

ROC on LTO Programmatic Component: Revisions to the LTO Alternatives Workshop

Notes from Small Workgroup Discussions **DRAFT**

MEETING DATE & TIME:	June 7, 9:00 am – 3:30 pm
MEETING LOCATION:	Arthur F. Turner Library, 1212 Merkley Ave. West Sacramento, CA 95691
MEETING OBJECTIVES:	<ul style="list-style-type: none">■ Brainstorm adaptive management framework process, steps, and objectives■ Identify other stressors for evaluation and possible evaluation tools■ Discuss water supply actions■ Discuss power actions■ Get feedback on screening criteria

For each of the breakout tables, notes reflect the conversations over four small group discussions. Table topics included:

- **Water Supply**
- **Power Generation**
- **Other Stressors**
- **Adaptive Management**

1. Plenary Questions and Comments

(a) Water Supply

- Comments:
 - Q: How did the previous input from ROC on LTO workshops get integrated into the current workshop, and the Reclamation water supply alternatives? More specifically, where are Hoopa Tribe's comments on carryover storage in Weaverville included and incorporated?
A: Reclamation has been screening input and putting it into the appropriate part of the process – near-term actions, programmatic, or long-term reoperation. Carryover storage on Weaverville is a topic for the long-term re-operation.
 - Q: Are these short-term projects to be completed in one year or long-term projects to be completed in several years?
A: The water supply alternatives represent a series of project alternatives that Reclamation is exploring for the long-term as part of the programmatic approach. Reclamation is not proposing every one of these projects that appear in the alternatives. Reclamation is not proposing these projects for completion in the next few years;

Reclamation understands these kinds of alternatives would require 20-30 years for completion.

(a) Adaptive Management

- Comments:
 - Add “Enhance” to the Adaptive Management goals
 - Using the word “recovery” as a CVP goal could be problematic. “Recovery” carries a certain scientific meaning that returns fish to a certain static number, whereas the CVP goal should be to return fish to natural fluctuations of population at sustainable levels in all year types from Critically Dry to Wet.
 - Address the costs and benefits resulting from Adaptive Management.

2. Water Supply

(b) General Comments / Questions

- Ideas:
 - Why is this discussion part of the process?
 - Doing NEPA/ESA may result in mitigation for theoretical storage
 - Doesn’t get site specific actions – no benefit to NEPA/ESA
 - What’s the plan for all of this water?
 - Does Reclamation have water rights to all the water that would be in storage
 - Need to define water supply for who - CVP users only?
 - Make benefits clear
 - How many years in the future are we looking to meet ESA compliance?
 - BOs - normally done every 5-10 years, would like every 15-20
 - Needs to be strategy when choosing/pursuing any new storage
 - One participant stated that any water supply action proposed here would have more adverse effects for fisheries.
 - Not sure how DWR wants to move forward with permitting process on all of this

(c) Selection of Alternatives:

- Ideas:
 - Selection of Alternatives
 - What is regulatory baseline for next consultation?
 - Including these storage projects could mess this up
 - How did previous input to ROC on LTO result/influence/get integrated into development of these alternatives?
 - The closer we can move things toward realistic projects and modeling, the better. Otherwise, we risk people reacting to projects that are just being used as placeholders
 - Model only realistic scenarios

- Resiliency of water supply into the future
- Make action range very large

(d) New Alternatives:

