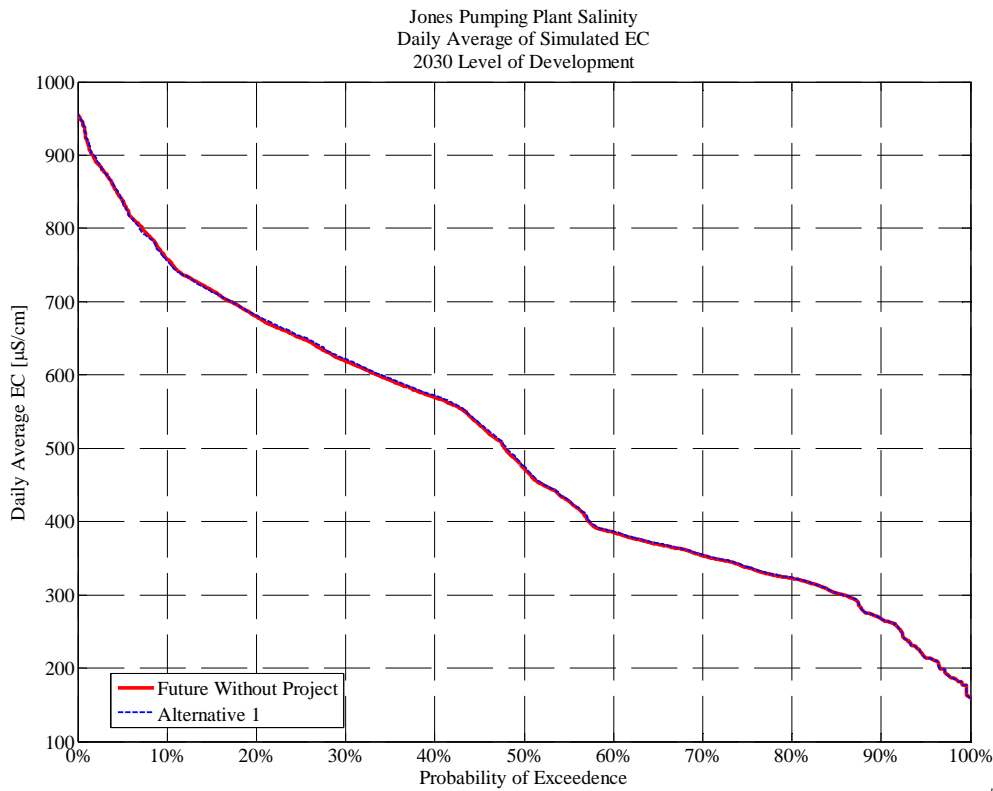
Jones Pumping Plant Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

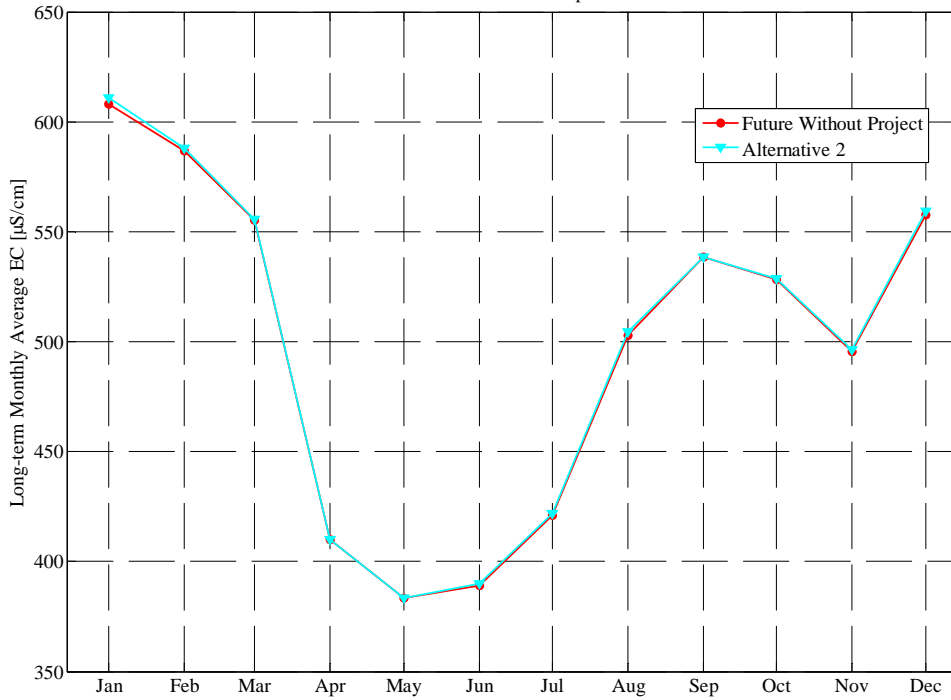
Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)
Alternative 2
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	325	339	421	510	599	614	496	439	499	635	671	712
1977	705	692	644	882	931	896	622	571	577	550	606	631
1978	736	705	819	738	602	568	286	262	372	360	324	332
1979	352	354	445	574	389	309	335	301	351	318	431	584
1980	648	545	488	388	360	218	315	331	346	386	315	320
1981	361	387	492	625	588	611	403	358	381	408	623	696
1982	593	543	480	609	323	317	182	182	340	367	288	241
1983	190	210	273	346	326	272	193	198	213	230	192	222
1984	270	170	250	296	227	296	324	325	382	323	314	362
1985	339	324	445	499	542	575	424	378	387	405	617	695
1986	672	606	704	690	541	284	243	263	370	341	350	365
1987	374	390	440	634	635	632	431	371	378	383	541	618
1988	682	694	738	656	903	899	520	423	425	388	605	718
1989	758	699	814	678	884	817	602	550	325	391	627	696
1990	666	637	725	784	677	827	635	599	448	633	800	743
1991	786	643	773	862	883	758	550	585	443	636	766	679
Avg	529	496	559	611	588	556	410	383	390	422	504	538
W/AN/BN	494	448	494	520	396	323	268	266	339	332	316	346
D/C	555	534	610	681	738	737	520	475	429	492	651	688

Percent (%) Change from Future Without Project for Jones Pumping Plant Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development

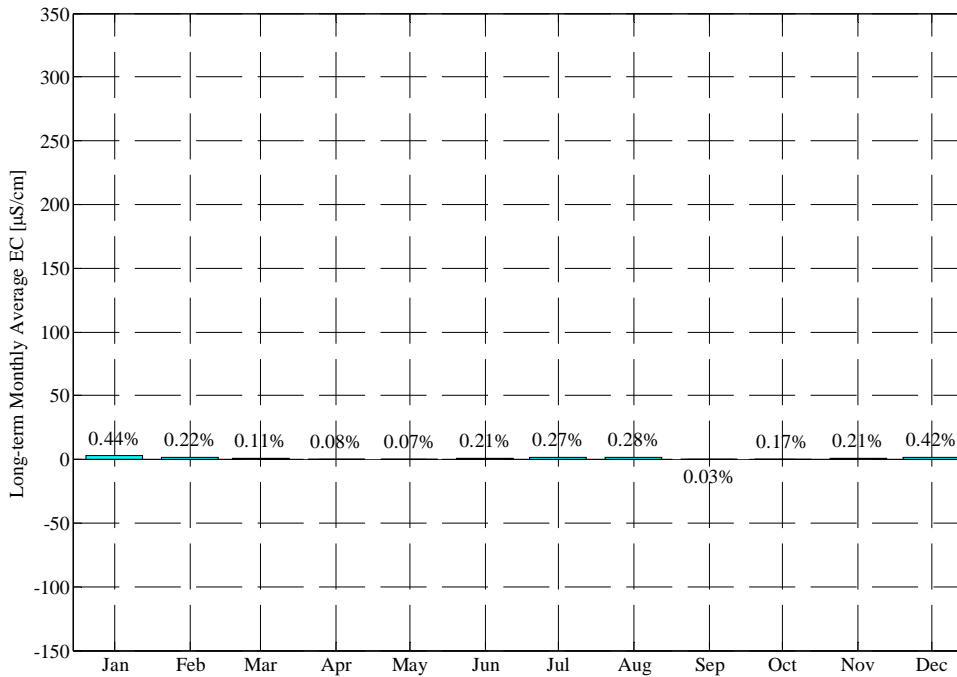
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.6%	0.6%	1.1%	0.8%	0.4%	0.0%	0.0%	-0.1%	0.1%	0.4%	0.6%	-0.4%
1977	-1.5%	-1.1%	1.3%	1.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.5%
1978	0.2%	0.9%	0.6%	0.3%	0.1%	0.0%	0.4%	0.0%	0.4%	0.4%	0.2%	0.2%
1979	0.3%	0.3%	1.2%	0.5%	0.0%	0.0%	0.3%	0.6%	0.6%	0.4%	0.0%	0.3%
1980	0.4%	1.2%	0.4%	0.2%	-0.1%	0.0%	0.2%	0.3%	0.1%	0.4%	0.2%	0.1%
1981	0.8%	1.1%	0.5%	0.5%	0.9%	0.1%	0.0%	0.0%	0.4%	0.0%	0.2%	0.3%
1982	0.7%	0.9%	1.4%	0.5%	0.0%	0.0%	0.0%	-0.1%	0.2%	0.2%	0.1%	0.0%
1983	-0.2%	-0.1%	0.1%	0.0%	0.3%	-0.1%	-0.2%	0.0%	0.0%	0.0%	-0.1%	0.1%
1984	0.2%	-0.3%	0.0%	-0.4%	-0.7%	0.2%	0.6%	0.1%	0.0%	0.3%	0.1%	0.0%
1985	0.6%	-0.3%	0.6%	1.2%	0.7%	1.3%	0.1%	0.0%	0.2%	0.0%	0.5%	1.2%
1986	1.2%	0.7%	0.6%	0.8%	0.1%	0.1%	0.0%	0.0%	0.2%	0.2%	0.3%	0.3%
1987	1.5%	0.7%	0.6%	0.5%	0.4%	0.0%	0.0%	-0.1%	0.3%	0.5%	0.9%	0.5%
1988	0.5%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.6%	0.6%	-2.0%
1989	-2.3%	-2.3%	-2.4%	0.0%	0.5%	0.1%	0.0%	0.2%	0.7%	0.1%	0.0%	-0.6%
1990	0.1%	0.3%	0.3%	0.1%	0.6%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	-0.1%
1991	0.0%	0.4%	0.4%	0.0%	0.2%	0.0%	0.0%	0.1%	0.3%	0.6%	0.5%	0.2%
Avg	0.2%	0.2%	0.4%	0.4%	0.2%	0.1%	0.1%	0.1%	0.2%	0.3%	0.3%	0.0%
W/AN/BN	0.4%	0.5%	0.6%	0.3%	0.0%	0.0%	0.2%	0.1%	0.2%	0.3%	0.1%	0.1%
D/C	0.0%	0.0%	0.3%	0.6%	0.4%	0.2%	0.0%	0.0%	0.2%	0.3%	0.4%	-0.1%

Jones Pumping Plant Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



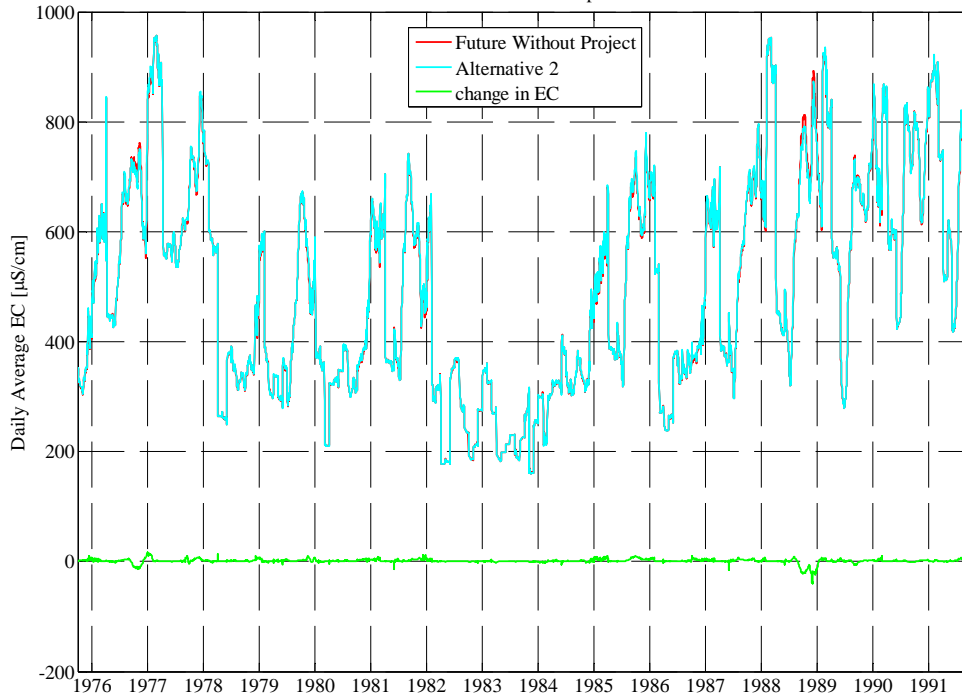
p_lve_wq_feir.m
 07-Jan-2010 DS

Jones Pumping Plant Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



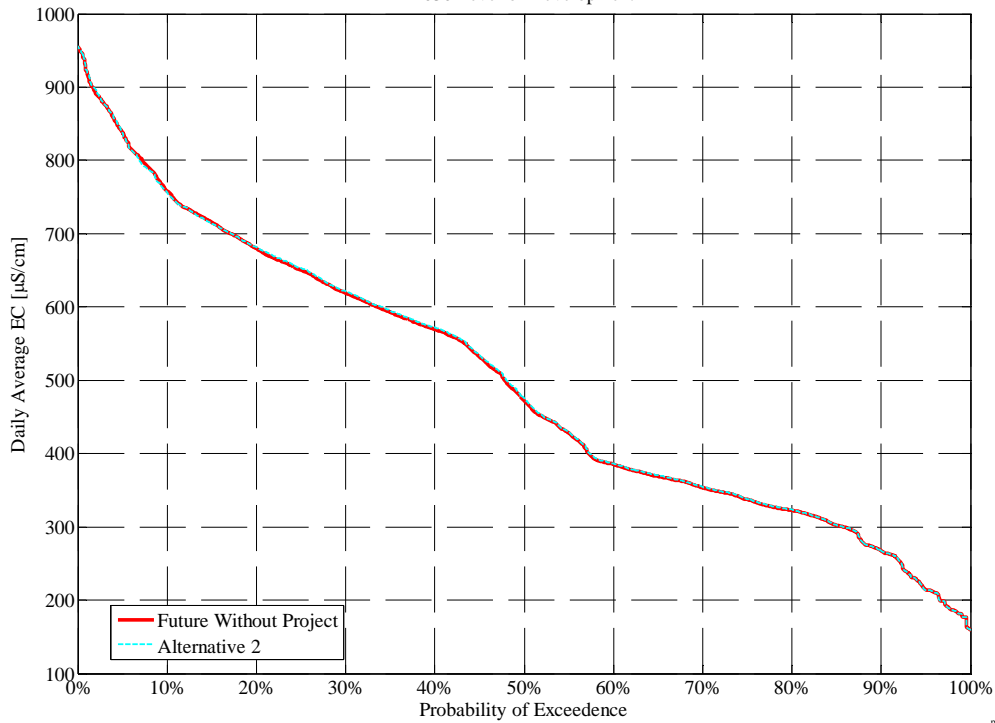
p_lve_wq_feir.m
 07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Jones Pumping Plant Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

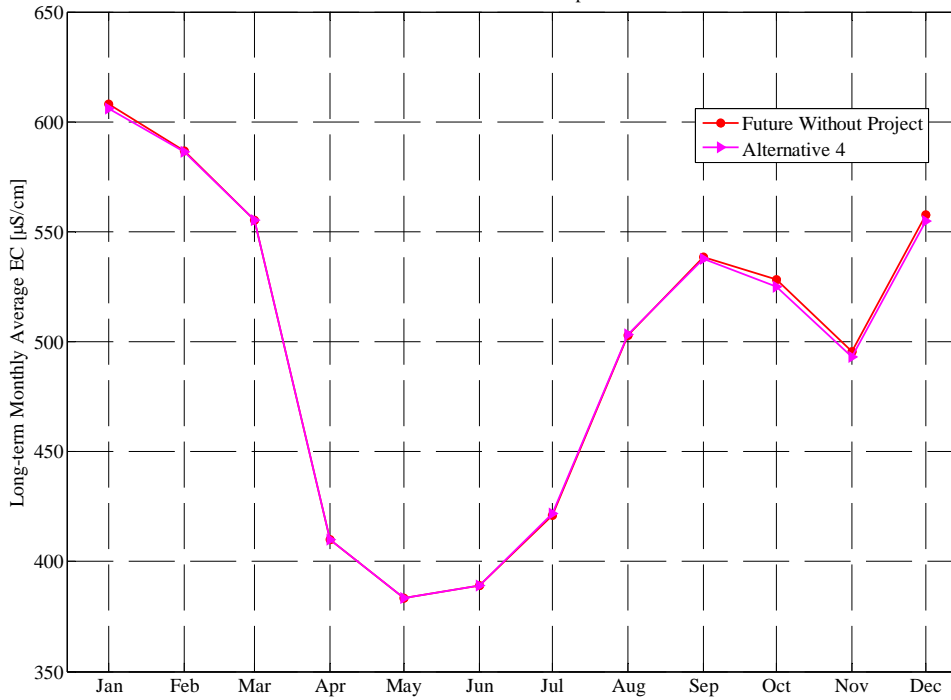
Jones Pumping Plant Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 4
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	323	337	416	506	597	614	496	440	499	633	666	706
1977	697	683	628	849	929	895	623	572	579	555	610	630
1978	737	705	805	734	602	568	285	262	370	359	324	332
1979	350	352	445	577	390	309	334	299	349	318	439	600
1980	653	547	485	387	360	218	314	330	346	385	314	320
1981	358	383	489	622	583	611	403	358	380	408	623	695
1982	588	538	473	607	323	317	182	182	339	366	287	241
1983	191	211	273	346	325	272	193	198	213	230	192	222
1984	270	170	250	297	228	295	322	324	382	322	314	362
1985	337	325	442	493	538	567	424	378	386	405	614	686
1986	663	602	700	685	540	283	243	263	370	341	349	365
1987	373	381	436	629	631	632	431	371	377	381	538	618
1988	681	691	737	653	903	898	520	424	426	385	589	702
1989	727	685	805	668	878	816	602	548	322	390	627	699
1990	663	634	722	780	672	827	635	598	447	633	799	742
1991	785	643	772	862	881	758	550	585	442	639	768	680
Avg	525	493	555	606	586	555	410	383	389	422	503	537
W/AN/BN	493	446	490	519	396	323	268	265	338	331	317	349
D/C	549	529	605	674	735	735	520	475	429	492	648	684

Percent (%) Change from Future Without Project for Jones Pumping Plant Salinity
(Alternative 4 - Future Without Project) / Future Without Project
2030 Level of Development

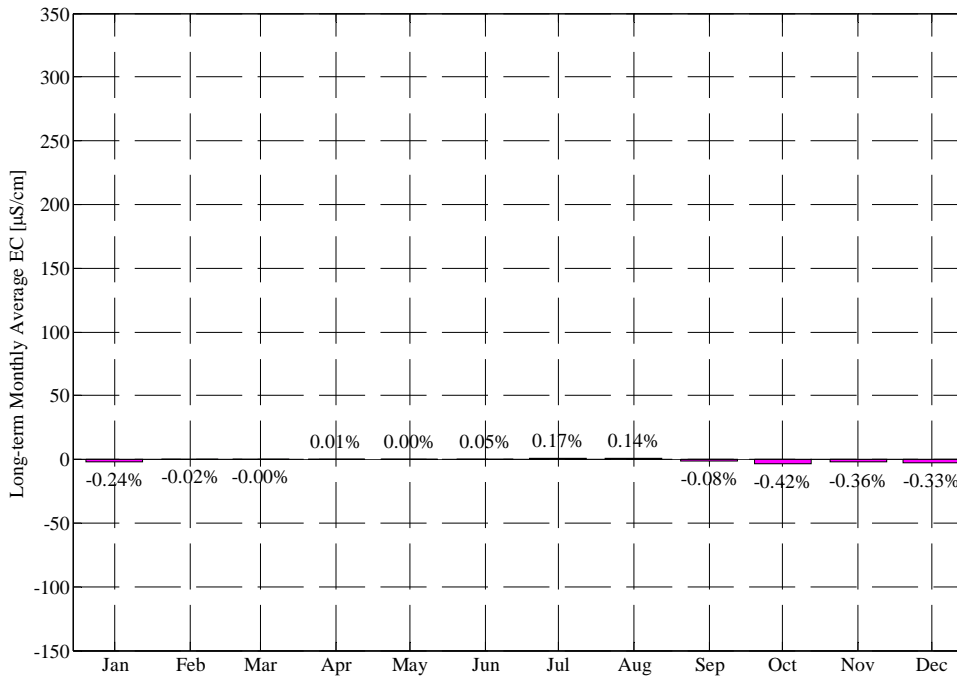
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-1.2%
1977	-2.6%	-2.5%	-1.2%	-2.4%	-0.2%	0.0%	0.1%	0.0%	0.3%	1.0%	0.8%	0.4%
1978	0.4%	1.0%	-1.2%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%
1979	-0.3%	-0.2%	1.1%	1.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.5%	1.8%	2.9%
1980	1.3%	1.6%	-0.1%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
1981	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%
1982	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1986	-0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%	0.5%
1987	1.1%	-1.5%	-0.4%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.3%	0.4%
1988	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.1%	-2.0%	-4.1%
1989	-6.4%	-4.3%	-3.4%	-1.5%	-0.1%	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.3%
1990	-0.4%	-0.2%	-0.1%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	-0.1%	-0.4%
1991	-0.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	1.0%	0.8%	0.4%
Avg	-0.4%	-0.4%	-0.3%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	-0.1%
W/AN/BN	0.2%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	0.5%
D/C	-0.9%	-0.9%	-0.6%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	-0.5%

Jones Pumping Plant Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

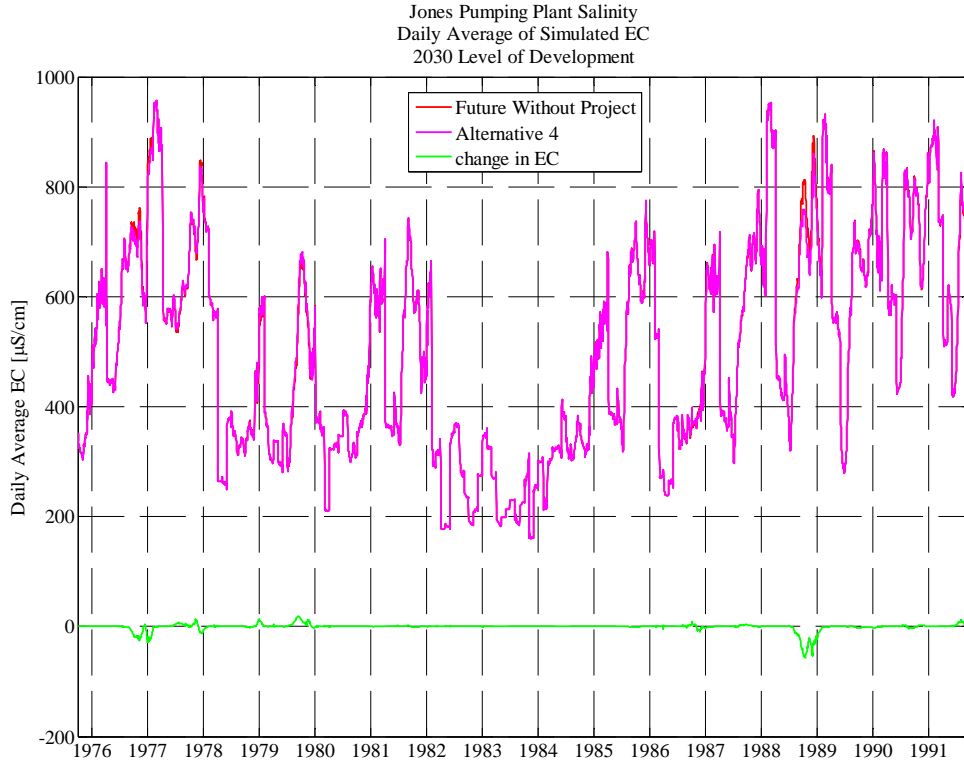


p_lve_wq_feir.m
 07-Jan-2010 DS

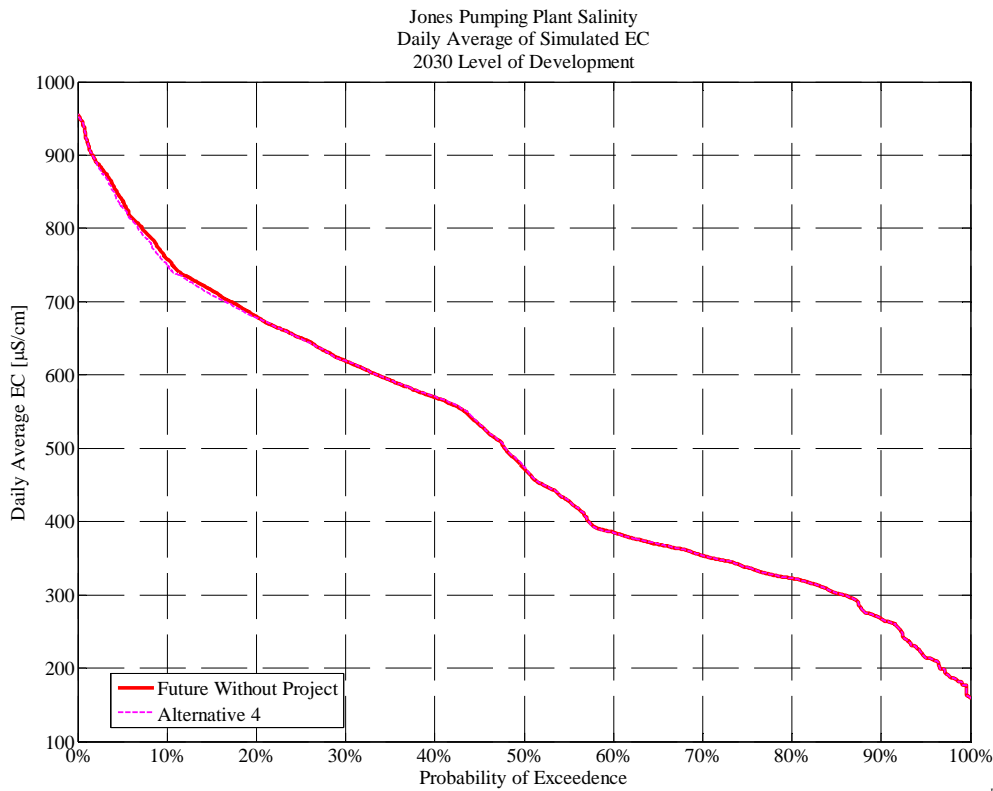
Jones Pumping Plant Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

City of Stockton Intake

Future Without Project

**City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	303	331	232	300	357	354	441	398	366	433	436	458
1977	453	410	425	632	549	496	465	439	395	377	377	384
1978	436	446	583	493	522	476	315	256	331	261	229	244
1979	306	317	250	441	396	302	317	291	273	234	295	382
1980	410	380	303	331	311	221	286	310	321	314	232	227
1981	322	353	320	423	347	466	438	347	270	295	426	448
1982	387	367	257	380	290	295	192	173	294	320	240	224
1983	199	209	258	287	289	239	190	194	207	224	194	207
1984	242	182	229	284	231	272	303	303	287	222	216	278
1985	310	277	266	303	355	432	440	360	270	293	419	450
1986	428	409	483	433	378	270	245	250	329	239	235	270
1987	334	354	276	434	377	482	482	369	271	279	353	401
1988	441	456	526	408	456	494	517	413	303	296	403	468
1989	474	484	553	438	464	483	471	347	233	299	436	455
1990	413	418	492	529	379	399	366	362	321	453	531	483
1991	471	428	532	641	539	567	526	377	307	452	462	422
Avg	371	364	374	422	390	390	375	324	299	312	343	363
W/AN/BN	344	330	338	378	345	296	264	254	292	259	234	262
D/C	391	390	403	457	425	464	461	379	304	353	427	441

Alternative 1

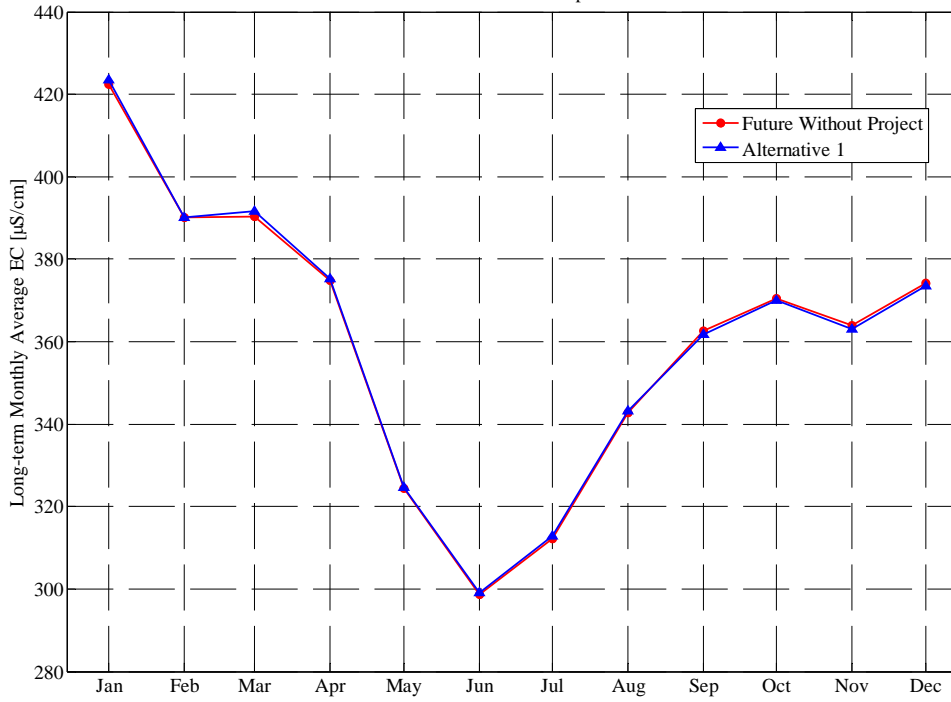
**City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	303	332	232	299	357	354	441	398	366	434	437	455
1977	446	407	432	640	550	496	465	439	395	377	377	384
1978	438	450	585	498	518	476	315	256	331	263	230	244
1979	305	316	252	442	393	302	318	291	275	235	296	383
1980	411	384	306	331	310	221	287	310	321	315	232	227
1981	322	353	320	423	347	466	438	347	270	295	425	447
1982	387	368	256	382	290	295	192	173	293	320	239	223
1983	199	210	258	287	289	239	190	194	207	224	194	207
1984	242	182	229	284	231	273	304	303	287	222	216	279
1985	310	273	266	304	356	439	442	360	271	293	420	453
1986	430	410	484	435	378	270	245	250	329	239	234	269
1987	335	353	275	434	376	486	484	369	272	281	355	401
1988	441	455	523	408	457	498	520	414	303	298	403	457
1989	466	469	532	439	466	483	472	348	234	299	435	452
1990	413	419	492	529	379	399	366	363	322	454	531	482
1991	473	430	533	640	541	568	528	380	310	455	464	423
Avg	370	363	374	423	390	392	375	325	299	313	343	362
W/AN/BN	344	331	339	380	344	297	264	254	292	260	235	262
D/C	390	388	401	457	426	466	462	380	305	354	428	439

**Percent (%) Change from Future Without Project for City of Stockton Intake Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development**

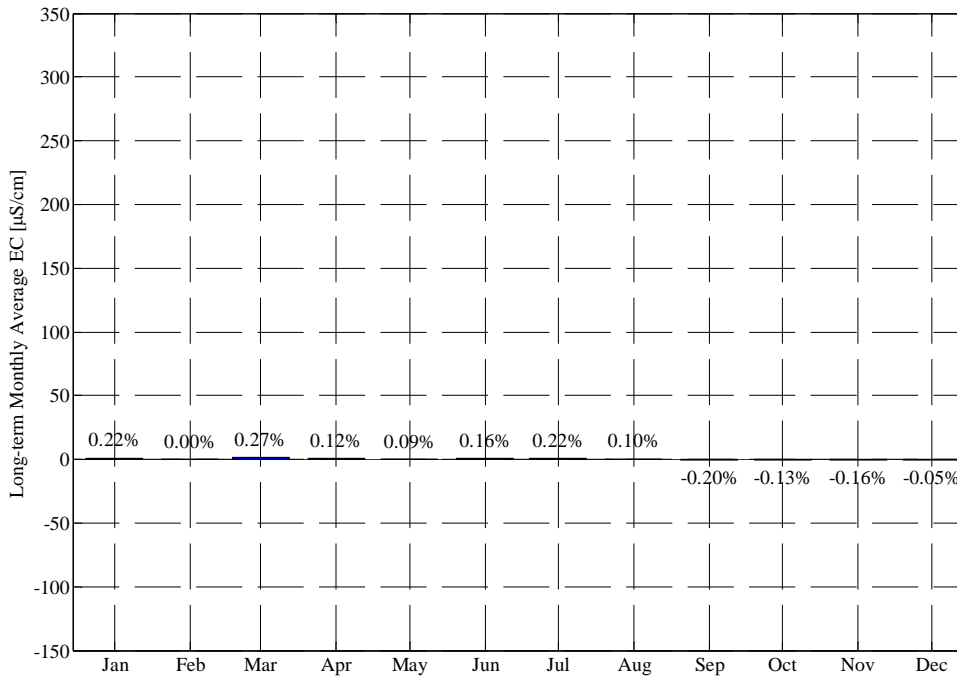
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.2%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	-0.7%
1977	-1.6%	-0.7%	1.6%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
1978	0.4%	0.8%	0.2%	1.0%	-0.7%	0.0%	-0.2%	0.1%	0.0%	0.8%	0.3%	0.1%
1979	-0.5%	-0.3%	0.9%	0.3%	-0.5%	-0.1%	0.2%	0.1%	0.7%	0.6%	0.2%	0.3%
1980	0.2%	1.1%	1.1%	-0.1%	-0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%
1981	0.1%	0.2%	0.0%	0.0%	0.2%	0.0%	-0.1%	0.0%	0.1%	0.0%	-0.1%	-0.2%
1982	0.1%	0.3%	-0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%	-0.3%	-0.3%
1983	-0.2%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
1985	0.0%	-1.5%	0.0%	0.4%	0.2%	1.7%	0.5%	0.1%	0.1%	0.0%	0.3%	0.7%
1986	0.5%	0.2%	0.2%	0.5%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.2%	-0.3%
1987	0.4%	-0.1%	-0.1%	0.0%	-0.1%	0.9%	0.4%	0.1%	0.1%	0.7%	0.7%	-0.1%
1988	-0.2%	-0.3%	-0.7%	0.0%	0.1%	1.0%	0.6%	0.2%	0.1%	0.7%	0.2%	-2.4%
1989	-1.8%	-3.1%	-3.8%	0.1%	0.5%	0.1%	0.1%	0.3%	0.2%	0.1%	-0.1%	-0.6%
1990	0.1%	0.1%	0.0%	-0.1%	0.1%	0.2%	0.0%	0.1%	0.1%	0.1%	-0.1%	-0.1%
1991	0.5%	0.6%	0.1%	-0.2%	0.4%	0.3%	0.3%	0.6%	1.2%	0.6%	0.5%	0.2%
Avg	-0.1%	-0.2%	-0.1%	0.2%	0.0%	0.3%	0.1%	0.1%	0.2%	0.2%	0.1%	-0.2%
W/AN/BN	0.1%	0.3%	0.3%	0.3%	-0.2%	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%
D/C	-0.3%	-0.5%	-0.3%	0.1%	0.2%	0.4%	0.2%	0.1%	0.2%	0.3%	0.2%	-0.4%

City of Stockton Intake Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



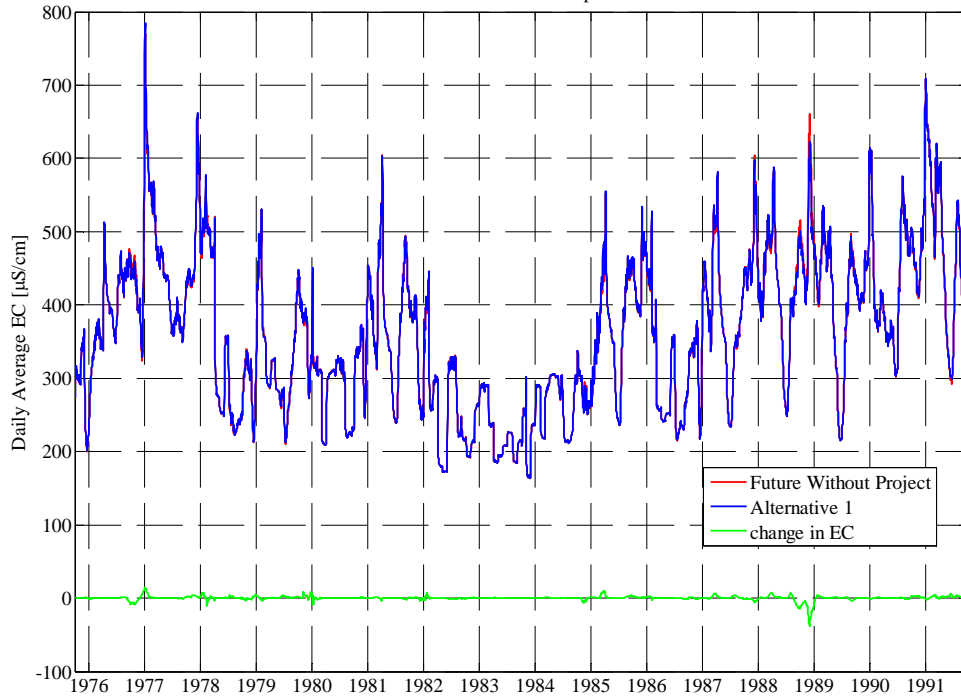
p_lve_wq_feir.m
 07-Jan-2010 DS

City of Stockton Intake Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



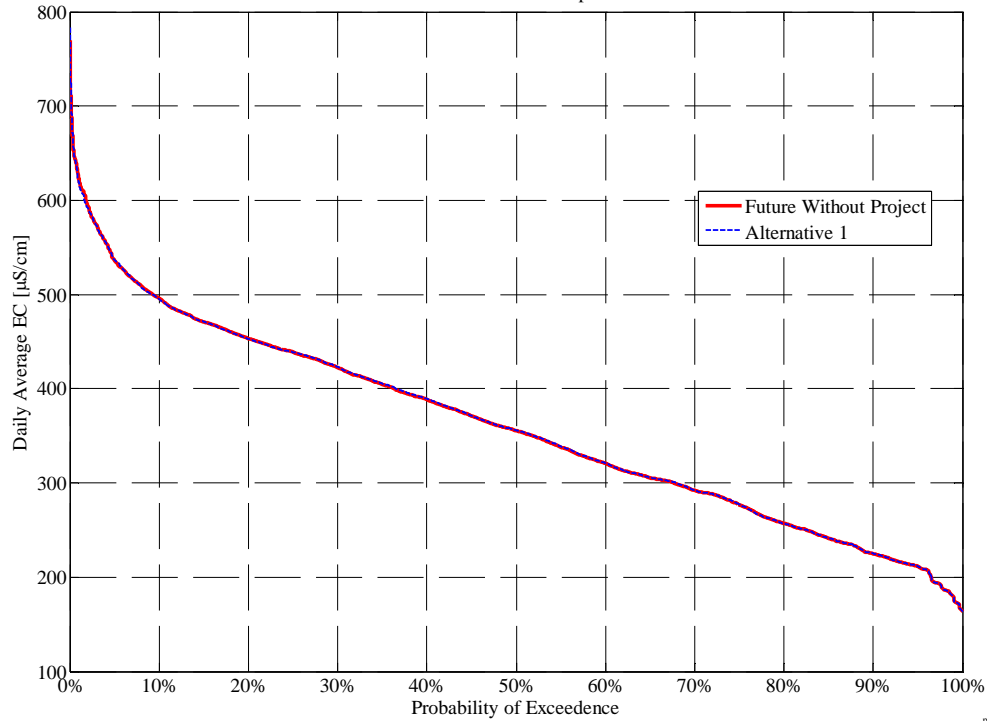
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 07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

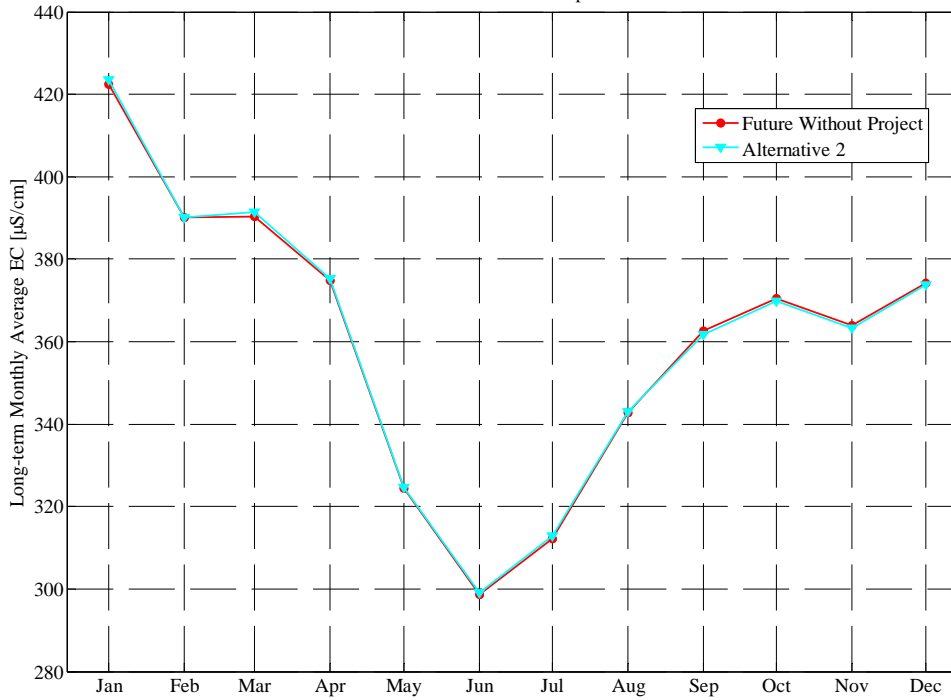
**City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	303	332	232	300	357	354	441	398	366	434	436	454
1977	446	407	433	641	551	496	465	439	395	377	377	384
1978	438	450	585	498	518	476	315	256	331	263	230	244
1979	305	316	252	442	393	302	318	291	275	235	296	383
1980	411	384	306	331	310	221	287	310	321	315	232	227
1981	322	353	320	424	347	467	438	347	270	295	425	447
1982	387	370	256	382	290	295	192	173	293	320	239	223
1983	199	210	258	287	289	239	190	194	207	224	194	207
1984	240	182	229	284	232	273	304	303	287	222	216	279
1985	310	273	266	304	356	439	442	360	271	293	420	453
1986	430	410	485	435	378	270	245	250	329	239	234	269
1987	335	353	275	434	376	482	482	369	272	281	355	401
1988	441	455	523	409	457	498	520	414	303	298	403	457
1989	466	470	533	439	466	483	472	348	234	300	435	452
1990	413	419	492	529	379	399	366	363	322	454	531	482
1991	473	430	533	640	541	568	528	380	310	455	464	423
Avg	370	363	374	424	390	391	375	325	299	313	343	362
W/AN/BN	344	332	339	380	344	297	264	254	292	260	235	262
D/C	390	388	401	458	426	465	461	380	305	354	428	439

**Percent (%) Change from Future Without Project for City of Stockton Intake Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

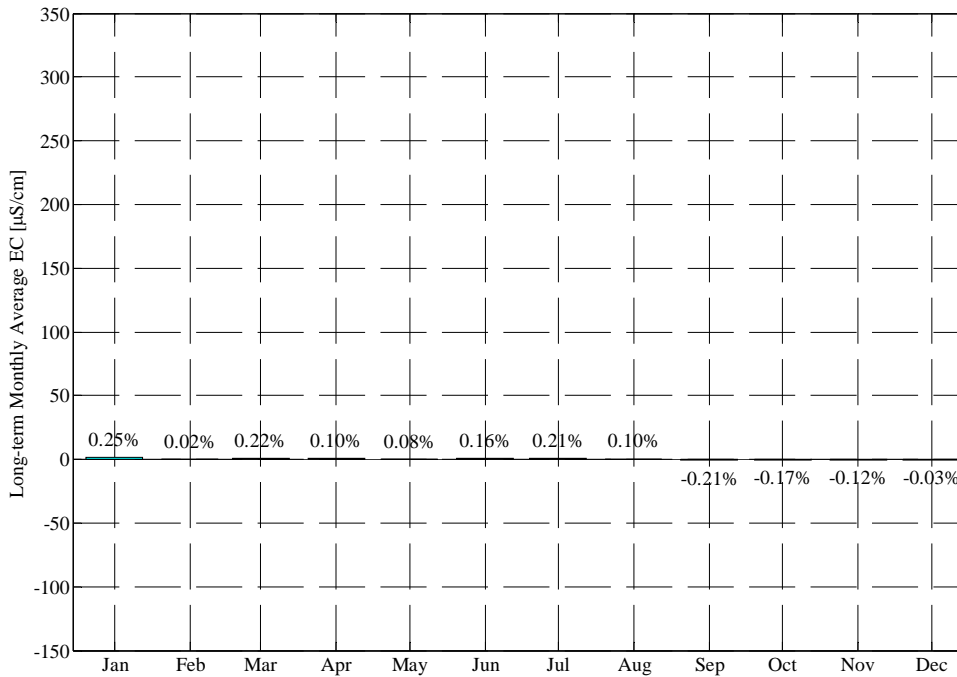
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	-0.9%
1977	-1.7%	-0.7%	1.8%	1.4%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
1978	0.5%	0.9%	0.3%	1.0%	-0.7%	0.1%	-0.2%	0.1%	0.0%	0.8%	0.3%	0.1%
1979	-0.5%	-0.3%	0.9%	0.3%	-0.5%	-0.1%	0.2%	0.1%	0.7%	0.6%	0.2%	0.3%
1980	0.2%	1.1%	1.1%	-0.1%	-0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%
1981	0.0%	0.2%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	-0.1%	-0.2%
1982	0.0%	0.6%	-0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%	-0.3%	-0.3%
1983	-0.2%	0.2%	0.0%	0.1%	0.0%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	-0.2%
1984	-0.7%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
1985	0.0%	-1.5%	0.0%	0.3%	0.2%	1.6%	0.5%	0.1%	0.1%	0.0%	0.4%	0.8%
1986	0.5%	0.3%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.3%
1987	0.3%	-0.1%	-0.1%	0.0%	-0.1%	0.0%	0.1%	0.0%	0.1%	0.7%	0.7%	-0.1%
1988	-0.2%	-0.3%	-0.7%	0.0%	0.1%	1.0%	0.6%	0.2%	0.1%	0.7%	0.2%	-2.4%
1989	-1.7%	-2.9%	-3.6%	0.2%	0.5%	0.0%	0.1%	0.3%	0.2%	0.2%	-0.2%	-0.6%
1990	0.1%	0.1%	0.0%	-0.1%	0.2%	0.2%	0.0%	0.1%	0.1%	0.1%	0.0%	-0.1%
1991	0.5%	0.5%	0.1%	-0.2%	0.4%	0.3%	0.3%	0.6%	1.2%	0.5%	0.4%	0.2%
Avg	-0.2%	-0.1%	0.0%	0.2%	0.0%	0.2%	0.1%	0.1%	0.2%	0.2%	0.1%	-0.2%
W/AN/BN	0.0%	0.4%	0.3%	0.3%	-0.2%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%
D/C	-0.3%	-0.5%	-0.3%	0.2%	0.2%	0.4%	0.2%	0.1%	0.2%	0.2%	0.2%	-0.4%

City of Stockton Intake Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



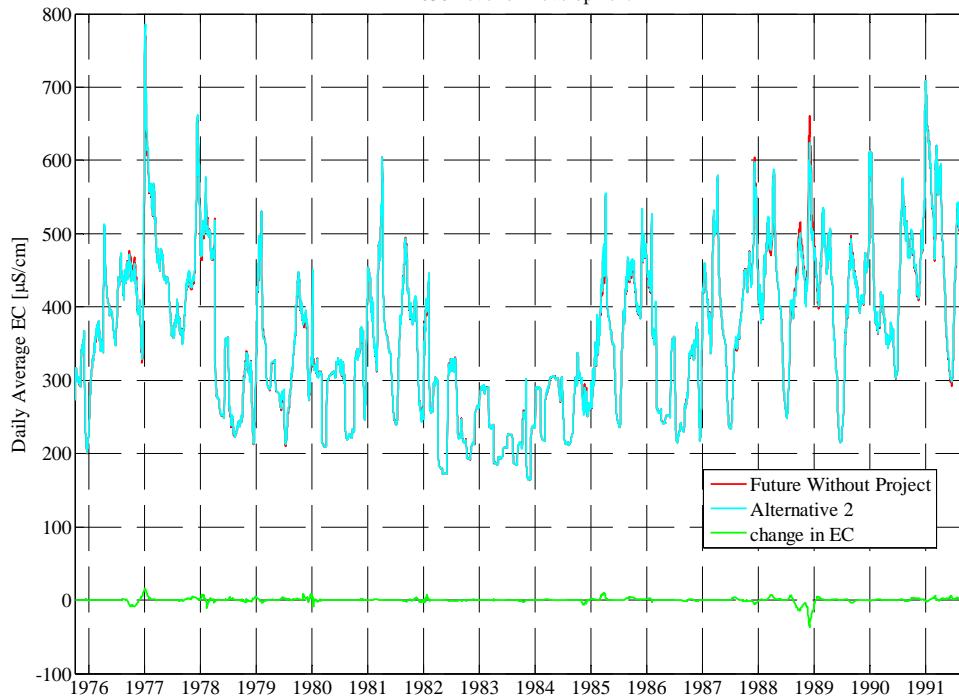
p_lve_wq_feir.m
 07-Jan-2010 DS

City of Stockton Intake Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



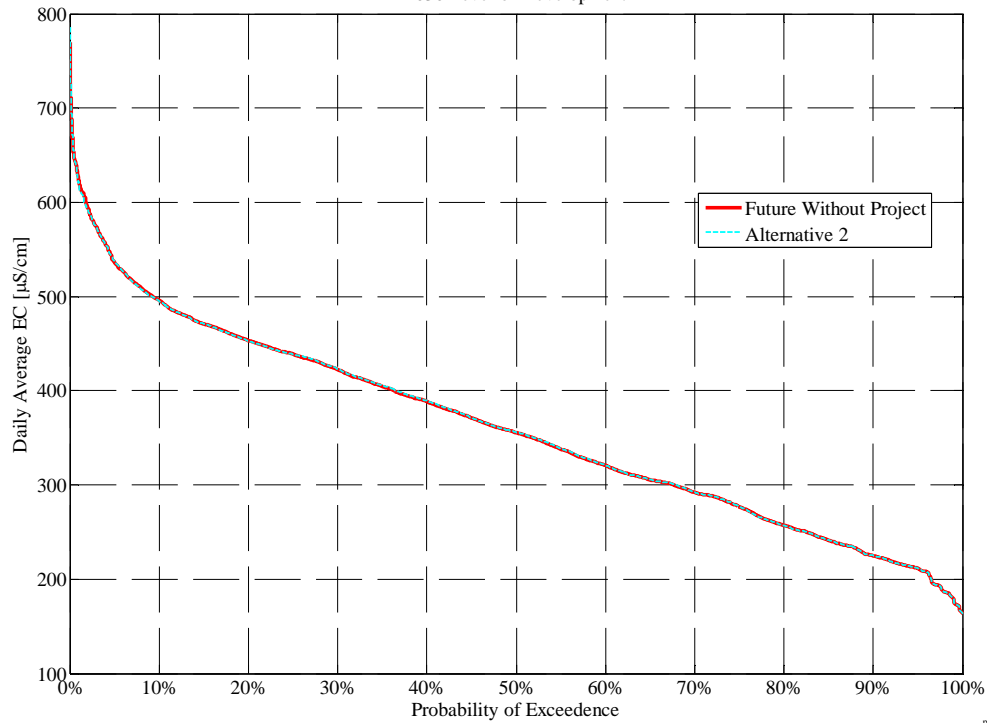
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 07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

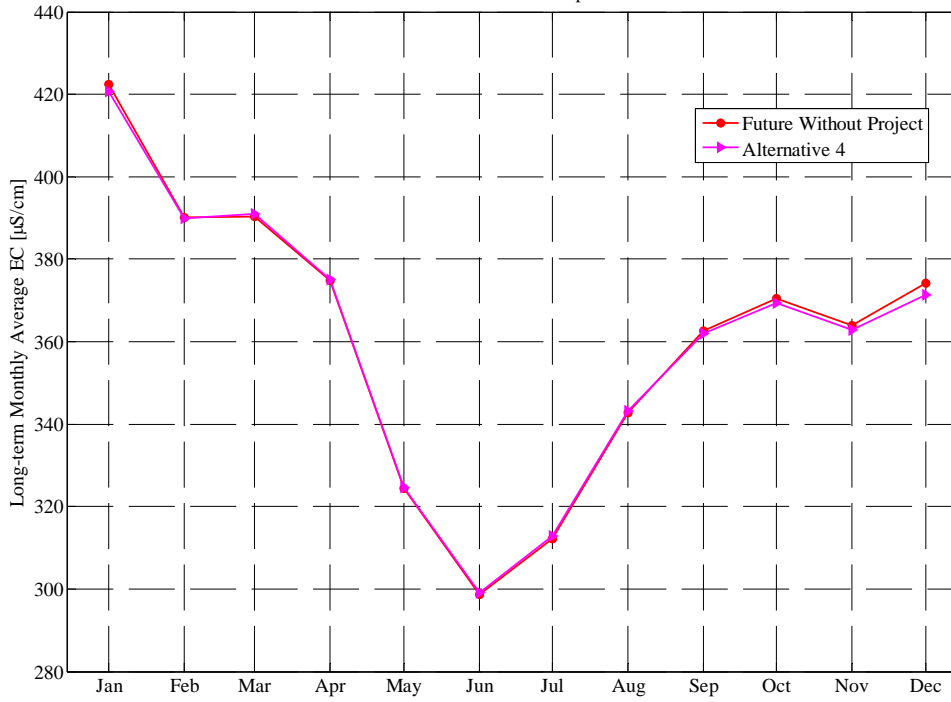
City of Stockton Intake Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 4
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	303	331	232	300	357	354	441	398	366	433	435	453
1977	445	406	414	614	550	501	468	441	396	381	379	384
1978	438	453	573	492	522	476	315	256	331	262	231	245
1979	304	315	255	445	393	302	318	291	274	236	301	394
1980	414	386	303	331	310	221	286	310	321	316	233	227
1981	322	353	321	423	348	466	438	348	272	295	427	448
1982	386	367	257	380	290	295	192	173	294	320	240	223
1983	199	209	258	287	289	239	190	194	207	224	194	207
1984	242	182	229	284	231	272	303	303	287	222	216	279
1985	310	277	266	303	355	431	440	360	270	293	419	449
1986	427	409	483	434	378	270	245	250	329	239	235	270
1987	335	350	274	432	376	482	482	369	271	279	354	403
1988	442	457	526	408	456	498	520	414	303	296	398	451
1989	456	463	525	430	462	482	471	347	233	299	435	454
1990	411	418	491	526	378	399	366	362	321	454	530	481
1991	474	430	533	640	541	568	528	379	310	456	466	424
Avg	369	363	371	421	390	391	375	325	299	313	343	362
W/AN/BN	344	332	337	379	345	296	264	254	292	260	236	264
D/C	389	387	398	453	425	465	461	380	305	354	427	439

Percent (%) Change from Future Without Project for City of Stockton Intake Salinity
(Alternative 4 - Future Without Project) / Future Without Project
2030 Level of Development

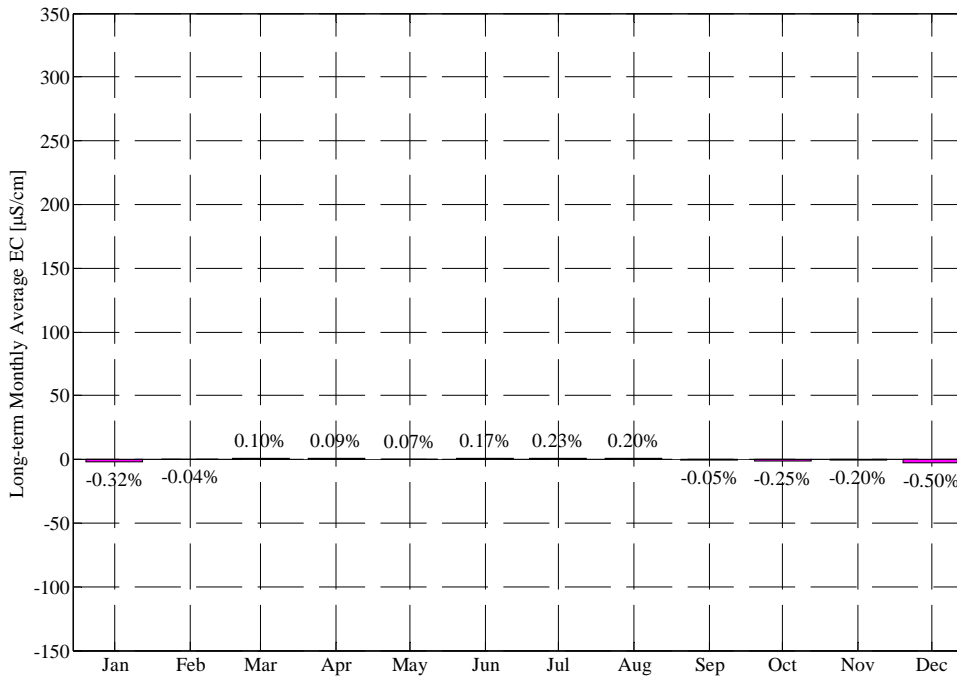
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-1.1%
1977	-1.8%	-0.9%	-2.5%	-2.9%	0.2%	0.9%	0.5%	0.4%	0.4%	1.0%	0.5%	0.0%
1978	0.4%	1.4%	-1.8%	-0.3%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.6%	0.6%	0.4%
1979	-0.7%	-0.7%	2.1%	1.1%	-0.6%	-0.1%	0.1%	-0.1%	0.5%	0.8%	2.0%	3.0%
1980	1.1%	1.6%	-0.1%	-0.2%	-0.3%	0.0%	0.1%	-0.1%	-0.1%	0.4%	0.6%	0.1%
1981	0.2%	0.1%	0.2%	0.0%	0.4%	-0.2%	-0.1%	0.1%	0.8%	0.0%	0.1%	0.0%
1982	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1986	-0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
1987	0.2%	-0.9%	-0.7%	-0.4%	-0.2%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.2%	0.5%
1988	0.2%	0.1%	-0.1%	0.0%	0.0%	0.9%	0.6%	0.2%	0.1%	-0.1%	-1.1%	-3.7%
1989	-3.8%	-4.2%	-5.0%	-2.0%	-0.5%	-0.2%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.3%
1990	-0.3%	-0.1%	-0.3%	-0.5%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	-0.2%	-0.3%
1991	0.6%	0.7%	0.2%	-0.2%	0.4%	0.3%	0.3%	0.5%	1.1%	0.9%	0.7%	0.4%
Avg	-0.3%	-0.2%	-0.5%	-0.3%	0.0%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	-0.1%
W/AN/BN	0.1%	0.3%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.3%	0.5%	0.5%
D/C	-0.5%	-0.6%	-0.9%	-0.7%	0.0%	0.2%	0.1%	0.1%	0.3%	0.2%	0.0%	-0.5%

