

## Salinity and Hydrodynamics Supplemental Tables

Table A1. List of water salinity model output stations. Station numbers starting with R indicate are exclusive to RMA 2-D model.

Number	STATION ID	Number	STATION ID	Number	STATION ID
1	OLD-RIV-HEAD	29	A-CHIPPS IS RSAN014	R8	OLD R @ MANDEVILLE IS
2	OLD R @ SJR	30	RSAC077	R9	OLD R DS OF ROCK SL
3	CVP	31	A-JERSEY PT RSAN018	R10	OLD R DS SWP
4	HOLLAND CUT	32	LSHL001	R11	POTATO SLOUGH
5	RSAC075	33	RSAC045	R12	ROLD024
6	FALSE RIVER	34	RSAC064	R13	ROLD046
7	LITTLE POTATO SLOUGH	35	A-PRISONERS PT RSAN037	R14	ROLD074
8	MOK NR SJR	36	A-COLLINSVILLE RSAC081	R15	RSAC101
9	SLMZU026	37	A-EMMATON RSAC092	R16	RSAC128
10	A-BARKER SL SLSAR03	38	SLTRM004	R17	RSAC155
11	A-HOOD	39	SLMZU029	R18	RSAN018
12	RSAC056	40	A-SAN ANDREAS RSAN032	R19	RSAN032
13	Vernalis	41	A_TERMINOUS RSMKL008	R20	RSAN037
14	RSAN087	42	SLMZU025	R21	RSAN046
15	CHGRL009	43	SLMZU003	R22	RSAN063
16	ROLD040	44	A-RIO VISTA RSAC101	R23	SAC R US THREE MI SL
17	A-BRANDT BR RSAN072	45	SLMZU011	R24	SF MOKELUMNE
18	CHVCT000	46	RMKL019	R25	SJR BTWN MIDDLE R AND CONNECTION
19	RMID023	47	RSAC123	R26	SJR BTWN OLD R AND MOKELUMNE DS
20	ROLD034	48	RSAC139	R27	SJR NR LATHROP
21	RMID015	49	A-FREEPORT RSAC155	R28	SLDUT007
22	A-CCWD ROLD024	R1	CACHE SLOUGH	R29	SLGEO19
23	RMID005	R2	DS OF ROLD034	R30	SLRCK005
24	RSAN008	R3	FISHERMAN'S CUT	R31	SLSBT039
25	ROLD014	R4	HOLLAND CUT W	R32	SNODGRASS SLOUGH
26	A-ANTIOCH RSAN007	R5	LITTLE CONNECTION SL ABV POTATO	R33	STEAMBOAT SLOUGH
27	A-VENICE-BOULDIN RSAN046	R6	LITTLE CONNECTION SLOUGH	R34	TAYLOR SLOUGH
28	RSAC054	R7	MINER SLOUGH	R35	TURNER CUT

Table A2. Delta islands and subregions match with the closest two WAM stations.

