

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
2015			
05/14/15	1015	open	Delta Salinity
05/18/15	952	closed	
05/22/15	948	open	Memorial Day weekend operations
05/26/15	950	closed	
05/29/15	915	open	Weekend Operations
06/01/15	1004	closed	
06/05/15	1000	open	Weekend Operations
06/08/15	1000	closed	
06/13/15	900	open	Weekend Operations
06/15/15	954	closed	
06/16/15	958	open	
06/23/15	1005	closed	Delta Salinity
06/26/15	1215	open	

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DATE	TIME	ACTION	REMARKS
2014			
02/01/14	1019	open	Delta Salinity
02/10/14	958	closed	Fishery concerns
05/23/14	1017	open	Open for Memorial Day Weekend recreational activities.
05/27/14	1055	closed	
06/06/14	1020	open	Weekend recreational activities.
06/09/14	1055	closed	
06/13/14	958	open	
10/28/14	956	closed	Rio Vista flow standard.
10/30/14	1000	open	
11/02/14	1001	closed	Fishery protection
11/07/14	955	open	
12/01/14	955	closed	Fish protection per National Marine Fisheries Service Biological Opinion (Action IV..1.2).

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DATE	TIME	ACTION	REMARKS
2013			
05/24/13	957	open	Open for Memorial Day Weekend recreational activities.
05/28/13	1050	closed	
05/31/13	1530	open	Weekend recreational activities.
06/03/13	1105	closed	
06/07/13	932	open	Weekend recreational activities.
06/10/13	1045	closed	
06/14/13	1018	open	
10/08/13	1608	closed	Rio Vista flow standard
10/10/13	1505	open	
10/17/13	926	closed	Rio Vista flow standard
10/18/13	1500	open	
10/21/13	945	closed	Rio Vista flow standard
10/31/13	1015	open	
11/04/13	1000	closed	Rio Vista flow standard
11/08/13	1000	open	
11/12/13	1015	closed	Rio Vista flow standard
11/15/13	845	open	
11/18/13	953	closed	Rio Vista flow standard
11/22/13	1246	open	

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DATE	TIME	ACTION	REMARKS
2013 continued			
11/25/13	1005	closed	Rio Vista flow standard
11/27/13	1021	open	
12/01/13	1120	closed	Fish Protection (NMFS BO Action IV.1.2)

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DATE	TIME	ACTION	REMARKS
2012			
05/25/12	1115	open	Open for weekend recreational activities.
05/29/12	1000	close	Cancelled Unable to close gate #1 due to mechanical problem Gate #2 was closed. Gate #2 reopened for safety reasons.
06/01/12	1700	close	
06/21/12	1300	open	
11/27/12	1015	closed	Fish Protection per NMFS BO (Action IV.1.2)

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DATE	TIME	ACTION	REMARKS
2011			
07/15/11	955	open	
10/04/11	1024	closed	Mokelumne River Salmon fish attraction experiment
10/14/11	1116	open	
12/01/11	919	closed	Fish Protection (NMFS BO Action IV.1.2)

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DATE	TIME	ACTION	REMARKS
2010			
05/28/10	1005	open	Open for weekend recreation activities

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DATE	TIME	ACTION	REMARKS
06/01/10	1001	closed	
06/04/10	955	open	Open for weekend recreation activities
06/07/10	1004	closed	High flows at Freeport
06/18/10	1104	open	Remain open until further notice
10/13/10	1154	closed	
10/15/10	1205	open	
11/01/10	1024	closed	
11/04/10	1000	open	Fish Protection
12/01/10	1020	closed	

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DATE	TIME	ACTION	REMARKS
2009			
05/22/09	1000	open	Open for Memorial weekend recreation activities.
05/26/09	1130	closed	
05/29/09	1024	open	Open for weekend recreation activities.
06/01/09	957	close	
06/05/09	1025	open	Open for weekend recreation activities.
06/08/09	1024	close	
06/12/09	1004	open	Open for weekend recreation activities.
06/15/09	946	close	
06/16/09	1037	open	
10/23/09	1026	close	Required by NOAA Fisheries.
10/27/09	1000	open	Opening permitted by NOAA Biological Opinion.
11/06/09	954	closed	Rio Vista Standard
11/07/09	947	open	
11/12/09	959	closed	Rio Vista Standard
11/13/09	956	open	
11/19/09	1000	closed	D-1641 Rio Vista Standard
11/25/09	1016	open	
11/30/09	1015	closed	D-1641 Rio Vista Standard
12/01/09	954	open	
12/06/09	955	closed	D-1641 Rio Vista Standard

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2009 continued			
12/07/09	1002	open	
12/15/09	958	closed	Fish Protection

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2008			
05/23/08	1058	open	Opening or Memorial Day weekend recreation activities.
05/27/08	1054	closed	
05/30/08	1024	open	Opening for weekend recreation activities.
06/02/08	1024	closed	
06/06/08	1025	open	Opening for weekend recreation activities.
06/09/08	1024	closed	
06/13/08	1024	open	
11/10/08	0820	closed	Begin fish, hydrodynamics and water quality experiment requested by DWR and USGS.
11/12/08	0800	open	
11/12/08	1634	closed	
11/13/08	0800	open	
11/13/08	1555	closed	
11/14/08	0811	open	
11/14/08	1555	closed	
11/15/08	0800	open	
11/15/08	1554	closed	
11/16/08	0818	open	
11/16/08	1554	closed	
11/17/08	0815	open	
11/17/08	1633	closed	

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DATE	TIME	ACTION	REMARKS
2008 continued			
11/18/08	0817	open	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
11/18/08	1551	closed	
11/19/08	0825	open	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
11/19/08	1550	closed	
11/20/08	0805	open	
11/20/08	1540	closed	
11/21/08	0820	open	
11/21/08	1541	closed	
11/22/08	0821	open	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
11/22/08	1619	closed	
11/23/08	0824	open	
11/23/08	1548	closed	
11/24/08	0825	open	
11/24/08	1547	closed	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
11/25/08	0824	open	
11/25/08	1547	closed	
11/26/08	0825	open	Suspend experiment due to Water Quality concerns.
12/13/08	1540	closed	Begin fish, hydrodynamics and water quality experiment requested by DWR and USGS.
12/14/08	0825	open	
12/14/08	1546	closed	

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2008 continued			
12/15/08	0825	open	
12/15/08	1544	closed	
12/16/08	0840	open	
12/16/08	1544	closed	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
12/17/08	0842	open	
12/17/08	1547	closed	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
12/18/08	0850	open	
12/18/08	1549	closed	
12/19/08	0843	open	
12/19/08	1550	closed	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
12/20/08	0844	open	
12/20/08	1548	closed	
12/21/08	0844	open	
12/21/08	1548	closed	Continued fish, hydrodynamics and water quality experiment requested by DWR and USGS.
12/22/08	0844	open	
12/22/08	1549	closed	Suspend experiment due to fishery concerns.