City of Stockton Intake Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



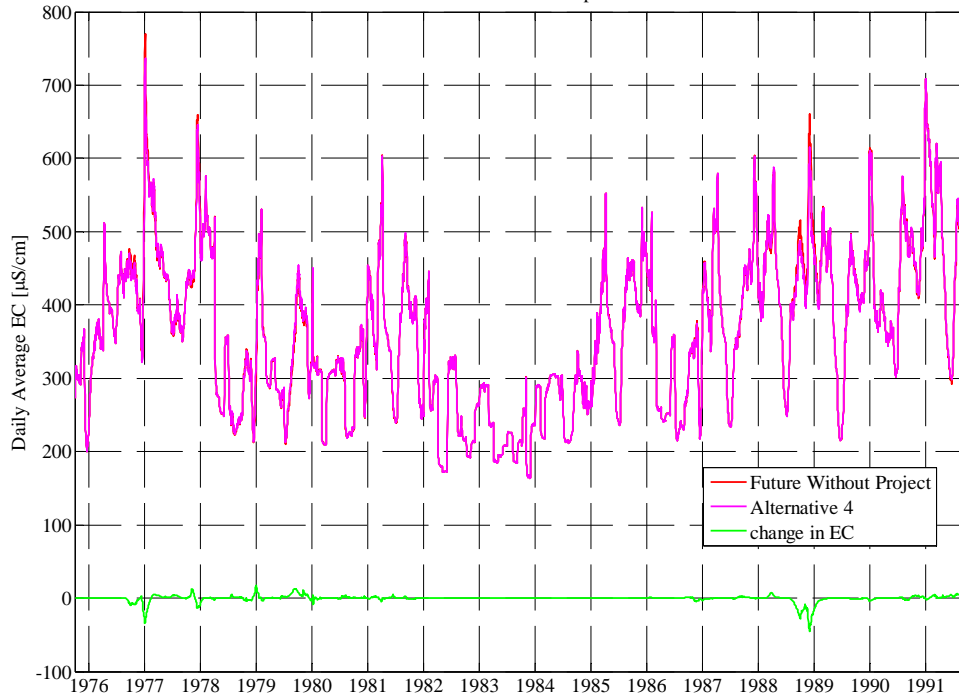
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 07-Jan-2010 DS

City of Stockton Intake Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



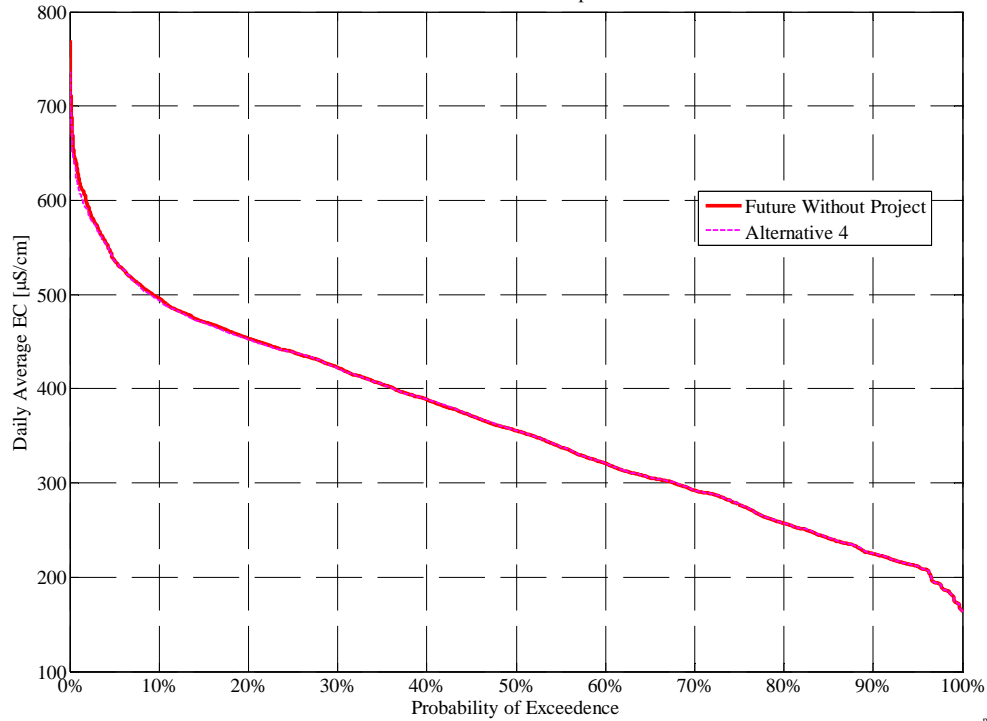
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City of Stockton Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



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07-Jan-2010 DS

City of Stockton Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



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07-Jan-2010 DS

San Joaquin River at Antioch

Future Without Project

**San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	500	374	820	1,523	1,817	1,232	719	1,752	3,278	4,509	4,807	5,682
1977	5,738	3,504	4,337	2,484	1,056	1,144	1,370	2,474	3,293	4,095	3,855	4,725
1978	4,349	4,621	3,168	408	256	251	264	233	257	832	1,632	1,545
1979	947	1,053	1,297	541	274	241	238	252	416	1,674	3,180	5,076
1980	5,265	2,181	1,111	292	262	240	222	245	284	689	1,512	1,519
1981	885	873	2,088	907	262	215	267	467	1,060	2,786	4,150	4,557
1982	4,710	1,486	216	236	219	233	200	183	197	466	940	395
1983	348	210	220	274	278	244	205	188	197	208	216	202
1984	403	208	209	223	214	197	228	270	638	1,086	1,325	910
1985	455	413	211	360	534	435	341	560	1,127	2,697	3,970	5,211
1986	4,804	4,720	2,806	587	255	251	238	231	372	1,128	1,361	467
1987	332	377	1,887	1,883	681	256	395	739	1,111	2,673	3,619	4,813
1988	5,089	4,917	2,514	404	279	679	703	1,055	1,390	3,235	4,256	5,399
1989	4,892	5,416	3,686	2,213	1,435	312	226	351	1,091	2,611	3,987	4,801
1990	4,698	4,642	4,965	1,809	578	478	641	1,388	2,701	4,823	5,161	5,456
1991	3,910	4,266	5,618	2,910	1,691	470	318	1,206	2,947	4,775	3,991	4,973
Avg	2,958	2,454	2,197	1,066	631	430	411	725	1,272	2,393	2,998	3,483
W/AN/BN	2,975	2,068	1,290	366	251	237	228	229	337	869	1,452	1,445
D/C	2,944	2,754	2,903	1,610	926	580	553	1,110	2,000	3,578	4,200	5,068

Alternative 1

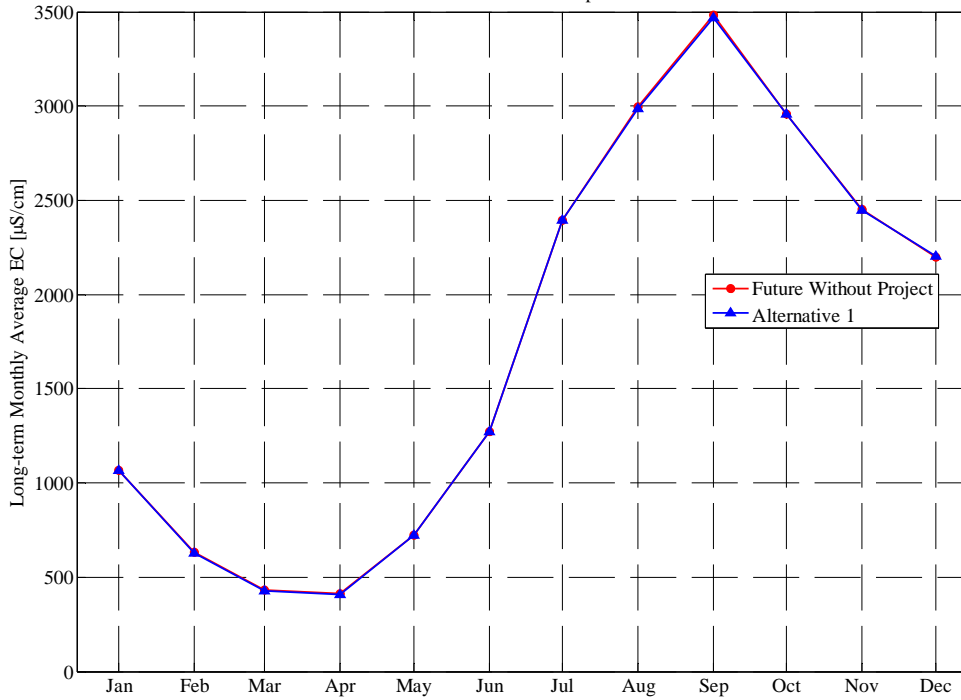
**San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	500	374	816	1,520	1,815	1,231	720	1,757	3,276	4,513	4,815	5,607
1977	5,610	3,536	4,415	2,456	1,026	1,136	1,366	2,471	3,292	4,098	3,826	4,703
1978	4,412	4,665	3,167	407	256	251	264	234	257	833	1,632	1,546
1979	963	1,100	1,331	546	274	241	238	252	415	1,673	3,180	5,076
1980	5,265	2,134	1,130	298	261	240	222	244	284	690	1,515	1,522
1981	885	873	2,087	907	262	215	267	468	1,059	2,783	4,143	4,571
1982	4,738	1,491	216	236	219	233	200	183	197	466	941	409
1983	397	218	220	272	278	244	205	188	197	208	216	203
1984	405	209	209	223	214	198	229	270	636	1,084	1,324	910
1985	451	433	216	360	534	419	339	560	1,128	2,694	3,982	5,240
1986	4,832	4,726	2,811	587	255	252	238	231	372	1,129	1,346	463
1987	328	376	1,888	1,883	681	256	395	741	1,111	2,684	3,604	4,786
1988	5,071	4,879	2,501	405	279	673	700	1,048	1,384	3,265	4,169	5,258
1989	4,827	5,235	3,689	2,272	1,448	313	226	352	1,089	2,619	3,970	4,784
1990	4,711	4,645	4,964	1,807	578	478	641	1,390	2,700	4,823	5,153	5,457
1991	3,913	4,271	5,620	2,909	1,690	470	318	1,206	2,948	4,768	3,989	4,981
Avg	2,957	2,448	2,205	1,068	629	428	411	725	1,272	2,396	2,988	3,470
W/AN/BN	3,002	2,078	1,298	367	251	237	228	229	337	869	1,451	1,447
D/C	2,922	2,736	2,911	1,613	924	577	552	1,110	1,999	3,583	4,183	5,043

**Percent (%) Change from Future Without Project for San Joaquin River at Antioch Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development**

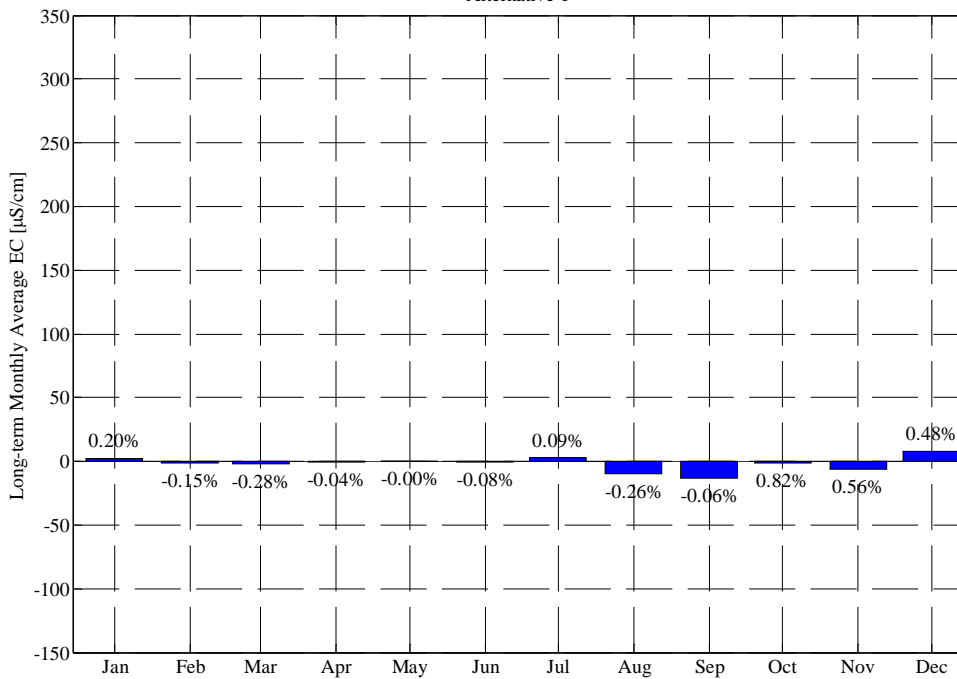
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	-0.5%	-0.2%	-0.1%	-0.1%	0.2%	0.3%	-0.1%	0.1%	0.1%	-1.3%
1977	-2.2%	0.9%	1.8%	-1.1%	-2.8%	-0.7%	-0.2%	-0.1%	0.0%	0.1%	-0.7%	-0.5%
1978	1.5%	1.0%	0.0%	-0.2%	0.0%	-0.1%	-0.1%	0.1%	0.0%	0.1%	0.0%	0.1%
1979	1.7%	4.5%	2.6%	0.9%	0.0%	-0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	-2.1%	1.7%	2.1%	-0.3%	0.2%	0.0%	-0.1%	-0.1%	0.1%	0.2%	0.2%
1981	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	-0.2%	0.3%
1982	0.6%	0.3%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	3.6%
1983	14.1%	3.6%	-0.1%	-0.9%	-0.2%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.3%	0.2%
1984	0.5%	0.2%	0.0%	-0.1%	0.0%	0.3%	0.3%	0.0%	-0.2%	-0.2%	0.0%	0.0%
1985	-1.0%	4.9%	2.4%	0.0%	0.0%	-3.7%	-0.6%	0.0%	0.1%	-0.1%	0.3%	0.6%
1986	0.6%	0.1%	0.2%	0.0%	0.1%	0.3%	-0.1%	0.1%	0.0%	0.1%	-1.1%	-0.8%
1987	-1.2%	-0.3%	0.0%	0.0%	0.0%	-0.1%	0.2%	0.2%	0.0%	0.4%	-0.4%	-0.6%
1988	-0.4%	-0.8%	-0.5%	0.1%	0.0%	-1.0%	-0.4%	-0.7%	-0.4%	0.9%	-2.0%	-2.6%
1989	-1.3%	-3.3%	0.1%	2.7%	0.9%	0.3%	0.0%	0.1%	-0.2%	0.3%	-0.4%	-0.4%
1990	0.3%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	-0.2%	0.0%
1991	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.2%
Avg	0.8%	0.6%	0.5%	0.2%	-0.2%	-0.3%	0.0%	0.0%	-0.1%	0.1%	-0.3%	-0.1%
W/AN/BN	2.7%	1.1%	0.6%	0.3%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.5%
D/C	-0.6%	0.2%	0.4%	0.1%	-0.2%	-0.6%	-0.1%	0.0%	-0.1%	0.2%	-0.4%	-0.5%

San Joaquin River at Antioch Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



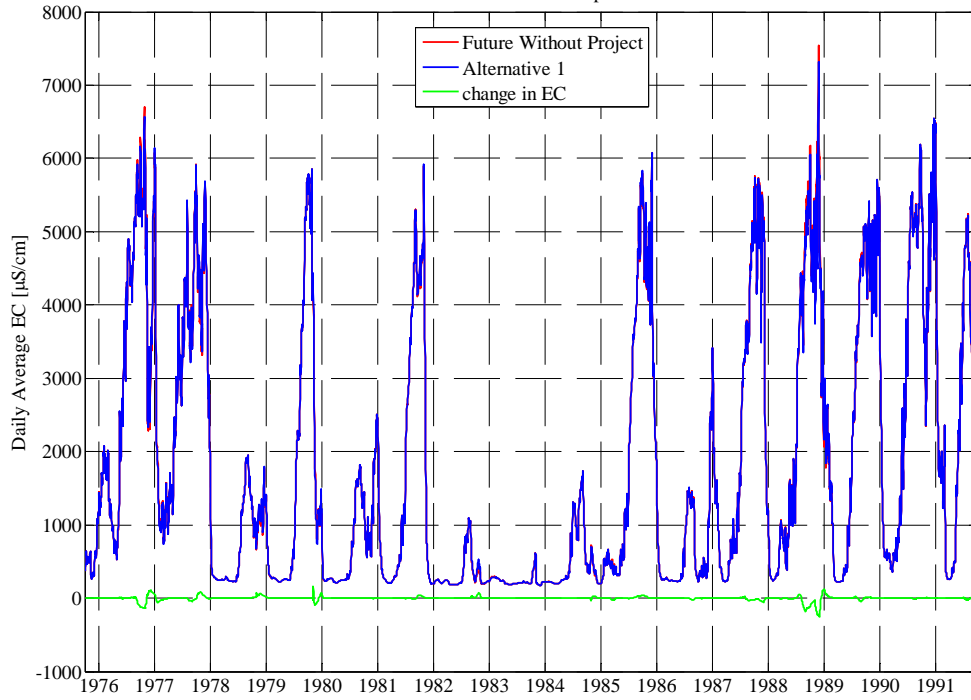
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San Joaquin River at Antioch Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



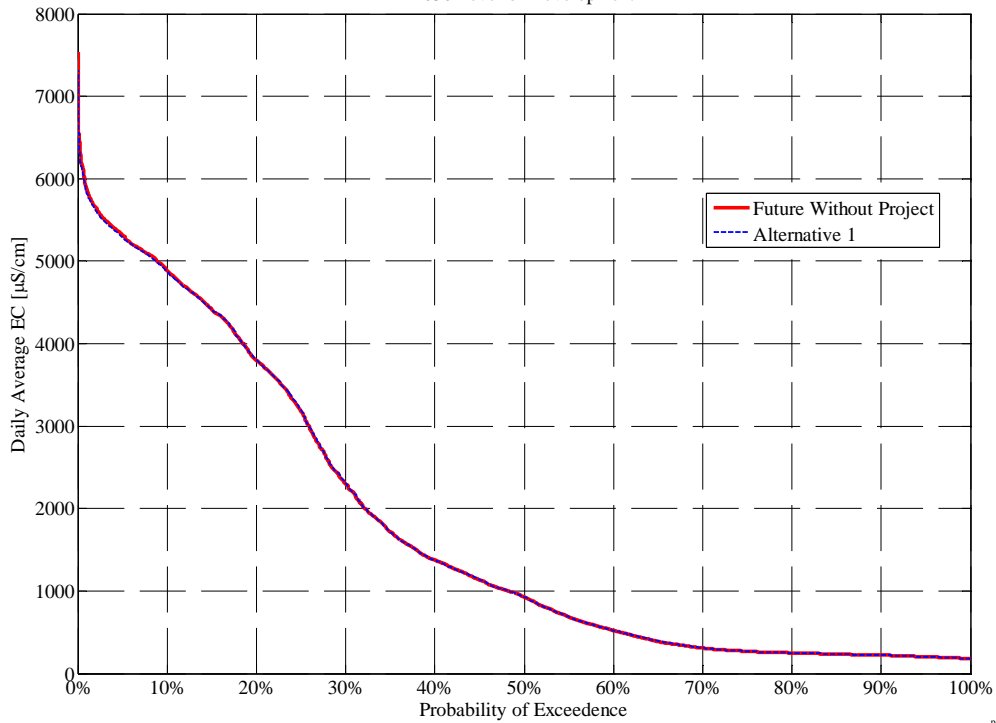
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San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

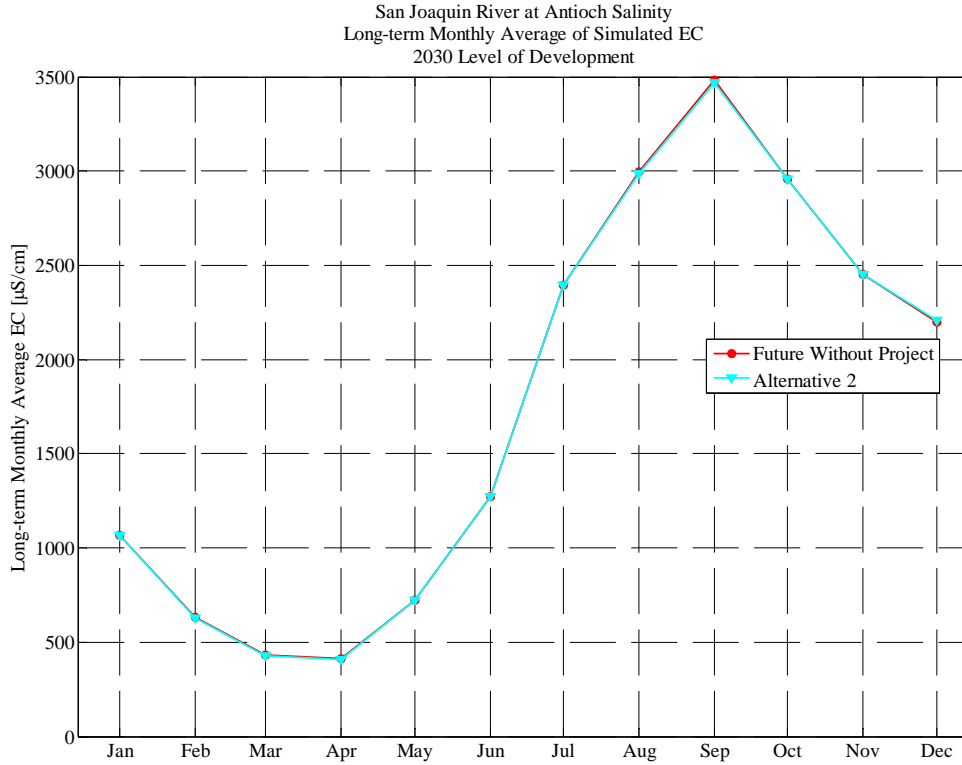
Alternative 2

San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development

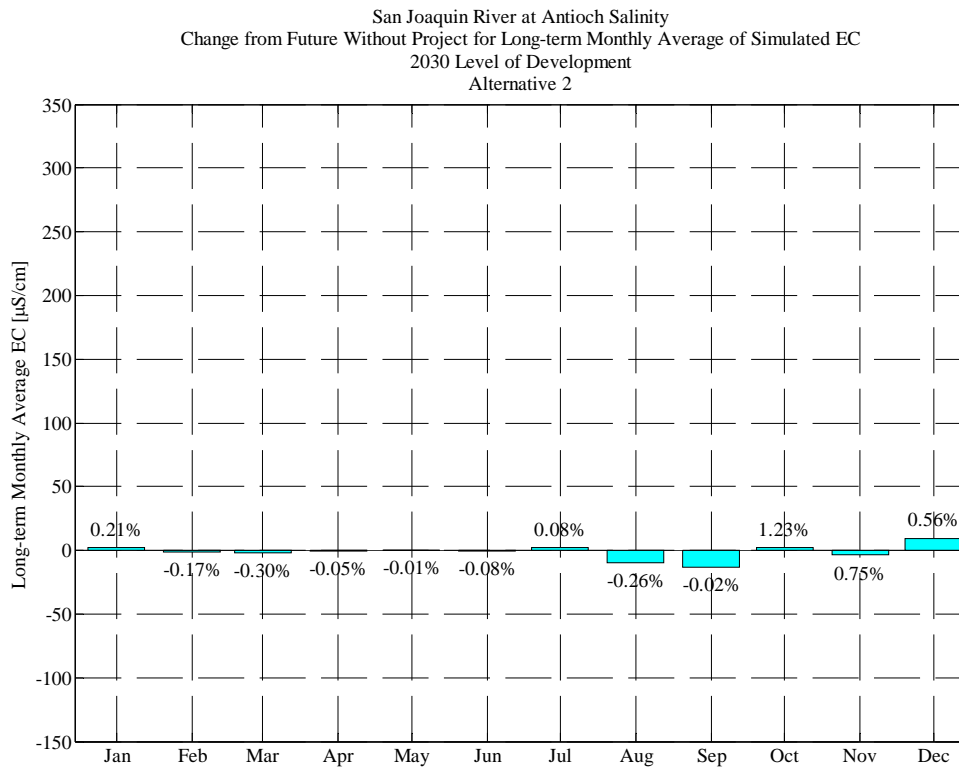
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	500	374	818	1,521	1,816	1,231	720	1,756	3,276	4,510	4,811	5,602
1977	5,606	3,544	4,425	2,451	1,023	1,135	1,366	2,471	3,292	4,096	3,826	4,703
1978	4,421	4,673	3,170	408	256	251	264	234	257	833	1,632	1,546
1979	963	1,100	1,331	546	274	241	238	252	415	1,673	3,180	5,076
1980	5,265	2,134	1,130	298	261	240	222	245	284	690	1,515	1,522
1981	885	873	2,088	907	262	215	267	468	1,059	2,783	4,143	4,571
1982	4,736	1,494	216	236	219	233	200	183	197	466	941	408
1983	397	218	220	272	277	244	206	188	197	208	216	204
1984	428	212	209	223	214	198	229	270	636	1,084	1,324	910
1985	451	434	216	360	534	419	340	560	1,128	2,695	3,984	5,246
1986	4,841	4,730	2,812	587	256	252	238	231	372	1,129	1,346	462
1987	329	376	1,888	1,883	681	256	395	740	1,111	2,684	3,604	4,787
1988	5,071	4,879	2,500	405	279	672	700	1,047	1,384	3,265	4,170	5,258
1989	4,836	5,244	3,700	2,278	1,449	313	226	352	1,089	2,619	3,970	4,785
1990	4,712	4,645	4,964	1,807	578	478	641	1,390	2,700	4,823	5,154	5,457
1991	3,912	4,270	5,620	2,909	1,690	470	318	1,206	2,948	4,769	3,989	4,979
Avg	2,960	2,450	2,207	1,068	629	428	410	725	1,272	2,395	2,988	3,470
W/AN/BN	3,007	2,080	1,298	367	251	237	228	229	337	869	1,451	1,447
D/C	2,922	2,738	2,913	1,614	924	577	552	1,110	1,998	3,583	4,183	5,043

Percent (%) Change from Future Without Project for San Joaquin River at Antioch
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	-0.1%	-0.2%	-0.1%	-0.1%	0.0%	0.2%	0.2%	-0.1%	0.0%	0.1%	-1.4%
1977	-2.3%	1.1%	2.0%	-1.3%	-3.1%	-0.8%	-0.3%	-0.1%	0.0%	0.0%	-0.8%	-0.5%
1978	1.7%	1.1%	0.1%	-0.2%	0.0%	0.0%	-0.1%	0.1%	0.0%	0.1%	0.0%	0.1%
1979	1.7%	4.5%	2.6%	1.0%	0.0%	-0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	-2.1%	1.7%	2.1%	-0.4%	0.0%	0.0%	-0.1%	-0.1%	0.1%	0.2%	0.2%
1981	0.0%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	-0.2%	0.3%
1982	0.6%	0.5%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	3.5%
1983	14.2%	3.6%	-0.1%	-0.8%	-0.3%	0.0%	0.0%	-0.2%	-0.1%	-0.2%	0.2%	1.0%
1984	6.2%	1.9%	0.0%	-0.2%	-0.2%	0.2%	0.3%	0.0%	-0.2%	-0.1%	0.0%	0.0%
1985	-1.0%	5.3%	2.5%	0.0%	0.0%	-3.6%	-0.6%	0.0%	0.0%	-0.1%	0.4%	0.7%
1986	0.8%	0.2%	0.2%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.1%	-1.1%	-0.9%
1987	-1.0%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.1%	0.4%	-0.4%	-0.5%
1988	-0.3%	-0.8%	-0.5%	0.1%	0.0%	-1.0%	-0.4%	-0.7%	-0.4%	0.9%	-2.0%	-2.6%
1989	-1.1%	-3.2%	0.4%	2.9%	1.0%	0.4%	0.0%	0.1%	-0.2%	0.3%	-0.4%	-0.3%
1990	0.3%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	-0.1%	0.0%
1991	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.1%
Avg	1.2%	0.7%	0.6%	0.2%	-0.2%	-0.3%	0.0%	0.0%	-0.1%	0.1%	-0.3%	0.0%
W/AN/BN	3.6%	1.4%	0.7%	0.3%	-0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.6%
D/C	-0.6%	0.3%	0.5%	0.2%	-0.2%	-0.6%	-0.1%	0.0%	-0.1%	0.2%	-0.4%	-0.5%

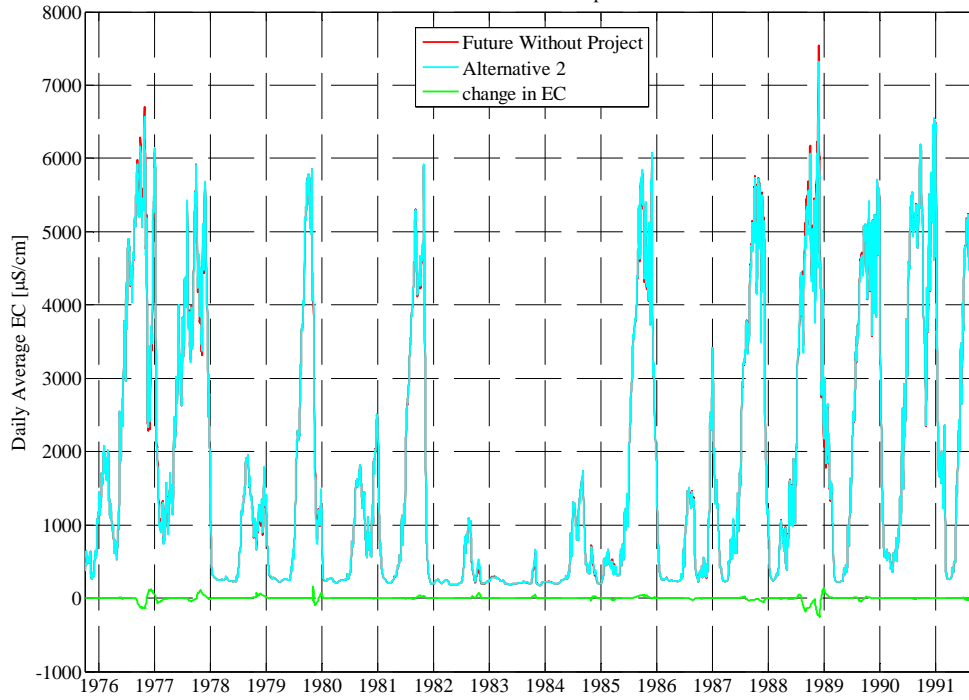


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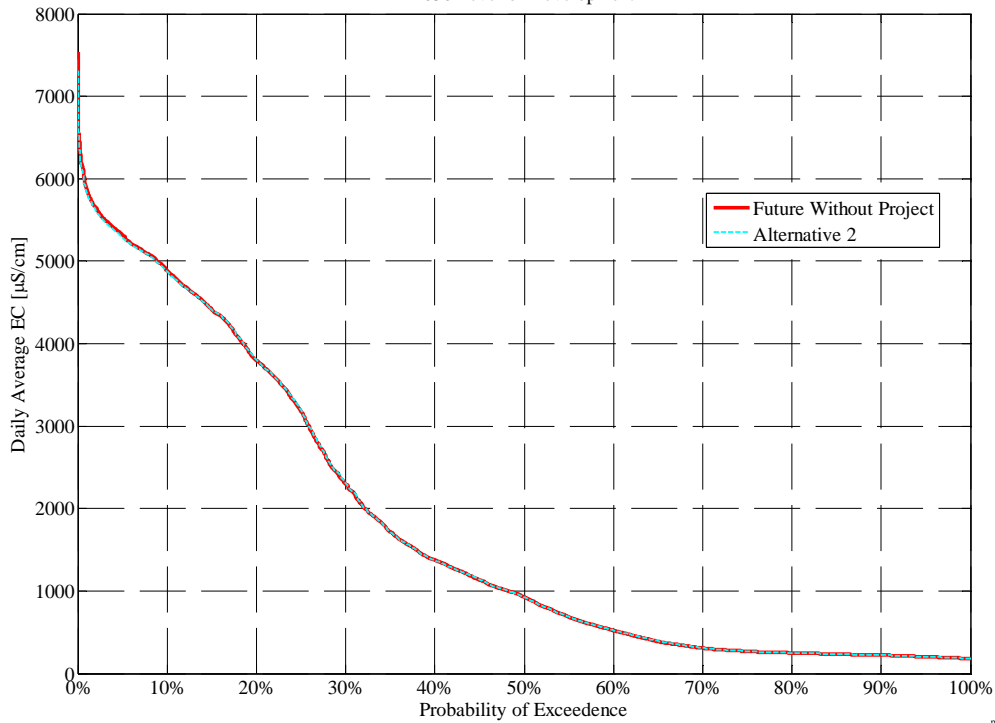
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07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

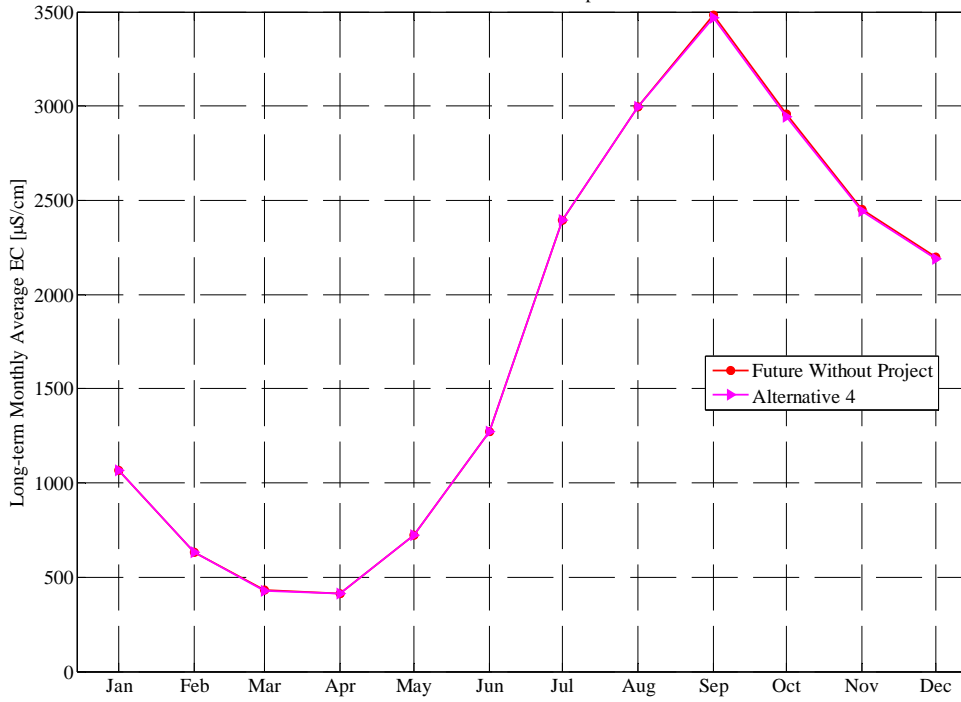
Alternative 4**San Joaquin River at Antioch Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 4****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	500	374	821	1,524	1,817	1,232	719	1,752	3,278	4,507	4,805	5,596
1977	5,607	3,508	4,341	2,494	1,057	1,143	1,372	2,466	3,323	4,137	3,858	4,720
1978	4,362	4,585	3,110	405	256	251	264	233	257	832	1,632	1,546
1979	964	1,107	1,369	560	276	241	238	252	415	1,678	3,262	5,160
1980	5,313	2,170	1,087	291	262	240	222	244	284	690	1,513	1,519
1981	885	873	2,088	907	262	215	267	467	1,060	2,786	4,154	4,550
1982	4,696	1,485	216	236	219	233	200	183	197	466	940	395
1983	348	210	220	274	278	244	205	188	197	208	216	202
1984	403	208	209	223	214	197	228	270	638	1,087	1,326	910
1985	456	413	211	360	534	435	341	560	1,127	2,697	3,968	5,207
1986	4,799	4,718	2,805	585	255	252	238	231	372	1,128	1,343	458
1987	332	380	1,883	1,883	680	256	395	739	1,111	2,672	3,665	4,847
1988	5,101	4,915	2,512	405	279	673	699	1,046	1,384	3,231	4,143	5,153
1989	4,734	5,214	3,592	2,213	1,436	312	226	351	1,090	2,613	3,980	4,779
1990	4,687	4,636	4,950	1,803	578	478	641	1,388	2,701	4,823	5,143	5,459
1991	3,919	4,279	5,623	2,909	1,690	470	318	1,206	2,953	4,765	3,994	4,989
Avg	2,944	2,442	2,190	1,067	631	429	411	724	1,274	2,395	2,996	3,468
W/AN/BN	2,984	2,069	1,288	368	251	237	228	229	337	870	1,462	1,456
D/C	2,913	2,732	2,891	1,611	926	579	553	1,108	2,003	3,581	4,190	5,033

**Percent (%) Change from Future Without Project for San Joaquin River at Antioch
(Alternative 4 - Future Without Project) / Future Without Project****2030 Level of Development**

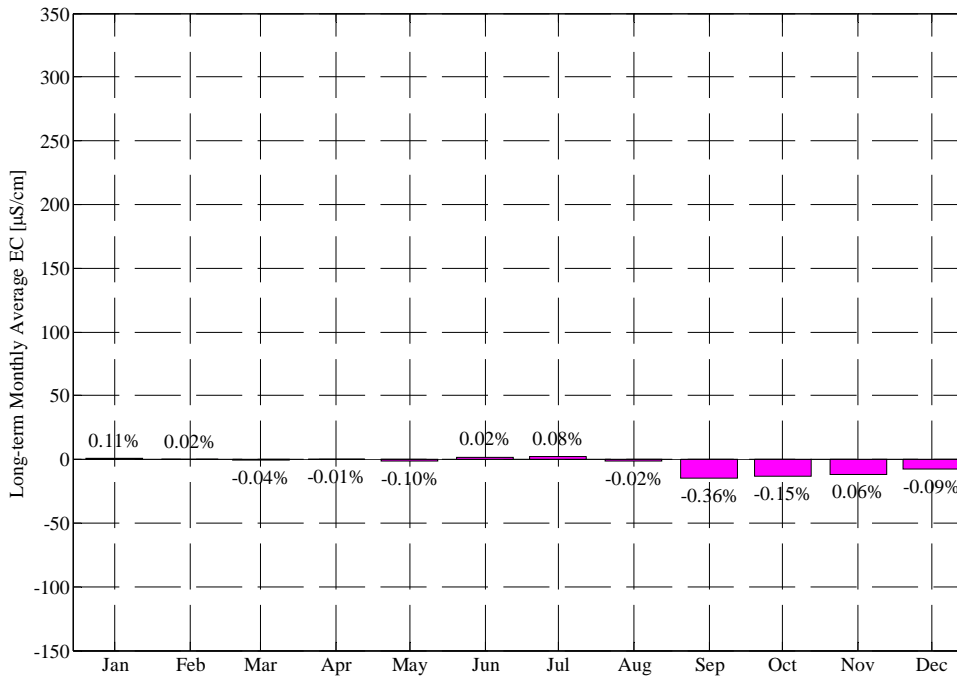
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-1.5%
1977	-2.3%	0.1%	0.1%	0.4%	0.2%	-0.1%	0.2%	-0.3%	0.9%	1.0%	0.1%	-0.1%
1978	0.3%	-0.8%	-1.8%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	1.8%	5.1%	5.5%	3.4%	0.5%	0.1%	0.1%	-0.2%	-0.2%	0.3%	2.6%	1.7%
1980	0.9%	-0.5%	-2.2%	-0.4%	0.0%	0.0%	0.0%	-0.2%	-0.1%	0.1%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.1%	-0.1%
1982	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
1986	-0.1%	0.0%	0.0%	-0.4%	0.0%	0.4%	0.2%	0.0%	0.0%	0.0%	-1.3%	-1.8%
1987	0.2%	0.7%	-0.2%	0.0%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	1.3%	0.7%
1988	0.2%	0.0%	-0.1%	0.0%	0.0%	-1.0%	-0.6%	-0.8%	-0.4%	-0.1%	-2.7%	-4.6%
1989	-3.2%	-3.7%	-2.5%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.1%	-0.2%	-0.5%
1990	-0.2%	-0.1%	-0.3%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.4%	0.1%
1991	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	-0.2%	0.1%	0.3%
Avg	-0.1%	0.1%	-0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.0%	-0.4%
W/AN/BN	0.4%	0.5%	0.2%	0.3%	0.1%	0.1%	0.0%	-0.1%	-0.1%	0.1%	0.2%	0.0%
D/C	-0.6%	-0.3%	-0.3%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.1%	0.1%	-0.2%	-0.6%

San Joaquin River at Antioch Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



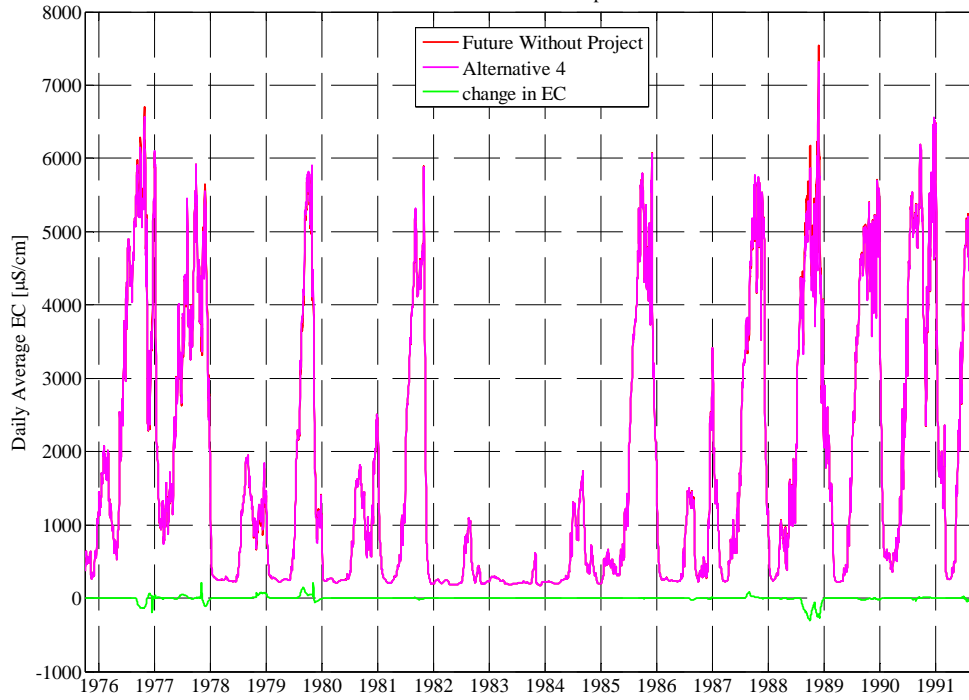
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



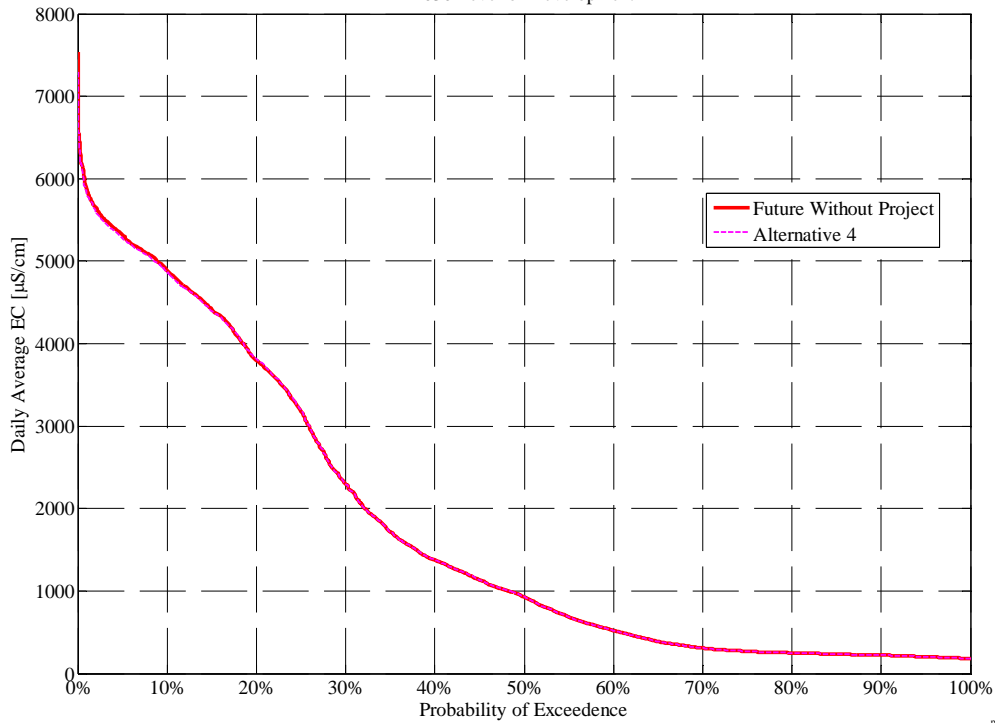
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 07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Antioch Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River at Rock Slough

Future Without Project

**Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	248	227	224	346	383	349	357	392	557	832	900	1,014
1977	1,088	884	735	1,097	611	454	423	468	644	671	787	837
1978	1,015	904	972	486	361	356	313	277	261	232	287	302
1979	258	247	302	396	344	291	337	327	259	302	520	821
1980	961	623	377	348	496	426	339	346	287	238	258	282
1981	261	265	441	526	269	257	408	386	284	483	841	926
1982	795	606	236	315	296	301	202	183	225	235	224	206
1983	193	213	303	422	327	252	206	207	222	254	209	190
1984	197	214	242	304	256	224	316	351	269	257	274	360
1985	255	229	219	224	241	255	401	384	283	472	823	969
1986	918	800	838	482	404	320	261	273	268	256	283	235
1987	246	278	337	624	362	296	407	411	291	440	676	841
1988	958	936	849	393	379	369	425	419	344	469	824	1,074
1989	1,079	1,001	1,076	587	490	406	389	310	244	487	847	954
1990	850	800	934	799	347	301	310	326	428	867	1,067	1,057
1991	1,039	750	1,081	1,088	619	472	462	358	451	861	960	901
Avg	648	561	573	527	387	333	347	339	332	460	611	685
W/AN/BN	620	515	467	393	355	310	282	281	256	253	294	342
D/C	669	597	655	632	411	351	398	384	392	620	858	952

Alternative 1

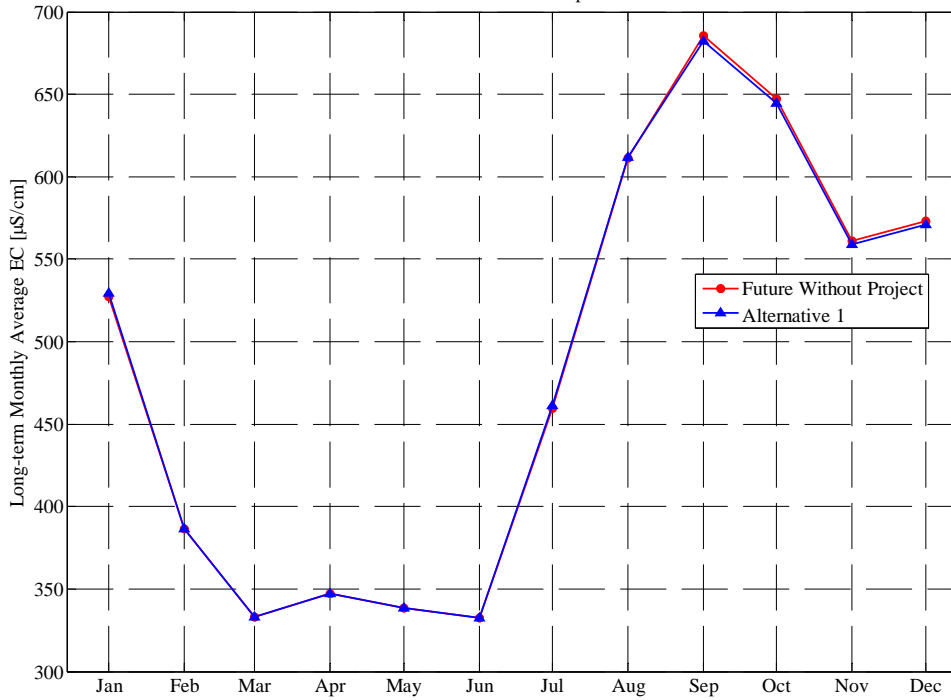
Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	248	228	223	343	382	348	356	392	558	833	902	1,004
1977	1,056	869	752	1,109	610	453	422	468	643	672	786	833
1978	1,017	914	977	486	361	356	313	279	261	232	288	303
1979	257	247	308	400	344	291	336	326	259	302	520	822
1980	961	632	382	353	492	407	333	344	287	238	258	282
1981	261	266	440	526	269	258	408	384	283	483	839	926
1982	801	609	236	316	296	301	203	183	225	235	224	206
1983	193	213	302	428	327	252	207	205	221	254	208	190
1984	197	213	242	302	255	226	316	349	268	257	274	360
1985	256	232	221	225	241	258	403	384	283	472	826	977
1986	926	803	840	485	404	318	262	274	268	256	282	234
1987	247	278	337	624	362	299	410	410	291	445	682	838
1988	955	931	841	392	379	381	429	421	344	475	826	1,034
1989	1,045	958	1,017	594	496	408	386	309	244	488	845	946
1990	852	802	935	798	347	301	310	326	428	868	1,067	1,054
1991	1,039	752	1,083	1,089	619	472	462	358	451	867	964	904
Avg	644	559	571	529	386	333	347	338	332	461	612	682
W/AN/BN	622	519	470	396	354	307	281	280	256	253	294	342
D/C	662	591	650	633	412	353	398	384	392	622	860	946

Percent (%) Change from Future Without Project for Old River at Rock Slough Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

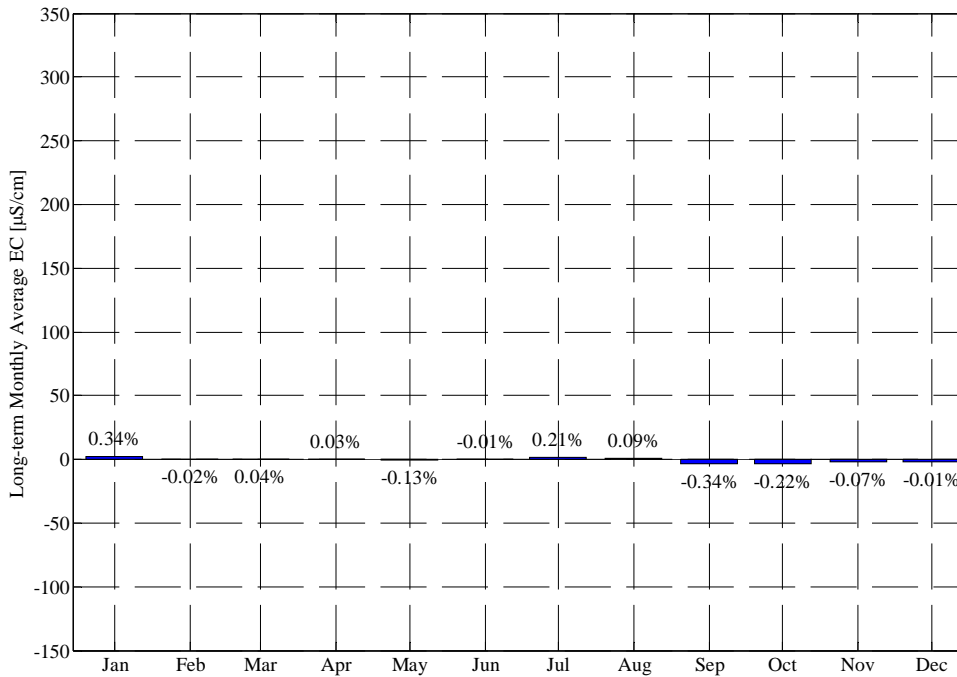
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	0.1%	-0.3%	-0.8%	-0.2%	-0.1%	-0.4%	-0.1%	0.1%	0.1%	0.3%	-1.0%
1977	-2.9%	-1.7%	2.3%	1.2%	-0.2%	-0.3%	-0.2%	-0.1%	0.0%	0.1%	-0.1%	-0.4%
1978	0.1%	1.0%	0.4%	0.1%	0.0%	-0.1%	-0.1%	0.8%	0.2%	0.1%	0.2%	0.2%
1979	-0.2%	0.3%	2.0%	1.1%	-0.1%	-0.1%	-0.2%	-0.3%	-0.1%	0.0%	0.0%	0.1%
1980	0.0%	1.5%	1.2%	1.3%	-0.9%	-4.6%	-1.7%	-0.5%	0.0%	0.1%	0.1%	0.1%
1981	0.1%	0.2%	0.0%	0.0%	0.0%	0.1%	-0.1%	-0.5%	-0.1%	-0.1%	-0.2%	0.0%
1982	0.8%	0.6%	0.0%	0.1%	0.2%	0.0%	0.5%	-0.1%	0.0%	0.0%	0.0%	-0.2%
1983	0.2%	0.1%	-0.5%	1.4%	-0.1%	-0.1%	0.5%	-1.1%	-0.3%	-0.2%	-0.1%	0.0%
1984	0.1%	-0.2%	-0.1%	-0.5%	-0.2%	0.8%	0.2%	-0.6%	-0.1%	-0.1%	0.0%	0.0%
1985	0.1%	1.3%	0.9%	0.2%	0.1%	0.9%	0.5%	0.1%	0.0%	-0.1%	0.4%	0.8%
1986	0.8%	0.3%	0.2%	0.6%	0.1%	-0.7%	0.5%	0.6%	0.2%	0.0%	-0.2%	-0.4%
1987	0.5%	0.0%	-0.1%	0.0%	0.0%	0.9%	0.7%	-0.2%	0.0%	1.1%	0.8%	-0.3%
1988	-0.4%	-0.5%	-1.0%	-0.3%	-0.1%	3.2%	1.1%	0.5%	0.0%	1.2%	0.2%	-3.7%
1989	-3.2%	-4.3%	-5.4%	1.2%	1.2%	0.4%	-0.6%	-0.3%	0.0%	0.2%	-0.2%	-0.8%
1990	0.2%	0.2%	0.0%	-0.1%	-0.1%	0.1%	0.0%	-0.2%	0.0%	0.2%	-0.1%	-0.2%
1991	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	-0.1%	0.0%	0.1%	0.7%	0.5%	0.3%
Avg	-0.2%	-0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.2%	0.1%	-0.3%
W/AN/BN	0.3%	0.5%	0.5%	0.6%	-0.1%	-0.7%	-0.1%	-0.2%	0.0%	0.0%	0.0%	0.0%
D/C	-0.6%	-0.5%	-0.4%	0.2%	0.1%	0.6%	0.1%	-0.1%	0.0%	0.4%	0.2%	-0.6%

Old River at Rock Slough Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



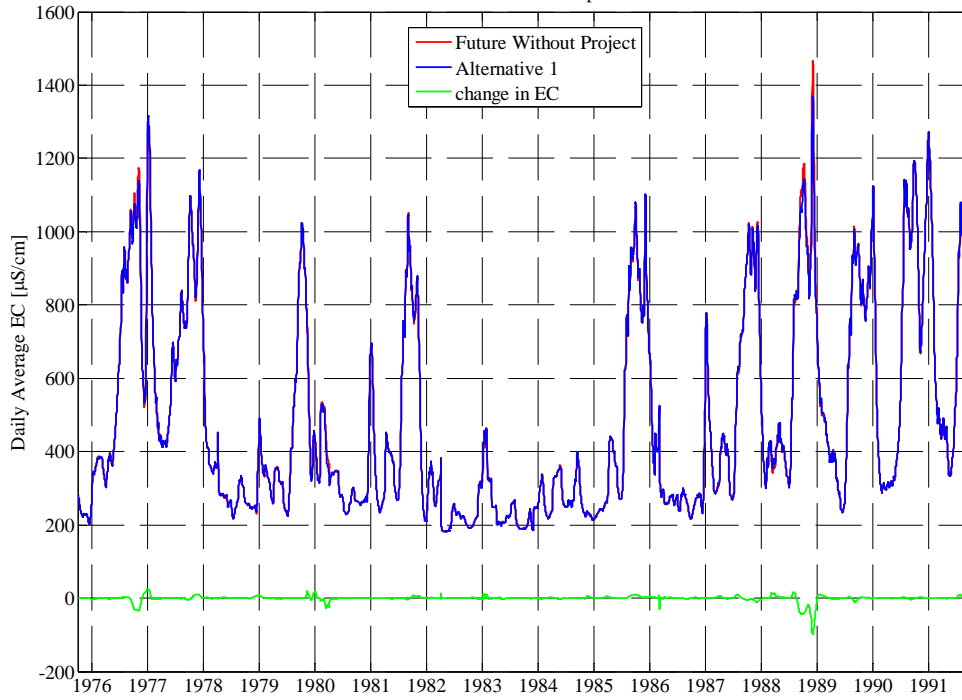
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River at Rock Slough Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



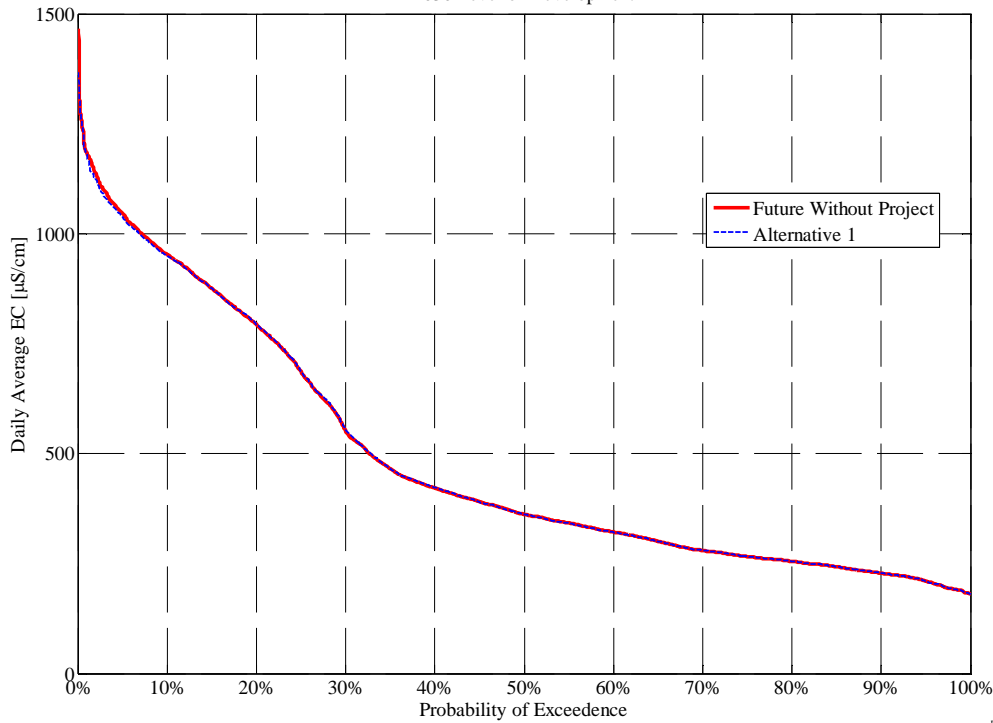
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River at Rock Slough Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River at Rock Slough Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

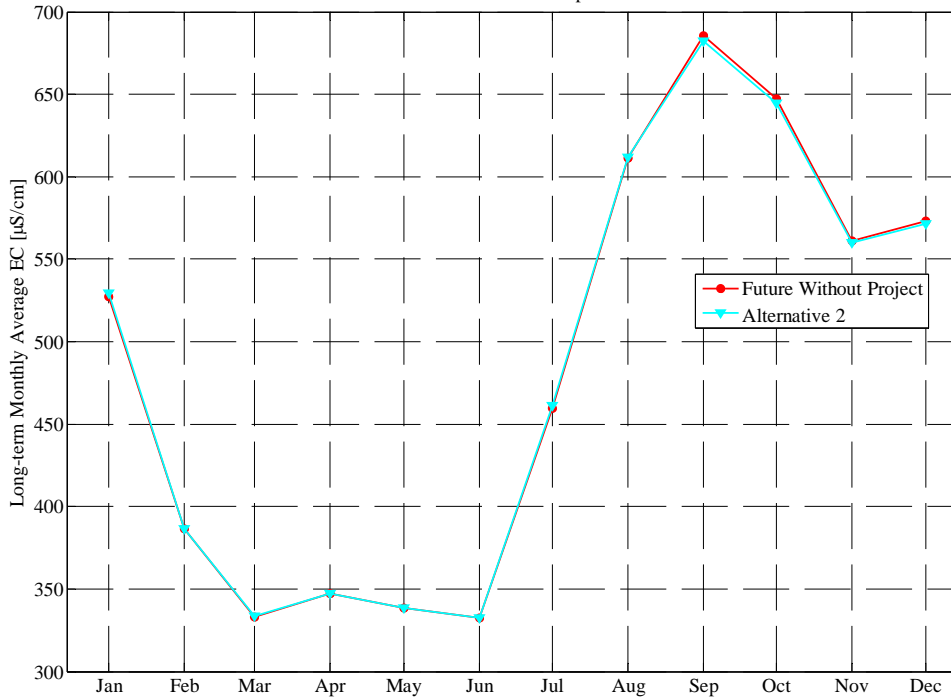
**Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	248	228	223	344	383	349	356	392	558	833	901	1,002
1977	1,055	869	754	1,111	611	453	422	468	643	672	786	833
1978	1,018	916	978	486	361	356	313	279	261	232	288	303
1979	257	247	308	400	344	291	336	326	259	302	520	822
1980	961	632	382	353	494	418	336	344	287	238	258	282
1981	261	266	441	526	269	258	408	384	283	483	839	926
1982	801	613	237	316	296	301	203	183	225	235	224	206
1983	193	213	302	428	327	252	208	207	222	256	208	189
1984	198	213	242	299	254	226	316	349	269	257	274	360
1985	256	232	221	225	241	258	403	384	283	472	827	978
1986	927	803	840	485	404	320	261	274	268	256	282	234
1987	247	278	337	624	362	296	406	409	290	445	682	838
1988	955	931	841	392	379	381	429	421	344	475	826	1,034
1989	1,046	961	1,019	596	496	408	386	309	244	488	845	946
1990	852	802	935	798	347	301	310	326	428	868	1,067	1,054
1991	1,039	751	1,082	1,089	619	472	462	358	451	866	964	903
Avg	645	560	571	529	387	334	347	338	332	461	612	682
W/AN/BN	622	520	470	395	354	309	282	280	256	254	293	342
D/C	662	591	650	634	412	353	398	383	392	622	860	946

