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Subject: DCC Gate Closure considerations  
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The following information is being provided as an indication of Delta water quality conditions that may provide an opportunity to close the Delta Cross Channel gates. Note that the salinity conditions are not much different than what they were prior to the closure in November. However, I have also included Antioch and the SWP and CVP export locations. I have also listed other factors that we would consider in supporting closure of the gates for fishery protection measures. Another note is that the southern/interior are slightly higher than I would care to close the gates with, but given the current conditions I am using something I believe is reasonable to achieve.

Water Quality Conditions

Station	Objective Salinity (mS/cm) (Daily avg.)
Antioch	3.5 to 4.0
Jersey Point	1.1 to 1.4
Bethel	0.6 to 0.7
Holland	0.5 to 0.6
Bacon	0.5 to 0.6
CCFB	0.4 to 0.6
Tracy PP	0.4 to 0.6

Other factors to consider:

Length of Closure How long is the closure expected? During what tidal cycle will it occur?

Tidal cycle preferable to keep gates open on both minor and major spring tides of each month.

Salinity trends How long has salinity been at these levels? Is trend for conditions to improve or deteriorate?

Sacramento River @ Freeport average daily flow 15,000 to 18,000 cfs

San Joaquin River @ Vernalis average daily value 1,900 to 2,100 cfs

Net Delta Outflow average daily value 7,000 to 10,000 cfs.

Weather pattern Near-term forecast (3-5 days), Long-term forecast (7-10 days)

Improved opportunity to close gates more likely with storms in near-term forecast.

Although Antioch and Jersey are below the objective values, the interior/southern Delta conditions may not achieve the objective salinity values by the end of the current spring tidal cycle this coming Wednesday. As we have previously discussed, keeping the gates open during the spring tidal cycle prevents salinity from increasing beyond our control and keeping the gates open during the neap tidal cycle provides the best opportunity to improve conditions. Obviously this will need to be balanced with fishery protection, but keeping the gates open longer at this time will allow them to remain closed longer in the future. If the interior/southern objectives are met, it may be more prudent (given the limited movement of salmon) to keep the gates open as long as possible to provide a greater opportunity for an extended closure with less risk for exceeding SWRCB requirements.

REMINDER THE NNG CALL IS SCHEDULED FOR 9:00 am MONDAY DECEMBER 20, 1999. THE NUMBER TO CALL IN IS (916) 657-4108.

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