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2007			
05/25/07	0949	open	
05/30/07	1240	closed	Decreasing water quality at Emmaton.
06/02/07	0825	open	
06/05/07	1045	closed	To improve water quality at Emmaton.
06/09/07	0830	open	
06/11/07	0830	closed	To comply with SWRCB Standards.
06/16/07	0855	open	
12/14/07	1138	closed	Requested by Fishery Agencies.

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DATE	TIME	ACTION	REMARKS
2006			
06/30/06	1003	open	
10/30/06	1030	closed	Testing and adjustment after contract work completed
10/30/06	1230	open	
12/15/06	952	closed	Flows forcasted to get above 25,000 cfs.

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DATE	TIME	ACTION	REMARKS
2005			
06/25/05	914	open	
11/16/05	825	closed	DAT recommendation for Winter Run Protection
11/20/05	830	open	
12/03/05	823	closed	Fishery Protection

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DATE	TIME	ACTION	REMARKS
2004			
05/28/04	1032	open	
06/01/04	1032	closed	Gate 2 fully closed at 1229 due to operational problems.
06/03/04	1141	open	Gate 2 fully opened at 1250 due to operational problems.
12/05/04	1215	closed	Fishery Experiment
12/28/04	1127	open	Water Quality, before substantial increase flows at Freeport.
12/29/04	1723	closed	

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DATE	TIME	ACTION	REMARKS
2003			
05/30/03	1625	open	High flows - open for weekend and closed again on Monday.
06/02/03	0824	closed	
06/06/03	1112	open	Gates open on weekends until flow drops below 25,000 cfs
06/09/03	0908	closed	High flows
06/12/03	0925	open	
12/01/03	1024	closed	Fishery Protection

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DATE	TIME	ACTION	REMARKS
2002			
05/24/02	1024	open	
05/28/02	1024	close	
05/31/02	1025	open	Begin Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
06/03/02	2017	close	
06/04/02	0529	open	
06/04/02	2026	close	
06/05/02	0526	open	
06/05/02	2024	close	
06/06/02	0525	open	
06/06/02	2027	close	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
06/07/02	0528	open	
06/09/02	2324	close	
06/10/02	0727	open	
06/10/02	2325	close	
06/11/02	0729	open	
06/11/02	2325	close	
06/12/02	0727	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
06/12/02	2325	close	

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2002 continued			
06/13/02	0728	open	Continue Gate study to determine how best to operate CC
06/13/02	2325	close	Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
06/14/02	0724	open	End Gate study to determine how best to operate CC
			Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/16/02	0835	closed	Fish study
10/19/02	0825	open	End of fish study. Gate #2 fell closed from full open position at 0830. #2 Gate (south) remains closed until repairs complete.
11/12/02	0815	closed	To complete maintenance and repairs.
11/12/02	1730	open	Maintenance and repairs complete.
12/03/02	1010	closed	Fishery Agencies Request.
12/10/02	1355	open	Fishery Agencies Request Complete.
12/16/02	1124	closed	High Flows.

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DATE	TIME	ACTION	REMARKS
2001			
01/14/01	1025	closed	Fishery concerns
01/23/01	1025	open	
01/26/01	1025	closed	
05/25/01	1215	open	
05/29/01	0525	closed	
06/09/01	0620	open	
06/11/01	0620	closed	
06/14/01	1350	open	
08/10/01	1740	closed	Begin Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
08/10/01	2352	open	
08/12/01	1909	closed	
08/13/01	0110	open	
08/14/01	2057	closed	
08/15/01	0222	open	
08/16/01	2221	closed	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
08/17/01	0354	open	
08/19/01	0009	closed	Started to close gates on 8/18/2001 at 2345 hours.

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2001 continued			
08/19/01	0539	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
08/21/01	0224	closed	
08/21/01	0725	open	
08/23/01	0522	closed	
08/23/01	0925	open	
08/25/01	1721	closed	
08/26/01	0009	open	Started to close gates on 8/25/2001 at 2344 hours.
08/26/01	1902	closed	
08/27/01	0055	open	End Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/08/01	0645	closed	
10/08/01	1225	open	Begin Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/09/01	0739	closed	
10/09/01	1325	open	
10/10/01	0824	closed	
10/10/01	1410	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta

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DATE	TIME	ACTION	REMARKS
2001 continued			
10/11/01	2024	closed	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/12/01	0125	open	
10/12/01	2119	closed	
10/13/01	0235	open	
10/13/01	2204	closed	
10/14/01	0335	open	
10/14/01	2304	closed	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/15/01	0425	open	
10/16/01	0038	closed	
10/16/01	0514	open	
10/17/01	0154	closed	
10/17/01	0615	open	
10/18/01	0249	closed	
10/18/01	0820	open	
10/19/01	0404	closed	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/19/01	0920	open	

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DATE	TIME	ACTION	REMARKS
2001 continued			
10/20/01	0459	closed	Continue Gate study to determine how best to operate CC
10/20/01	1030	open	Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/20/01	1518	closed	
10/20/01	2035	open	
10/21/01	1605	closed	
10/21/01	2134	open	
10/22/01	1700	closed	Continue Gate study to determine how best to operate CC
10/22/01	2206	open	Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta
10/23/01	1735	Gate was to close but operator missed the closure.	
10/24/01	1852	closed	
10/24/01	2359	open	
10/25/01	2004	close	
10/26/01	0054	open	
10/26/01	2030	close	
10/27/01	0139	open	End Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta

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DATE	TIME	ACTION	REMARKS
2001 continued			
11/21/01	1024	closed	Fish concerns
11/29/01	1426	open	Delta water quality concern
12/04/01	0931	closed	Forcast high flow Sac River as well as fishery protection. Note: Gates could have been open on 12/11, but kept closed for fishery concerns.