**Percent (%) Change from Future Without Project for Old River at Rock Slough Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

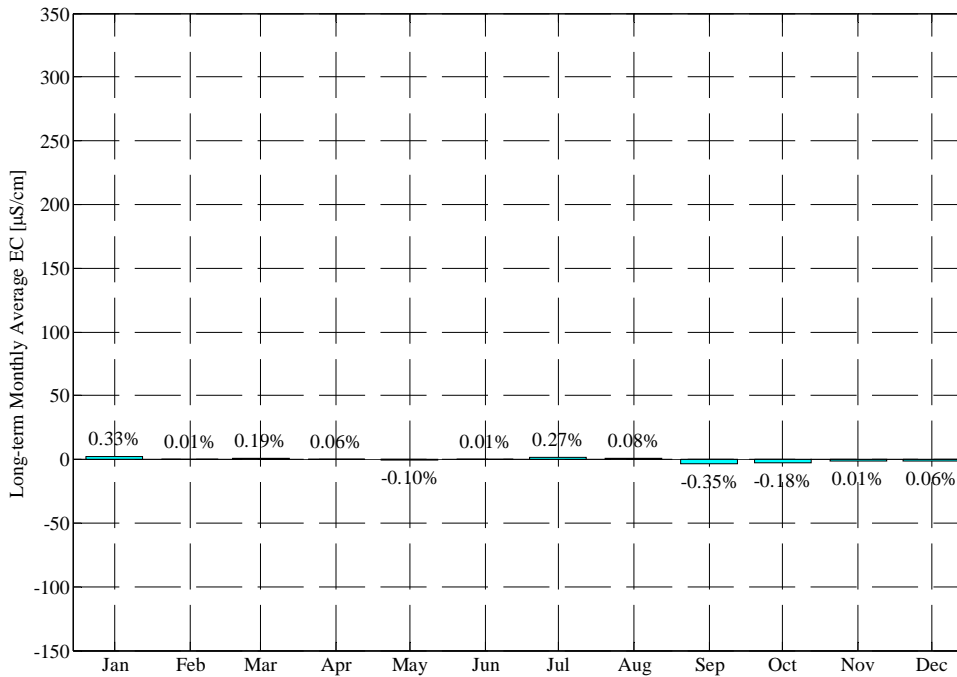
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.1%	0.1%	-0.1%	-0.5%	-0.1%	0.0%	-0.4%	-0.1%	0.1%	0.1%	0.2%	-1.1%
1977	-3.0%	-1.7%	2.6%	1.3%	-0.1%	-0.3%	-0.2%	-0.1%	0.0%	0.0%	-0.1%	-0.5%
1978	0.2%	1.3%	0.6%	0.1%	0.0%	0.0%	-0.1%	0.8%	0.2%	0.1%	0.2%	0.2%
1979	-0.2%	0.3%	2.0%	1.1%	-0.1%	-0.1%	-0.2%	-0.3%	-0.1%	0.0%	0.0%	0.1%
1980	0.0%	1.5%	1.2%	1.3%	-0.4%	-2.0%	-0.8%	-0.4%	0.0%	0.1%	0.1%	0.1%
1981	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	-0.1%	-0.5%	-0.1%	-0.1%	-0.2%	0.1%
1982	0.7%	1.2%	0.2%	0.1%	0.2%	0.0%	0.6%	-0.1%	-0.1%	0.0%	0.0%	-0.1%
1983	0.2%	0.1%	-0.4%	1.4%	-0.1%	-0.1%	1.0%	-0.2%	0.1%	0.8%	-0.2%	-0.1%
1984	0.6%	-0.3%	-0.1%	-1.5%	-0.6%	0.8%	0.2%	-0.6%	-0.1%	-0.1%	0.0%	0.0%
1985	0.1%	1.4%	1.0%	0.2%	0.1%	0.9%	0.5%	0.1%	0.0%	0.0%	0.4%	1.0%
1986	0.9%	0.4%	0.3%	0.7%	0.1%	-0.1%	0.3%	0.6%	0.1%	0.0%	-0.2%	-0.4%
1987	0.4%	-0.1%	-0.1%	0.0%	0.0%	0.0%	-0.2%	-0.5%	-0.1%	1.1%	0.8%	-0.3%
1988	-0.4%	-0.5%	-1.0%	-0.3%	-0.1%	3.2%	1.1%	0.5%	0.0%	1.2%	0.2%	-3.7%
1989	-3.1%	-4.0%	-5.2%	1.5%	1.3%	0.4%	-0.6%	-0.3%	0.0%	0.2%	-0.2%	-0.8%
1990	0.2%	0.2%	0.0%	-0.1%	-0.1%	0.1%	0.0%	-0.2%	0.0%	0.2%	0.0%	-0.2%
1991	0.0%	0.2%	0.1%	0.0%	0.0%	0.2%	-0.1%	0.0%	0.1%	0.6%	0.4%	0.3%
Avg	-0.2%	0.0%	0.1%	0.3%	0.0%	0.2%	0.1%	-0.1%	0.0%	0.3%	0.1%	-0.3%
W/AN/BN	0.4%	0.6%	0.5%	0.4%	-0.1%	-0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	-0.1%
D/C	-0.6%	-0.5%	-0.3%	0.2%	0.1%	0.5%	0.0%	-0.1%	0.0%	0.4%	0.2%	-0.6%

Old River at Rock Slough Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



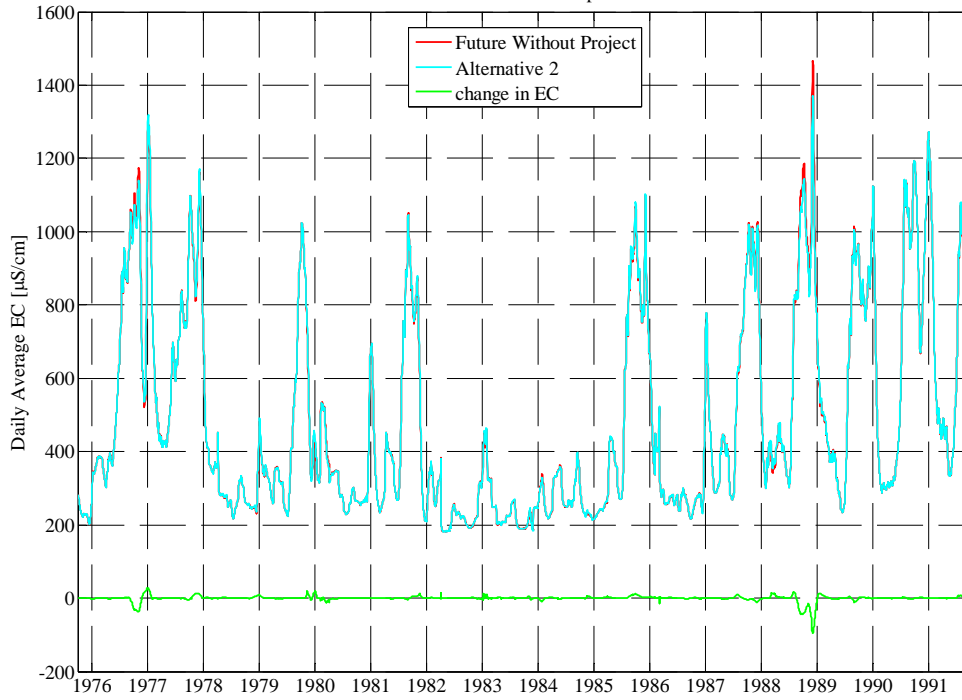
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River at Rock Slough Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



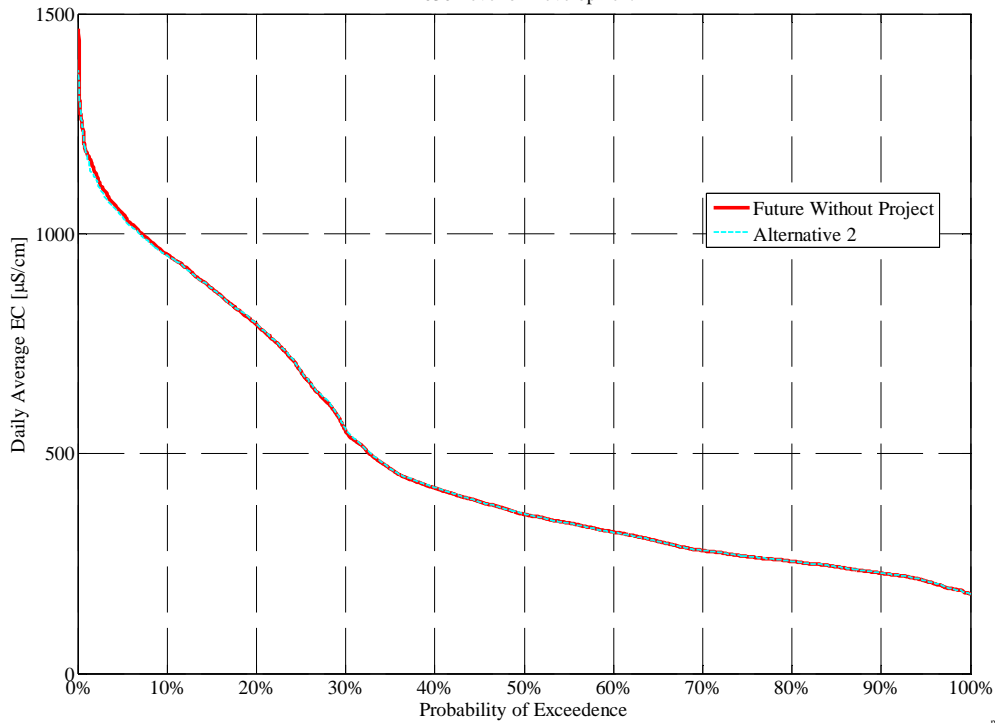
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 07-Jan-2010 DS

Old River at Rock Slough Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River at Rock Slough Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

**Old River at Rock Slough Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S/cm}$)**

Alternative 4

2030 Level of Development

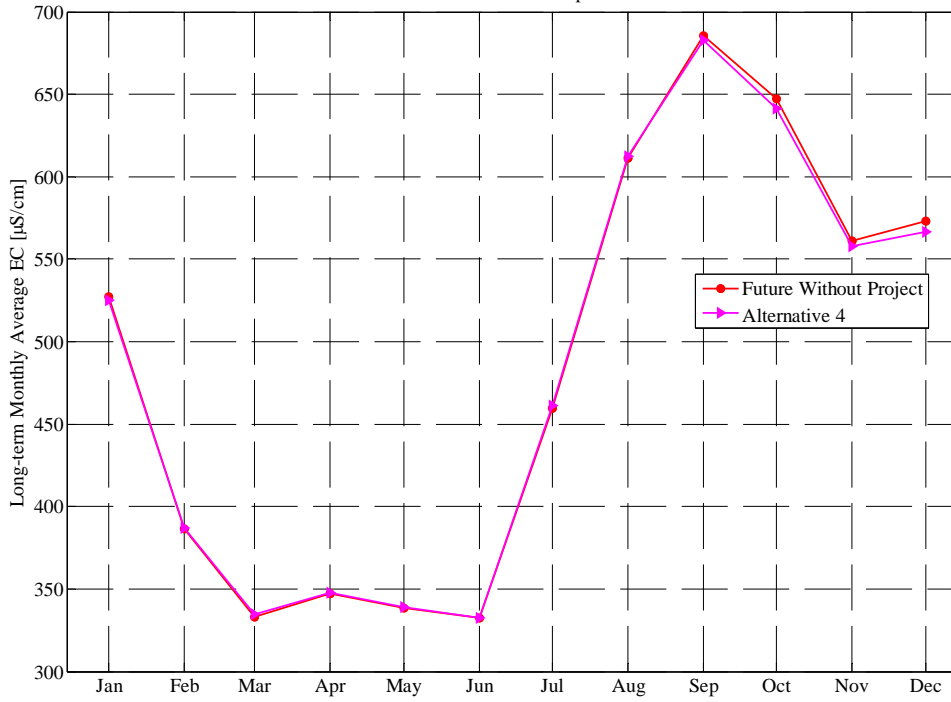
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	248	227	224	346	383	349	357	392	557	832	899	1,000
1977	1,053	866	719	1,066	625	465	426	470	647	681	792	836
1978	1,019	910	948	481	361	357	313	277	261	232	287	302
1979	257	247	317	411	346	292	337	326	258	304	537	852
1980	976	641	373	347	493	425	339	345	286	238	258	282
1981	261	265	441	526	269	258	408	386	284	483	842	926
1982	792	605	236	315	296	301	202	183	225	235	224	206
1983	193	213	303	422	327	252	206	207	222	254	209	190
1984	197	214	242	304	256	224	316	351	269	257	275	360
1985	255	229	219	224	241	255	401	384	283	472	823	968
1986	917	800	838	484	404	324	261	273	268	256	281	234
1987	247	274	333	622	361	296	407	412	291	439	679	847
1988	963	937	848	393	379	381	430	422	344	468	812	1,013
1989	1,001	942	1,004	575	487	405	388	310	244	487	847	950
1990	846	799	932	794	346	301	310	326	428	869	1,065	1,051
1991	1,039	754	1,084	1,089	619	472	462	359	452	871	967	905
Avg	642	558	566	525	387	335	348	339	332	461	612	683
W/AN/BN	622	519	465	395	355	311	282	280	256	254	296	347
D/C	657	588	645	626	412	354	399	384	392	622	858	944

**Percent (%) Change from Future Without Project for Old River at Rock Slough Salinity
(Alternative 4 - Future Without Project) / Future Without Project**

2030 Level of Development

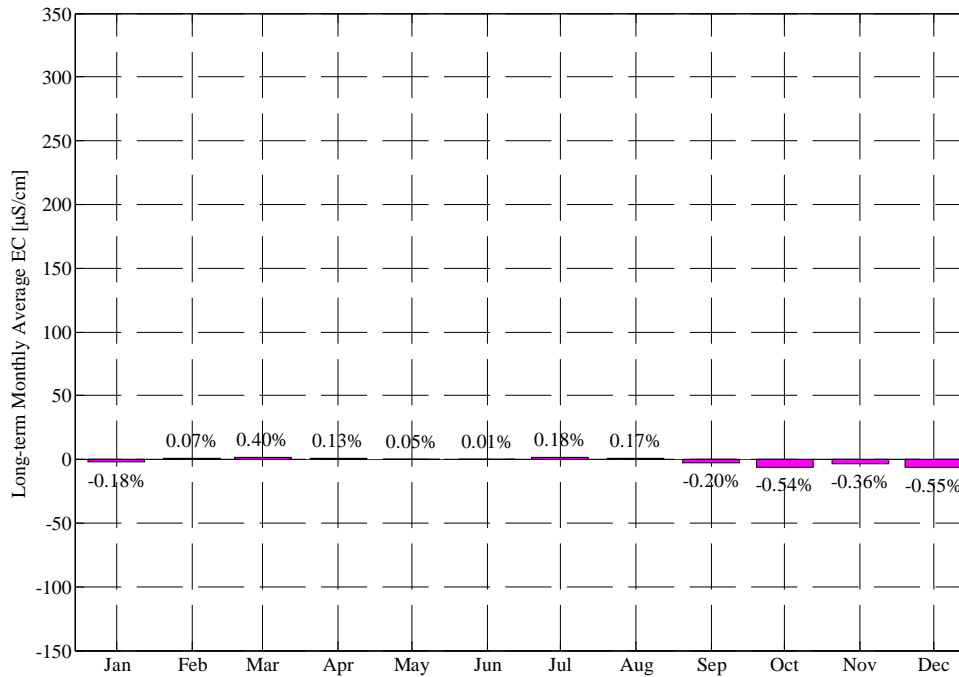
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-1.4%
1977	-3.2%	-2.1%	-2.2%	-2.8%	2.3%	2.4%	0.8%	0.4%	0.6%	1.3%	0.6%	-0.1%
1978	0.4%	0.6%	-2.5%	-0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	-0.4%	0.1%	5.0%	3.9%	0.4%	0.1%	0.1%	-0.1%	-0.3%	0.7%	3.2%	3.8%
1980	1.6%	3.0%	-1.3%	-0.5%	-0.6%	-0.4%	-0.1%	-0.3%	-0.3%	0.0%	0.1%	0.0%
1981	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.1%	0.0%
1982	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
1986	-0.1%	0.0%	0.0%	0.4%	0.1%	1.2%	0.1%	0.0%	0.0%	0.0%	-0.4%	-0.3%
1987	0.4%	-1.7%	-1.1%	-0.4%	-0.1%	-0.1%	0.0%	0.0%	0.0%	-0.2%	0.4%	0.8%
1988	0.5%	0.1%	-0.1%	0.0%	0.0%	3.2%	1.3%	0.8%	0.0%	-0.1%	-1.5%	-5.6%
1989	-7.3%	-6.0%	-6.6%	-2.1%	-0.6%	-0.2%	-0.1%	0.0%	0.0%	-0.1%	0.0%	-0.4%
1990	-0.5%	-0.2%	-0.3%	-0.6%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.2%	-0.2%	-0.5%
1991	0.0%	0.5%	0.2%	0.1%	0.0%	0.2%	0.1%	0.1%	0.2%	1.1%	0.7%	0.5%
Avg	-0.5%	-0.4%	-0.6%	-0.2%	0.1%	0.4%	0.1%	0.0%	0.0%	0.2%	0.2%	-0.2%
W/AN/BN	0.2%	0.5%	0.2%	0.4%	0.0%	0.1%	0.0%	-0.1%	-0.1%	0.1%	0.4%	0.5%
D/C	-1.1%	-1.0%	-1.1%	-0.6%	0.2%	0.6%	0.2%	0.1%	0.1%	0.2%	0.0%	-0.8%

Old River at Rock Slough Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

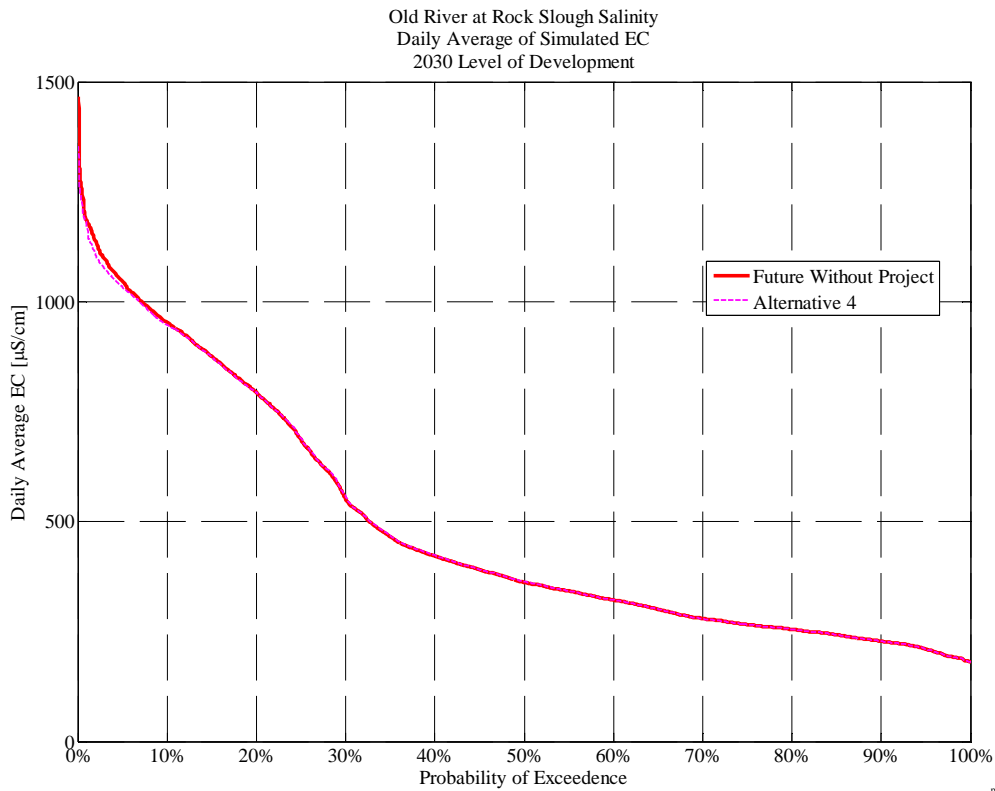
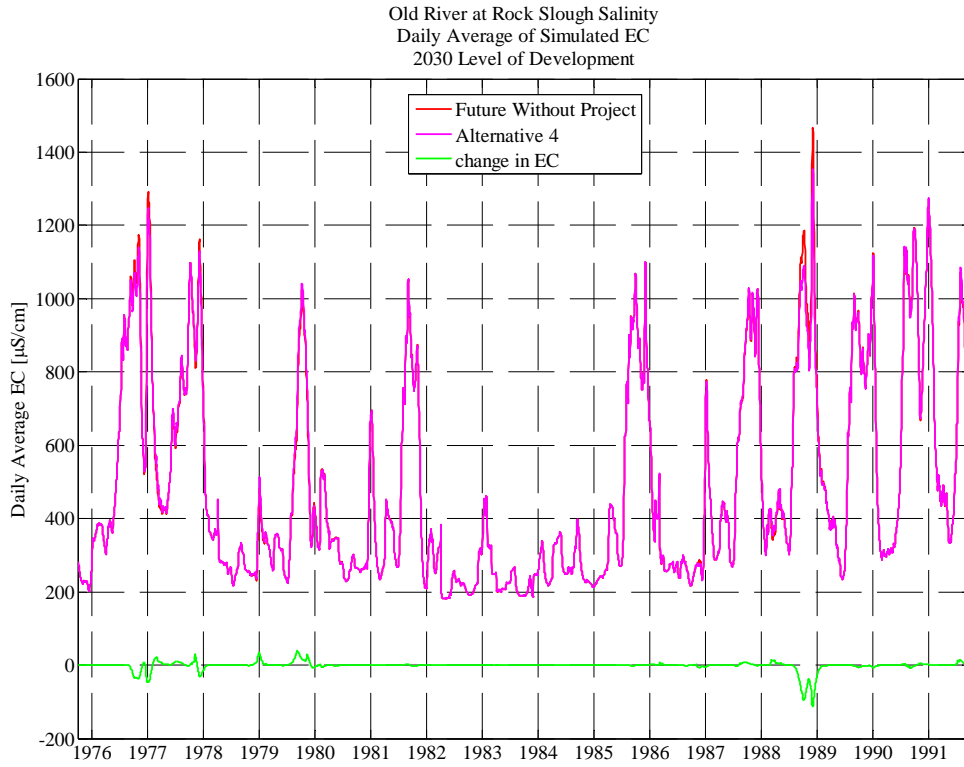


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 07-Jan-2010 DS

Old River at Rock Slough Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



Barker Slough at North Bay Aqueduct

Future Without Project

**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	191	191	205	213	234	234	221	214	213	211	205	198
1977	198	202	200	206	223	231	238	238	248	223	216	208
1978	207	207	236	322	588	549	525	312	220	203	200	201
1979	202	206	208	265	462	525	341	247	211	203	199	200
1980	198	198	218	307	524	600	352	252	210	201	199	199
1981	200	207	207	229	295	265	259	226	212	214	199	196
1982	202	207	243	372	570	471	541	352	224	201	200	197
1983	198	231	325	364	575	707	664	354	229	196	196	197
1984	198	203	275	409	289	254	227	211	204	200	197	200
1985	199	224	279	289	295	278	275	228	211	208	207	207
1986	205	206	232	308	431	604	498	295	219	205	200	200
1987	201	204	207	216	248	268	272	270	224	209	205	208
1988	211	216	214	267	358	380	340	236	214	210	206	207
1989	208	223	212	220	233	254	256	229	210	203	205	205
1990	204	200	203	217	246	325	325	265	215	210	206	206
1991	214	212	215	216	243	253	339	267	218	207	206	207
Avg	202	209	230	276	363	387	355	262	218	207	203	202
W/AN/BN	201	208	248	335	491	530	450	289	217	201	199	199
D/C	203	209	216	230	264	276	281	242	218	211	206	204

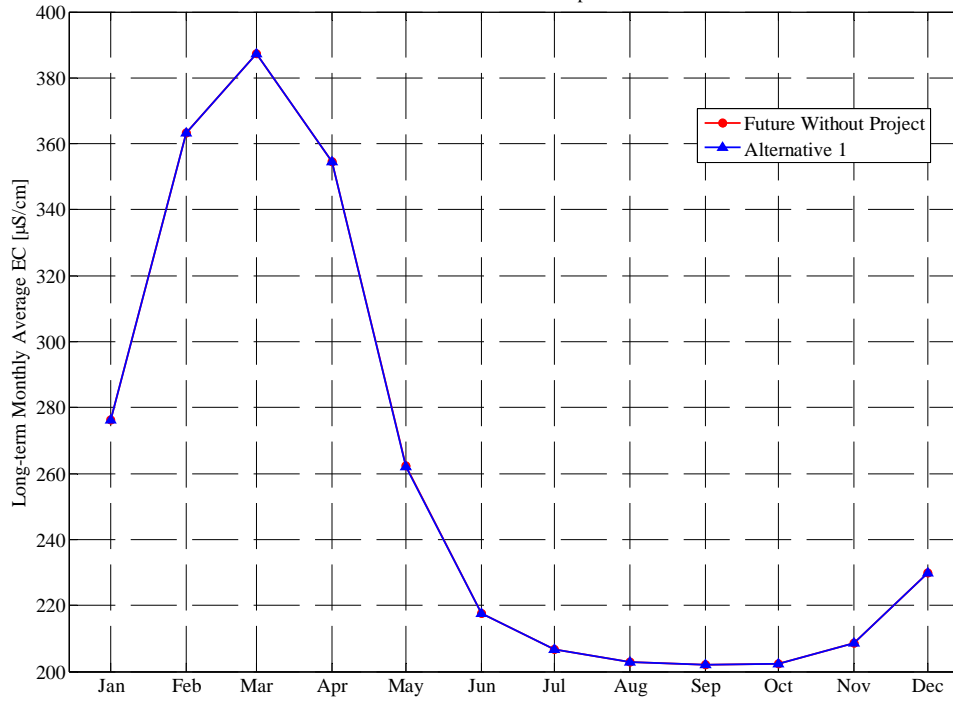
Alternative 1**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 1****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	191	191	205	213	234	234	221	214	213	212	205	198
1977	198	202	200	205	223	231	237	238	248	223	216	208
1978	207	207	236	322	592	548	524	312	220	203	200	201
1979	202	206	208	265	462	525	341	247	211	203	199	200
1980	198	198	218	307	524	600	353	252	210	201	199	199
1981	200	207	207	229	295	265	259	226	212	214	199	196
1982	202	207	243	373	570	471	542	352	224	201	200	197
1983	198	231	325	364	575	707	664	354	229	196	196	197
1984	198	203	275	409	288	253	227	211	204	200	197	200
1985	199	224	279	289	295	278	275	228	211	208	207	207
1986	205	206	232	308	431	604	498	295	219	205	200	200
1987	201	204	207	216	248	268	272	270	224	209	205	208
1988	211	216	214	267	358	380	340	236	214	210	206	208
1989	212	222	212	221	233	254	256	229	210	203	205	205
1990	204	200	203	217	245	325	325	265	215	210	206	206
1991	214	212	215	216	243	253	340	267	218	207	206	207
Avg	202	208	230	276	363	387	355	262	218	207	203	202
W/AN/BN	201	208	248	335	492	530	450	289	217	201	199	199
D/C	203	209	216	230	264	276	281	241	218	211	206	205

**Percent (%) Change from Future Without Project for Barker Slough at North Bay Aqueduct
(Alternative 1 - Future Without Project) / Future Without Project****2030 Level of Development**

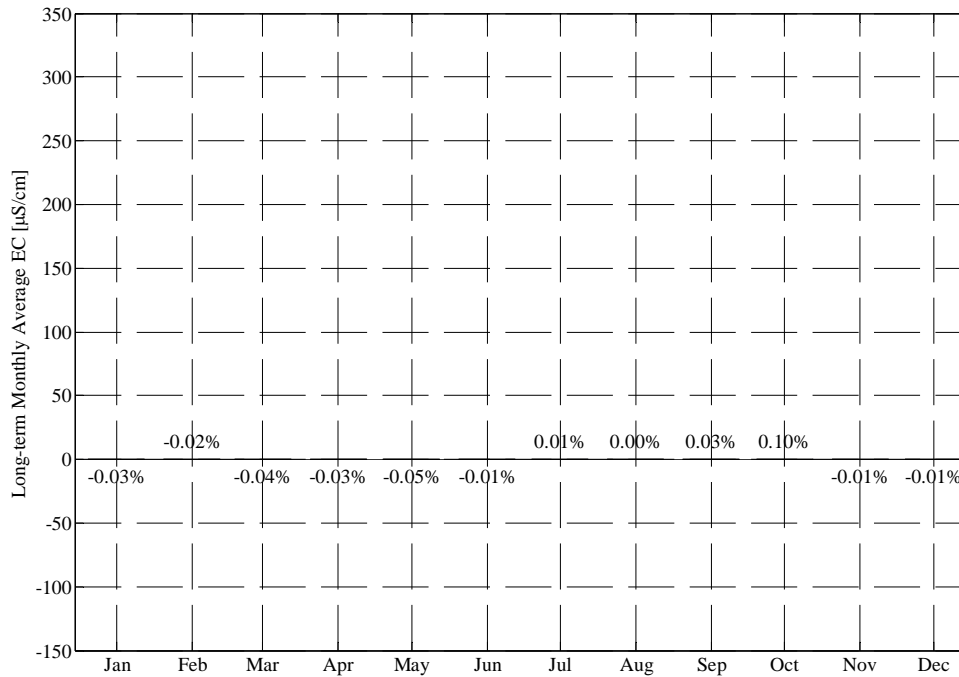
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1977	-0.2%	-0.1%	-0.2%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.1%	0.1%	0.0%	0.0%
1978	0.1%	0.1%	0.1%	0.0%	0.6%	-0.2%	-0.3%	-0.2%	-0.1%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.2%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
1989	1.5%	-0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	-0.1%	-0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.2%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%

Barker Slough at North Bay Aqueduct Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



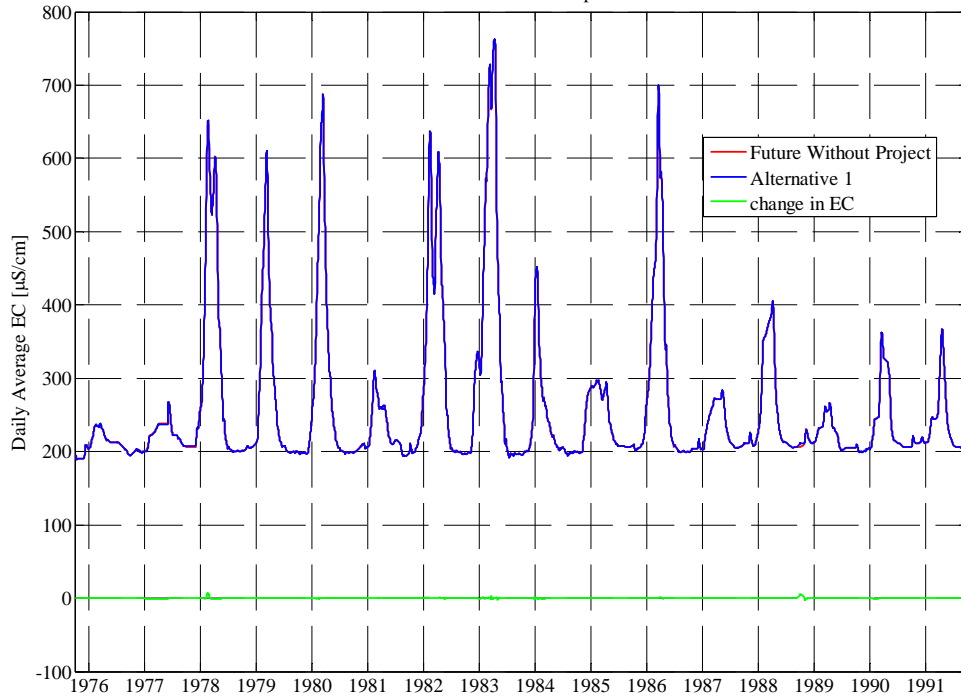
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Barker Slough at North Bay Aqueduct Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



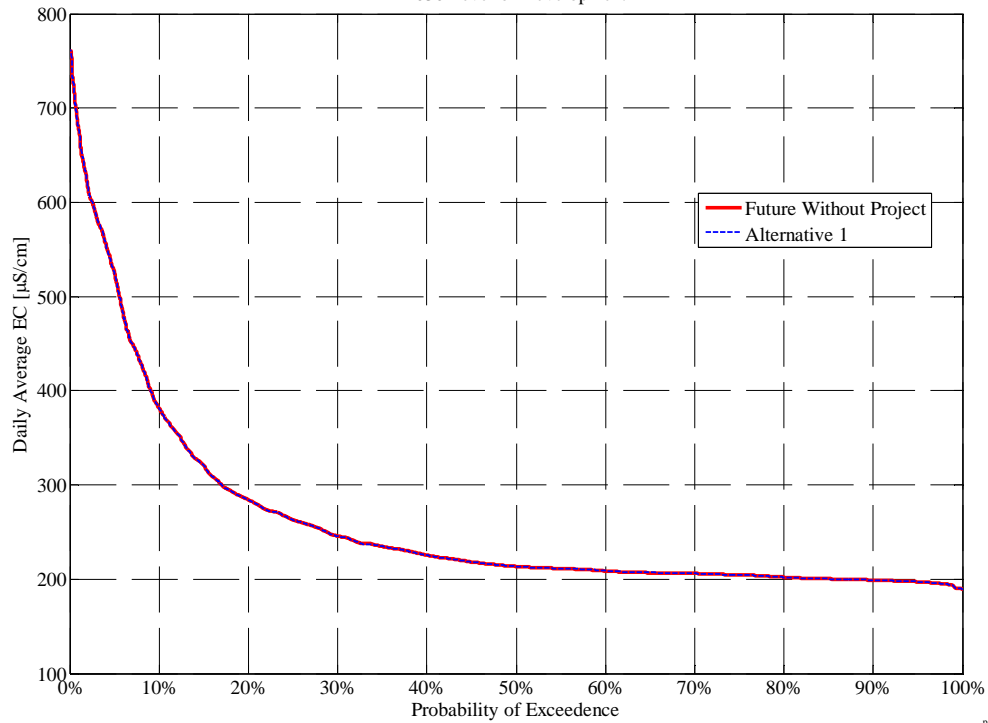
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Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2030 Level of Development



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07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 2

2030 Level of Development

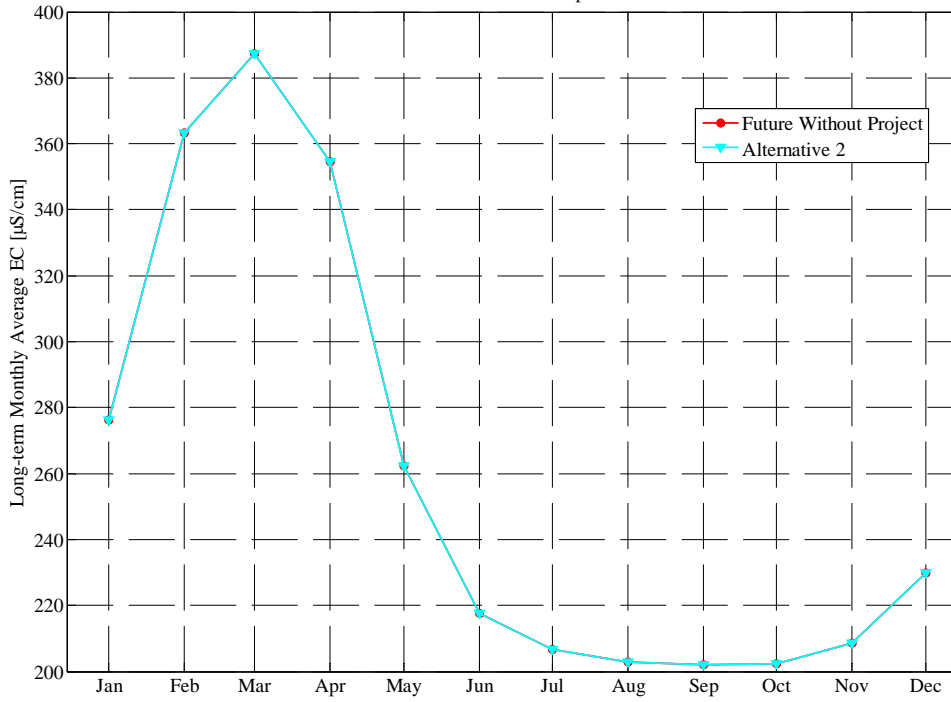
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	191	191	205	213	234	234	221	214	212	212	205	198
1977	198	202	200	205	222	231	238	238	248	222	216	208
1978	207	207	235	320	591	549	524	312	220	203	200	201
1979	202	206	208	265	462	525	341	247	211	203	199	200
1980	198	198	218	307	524	600	353	252	210	201	199	199
1981	200	207	207	229	295	265	259	226	212	214	199	196
1982	202	207	243	373	570	471	542	352	224	201	200	197
1983	198	231	325	364	575	707	664	354	229	196	196	197
1984	198	202	275	409	288	253	227	211	204	200	197	200
1985	199	224	279	289	295	278	275	228	211	208	207	207
1986	205	206	232	308	431	604	498	295	219	205	200	200
1987	201	204	207	216	248	268	272	270	224	209	205	208
1988	211	216	214	267	358	380	340	236	214	210	206	208
1989	212	222	212	221	233	254	256	229	210	203	205	205
1990	204	200	203	217	245	325	325	265	215	210	206	206
1991	214	212	215	216	243	253	340	267	218	207	206	207
Avg	202	208	230	276	363	387	355	262	218	207	203	202
W/AN/BN	201	208	248	335	492	530	450	289	217	201	199	199
D/C	203	209	216	230	264	276	281	241	218	211	206	205

**Percent (%) Change from Future Without Project for Barker Slough at North Bay
(Alternative 2 - Future Without Project) / Future Without Project**

2030 Level of Development

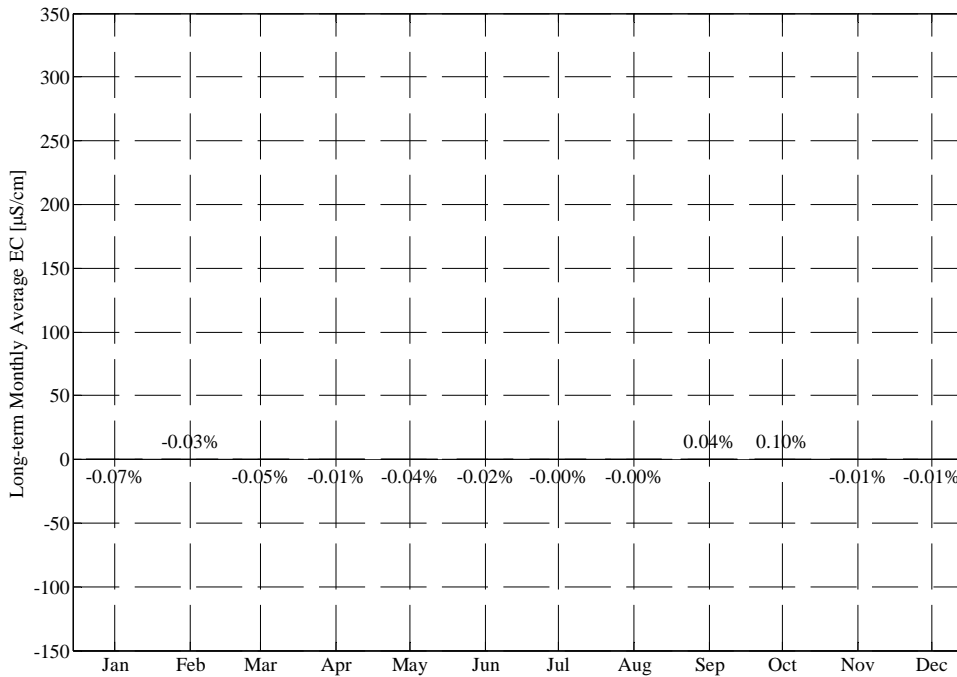
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.2%	0.2%	0.0%	-0.1%	0.1%	0.0%	0.1%
1977	-0.1%	0.0%	-0.2%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	0.0%	0.0%	0.0%
1978	0.1%	0.1%	-0.1%	-0.5%	0.6%	-0.2%	-0.2%	-0.2%	-0.1%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.2%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
1989	1.5%	-0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	-0.1%	-0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
D/C	0.2%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%

Barker Slough at North Bay Aqueduct Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



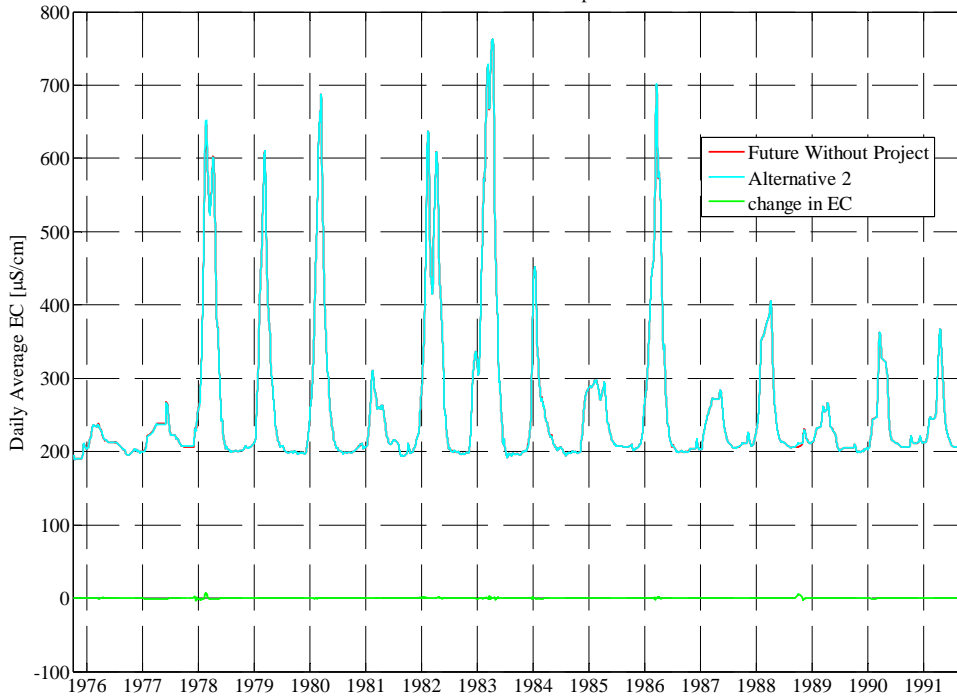
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 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



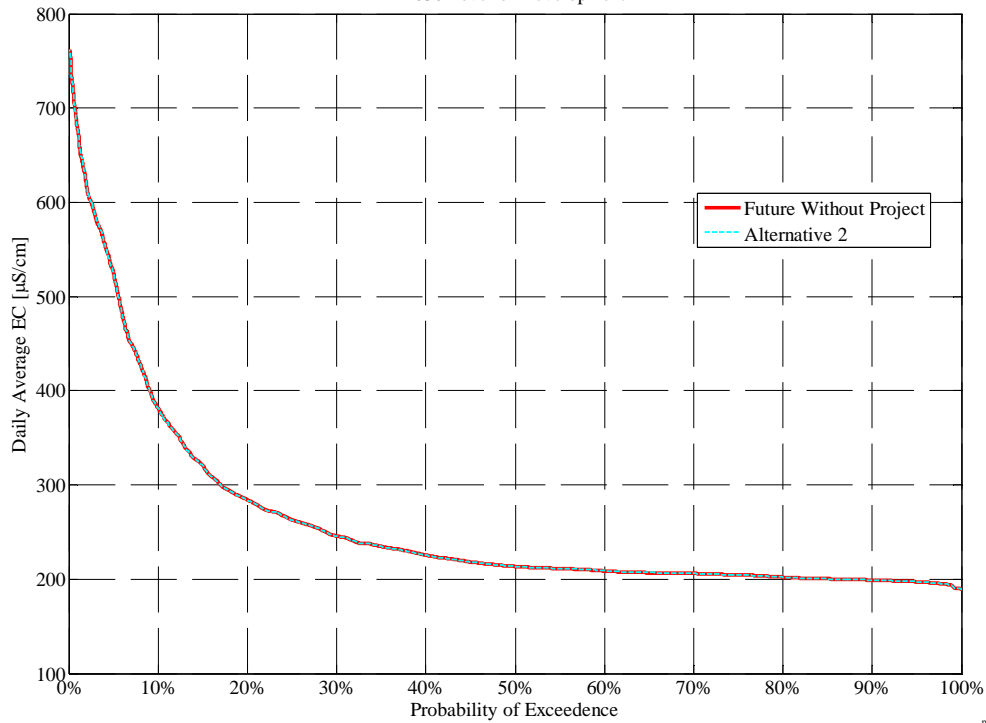
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 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

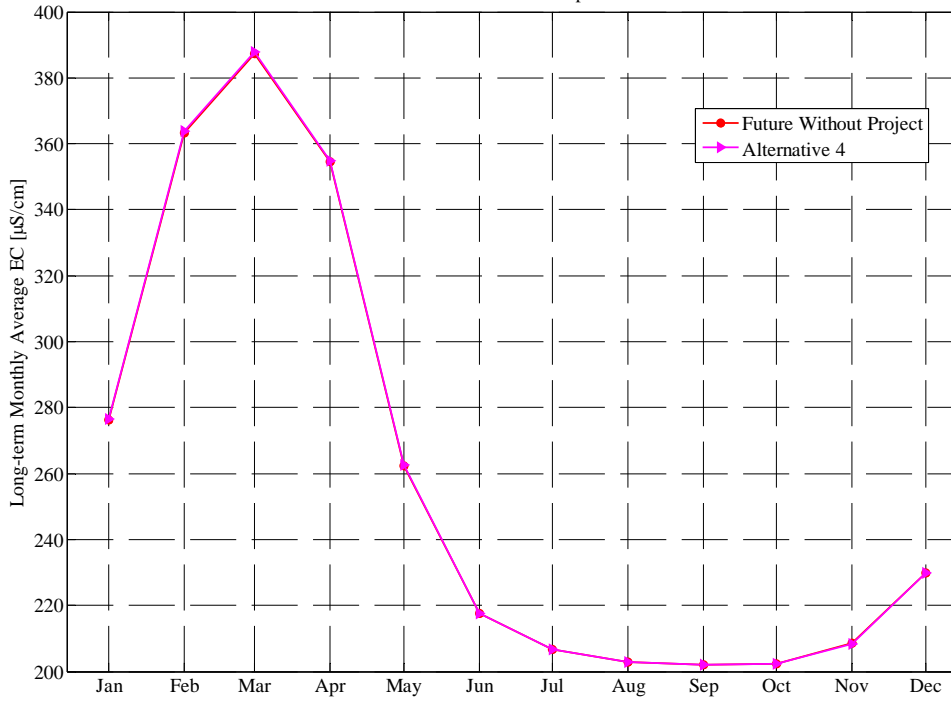
Alternative 4**Barker Slough at North Bay Aqueduct Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 4****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	191	191	205	213	234	234	221	214	213	211	205	198
1977	198	202	200	212	232	237	241	241	248	223	216	208
1978	207	207	235	321	588	550	525	312	220	203	200	201
1979	202	206	208	265	462	525	341	247	211	203	199	200
1980	198	198	218	307	524	600	352	252	210	201	199	199
1981	200	207	207	229	295	265	259	226	212	214	199	196
1982	202	207	243	372	570	471	541	352	224	201	200	197
1983	198	231	325	364	575	707	664	354	229	196	196	197
1984	198	203	275	409	289	254	227	211	204	200	197	200
1985	199	224	279	289	295	278	275	228	211	208	207	207
1986	205	206	232	308	431	604	499	295	219	205	200	200
1987	201	205	207	216	248	268	272	270	224	209	205	207
1988	211	216	214	267	358	380	340	236	214	210	206	208
1989	212	222	212	221	233	254	256	229	210	203	205	205
1990	204	200	203	217	246	325	325	265	215	210	206	206
1991	214	212	215	216	243	253	340	267	218	207	206	207
Avg	202	208	230	277	364	388	355	262	218	207	203	202
W/AN/BN	201	208	248	335	491	530	450	289	217	201	199	199
D/C	203	209	216	231	265	277	281	242	218	211	206	205

**Percent (%) Change from Future Without Project for Barker Slough at North Bay
(Alternative 4 - Future Without Project) / Future Without Project****2030 Level of Development**

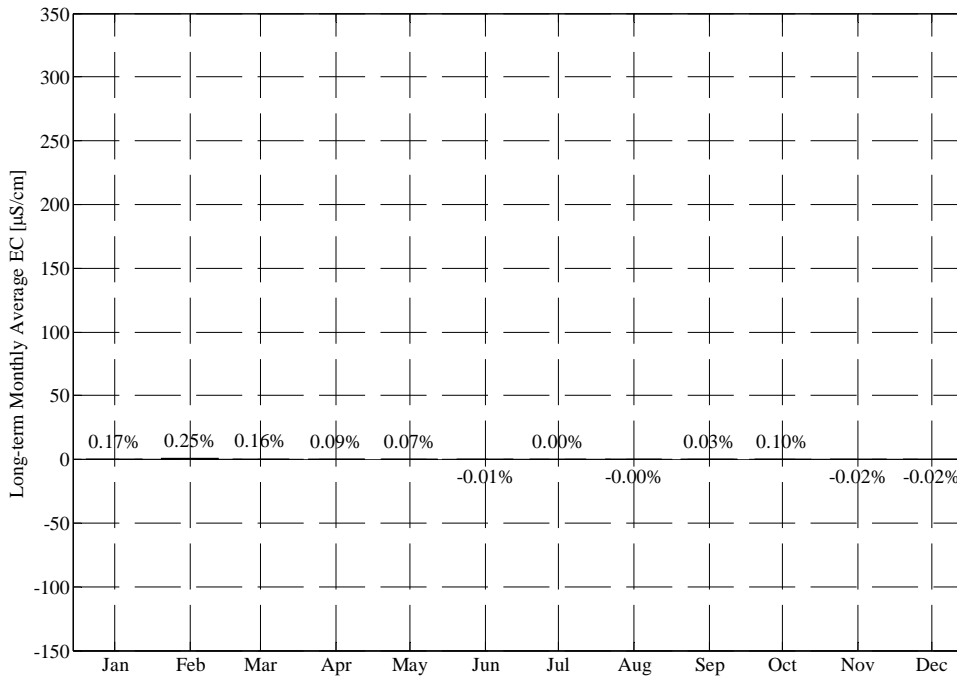
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	-0.1%	2.9%	4.1%	2.4%	1.3%	1.3%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	-0.1%	-0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
1989	1.6%	-0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.3%	-0.2%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.1%	0.0%	0.0%	0.2%	0.3%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.2%	0.0%	0.0%	0.3%	0.5%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%

Barker Slough at North Bay Aqueduct Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



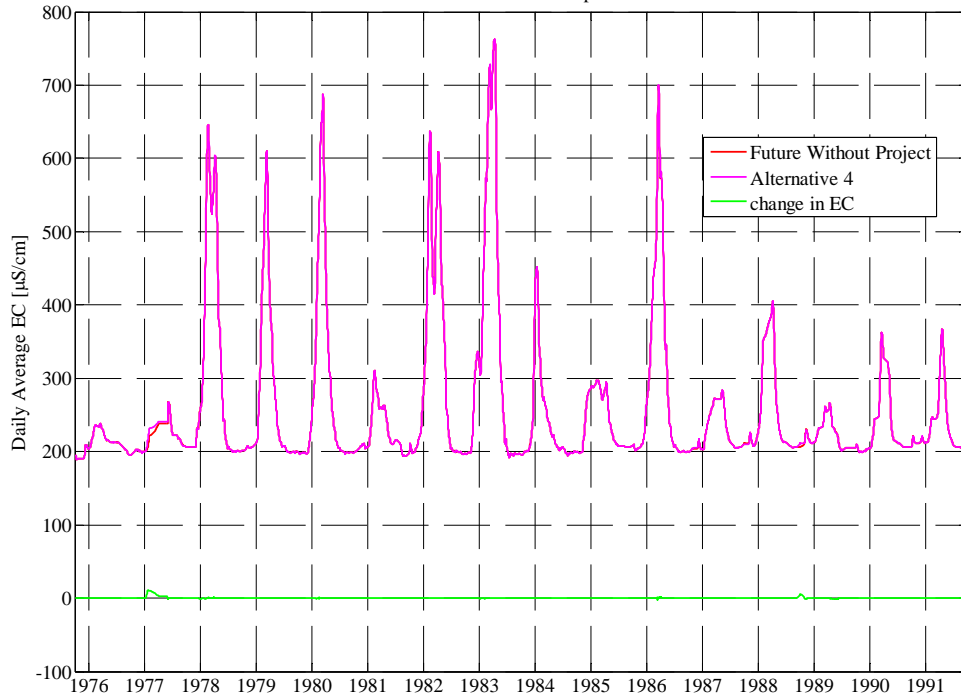
p_lve_wq_feir.m
 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



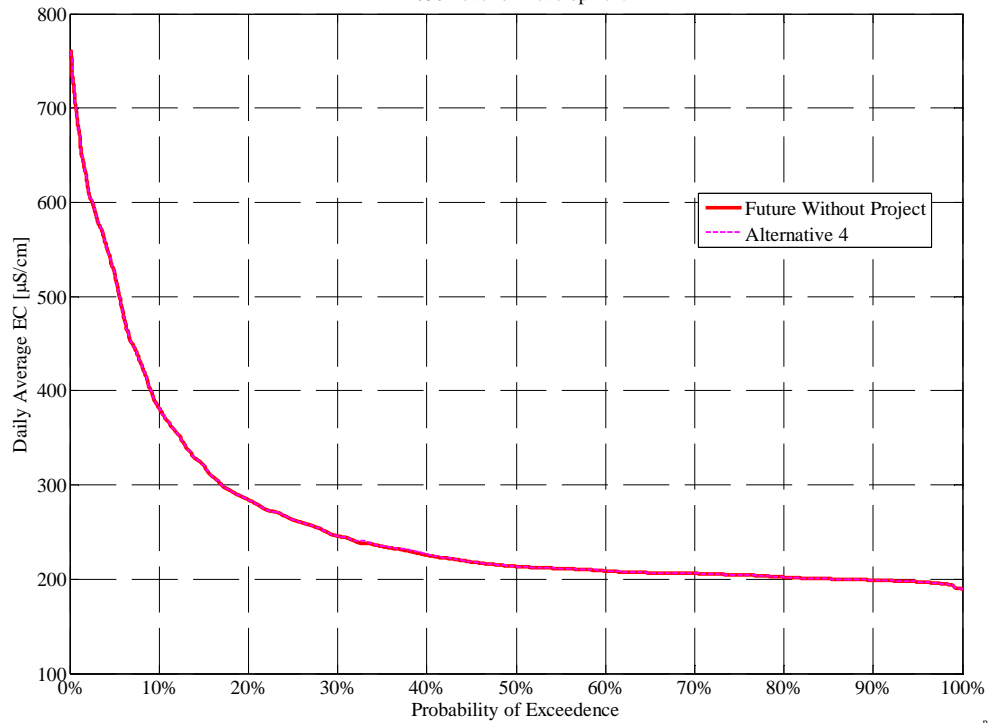
p_lve_wq_feir.m
 07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Barker Slough at North Bay Aqueduct Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake

Future Without Project

**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	197	197	200	205	209	239	227	209	205	201	195	196
1977	199	206	208	208	207	249	242	218	206	200	199	200
1978	203	214	404	743	801	797	603	336	242	205	199	199
1979	200	204	207	646	764	566	359	261	215	203	198	199
1980	201	202	324	640	758	632	384	264	221	204	199	199
1981	199	204	206	440	333	223	270	229	206	202	198	197
1982	198	200	425	709	638	644	716	537	257	206	201	200
1983	199	200	200	666	781	791	661	388	248	208	199	198
1984	198	201	489	550	471	285	247	215	203	201	197	197
1985	198	198	198	198	199	211	288	234	206	201	198	198
1986	199	203	204	530	748	790	545	300	232	206	200	199
1987	200	204	206	207	208	210	259	228	205	199	196	200
1988	204	208	211	571	648	392	298	231	206	200	198	204
1989	210	214	215	215	213	227	257	222	202	198	196	196
1990	197	201	204	205	205	242	293	238	207	201	197	199
1991	205	209	209	210	212	227	315	271	211	199	197	202
Avg	200	204	257	434	462	420	373	274	217	202	198	199
W/AN/BN	200	203	322	641	709	644	502	329	231	205	199	199
D/C	201	205	206	273	271	247	272	231	206	200	197	199

Alternative 1

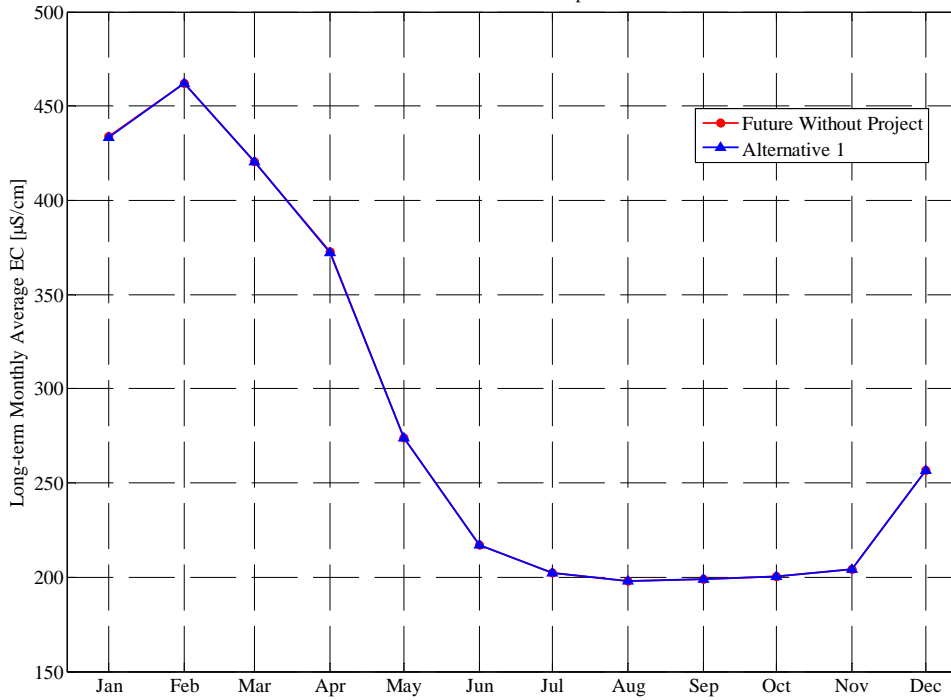
**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	197	197	200	205	209	239	227	209	205	201	195	196
1977	199	206	208	208	208	253	240	218	206	200	199	201
1978	203	214	404	731	792	793	601	335	242	205	199	199
1979	200	204	207	646	765	566	359	261	215	203	198	199
1980	201	202	324	641	759	632	384	265	221	204	199	199
1981	199	204	206	435	333	223	270	229	206	202	198	197
1982	198	200	423	709	638	644	716	537	257	206	201	200
1983	199	199	200	671	781	791	658	388	248	208	199	198
1984	198	201	488	550	471	285	247	215	203	201	197	197
1985	198	198	198	198	199	211	288	234	206	201	198	198
1986	199	203	204	532	748	790	545	300	232	206	200	199
1987	200	204	206	207	208	210	259	228	205	199	196	200
1988	204	208	211	571	648	392	298	231	206	200	198	204
1989	209	213	214	215	213	227	257	222	202	198	196	196
1990	197	201	204	205	205	242	293	238	207	201	197	199
1991	205	209	209	210	212	227	315	271	211	199	197	202
Avg	200	204	257	433	462	420	372	274	217	202	198	199
W/AN/BN	200	203	321	640	708	643	501	329	231	205	199	199
D/C	201	205	206	273	271	247	272	231	206	200	197	199

**Percent (%) Change from Future Without Project for Cache Slough at City of Vallejo Intake
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development**

