LSJRC Basin Plan Amendment Planning – 2/25/2015

Considerations for a Basin Plan Amendment

- Elements for the Staff Report
  - Beneficial Uses
  - Water Quality Objectives
  - Implementation Program
    - Monitoring and Surveillance
  - Consistency with Laws, Plans and Policies
  - Environmental Analysis (Environmental Checklist)
  - Economics

- At LEAST 2 Project Alternatives need to be presented, including a NO ACTION alternative. Multiple implementation options can be considered within each overall project alternative.

- All alternatives that were evaluated through the development process should be presented in the report, but this can be done in an appendix if the list and ranking process is extensive.

- The selection criteria for project alternatives and implementation options should be clearly stated.

- Providing very thorough scientific justification, stating all methods, assumptions, data gaps is critical.

- Economic and Environmental reviews can be done on just the highest ranking alternatives/options and presented in the main portion of the Staff Report.

Example selection criteria for the Water Quality Objective alternatives:

The Basin Plan Amendment project alternatives were evaluated based on their ability to meet the following primary selection criteria:

1. Maintain consistency with federal and state water quality laws, plans and policies as applicable (Antidegradation? Recycled Water Policy? etc.)
2. Assure compliance with all relevant water quality objectives downstream (i.e. Vernalis objective)
3. Reduce dependency on New Melones Water Quality Releases
4. Maximize the assimilative capacity of the river to export salt out of the Basin to the Delta and ocean.
5. Provide solid scientific analysis to ensure the appropriate protection of existing and potential future beneficial uses
6. Provide a technically feasible, economically viable, and reasonable solution for the implementation of the water quality standards

LSJRC Basin Plan Amendment Project Alternatives Matrix – EXAMPLE ONLY

EC Water Quality Objective (Crow's Landing) Project Alternatives	Scientific Justification	Selection Criteria (Rating: H=High, M=Medium and L=Low)						Potential Implementation Options	Selection Criteria (Rating: H=High, M=Medium, and L=Low based on sub-criteria screening)		
		Consistent with federal/state laws, plans and policies	Compliant with all relevant water quality objectives downstream (i.e.Vernalis objective)	Reduced dependency on New Melones Water Quality Releases	Maximizes salt transport out of basin	Scientifically Defensible	Feasible to Implement	⟷	Technically Feasible	Economically Viable	Implementation Achievability
1. 1550 µmhos/cm	Hoffman Model - 15% Leaching fraction, 95% yield in all of the 5% driest years	M	M	L	H	H	M	a. Planned activities + potential for future RTM releases to transport salt out of basin	M	H	M
2. 1475? µmhos/cm	Achievability shown by WARMF modeling for planned activities bundle?	M	M	M	M	L	H	a. NO ACTION - Planned activities *(Assumptions include zero release from Grasslands Bypass Project + WWTP salinity loading decrease of 3% + ?)*	H	H	H
3. 1200? 1300? µmhos/cm	Achievability shown by WARMF modeling + post processing? Do another Hoffman Model approach for a mid-range number?	H	M	M	L	L	M	a. Planned activities + X% decrease in Salt and Mud Slough flows for smaller SJRP project + X% decrease in salinity loading by ? + X% decreased flows from downstream dischargers +?	M	M	M
							L	b. Planned activities + X% decrease in salinity loading by wetlands + X% increase in flow from Friant Dam releases?	M	L	L
							?	c. Other combinations?	?	?	?
4. 1010 µmhos/cm	Hoffman Model - 10% Leaching fraction, 95% yield in all of the 5% driest years	H	H	H	L	M	L	a. All Salt and Mud Slough flows to go to Desalination treatment plant and return as fresh flows	M	L	L
							L	b. All Salt and Mud Slough flows go to SJRP project	L	M	L
							M	c. Planned activities + 2X% increase in flow from Friant Dam releases	M	H	M
5. 700 µmhos/cm	Ayers and Westcot	H	H	H	L	H	L	?	?	?	?
6. Other (Range? Seasonal? Water Year?)	Based on when AGR needs to be protected with consideration to when exceedances occur? (modeling)	?	?	?	?	?	?	a. Real Time Management Program? Holding reservoir?	?	?	?