- Alternatives with more actions than just the regulatory aspects
 - Alternative resulting in improved Delta Smelt population
 - Alternative with pumped storage alternative for power (Veteran's Lake)
 - Alternative for Ag/Urban efficiency
 - Alternative for maximum efficiency alternative from current clients without more water storage
 - Identify model for this alternative.
 - Alternative for North Delta conveyance without storage
 - Alternatives with more cold water scenarios
 - Focus less at Delta?
 - Or whatever combination is more effective to focus at cold water
 - New bookend?
 - Alternative with increased CVP water costs
 - Adapt policies to current
 - Alternative with spring pulse for fish
 - Could more conveyance incentivize releases?
 - Could CalWaterFix be a tool?
 - Bookend Alternatives
 - Create bookends/explain clearly the actions
 - Not seeing anything with bookend that results in Delta Smelt population improving
 - #2: as we move from action to alternatives - we want bookends
 - Include site-specific action
- Comments / Questions/Concerns on Specific Alternatives
- Whiskeytown and Veterans Lakes
 - How is Whiskeytown and Veterans Lake tied to pump storage?
 - How does this impact temperature compliance?
 - Concern for quality of water coming from Sites and Whiskeytown
 - Veterans Lake/ Steelhead
 - Temperature to Sacramento concerns?
 - Is Whiskeytown tied in, how?
 - Summer temperatures for releases to Sacramento
 - Water quality out of Steelhead Lake
 - Temperature and contaminants
 - D-1485 Paragraph that refers to North Delta conveyance as necessary to implement salinity standards
 - New Melones Index change
 - Site specific action in Track 2?

- Water Control Management updates - forecast based for other reservoirs
- Los Vaqueros
 - Expansion may be of interest
 - Resiliency with climate
 - Final feasibility study by the end of the year
 - Include as cumulative/baseline rather than alternative
- Folsom: Could increased storage at Folsom be beneficial?
 - Fill and spill; for multiple benefits
 - If storage at Folsom increased but Delta operated the same, it won't do much without changes to conveyance/ Delta relaxed regulations
 - Could Folsom be part of bookends?
 - Eliminate Folsom storage alternative because it's too uncertain
 - If not in WIIN or CWC
- South Delta Conveyance = storage optimization
- Sites interest- winter floods rather than snowmelt runoff

(e) Actions with positive feedback:

- Ideas:
 - North Delta conveyance seems to meet needs

(f) Actions with negative feedback:

- Ideas:
 - All actions: studies seem to maximize water supply, but nothing focusing on protecting fish, all lead to jeopardy
 - Is scenario #1 leading toward jeopardy? Scenario 1 includes maximum storage and changes to Delta regulations.
 - North Delta conveyance= not fish friendly
 - X2 trigger base for individual USFWS Actions (1-3)
 - Consider adjusting X2 criteria instead of reducing timeframe overall
 - There's a coldwater pool concern

(g) Feedback related to Power Related to Alternatives:

- Ideas:
 - Costs for power
 - Risk= cost to power user (how funded/filters down to power users and rest of CVP)
 - Storage, conveyance= expensive
 - What are the benefits to power? Can the benefits be quantified?
 - Barry Mortimeyer's work, potential to have coldwater benefits
 - Look at Pumped Storage
 - Dams= 1 way movement; Europe doing pump storage/power generation in a "closed-loop", cyclical system
 - Is Reclamation looking at this?
 - Veterans Lake, etc.- looking at pump storage

- This is a different perspective for power people
 - Everything looks expensive from power and fisheries perspectives

(h) Feedback on “pilot” screening criteria:

- Ideas:
 - #1 can “maximize” be replaced by “increase”?
 - “Maximize” seems harsh
 - “maximize”, “optimize” - why use those words?
 - Seems like this tends to catch people’s attention, maybe wanting clearer words/more measurable and reflective
 - Budget/ Cost/Benefits are not included in screening criteria
 - Feels essential to evaluate all of these scenarios on a cost/benefit ratio
 - Screening criteria should include water supply, fisheries, and power criteria
 - Alternatives representing a small difference in water supply outcomes may also represent a wide range of other fisheries and power outcomes that should be taken into account when screening the alternatives for the few that will go forward.
 - Add feasibility as a screening criteria
 - How feasible are the identified storage projects?
 - What do we know from feasibility studies done before?
 - Specifically Auburn Dam study showed there was a fault line that made the project infeasible.
 - Explanation of rationale for what is left out of screening criteria?
 - Add “resiliency of water supply” to screening criteria
 - Add “Climate resiliency”
 - No glaring issues yet
 - They’ll reach out if they see anything else
 - Use Reclamation’s Principles and Guidelines (PG)’s- have to look at them and review for age/old rules, standards, scope, etc.

