

**Proposed Panel Questions Form  
(Due 12 Noon, Wednesday, December 22, 2010)**

**January 6 and 7, 2011 Public Workshop on Draft Technical Report  
on the Scientific Basis for Alternative San Joaquin River Flow and  
Southern Delta Salinity Objectives**

SOUTH DELTA WATER AGENCY (name of individual participant or group of participants)  
requests that the following prioritized questions be addressed in the above workshop:

| PRIORITY | QUESTION DIRECTED TO: | PROPOSED QUESTIONS FOR PANEL ON THE HYDROLOGIC ANALYSIS OF THE SAN JOAQUIN RIVER BASIN  |
|----------|-----------------------|---|
| 1        |                       | How do decreased main stem flows compare to total decreased flow on the San Joaquin River? Should not any increase in flow standards include increased contributions from the main stem?  |
| 2        |                       | Are not the various ongoing and proposed programs for conservation, decreased agricultural discharges, control of salts, control of nitrates and ammonia, etc. all contributing to lower flows on the San Joaquin River during all times of the years? Isn't his contrary to maintaining higher flows for fishery recovery? |
| 3        |                       | Why does the SWRCB's staff analysis not recommend increased flows through July given as the historic record indicates occurred "naturally"?   |
| 4        |                       | Why doesn't the staff report analyze how current water quality compares to pre-project water quality in the river and southern Delta?   |
| 5        |                       | How do high flows affect salinity levels in southern Delta channels and in the soils of that area?  |
| 6        |                       |   |
| 7        |                       |   |
| 8        |                       |   |
| 9        |                       |   |
| 10       |                       |   |

**Proposed Panel Questions Form  
(Due 12 Noon, Wednesday, December 22, 2010)**

**January 6 and 7, 2011 Public Workshop on Draft Technical Report  
on the Scientific Basis for Alternative San Joaquin River Flow and  
Southern Delta Salinity Objectives**

SOUTH DELTA WATER AGENCY (name of individual participant or group of participants)  
requests that the following prioritized questions be addressed in the above workshop:

| PRIORITY | QUESTION DIRECTED TO: | PROPOSED QUESTIONS FOR PANEL ON THE SCIENTIFIC BASIS FOR DEVELOPING ALTERNATIVE SAN JOAQUIN RIVER FLOW OBJECTIVES   |
|----------|-----------------------|---|
| 1        |                       | Recent work suggests that a saltier southern Delta might interfere with cues to fish seeking either the fresher water of Delta inflows during in-migration or seeking the saltier water of the ocean during out-migration. Does the science suggest that worsening southern Delta water quality would have no effect on fisheries at all times of the year? |
| 2        |                       | Do survival rates of fish expected from increased flows on the San Joaquin River also depend on there being a net flow past the export pumps?   |
| 3        |                       | If recent tributary sales of water were instead allocated to increased flows, would that volume of water be a benefit to fisheries?   |
| 4        |                       | Are fisheries benefitted by having net flows in the southern Delta channels? By having better water quality in those channels? Can one be accomplished without the other?   |
| 5        |                       |   |
| 6        |                       |   |
| 7        |                       |   |
| 8        |                       |   |
| 9        |                       |   |
| 10       |                       |   |

**Proposed Panel Questions Form  
(Due 12 Noon, Wednesday, December 22, 2010)**

**January 6 and 7, 2011 Public Workshop on Draft Technical Report  
on the Scientific Basis for Alternative San Joaquin River Flow and  
Southern Delta Salinity Objectives**

SOUTH DELTA WATER AGENCY (name of individual participant or group of participants)  
requests that the following prioritized questions be addressed in the above workshop:

| PRIORITY | QUESTION DIRECTED TO: | PROPOSED QUESTIONS FOR PANEL ON THE SCIENTIFIC BASIS FOR DEVELOPING ALTERNATIVE SOUTHERN DELTA SALINITY OBJECTIVES  |
|----------|-----------------------|---|
| 1        |                       | Why doesn't the analysis of salt crop tolerances take into consideration agricultural management practices which are known to impact leaching? Dr. Hoffman referred to mowing, raking and baling of alfalfa as "bad management practices" and thus ignores their impacts on the ability to adequately leach salts from the soil.  |
| 2        |                       | In calculating leaching fractions, the Hoffman report relies upon assumed EC data for applied water and measured EC data from drainage water. Does such an approach allow for a reliable determination of leaching fractions? Isn't that assumption known to be false given the DWR study of how the area retains salts during parts of the year until high flows flush some of them out of the area? |
| 3        |                       | On what basis can Dr. Hoffman conclude that his calculation of leaching factors (based on data from the south western portion of the southern Delta) be representative of conditions on the southern Delta islands that have ground water levels between zero and five feet?  |
| 4        |                       | Do the salts in the applied irrigation water on Roberts and Union Islands leave the root zone or are they trapped by the shallow ground water and pushed back into the root zone because of the tidal action?   |
| 5        |                       | What are some of the problems associated with using modeling and laboratory data to predict leaching capabilities in general and in the southern Delta in particular?   |
| 6        |                       | Is there any basis for concluding that any water quality standard for the control of salinity in the southern Delta can be maintained unless each channel has a net flow of water to remove the salts from the area?  |

|           |  |  |
|-----------|--|--|
| <b>7</b>  |  | Under what conditions do the San Joaquin River salts which enter the southern Delta leave the area?  |
| <b>8</b>  |  | Do crops have the same salt tolerances at different growth stages and how does this affect the ability to set water quality standards at different time of the year?   |
| <b>9</b>  |  | Should a water quality standard be based one or two crop types? Does this affect an area's ability to adjust to changing market conditions?  |
| <b>10</b> |  | If a water quality standard is set at any particular point in the southern Delta channels, can there be any consumptive use of that quality of water which does not result in an exceedance of that standard downstream from the point of use? |
| <b>11</b> |  | If the effective rainfall in the area only periodically leaches salts from the soil, how could effective rainfall be included in an analysis to protect crops in all year types?   |

**Proposed Panel Questions Form  
(Due 12 Noon, Wednesday, December 22, 2010)**

**January 6 and 7, 2011 Public Workshop on Draft Technical Report  
on the Scientific Basis for Alternative San Joaquin River Flow and  
Southern Delta Salinity Objectives**

SOUTH DELTA WATER AGENCY (name of individual participant or group of participants)  
requests that the following prioritized questions be addressed in the above workshop:

| PRIORITY | QUESTION DIRECTED TO: | PROPOSED QUESTIONS FOR PANEL ON THE POTENTIAL WATER SUPPLY IMPACTS OF POTENTIAL ALTERNATIVE SAN JOAQUIN RIVER FLOW AND SOUTHERN DELTA SALINITY OBJECTIVES   |
|----------|-----------------------|---|
| 1        |                       | When examining the effects on tributary supplies resulting from increased flow requirements, how are sales from those tributaries handled?  |
| 2        |                       | The Bureau is obligated under federal law (HR 2828) to develop a program to meet water quality standards on the San Joaquin River and to decrease the use of New Melones for such purposes. Do the Bureau's programs under these mandates include increased flows and how do those flows compare to the SWRCB's staff analysis? |
| 3        |                       |   |
| 4        |                       |   |
| 5        |                       |   |
| 6        |                       |   |
| 7        |                       |   |
| 8        |                       |   |
| 9        |                       |   |
| 10       |                       |   |