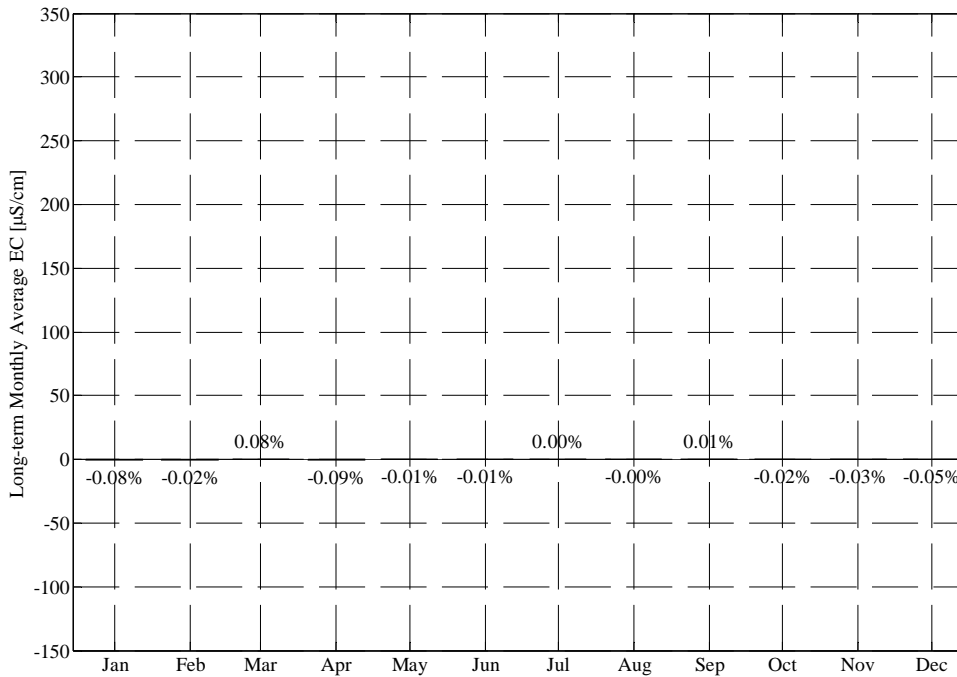
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.2%
1977	0.2%	0.1%	0.0%	0.1%	0.3%	1.7%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.1%
1978	0.0%	-0.2%	0.0%	-1.7%	-1.1%	-0.5%	-0.4%	-0.2%	-0.1%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	-1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	-0.5%	0.1%	0.1%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	-0.3%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1989	-0.5%	-0.4%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	-0.1%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	-0.1%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	-0.1%	0.1%	0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

Cache Slough at City of Vallejo Intake Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



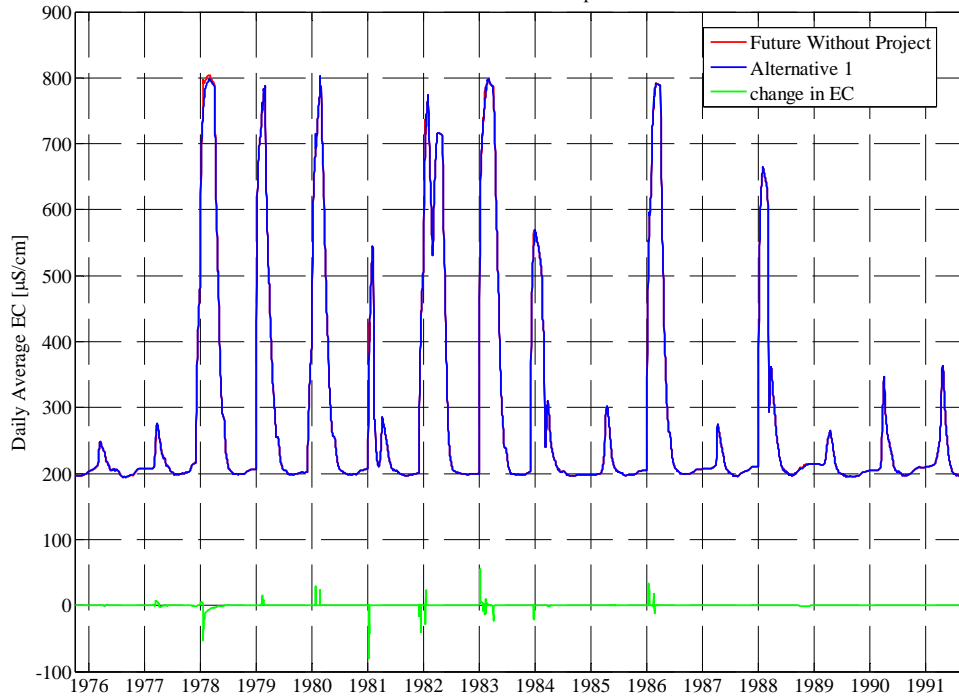
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



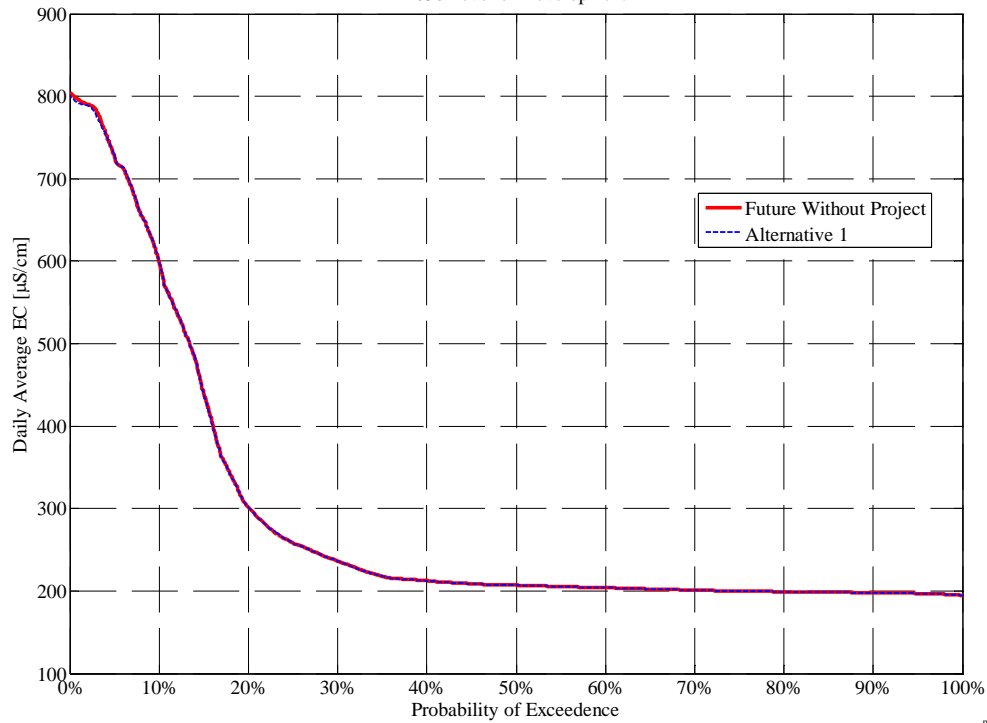
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 2

2030 Level of Development

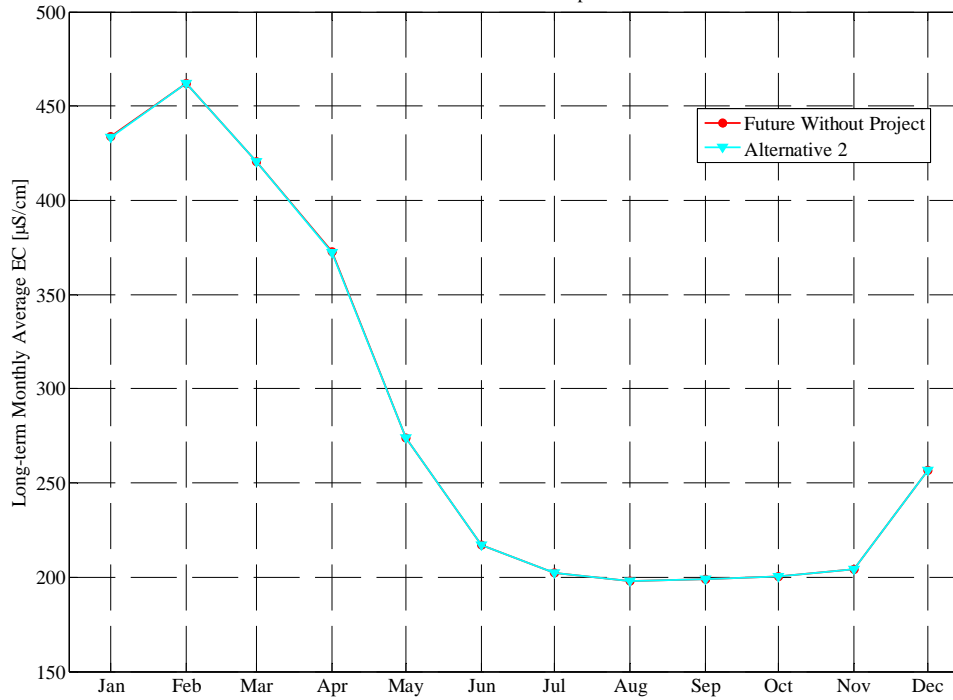
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	197	197	199	205	210	241	226	209	205	202	195	196
1977	199	206	208	208	208	253	242	218	206	200	199	201
1978	203	214	404	731	792	793	601	335	242	205	199	199
1979	200	204	207	646	765	566	359	261	215	203	198	199
1980	201	202	324	642	759	632	384	265	221	204	199	199
1981	199	204	206	435	333	223	270	229	206	202	198	197
1982	198	200	425	709	638	644	716	537	257	206	201	200
1983	199	199	200	670	781	791	658	388	248	208	199	198
1984	198	201	488	550	471	285	247	215	203	201	197	197
1985	198	198	198	198	199	211	288	234	206	201	198	198
1986	199	203	204	532	748	790	545	300	232	206	200	199
1987	200	204	206	207	208	210	259	228	205	199	196	200
1988	204	208	211	571	648	392	298	231	206	200	198	204
1989	209	213	214	215	213	227	257	222	202	198	196	196
1990	197	201	204	205	205	242	293	238	207	201	197	199
1991	205	209	209	210	212	227	315	271	211	199	197	202
Avg	200	204	257	433	462	420	372	274	217	202	198	199
W/AN/BN	200	203	322	640	708	643	501	328	231	205	199	199
D/C	201	205	206	273	271	247	272	231	206	200	197	199

**Percent (%) Change from Future Without Project for Cache Slough at City of Vallejo
(Alternative 2 - Future Without Project) / Future Without Project**

2030 Level of Development

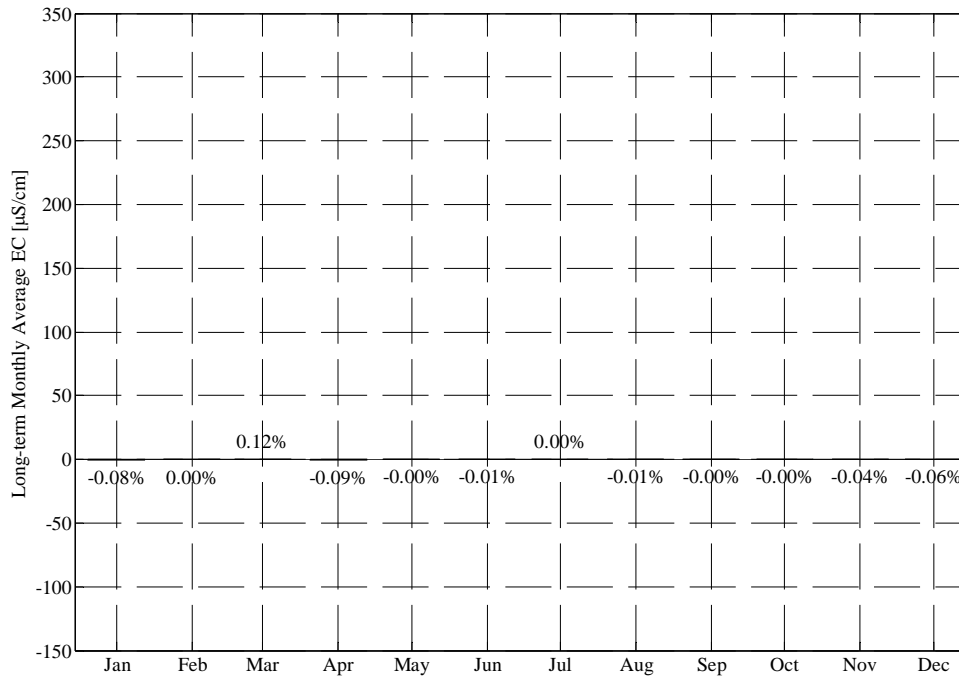
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.2%	-0.1%	-0.4%	0.1%	0.6%	0.7%	-0.5%	0.1%	0.0%	0.0%	-0.1%	0.0%
1977	0.3%	0.0%	-0.2%	0.0%	0.2%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1978	0.0%	-0.2%	0.0%	-1.7%	-1.1%	-0.5%	-0.4%	-0.2%	-0.1%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	-1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	-0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	-0.3%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1989	-0.5%	-0.4%	-0.2%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	-0.1%	-0.1%	0.1%	0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

Cache Slough at City of Vallejo Intake Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



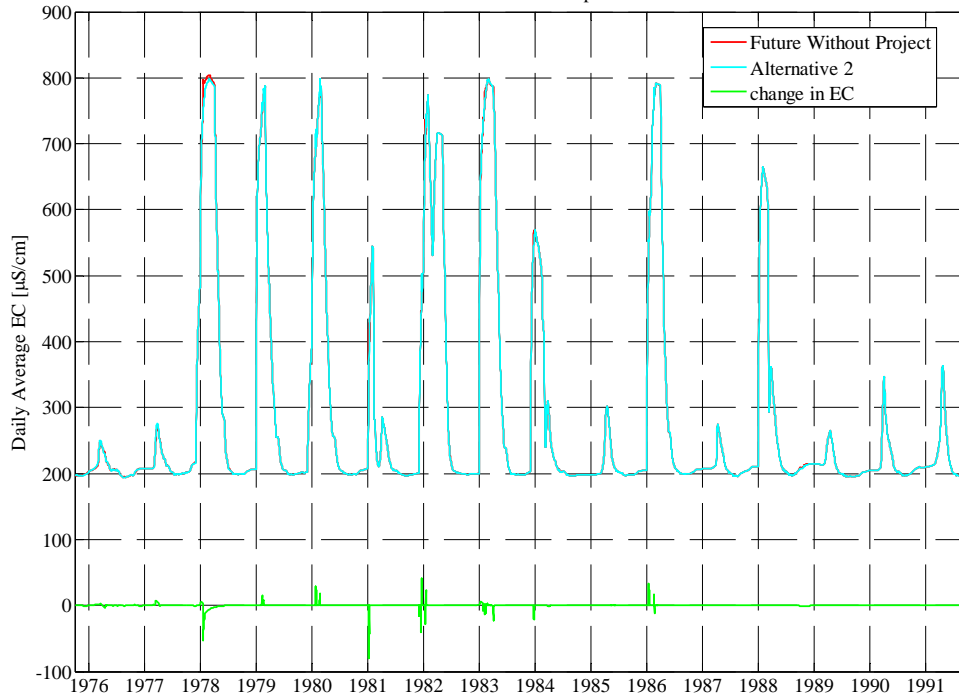
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



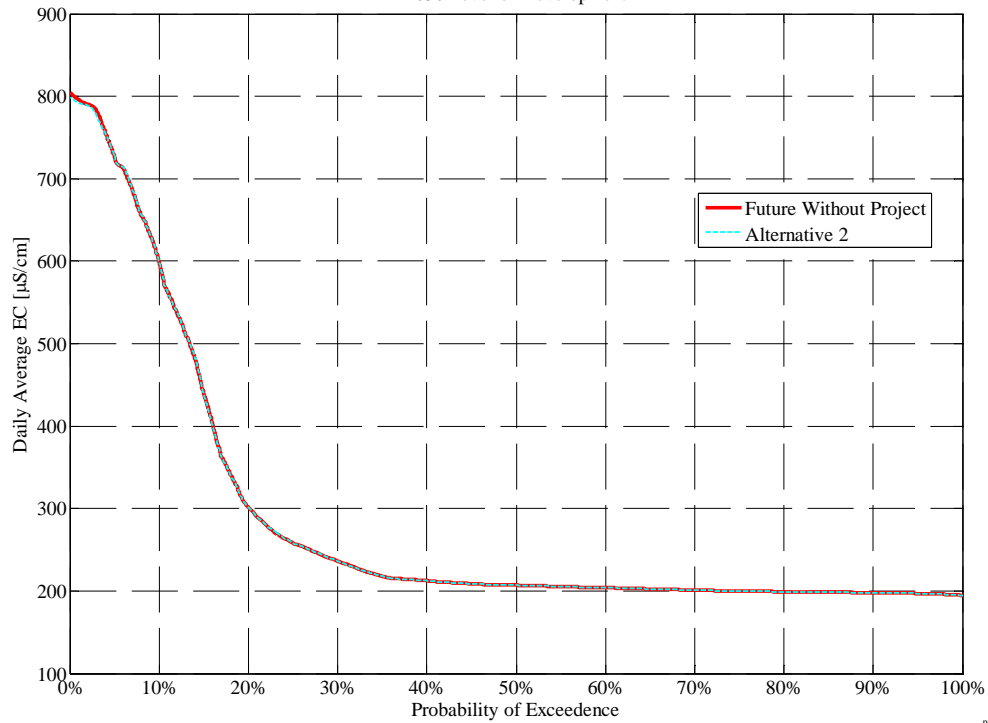
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 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

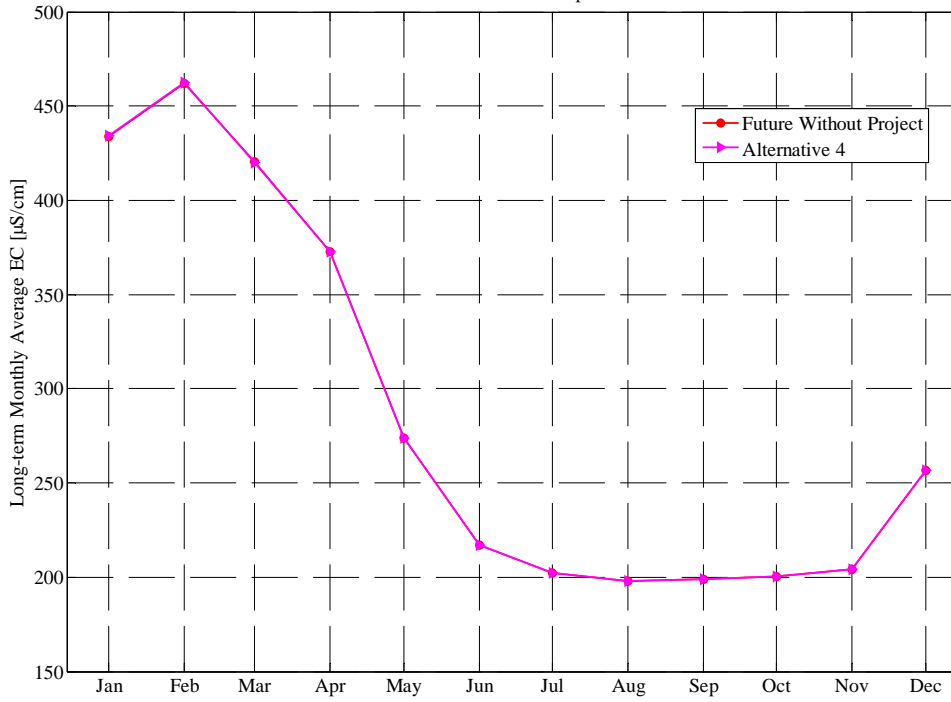
Alternative 4**Cache Slough at City of Vallejo Intake Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 4****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	197	197	200	205	209	239	227	209	205	201	195	196
1977	199	206	208	208	207	248	241	218	206	200	199	200
1978	203	214	405	746	801	797	603	336	242	205	199	199
1979	200	204	206	646	765	566	359	261	215	203	198	199
1980	201	202	324	640	758	632	384	264	221	204	199	199
1981	199	204	206	440	333	223	270	229	206	202	198	197
1982	198	200	424	709	638	644	716	537	257	206	201	200
1983	199	199	200	670	782	791	661	388	248	208	199	198
1984	198	201	489	550	471	285	247	215	203	201	197	197
1985	198	198	198	198	199	211	288	234	206	201	198	198
1986	199	203	204	530	748	790	545	300	232	206	200	199
1987	200	204	206	207	208	210	259	228	205	199	196	200
1988	204	208	211	571	648	392	298	231	206	200	198	204
1989	209	212	214	214	213	227	257	222	202	198	196	196
1990	197	201	204	205	205	242	293	238	207	201	197	199
1991	205	209	209	210	212	227	315	271	211	199	197	202
Avg	200	204	257	434	462	420	373	274	217	202	198	199
W/AN/BN	200	203	322	642	709	644	502	329	231	205	199	199
D/C	201	204	206	273	271	246	272	231	206	200	197	199

**Percent (%) Change from Future Without Project for Cache Slough at City of Vallejo
(Alternative 4 - Future Without Project) / Future Without Project****2030 Level of Development**

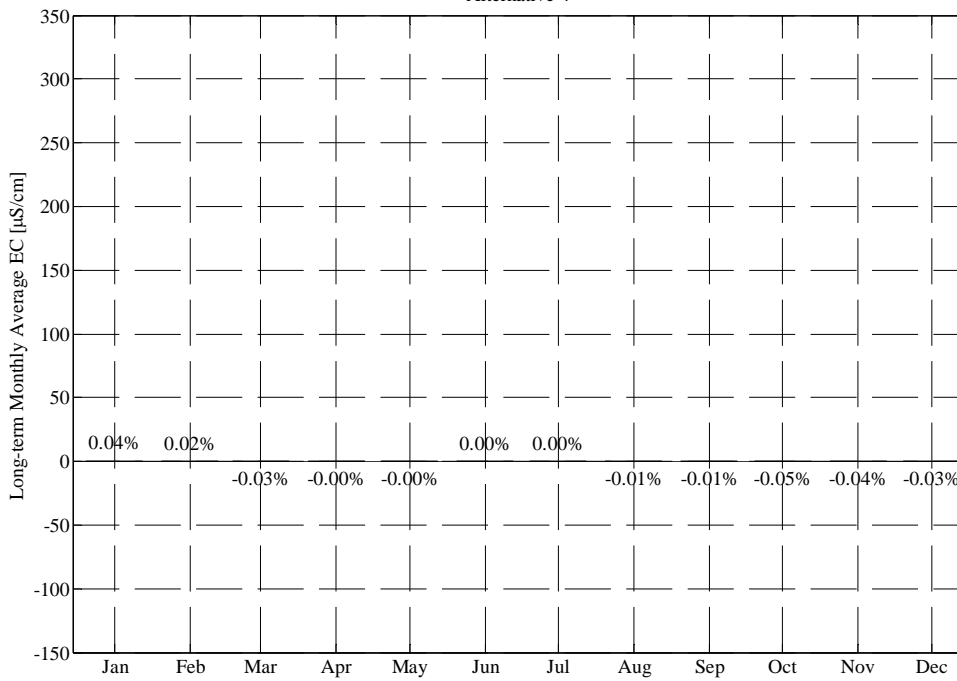
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
1988	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%
1989	-0.7%	-0.7%	-0.4%	-0.3%	-0.2%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	-0.1%	-0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Cache Slough at City of Vallejo Intake Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



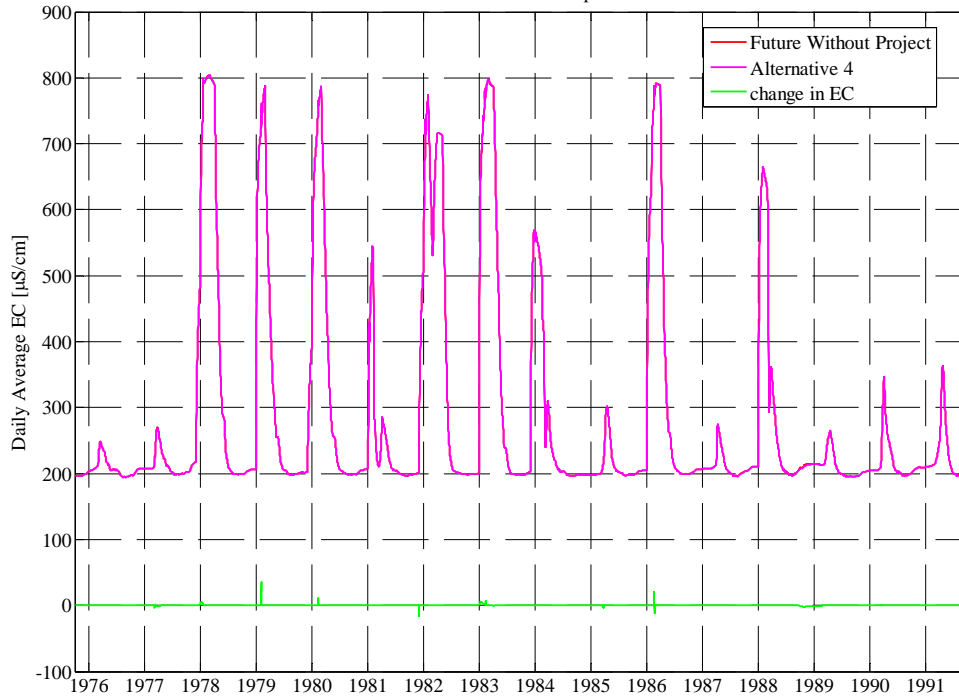
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



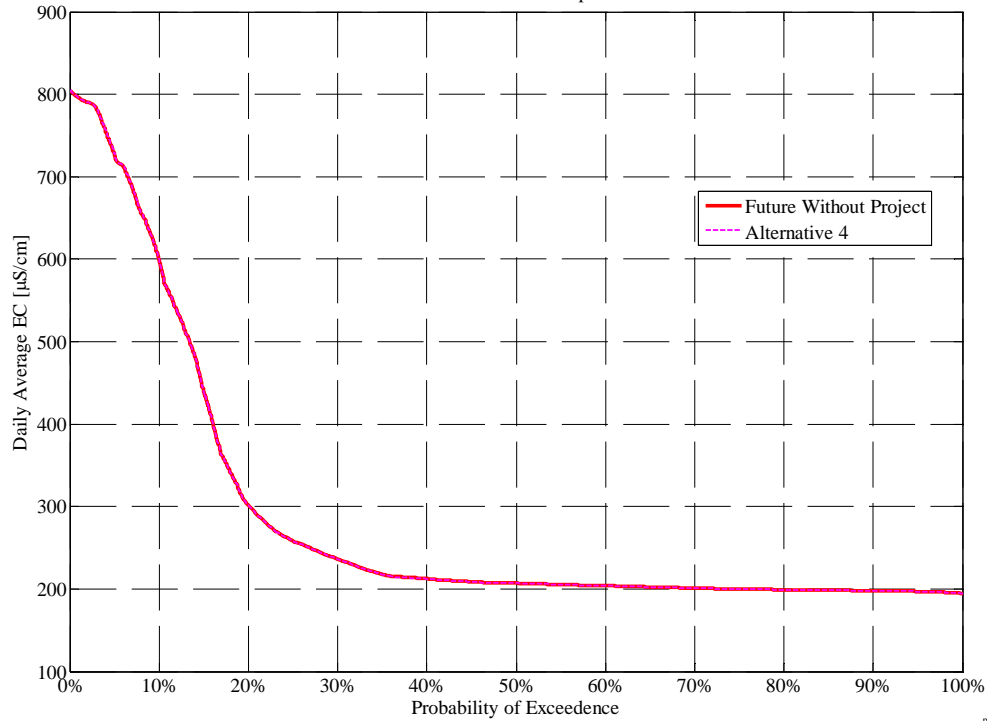
p_lve_wq_feir.m
 07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Cache Slough at City of Vallejo Intake Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River near Tracy Road Bridge

Future Without Project

**Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	381	465	708	728	832	876	472	432	549	665	660	641
1977	532	611	797	845	946	978	609	570	644	644	631	657
1978	696	708	817	786	627	593	272	248	380	514	468	440
1979	483	487	704	690	371	298	328	282	417	595	515	514
1980	446	509	730	386	333	214	308	316	341	433	425	463
1981	436	477	693	730	828	727	369	347	562	635	609	593
1982	486	564	737	749	309	299	176	169	350	389	325	244
1983	182	207	269	321	305	249	185	192	203	222	177	226
1984	337	165	232	299	216	304	305	306	463	568	509	446
1985	372	465	719	728	753	716	391	371	577	660	599	565
1986	498	538	722	792	541	260	239	250	375	536	462	425
1987	390	420	675	732	880	743	396	358	543	668	613	618
1988	532	596	761	807	942	929	484	414	530	656	623	661
1989	573	615	768	805	936	873	580	573	645	649	641	615
1990	628	622	748	839	945	965	714	616	579	657	729	728
1991	656	642	759	854	946	769	526	613	586	667	744	711
Avg	477	506	677	693	669	612	397	379	484	572	546	534
W/AN/BN	447	454	601	575	386	317	259	252	361	465	412	394
D/C	500	546	736	785	890	842	505	477	580	656	650	643

Alternative 1

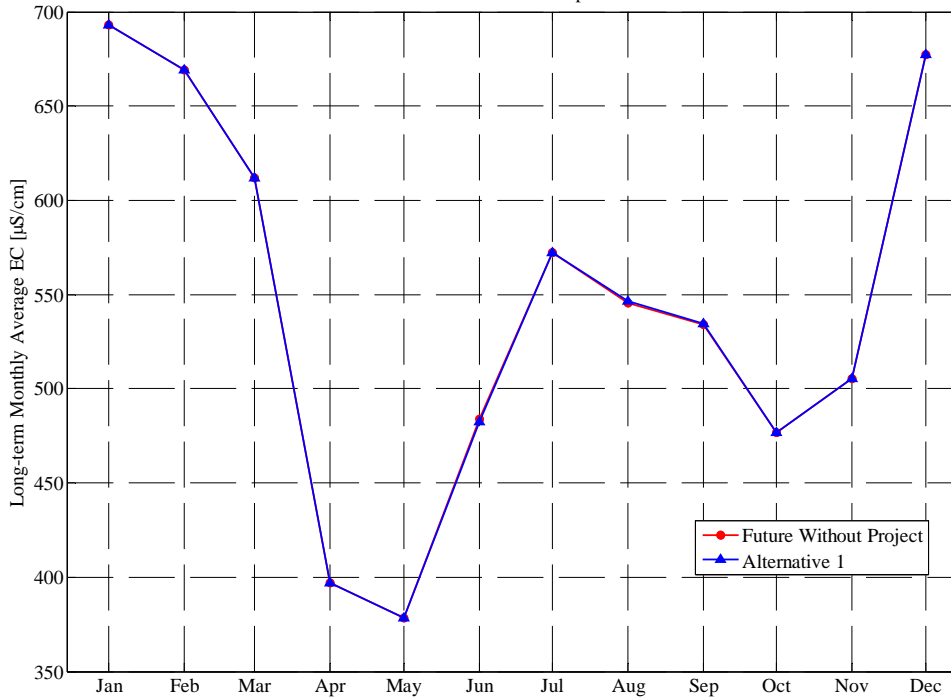
Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	381	465	707	728	832	876	472	432	549	665	660	641
1977	532	611	797	845	946	978	609	570	644	645	631	658
1978	696	707	816	786	627	593	272	248	380	514	468	440
1979	483	487	704	690	371	298	328	282	416	595	514	514
1980	446	509	730	386	333	214	307	316	341	433	425	463
1981	436	477	693	730	828	727	369	347	560	635	609	593
1982	486	564	737	749	309	299	176	169	350	389	325	244
1983	182	207	269	321	306	249	185	192	203	222	177	226
1984	337	165	232	298	215	304	306	306	463	568	509	446
1985	372	465	719	728	753	717	391	371	576	661	599	565
1986	498	538	722	792	541	260	239	250	375	536	462	425
1987	390	420	675	733	880	743	396	358	524	667	614	619
1988	532	595	761	807	942	929	484	414	530	656	626	660
1989	573	615	768	805	936	873	580	573	641	648	641	615
1990	628	622	748	838	945	965	714	616	580	657	733	728
1991	656	642	759	854	946	769	527	613	587	667	747	712
Avg	477	505	677	693	669	612	397	379	482	572	546	534
W/AN/BN	447	454	601	574	386	317	259	252	361	465	412	394
D/C	500	546	736	785	890	842	505	477	577	656	651	644

Percent (%) Change from Future Without Project for Old River near Tracy Road Bridge
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

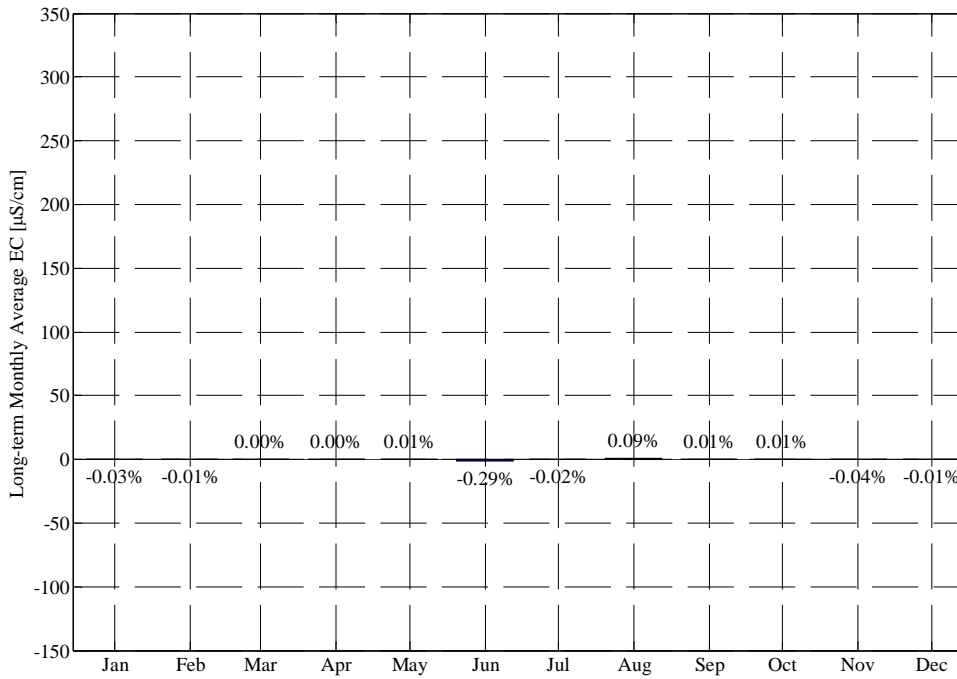
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.1%	0.0%	0.0%	0.2%	-0.1%	-0.2%	0.0%	0.0%	0.0%	-0.1%	-0.2%
1984	0.1%	-0.4%	-0.1%	-0.5%	-0.4%	-0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-3.4%	-0.3%	0.2%	0.2%
1988	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.5%	-0.2%
1989	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.7%	-0.2%	0.0%	0.0%
1990	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%	0.2%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	0.0%	0.1%	0.0%
W/AN/BN	0.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.5%	0.0%	0.2%	0.1%

Old River near Tracy Road Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

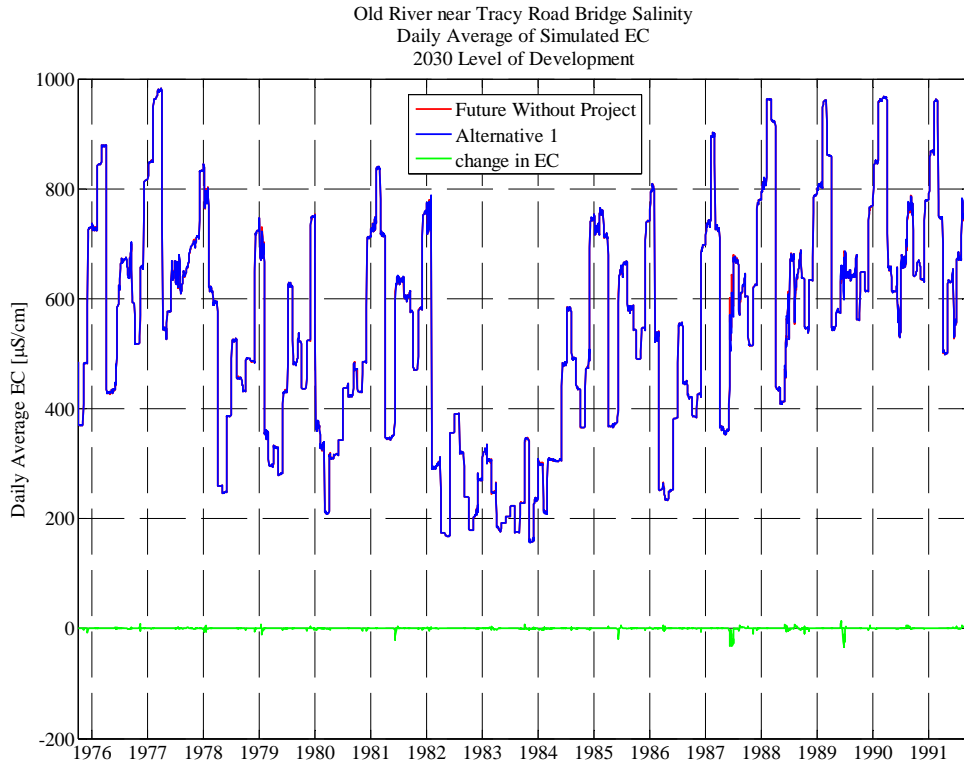


p_lve_wq_feir.m
 07-Jan-2010 DS

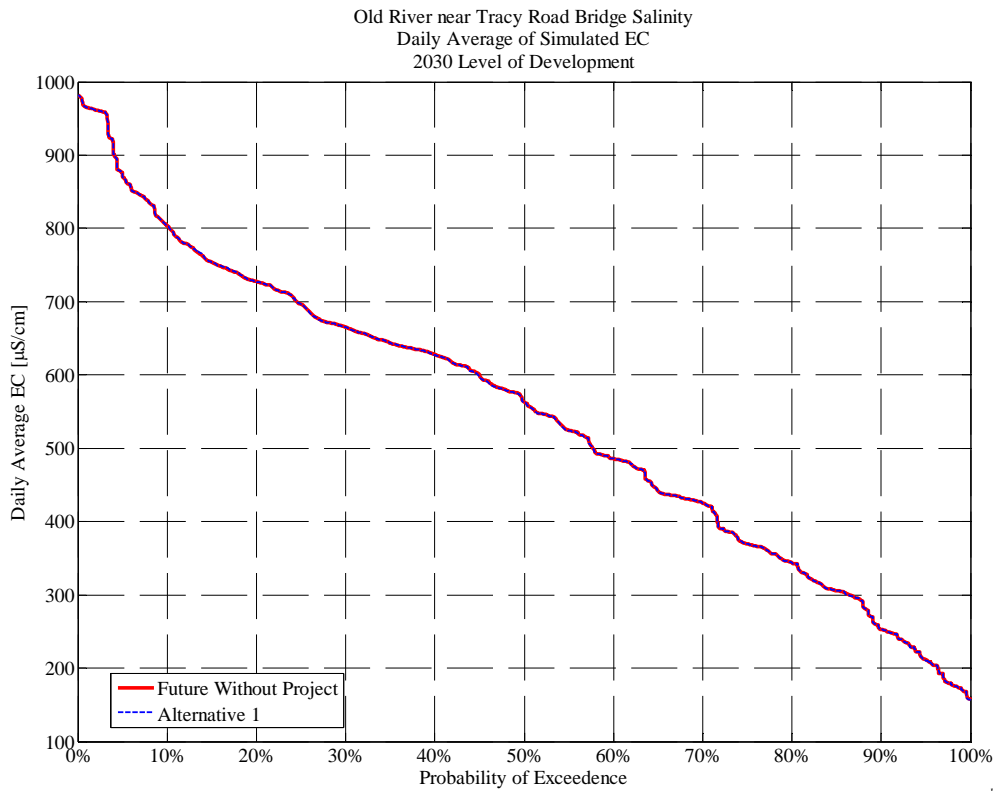
Old River near Tracy Road Bridge Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

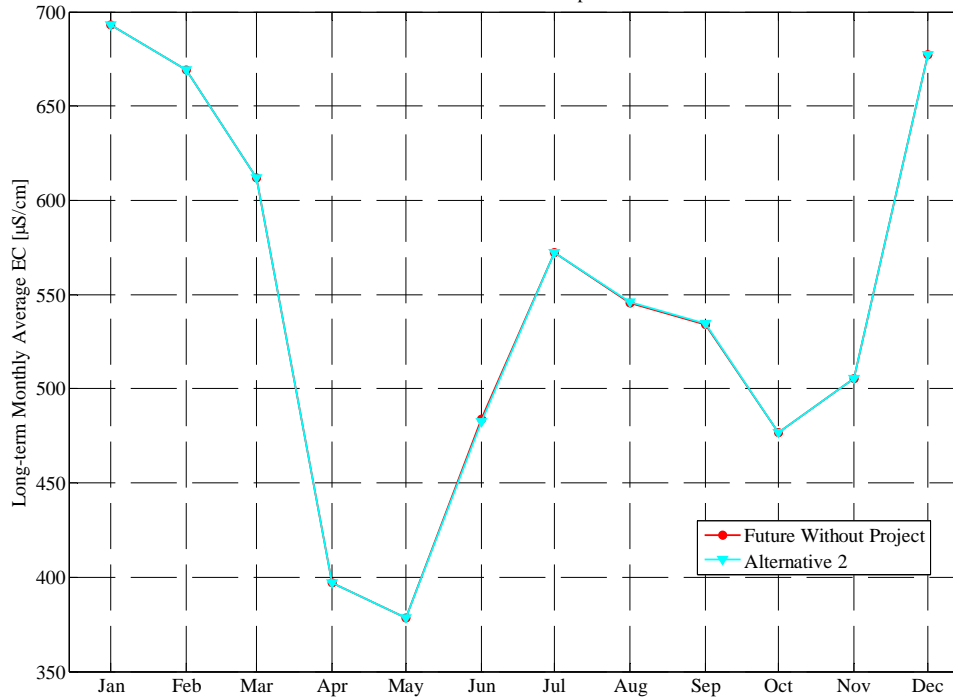
**Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	381	465	707	728	832	876	472	432	549	665	660	641
1977	532	611	797	845	946	978	609	570	644	645	631	658
1978	696	707	816	786	627	593	272	248	380	514	468	440
1979	483	487	704	690	371	298	328	282	416	595	514	514
1980	446	509	730	386	333	214	307	316	341	433	425	463
1981	436	477	693	729	828	727	369	347	560	635	609	593
1982	486	564	737	749	309	299	176	169	350	389	325	244
1983	182	207	269	321	306	249	185	192	203	222	177	226
1984	337	164	232	298	215	303	306	306	463	568	509	446
1985	372	464	719	728	753	717	391	371	576	661	599	565
1986	498	538	721	792	541	260	239	250	375	536	462	425
1987	390	420	675	733	880	743	396	358	524	667	614	619
1988	532	595	761	807	942	929	484	414	530	656	626	660
1989	573	615	768	805	936	873	580	573	641	648	641	615
1990	628	622	748	838	945	965	714	616	580	657	732	728
1991	656	642	759	854	946	769	527	613	587	667	747	712
Avg	477	505	677	693	669	612	397	379	483	572	546	534
W/AN/BN	447	454	601	574	386	317	259	252	361	465	412	394
D/C	500	546	736	785	890	842	505	477	577	655	651	644

**Percent (%) Change from Future Without Project for Old River near Tracy Road Bridge
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

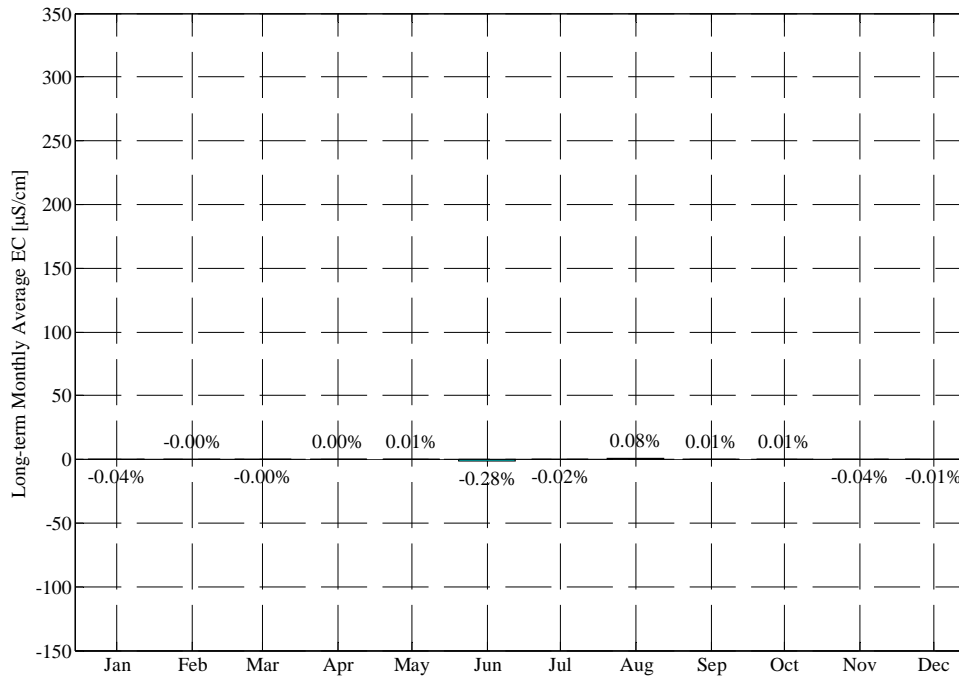
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	-0.1%	-0.1%	0.1%	0.0%	0.0%	0.0%	-0.3%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.3%	-0.1%	-0.2%	0.0%	0.0%	0.0%	-0.1%	-0.2%
1984	0.1%	-0.5%	0.0%	-0.5%	-0.4%	-0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-3.5%	-0.3%	0.2%	0.2%
1988	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.5%	-0.1%
1989	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.7%	-0.2%	0.0%	0.0%
1990	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%	0.1%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	0.0%	0.1%	0.0%
W/AN/BN	0.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.5%	0.0%	0.2%	0.0%

Old River near Tracy Road Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



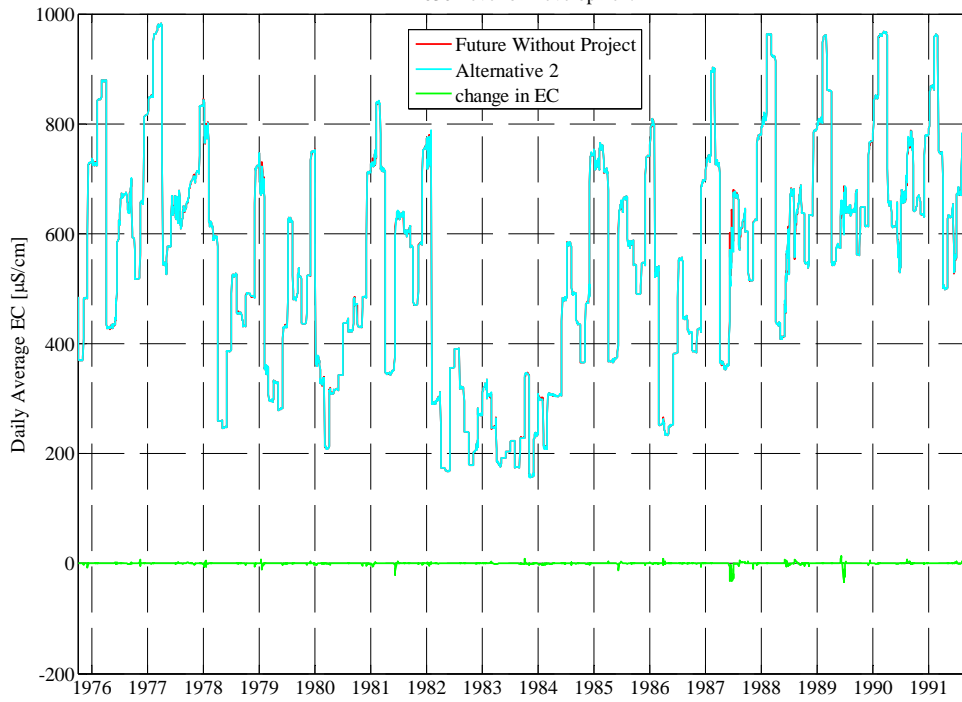
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Tracy Road Bridge Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



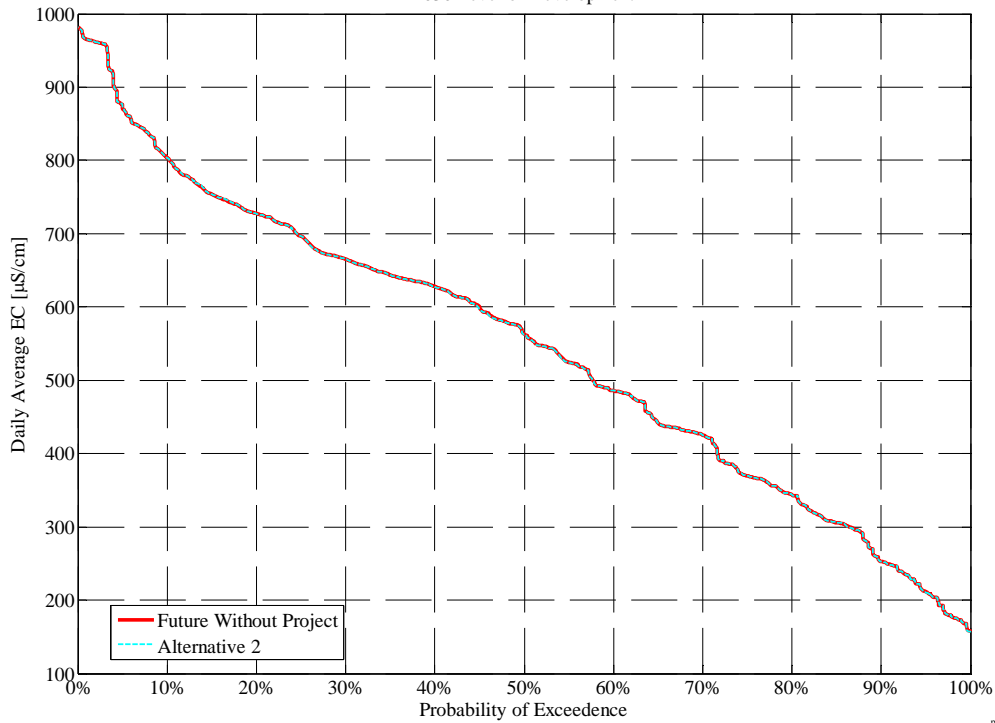
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 07-Jan-2010 DS

Old River near Tracy Road Bridge Salinity
 Daily Average of Simulated EC
 2030 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Tracy Road Bridge Salinity
 Daily Average of Simulated EC
 2030 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

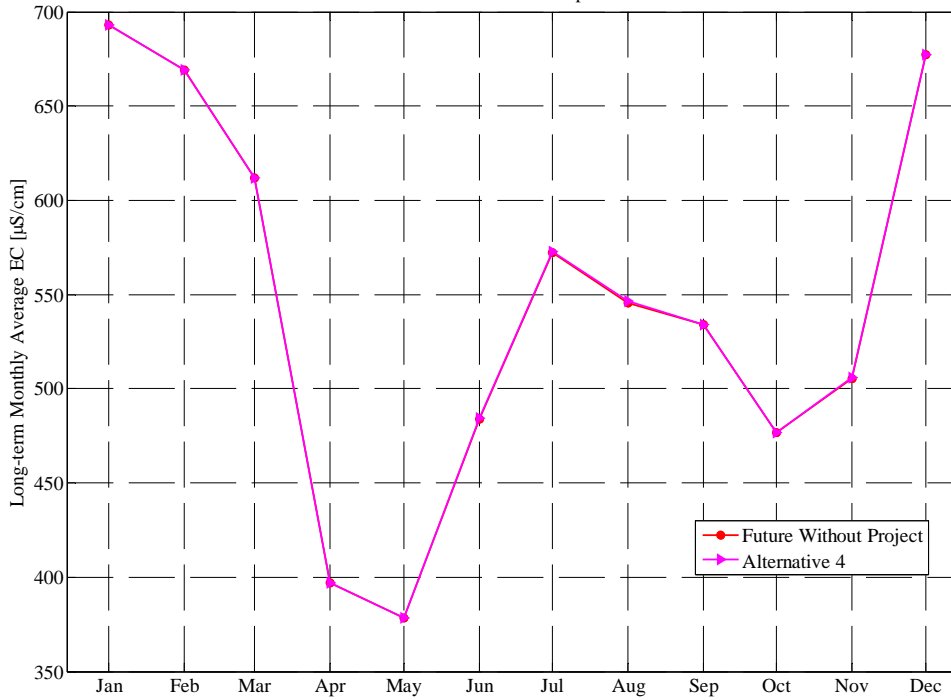
Alternative 4**Old River near Tracy Road Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 4****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	381	465	708	728	832	876	472	432	549	665	660	641
1977	532	612	797	845	946	978	609	570	644	648	634	659
1978	695	708	816	786	627	593	272	248	380	514	468	440
1979	483	487	704	690	371	298	328	282	417	595	515	514
1980	446	509	730	386	333	214	307	316	341	433	425	463
1981	436	477	693	730	828	727	369	347	562	635	609	593
1982	486	564	737	748	309	299	176	169	350	389	325	244
1983	182	207	269	321	305	249	185	192	203	222	177	226
1984	337	165	232	299	216	304	305	306	463	568	509	446
1985	372	465	719	728	753	716	391	371	577	660	599	565
1986	498	538	722	792	541	260	239	250	375	536	462	425
1987	390	420	675	732	880	743	396	358	543	669	615	619
1988	532	595	761	807	942	929	484	414	530	656	616	654
1989	572	615	768	805	936	873	580	573	646	649	641	615
1990	628	622	749	838	945	965	714	616	579	657	737	727
1991	656	642	759	854	946	769	526	613	587	667	749	712
Avg	477	506	677	693	669	612	397	379	484	573	546	534
W/AN/BN	447	454	601	575	386	317	259	252	361	465	412	394
D/C	500	546	736	785	890	842	505	477	580	656	651	643

**Percent (%) Change from Future Without Project for Old River near Tracy Road Bridge
(Alternative 4 - Future Without Project) / Future Without Project****2030 Level of Development**

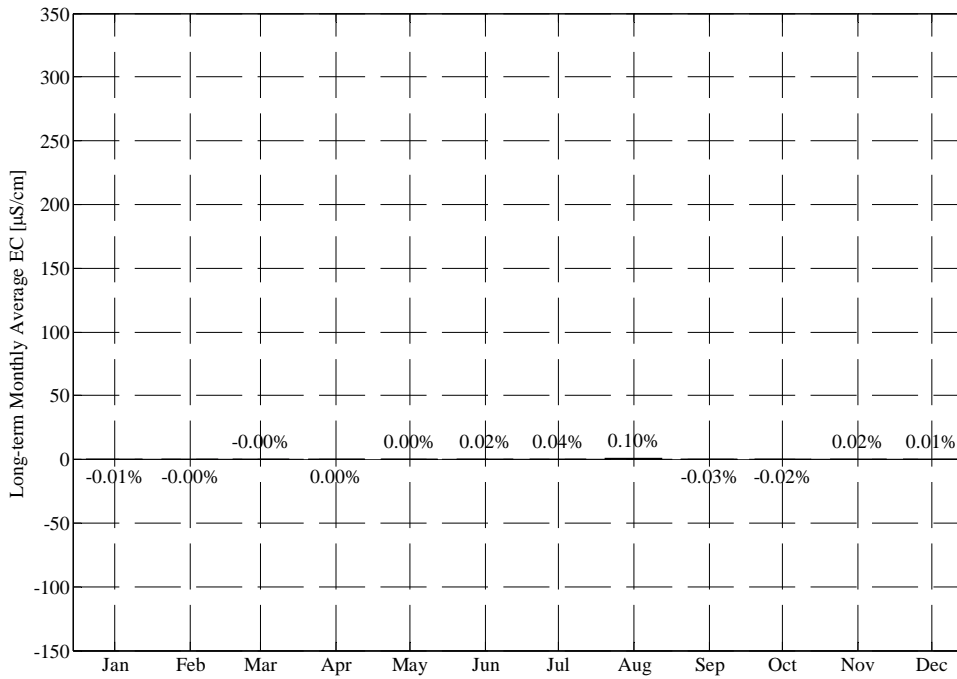
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.5%	0.6%	0.3%
1978	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.1%	-1.1%
1989	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.6%	0.2%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	-0.1%

Old River near Tracy Road Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

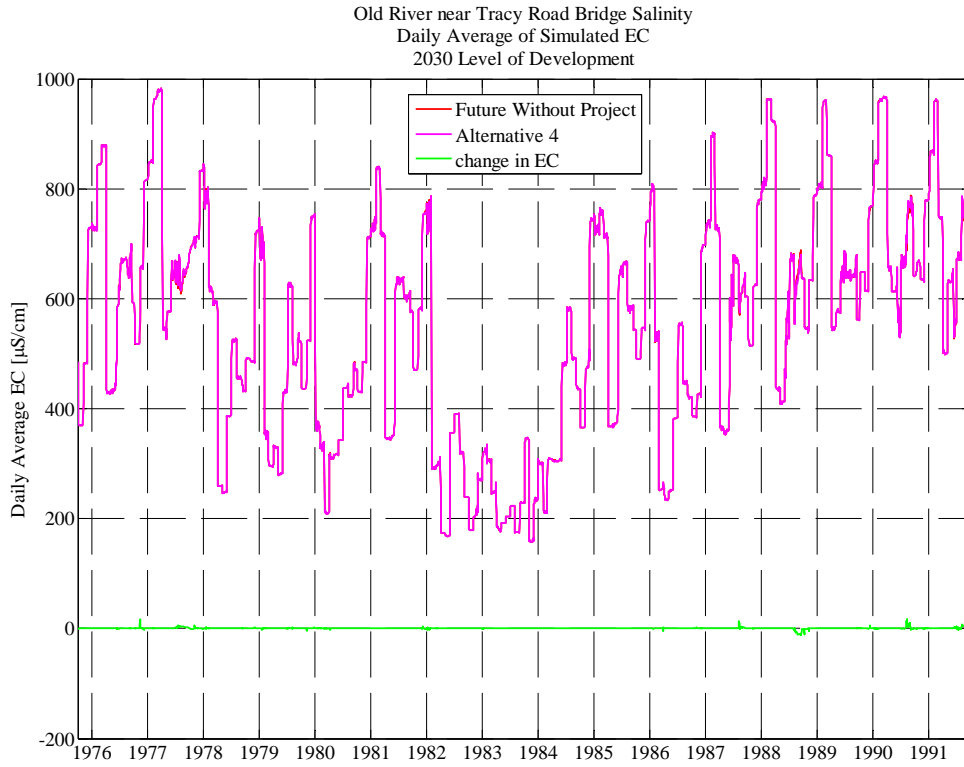


p_lve_wq_feir.m
 07-Jan-2010 DS

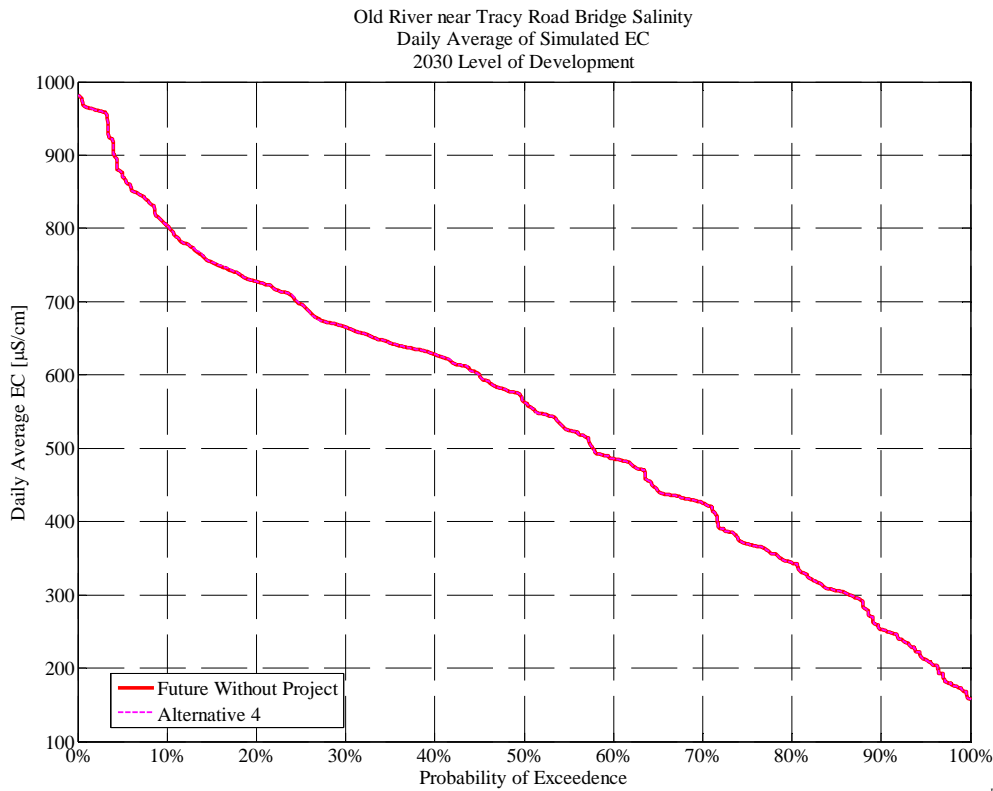
Old River near Tracy Road Bridge Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Old River near Middle River