(i) Feedback on Modeling:

- Ideas:
 - -2000 cfs background tended to need clarification/further explanation
 - Consider getting away from New Melones index. Something reflects water year more than storage (e.g., getting away from storage-based)(Low-hanging fruit)
 - Naming Conventions need more transparency and accessibility: Nobody is going to understand the meaning of “OMR 1/3 w/ -2000 cfs background”

(j) Relationship to Other Processes:

- Ideas:
 - Was WaterFix included in any scenarios?
 - How does all of this fit in with COA and State Water Project?

3. Power Generation

(a) Initial reactions to the proposed actions

- Ideas:

(b) Recommendations

- Ideas:
 - General
 - Power seems off of the subject
 - More of a business plan (non-sustainable)
 - But it does help CVPIA funding
 - Reclamation's power generation needs to adapt
 - Could we fortify the dams with solar to make them more dependable?
 - To cut down usage of dam
 - This is being considered for Sites
 - Consider congestion
 - Would increase negative rate power
 - Go just to energy if water isn't there
 - Why is Reclamation cheaper?
 - Think of future with less and less water
 - Process
 - Water operators are driven by the state, power users are heard after
 - More communication from CVP to power users, WAPA, State, and Federal
 - Increase flow rate ability for more power generation
 - Facility updates
 - Decrease cost
 - CVP/CVPIA Cost Allocation/Economic Study
 - Rate not total revenue
 - >3 year average- smooth peaks/valleys
 - Get rid of 3 year average because it makes peaks and valleys
 - Offset project cost (Solar, etc.)
 - Study opportunity
 - Should design future reservoirs to pull different water (through non-power generating outlets)
 - So we can meet temperature requirements during negative rates without paying for it
 - Between 13:00 – 17:00 in summer, there are hundreds of megawatts in generation at a negative rate to meet temperature requirements
 - Increase value

- Vary temperature more to biology (specific)
 - Varying temperature control to presence based is good
 - Find wiggle room allowed for operators- for biological reasons to meet requirements for fish
 - What latitude for flexible operations for power? (hottest day)
 - Hydropower operation could work to balance solar at night
 - Model forecasted pricing
 - Look at tradeoffs with temperature and other considerations
 - Vary temperature more to biology (specific)
 - What latitude for flexible operations for power? (hottest day)
- CVPIA:
 - Economic analysis for CVPIA- broader than just cost allocation
 - Costs and who's sharing them?
 - CVP in drought years for power users
 - Cut costs in drought years
 - Elaborate on CVPIA finance plan
 - CVP, CVPIA is not why power costs a lot
 - Split CVPIA equally between water and power
 - Have a roll-over for financing- possibly smooth peaks and valleys with a rate not a total
 - Cost has increase lately, reduce extremes
- No more state water transfer fees
 - Like #6 on power value actions, hard to plan for operators
- Optimize around low and negative pricing- plan around Photo-voltaic solar market
 - Two solar projects scheduled for San Luis
- Renewable Power Generation for Reclamation-owned land
 - Solar may add to negative pricing
- Refund provision in service costs- if overpay, get refund
- Power and water operation conflict (hottest day of the year)
- Negotiate price, some projects have to run the power generator to release cool water flows, so need a way to spill water through an alternative release without getting charged on the market
 - Model forecasting pricing
 - Look at tradeoffs with temperature and other considerations
 - Build in energy costs forecast for operators
 - Market depends on unexpected weather
 - Power market is changing (especially 30 years)
 - Hydro can generate on demand- can sell more than we do
- Respond to market signals
 - Flexibility
 - ISO rewards flexibility
- Power landscape
 - Water wouldn't make up the cost if power left
 - Cost wouldn't be recoverable