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DATE	TIME	ACTION	REMARKS
2000			
01/16/00	1041	Closed	Monitoring of Spring Run sized Chinook salmon at lower Sacramento River sites.
05/26/00	1025	Open	
06/05/00	1025	Closed	
06/09/00	1020	Open	
06/12/00	1025	Closed	
06/16/00	1030	Open	
09/28/00	0654	closed	Begin Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	1325	open	
	1851	closed	
09/29/00	0206	open	
	0755	closed	
	1410	open	
	1941	closed	
09/30/00	0308	open	
	0902	closed	
	1449	open	
	2009	closed	
10/01/00	0416	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	0950	closed	
	1545	open	
	2054	closed	
10/02/00	0511	open	
	1025	closed	
	1540	open	
	2140	closed	

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DATE	TIME	ACTION	REMARKS
2000 continued			
10/03/00	0616	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	1155	closed	
	1510	open	
	2224	closed	
10/04/00	0715	open	
	1240	closed	
	1804	open	
	2209	closed	
10/05/00	0755	open	
	1325	closed	
	1854	open	
10/06/00	0011	closed	
	0840	open	
	1410	closed	
	1937	open	
10/07/00	0055	closed	
	0926	open	
	1454	closed	
	2040	open	
10/08/00	0154	closed	
	0956	open	
	1538	closed	
	2123	open	
10/09/00	0250	closed	
	1025	open	
	1610	closed	
	2220	open	
10/10/00	0351	closed	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	1110	open	
	1640	closed	
	2310	open	

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DATE	TIME	ACTION	REMARKS
2000 continued			
10/11/00	0440	closed	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	1155	open	
	1710	closed	
10/12/00	0010	open	
	0539	closed	
	1225	open	
10/13/00	1755	closed	
	0058	open	
	0640	closed	
10/14/00	1240	open	
	1824	closed	
	0155	open	
10/15/00	0754	closed	
	1324	open	
	1854	closed	
10/16/00	0304	open	
	0902	closed	
	1410	open	
10/17/00	1939	closed	
	0354	open	
	0925	closed	
10/18/00	1455	open	
	2024	closed	
	0454	open	
10/19/00	1025	closed	
	1540	open	
	2124	closed	
10/20/00	0555	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	1125	closed	
	1640	open	
	2212	closed	

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DATE	TIME	ACTION	REMARKS
2000 continued			
10/19/00	0638	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	1210	closed	
	1745	open	
	2309	closed	
10/20/00	0740	open	
	1255	closed	
10/21/00	0821	open	
	1454	closed	
10/22/00	0909	open	
	1438	closed	
10/23/00	0955	open	
	1525	closed	
10/24/00	1015	open	
	1610	closed	
10/25/00	1125	open	
	1655	closed	
10/26/00	1155	open	
	1725	closed	
10/27/00	1240	open	
	1810	closed	
10/28/00		No moves	
10/29/00	1310	open	
	1840	closed	
10/30/00	1355	open	
	1925	closed	
10/31/00	1440	open	
	1955	closed	
11/01/00	1525	open	
	2040	closed	
11/02/00	1625	open	Continue Gate study to determine how best to operate CC Gates to protect both fish & water quality in the Sacramento-San Joaquin River Delta.
	2125	closed	
11/03/00	0610	open	
	1155	closed	

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2000 continued			
11/04/00	0655	open	Continue Gate study to determine how best to operate CC
	1239	closed	Gates to protect both fish & water quality in
11/05/00	0724	open	the Sacramento-San Joaquin River Delta.
	1510	closed	
11/06/00	0810	open	
	1340	closed	
11/07/00	0840	open	
	1410	closed	
11/08/00	0925	open	Opened until further notice. End of study.
12/22/00	1025	closed	
12/26/00	1425	open	

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DATE	TIME	ACTION	REMARKS
1999			
05/28/99	0852	OPEN	
11/26/99	0824	CLOSED	Fishery protection
12/14/99	0924	Open	Delta Water Quality
12/14/99	1425	Closed	
12/15/99	0922	Open	

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DATE	TIME	ACTION	REMARKS
1998			
07/17/98	0925	OPEN	
09/08/98	1225	CLOSED	Flows in Sacramento River above 25,000 cfs.

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DATE	TIME	ACTION	REMARKS
1997			
05/16/97	1900	OPEN	
05/21/97	1120	CLOSED	
05/23/97	1325	OPEN	
05/28/97	0925	CLOSED	
05/30/97	1325	OPEN	
06/12/97	0925	CLOSED	
06/16/97	0955	OPEN	
07/01/97	0725	CLOSED	
07/03/97	1225	OPEN	
10/06/97	1555	CLOSED	EXPERIMENT TO CLOSE THE GATES FOR A 2 WEEK PERIOD TO MEASURE THE RATE OF INCREASE OF SALINITY.
10/15/97	0855	OPEN	
11/25/97	0624	CLOSED	

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DATE	TIME	ACTION	REMARKS
1996			
06/12/96	0900	OPEN	
11/12/96	1300	CLOSED	TO AVOID DIVERSION OF FISH
11/15/96	1300	OPEN	
11/20/96	1200	CLOSED	FISH MOVEMENT

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DATE	TIME	ACTION	REMARKS
1995			
01/04/95	1034	CLOSED	REQUEST FROM FISHERY AGENCIES FOR EXPERIMENT ON MOVEMENT OF SALMON SMOLTS.
07/28/95	0700	OPEN	
09/19/95	1400	CLOSED	FLOWS IN SACRAMENTO RIVER OVER 25,000 CFS.
09/22/95	1100	OPEN	
12/11/95	0900	CLOSED	FORECASTED WEATHER NEXT WEEK WITH RESULTANT INCREASED FLOWS AND FISH MOVEMENT.

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DATE	TIME	ACTION	REMARKS
1994			
01/08/94	1041	CLOSED	ESA REQUIREMENT
05/27/94	1326	OPEN	WINTER RUN SALMON ASSUMED TO BE OUT OF SYSTEM
06/22/94	1420	CLOSED	EMMATON WATER QUALITY
06/24/94	1338	OPEN	
06/29/94	1335	CLOSED	TO IMPROVE STATE EMMATON STANDARD
07/01/94	1502	OPEN	FOR 3-DAY WEEKEND
07/05/94	1424	CLOSED	TO IMPROVE STATE EMMATON STANDARD
07/08/94	1335	OPEN	EMMATON STANDARD IMPROVED
07/26/94	1428	CLOSED	TO IMPROVE STATE EMMATON STANDARD
07/29/94	1325	OPEN	
11/11/94	1240	CLOSED	WINTER RUN OUT MIGRATION
11/14/94	1805	OPEN	
12/08/94	1029	CLOSED	WINTER RUN MOVEMENT - NMFS REQUEST TO CLOSE
12/14/94	1625	OPEN	
12/16/94	0835	CLOSED	
12/19/94	1354	OPEN	