Future Without Project

**Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	369	472	718	708	830	866	432	417	642	657	587	587
1977	515	645	807	826	946	963	541	566	641	663	659	675
1978	682	701	821	737	597	571	262	241	378	510	440	425
1979	481	481	713	647	341	290	322	273	402	605	471	512
1980	434	515	738	355	307	206	301	309	337	430	405	461
1981	425	477	703	704	819	708	347	332	596	623	588	571
1982	470	569	744	693	292	280	174	165	349	384	310	239
1983	179	196	266	272	289	226	175	190	201	220	170	224
1984	337	159	223	289	201	297	297	294	456	565	478	428
1985	363	456	726	703	742	704	367	354	608	653	568	537
1986	486	537	729	764	487	250	230	243	374	536	431	412
1987	377	417	686	711	876	715	362	344	647	658	616	597
1988	511	613	768	778	942	912	444	400	649	661	654	627
1989	536	623	778	785	942	855	544	559	635	631	623	560
1990	638	610	759	827	945	954	647	607	664	650	638	629
1991	649	627	771	843	945	746	497	613	661	662	657	685
Avg	466	506	684	665	656	596	371	369	515	569	518	510
W/AN/BN	439	451	605	537	359	303	252	245	357	464	386	386
D/C	487	549	746	765	888	825	464	466	638	651	621	607

Alternative 1

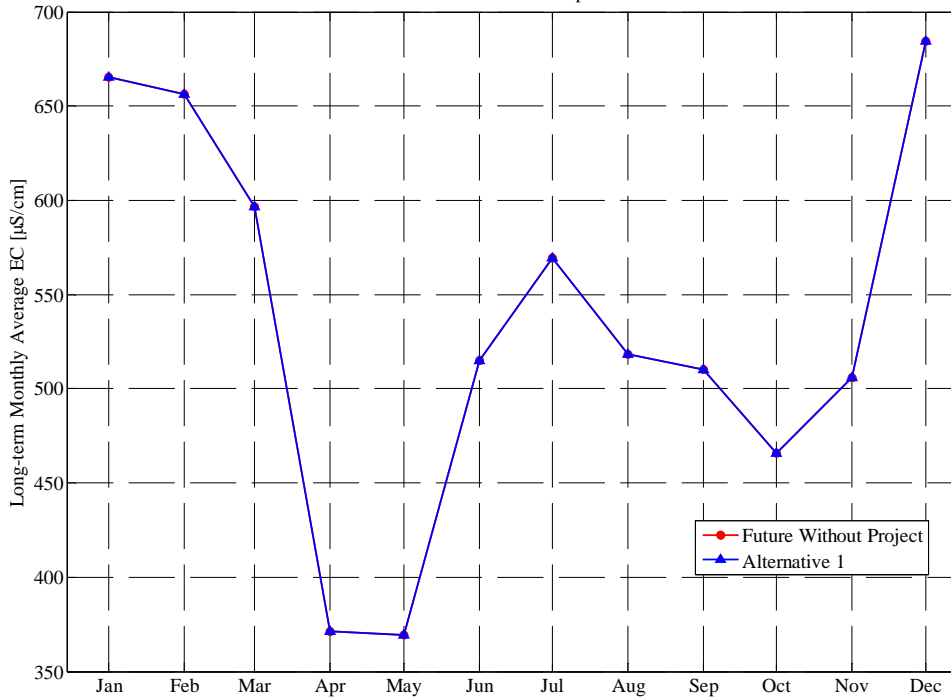
Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, $\mu\text{S}/\text{cm}$)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	369	472	718	708	830	866	432	417	642	657	587	587
1977	515	645	807	826	946	963	541	566	641	663	659	675
1978	682	701	821	737	597	571	262	241	378	511	440	425
1979	481	481	713	647	341	290	322	273	402	605	471	512
1980	434	515	738	355	307	206	301	309	337	430	405	461
1981	425	477	703	704	819	708	347	332	596	623	588	571
1982	470	569	744	693	292	280	174	165	349	384	310	239
1983	179	196	266	272	289	226	175	190	201	220	170	224
1984	337	159	223	289	201	297	297	294	456	565	478	428
1985	363	456	726	703	742	704	367	354	608	653	568	537
1986	486	537	729	764	487	250	230	243	374	536	431	412
1987	377	417	686	711	876	715	362	344	647	658	616	597
1988	511	613	768	778	942	912	444	400	649	661	654	627
1989	536	623	778	785	942	855	544	559	635	631	623	560
1990	638	610	759	827	945	954	647	607	664	650	638	629
1991	649	627	771	843	945	746	497	613	661	662	657	685
Avg	466	506	684	665	656	596	371	369	515	569	518	510
W/AN/BN	439	451	605	537	359	303	252	245	357	464	386	386
D/C	487	549	746	765	888	825	464	466	638	651	621	607

Percent (%) Change from Future Without Project for Old River near Middle River Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

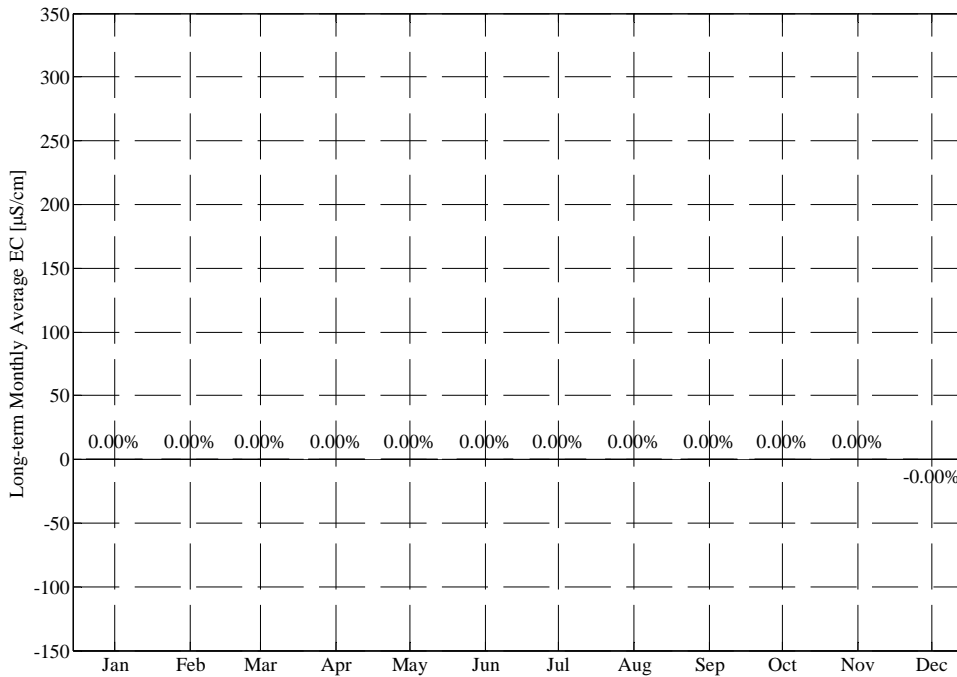
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Old River near Middle River Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

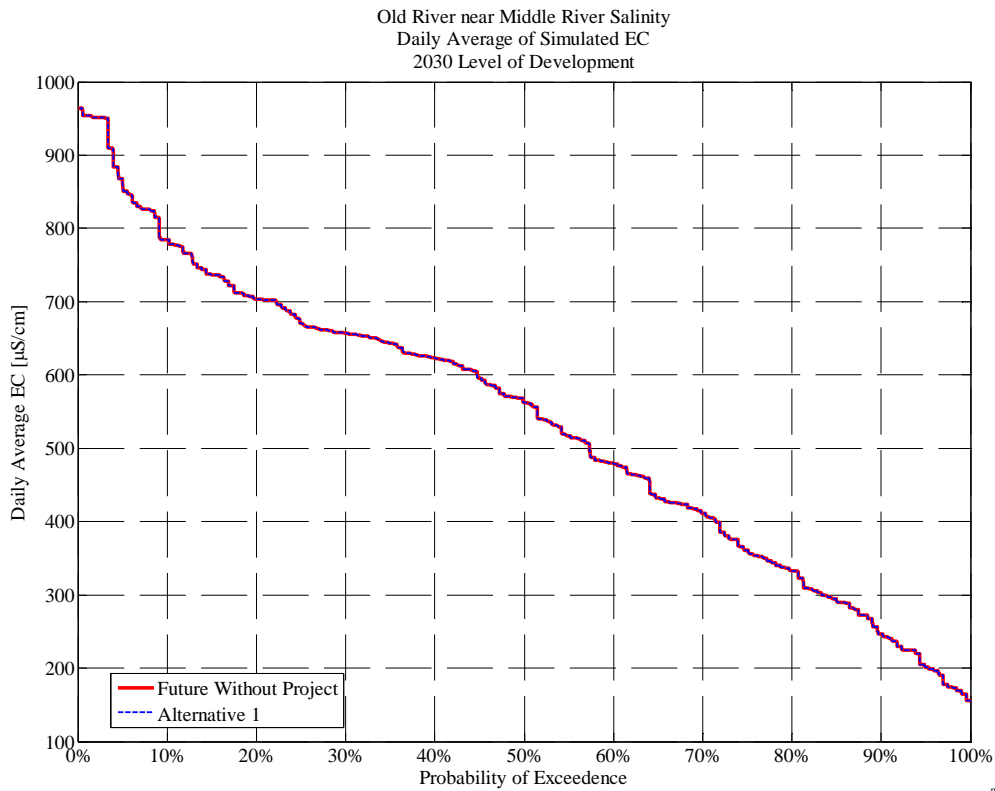
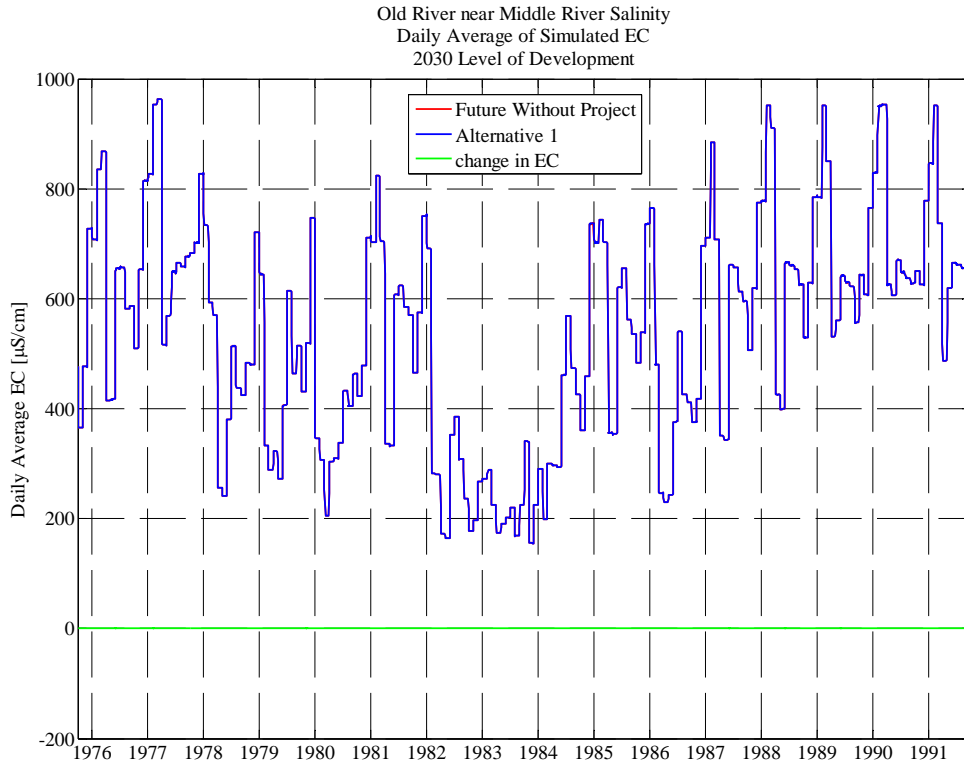


p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



Alternative 2

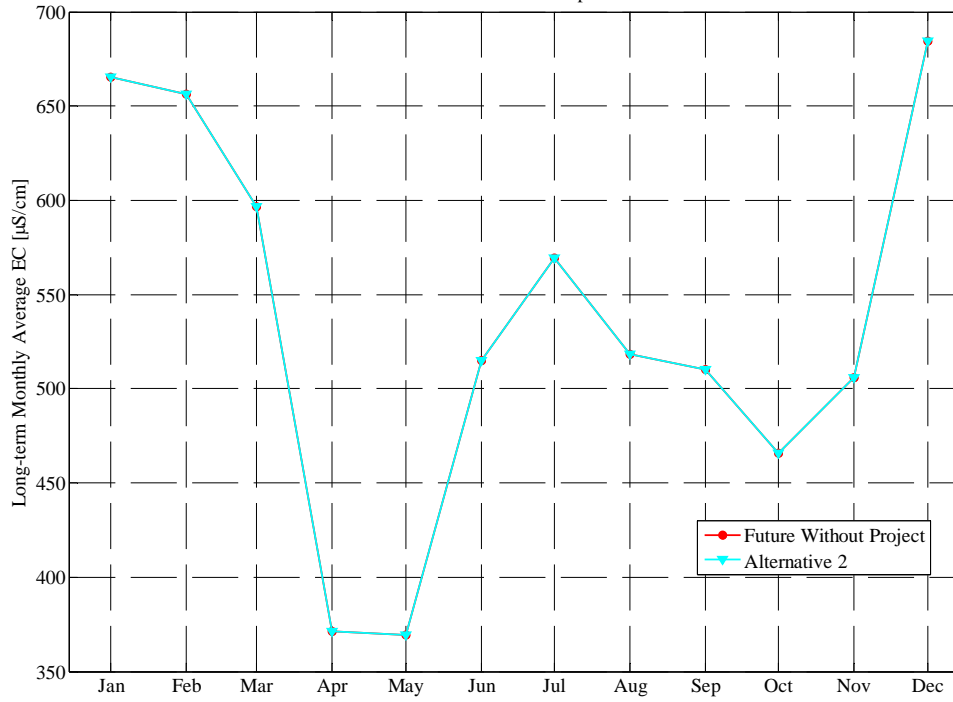
**Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	369	472	718	708	830	866	432	417	642	657	587	587
1977	515	645	807	826	946	963	541	566	641	663	659	675
1978	682	701	821	737	597	571	262	241	378	511	440	425
1979	481	481	713	647	341	290	322	273	402	605	471	512
1980	434	515	738	355	307	206	301	309	337	430	405	461
1981	425	477	703	704	819	708	347	332	596	623	588	571
1982	470	569	744	693	292	280	174	165	349	384	310	239
1983	179	196	266	272	289	226	175	190	201	220	170	224
1984	337	159	223	289	201	297	297	294	456	565	478	428
1985	363	456	726	703	742	704	367	354	608	653	568	537
1986	486	537	729	764	487	250	230	243	374	536	431	412
1987	377	417	686	711	876	715	362	344	647	658	616	597
1988	511	613	768	778	942	912	444	400	649	661	654	627
1989	536	623	778	785	942	855	544	559	635	631	623	560
1990	638	610	759	827	945	954	647	607	664	650	638	629
1991	649	627	771	843	945	746	497	613	661	662	657	685
Avg	466	506	684	665	656	596	371	369	515	569	518	510
W/AN/BN	439	451	605	537	359	303	252	245	357	464	386	386
D/C	487	549	746	765	888	825	464	466	638	651	621	607

**Percent (%) Change from Future Without Project for Old River near Middle River Salinity
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

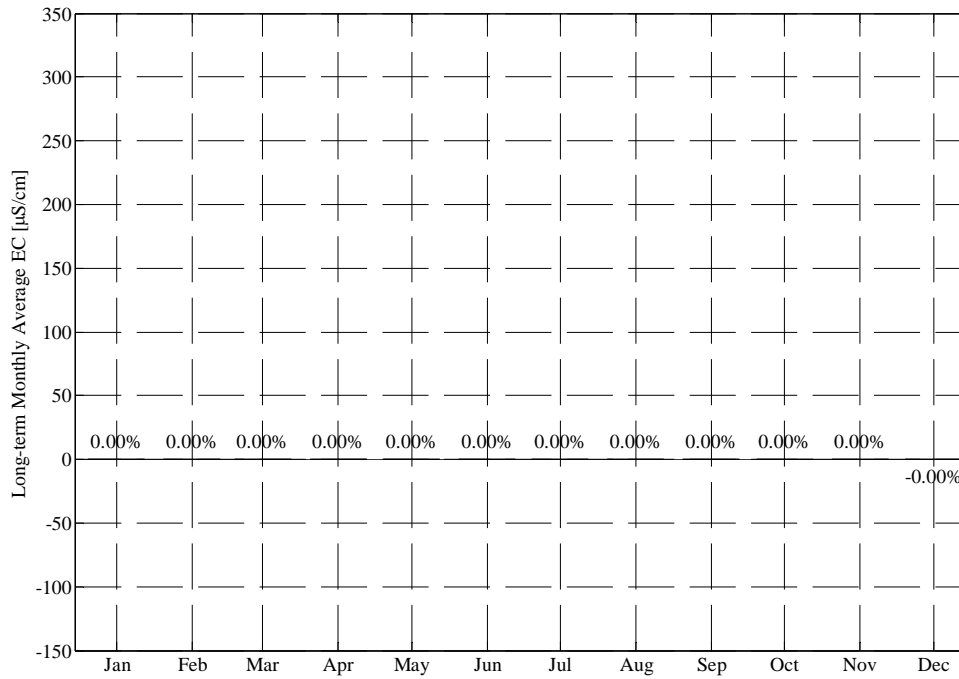
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Old River near Middle River Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



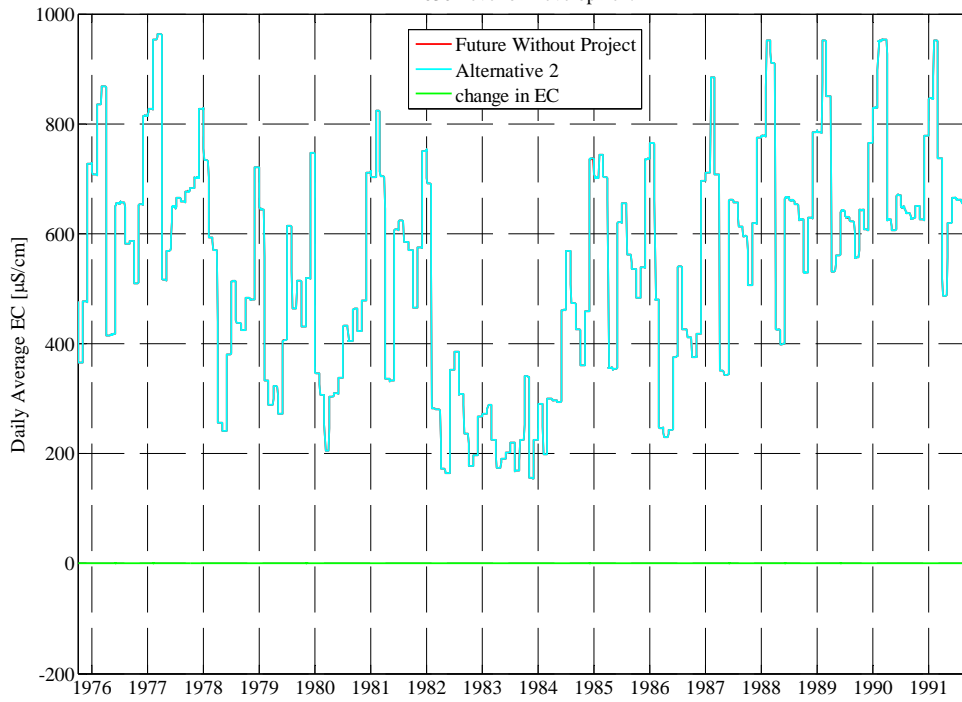
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



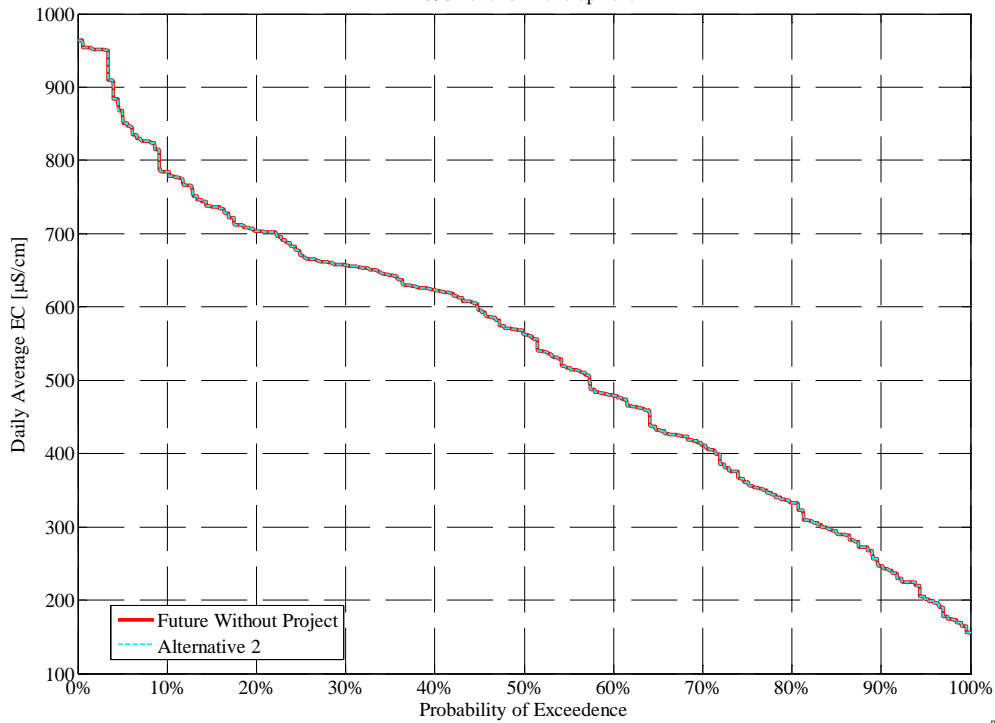
p_lve_wq_feir.m
 07-Jan-2010 DS

Old River near Middle River Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Old River near Middle River Salinity
Daily Average of Simulated EC
2030 Level of Development



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 4

**Old River near Middle River Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 4**2030 Level of Development**

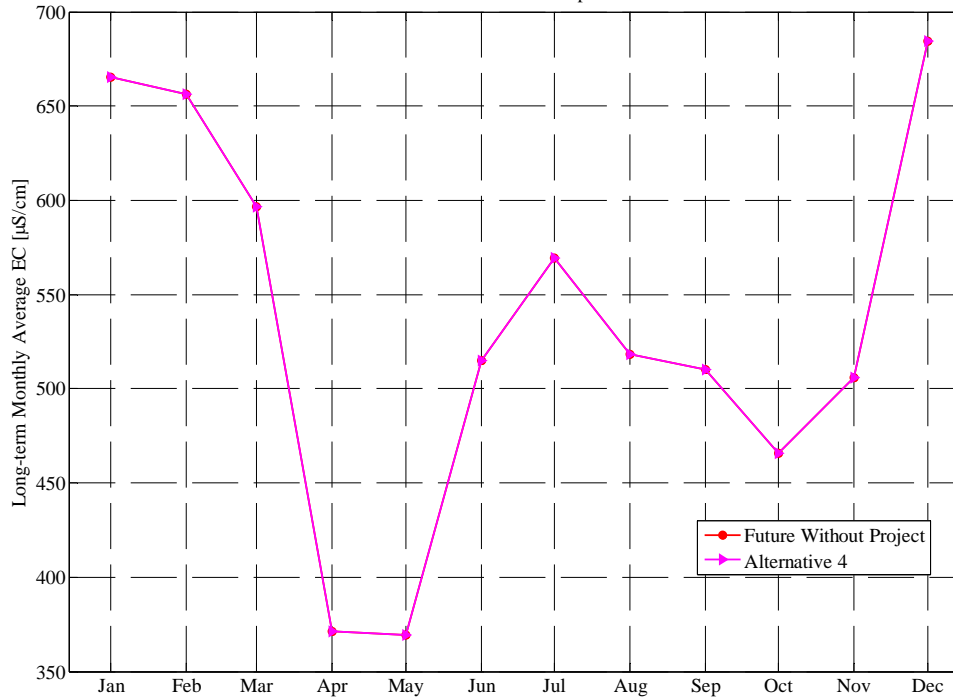
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	369	472	718	708	830	866	432	417	642	657	587	587
1977	515	645	807	826	946	963	541	566	641	663	659	675
1978	683	701	821	737	597	571	262	241	378	511	440	425
1979	481	481	713	647	341	290	322	273	402	605	471	512
1980	434	515	738	355	307	206	301	309	337	430	405	461
1981	425	477	703	704	819	708	347	332	596	623	588	571
1982	470	569	744	693	292	280	174	165	349	384	310	239
1983	179	196	266	272	289	226	175	190	201	220	170	224
1984	337	159	223	289	201	297	297	294	456	565	478	428
1985	363	456	726	703	742	704	367	354	608	653	568	537
1986	486	537	729	764	487	250	230	243	374	536	431	412
1987	377	417	686	711	876	715	362	344	647	658	616	597
1988	511	613	768	778	942	912	444	400	649	661	654	627
1989	536	623	778	785	942	855	544	559	635	632	623	560
1990	638	610	759	827	945	954	647	607	664	650	638	629
1991	649	627	771	843	945	746	496	613	661	662	657	685
Avg	466	506	684	665	656	596	371	369	515	569	518	510
W/AN/BN	439	451	605	537	359	303	252	245	357	464	386	386
D/C	487	549	746	765	888	825	464	466	638	651	621	607

**Percent (%) Change from Future Without Project for Old River near Middle River Salinity
(Alternative 4 - Future Without Project) / Future Without Project**

2030 Level of Development

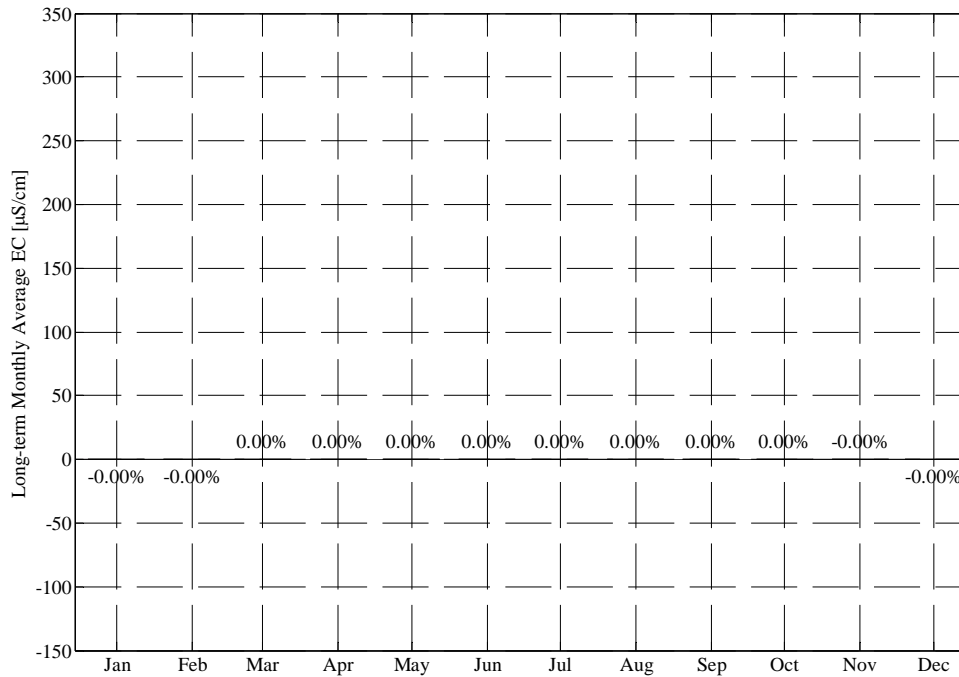
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Old River near Middle River Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

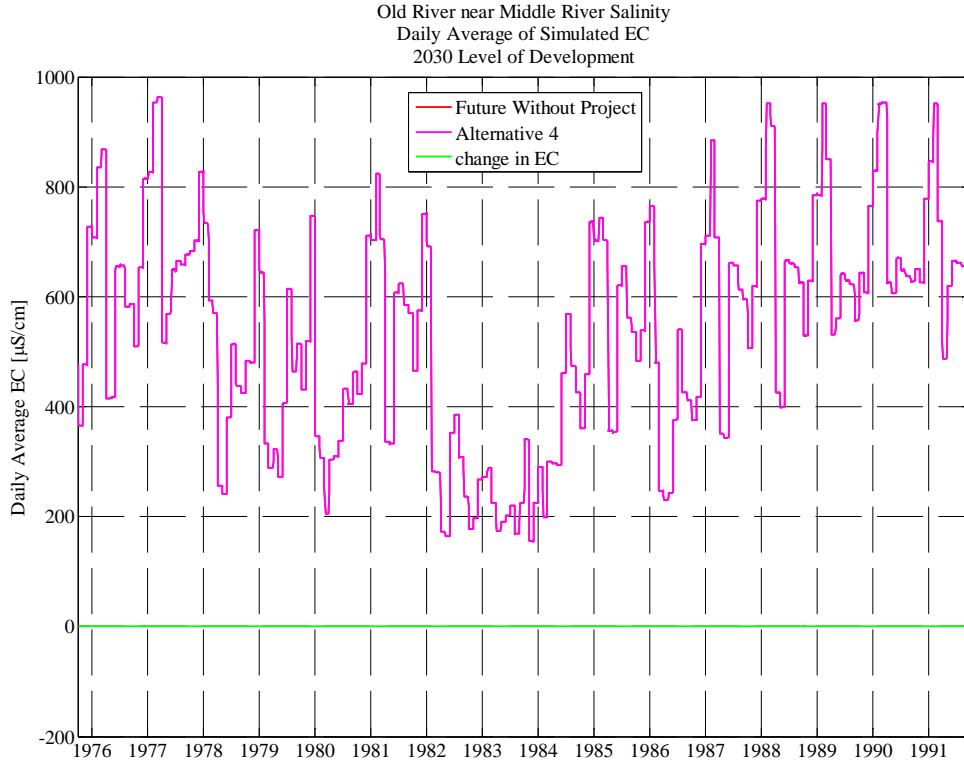


p_lve_wq_feir.m
 07-Jan-2010 DS

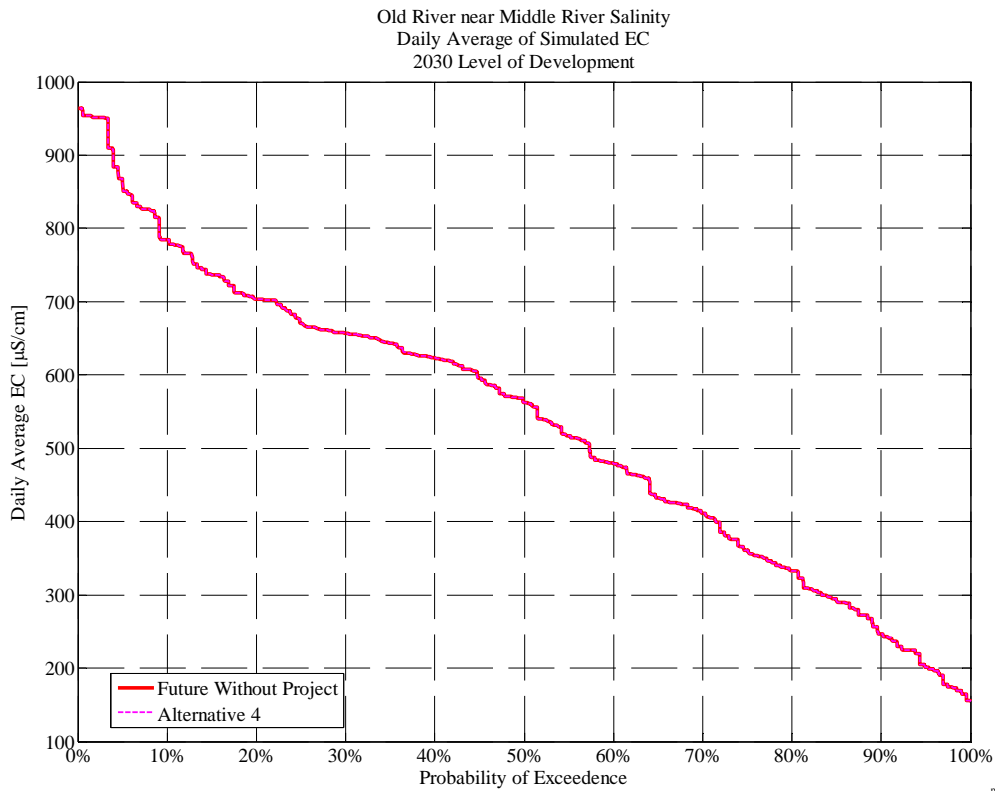
Old River near Middle River Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Brandt Bridge

Future Without Project

**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	368	471	714	708	827	866	436	417	636	659	588	586
1977	512	643	797	824	942	963	549	565	636	663	658	674
1978	680	699	817	738	596	570	262	241	377	510	440	424
1979	479	479	710	646	341	289	321	273	400	604	470	511
1980	433	513	732	355	306	206	300	309	337	429	405	459
1981	423	475	698	703	816	708	347	332	589	623	588	570
1982	468	568	742	693	292	279	174	165	348	384	309	238
1983	179	196	266	272	289	225	175	190	201	219	169	223
1984	336	159	223	288	200	296	296	294	454	563	479	427
1985	362	453	722	703	741	703	367	353	602	653	568	537
1986	483	535	724	763	487	250	230	243	373	535	431	411
1987	375	415	681	709	871	716	364	343	638	659	616	596
1988	508	612	762	777	937	913	449	400	643	669	653	626
1989	532	622	775	784	938	856	550	559	631	649	626	560
1990	636	607	754	826	941	953	659	607	661	670	639	627
1991	647	625	765	839	942	748	499	611	659	672	656	683
Avg	464	505	680	664	654	596	374	369	512	573	518	509
W/AN/BN	437	450	602	536	359	302	251	245	356	463	386	385
D/C	485	547	741	764	884	825	469	465	633	658	621	607

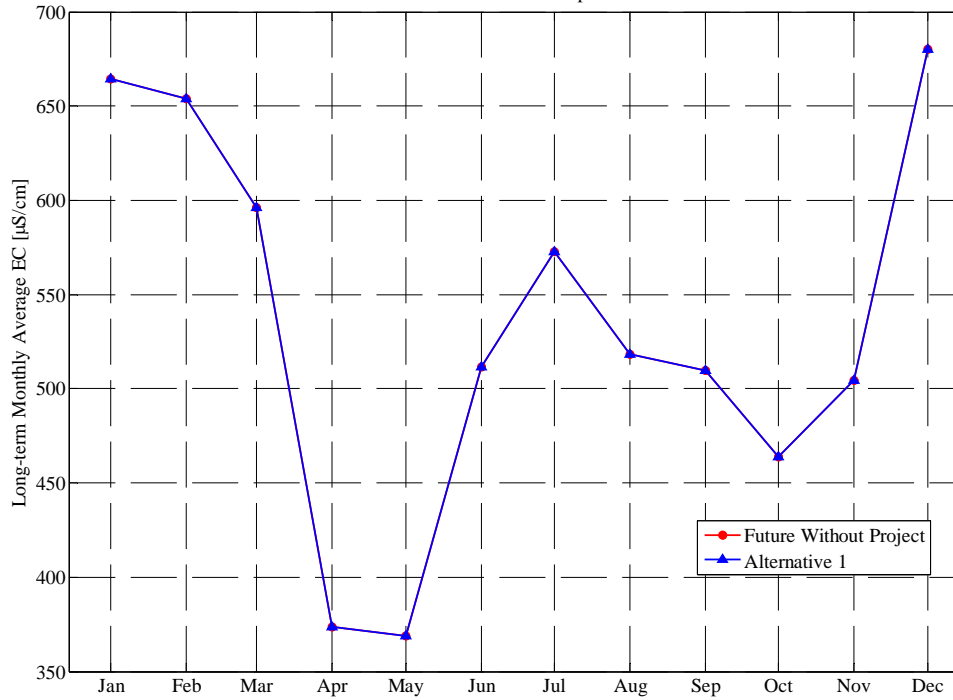
Alternative 1**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 1****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	368	471	714	708	827	866	436	417	636	659	588	586
1977	512	643	797	824	942	963	549	565	636	663	658	674
1978	680	699	817	738	596	570	262	241	377	510	440	424
1979	479	479	710	646	341	289	321	273	400	604	470	511
1980	433	513	732	355	306	206	300	309	337	429	405	459
1981	423	475	698	703	816	708	347	332	589	623	588	570
1982	468	568	742	693	292	279	174	165	348	384	309	238
1983	179	196	266	272	289	225	175	190	201	219	169	223
1984	336	159	223	288	200	296	296	294	454	563	479	427
1985	362	453	722	703	741	703	367	353	602	653	568	537
1986	483	535	724	763	487	250	230	243	373	535	431	411
1987	375	415	681	709	871	716	364	343	638	659	616	596
1988	508	612	762	777	937	913	449	400	643	670	653	626
1989	532	622	775	784	938	856	550	559	631	649	626	560
1990	636	607	754	826	941	953	659	607	661	670	638	627
1991	647	625	766	839	942	748	499	611	659	672	656	683
Avg	464	505	680	664	654	596	374	369	512	573	518	509
W/AN/BN	437	450	602	536	359	302	251	245	356	463	386	385
D/C	485	547	741	764	884	825	469	465	633	658	621	607

**Percent (%) Change from Future Without Project for San Joaquin River at Brandt Bridge
(Alternative 1 - Future Without Project) / Future Without Project****2030 Level of Development**

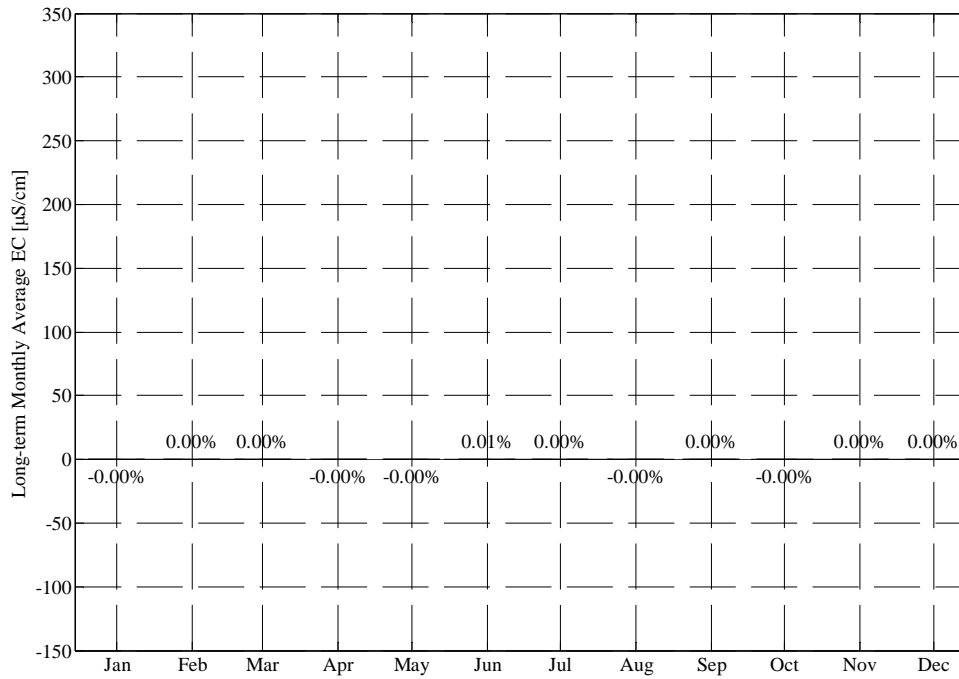
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Brandt Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

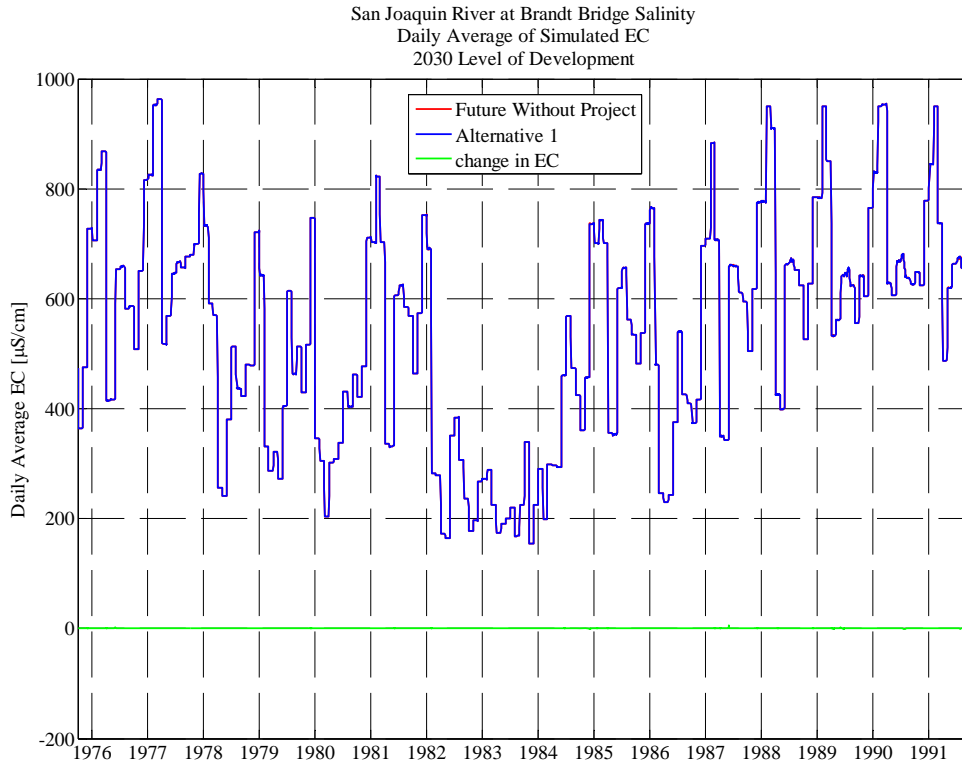


p_lve_wq_feir.m
 07-Jan-2010 DS

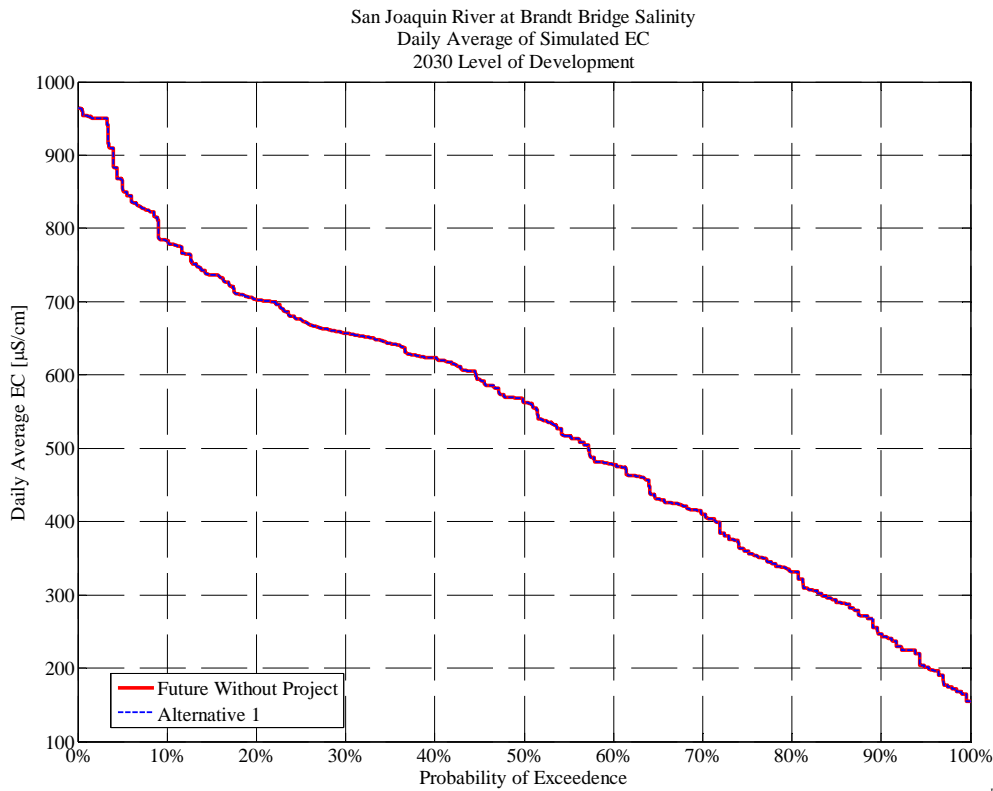
San Joaquin River at Brandt Bridge Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)**

Alternative 2

2030 Level of Development

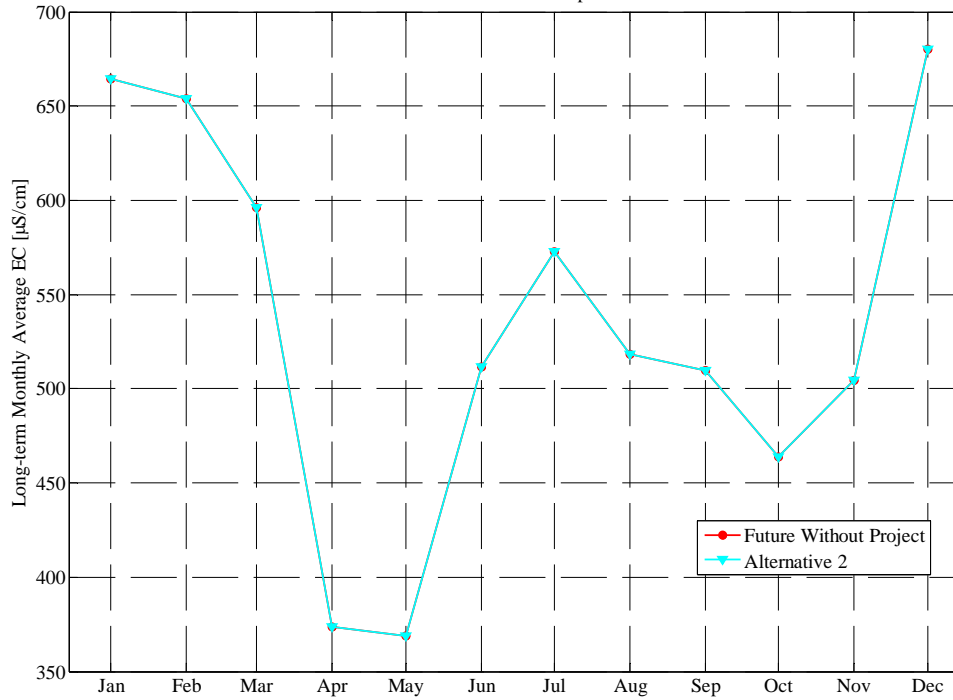
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	368	471	714	708	827	866	436	417	636	659	588	586
1977	512	643	797	824	942	963	549	565	636	663	658	674
1978	680	699	817	738	596	570	262	241	377	510	440	424
1979	479	479	710	646	341	289	321	273	400	604	470	511
1980	433	513	732	355	306	206	300	309	337	429	405	459
1981	423	475	698	703	816	708	347	332	589	623	588	570
1982	468	568	742	693	292	279	174	165	348	384	309	238
1983	179	196	266	272	289	225	175	190	201	219	169	223
1984	336	159	223	288	200	296	296	294	454	563	479	427
1985	362	453	722	703	741	703	367	353	602	653	568	537
1986	483	535	724	763	487	250	230	243	373	535	431	411
1987	375	415	681	709	871	716	364	343	638	659	616	596
1988	508	612	762	777	937	913	449	400	643	670	653	626
1989	532	622	775	784	938	856	550	559	631	649	626	560
1990	636	607	754	826	941	953	659	607	661	670	638	627
1991	647	625	766	839	942	748	499	611	659	672	656	683
Avg	464	505	680	664	654	596	374	369	512	573	518	509
W/AN/BN	437	450	602	536	359	302	251	245	356	463	386	385
D/C	485	547	741	764	884	825	469	465	633	658	621	607

**Percent (%) Change from Future Without Project for San Joaquin River at Brandt Bridge
(Alternative 2 - Future Without Project) / Future Without Project**

2030 Level of Development

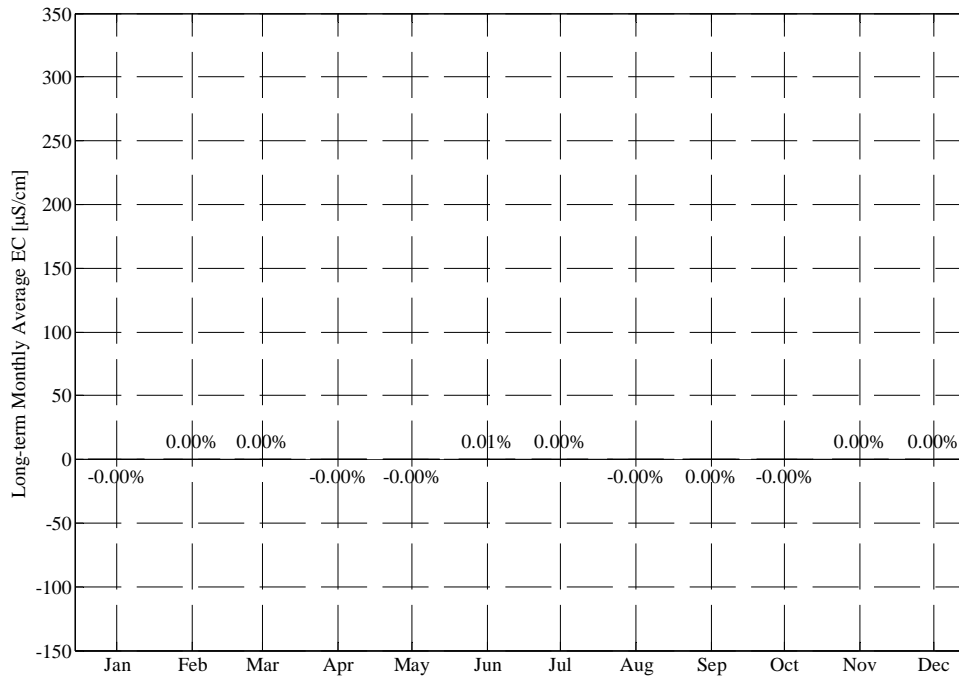
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Brandt Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



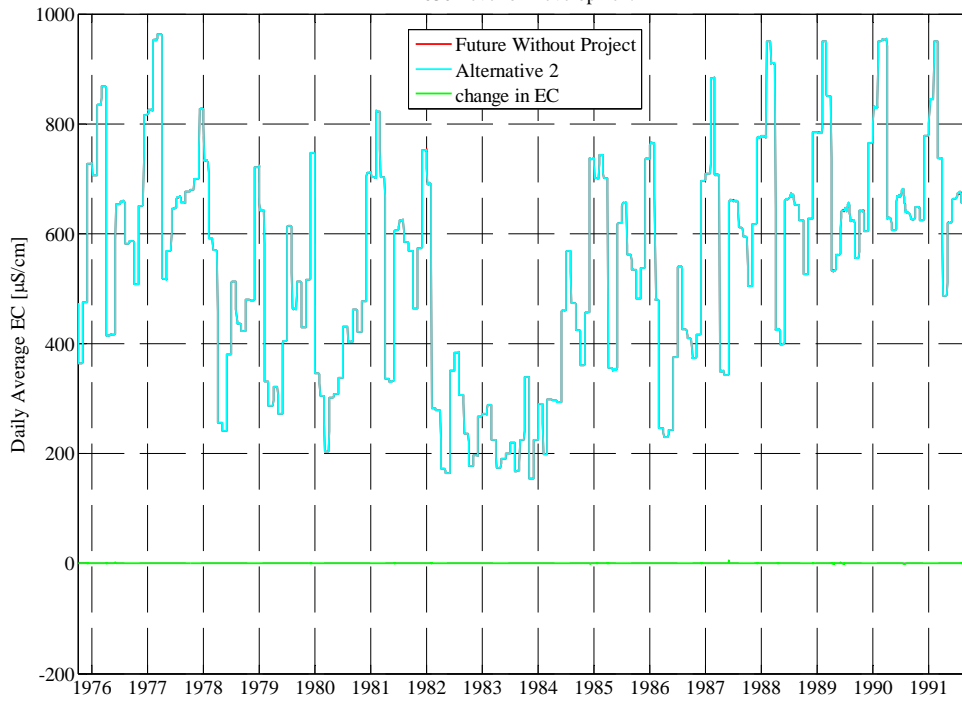
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



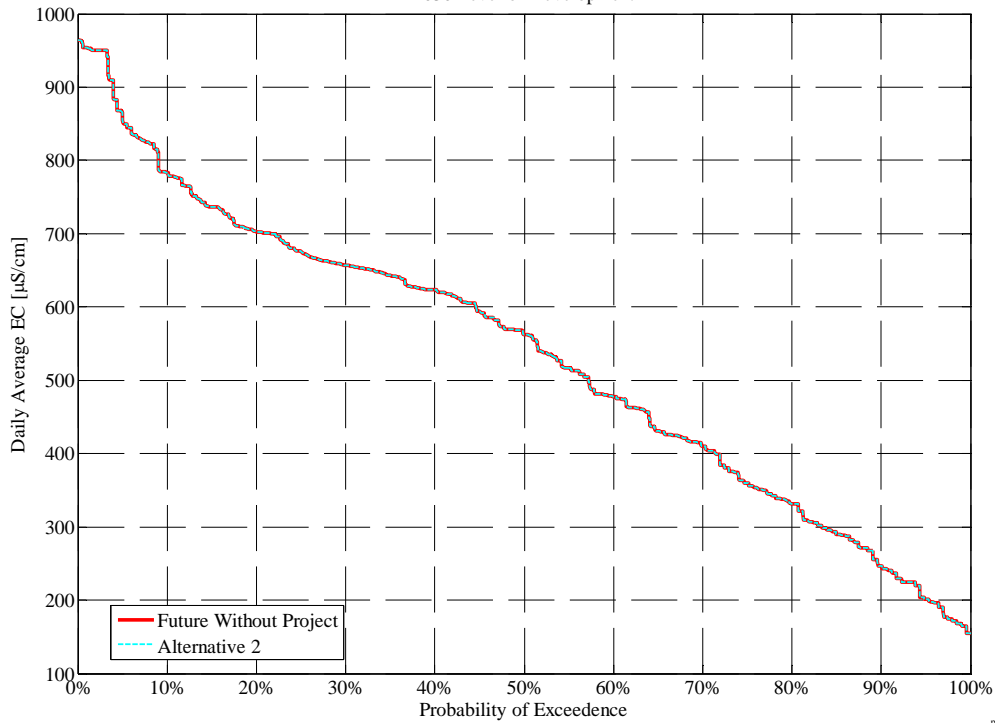
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
 Daily Average of Simulated EC
 2030 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Brandt Bridge Salinity
 Daily Average of Simulated EC
 2030 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

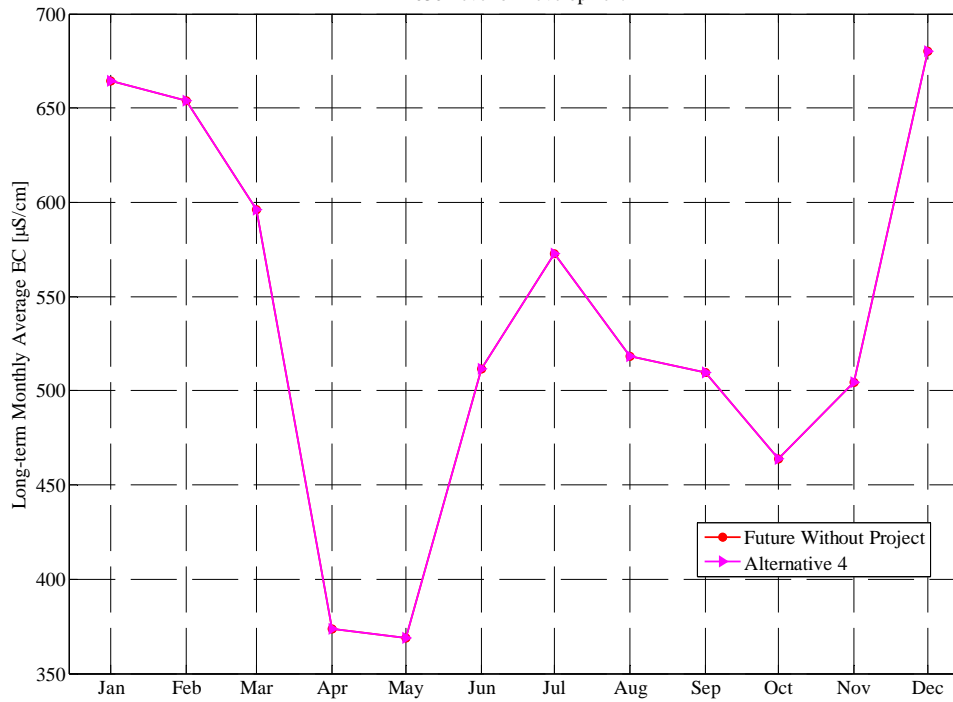
Alternative 4**San Joaquin River at Brandt Bridge Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 4****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	368	471	714	708	827	866	436	417	636	659	588	586
1977	512	643	797	824	942	963	549	565	636	663	658	674
1978	680	699	817	738	596	570	262	241	377	510	440	424
1979	479	479	710	646	341	289	321	273	400	604	470	511
1980	433	513	732	355	306	206	300	309	337	429	405	459
1981	423	475	698	703	816	708	347	332	589	623	588	570
1982	468	568	742	693	292	279	174	165	348	384	309	238
1983	179	196	266	272	289	225	175	190	201	219	169	223
1984	336	159	223	288	200	296	296	294	454	563	479	427
1985	362	453	722	703	741	703	367	353	602	653	568	537
1986	483	535	724	763	487	250	230	243	373	535	431	411
1987	375	415	681	709	871	716	364	343	638	659	616	596
1988	508	612	762	777	937	913	449	400	643	669	653	626
1989	532	622	775	784	938	856	550	559	631	649	626	560
1990	636	607	754	826	941	953	659	607	661	670	638	627
1991	647	625	765	839	942	748	499	611	659	673	656	683
Avg	464	505	680	664	654	596	374	369	512	573	518	510
W/AN/BN	437	450	602	536	359	302	251	245	356	463	386	385
D/C	485	547	741	764	884	825	469	465	633	658	621	607

**Percent (%) Change from Future Without Project for San Joaquin River at Brandt Bridge
(Alternative 4 - Future Without Project) / Future Without Project****2030 Level of Development**

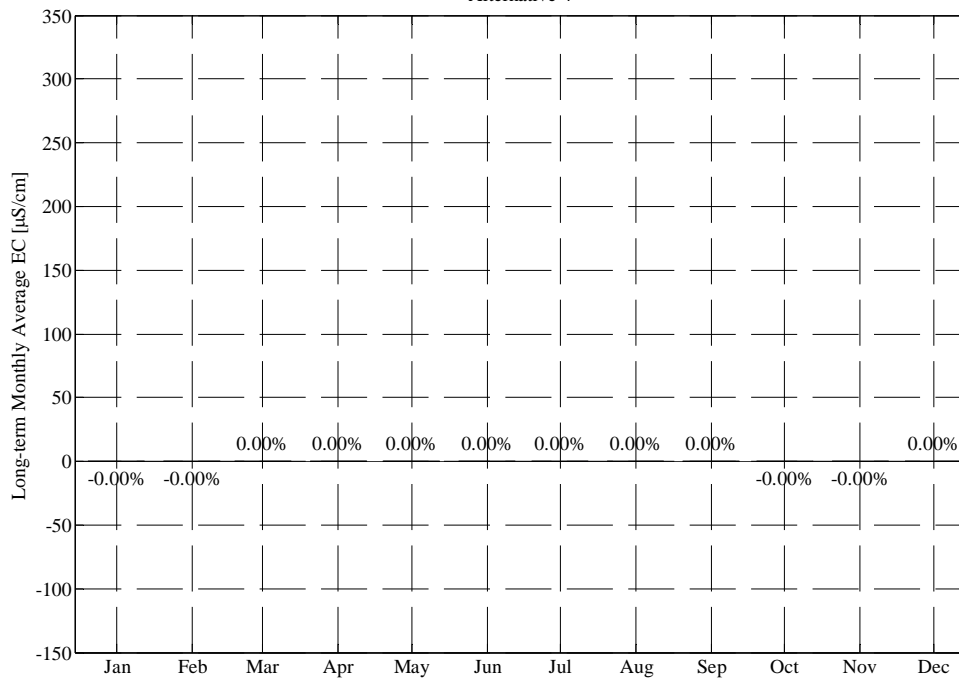
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Brandt Bridge Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