Island or subregion	Station 1	Station 2	Island or subregion	Station 1	Station 2
<b>Bacon</b>	A-CCWD ROLD024	RMID015	<b>Mildred Island</b>	RMID005	RMID015
<b>Bethel</b>	HOLLAND CUT	FALSE RIVER	<b>Netherlands</b>	A-FREEPORT RSAC155	RSAC139
<b>Bishop</b>	A-VENICE-BOULDIN RSAN046	LITTLE POTATO SLOUGH	<b>Neville</b>	RSAC075	A-COLLINSVILLE RSAC081
<b>Bouldin</b>	MOK NR SJR	A_TERMINOUS RSMKL008	<b>New Hope</b>	RSAC123	RMKL019
<b>Brack</b>	A_TERMINOUS RSMKL008	RMKL019	<b>Orwood</b>	A-CCWD ROLD024	RMID015
<b>Bradford</b>	FALSE RIVER	SLTRM004	<b>Palm</b>	A-CCWD ROLD024	RMID015
<b>Brannan-Andrus</b>	A-RIO VISTA RSAC101	A-SAN ANDREAS RSAN032	<b>Pierson District</b>	RSAC123	RSAC139
<b>Browns</b>	RSAC075	RSAC077	<b>Prospect</b>	RSAC139	A-RIO VISTA RSAC101
<b>Byron</b>	CHVCT000	ROLD040	<b>Quimby</b>	HOLLAND CUT	ROLD014
<b>Canal Ranch</b>	RMKL019	A_TERMINOUS RSMKL008	<b>Rhode</b>	ROLD014	HOLLAND CUT
<b>Chippis</b>	RSAC077	SLMZU029	<b>Rindge</b>	A-VENICE-BOULDIN RSAN046	RMID005
<b>Clifton Court</b>	CHVCT000	ROLD040	<b>Roberts</b>	A-VENICE-BOULDIN RSAN046	A-BRANDT BR RSAN072
<b>Coney</b>	CHVCT000	ROLD040	<b>Rough_and_Ready</b>	RMID023	A-BRANDT BR RSAN072
<b>Deadhorse Island</b>	RMKL019	RSAC123	<b>Ryer</b>	RSAC139	A-BARKER SL SLSAR03
<b>Decker</b>	SLMZU026	A-EMMATON RSAC092	<b>Sargent_Barnhart</b>	A-VENICE-BOULDIN RSAN046	A-BRANDT BR RSAN072
<b>Empire</b>	LITTLE POTATO SLOUGH	A-VENICE-BOULDIN RSAN046	<b>Sherman</b>	A-EMMATON RSAC092	SLTRM004
<b>Fabian</b>	CHGRL009	ROLD040	<b>Shima</b>	A-VENICE-BOULDIN RSAN046	A-BRANDT BR RSAN072
<b>Fay</b>	A-CCWD ROLD024	RMID015	<b>Shin_Kee</b>	A-VENICE-BOULDIN RSAN046	LITTLE POTATO SLOUGH
<b>Glanville</b>	RSAC123	A-HOOD	<b>Staten</b>	RMKL019	A_TERMINOUS RSMKL008
<b>Grand</b>	RSAC123	A-RIO VISTA RSAC101	<b>Stewart</b>	OLD-RIV-HEAD	RSAN087
<b>Hastings</b>	A-BARKER SL SLSAR03	A-RIO VISTA RSAC101	<b>Sutter</b>	RSAC139	A-HOOD
<b>Holland Tract</b>	HOLLAND CUT	ROLD014	<b>Sycamore</b>	RMKL019	A_TERMINOUS RSMKL008
<b>Hotchkiss</b>	A-CHIPPS IS RSAN014	A-CCWD ROLD024	<b>Terminous</b>	LITTLE POTATO SLOUGH	A_TERMINOUS RSMKL008
<b>Jersey</b>	A-CHIPPS IS RSAN014	FALSE RIVER	<b>Twitchell</b>	SLTRM004	A-SAN ANDREAS RSAN032

<b>Jones</b>	RMID015	RMID023	<b>Tyler</b>	RSAC123	RMKL019
<b>Kimball</b>	A-ANTIOCH RSAN007	RSAC075	<b>Union</b>	ROLD040	CHGRL009
<b>King</b>	LITTLE POTATO SLOUGH	A-VENICE- BOULDIN RSAN046	<b>Van_Sickle</b>	A-COLLINSVILLE RSAC081	SLMZU029
<b>Little Franks</b>	HOLLAND CUT	FALSE RIVER	<b>Veale</b>	A-CCWD ROLD024	ROLD034
<b>Little Mandeville</b>	HOLLAND CUT	ROLD014	<b>Venice</b>	A-PRISONERS PT RSAN037	LITTLE POTATO SLOUGH
<b>Little Tinsley</b>	RMID005	A-VENICE- BOULDIN RSAN046	<b>Victoria</b>	RMID023	ROLD034
<b>Mandeville</b>	RMID005	A-PRISONERS PT RSAN037	<b>Webb</b>	A-SAN ANDREAS RSAN032	A-PRISONERS PT RSAN037
<b>McCormack- Williamson</b>	RMKL019	RSAC123	<b>Winter</b>	RSAC075	A- COLLINSVILLE RSAC081
<b>McDonald</b>	RMID005	A-VENICE- BOULDIN RSAN046	<b>Woodward</b>	RMID015	ROLD034
<b>Medford</b>	A-VENICE- BOULDIN RSAN046	A-PRISONERS PT RSAN037	<b>Wright- Elmwood</b>	A-VENICE- BOULDIN RSAN046	A-BRANDT BR RSAN072
<b>Merritt</b>	A-HOOD	RSAC139	<b>Rio Blanco</b>	LITTLE POTATO SLOUGH	A-VENICE- BOULDIN RSAN046

