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February 5, 2004

Ms. Celeste Cantú
Executive Director
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000

Dear Ms. Cantú:

This letter follows up on a meeting between members of your staff and staff from the California Department of Water Resources and US Bureau of Reclamation (DWR/USBR). This meeting took place at the State Board's offices on October 20, 2003. The main purpose of the meeting was to discuss some details of your August 11, 2003 response to our March 25, 2003 request for modifications to the Environmental Monitoring Program (EMP). During this discussion it became evident that some of the modifications we proposed were not described with adequate clarity in that we are not proposing changes to compliance monitoring. The changes we propose would only affect baseline monitoring identified in Table 5. We therefore submit for your consideration the following clarifications:

- Proposed changes involving seven compliance/baseline stations (C9, C10, D10, D12, D22, D24, S42) would affect only the baseline aspects of the monitoring program. All aspects of the compliance monitoring activities at these stations would remain unchanged. Similarly, the proposed addition of baseline monitoring at one compliance station (D29) would not affect compliance monitoring at this station;
- The nine "proposed additional D-1641 monitoring stations" that appear in your version of revised Table 5 were not intended to be added to the list of baseline monitoring stations under D-1641. They were thus not included in the revised Table 5 (page 9 of 13) that we submitted for your consideration as part of our March 25th correspondence. The potential future addition of these nine stations was discussed in the technical report attached to our March 25th request (Appendix C). DWR/USBR staff plan to evaluate the suitability of these sites for possible consideration as future baseline monitoring stations;
- The phrase "near-monthly on alternating spring and neap tides" that appears in footnotes 6, 7 and 8 of our version of revised Table 5 (page 10 of 13) was intended to signify that discrete sampling would continue to take place throughout the year, but to the extent that safety and overtime considerations allow, would also attempt to sample spring and neap high slack tidal stages with as close to equal frequency as possible;




- The start and end dates for quarterly benthos monitoring that appear in footnote 8 of our version of revised Table 5 (page 10 of 13) should be changed from "2003 and 2004" to "water years 2004 and 2005" with more frequent monitoring resuming in water year 2006.


In light of these clarifications, we are enclosing a newly revised version of Table 5 and associated revised Figure 4. This version of Table 5 is similar to the version submitted as part of our March 25th correspondence except that (1) station numbers (e.g. "C9") and station descriptions (e.g. "West Canal @ Mouth of CC Forebay Intake") for compliance and compliance/baseline stations have been changed back to the numbers and descriptions used in D-1641; (2) the letters identifying compliance, baseline, and compliance/baseline monitoring stations have been changed back to the symbols used in D-1641; (3) geographical coordinates have been added to the table to correctly identify sampling site locations (e.g. the two current sampling locations for station C9) while avoiding changes in compliance and compliance/baseline station numbers and descriptions. These are the same geographical coordinates submitted to you in our March 25th correspondence as proposed new Table 6. Their inclusion in Table 5 obviates the need for an additional table; (4) the phrase "near-monthly on alternating spring and neap tides" in footnotes 6, 7 and 8 has been replaced with "on a year-round, near-monthly basis that alternates between spring and neap tides"; and (5) the start and end dates for quarterly benthos monitoring that appear in footnote 9 of our version of revised Table 5 have been changed from "2003 and 2004" to "water years 2004 and 2005" with more frequent monitoring resuming in water year 2006. We ask that you consider replacing the revised Table 5 and Figure 4 contained in your August 11, 2003 correspondence with the enclosed newly revised table and figure.

We are confident that the proposed modifications embodied in the newly revised Table 5 and Figure 4 would substantially improve the effectiveness of the EMP and DWR/USBR staff look forward to the opportunity of working closely with your staff to implement these improvements. If the proposed modifications are accepted, we would then submit the newly revised D-1641 Table 5 and Figure 4 to the State Board for consideration as replacements for Table 4 and Figure 2 in the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (WQCP) during the review of the WQCP. If you or your staff have any questions regarding this matter, please contact Erwin Van Nieuwenhuysse at USBR (916) 978-5213 or Anke Mueller-Solger at DWR (916) 227-2194.

Thank you for consideration of our request.