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1993			
01/03/93	1125	CLOSED	HIGH FLOWS IN SAC RIVER/ESA REQUIREMENTS
05/29/93	1755	OPEN	LOWER FLOWS
06/01/93	1436	CLOSED	HIGH FLOW IN SACRAMENTO RIVER
06/18/93	1001	OPEN	HIGH FLOWS RECEDING
10/29/93	0938	CLOSED	STATE EMMATON STANDARD
11/01/93	0930	OPEN	STATE EMMATON STANDARD IMPROVED
11/02/93	1101	CLOSED	STATE EMMATON STANDARD
11/07/93	0940	OPEN	STATE EMMATON STANDARD IMPROVED

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1992			
02/03/92	1025	CLOSED	OUT-MIGRATION OF JUVENILE WINTER-RUN SALMON
05/01/92	0932	OPEN	OUT-MIGRATION COMPLETE
05/15/92	0900	CLOSED	TO HELP MEET D-1485 RIO VISTA FLOW REQUIREMENTS
05/22/92	1000	OPEN	RIO VISTA FLOWS O.K.
05/26/92	0924	CLOSED	EMMATON WATER QUALITY
05/29/92	1649	OPEN	EMMATON IMPROVED
06/01/92	0920	CLOSED	EMMATON WATER QUALITY
06/03/92	0908	PARTIALLY OPENED	OPENED TO WATER SURFACE FOR GATE INSPECTION
06/03/92	1427	CLOSED	INSPECTION COMPLETED
06/08/92	1520	OPEN	EMMATON IMPROVED
12/12/92	1125	CLOSED	HIGH FLOW IN SACRAMENTO RIVER
12/14/92	1755	OPEN	FLOWS LOWER

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1991			
03/05/91	1425	CLOSED	OUTFLOW ABOVE 12,000
03/11/91	1025	OPEN	OUTFLOW BELOW 12,000
03/14/91	1600	CLOSED	OUTFLOW ABOVE 12,000
04/04/91	1055	OPEN	OUTFLOW BELOW 12,000
05/02/91	1245	CLOSED	FISH FLUSH
05/03/91	1435	OPEN	
05/16/91	1440	CLOSED	EMMATON WATER QUALITY
05/18/91	0625	OPEN	EMMATON IMPROVED
05/20/91	1424	CLOSED	EMMATON WATER QUALITY
05/25/91	0625	OPEN	EMMATON IMPROVED
05/30/91	1125	CLOSED	EMMATON WATER QUALITY
06/01/91	0625	OPEN	EMMATON IMPROVED
06/03/91	1337	CLOSED	EMMATON WATER QUALITY
06/07/91	0845	OPEN	EMMATON IMPROVED
06/10/91	1024	CLOSED	EMMATON WATER QUALITY
06/13/91	0825	OPEN	EMMATON IMPROVED
06/27/91	1455	CLOSED	EMMATON WATER QUALITY
06/29/91	0625	OPEN	EMMATON IMPROVED

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1990			
01/11/90	0945	CLOSED	OUTFLOW ABOVE 12,000 CFS
01/22/90	1425	OPEN	OUTFLOW BELOW 12,000
04/25/90	1424	GATE 2 CLOSED	FLOW STUDY BY DWR
04/26/90	1540	OPEN	FLOW STUDY COMPLETE
05/15/90	0924	CLOSED	EMMATON WATER QUALITY
05/16/90	1325	OPEN	EMMATON IMPROVED

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1989			
02/19/89	1228	CLOSED	REQUESTED BY SHERIFF'S OFFICE SO THEY COULD SEARCH FOR A BODY -- NONE FOUND
02/19/89	1357	OPEN	
03/06/89	0925	CLOSED	OUTFLOW EXCEEDS 12,000 CFS
04/13/89	1507	OPEN	OUTFLOW BELOW 12,000 CFS
05/08/89	1226	CLOSED	EMMATON QUALITY NOT GOOD
05/10/89	0825	OPEN	EMMATON QUALITY IMPROVING
05/12/89	1425	CLOSED	FISH FLUSH - FISH HAVE REACHED DELTA
05/17/89	1022	OPEN	COLEMAN FISH FLUSH CONCLUDED
06/05/89	1325	CLOSED	EMMATON WATER QUALITY
06/07/89	0825	OPEN	EMMATON QUALITY IMPROVING
06/08/89	1454	CLOSED	EMMATON WATER QUALITY
06/10/89	0655	OPEN	EMMATON QUALITY IMPROVING
06/19/89	1025	CLOSED	EMMATON WATER QUALITY
06/21/89	1425	OPEN	EMMATON QUALITY IMPROVING

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1988			
01/05/88	0825	CLOSED	OUTFLOW REQUIREMENT
01/27/88	1340	OPEN	OUTFLOW BELOW 12,000
05/03/88	0732	CLOSED	FISH TEST
05/06/88	0746	OPEN	FISH TEST
05/13/88	1325	CLOSED	FISH FLUSH
05/20/88	1525	OPEN	
05/31/88	0754	CLOSED	FISH TEST
05/31/88	1435	OPEN	TEST POSTPONED UNTIL 6/13/88
06/21/88	0740	CLOSED	FISH TEST
06/24/88	0725	OPEN	FISH TEST
11/25/88	1254	CLOSED	HIGH OUTFLOW
11/27/88	0743	OPEN	

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1987			
02/27/87	0725	OPEN	OUTFLOW BELOW 12,000 CFS
03/06/87	0940	CLOSED	OUTFLOW OVER 12,000 CFS
04/01/87	0825	OPEN	OUTFLOW BELOW 12,000 AND TO EQUALIZE WATER QUALITY BETWEEN EMMATON AND JERSEY POINT
04/28/87	0755	CLOSED	FISH TESTING
05/01/87	0755	OPEN	
05/17/87	0725	CLOSED	FISH FLUSH
05/23/87	0725	OPEN	
10/01/87	1535	CLOSED	EMMATON WATER QUALITY (DWR REQUEST)
10/04/87	0925	OPEN	EMMATON O.K.
10/08/87	1122	CLOSED	EMMATON WATER QUALITY (DWR REQUEST)
10/10/87	0630	OPEN	EMMATON O.K.
10/27/87	1115	CLOSED	EMMATON WATER QUALITY (DWR REQUEST)
10/30/87	0735	OPEN	EMMATON WATER QUALITY O.K.
11/02/87	1455	CLOSED	EMMATON WATER QUALITY (DWR REQUEST)
11/05/87	1525	OPEN	EMMATON O.K.