Table A3. Average irrigation season salinity (as mS cm<sup>-1</sup>) by Delta island from hydrodynamic modeling with WAM.

Zone	Island	Current conditions	Dual conveyance	1 foot SLR	1 foot SLR & dual conveyance	3 foot SLR	3 foot SLR & dual conveyance	Dry year current conditions	Dry year dual conveyance
Central	Bacon	0.38	0.54	0.96	0.40	0.49	0.86	0.58	0.49
Central	Bouldin	0.17	0.17	0.27	0.17	0.17	0.25	0.17	0.17
Central	Empire	0.29	0.32	0.48	0.32	0.32	0.45	0.32	0.35
Central	Little Franks	<b>0.67</b>	0.96	1.62	0.66	0.81	1.42	1.17	0.96
Central	Little Mandeville	0.39	0.55	0.99	0.39	0.49	0.87	0.59	0.50
Central	Little Tinsley	0.29	0.33	0.57	0.32	0.33	0.52	0.32	0.35
Central	Mandeville	0.26	0.34	0.63	0.30	0.33	0.56	0.29	0.30
Central	McDonald	0.29	0.33	0.57	0.32	0.33	0.52	0.32	0.35
Central	Medford	0.29	0.34	0.63	0.32	0.32	0.56	0.32	0.35
Central	Mildred Island	0.31	0.35	0.57	0.36	0.36	0.52	0.36	0.40
Central	Quimby	0.39	0.55	0.99	0.39	0.49	0.87	0.59	0.50
Central	Rhode	0.39	0.55	0.99	0.39	0.49	0.87	0.59	0.50
Central	Venice	0.25	0.34	0.63	0.26	0.31	0.56	0.29	0.26
Central	Webb	0.26	0.38	0.74	0.26	0.33	0.64	0.35	0.26
East	Bishop	0.29	0.32	0.48	0.32	0.32	0.45	0.32	0.35
East	Brack	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15
East	Canal Ranch	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15
East	King	0.29	0.32	0.48	0.32	0.32	0.45	0.32	0.35
East	Rindge	0.29	0.33	0.57	0.32	0.33	0.52	0.32	0.35
East	Rio Blanco	0.29	0.32	0.48	0.32	0.32	0.45	0.32	0.35
East	Rough and Ready	0.55	0.55	0.55	0.55	0.55	0.55	0.74	0.74
East	Sargent Barnhart	0.55	0.55	0.55	0.55	0.55	0.55	0.74	0.74
East	Shima	0.55	0.55	0.55	0.55	0.55	0.55	0.74	0.74
East	Shin Kee	0.29	0.32	0.48	0.32	0.32	0.45	0.32	0.35
East	Sycamore	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15
East	Terminus	0.19	0.22	0.37	0.20	0.22	0.35	0.18	0.19
East	Wright-Elmwood	0.55	0.55	0.55	0.55	0.55	0.55	0.74	0.74
North	Deadhorse Island	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	Glanville	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	Grand	0.24	0.44	0.94	0.66	0.65	1.32	0.29	0.75
North	Hastings	0.29	0.44	0.94	0.66	0.65	1.32	0.36	0.75
North	McCormack-Williamson	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	Merritt	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	Netherlands	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	New Hope	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	Pierson District	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	Prospect	0.24	0.44	0.94	0.66	0.65	1.32	0.29	0.75
North	Ryer	0.29	0.31	0.46	0.34	0.35	0.61	0.36	0.41