- Some customers have WAPA as their only energy source
- Solar is changing costs of water because of changing peaks

(c) Actions with positive feedback

- Ideas:
 - Provide certainty by mitigating droughts financially
 - #2 on Power Costs makes a lot of sense
 - The hydropower already exists, so it's less harmful

(d) Actions with negative feedback

- Ideas:
 - If you cut more, will result in more regulations to protect the environment
 - More work to be done at San Luis
 - Need to address pumping operations
 - You can't depend on regular patterns
 - Does it save much money?
 - It can on PG&E rates for time of use
 - Hard with limited windows (#2 PV)- possibly for Sites
 - Doesn't meet fish needs, just water issues
 - Storage expansion may cost customers too much
 - Shasta Dam raise would push more costs to power users

(e) Additional reactions and feedback on the proposed actions

- Ideas:
 - Will Klamath changes effect Trinity and CVP?
 - Remove Folsom- old dam that entrains cold water
 - Regulatory/ Legislative administration changes
 - Federal government- can we use power for ourselves?
 - O&M side could help power
 - Will analyze cap on aid to irrigation with NEPA
 - Interest goes to aid irrigation- not to treasure
 - Was passed but not implemented
 - Cap power payments to less than 30 million indexed
 - Only pay the percentage used on it
 - Sell license plates "support your dams"
 - Aging infrastructure plan for CVP
 - Extra cost for maintenance
 - Smaller water authorities could add an extra fee now to help aging infrastructure
 - Deliver excess power at negative rates to SWP
 - CVP generates 25%, solar to offset pumping
 - Steelhead and Veteran's Lake would make more financial sense

- Sites doesn't
- But would take from Trinity

(f) Feedback on "pilot" screening criteria

- Ideas:
 - Conflicting needs with water and fish

(g) Additional screening criteria:

- Ideas:
 - P&N, bookends, effectiveness, complete, accept, efficiency

4. Other Stressors

(a) Are there stressors missing from the existing conceptual models?

- Ideas:
 - Process
 - Clarify analysis of other stressors and ultimate goal- to be included as baseline or define resiliency strategy or planning?
 - Consider separating conditions (i.e., Drought as a stressor) and operations (flow releases as stressors)
 - General
 - All stressors interconnected
 - Emphasis on inter-connections- maybe not a pie chart
 - Consider inter-relations between stressors
 - Prioritize stressors
 - Data and Evaluation Needs
 - Better projections on escapement- used to set ocean harvest levels but are usually incorrect (done by PFMC)
 - Delta Smelt decline increasing predation? Study
 - PFMC has looked into improving their predictions of CV Chinook abundance and harvest, but NOAA researchers studying this concluded that they need better data on CV salmon to improve accuracy of predictions
 - Winship et al. 2015, in Canadian Journal of Fisheries and Aquatic Sciences
 - Watershed water budgets
 - How is this calculated and used in analysis?
 - Stressors
 - Cumulative impacts of projects in same geographies, water management as stressor
 - Forest management
 - Passage issues
 - Passage- lack of sediment in the system, as it affects habitat
 - Rim dams