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1986			
01/17/86	1300	CLOSED	D-1485 - DELTA OUTFLOW > 12,000 EXPECTED
05/22/86	1300	OPEN	OPEN FOR WEEKEND
09/23/86	1425	CLOSED	HIGH WATER
10/09/86	1355	OPEN	OPEN FOR BOATERS CONVENIENCE
12/05/86	1435	CLOSED	EMMATON WATER QUALITY (REQUEST OF DWR)
12/10/86	1025	OPEN	
12/30/86	1425	CLOSED	OUTFLOW 12,000 CFS

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1985			
03/15/85	1425	OPEN	
05/07/85	1035	CLOSED	DELTA WATER QUALITY
05/09/85	1043	OPEN	FISH TESTING
05/29/85	1002	CLOSED	EMMATON WATER QUALITY
05/31/85	1355	OPEN	JERSEY WATER QUALITY
06/03/85	0925	CLOSED	EMMATON WATER QUALITY
06/06/85	1040	OPEN	JERSEY WATER QUALITY - EMMATON O.K.
06/12/85	0923	CLOSED	EMMATON WATER QUALITY
06/14/85	1324	OPEN	EMMATON O.K.
10/17/85	0909	CLOSED	EMMATON WATER QUALITY
10/19/85	1135	OPEN	EMMATON WATER QUALITY O.K.
10/23/85	1425	CLOSED	EMMATON WATER QUALITY INSURANCE
10/25/85	1400	OPEN	48 HOURS DURATION OF CLOSURE
11/07/85	1425	CLOSED	EMMATON WATER QUALITY (REQUEST OF DWR)
11/08/85	1425	OPEN	24-HOUR CLOSURE - OPEN FOR WEEKEND
11/12/85	1220	CLOSED	EMMATON WATER QUALITY (REQUEST OF DWR)
11/15/85	1423	OPEN	OPEN FOR WEEKEND
11/30/85	1130	CLOSED	HIGH WATER
12/06/85	1230	OPEN	CONTRA COSTA WATER QUALITY - RIVER STILL HIGH BUT FALLING

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1984			
04/20/84	1005	OPEN	
05/08/84	1149	CLOSED	Closure for fish testing.
05/11/84	1057	OPEN	
05/14/84	1022	CLOSED	
05/17/84	1025	OPEN	
05/21/84	0940	CLOSED	
05/24/84	1015	OPEN	
11/13/84	0954	CLOSED	

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
		1983	
07/22/83	0936	OPEN	
11/13/83	1435	CLOSED	

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1982			
06/11/82	1225	OPEN	Problems with gate #2. Gate #2 opened at 1610 hours.
06/14/82	1005	CLOSED	
06/18/82	1226	OPEN	
06/21/82	0945	CLOSED	
06/25/82	1221	OPEN	
11/16/82	1025	CLOSED	

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1981			
01/23/81	1050	CLOSED	
04/15/81	1032	OPEN	
05/05/81	1446	CLOSED	
05/12/81	1130	OPEN	
11/14/81	1119	CLOSED	

BUREAU OF RECLAMATION
DELTA CROSS CHANNEL OPERATIONS

DATE	TIME	ACTION	REMARKS
1980			
10/21/80	1000	CLOSED	Only the south gate was closed.
10/23/80	1125	OPEN	
10/28/80	1025	CLOSED	
11/20/80	1000	OPEN	

From: "Bogdan, Kenneth M.@DWR" <Kenneth.Bogdan@water.ca.gov>

Date: September 22, 2015 at 3:53:19 PM PDT

To: "Heinrich, Dana@Waterboards" <Dana.Heinrich@waterboards.ca.gov>, "Riddle, Diane@Waterboards" <Diane.Riddle@waterboards.ca.gov>

Cc: "Mizell, James@DWR" <James.Mizell@water.ca.gov>

Subject: Schedule Information Related to California WaterFix

Dana and Diane,

As you know, on August 26, 2015, the California Department of Water Resources (DWR) and U.S. Bureau of Reclamation (Reclamation) submitted to the State Water Resources Control Board (State Water Board) a petition for a change to the water rights necessary to allow for the implementation, if approved, of key components of the State's proposed "California WaterFix" project. On September 16, 2015, DWR and Reclamation submitted an addendum and errata for the petition. Within the next few days, DWR expects to submit to the State Water Board an application for water quality certification pursuant to Section 401 of the Clean Water Act. This e-mail is to inform you of our preference regarding the processing of the Section 401 water quality certification application, as well as to inform you of our current understanding of the schedule for completing compliance with the federal and California Endangered Species Acts and the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

Section 401 Certification

If approved, construction of the proposed California WaterFix would involve the discharge of dredged or fill material into waters of the United States and, prior to construction, the project requires a permit from the US Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act. The permit under Section 404 may not be issued without obtaining certification from the state that the discharge is consistent with the applicable water quality standards. Because water right authorizations from the State Board are requested for the project, we have been directed to submit the application for Section 401 water quality certification to the State Water Board, Division of Water Rights.

DWR appreciates the potential complexities associated with the State Water Board's hearing process for the change petition and we therefore request that the State Water Board consider the California WaterFix application for Section 401 water quality certification in a process separate from the change petition.

Schedule for Compliance with Federal and California Endangered Species Acts

The California WaterFix project involves the request for federal approvals related to construction (USACE) and coordinated operations with the federal Central Valley Project (Reclamation). As a requirement of Section 7 of the federal Endangered Species Acts (ESA), prior to making a final decision on the action, the federal agencies must, in consultation with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), ensure that the proposed action does not jeopardize the continued existence of a listed species or adversely modify or destroy critical habitat. The Section 7 process for the California WaterFix project involves the preparation of a biological assessment, expected to be submitted to USFWS and NMFS in November 2015, and issuance of a biological opinion, expected from USFWS and NMFS within the April-June 2016 timeframe, prior to Reclamation and USACE final decision on approval of the California WaterFix project. DWR will ensure that the final documents

associated with Section 7 are available to the State Water Board and, as the Section 7 consultation process continues, DWR will update the State Water Board on the schedule for document releases.

The California WaterFix project, if approved, would involve activities that may cause the take of species listed under the California Endangered Species Acts (CESA). DWR intends to obtain incidental take authorization for the California WaterFix project through Section 2081(b) of the California Fish & Game Code. DWR expects to submit an application for an incidental take permit to the California Department of Fish & Wildlife (CDFW) in November 2015, and expects DFW to make a decision on whether to issue the permit within the same approximate timeframe as the biological opinion issued under Section 7 of the ESA (with the caveat that it would come after DWR completes the process for CEQA compliance and decision on project approval).