Zone	Island	Current conditions	Dual conveyance	1 foot SLR	1 foot SLR & dual conveyance	3 foot SLR	3 foot SLR & dual conveyance	Dry year current conditions	Dry year dual conveyance
North	Staten	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15
North	Sutter	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
North	Tyler	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
South	Byron	0.43	0.47	0.66	0.48	0.48	0.62	0.58	0.61
South	Clifton Court	0.43	0.47	0.66	0.48	0.48	0.62	0.58	0.61
South	Coney	0.43	0.47	0.66	0.48	0.48	0.62	0.58	0.61
South	Fabian	0.56	0.56	0.66	0.56	0.56	0.62	0.76	0.76
South	Jones	0.31	0.35	0.54	0.37	0.37	0.51	0.37	0.41
South	Roberts	0.55	0.55	0.55	0.55	0.55	0.55	0.74	0.74
South	Stewart	0.56	0.56	0.56	0.56	0.56	0.56	0.76	0.76
South	Union	0.56	0.56	0.66	0.56	0.56	0.62	0.76	0.76
South	Victoria	0.38	0.52	0.90	0.41	0.49	0.80	0.57	0.49
South	Woodward	0.38	0.52	0.90	0.41	0.49	0.80	0.57	0.49
West	Bethel	0.67	0.96	1.62	0.66	0.81	1.42	1.17	0.96
West	Bradford	0.76	0.96	1.62	1.24	1.04	1.48	1.32	1.90
West	Brannan-Andrus	0.26	0.44	0.94	0.66	0.65	1.32	0.35	0.75
West	Decker	2.57	3.34	4.93	3.16	3.42	5.05	4.61	4.71
West	Fay	0.38	0.54	0.96	0.40	0.49	0.86	0.58	0.49
West	Holland	0.39	0.55	0.99	0.39	0.49	0.87	0.59	0.50
West	Hotchkiss	0.99	1.46	2.37	0.81	1.21	2.14	1.77	1.14
West	Jersey	0.99	1.46	2.37	0.81	1.21	2.14	1.77	1.14
West	Orwood	0.38	0.54	0.96	0.40	0.49	0.86	0.58	0.49
West	Palm	0.38	0.54	0.96	0.40	0.49	0.86	0.58	0.49
West	Sherman	1.24	1.63	2.41	2.20	1.99	2.83	2.24	3.20
West	Twitchell	0.76	0.95	1.48	1.24	1.04	1.48	1.32	1.90
West	Veale	0.38	0.54	0.96	0.41	0.49	0.86	0.58	0.49
Far-west	Browns	6.37	6.96	8.02	7.61	7.04	8.14	10.53	10.64
Far-west	Chipps	5.21	5.82	6.92	6.27	5.91	7.04	8.85	8.97
Far-west	Kimball	6.37	6.96	8.02	7.61	7.04	8.14	10.53	10.64
Far-west	Neville	6.37	6.96	8.02	7.61	7.04	8.14	10.53	10.64
Far-west	Van Sickle	3.10	3.66	4.84	3.87	3.77	4.97	5.55	5.73
Far-west	Winter	6.37	6.96	8.02	7.61	7.04	8.14	10.53	10.64

Table A4. Average salinity (as electrical conductivity in mS cm<sup>-1</sup>) from hydrodynamic modeling with RMA 2-D.