- Diversions
- Not only lack of floodplain habitat, but also flows and function of floodplain reconnection- fish survivability
 - Private ownership of riparian habitats has decreased ability to protect
- Other facilities, diversions
 - SWP (Oroville)
 - If this process is distinct from joint operations, then clarify (regarding the process)
- Other industries, including waste discharge and both point and non-point source pollution
- Land management- irrigated agriculture in naturally arid regions
 - Consider options that decrease demand, especially in drought times with high value water-intensive crops
- Predation
 - As a function of ecological conditions, predation is normal, but how much of this is exacerbated by the CVP and other activities in the CVP region?
 - Not as big of a problem if increase number of juveniles, size and health, so solutions should be well rounded
 - Delta conditions- now increase level of predation and consequently the impacts
 - Bass/Fishing limits
 - Bounty
 - River structure
 - Increase survivability
 - Clarify conceptual model of how predation works
 - Non-native fish
 - Linkages between predation and contaminants have been demonstrated in the lab but need to make leap into field studies to quantify these mechanisms
 - Requires coordination between predation researchers and contaminant researchers
- Birds
- Introduced species
 - aquatic weeds, clams
 - Non-native fish outcompete and change the habitat of listed species so they produce effects beyond just predation alone
- Groundwater
 - Instream flows as it relates to groundwater, other effects
- Lack of riparian habitat
 - Private ownership-riparian – unwilling landowners, lack of BMPs
- Fishing and Regulations
 - Fish and game commission bag limits and sizes, consider changing bag limits or setting a bounty
 - Poaching significance? Relative to which baseline conditions?

- What did they do in earlier EIR/S?
- Recreation: jet boats, other motorized boats
 - Noise
 - Vibrations
 - Pollution
- Hatcheries
 - Hatchery operations- stressor but also mitigation measure, need to include both positive and negative effects in analysis
 - Impacts and wild
 - Wild impact to hatchery (disease)
 - Tagging/marking
 - Genetic dependencies on hatchery
- Fish release sites, including light pollution and shade
- Levee habitat
 - Understand where best investments can be made
 - Understand connection between predation and bank habitat
 - Lack of riparian
- Salinity
- Ocean harvest
 - Lack of data
 - Often inaccurate
 - More monitors
 - 100% tagging
 - Hatchery only
 - Talk to experts
- Seals
- Climatic conditions
 - Drought
 - Atmospheric rivers and relationship to infrastructure
 - Safety of dams change when precipitation events are more extreme, some studies were done during the Safety of Dams process
- Operational and Management
 - Not implementing CVP/SWP operations as written- especially in drought years
 - TUPC, RPA's, Fall X2
 - Emphasis on expectations should be more pragmatic given recent conditions
- Contributing factors to stressors? Stressors are often symptoms of the underlying problems
 - Habitat modification
 - Species-specific benefits to recovery
 - Temporal and special differences in relative sizes

(b) How can we evaluate these models? Suggestions for tools and data, including advantages and disadvantages

- Ideas:
 - Improve monitoring of ocean harvest species
 - Increase marking to 100%, currently only mark and clip every fourth fish
 - In sports fisheries too
 - Quantify water management operations with other projects in cumulative effects in NEPA, also management for other species
 - Coordinate actions from BOs (actions for one species might affect actions for another)
 - Action specific implementation plan (ASIP) for CalFed was an attempt but found too many institutional barriers- improve on this?
 - Analyze introduced species: the ebb and flow of small populations isn't always tracked
 - Grown trout in Trinity/Klamath
 - Benthic sampling for clams- bioaccumulation toxins: studies of phytoplankton removal from the system (Dan Thompson)
 - Boating and waterways- sprays for invasive species
 - Consensus science- Salmon Joint Venture, CVPIA fish analysis
 - Inter-agency Ecological program- predator PWT (FishBio and Reclamation) to access linkages and quantify overall effect
 - NMFS/NOAA: ocean harvest and fish take- Pacific Fisheries Management Council sets limits with time/seasons
 - CDFW monitors docks
 - Predictions have been off, but maybe improve data or analysis
 - Caltrout, Trout Unlimited studies on active rice fields to flood plain
 - SJ basin trial, Sutter Bypass trial
 - Have studied temporally but need more spatial understandings
 - Bay Institute habitat loss modeling
 - USACE habitat assessment and studies on effects of habitat modification
 - Work on the Sacramento on different levees and habitats
 - Identify more direct revenue streams;
 - Actors who cause habitat loss to contribute to recovery
 - CARB carbon sequestration in floodplains
 - Maybe a compensation mechanism, not necessarily through money
 - USGS and DWR studies on sequestration at Twitchell Island- Jersey Point
 - UC Davis quantify aquatic vegetation with remote sensing
 - Hyacinth in the Tuolumne affecting salmon movement
 - Contaminants: effects during drought years and wet years
 - Selenium in farming runoff
 - Ammonia in wastewater treatment
 - Effects of dredging on contaminant mobilization (water operations – flow contaminants, circular effects)
 - IEP project team- work done in labs doesn't necessarily translate in the field
 - Discharge permits with Regional Boards
 - Wastewater, other public
 - Agriculture