Schedule for Compliance with NEPA and CEQA

In July 2015, DWR and Reclamation issued the BDCP/California Water Fix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS). The BDCP Draft EIR/EIS was issued December 2013. DWR and Reclamation expect to complete preparation of a Final EIR/EIS in May- June 2016 timeframe and Reclamation would issue the record of decision (ROD) to complete the NEPA process after receipt of the biological opinion. DWR expects to certify the EIR and make a decision on the project and file a notice of determination (NOD) completing the CEQA process at approximately the same time as Reclamation issues the ROD.

The change petition was submitted to the State Water Board to begin the water rights hearing process which may necessarily take many months to complete. It was submitted within the comment period for the RDEIR/SDEIS in order to allow the State Water Board and the public the time and information needed to fully consider the proposed changes, in coordination with the environmental analysis required by CEQA and NEPA. A final decision on this Petition is not requested until DWR and Reclamation completes preparation of the Final EIR/EIS, makes a decision on the project, and issues the NOD and ROD (which includes completion of the Section 7 of the ESA). It should be noted that besides the need to begin the change petition process in order to efficiently complete the process within a reasonable amount of time (projected to be well after the completion of the CEQA/NEPA process), starting the process now gives DWR and Reclamation, prior to completing the Final EIR/EIS and determining whether to approve the proposed project, the benefit of being able to consider the additional comments/environmental issues submitted in reaction to the change petition.

Please let me know if you have any questions,

Ken

Kenneth M Bogdan
Senior Staff Counsel
Office of Chief Counsel
CA Department of Water Resources
11th Floor
1416 9th Street
Sacramento CA 95814
Office 916.651.2988
Cell 916.607.7852

Deanna Sereno

From: Heiland, Brian@DWR <Brian.Heiland@water.ca.gov>
Sent: Thursday, March 28, 2013 2:56 PM
To: Deanna Sereno; Sanchez, Arnold@DWR
Cc: Stein, Russell@DWR; Morrow, Michelle@DWR
Subject: RE: BDCP modeling files
Attachments: BDCP_Alts_Crosswalk_102711.pdf

Hi Deanna, we can transfer all the files. Your numbering scheme is correct – I have also attached our Crosswalk. Yes, the modeling still uses the “old” numbering scheme.

BG

From: Deanna Sereno [mailto:dsereno@ccwater.com]
Sent: Wednesday, March 27, 2013 10:33 AM
To: Heiland, Brian@DWR; Sanchez, Arnold@DWR
Cc: Stein, Russell@DWR; Morrow, Michelle@DWR
Subject: RE: BDCP modeling files

Hi BG –

If it's okay, I'd prefer to get all the modeling files at once, even if they haven't changed. I believe the hard drive I sent should have enough space (500 GB), but let me know if it doesn't. Arnold should get the hard drive today. Here is the tracking info in case there is a problem:

Tracking number: 799375886465

Also, I've attached an excel spreadsheet with my interpretation of the old and new numbering schemes. It would be great if DWR could review this to make sure I'm interpreting the naming schemes properly. The modeling files (at least the prior two releases that I received) used the old numbering scheme, so this is critical to interpreting the results in context of the EIR/S.

Thanks,
 ~ Deanna

From: Heiland, Brian@DWR [mailto:Brian.Heiland@water.ca.gov]
Sent: Tuesday, March 26, 2013 4:19 PM
To: Deanna Sereno; Sanchez, Arnold@DWR
Cc: Stein, Russell@DWR; Morrow, Michelle@DWR
Subject: RE: BDCP modeling files

Hi Deanna, there are only a few remaining data sets that you don't have. In your first request, you asked for Existing Conditions, No Action, and Alternatives 1-5. In your 2nd request, you asked for Alternatives 2, 4, 5, and 8.

We can provide the Calsim/DSM2/SRWQM for Alternatives 6, 7, and 9 along with the Decision Tree scenarios for Alternative 4. I will assume you only want these runs unless you reply back to me with changes.

BG

From: Deanna Sereno [<mailto:dsereno@ccwater.com>]
Sent: Tuesday, March 26, 2013 3:23 PM
To: Heiland, Brian@DWR; Sanchez, Arnold@DWR
Cc: Stein, Russell@DWR; Morrow, Michelle@DWR
Subject: RE: BDCP modeling files

Hi BG and Arnold –

We would like all runs that are available for release. Who should I ship the harddrive to? I can send it out FedEx tonight if I get an address. If you can get the files copied before April 4, I can pick it up when I'm in town for the BDCP public meeting.

Thanks,
 ~ Deanna

Deanna Sereno

Water Resources Specialist
 Contra Costa Water District
 (925) 688-8079

From: Heiland, Brian@DWR [<mailto:Brian.Heiland@water.ca.gov>]
Sent: Tuesday, March 26, 2013 12:57 PM
To: Deanna Sereno
Cc: Stein, Russell@DWR; Morrow, Michelle@DWR; Sanchez, Arnold@DWR
Subject: RE: BDCP modeling files

Deanna, I have been authorized the release (starting Wednesday 3/27) the Calsim II and DSM2 data for all the BDCP Alternatives including the decision tree scenarios. We will not require a Disclaimer to be signed now that Chapter 5 of the BDCP is going to be released.

Please:

- Let me know which runs you are requesting.
- Coordinate with Arnold Sanchez (CC'd here) to provide him with an external hard drive (with at least 300 GB of storage).
- Make sure (consult & confirm with your IT staff) that the external hard drive is formatted in NTFS format instead of the default FAT32 file system or others. The reason for this is that some individual files are larger than 3GB will not be copied to that hard drive if it's not formatted accordingly.

Let me know if you have any questions.

BG

Brian "BG" Heiland, P.E.
 Supervising Engineer, Water Resources
 Executive Advisor to the Chief Deputy Director

Department of Water Resources
 Executive Office

Phone: (916) 657-4389
 Cell: (916) 207-6620

<mailto:Brian.Heiland@water.ca.gov>

From: Deanna Sereno [<mailto:dsereno@ccwater.com>]

Sent: Thursday, March 21, 2013 9:29 AM

To: Stein, Russell@DWR

Cc: Meral, Jerry@CNRA; Moon, Laura K.@DWR

Subject: BDCP modeling files

Hi Russ --

In the meeting yesterday, Jerry Meral said that the modeling files are now available to the public. While I understand that it might not be available until Ch. 5 is released (per you and Laura), the release is scheduled for next Wed, so I'd like to get the process started. Is there any paperwork that we need to sign? Who should I ship the hard drive to?