Zone	Island	Current conditions— Irrigation season	Flooded Islands— Irrigation season	Current conditions— Rest of year	Flooded Islands— Rest of year
Central	Bacon	0.34	0.39	0.45	0.73
Central	Bouldin	0.17	0.17	0.19	0.19
Central	Empire	0.32	0.33	0.36	0.44
Central	Little Franks	0.50	0.49	0.71	0.97
Central	Little Mandeville	0.36	0.41	0.50	0.81
Central	Little Tinsley	0.32	0.33	0.36	0.45
Central	Mandeville	0.26	0.30	0.29	0.47
Central	McDonald	0.32	0.33	0.36	0.45
Central	Medford	0.32	0.33	0.36	0.47
Central	Mildred Island	0.30	0.33	0.36	0.49
Central	Quimby	0.36	0.41	0.50	0.81
Central	Rhode	0.36	0.41	0.50	0.81
Central	Venice	0.24	0.29	0.27	0.47
Central	Webb	0.27	0.33	0.32	0.60
East	Bishop	0.32	0.33	0.36	0.44
East	Brack	0.17	0.17	0.19	0.19
East	Canal Ranch	0.17	0.17	0.19	0.19
East	King	0.32	0.33	0.36	0.44
East	Rindge	0.32	0.33	0.36	0.45
East	Rio Blanco	0.32	0.33	0.36	0.44
East	Rough and Ready	0.60	0.60	0.79	0.79
East	Sargent Barnhart	0.60	0.60	0.79	0.79
East	Shima	0.60	0.60	0.79	0.79
East	Shin Kee	0.32	0.33	0.36	0.44
East	Sycamore	0.17	0.17	0.19	0.19
East	Terminus	0.17	0.17	0.19	0.19
East	Wright-Elmwood	0.60	0.60	0.79	0.79
North	Deadhorse Island	0.15	0.15	0.16	0.16
North	Glanville	0.14	0.14	0.16	0.16
North	Grand	0.16	0.15	0.20	0.19
North	Hastings	0.16	0.15	0.20	0.19
North	McCormack- Williamson	0.15	0.15	0.16	0.16
North	Merritt	0.14	0.14	0.16	0.16
North	Netherlands	0.14	0.14	0.16	0.16
North	New Hope	0.15	0.15	0.16	0.16
North	Pierson District	0.14	0.14	0.16	0.16
North	Prospect	0.16	0.15	0.20	0.19
North	Ryer	0.15	0.15	0.17	0.17
North	Staten	0.17	0.17	0.19	0.19
North	Sutter	0.14	0.14	0.16	0.16
North	Tyler	0.15	0.15	0.16	0.16
South	Byron	0.36	0.39	0.56	0.71
South	Clifton Court	0.36	0.39	0.56	0.71
South	Coney	0.36	0.39	0.56	0.71
South	Fabian	0.62	0.62	0.79	0.79
South	Jones	0.34	0.38	0.44	0.67
South	Roberts	0.60	0.60	0.79	0.79
South	Stewart	0.60	0.60	0.79	0.79
South	Union	0.62	0.62	0.79	0.79
South	Victoria	0.34	0.38	0.44	0.67

South	Woodward	0.34	0.38	0.44	0.67
West	Bethel	0.50	0.49	0.71	0.97
West	Bradford	0.50	0.49	0.71	0.97
West	Brannan-Andrus	0.27	0.33	0.32	0.60
West	Decker	4.83	4.67	6.20	5.97
West	Fay	0.34	0.39	0.45	0.73
West	Holland	0.36	0.41	0.50	0.81
West	Hotchkiss	0.54	0.53	0.78	1.03
West	Jersey	0.54	0.53	0.78	1.03
West	Orwood	0.34	0.39	0.45	0.73
West	Palm	0.34	0.39	0.45	0.73
West	Sherman	0.36	0.40	0.53	0.79
West	Twitchell	0.36	0.40	0.53	0.79
West	Veale	0.34	0.39	0.45	0.73
Far-west	Browns	4.83	4.67	6.20	5.97
Far-west	Chipps	4.83	4.67	6.20	5.97
Far-west	Kimball	4.83	4.67	6.20	5.97
Far-west	Neville	4.83	4.67	6.20	5.97
Far-west	Van Sickle	4.83	4.67	6.20	5.97
Far-west	Winter	4.83	4.67	6.20	5.97