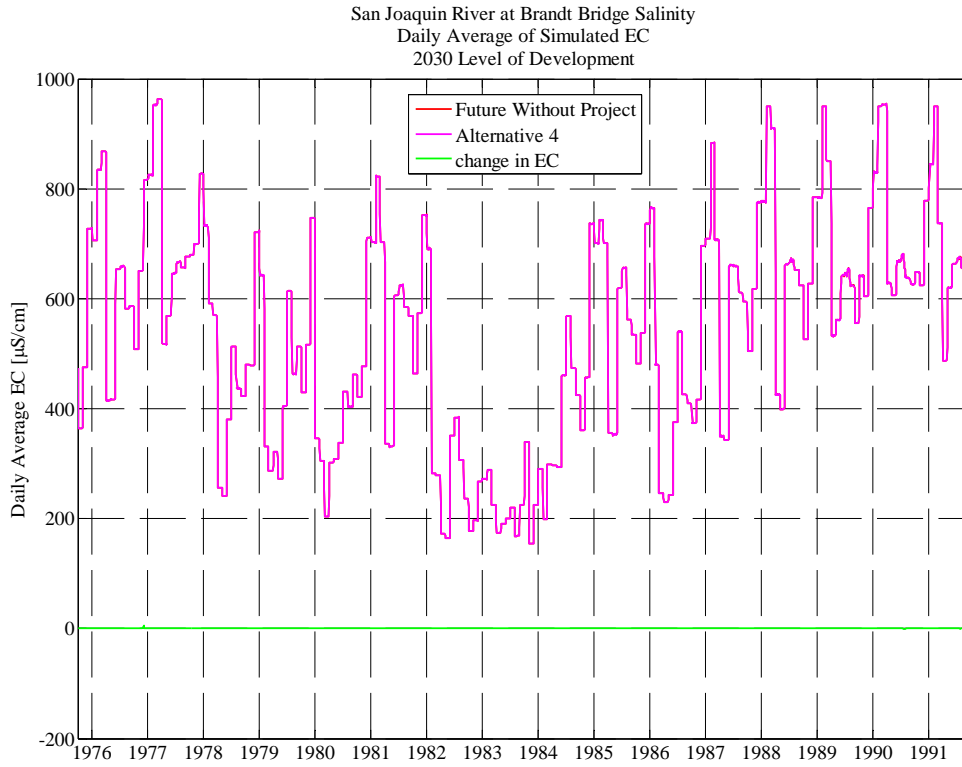


p_lve_wq_feir.m
 07-Jan-2010 DS

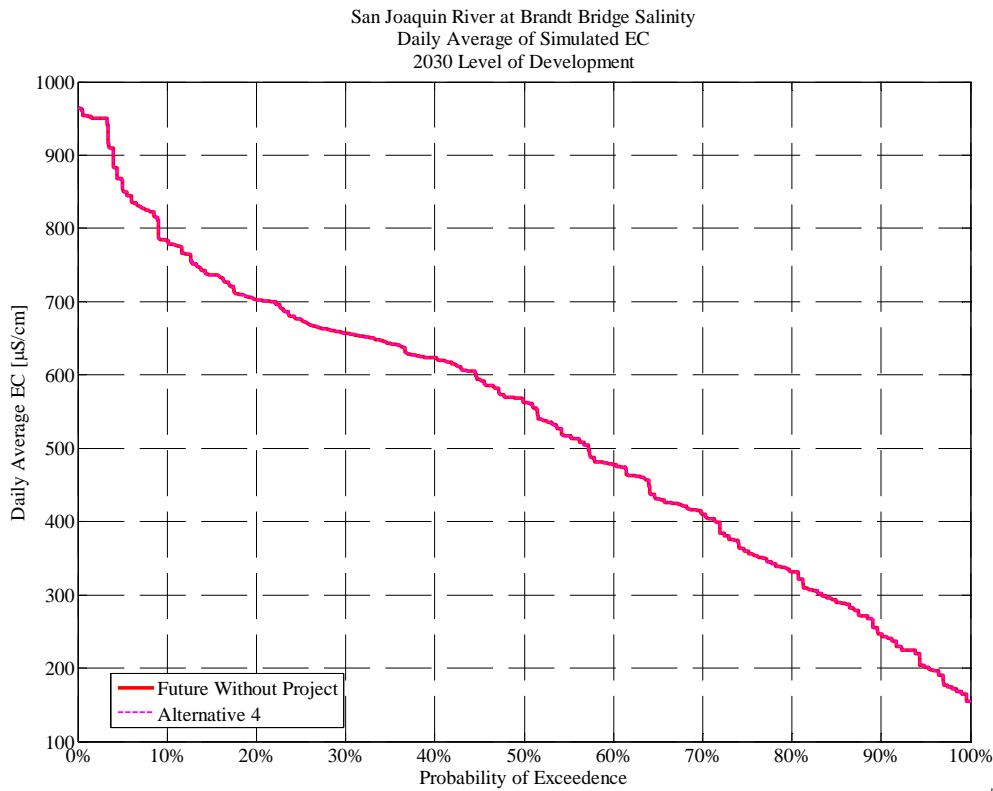
San Joaquin River at Brandt Bridge Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

San Joaquin River at Vernalis

Future Without Project

**San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, μ S/cm)
Future Without Project
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	364	473	725	702	830	857	404	403	640	648	576	583
1977	507	649	812	820	949	950	493	562	621	649	649	672
1978	678	699	823	723	589	562	255	237	376	507	429	419
1979	478	477	719	637	330	286	319	267	390	605	456	508
1980	429	515	744	343	302	204	299	305	333	427	397	457
1981	419	477	709	697	821	701	331	321	592	614	577	564
1982	463	571	747	678	282	274	172	162	348	380	301	235
1983	177	193	266	264	286	220	174	189	198	217	164	222
1984	338	155	222	289	197	297	291	287	449	559	466	420
1985	359	453	731	698	741	699	349	341	606	649	555	531
1986	480	536	732	757	473	244	229	240	371	532	419	407
1987	372	415	694	706	879	700	337	331	647	648	605	589
1988	503	616	772	770	947	903	416	388	648	644	645	619
1989	523	626	782	779	948	848	519	543	622	612	615	554
1990	640	604	764	824	948	947	601	600	648	626	628	621
1991	645	622	776	841	948	735	476	607	649	648	648	682
Avg	461	505	689	658	654	589	354	361	509	560	508	505
W/AN/BN	435	449	608	527	351	298	248	241	352	461	376	381
D/C	481	548	752	760	890	815	436	455	630	638	611	602

Alternative 1

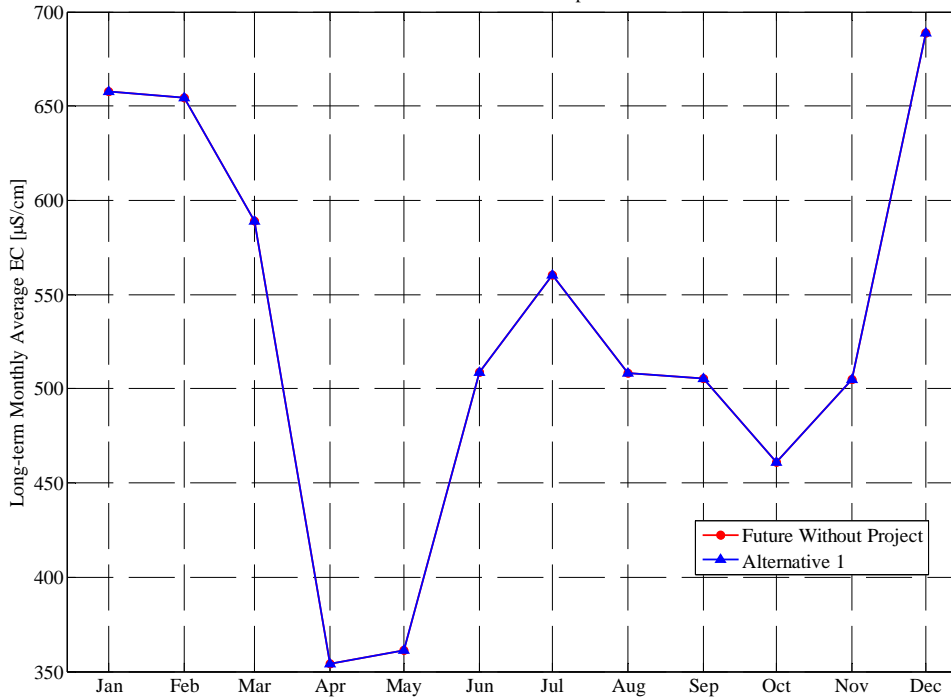
San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 1
2030 Level of Development

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	364	473	725	702	830	857	404	403	640	648	576	583
1977	507	649	812	820	949	950	493	562	621	649	649	672
1978	678	699	823	723	589	562	255	237	376	507	429	419
1979	478	477	719	637	330	286	319	267	390	605	456	508
1980	429	515	744	343	302	204	299	305	333	427	397	457
1981	419	477	709	697	821	701	331	321	592	614	577	564
1982	463	571	747	678	282	274	172	162	348	380	301	235
1983	177	193	266	264	286	220	174	189	198	217	164	222
1984	338	155	222	289	197	297	291	287	449	559	466	420
1985	359	453	731	698	741	699	349	341	606	649	555	531
1986	480	536	732	757	473	244	229	240	371	532	419	407
1987	372	415	694	706	879	700	337	331	647	648	605	589
1988	503	616	772	770	947	903	416	388	648	644	645	619
1989	523	626	782	779	948	848	519	543	622	612	615	554
1990	640	604	764	824	948	947	601	600	648	626	628	621
1991	645	622	776	841	948	735	476	607	649	648	648	682
Avg	461	505	689	658	654	589	354	361	509	560	508	505
W/AN/BN	435	449	608	527	351	298	248	241	352	461	376	381
D/C	481	548	752	760	890	815	436	455	630	638	611	602

Percent (%) Change from Future Without Project for San Joaquin River at Vernalis Salinity
(Alternative 1 - Future Without Project) / Future Without Project
2030 Level of Development

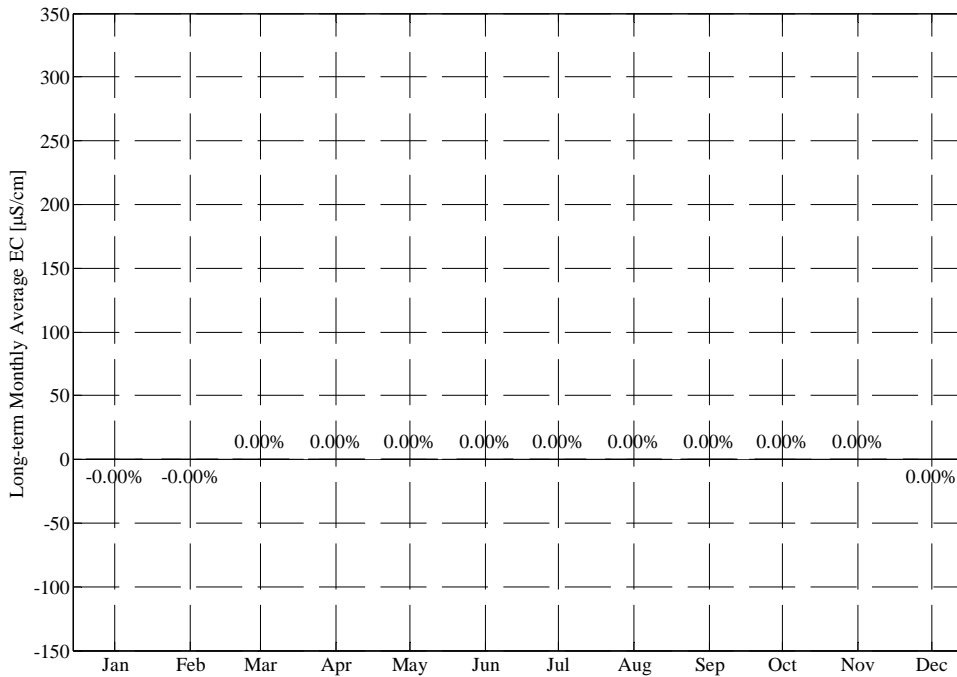
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Vernalis Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

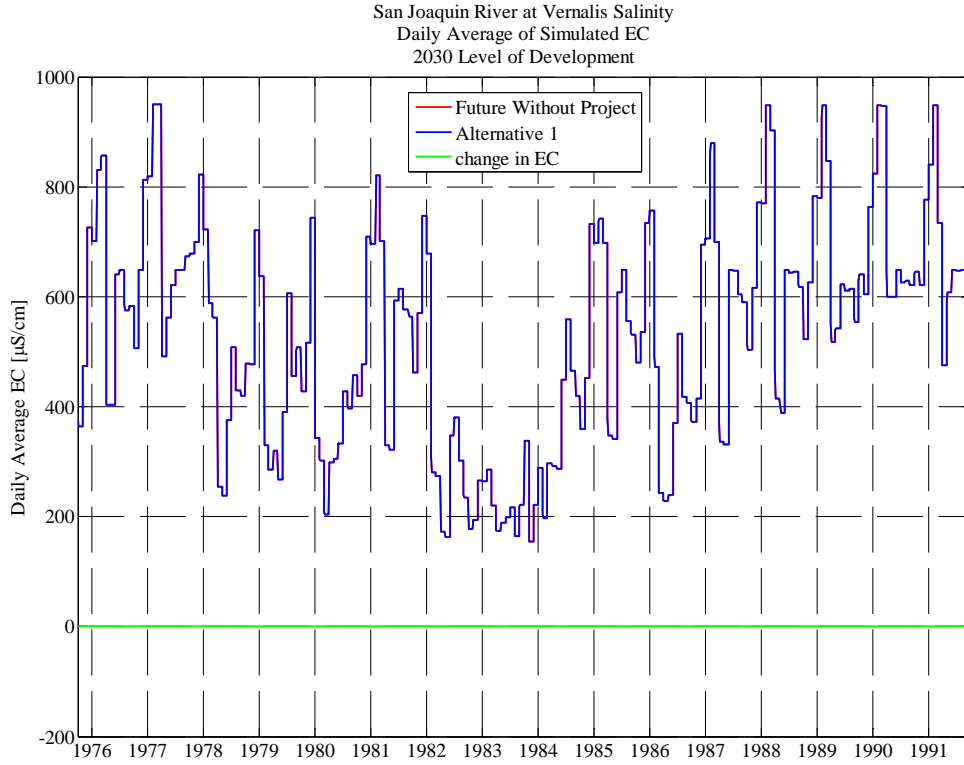


p_lve_wq_feir.m
 07-Jan-2010 DS

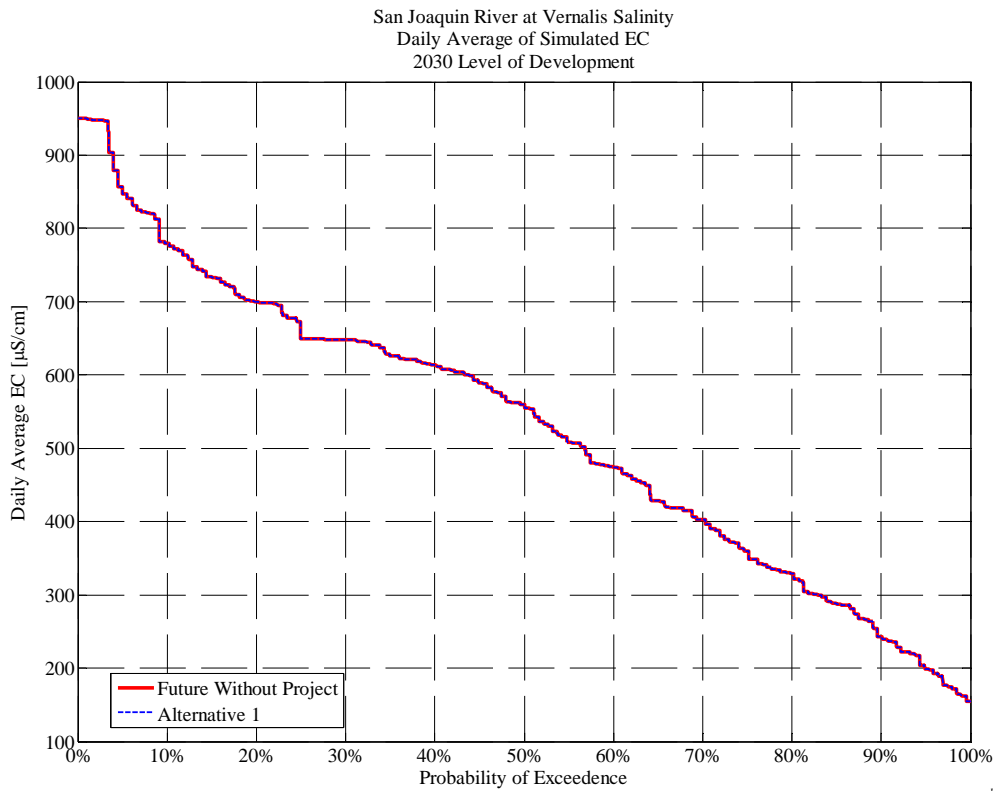
San Joaquin River at Vernalis Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 1



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS

Alternative 2

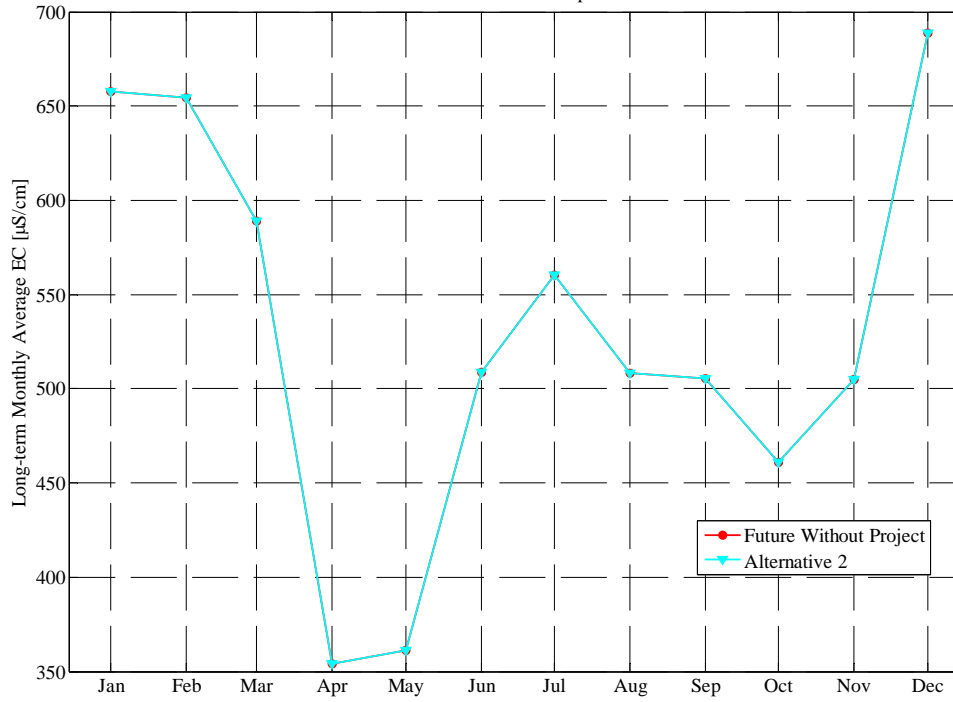
**San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, µS/cm)
Alternative 2
2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	364	473	725	702	830	857	404	403	640	648	576	583
1977	507	649	812	820	949	950	493	562	621	649	649	672
1978	678	699	823	723	589	562	255	237	376	507	429	419
1979	478	477	719	637	330	286	319	267	390	605	456	508
1980	429	515	744	343	302	204	299	305	333	427	397	457
1981	419	477	709	697	821	701	331	321	592	614	577	564
1982	463	571	747	678	282	274	172	162	348	380	301	235
1983	177	193	266	264	286	220	174	189	198	217	164	222
1984	338	155	222	289	197	297	291	287	449	559	466	420
1985	359	453	731	698	741	699	349	341	606	649	555	531
1986	480	536	732	757	473	244	229	240	371	532	419	407
1987	372	415	694	706	879	700	337	331	647	648	605	589
1988	503	616	772	770	947	903	416	388	648	644	645	619
1989	523	626	782	779	948	848	519	543	622	612	615	554
1990	640	604	764	824	948	947	601	600	648	626	628	621
1991	645	622	776	841	948	735	476	607	649	648	648	682
Avg	461	505	689	658	654	589	354	361	509	560	508	505
W/AN/BN	435	449	608	527	351	298	248	241	352	461	376	381
D/C	481	548	752	760	890	815	436	455	630	638	611	602

**Percent (%) Change from Future Without Project for San Joaquin River at Vernalis
(Alternative 2 - Future Without Project) / Future Without Project
2030 Level of Development**

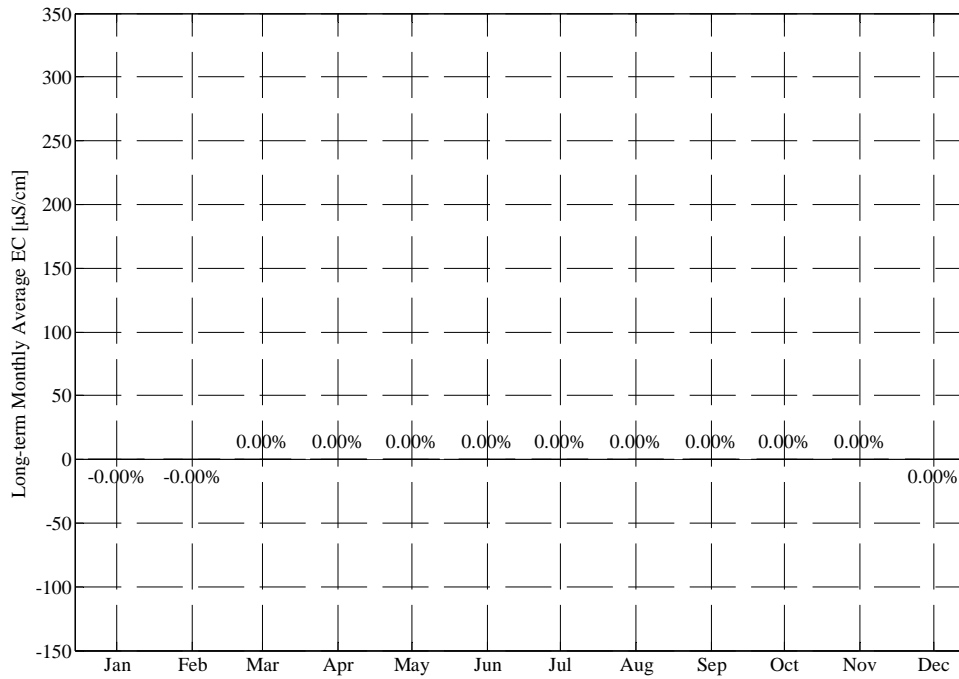
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Vernalis Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development



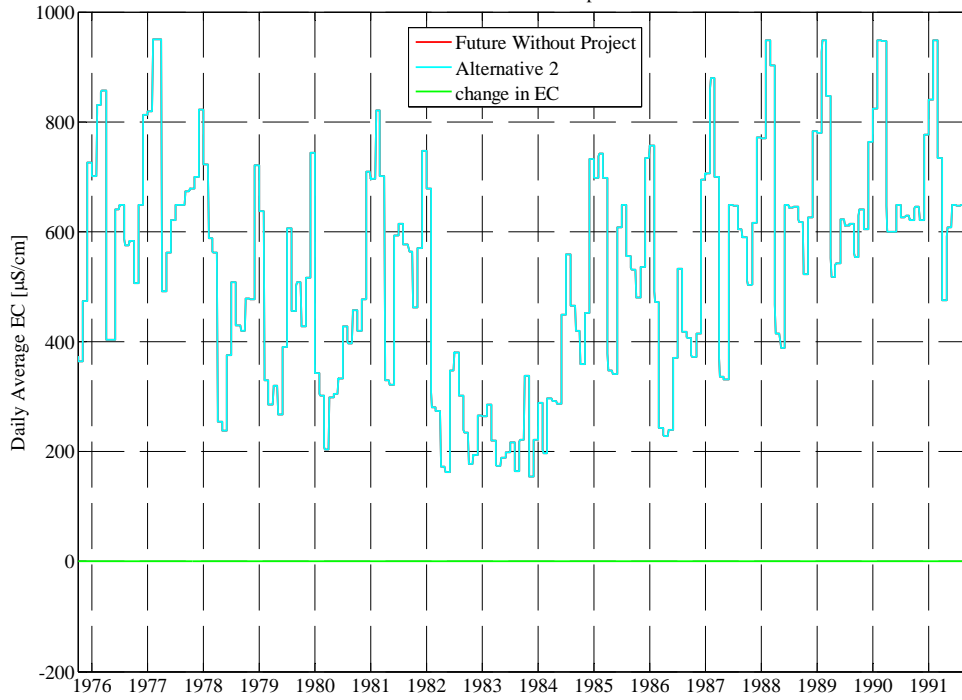
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 2



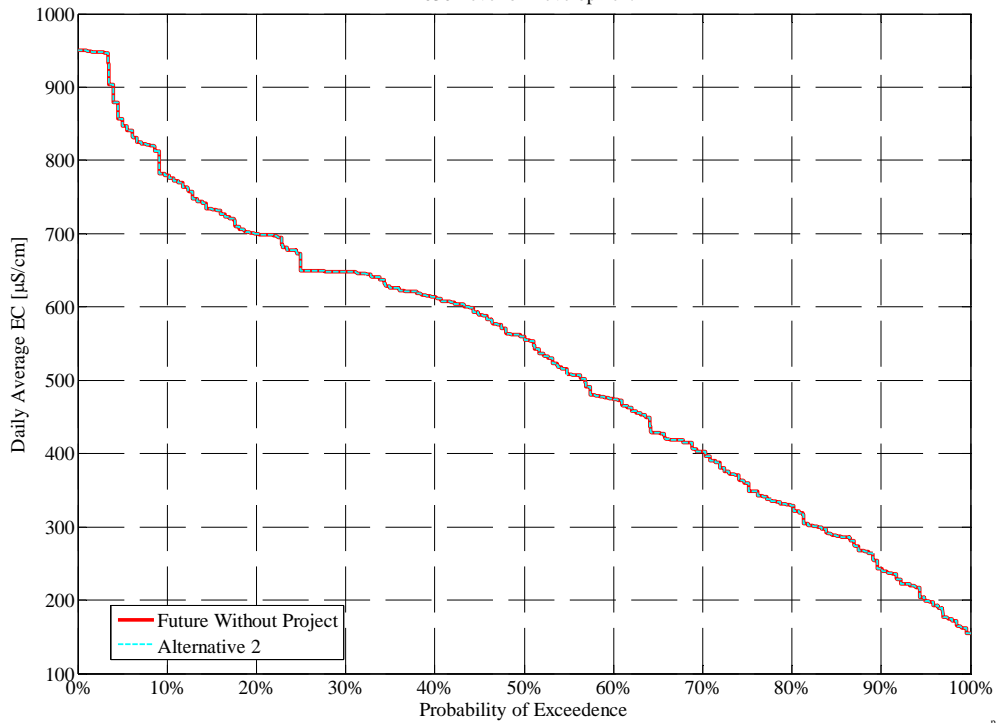
p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
 Daily Average of Simulated EC
 2030 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

San Joaquin River at Vernalis Salinity
 Daily Average of Simulated EC
 2030 Level of Development



p_lve_wq_feir.m
 07-Jan-2010 DS

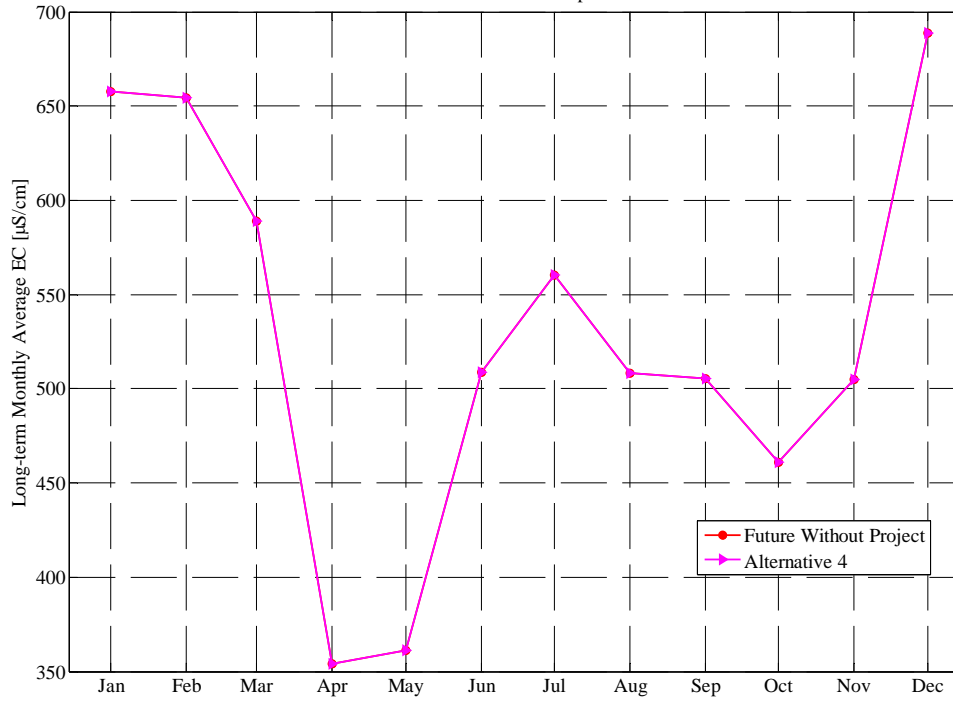
Alternative 4**San Joaquin River at Vernalis Salinity
Monthly Average of Simulated Values (EC, µS/cm)****Alternative 4****2030 Level of Development**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	364	473	725	702	830	857	404	403	640	648	576	583
1977	507	649	812	820	949	950	493	562	621	649	649	672
1978	678	699	823	723	589	562	255	237	376	507	429	419
1979	478	477	719	637	330	286	319	267	390	605	456	508
1980	429	515	744	343	302	204	299	305	333	427	397	457
1981	419	477	709	697	821	701	331	321	592	614	577	564
1982	463	571	747	678	282	274	172	162	348	380	301	235
1983	177	193	266	264	286	220	174	189	198	217	164	222
1984	338	155	222	289	197	297	291	287	449	559	466	420
1985	359	453	731	698	741	699	349	341	606	649	555	531
1986	480	536	732	757	473	244	229	240	371	532	419	407
1987	372	415	694	706	879	700	337	331	647	648	605	589
1988	503	616	772	770	947	903	416	388	648	644	645	619
1989	523	626	782	779	948	848	519	543	623	612	615	554
1990	640	604	764	824	948	947	601	600	648	626	628	621
1991	645	622	776	841	948	735	476	607	649	648	648	682
Avg	461	505	689	658	654	589	354	361	509	560	508	505
W/AN/BN	435	449	608	527	351	298	248	241	352	461	376	381
D/C	481	548	752	760	890	815	436	455	630	638	611	602

**Percent (%) Change from Future Without Project for San Joaquin River at Vernalis
(Alternative 4 - Future Without Project) / Future Without Project****2030 Level of Development**

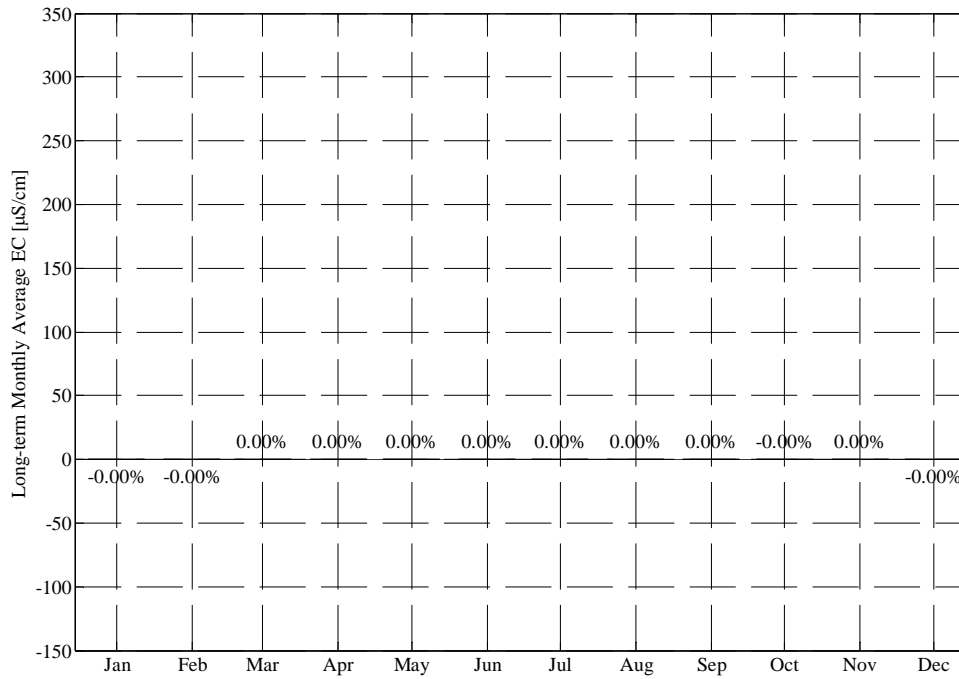
Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1976	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1977	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1986	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1987	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
1990	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1991	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avg	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
W/AN/BN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D/C	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

San Joaquin River at Vernalis Salinity
 Long-term Monthly Average of Simulated EC
 2030 Level of Development

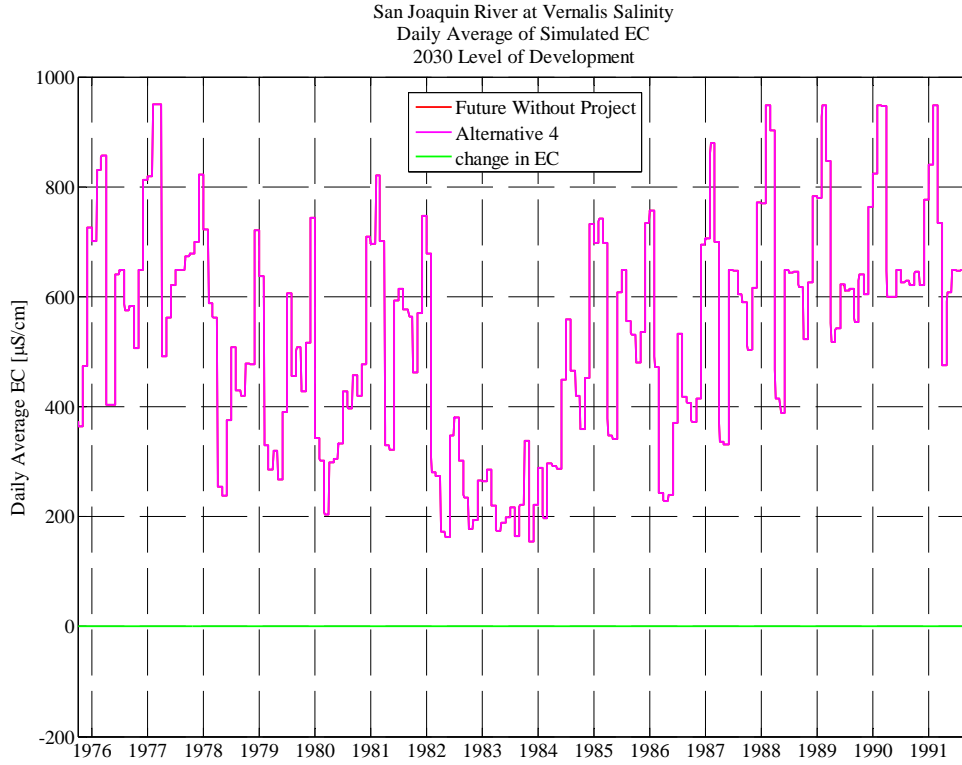


p_lve_wq_feir.m
 07-Jan-2010 DS

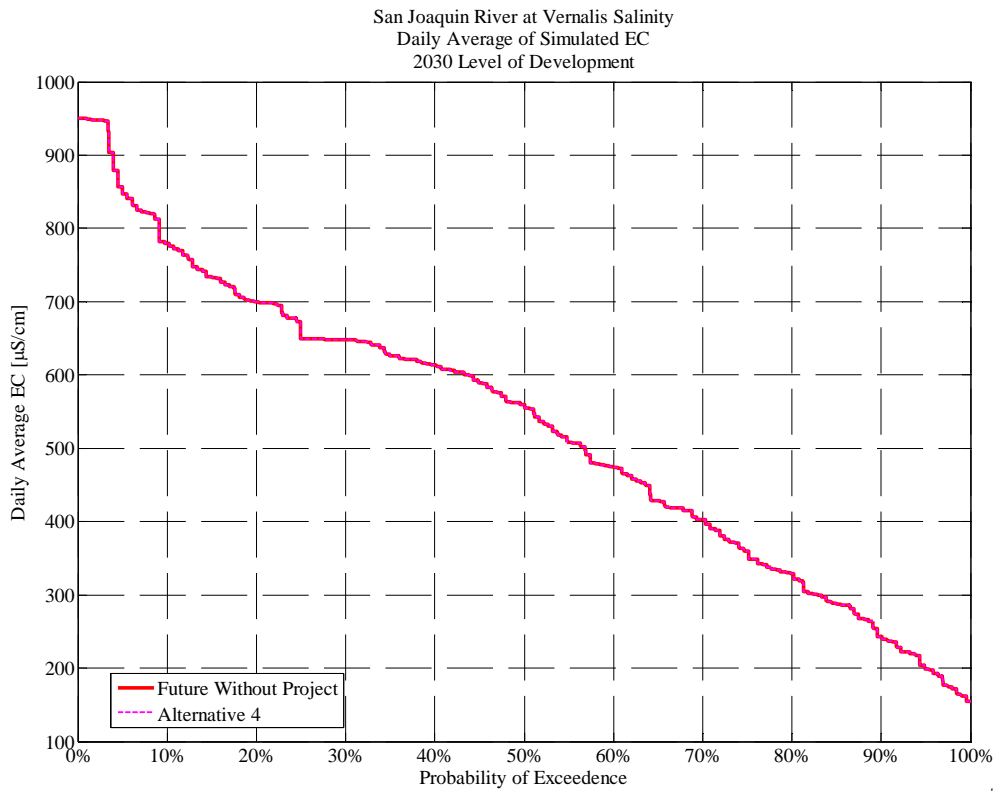
San Joaquin River at Vernalis Salinity
 Change from Future Without Project for Long-term Monthly Average of Simulated EC
 2030 Level of Development
 Alternative 4



p_lve_wq_feir.m
 07-Jan-2010 DS



p_lve_wq_feir.m
07-Jan-2010 DS



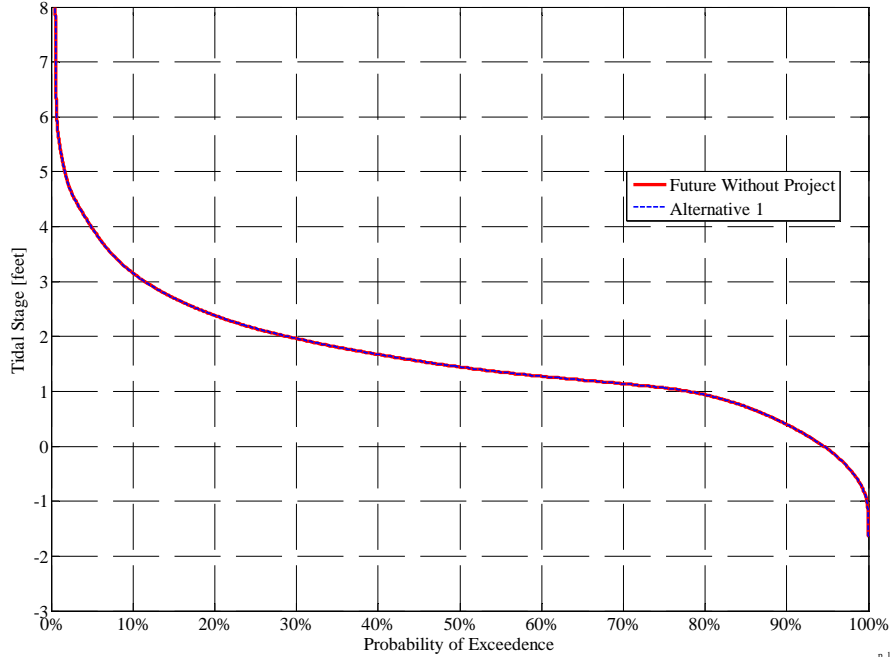
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07-Jan-2010 DS

Water Level

Middle River near Howard Road Bridge

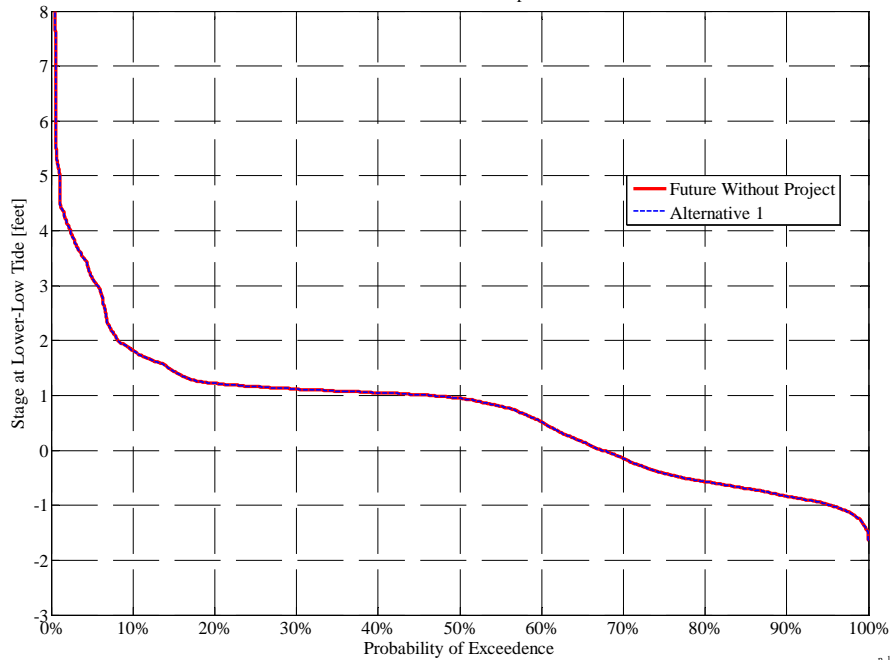
Alternative 1

Middle River near Howard Road Bridge
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development



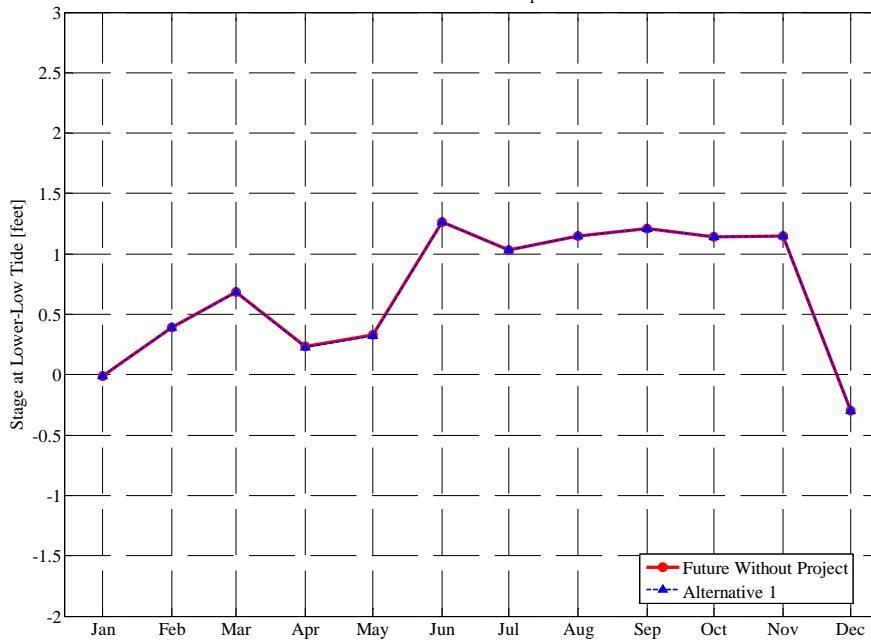
p_lve_stage_feir.m
07-Jan-2010 DS

Middle River near Howard Road Bridge
Water Level at Lower-Low Tide
2030 Level of Development



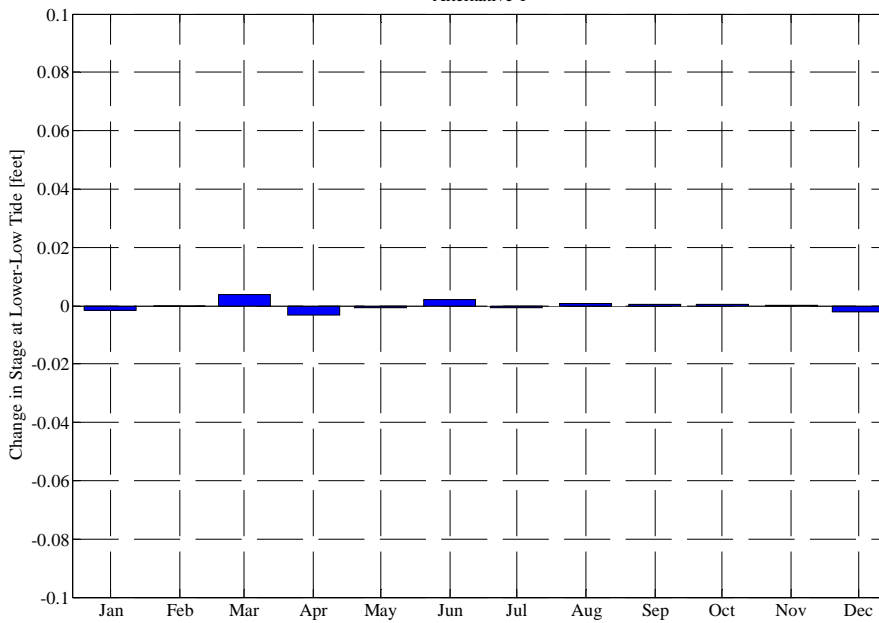
p_lve_stage_feir.m
07-Jan-2010 DS

Middle River near Howard Road Bridge
 Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development



p_lve_stage_feir.m
 07-Jan-2010 DS

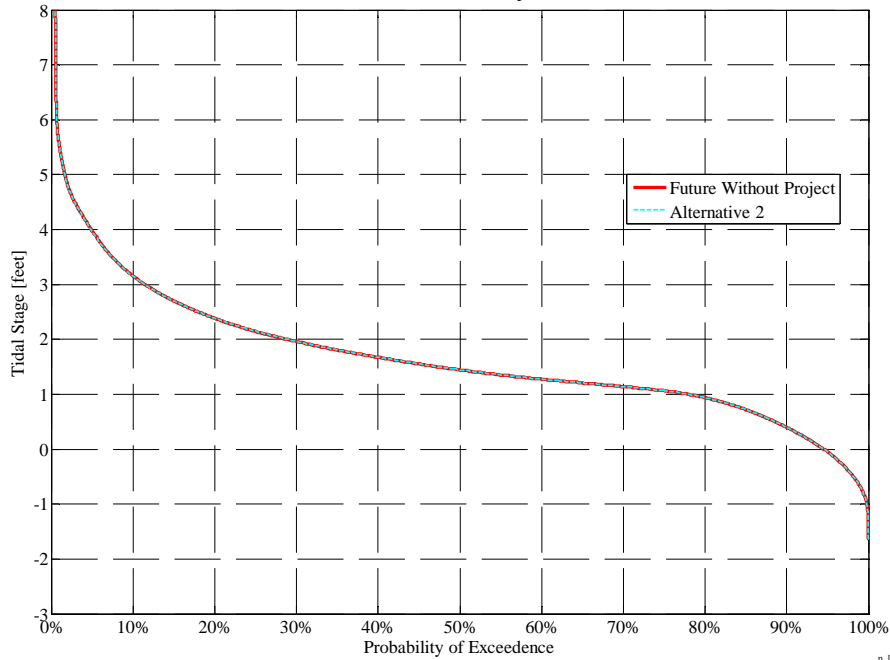
Middle River near Howard Road Bridge
 Change from Future Without Project for Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development
 Alternative 1



p_lve_stage_feir.m
 07-Jan-2010 DS

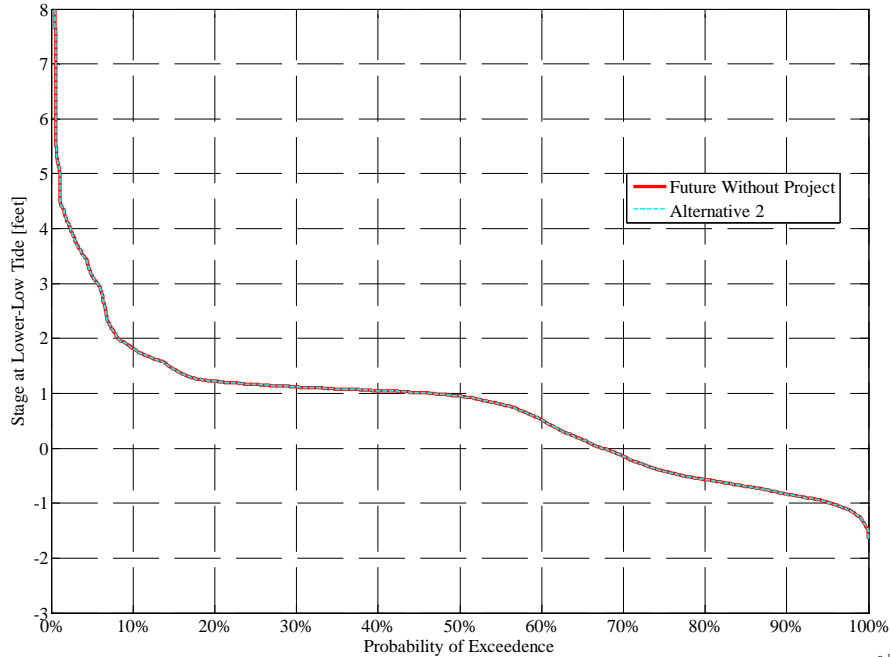
Alternative 2

Middle River near Howard Road Bridge
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development



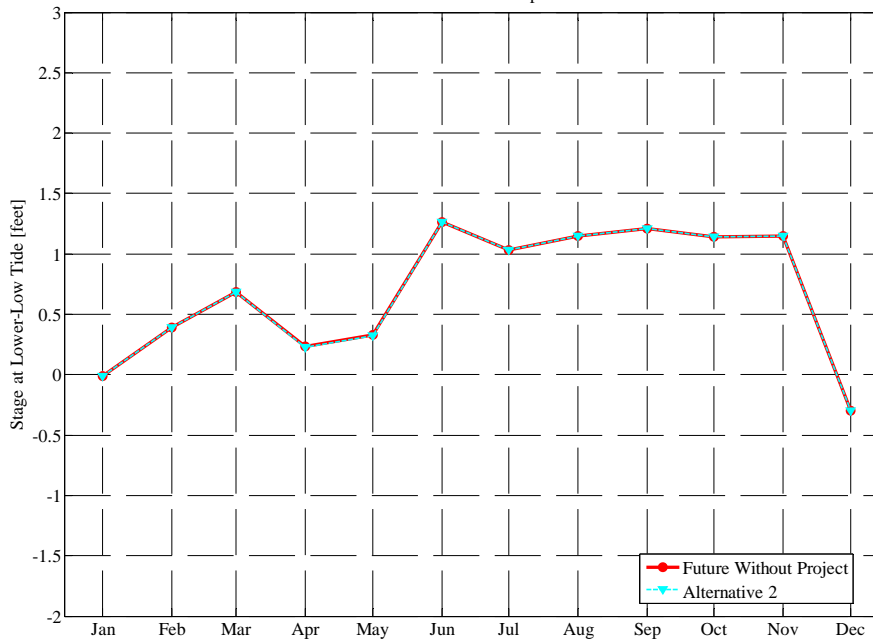
p_lve_stage_feir.m
07-Jan-2010 DS

Middle River near Howard Road Bridge
Water Level at Lower-Low Tide
2030 Level of Development



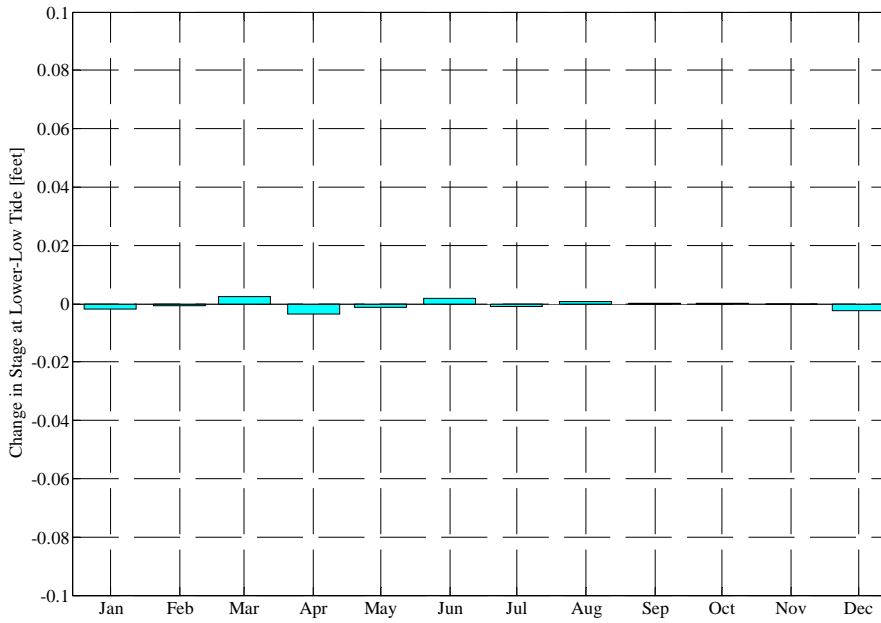
p_lve_stage_feir.m
07-Jan-2010 DS

Middle River near Howard Road Bridge
 Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development



p_lve_stage_feir.m
 07-Jan-2010 DS

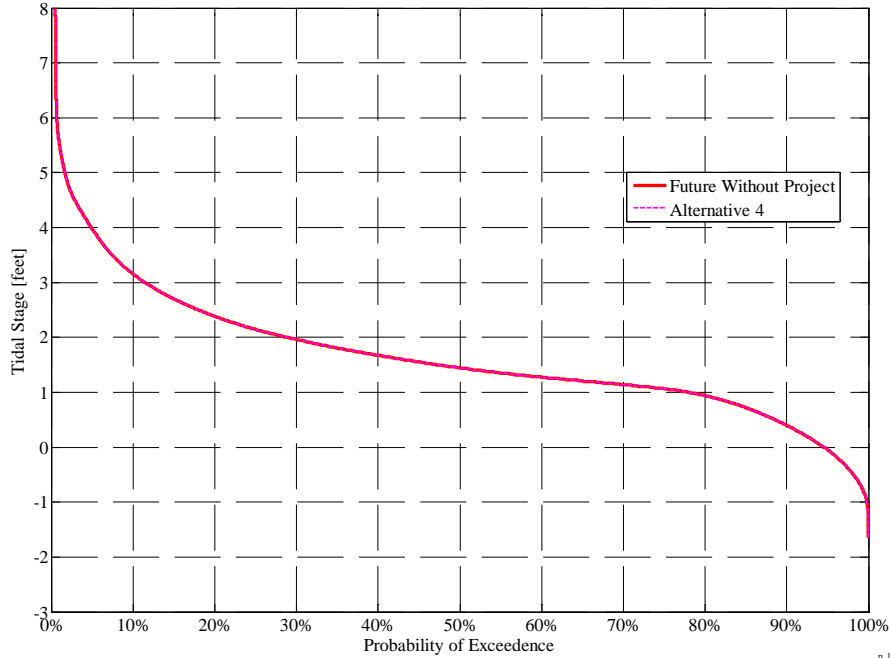
Middle River near Howard Road Bridge
 Change from Future Without Project for Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development
 Alternative 2



p_lve_stage_feir.m
 07-Jan-2010 DS

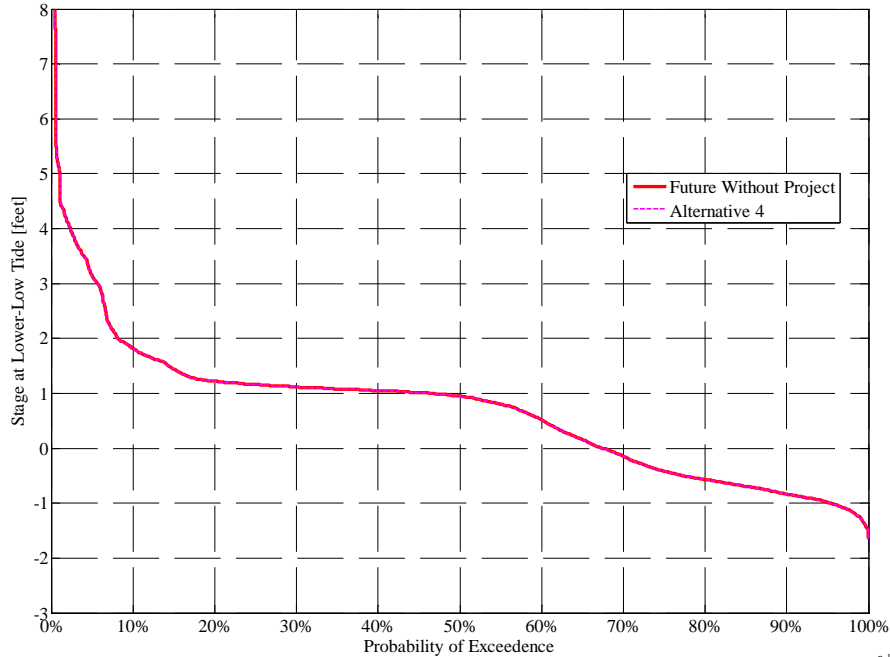
Alternative 4

Middle River near Howard Road Bridge
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development



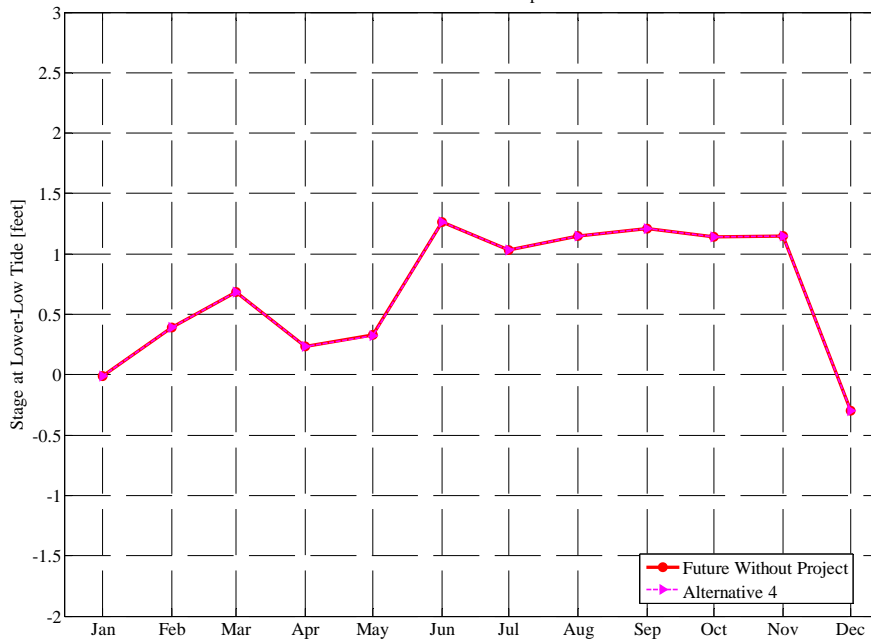
p_lve_stage_feir.m
07-Jan-2010 DS

Middle River near Howard Road Bridge
Water Level at Lower-Low Tide
2030 Level of Development