Thanks,
~ Deanna

Deanna Sereno

Water Resources Specialist
Contra Costa Water District
(925) 688-8079

ICF Proposed Alternatives Presentation for EIR/EIS

Alternative		Alignment / Conveyance	Intakes	ND Diversion Capacity (cfs)	Operations	Restoration
Old	New					
1	1A	Tunnel / dual	1, 2, 3, 4, 5; <i>alts 1, 2, 3, 4, 5</i>	15,000	BDCP Steering Comm.	BDCP Steering Comm.
	1B	East canal / dual	1, 2, 3, 4, 5; <i>alts 1, 2, 3, 4, 5</i>	15,000	BDCP Steering Comm.	BDCP Steering Comm.
	1C	West canal / dual	1, 2, 3, 4, 5 (west side intakes)	15,000	BDCP Steering Comm.	BDCP Steering Comm.
1A	2A	Tunnel / dual	1, 2, 3, 4, 5 ¹ ; <i>alts 1, 2, 3, 4, 5</i>	15,000	Scenario 6 / Fall X2	BDCP Steering Comm.
	2B	East canal / dual	1, 2, 3, 4, 5 ¹ ; <i>alts 1, 2, 3, 4, 5</i>	15,000	Scenario 6 / Fall X2	BDCP Steering Comm.
	2C	West canal / dual	1, 2, 3, 4, 5 (west side intakes)	15,000	Scenario 6 / Fall X2	BDCP Steering Comm.
2	3	Tunnel / dual	1, 2; <i>alts 1, 2</i>	6,000	BDCP Steering Comm.	BDCP Steering Comm.
2A	4	Tunnel / dual	1, 2, 3; <i>alts 1, 2, 3</i>	9,000	Scenario 6 / Fall X2	
2B	5	Tunnel / dual	1; <i>alt 1</i>	3,000	ND per BDCP Steering Comm.; SD per existing BOs (Fall X2, Old & Middle River flows, SJ E/I ratios)	BDCP Steering Comm.; 25,000 ac Tidal Marsh (2025 level)
3	6A	Tunnel / isolated	1, 2, 3, 4, 5; <i>alts 1, 2, 3, 4, 5</i>	15,000	BDCP Steering Comm.; no SD intakes; Fall X2	BDCP Steering Comm.
	6B	East canal / isolated	1, 2, 3, 4, 5; <i>alts 1, 2, 3, 4, 5</i>	15,000	BDCP Steering Comm.; no SD intakes; Fall X2	BDCP Steering Comm.
	6C	West canal / isolated	1, 2, 3, 4, 5 (west side intakes)	15,000	BDCP Steering Comm.; no SD intakes; Fall X2	BDCP Steering Comm.
4	7	Tunnel / dual	2, 3, 5; <i>alts 2, 3, 5</i>	9,000	BDCP Steering Comm.; modified to enhance aquatic conservation	Additional 20 mi Channel Margin, 10,000 ac Seasonally Inundated Floodplain
4A	8	Tunnel / dual	2, 3, 5; <i>alts 2, 3, 5</i>	9,000	≤ 1.5 MAF increased Delta outflow	BDCP Steering Comm.
5	9	Through Delta/ channel modifications	Screened intakes at Delta Cross Channel and Georgiana Slough	15,000	BDCP Steering Comm.	BDCP Steering Comm.; changes in SD

¹ Under Alternatives 2A and 2B, a total of five intakes would be constructed and operated. Intakes 4 and 5 may be substituted with intakes 6 and 7.

ND = North Delta

SD = South Delta

SJ = San Joaquin River

Deanna Sereno

From: Enos, Cassandra@DWR <Cassandra.Enos@water.ca.gov>
Sent: Friday, September 04, 2015 1:03 PM
To: Deanna Sereno
Cc: Heiland, Brian@DWR
Subject: FW: CA Water Fix Model Data (Aug 15)
Attachments: WATER_FIX_MODELING_DATA_DISCLAIMER final - READ ME.pdf

Deanna – Below is a link to an ftp site containing the modeling data for the BDCP/Cal WaterFix Partially Recirculated EIR/S. Attached is a disclaimer related to that data. Please let me know if you have any problems accessing the data.

Have a great weekend, Cassandra

Please see the link below for CA Water Fix Model Data (Aug 15). This link will expire 9/5/15.

<https://d3.water.ca.gov/owncloud/public.php?service=files&t=5bdd7b5faa1dc108563ae4a443f23505>

Password: XXXXXXXXXX

Cassandra Enos-Nobriga
Program Manager
Executive Program Office
Department of Water Resources
901 P Street, Sacramento, CA 95814
Office: (916) 651-0178
Mobile: (916) 835-6981

BAY-DELTA CONSERVATION PLAN (BDCP)/CALIFORNIA WATER FIX (CWF)
MODELING DATA DISCLAIMER AGREEMENT

The Requester is provided preliminary modeling data developed by the California Department of Water Resources (DWR) regarding the BDCP/CWF Recirculated Draft Environmental Impact Report/Supplemental Environmental Impact Statement (RDEIRS) under the following disclaimer acknowledgement.

DWR makes no warranties, representations or guarantees either expressed or implied, as to the completeness, accuracy or correctness of the data, nor accepts or assumes any liability arising from any incorrect, incomplete or misleading data as interpreted by Requestor and/or its agents. Requester acknowledges that this data has not been completely reviewed and approved by Lead agencies in the BDCP/CWF and is considered preliminary and tentative for future analysis and final decision-making support.

In exchange for access to this data the Requestor agrees to promptly notify DWR of any and all defects, errors, inaccuracies or any other discrepancies discovered in the data. The Requestor agrees to label any products with a version date, document author identified, and underlying data source(s).

