## Attachment B

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## <u>Port Chicago Compliance Decision Tree</u> 1-26-05 version rad

**Alert.** Port Chicago compliance is triggered by a 14-day average EC at the end of the preceding month. Thus, on the 15th of each month from January through May, begin examining the daily-average salinity record from Port Chicago.

**Step One: Project Operator Actions:** If the Port Chicago X2 is likely to trigger, the project operators will determine whether the objective can be met through operational changes early in the new month rather than through additional upstream reservoir releases. The project operators will determine:

- a. The likelihood of rain or flood release requirements that might contribute to increasing Delta outflow (need weather and operational forecasts)
- b. The likelihood that the objective will be triggered (regression analysis)
- c. The minimum number of days Port Chicago compliance will be required (estimated 8 River Index for the current month)
- d. The likelihood that operational changes will be required Although additional upstream releases are most likely be made from Nimbus Reservoir as that reservoir is closest to the Delta with the smallest travel time, consideration will be made to make early releases from other upstream reservoirs.

Project operators will determine whether:

- a. Compliance is best achieved through changes in export operations (need data on reservoir storage and export demand)
- b. There is a reason to delay compliance and/or if compliance is likely to require a change in reservoir operations. (Operational forecasts)
- c. Impacts on Nimbus operations can be avoided by coordinated releases of other reservoirs without a water cost to either project.

**Step Two: Management Agency Actions:** If changes in Nimbus operations are likely, DFG, FWS and NOAA staff should determine:

- a. Are American River salmonids at risk under proposed operations?
- b. Can American River changes be kept acceptable?
  - Will sustaining higher flows from Nimbus ensure remaining days of compliance can be met through 14-day EC rather than having to generate 29,200 cfs Delta outflow after decline in flood flows that triggered Port Chicago; thereby eliminating a costly and undesirable, second artificial peak or

- ii. Can second peak flow releases from Nimbus be restricted to a maximum of 4,000 cfs.
- c. Can EWA/B2 water be used to avoid impacts by supporting water costs of using alternative compliance strategies? Use of EWA/b2 assets will only be permitted if earlier use of objective criteria for making changes in project operations found alternatives to changes in Nimbus operations were not warranted. The amount of EWA/b2 use will depend on whether the projects took steps to avoid invoking the use of these assets. The EWA/b2 assets would be used to:
  - i. Pay water costs associated with other reservoir use
  - ii. Reduce exports earlier to meet requirement while baseline flows are still high enough to avoid needing reservoir changes

**Step Three: DAT/OFF Action**. If unacceptable American River impacts cannot be avoided in complying with the Port Chicago requirement then DAT and OFF should have a joint call to develop recommendations to IWOOF. Main options:

**[TBI Comments:** This section does not provide sufficient specificity as to the proposed variation and does not acknowledge the adverse impacts of reducing compliance with Roe Island. First, the decision should make clear that any changes will result in equivalent or greater total volume of Delta outflow, and set specific boundaries on how much and how long the changes to Delta outflow will be permitted (see below). Second, greater abundance of estuary-dependent species is highly correlated to X2 at Roe Island, not total seasonal outflow volume. Equivalent volume at a lower level of outflow does not equal equivalent protection: decreasing outflow shifts X2 upstream to a less desirable location associated with lesser abundance, and is as a result less protective than intended by the WQCP. Therefore, some mitigation (providing equivalent volume plus X%, for instance, or adding a day of compliance when Roe Island is next triggered, should also be required. (Also, as noted above, the mitigation requirement provides a disincentive to deferring alternative compliance with this objective).]

- a. Temporarily modify Port Chicago compliance by allowing a lower 25,000 cfs Delta outflow target for a greater number of days that provide an equivalent level of estuary fish protection, consistent with the Temporary Urgency Petition from SWRCB. The number of days will be based on providing the same total volume of outflow (or same average X2 location).
- **b.** Reduce current month's requirement and increase subsequent month's requirement to avoid impact, with an additional amount for mitigation.
- c. Shift compliance and use reduced outflow to offset any water quality and habitat impacts.