- Other private
- CDFW Index of CA Streams with State Board
- Assess hatchery limits and impacts
 - Makes it hard to quantify non-introduced numbers
 - Maybe increase tagging could determine
- ARFP- Anadromous Fish Restoration Program within Reclamation might have habitat information
- In-river rearing habitat options have been studied, requires flow coordination, etc.
- Aquatic vegetation removal efforts- in combination with other stressors
 - Boating and Waterways
- Internal Reclamation data (multiple ongoing projects within Reclamation, that may be useful)
- Include both negative and beneficial projects in cumulative impact sections
 - Similar to HCP's- do quantitative analysis well, but because programmatic, might be more qualitative
- EPA water temperature studies
- Groundwater models from USGS, basins developing groundwater plans
- USACE piers- number and acreage of boat docks
 - Biological engineering- as a better option than rip rap, natural riparian
- CDFW- law enforcement for poaching quantity
 - BLM, refugees
 - Angler interviews?
 - Currently do surveys that include misidentification (biologists talk to anglers and get anglers to state what they caught. Biologists also assess what anglers caught to determine misidentification)
- When creating a list of projects that contribute to cumulative impacts, include beneficial (Yolo restoration) and negative (housing developments) but qualitative is appropriate for a programmatic document

5. Adaptive Management

(a) What are the advantages/disadvantages of existing frameworks in achieving these objectives?

- Ideas:
 - Scale is too large to do effective adaptive management
 - Benefit: everyone involved in process (early on and throughout)
 - Broader view would be more difficult (e.g. More watersheds)
 - Will need to be broken down
 - Measure of uncertainty with some management actions
 - Long term operations show better results/analysis than short term

(b) Adaptive Management Framework Suggestions:

- Ideas:
 - Build in period to look back and assess if goals are being met
 - Don't just change CVP operations, understand its impact and incorporate best mitigation
 - Examine impact from CVP in contrast to other aspects
 - Cost for mitigating
 - Process to consider ways or develop ways to determine how we get the most 'bang for the buck'
 - Include cost/benefit analysis
 - Given CVP exists, are goals attainable and realistic?
 - May have to admit that perfect is not attainable/realistic
 - Add check-in point to see which actions work and which do not
 - Benchmarks/triggers (developed by stakeholders) that prompt actions need to be incorporated
 - Needs the capability to evaluate if some actions are achieving their purpose
 - Need metrics on effectiveness of actions to show models are correct/incorrect
 - Tiered or staged approach
 - Make transparent the reasons why management decisions are made
 - Clearly explain path of decision-making
 - Objectives need to be comprehensible
 - Management group needs clear set of goals defined early on
 - Participants / Stakeholders
 - Comprehensive plan that includes everyone should be priority
 - Structure needed in place
 - Disadvantage: timeframe will impact this
 - 6 months into it, have not seen objectives of maximum water, etc.
 - Not described well enough to evaluate
 - No hard questions
 - Look at samples of adaptive management programs (process) that may help bring folks to table
 - Umbrella Adaptive Management Stakeholder Group to include everyone
 - Disadvantages
 - Scheduling all interested parties will be difficult if everyone is involved
 - Confusion on track(s) process (Track 1, 2, 3 and new naming convention)
 - Should take a fresh look at water rights
 - Geographic scale - important for system
 - Track costs and have measure for its effectiveness
 - Prompts to find more effective programs
 - Factor in biology/cost
 - Holistic approach when managing listed species and operations
 - Limited operational "levers", not able to get much more out of system
 - Acquire correct "levers"

(c) What would alternative frameworks look like? Advantages/Disadvantages?