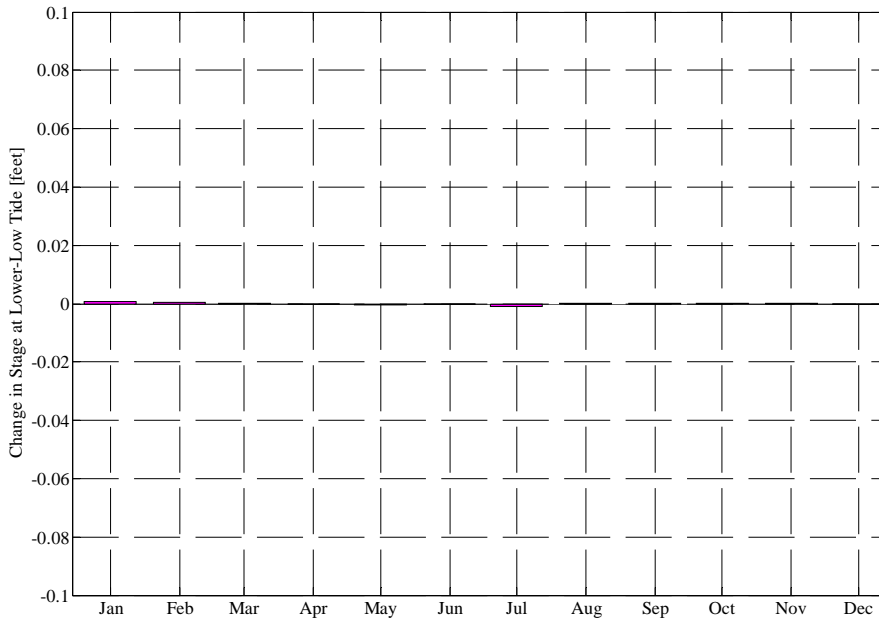
p_lve_stage_feir.m
07-Jan-2010 DS

Middle River near Howard Road Bridge
 Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development



p_lve_stage_feir.m
 07-Jan-2010 DS

Middle River near Howard Road Bridge
 Change from Future Without Project for Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development
 Alternative 4

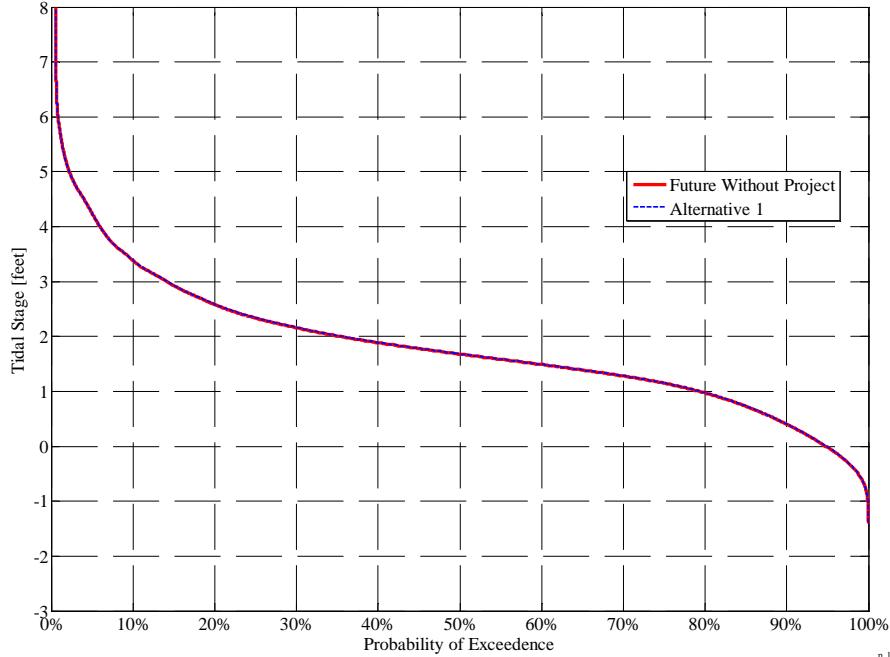


p_lve_stage_feir.m
 07-Jan-2010 DS

Old River near Tracy Road Bridge

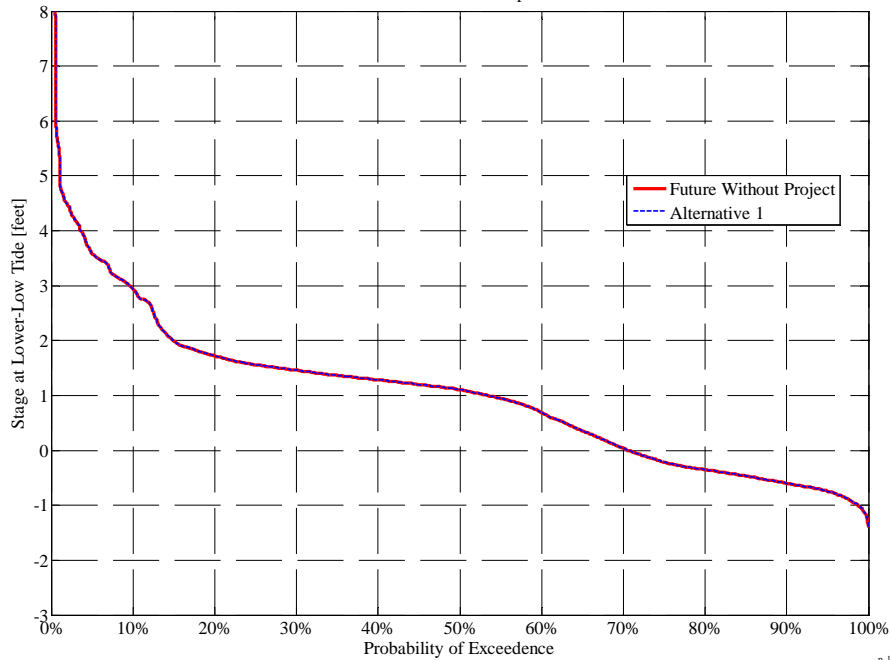
Alternative 1

Old River near Tracy Road Bridge
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

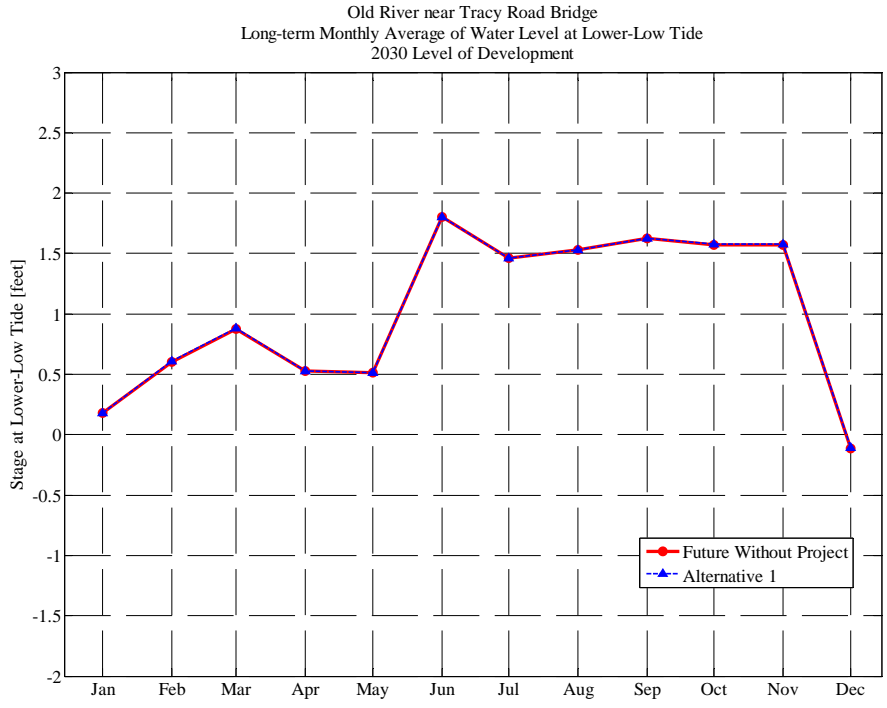


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07-Jan-2010 DS

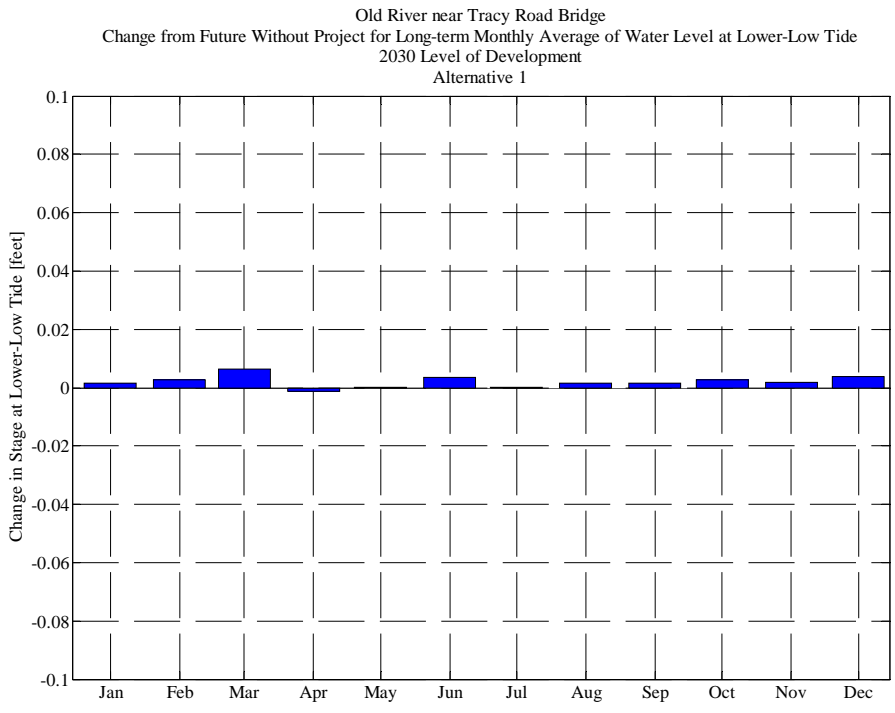
Old River near Tracy Road Bridge
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



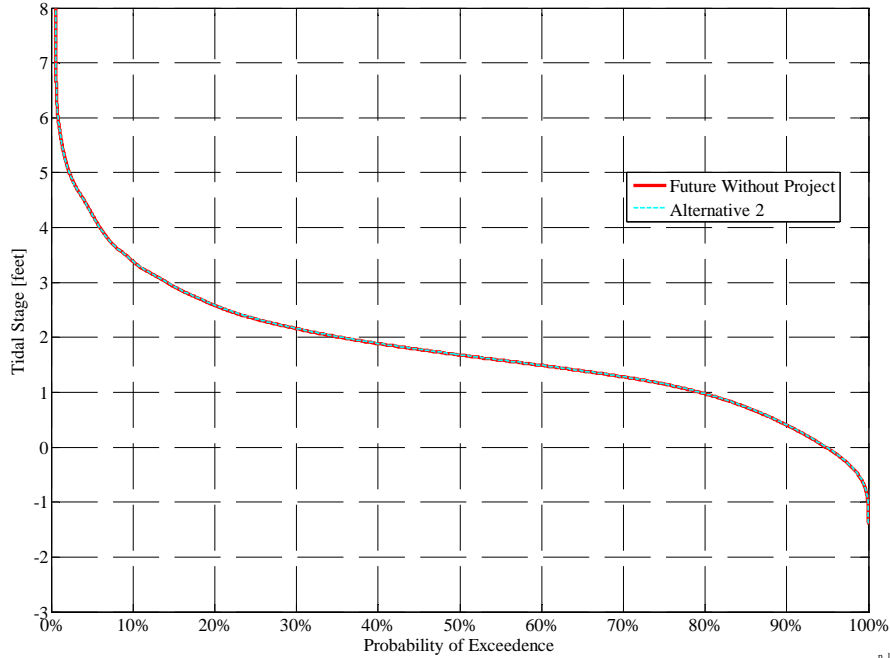
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

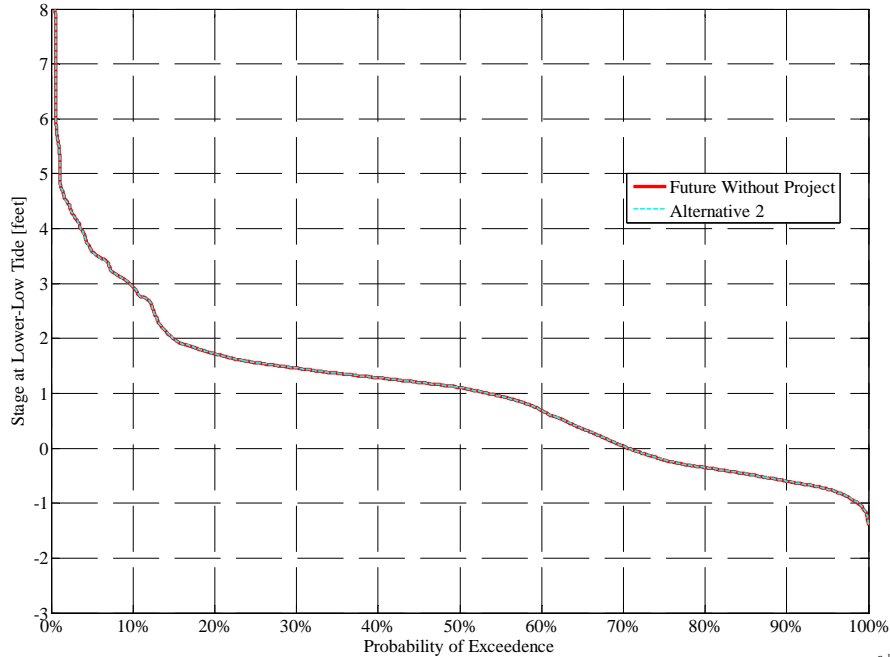
Alternative 2

Old River near Tracy Road Bridge
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

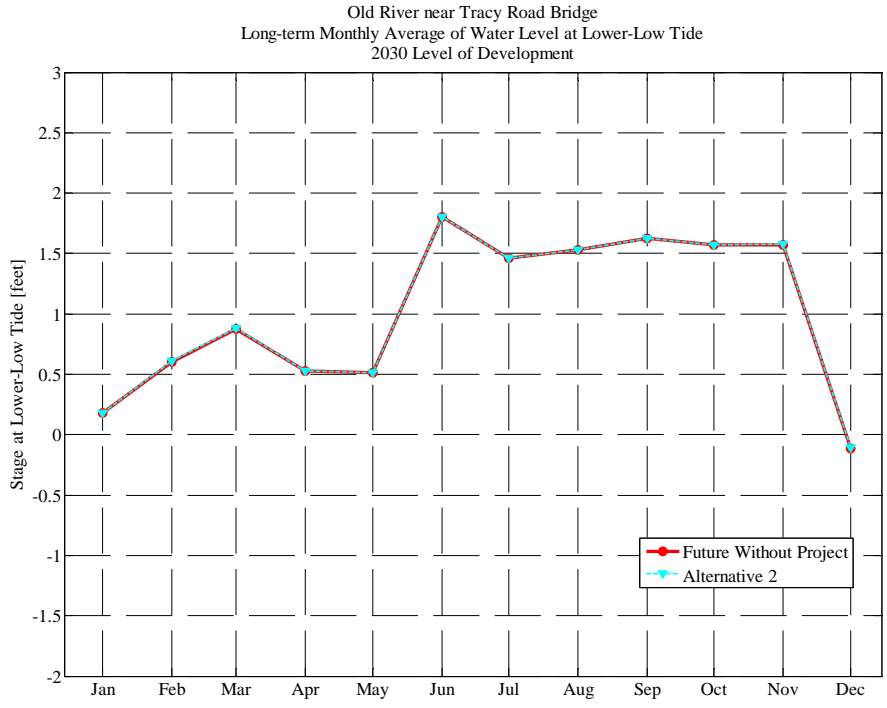


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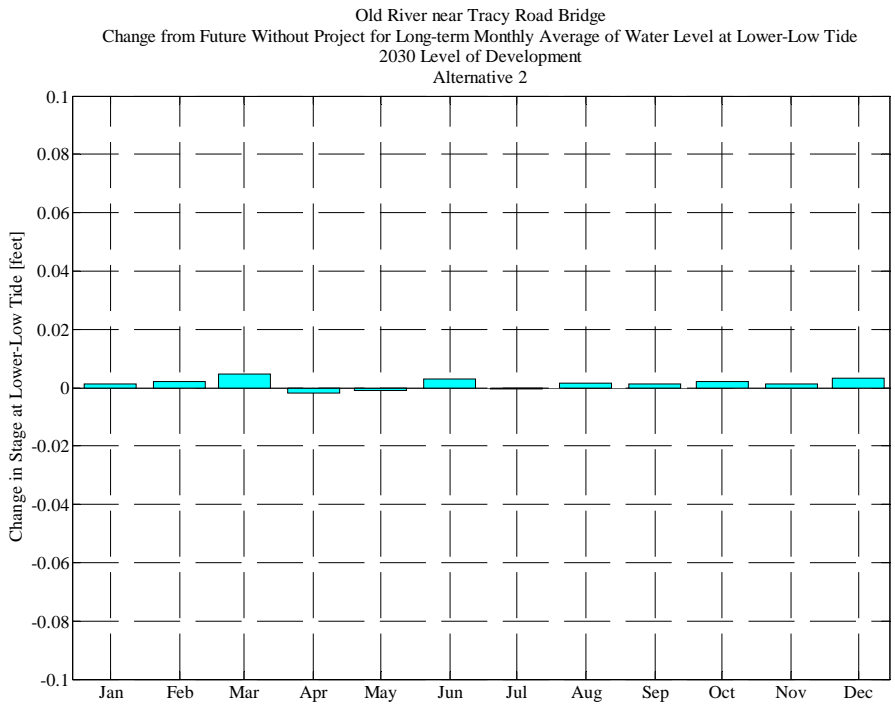
Old River near Tracy Road Bridge
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



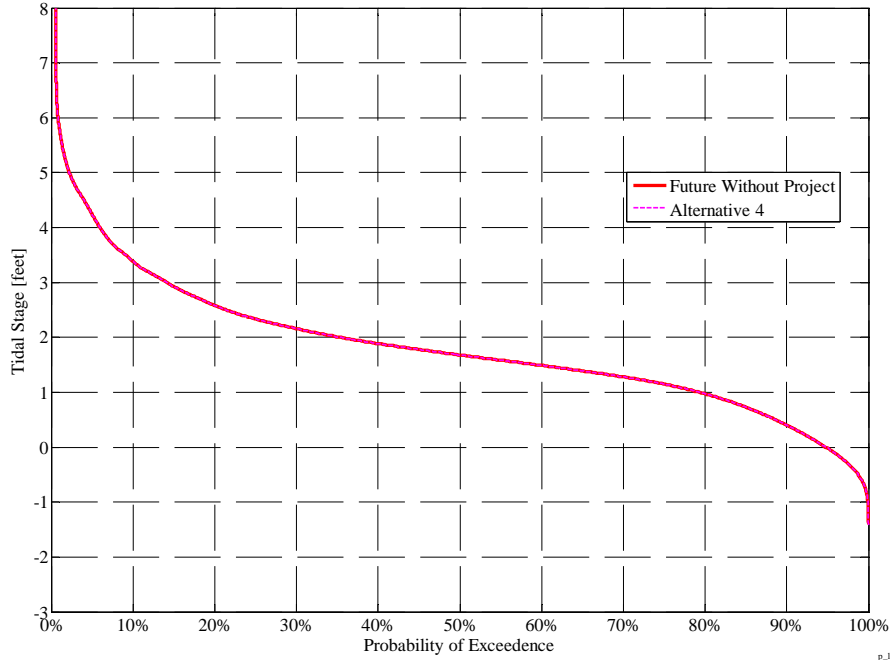
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p_lve_stage_feir.m
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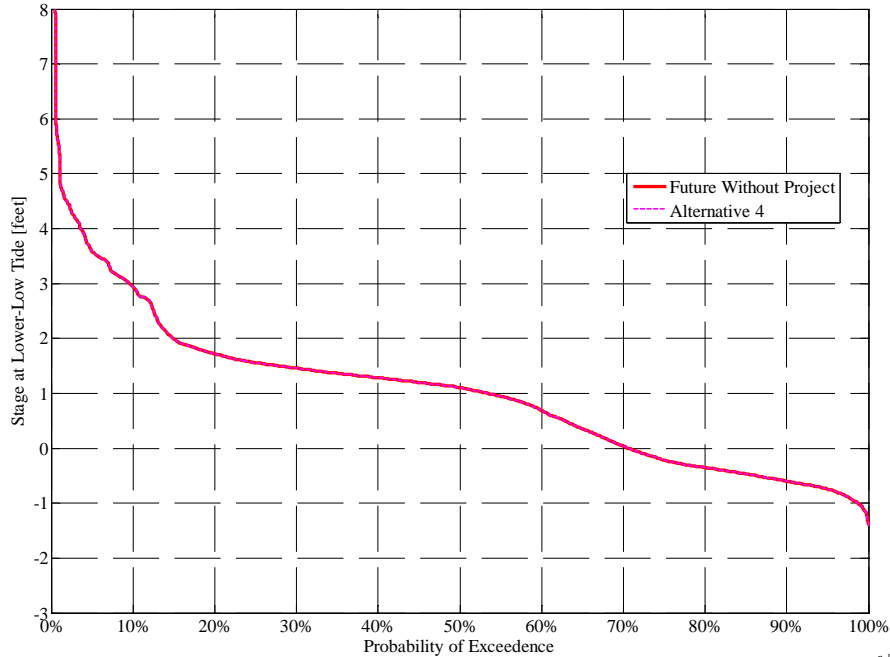
Alternative 4

Old River near Tracy Road Bridge
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

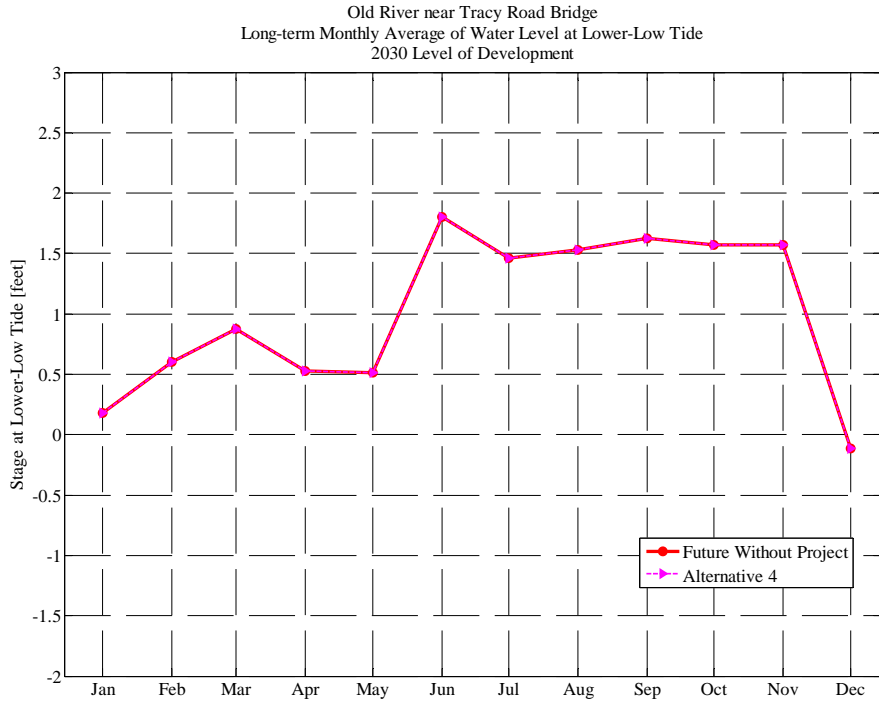


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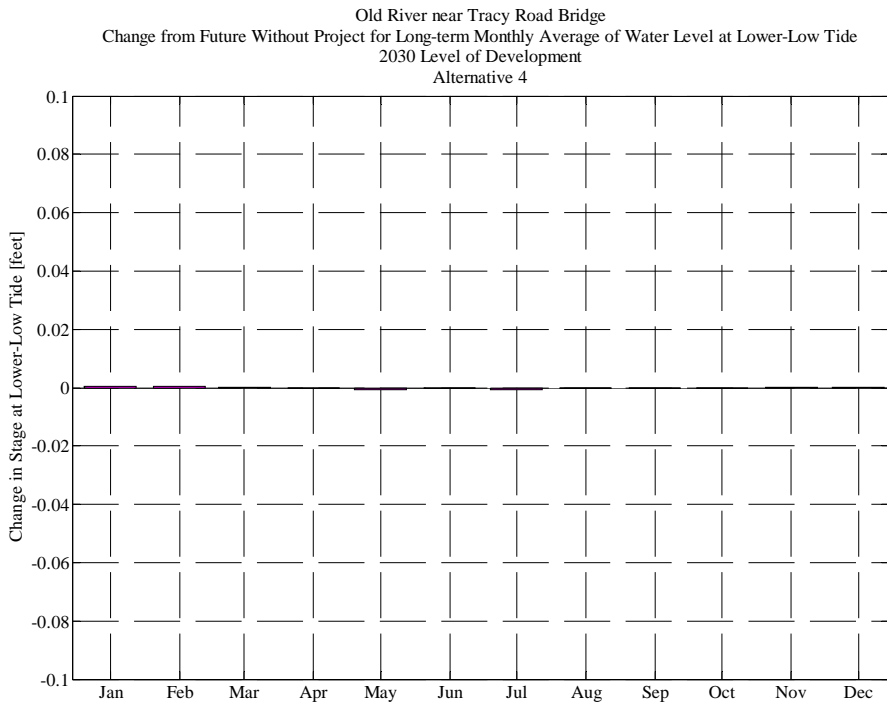
Old River near Tracy Road Bridge
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

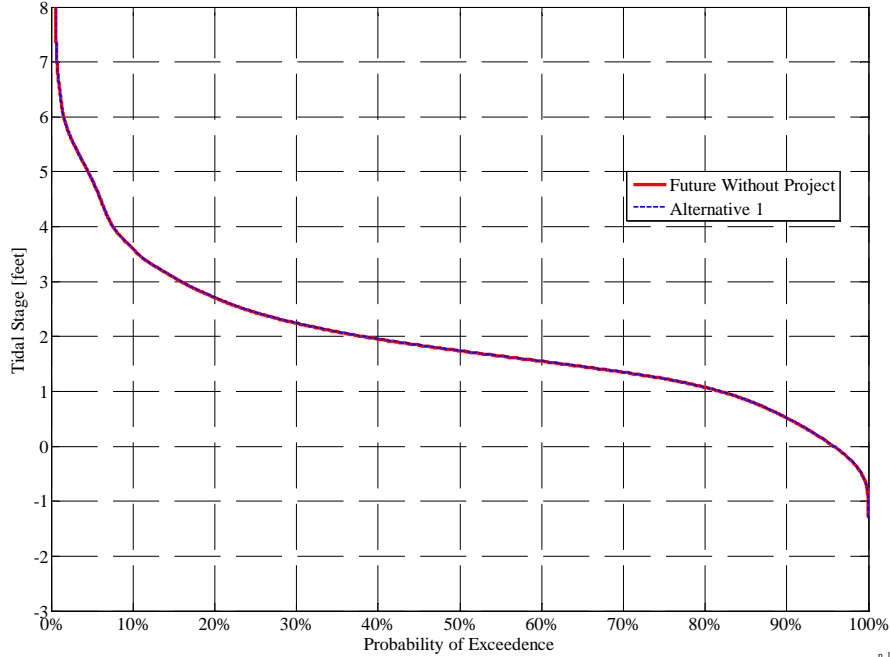


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07-Jan-2010 DS

Doughty Cut above Grant Line Canal Barrier

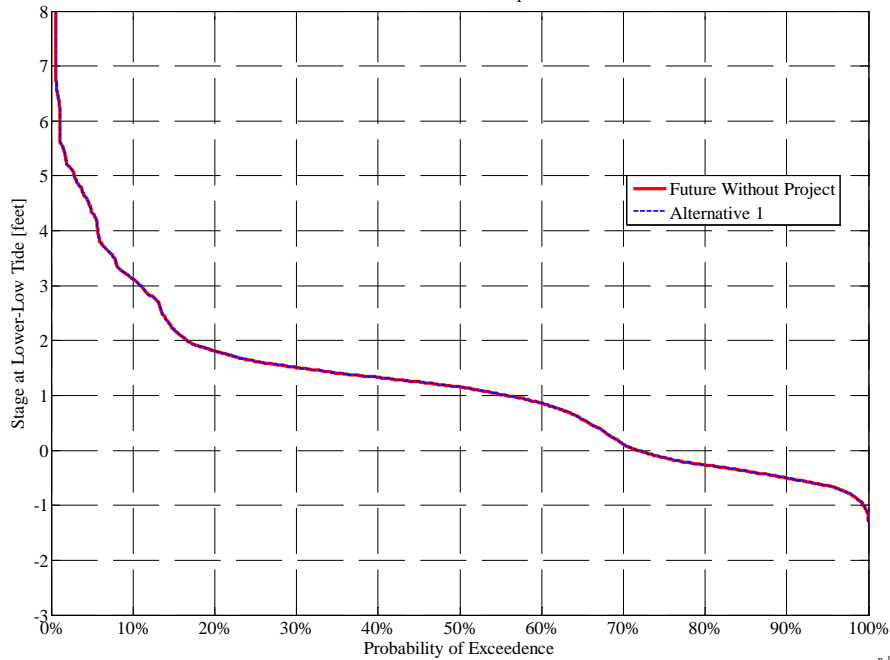
Alternative 1

Doughty Cut above Grant Line Canal Barrier
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

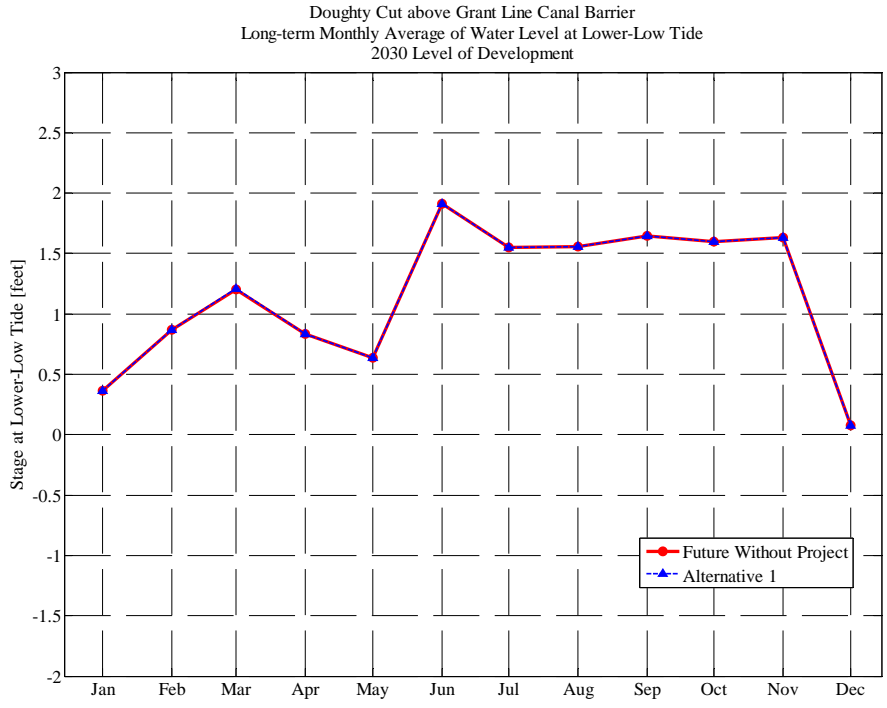


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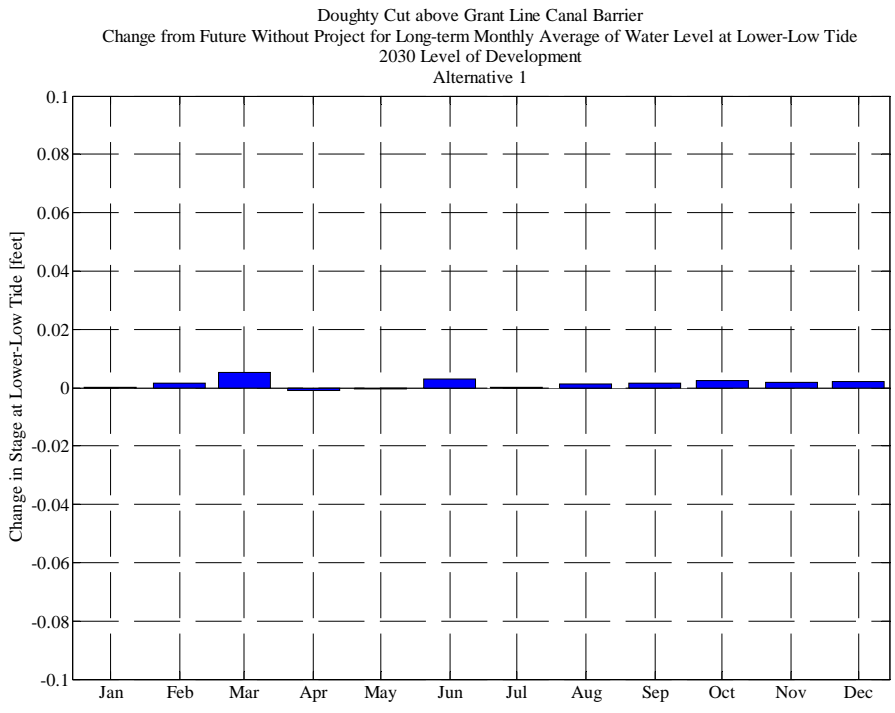
Doughty Cut above Grant Line Canal Barrier
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



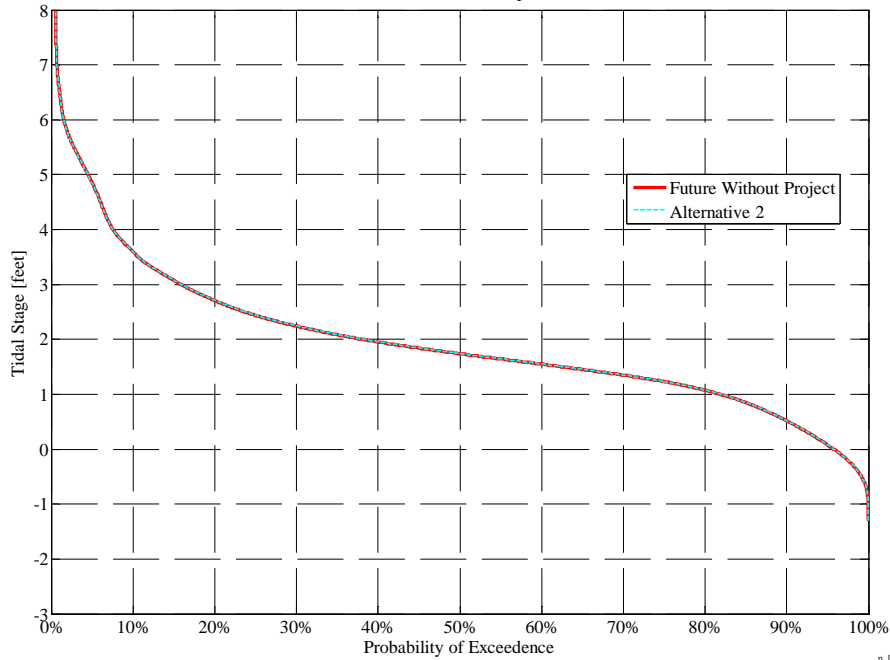
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p_lve_stage_feir.m
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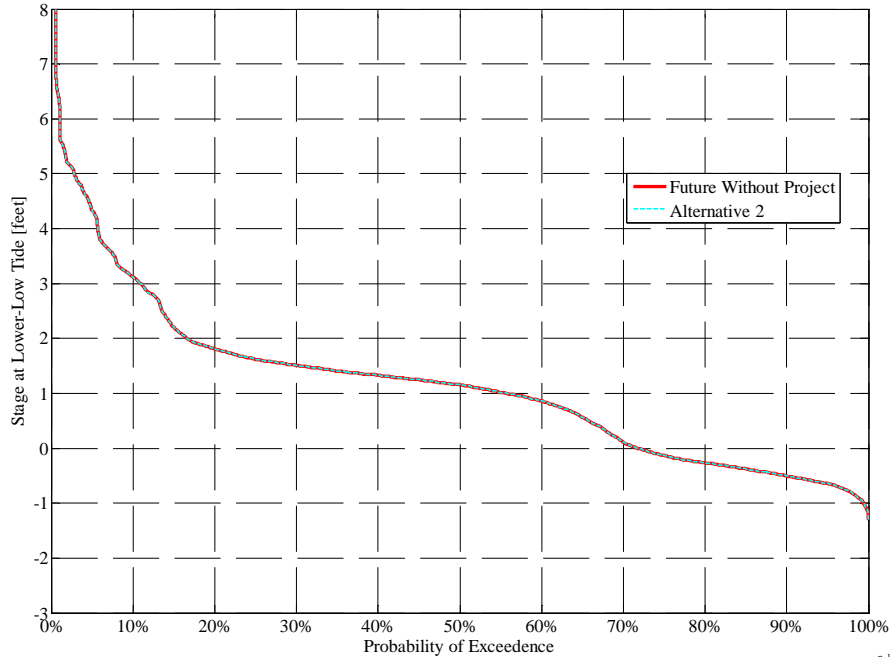
Alternative 2

Doughty Cut above Grant Line Canal Barrier
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

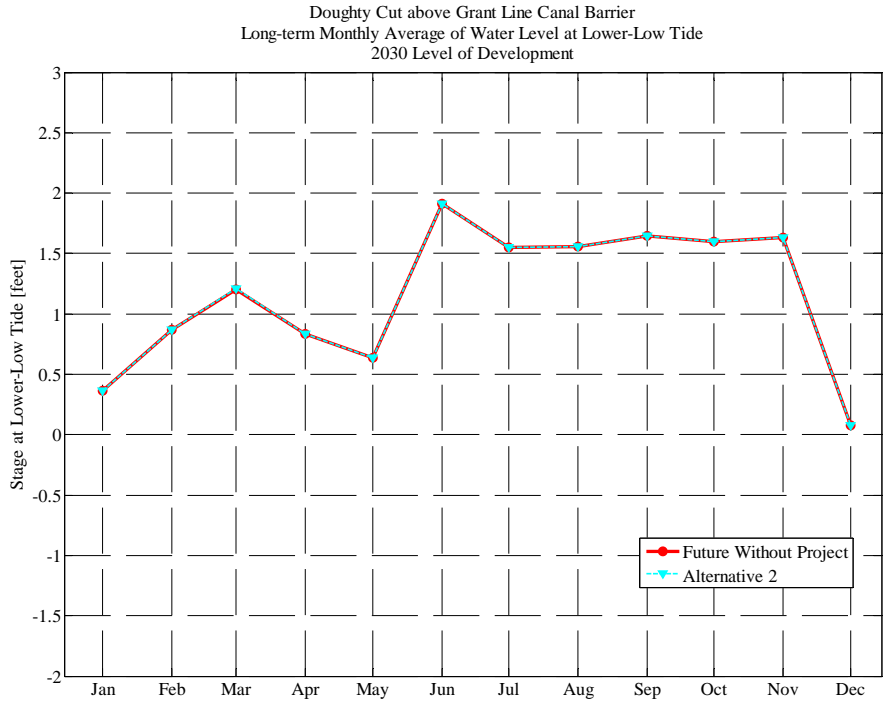


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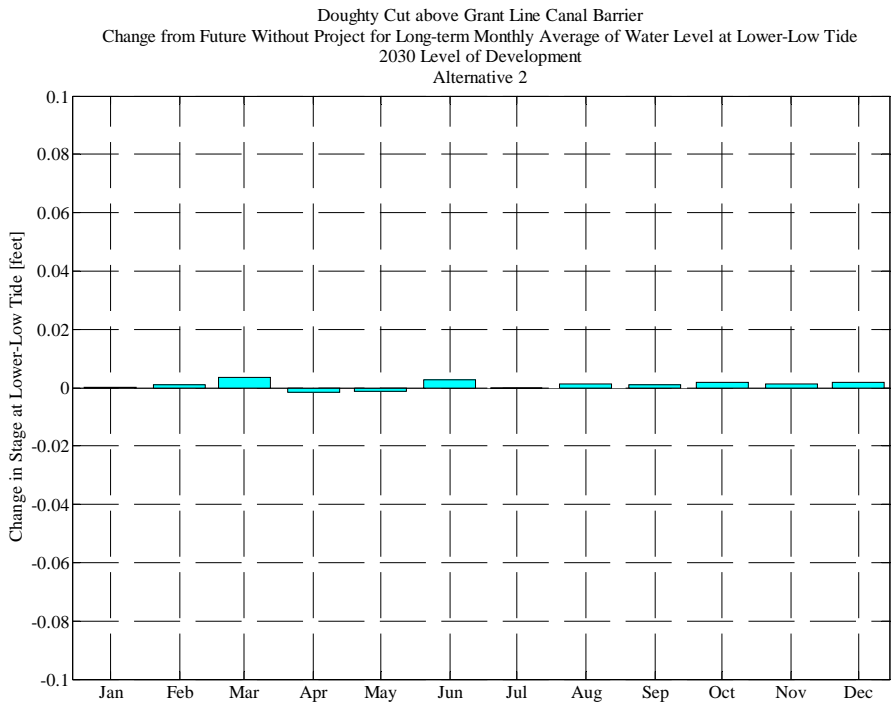
Doughty Cut above Grant Line Canal Barrier
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



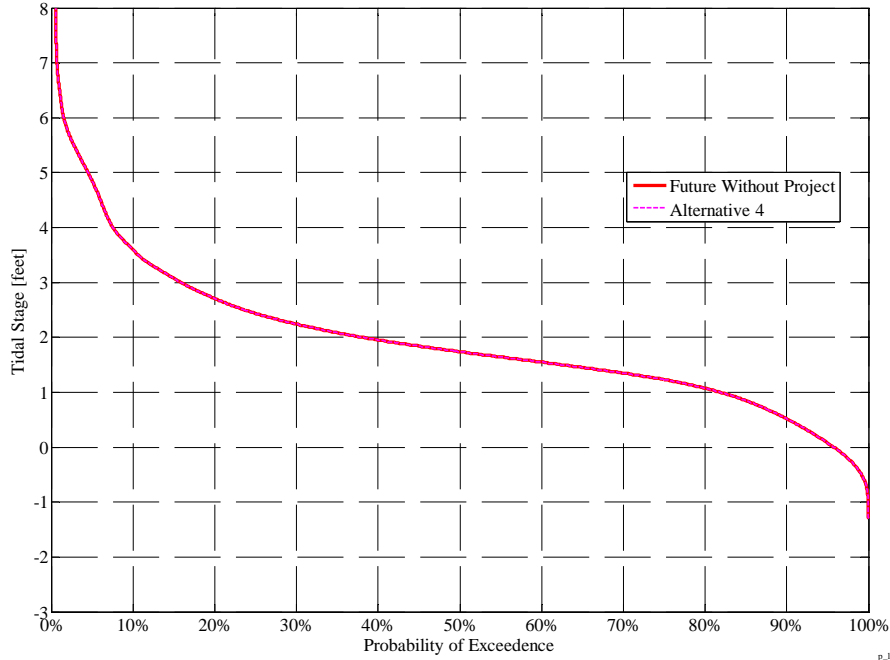
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p_lve_stage_feir.m
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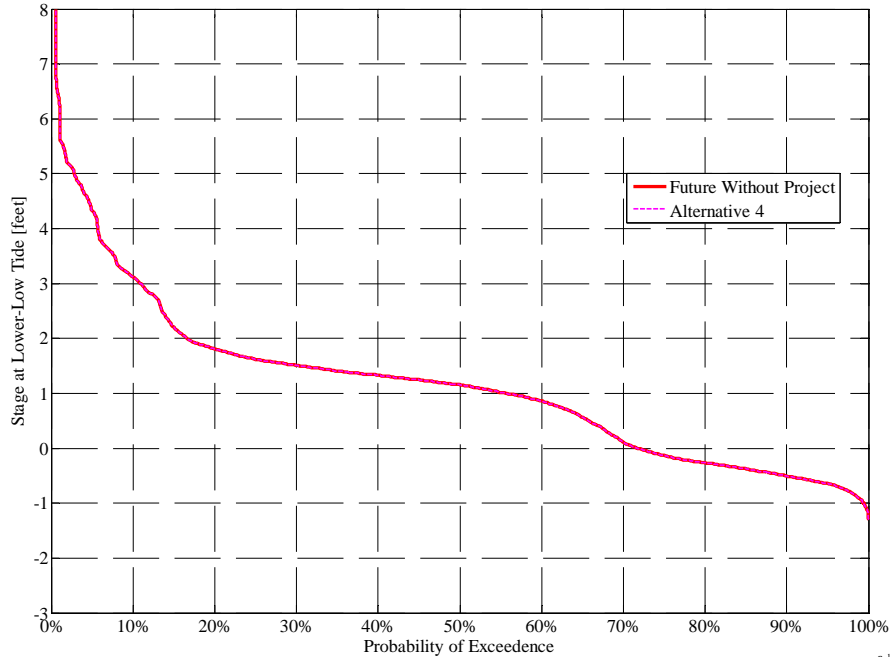
Alternative 4

Doughty Cut above Grant Line Canal Barrier
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

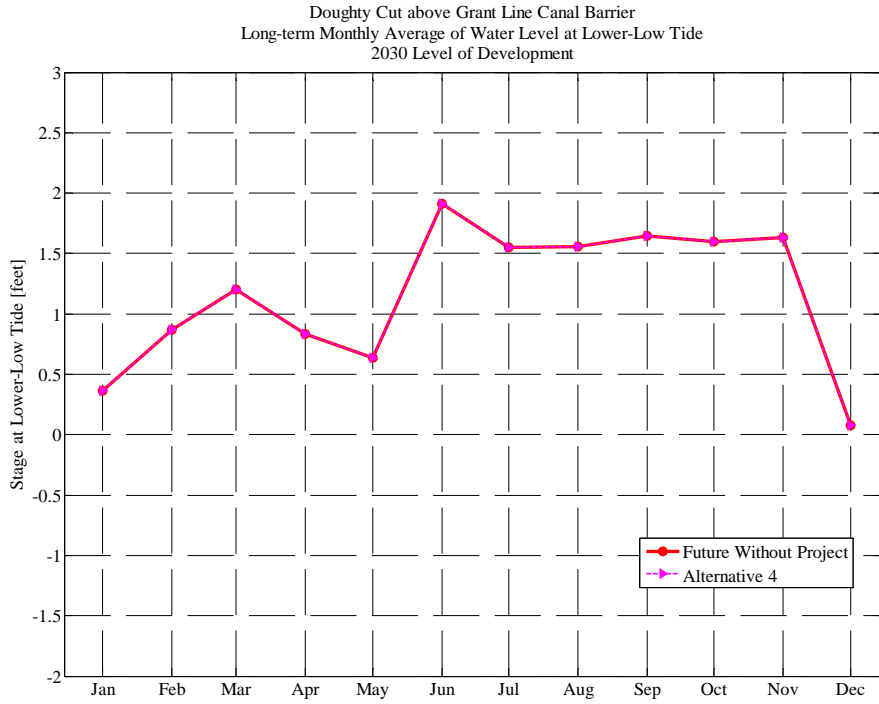


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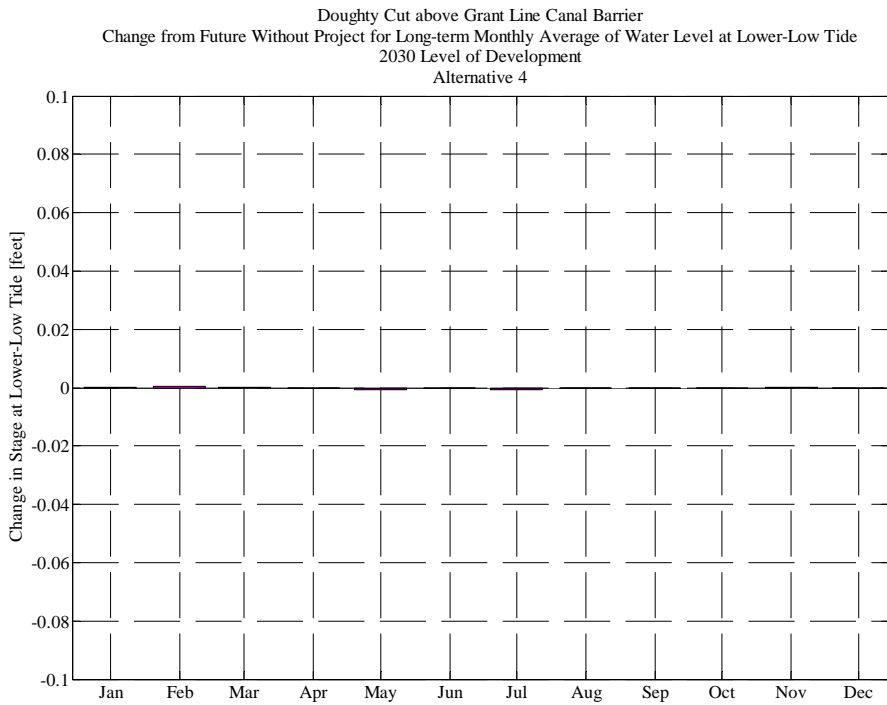
Doughty Cut above Grant Line Canal Barrier
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

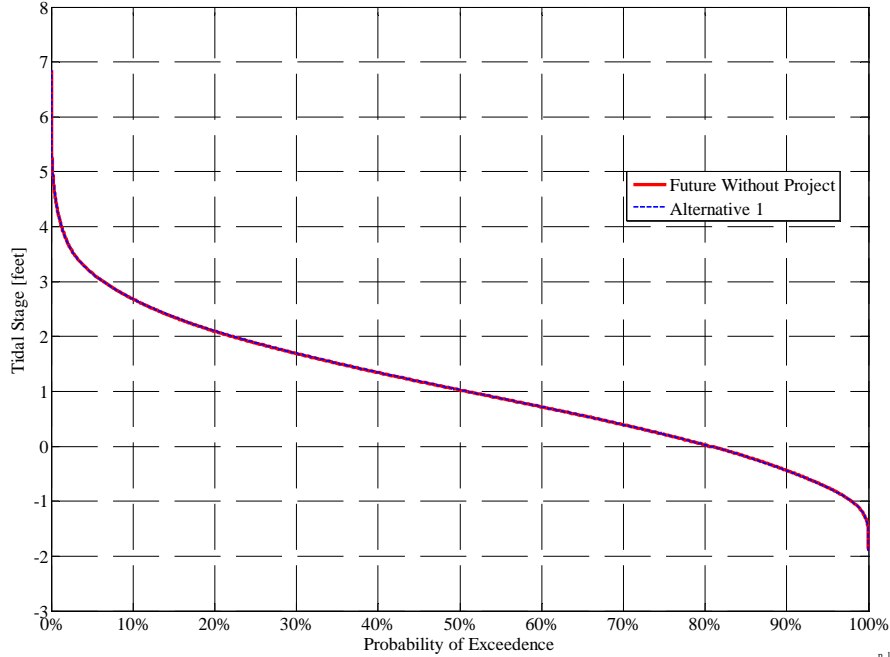


p_lve_stage_feir.m
07-Jan-2010 DS

East of Coney Island

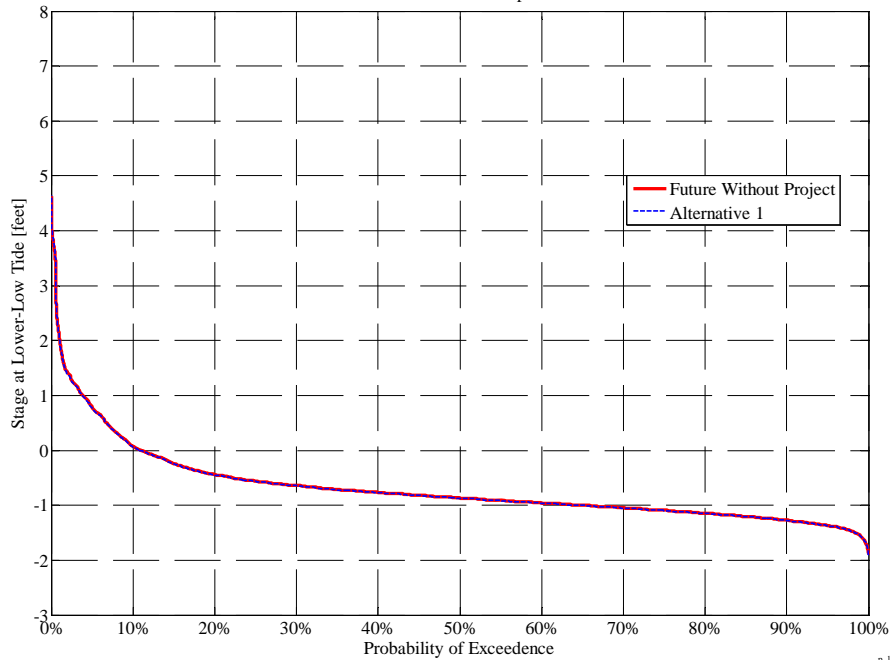
Alternative 1

East of Coney Island
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

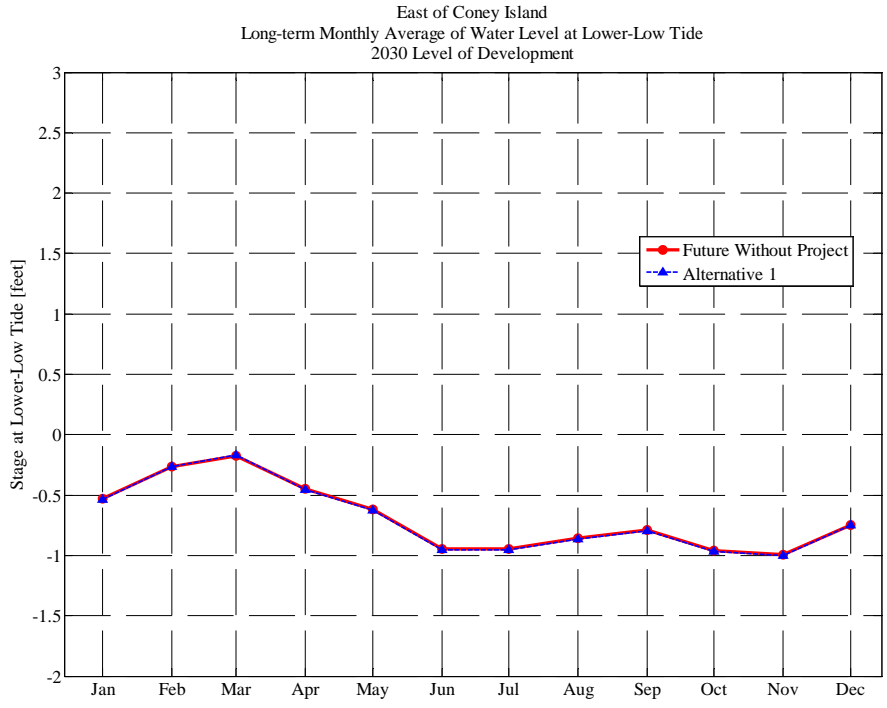


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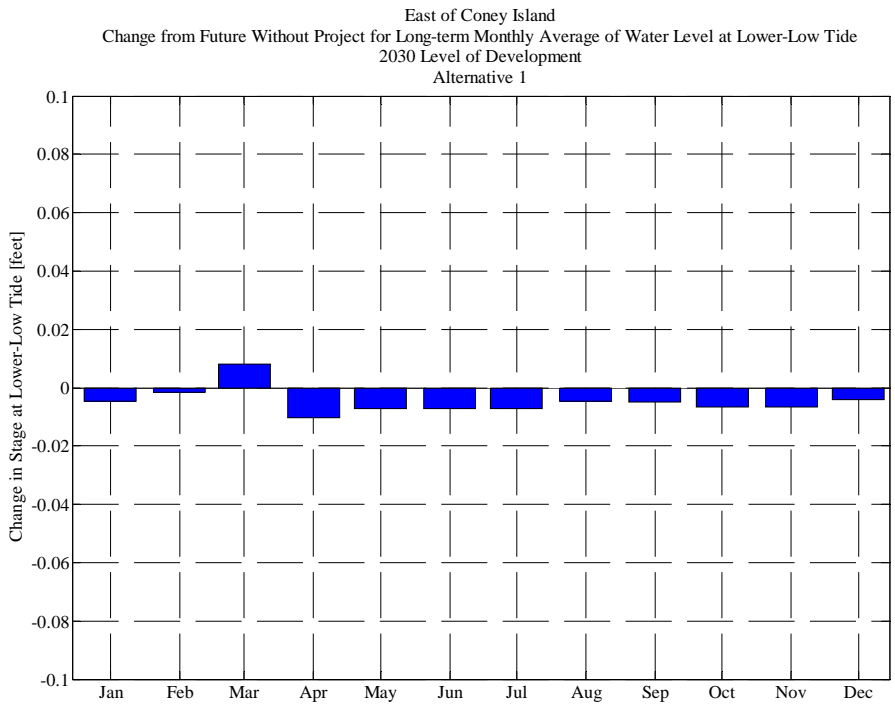
East of Coney Island
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



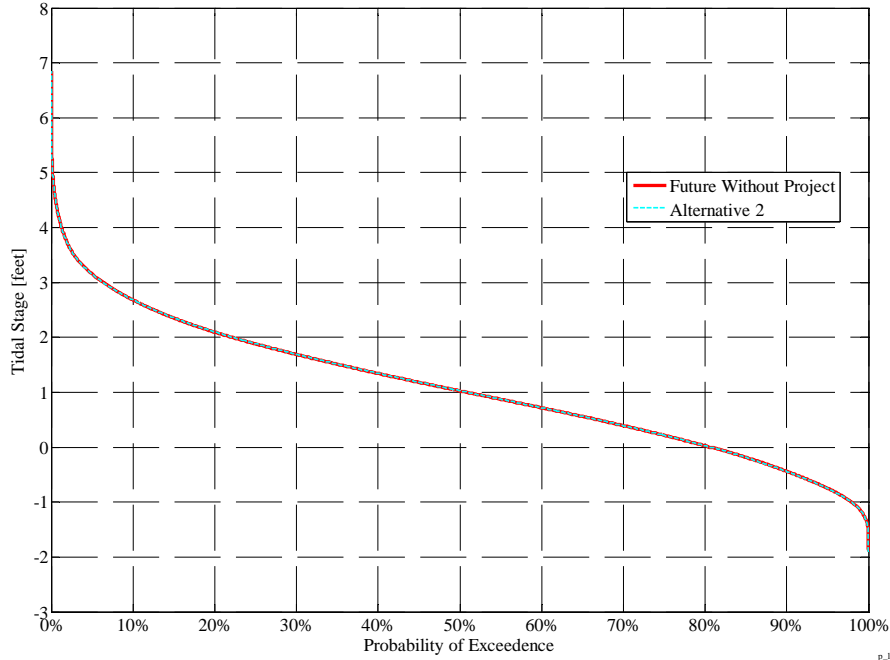
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07-Jan-2010 DS



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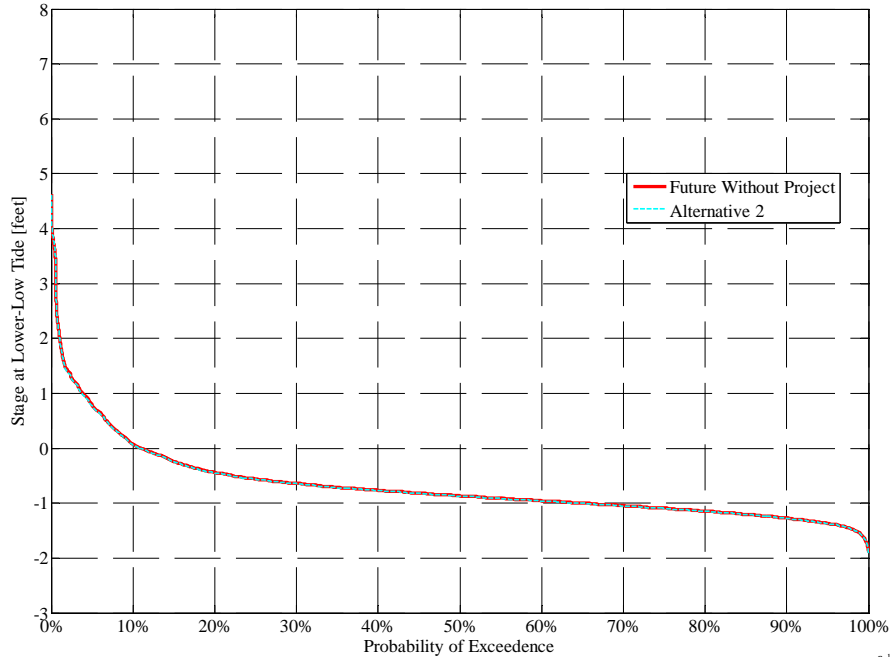
Alternative 2