Sincerely,


Susan Ramos
Assistant Regional Director
Bureau of Reclamation


Stephen Verigin
Acting Chief Deputy Director
Department of Water Resources

Cc: Barbara McDonnell, DWR
Phil Wendt, DWR
Steve Ford, DWR
Anke Mueller-Solger, DWR
Zach Hymanson, BDA

Ken Lentz, USBR
Erwin Van Nieuwenhuyse, USBR
Barbara Leidig, SWRCB
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Proposed revised Table 5 (D-1641, p.192 - 193)

Table 5. Water Quality Compliance and Baseline Monitoring

Station Number ¹	Station Description ²	Latitude ³	Longitude ³	Cont. Rec. ⁴	Cont. Multi-parameter ⁵	Discrete Physical/Chemical ⁶	Discr. Phytoplankton ⁷	Discr. Zooplankton ⁸	Discrete Benthos ⁹
C2	■ Sacramento River @ Collinsville	38.07395	-121.85010	*					
C3A	▲ Sacramento River @ Hood	38.36772	-121.52051		*	*	*	*	
C4	■ San Joaquin River @ San Andreas Landing	38.10319	-121.59128	*					
C5	■ Contra Costa Canal @ Pumping Plant #1	37.99520	-121.70244	*					
C6	■ San Joaquin River @ Brandt Bridge site	37.86454	-121.32270	*					
C7	▲ San Joaquin River @ Mossdale Bridge	37.78604	-121.30666		*				
C8	■ Old River near Middle River	37.82208	-121.37517	*					
C9	● West Canal @ Mouth of CC Forebay Intake	37.82818	-121.55275						*
		37.83075	-121.55703		*	*	*	*	
C10	● San Joaquin River near Vernalis	37.67575	-121.26500	*					
		37.67934	-121.26472		*	*	*	*	
C13	■ Mokelumne River @ Terminus	38.11691	-121.49888	*					
C14	■ Sacramento River @ Port Chicago	38.05881	-122.02607	*					
C19	■ Cache Slough @ City of Vallejo Intake	38.29687	-121.74784	*					
D4	▲ Sacramento River above Point Sacramento	38.06214	-121.81792			*	*	*	*
D6	▲ Suisun Bay @ Bull's Head Pt. near Martinez	38.04427	-122.11764			*	*	*	*
D6A	▲ Suisun Bay @ Martinez	38.02762	-122.14052		*				
D7	▲ Grizzly Bay @ Dolphin nr. Suisun Slough	38.11708	-122.03972	*		*	*	*	*
D8	▲ Suisun Bay off Middle Point nr. Nichols	38.05992	-121.98996			*	*	*	
D9	▲ Honker Bay near Wheeler Point	38.07245	-121.93923	*		*	*		
D10	● Sacramento River @ Chipps Island	38.04288	-121.92011		*	*			
		38.04631	-121.91829					*	
D11	▲ Sherman Lake near Antioch	38.04228	-121.79951	*		*	*		
D12	● San Joaquin River @ Antioch Ship Channel	38.01770	-121.80273		*	*			
		38.02162	-121.80638					*	
D15	■ San Joaquin River @ Jersey Point	38.05190	-121.68927	*					
D16	▲ San Joaquin River @ Twitchell Island	38.09690	-121.66912					*	*
D19	▲ Franks Tract near Russo's Landing	38.04376	-121.61477	*		*	*	*	
D22	● Sacramento River @ Emnaton	38.08406	-121.73912	*					
		38.08453	-121.73914					*	
D24	● Sacramento River below Rio Vista Bridge	38.15891	-121.68721		*	*			
		38.15550	-121.68113						*

(continued)

■ Compliance monitoring station

▲ Baseline monitoring station

● Compliance and baseline monitoring station

Proposed revised Table 5, continued

Table 5. Water Quality Compliance and Baseline Monitoring (continued)