Appropriate use of model results is important. Despite detailed model inputs and assumptions, the results may differ from real-time operations under stressed water supply conditions. Such model results occur due to the inability of the model to make real-time policy decisions under extreme circumstances, as the actual (human) operators must do. Therefore, these results should only be considered an indicator of stressed water supply conditions under that Alternative, and should not necessarily be understood to reflect literally what would occur in the future. For a complete description of the limitations, please see Appendix 5A from the BDCP Public Draft (released December 2013) at:

<http://baydeltaconservationplan.com/Libraries/Dynamic Document Library/Public Draft BDCP EIR-EIS Appendix 5A - EIR-EIS Modeling Technical Appendix - Sections A B.sflb.ashx>

The Requestor is receiving modeling output for sensitivity analyses performed for the RDEIRS listed in the tables below. **Sensitivity analyses are not full model runs!** Minor changes (as summarized below) have been made to the full model runs performed for the BDCP Public Draft to assess the effects of the specific change. CALSIM II sensitivity model runs were not re-balanced to address any new or modified effects (as would be done for a full model run) that may be a result of the minor changes. The sensitivity analyses are only valid to assess the impacts of the minor changes. CALSIM II and DSM2 results from the sensitivity runs should only be used to answer the specific questions for which the runs were performed.

Additional modeling performed for various sensitivity analyses included in the RDEIRS	Additional CALSIM II/DSM2 Runs
<p>Modeling mentioned in the RDEIRS Section ES.3.2.1.1 and described in Appendix 8H Attachment 1 under RDEIRS Appendix A: http://baydeltaconservationplan.com/RDEIRS/Appendix A Rev DEIR-5/Append 8H-Att-1 TM-Update%20WQ%20Sens.pdf</p>	<ul style="list-style-type: none"> • CALSIM II run of Alt4 H3 (LLT), with salinity compliance at Emmaton; • DSM2 runs using CALSIM II output for Alt4 H3 (LLT) with compliance at Emmaton with and without the daily patterning of Delta inflows; • Removing daily patterning of Delta inflows in Alt4 H3 (LLT) DSM2 run; • Alt4 H3 (LLT) DSM2 run with Montezuma Slough Salinity Control Gate (SCG) operations consistent with the NAA; • Alt4 H3 (LLT) DSM2 run with NAA SCG operations, and removing 65,000 acres restoration; • Alt4 H3 (LLT) DSM2 run with NAA Head of Old River Barrier operations.
<p>Modeling described in RDEIRS Appendix B Section B.1: http://baydeltaconservationplan.com/RDEIRS508/Append B Supp%20Alt-508.pdf</p>	<p>New CALSIM II runs in support of this sensitivity analysis:</p> <ul style="list-style-type: none"> • Alt4A (H3): Draft EIR/EIS Alternative 4 H3 without CM2, without CM4 and without shift in Emmaton compliance to Threemile Slough; • Alt4A (H4): Draft EIR/EIS Alternative 4 H4 without CM2, without CM4 and without shift in Emmaton compliance to Threemile Slough.
<p>Modeling for SWRCB scenario described in RDEIRS Appendix C: http://baydeltaconservationplan.com/RDEIRS/Append C SWRCB%20Permit.pdf</p>	<ul style="list-style-type: none"> • SWRCB_Scenario: One CALSIM II run at ELT based on Alternative 4 H3.

CALSIM II Model Run Log for the Sensitivity Analyses included in the RDEIRS Appendix A: Attachment 1 of Appendix 8H

Scenario	Scenario Description	CALSIM II Sensitivity Study	Filename
H3_LLT with compliance at Emmaton Sensitivity Run	RDEIRS Alternative 4 H3 at LLT with compliance at Emmaton Sensitivity Run	Study Zip File	.ISA2_Emm_Compliance_CALSIMII_Study\ BDCP_2020D09E_ALT2A_CALSIM_LLT_111113_rerun_w_Emm_WQCP.zip
		DSS output file	.ISA2_Emm_Compliance_CALSIMII_DSS_Output\ BDCP_2020D09E_ALT2A_CALSIM_LLT_111113_rerun_w_Emm_WQCP_TXFR_2020D09EDV.DSS

DSM2 Model Run Log for the Sensitivity Analyses included in the RDEIRS Appendix A: Attachment 1 of Appendix 8H

Scenario	Scenario Description	Daily patterning of DSM2 boundary conditions	DSS output filename
EX	RDEIRS CEQA Baseline	without daily patterning	.ISA1_Mon_BCond_DSM2_EC_DSS_Outputs\ BDCP_SA1_Ex_NoFallX2_monthly_baseline_v1_out_ec_PostPro.DSS
NAA_LLT	RDEIRS NEPA Baseline	without daily patterning	.ISA1_Mon_BCond_DSM2_EC_DSS_Outputs\ BDCP_SA1_NAA_LLT_monthly_bdcpl_naa_slr45_out_ec_PostPro.DSS
H3_LLT	RDEIRS Alternative 4 H3 at LLT	without daily patterning	.ISA1_Mon_BCond_DSM2_EC_DSS_Outputs\ BDCP_SA1_A4_H3_LLT_monthly_alt2a_llt_slr45_roa65_out_ec_PostPro.DSS
H3_LLT with	RDEIRS Alternative 4	with daily patterning	.ISA2_Emm_Compliance_DSM2_EC_DSS_Outputs\ BDCP_SA2_A4_H3_LLT_daily_alt2a_llt_slr45_roa65_out_ec_PostPro_daily.DSS

compliance at Emmaton Sensitivity Run	H3 at LLT with compliance at Emmaton Sensitivity Run	without daily patterning	.\SA2_Emm_Compliance_DSM2_EC_DSS_Outputs\ BDCP_SA2_A4_H3_LL_T_monthly_alt2a_llt_slr45_roa65_out_ec_PostPro_monthly.DSS
H3_LL_T with SCG	RDEIRS Alternative 4 H3 at LLT with Montezuma Marsh Salinity Control Gate Operations consistent with NAA	without daily patterning	.\SA4_CurrOps_SuisunGates_DSM2_EC_DSS_Outputs\ BDCP_SA4_A4_H3_LL_T_monthly_alt2a_llt_slr45_roa65_out_ec_PostPro.DSS
H3_LL_T with SCG and No Restoration	RDEIRS Alternative 4 H3 at LLT with Suisun Marsh Salinity Control Gate Operations consistent with NAA, and no 65,000 ac tidal habitat restoration	without daily patterning	.\SA4a_CurrOps_SuisunGates_NoRestoration_DSM2_EC_DSS_Outputs\ BDCP_SA4a_A4_H3_LL_T_monthly_alt2a_llt_slr45_roa0_out_ec_PostPro.DSS

H3_LLT with HORB open in Apr- May	RDEIRS Alternative 4 H3 at LLT with Head of Old River Barrier Operations consistent with NAA (open) during April and May	without daily patterning	.\\SA10-1_openHORBarrier_DSM2_EC_DSS_Outputs\\BDCP_SA10- 1_A4_H3_LLT_mon_(openHORB)_alt2a_llt_slr45_roa65_out_ec_PostPro
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