# Proposed Approach for Development of Sites operating criteria in cooperation with CDFW

Approach to Sites current modeling analysis needs to consider project time/schedule, WSIP requirements and deadline of December 2021, and the needs of Sites Authority members. This necessitates up-front planning for what biological protections should be included in the initial screening analysis, carried through to the initial full modeling run by Jacobs/Hendrix to evaluate effects of the project on aquatic resources, identify modifications to diversion criteria that preclude adverse effects, and to ensure sufficient water for a viable Sites Project.

1. Expectations for yield and affordability of project
   1. Annualized release is 230k – 240k AF at $650-$710 per AF without WIFIA or $600-$660 with WIFIA loans
   2. A defined portion of project yield for WSIP benefits to be administered by State
2. Establish Baseline for CEQA/NEPA, Biological assessment, and ITP application
   1. Ongoing or planned actions in the Sacramento Valley and Delta
      1. Operation of State and Federal Water Projects pursuant to 2019 biological opinions and the 2020 SWP Incidental Take Permit
      2. Delta Conveyance Project
      3. Voluntary Agreement Proposals by Sacramento Valley water rights holders
      4. Fremont Weir Notch
      5. Plans to supplement flows in Sutter Bypass e.g. Tisdale weir
      6. SWRCB regulations, e.g. D 1641, WR 90-5,
      7. Other existing flow requirements e.g. GCID flow requirement (4000 cfs) Wilkins slough flow requirement (5000 cfs)
      8. Other WSIP projects
3. Establish criteria for exclusion of speculative projects (i.e. limits to speculations)
   1. Where are they in the planning and permitting process?
      1. Is there a Record of Decision or Notice of Determination?
      2. Have permits for the Project been issued?
      3. Has construction already begun?
      4. Is the action a mitigation obligation under some other approved/operational project?
   2. Projects that have not completed environmental review or satisfy condition in 3.a. could be considered speculative and excluded from further consideration
   3. Exclusion criteria should be applied to future projects consistently
4. Complete initial analysis of effects based on operations scenario B in the Value Planning report (using Jacobs proposed baseline).
   1. Diversions at TCCA and GCID only
   2. Wilkins Slough flow criteria 8,000 cfs April and May (a VA proposal), otherwise 5000 cfs
   3. No more than 5% reduction in modeled flows through Fremont Weir Notch
   4. No restrictions on diversions by Sites to protect spills at Moulton, Tisdale, and Colusa weirs
   5. Pulse flow protections for all pulses measured as flows above 15,000 cfs at Bend Bridge
   6. Freeport model input from CA Water Fix (CWF) criteria (may need to revisit this since the criteria are not clearly defined in the CWF ITP)
   7. Delta outflow 44,500 cfs March 1 and May 31
   8. No other restrictions on pumping at TCCA or GCID diversions
   9. Complete initial assessment of effects bases on results of OBAN, IOS, Delta survival models, etc. for comparison of with and without project condition of target resources (i.e. Delta smelt, longfin smelt, green sturgeon, and salmonids)
5. Plan for re-engaging with CDFW regarding project operations
   1. Establish ground rules for decision making
      1. Decision framework will be comparison of future conditions with and without project
      2. Define roles and responsibilities
      3. Establish elevation process for timely resolution of impasses
   2. Complete initial effects analysis and supporting documentation prior to re-engaging with CDFW technical staff
   3. Consider bringing in other fisheries/permitting agencies (NMFS and USFWS) to minimize revisiting issues and seek consensus
   4. Plan on 2 to 3 facilitated workshops to explore modeling results, achieve common understanding of results, agree on resource requirements, and plan for additional model runs. (Bruce DiGennaro and/or Michael Harty would be good facilitators).
      1. Workshop #1 (zoom meeting) in October 2020 held after the first model run; include authors/experts (e.g. Perry author of Georgiana Slough Paper)
      2. Workshop #2 in November 2020 held after the second model run
      3. Workshop #3 Topic TBD, if needed
6. Based on workshop results, identify additional minimization measures for incorporation into project operating criteria. Likely additional measures include:
   1. Additional restrictions on pumping (e.g. tax table approach, divert no more than X% of flow)
   2. Establish baseflow criterion at Hamilton City based on relationship between diversions and subsequent flow at Wilkins Slough (i.e. a standard in lieu of a Wilkins Slough standard)
   3. Additional limits on encroachment of Flows through Fremont Weir Notch
   4. Identify a requirement to manage the potential increases in entrainment of juvenile salmon into Georgiana Slough attributable to Sites operations
   5. Run screening level analysis to test feasibility of proposed minimization measures (i.e. does project produce annualized releases and costs in 1.a.)
   6. Elevate issues to management team as appropriate for resolution and/or direction)
   7. Determine whether “unresolvable” issues can be addressed through adaptive management and/or additional mitigation
7. Develop additional diversion criteria based on workshops #1 and #2 results and direction from management and rerun full model sequence for delivery to ICF on 11/9/2020 for use in the EIR/EIS, Joint Biological Assessment, and Operations ITP application.