- Adaptive Management Elements
 - Add economic value to water “reductions” and biology
 - Most resource agencies don’t use figure
 - If done, then all benefits need to be quantified
 - Cost: dollars per fish return
 - Example: Habitat vs. SJ I:E ratio
 - Worst case adaptive management scenarios needed (drought, climate change, etc.)
 - Plan for worst case and plan to meet RPA’s
 - Factor in climate change
 - Add to CVP model system
 - Klamath irrigation project and hydrology impacts to CVP system
 - Trinity Watershed
 - Groundwater management and transfers need to be incorporated
 - Discharge may impact CVP system
 - Sacramento sewage
 - Bay Area industry
 - Power Operations
 - Capability to tweak CVP system for power needs is ideal
 - Is there a way to estimate maximum cost to power customers based on adaptive management plan?
 - Springtime storage prioritization (allows cold water releases in fall)
 - Scenarios should include additional water supply and tradeoffs
 - Consider amount and fluctuation of costs related to adaptive management
 - Include stressors and triggers (example)
 - Trigger? Food resources for Delta Smelt (zooplankton) is low
 - Adaptive Management response: re-routing water through Yolo bypass to develop zooplankton pulse in Sacramento River near confluence
 - Adaptive Management including recreational fishing, invasive species, contaminants, water transfers, groundwater
- Data and Evaluation Needs
 - CVP actions and stress on fish is unclear
 - No good mechanism for developing partnership

(d) How could we tweak existing frameworks to meet our objectives?

- Other Adaptive Management Frameworks and Relationship to ROC on LTO
 - CAMPT/CAP and other adaptive management frameworks already exist
 - Redundancy from all these groups

- Water operations groups- too many and meet too often
- Excess time consumed
- WaterFix adaptive management framework already exists and should still be used
- CSAMP/CAMT is looking at management actions already to protect fish in Delta
 - Current studies on OMR and entrainment
 - Collapse adaptive management groups into single entity
 - Disadvantage: each group has different goals
 - Some share similar goals and yet compete
- Look at existing forums and frameworks, etc. and collect that info, decide on what to build
 - Gap analysis and stakeholder thoughts
- A lot of duplicity in adaptive management groups
 - Why doing another?
 - Where does this one fit?
- Need to crosswalk with WaterFix adaptive management program
 - Stakeholder feedback on process?
 - System model should include Klamath IP of lower Klamath and Trinity
 - Look at other examples of adaptive management in Grand Canyon

(e) Other Observations

- Not all RPA's have been implemented
- Not all stressors have been addressed by Reclamation thus far
- Can't increase water supply and get RPA free BO
- Restoration projects under BO's not implemented

6. Plenary Report Out

(a) Stressors

- Comments:
 - Central Valley Project and non-project stressors need to be considered.

(b) Power

- Comments:

(c) Adaptive Management

- Comments:

(d) Water Supply

- Comments:
 - All BOR alternatives lead to jeopardy of fish

7. Key Insights

- The inclusion of power interests with water supply and fisheries for the CVP is new. The representatives from the power interests bring new information into the discussion.
- Fisheries representatives state that all the current proposed alternatives result in jeopardy for fish and do not meet the intent of the project to protect against jeopardy.
- The Power and Water Supply interest areas have actual proposed alternatives that seek to meet their interests whereas the Fisheries interests area currently only is discussing processes that would seek to describe, identify, evaluate, and adapt to those interests. This is quite different from discussing proposed alternatives that would meet the interests.