Station ID ¹	Station Description ²	Latitude ³	Longitude ³	Cont. Rec. ⁴	Cont. Multi-parameter ⁵	Discrete Physical/Chemical ⁶	Discr. Phytoplankton ⁷	Discr. Zooplankton ⁸	Discrete Benthos ⁹
D26	▲ San Joaquin River @ Potato Point	38.07667	-121.56696			*	*	*	
D28A	▲ Old River near Rancho Del Rio	37.97038	-121.57271			*	*	*	*
		37.96980	-121.57210	*					
D29	■ San Joaquin River @ Prisoners Point	38.05793	-121.55736	*					
		38.05793	-121.55736			*	*	*	
D41	▲ San Pablo Bay near Pinole Point	38.03016	-122.37287			*	*	*	*
D41A	▲ San Pablo Bay near Mouth of Petaluma River	38.08472	-122.39067			*	*	*	*
DMC1	● Delta-Mendota Canal @ Tracy Pump. Plt.	37.78165	-121.59050		*				
P8	▲ San Joaquin River @ Buckley Cove	37.97815	-121.38242			*	*	*	*
P8A	▲ San Joaquin River @ Rough and Ready Island	37.96277	-121.36587		*				
P12	■ Old River @ Tracy Road Bridge	37.80493	-121.44929	*					
MD10	▲ Disappointment Slough near Bishop Cut	38.04229	-121.41935			*	*	*	
S21	■ Chadbourne Slough @ Sunrise Duck Club	38.18476	-122.08315	*					
S35	▲ Goodyear Sl. @ Morrow Is. Clubhouse	38.11881	-122.09580	*					
S42	● Suisun Slough 300' south of Volanti Slough	38.18053	-122.04696	*		*	*		
		38.18027	-122.04779					*	
S49	■ Montezuma Slough near Beldon Landing	38.18686	-121.97080	*					
S64	■ Montezuma Slough @ National Steel	38.12223	-121.88800	*					
S97	▲ Cordelia Slough @ Ibis Club	38.15703	-122.11378	*					
NZ032	▲ Montezuma Slough, 2nd bend from mouth	38.16990	-122.02112					*	
SLBAR3	■ Barker Slough @ North Bay Aqueduct	38.27474	-121.79499	*					
---	■ Sacramento R. (I St. Bridge to Freeport) (RSAC155)			*					
---	▲ San Joaquin R. (Turner Cut to Stockton) (RSAN050-RSAN061)			*					
---	▲ Water supply intakes for waterfowl management areas on Van Sickle Island and Chipps Island			*					

■ Compliance monitoring station

▲ Baseline monitoring station

● Compliance and baseline monitoring station

Footnotes for Proposed Revised Table 5. Water Quality Compliance and Baseline Monitoring

- ¹ All stations with a compliance monitoring component are identified by historical "interagency" station numbers as given in SWRCB D-1641 (2000) and D-1485 (1978). Modified station ID numbers (e.g. C3A) identify baseline stations near historical stations.
- ² All stations with a compliance monitoring component retain their historical "interagency" station descriptions as given in SWRCB D-1641 (2000) and D-1485 (1978). Baseline stations with modified station ID numbers (e.g. C3A) have modified station descriptions.
- ³ Coordinates are geographic North American Datum 1983 and have been verified to be accurate for 1:24,000 scale mapping.
- ⁴ Continuous recording (every 15 minutes) of water temperature, electrical conductivity (EC), and/or dissolved oxygen. For municipal and industrial intake chloride objectives, EC can be monitored and converted to chloride concentration.
- ⁵ Continuous multi-parameter monitoring (recording every 1 to 15 minutes with telemetry capabilities) includes the following variables: water temperature, EC, pH, dissolved oxygen, turbidity, chlorophyll fluorescence, tidal elevation, and meteorological data (air temperature, wind speed and direction, solar radiation).
- ⁶ Discrete physical/chemical monitoring is conducted on a year-round, near-monthly basis that alternates between spring and neap tides and includes the following variables: macronutrients (inorganic forms of nitrogen, phosphorus, and silicon), total suspended solids, total dissolved solids, total, particulate and dissolved organic nitrogen and carbon, chlorophyll *a*, pH, dissolved oxygen (DO), EC (specific conductance), turbidity, secchi depth, and water temperature. In addition, on-board continuous recording is conducted intermittently for the following variables: water temperature, dissolved oxygen, electrical conductivity, turbidity, and chlorophyll *a* fluorescence.
- ⁷ Discrete sampling for phytoplankton enumeration or algal pigment analysis is conducted on a year-round, near-monthly basis that alternates between spring and neap tides.
- ⁸ Tow or pump sampling for zooplankton, mysids, and amphipods is conducted on a year-round, near-monthly basis that alternates between spring and neap tides.
- ⁹ In water years 2004 and 2005, replicated benthos and sediment grab samples are taken quarterly (every three months) and during special studies; more frequent monitoring sampling resumes in water year 2006.

Proposed revised Figure 4 (D-1641, p.194)

Figure 4. State Water Resources Control Board Bay-Delta Estuary Monitoring Stations