East of Coney Island
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development



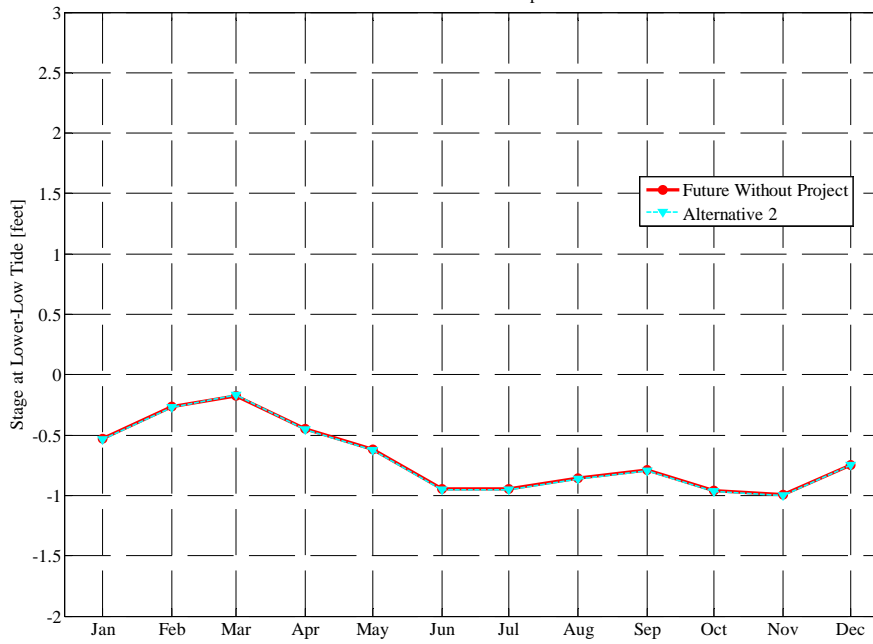
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07-Jan-2010 DS

East of Coney Island
Water Level at Lower-Low Tide
2030 Level of Development



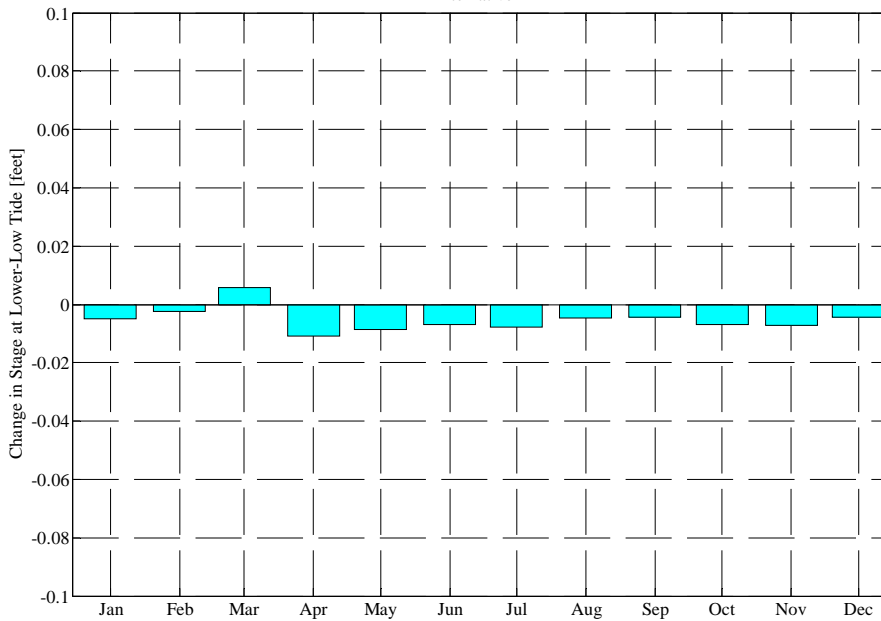
p_lve_stage_feir.m
07-Jan-2010 DS

East of Coney Island
 Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development



p_lve_stage_feir.m
 07-Jan-2010 DS

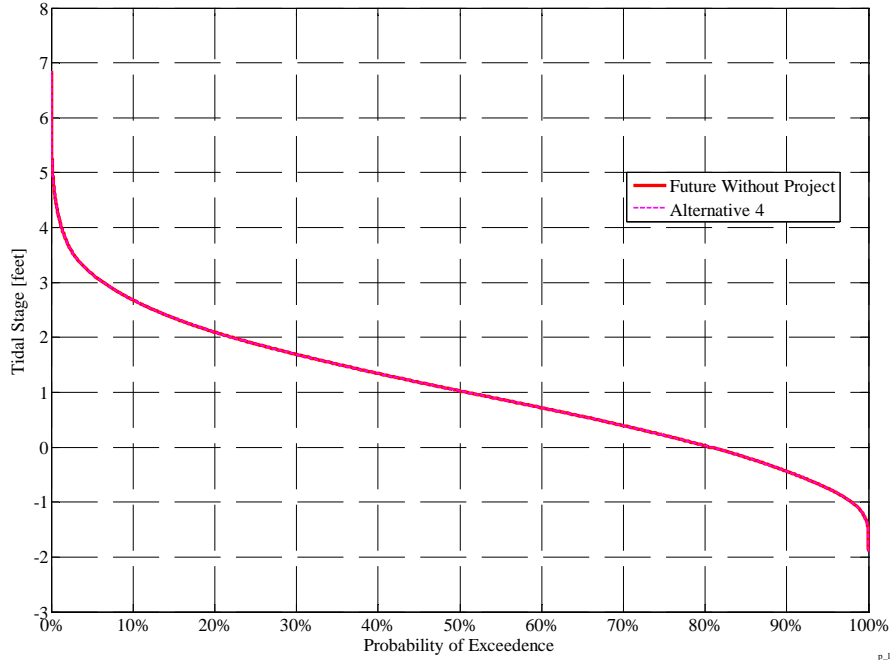
East of Coney Island
 Change from Future Without Project for Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development
 Alternative 2



p_lve_stage_feir.m
 07-Jan-2010 DS

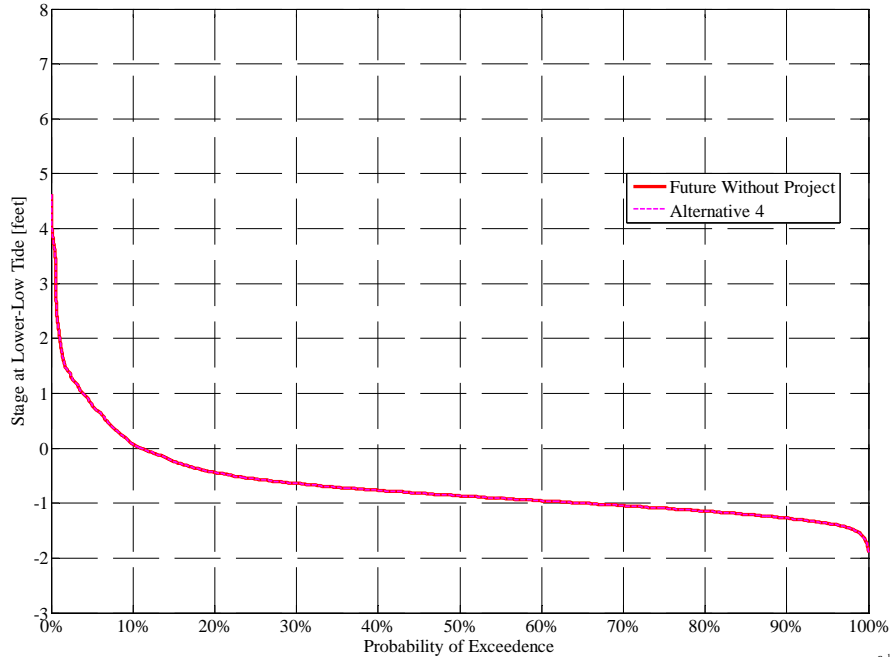
Alternative 4

East of Coney Island
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

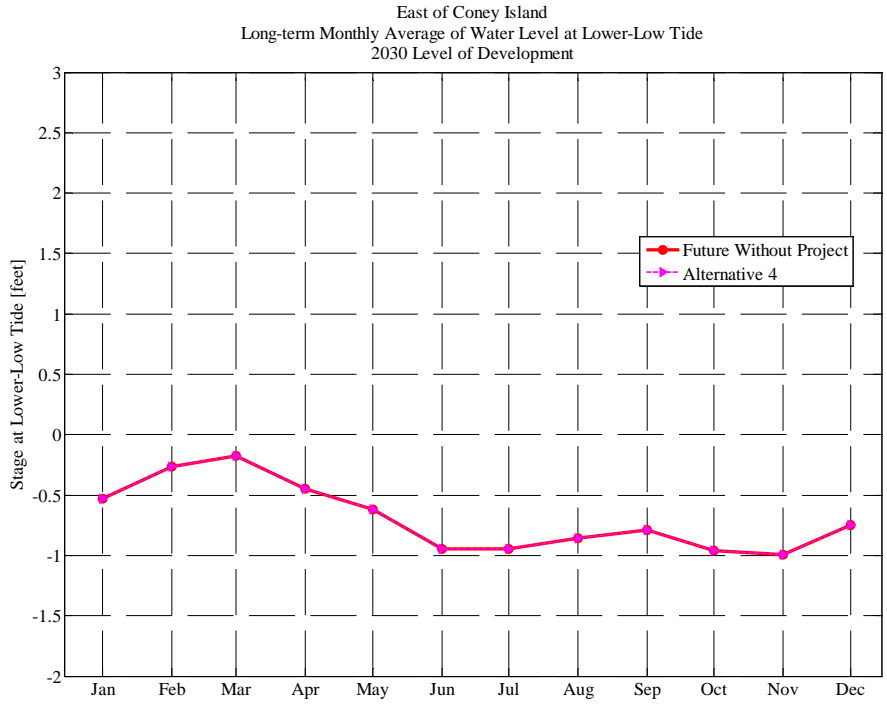


p_lve_stage_feir.m
07-Jan-2010 DS

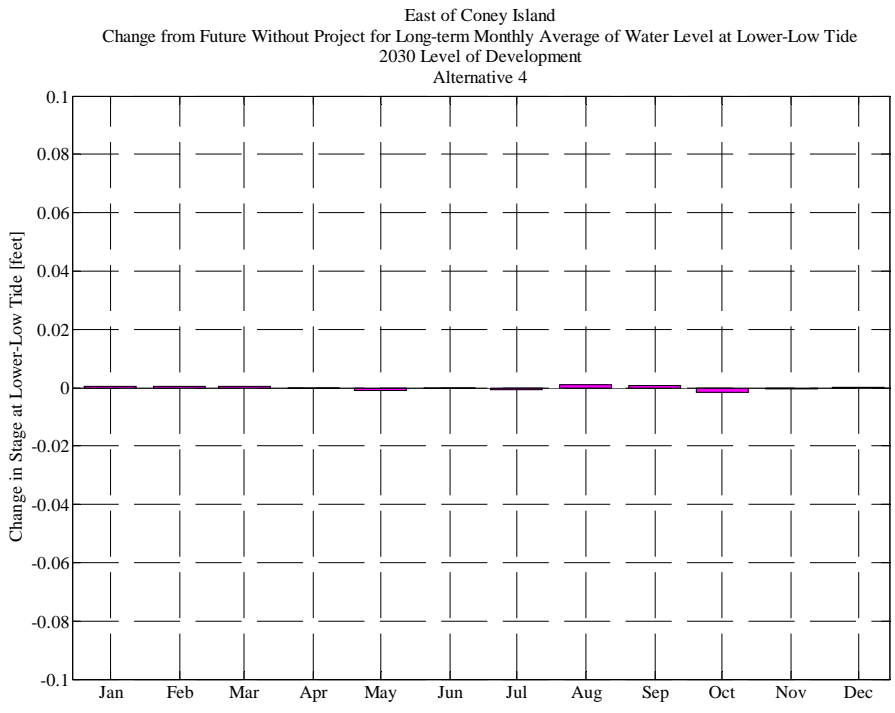
East of Coney Island
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



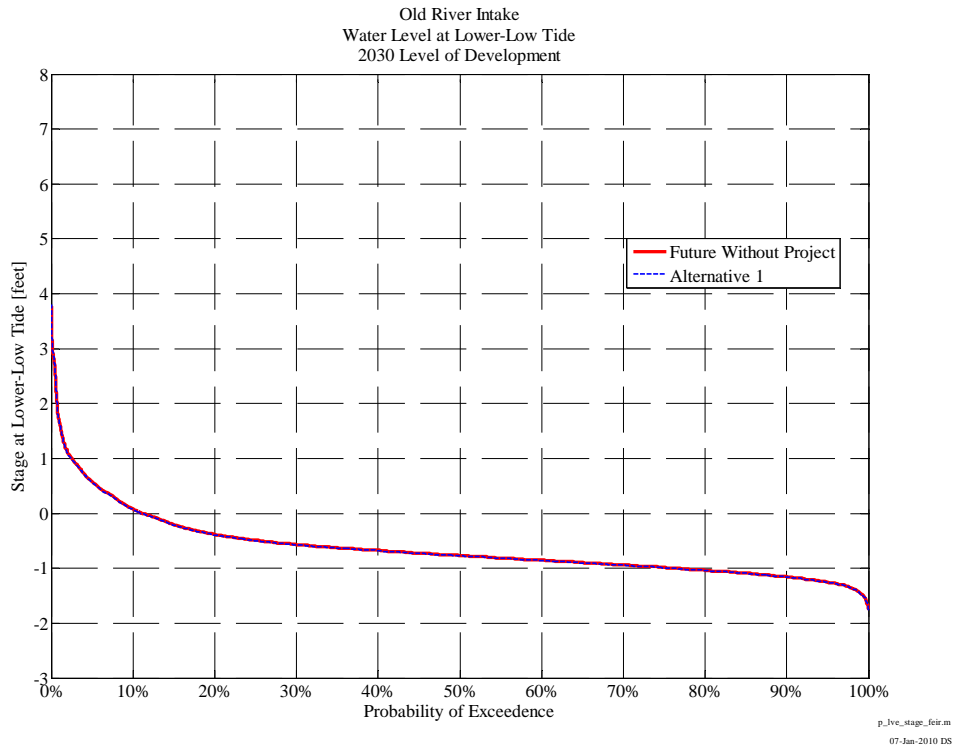
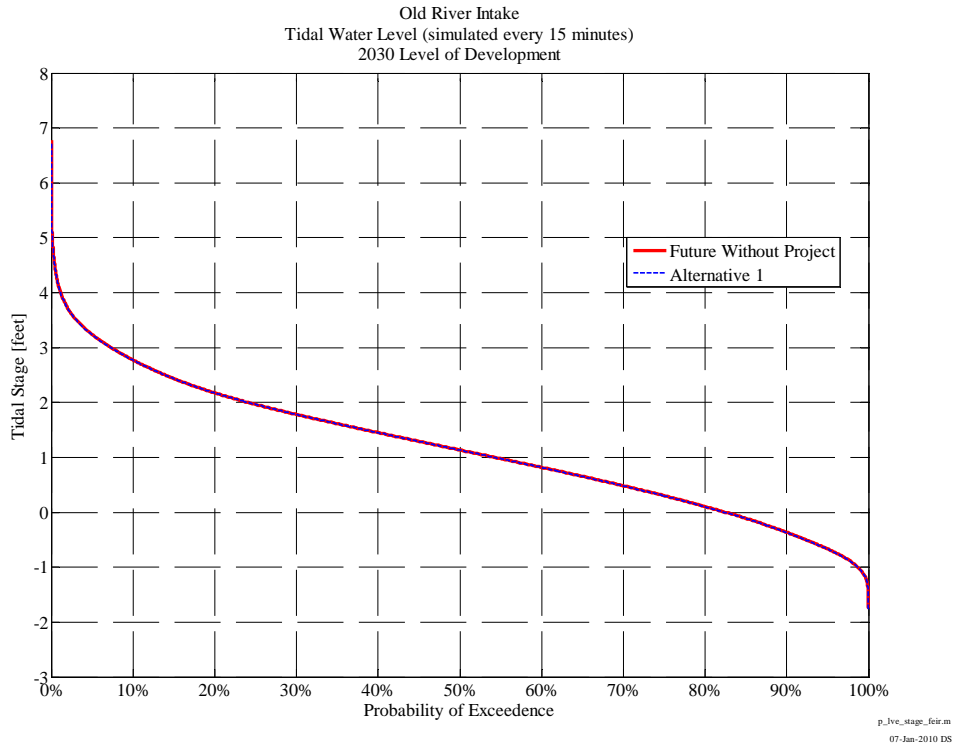
p_lve_stage_feir.m
07-Jan-2010 DS

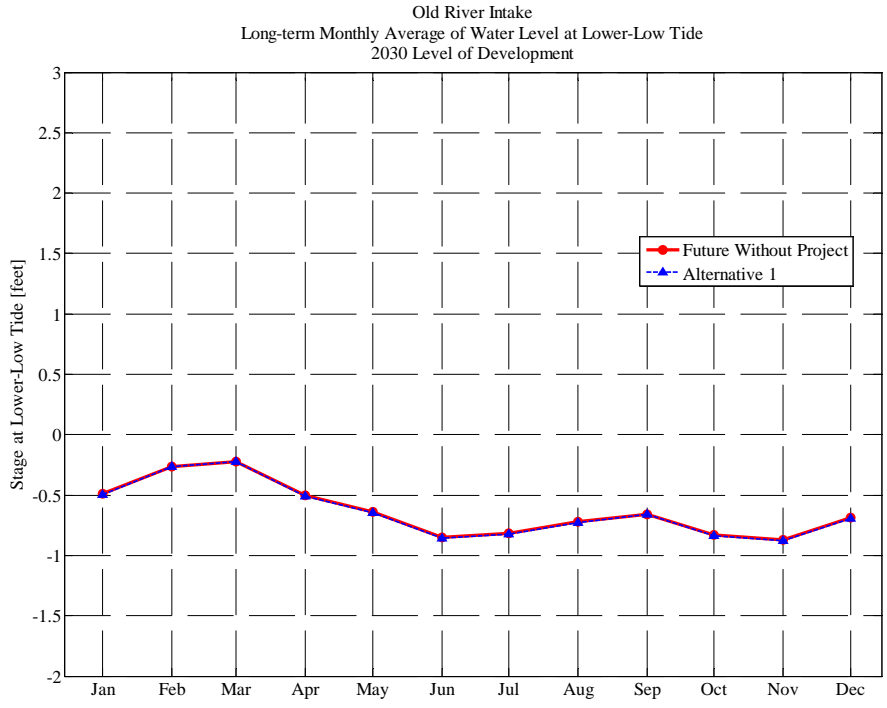


p_lve_stage_feir.m
07-Jan-2010 DS

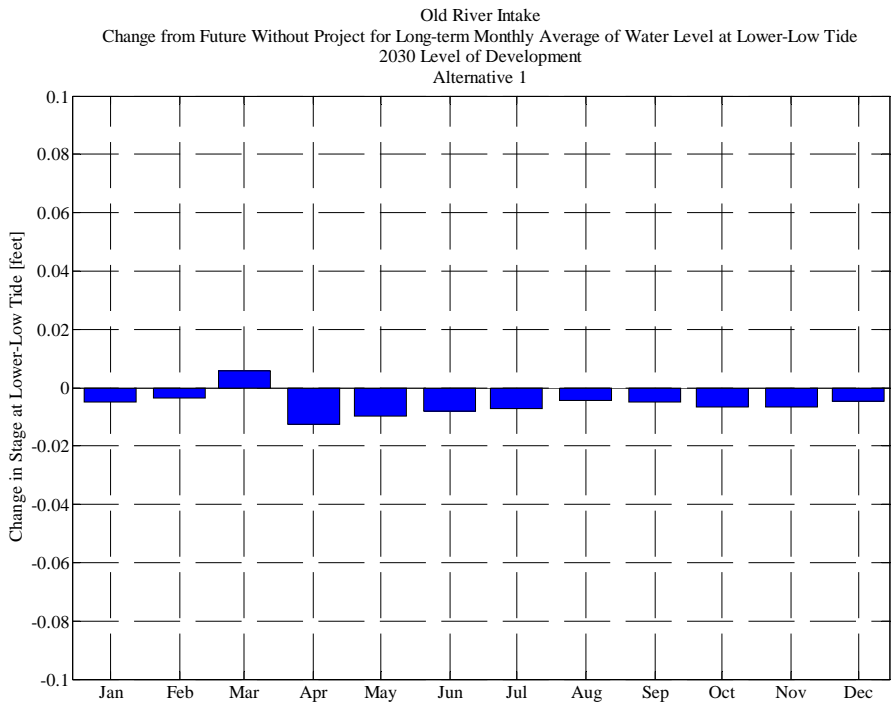
Old River Intake

Alternative 1





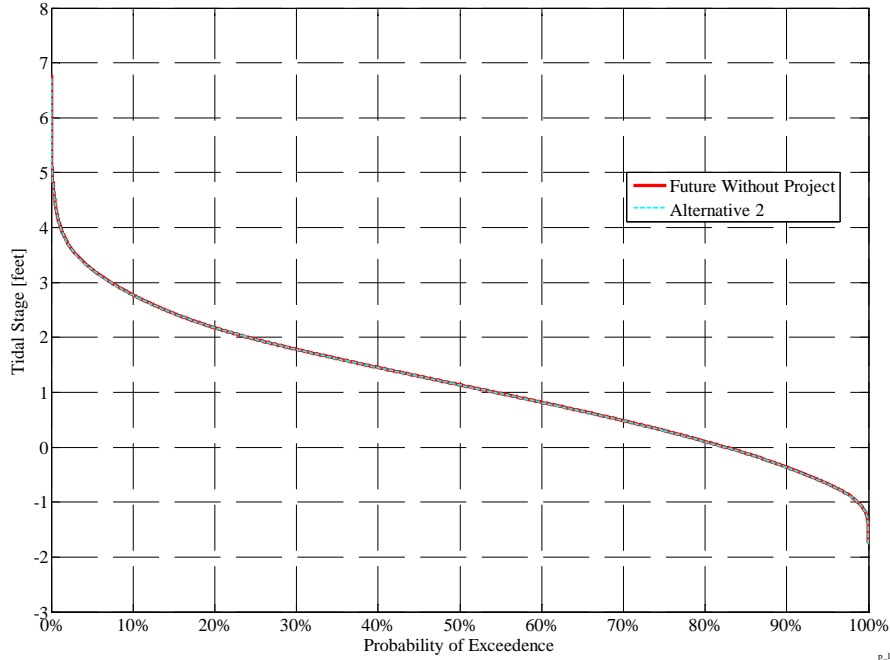
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

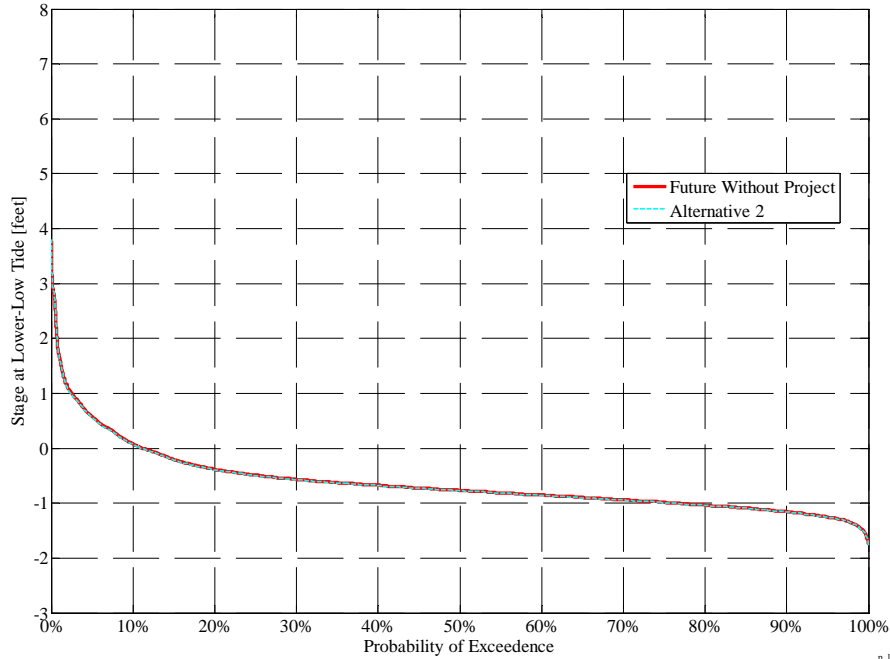
Alternative 2

Old River Intake
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

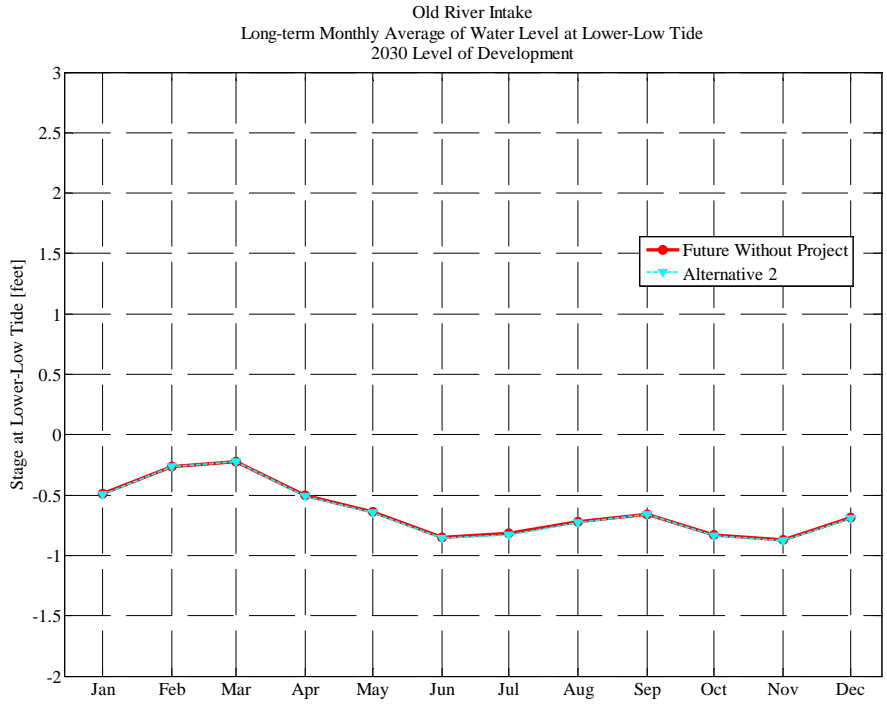


p_lve_stage_feir.m
07-Jan-2010 DS

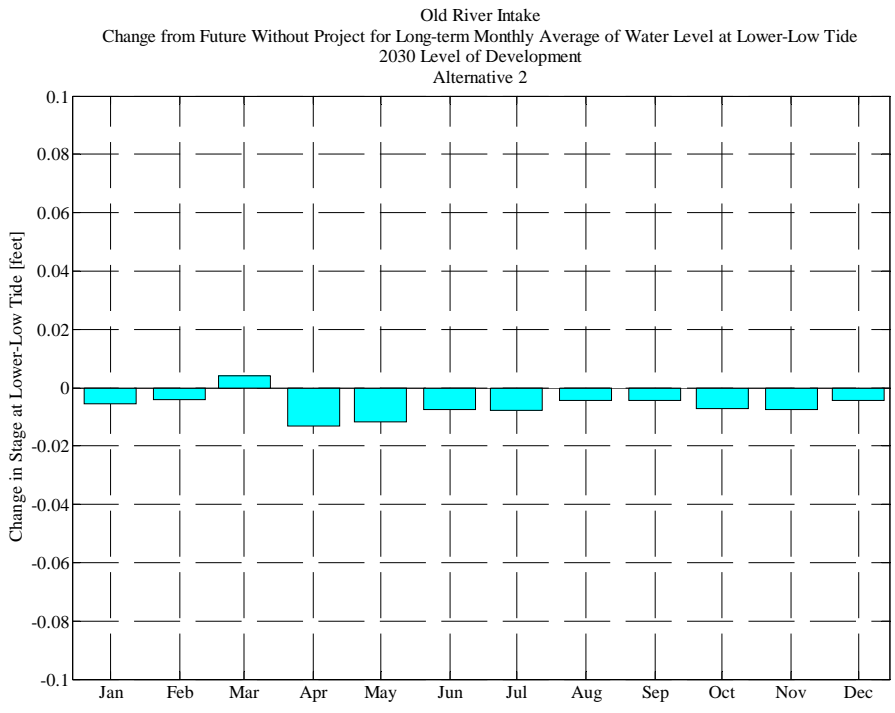
Old River Intake
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



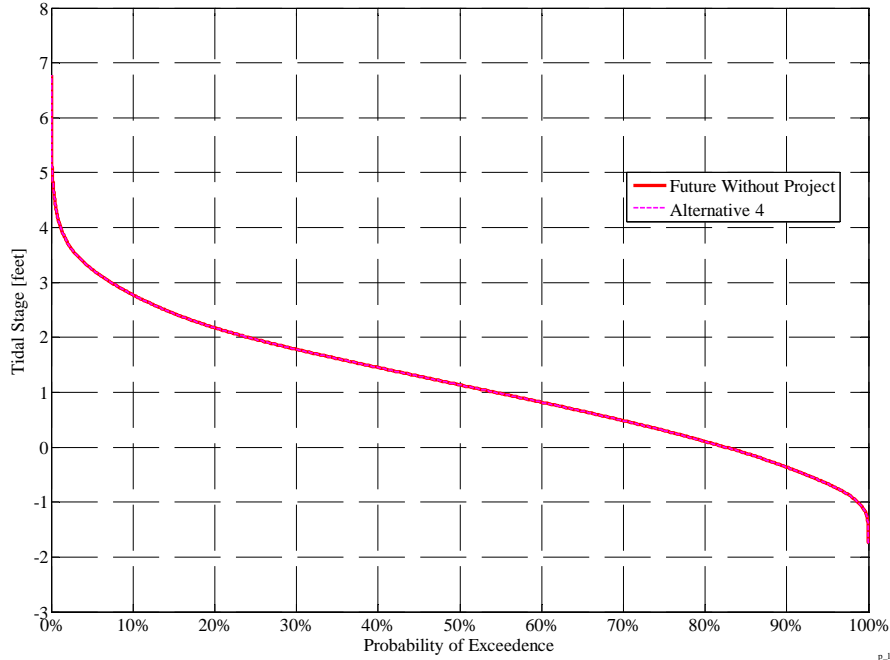
p_lve_stage_feir.m
07-Jan-2010 DS



p_lve_stage_feir.m
07-Jan-2010 DS

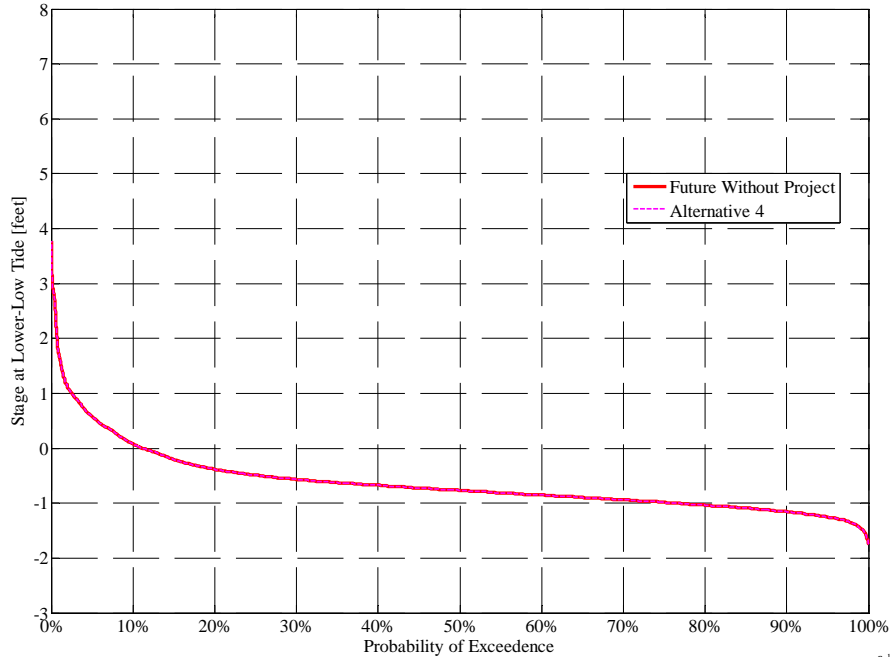
Alternative 4

Old River Intake
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development

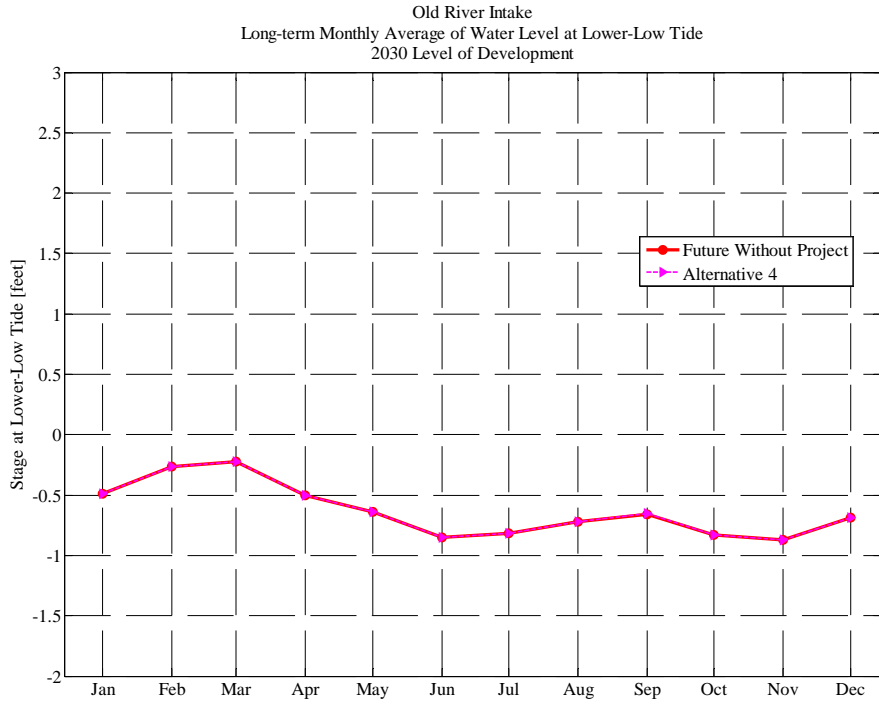


p_lve_stage_feir.m
07-Jan-2010 DS

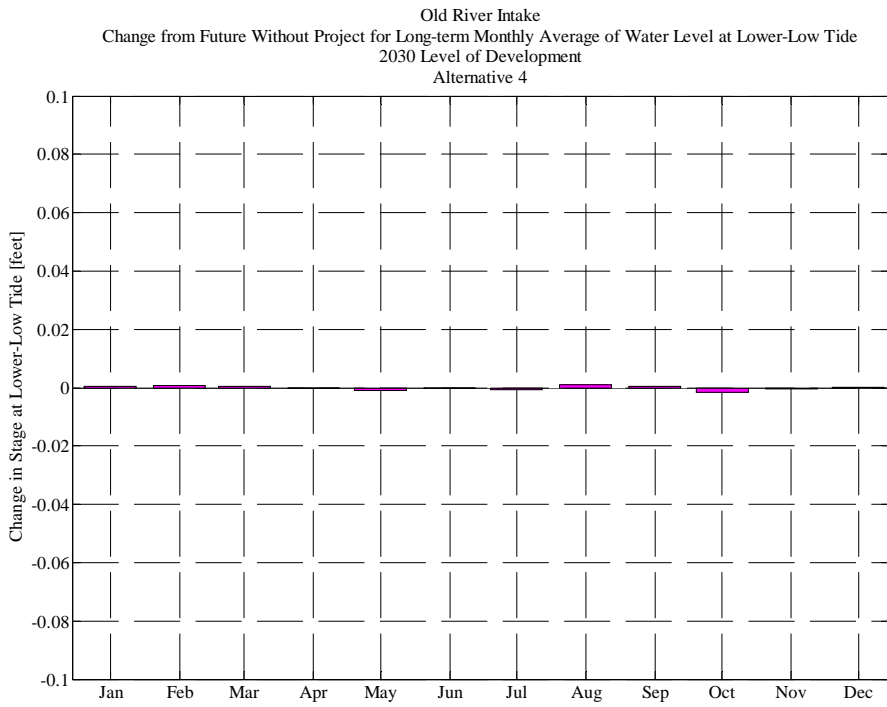
Old River Intake
Water Level at Lower-Low Tide
2030 Level of Development



p_lve_stage_feir.m
07-Jan-2010 DS



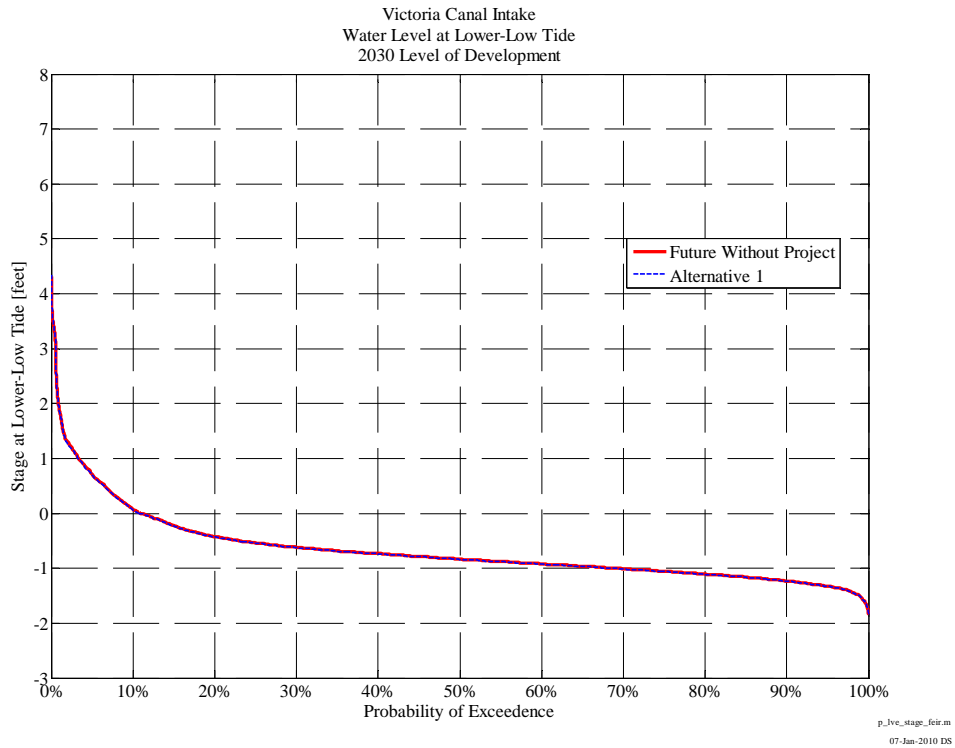
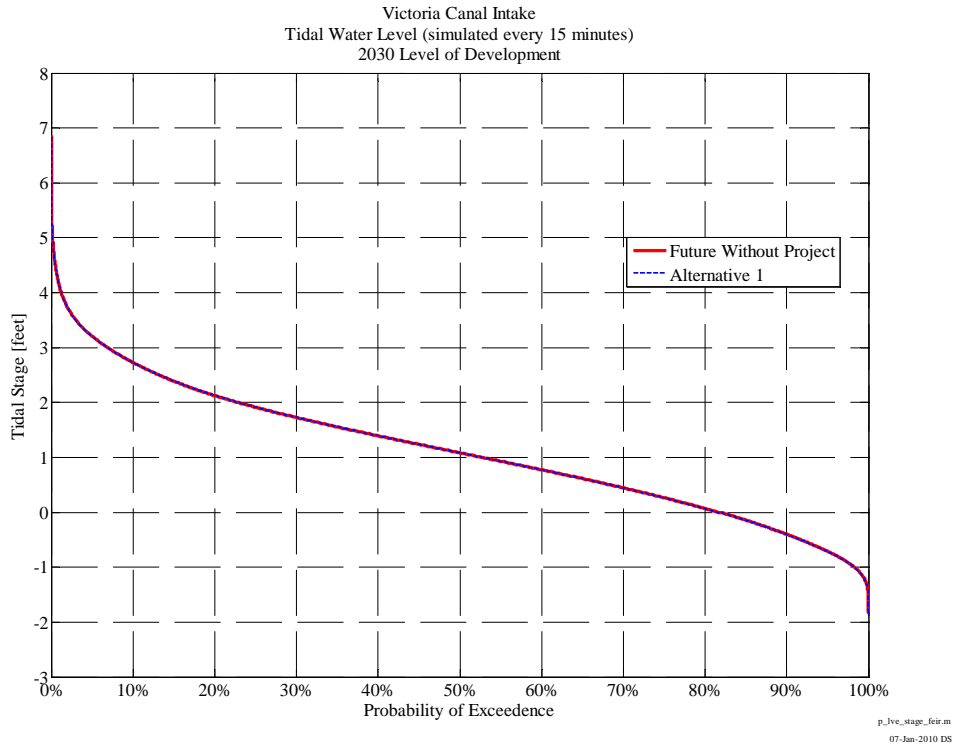
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07-Jan-2010 DS



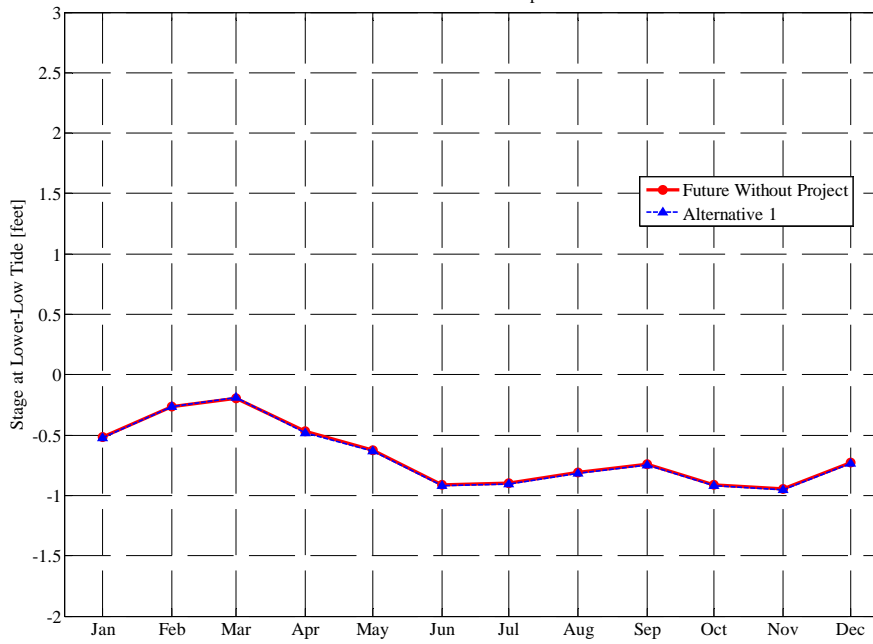
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07-Jan-2010 DS

Victoria Canal Intake

Alternative 1

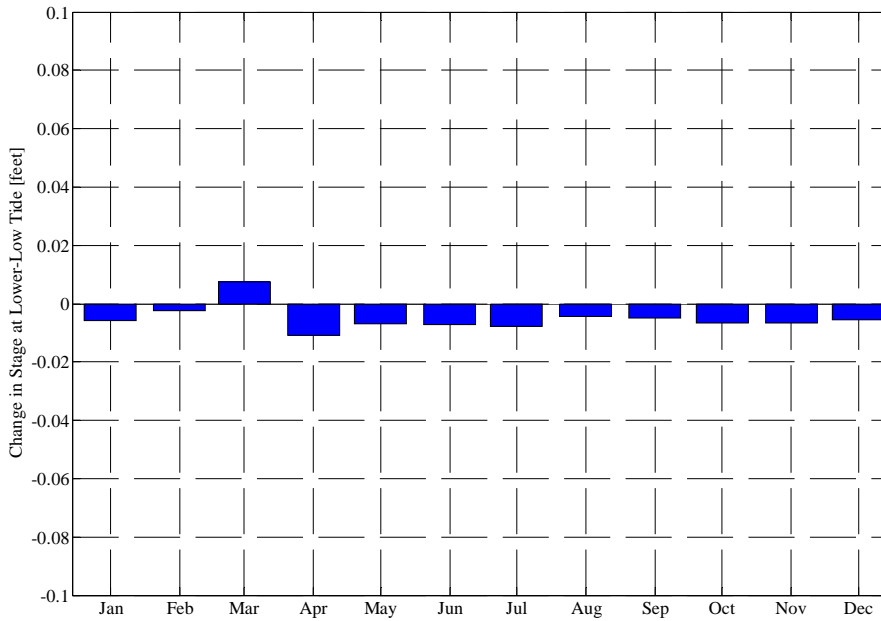


Victoria Canal Intake
 Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development



p_lve_stage_feir.m
 07-Jan-2010 DS

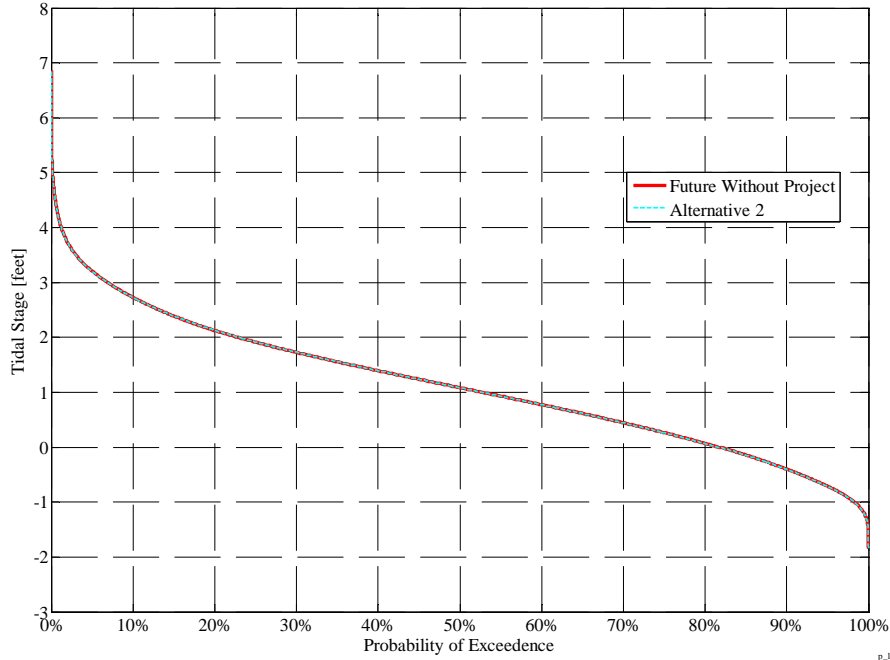
Victoria Canal Intake
 Change from Future Without Project for Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development
 Alternative 1



p_lve_stage_feir.m
 07-Jan-2010 DS

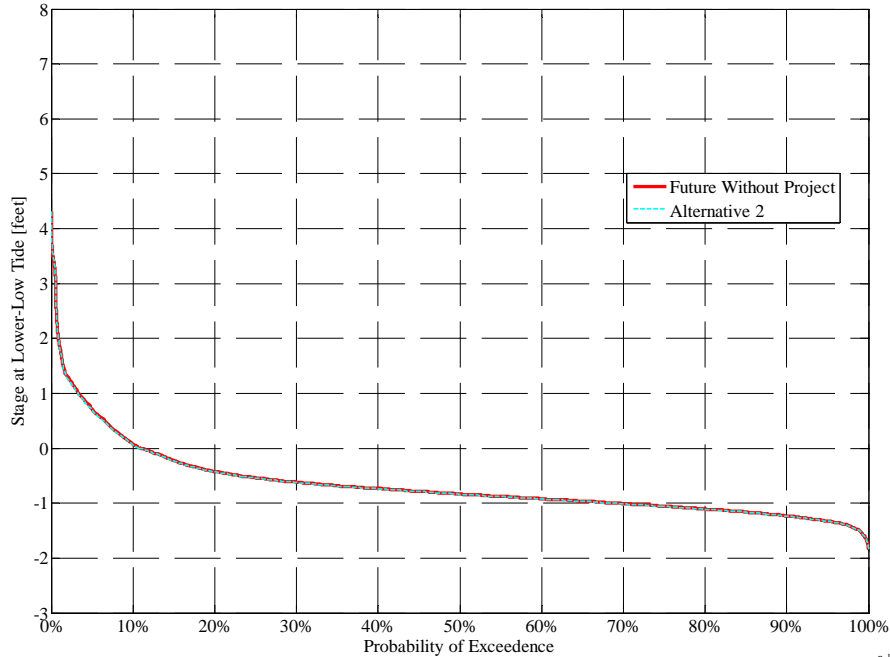
Alternative 2

Victoria Canal Intake
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development



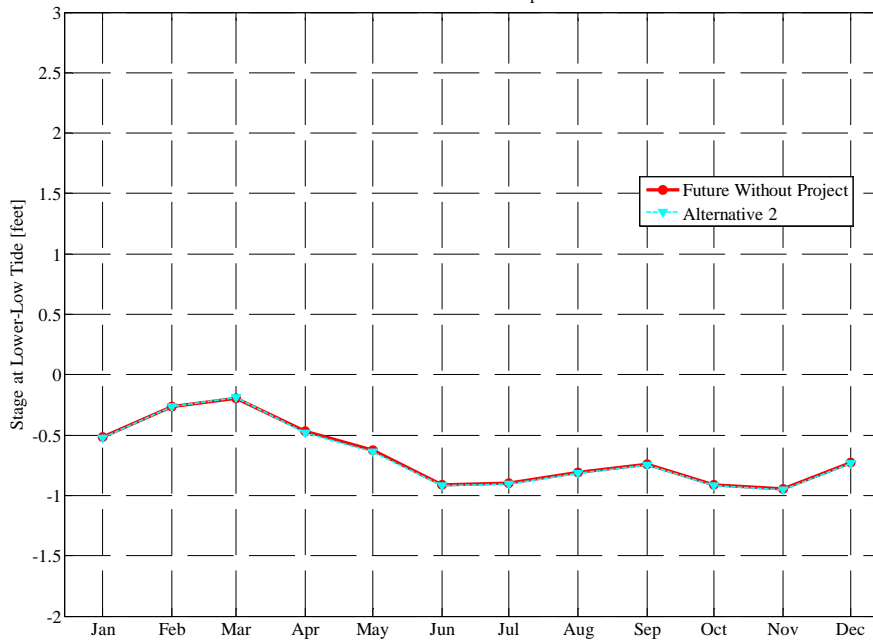
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07-Jan-2010 DS

Victoria Canal Intake
Water Level at Lower-Low Tide
2030 Level of Development



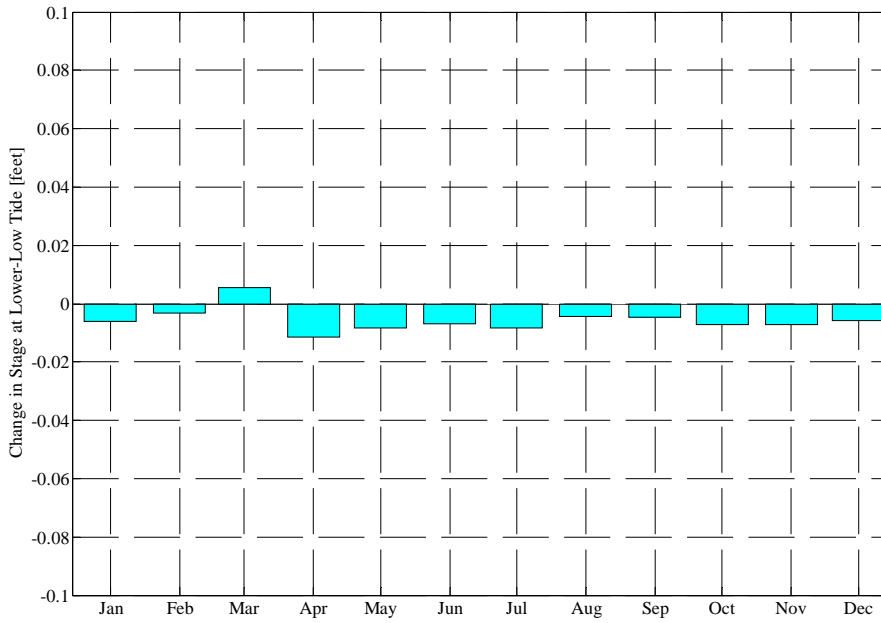
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07-Jan-2010 DS

Victoria Canal Intake
 Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development



p_lve_stage_feir.m
 07-Jan-2010 DS

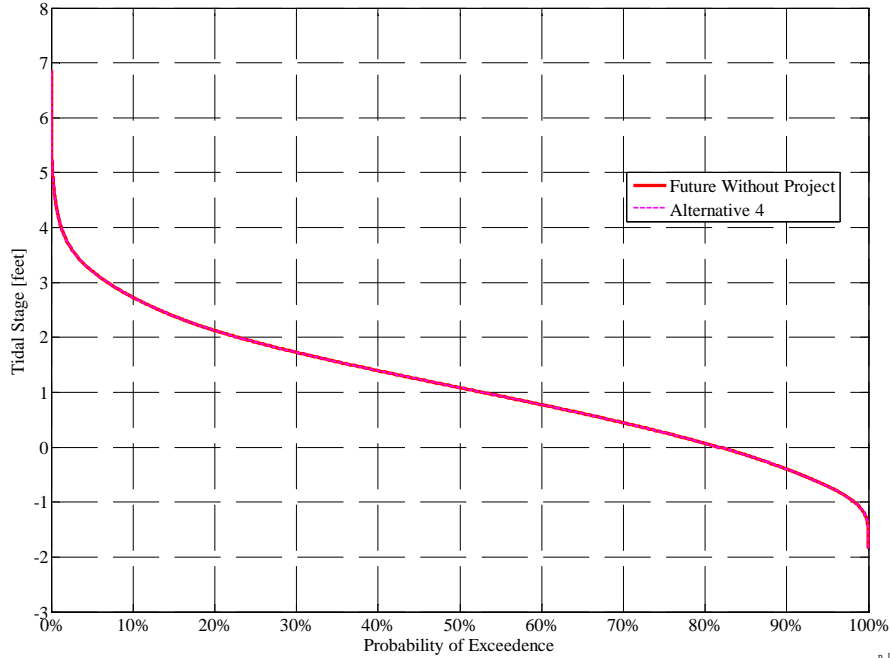
Victoria Canal Intake
 Change from Future Without Project for Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development
 Alternative 2



p_lve_stage_feir.m
 07-Jan-2010 DS

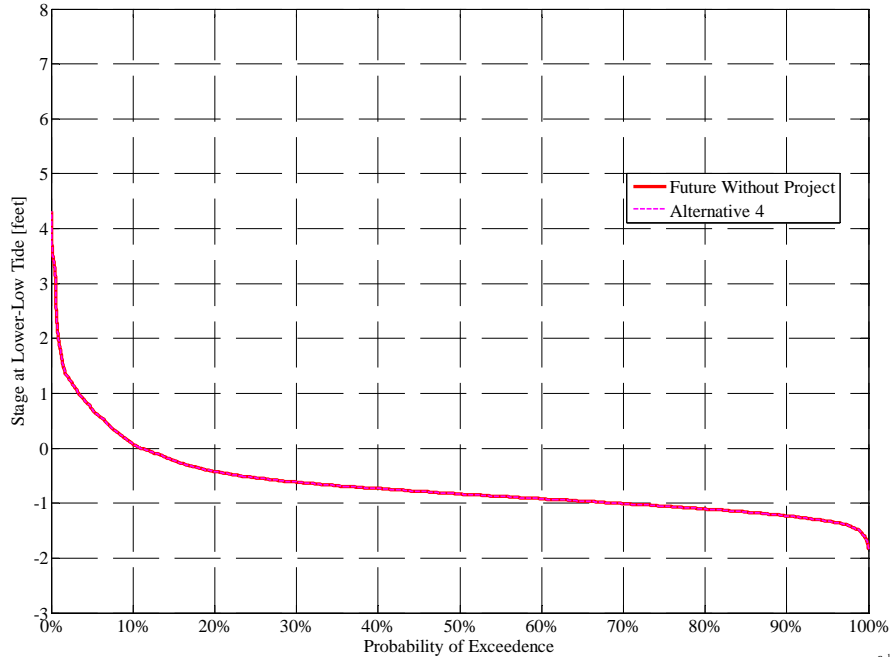
Alternative 4

Victoria Canal Intake
Tidal Water Level (simulated every 15 minutes)
2030 Level of Development



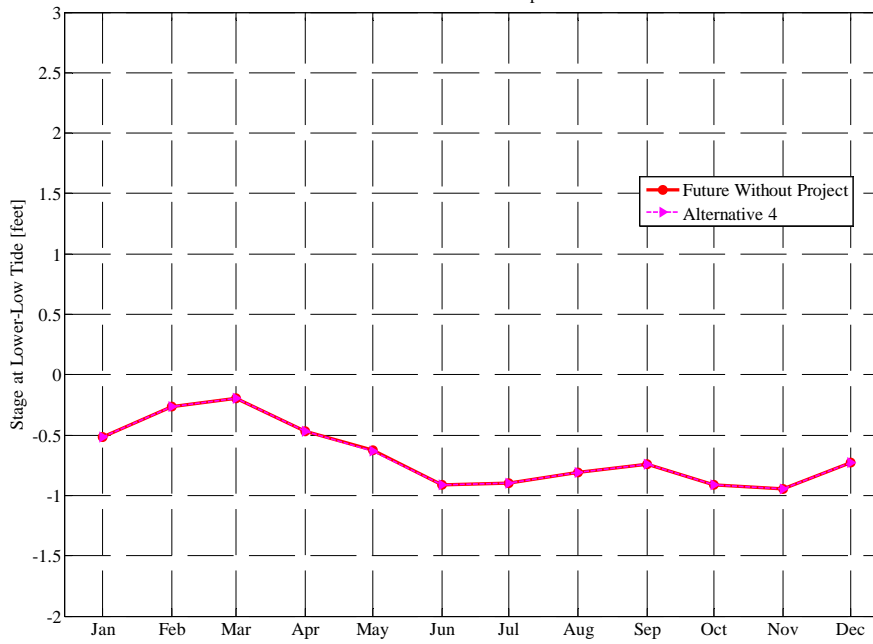
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07-Jan-2010 DS

Victoria Canal Intake
Water Level at Lower-Low Tide
2030 Level of Development



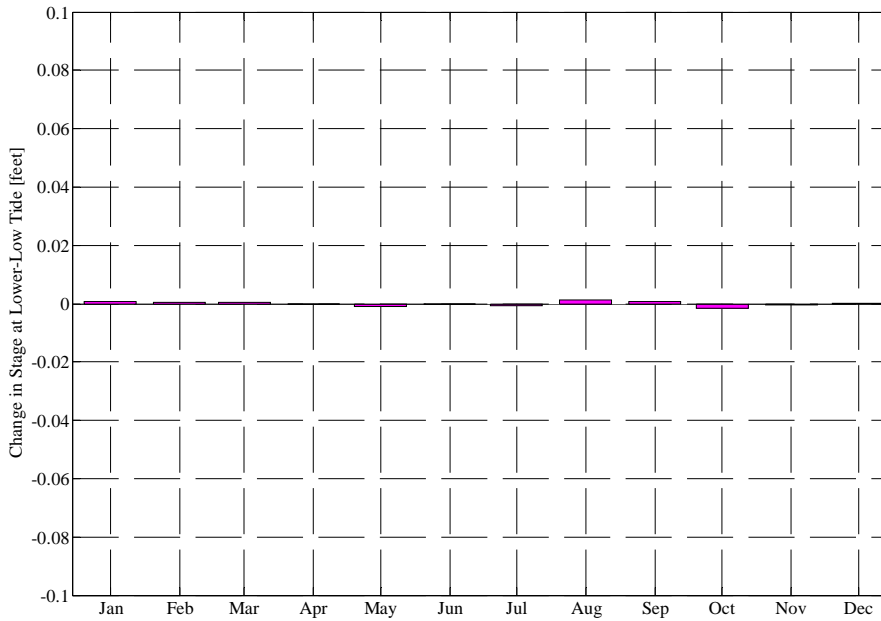
p_lvc_stage_feir.m
07-Jan-2010 DS

Victoria Canal Intake
 Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development



p_lve_stage_feir.m
 07-Jan-2010 DS

Victoria Canal Intake
 Change from Future Without Project for Long-term Monthly Average of Water Level at Lower-Low Tide
 2030 Level of Development
 Alternative 4



p_lve_stage_feir.m
 07-Jan-2010 DS