

# **DFG Comments on the June 2011 BDCP Science Advisors Draft Report on Goals and Objectives**

(6/23/11)

**General Comment:** On the whole, the report provides a very technically useful illustration of the development of objectives, and useful information about the bigger picture of the process.

**Title Page:** The title includes “Goals”, but the report is very focused on objectives.

**Page “7”, General Conclusion “3”:** The statement that quantitative objectives may not be possible for many species seems overly pessimistic. Conclusion “5” appears to get at this point, and suggests that some quantitative objectives should be able to be developed for most species.

**Page “7”, General Comment “6”:** Is the comment referring to “political” or “scientific” controversy? Would this distinction effect how the controversy in question is addressed?

**Page 1, last paragraph:** The paragraph’s “mutually agreed upon vision” language seems implicitly dismissive of the requirements of the ESA.

**Page 3, paragraph 2 and footnote “3”:** The paragraph on permit conditions and implementation obligation is inconsistent with direction that has been provided by the state and federal wildlife agencies and is not supported by the footnote. See the Federal Agencies White Paper presented at the 5/20/10 BDCP Steering Committee meeting.

**Page 5, paragraph 4:** The stressor interdependence point example is a good one, but the point could be expanded by indicating that entrainment in diversions might, for example, negate the survival/growth of an area with high food and high temperature.

**Page 6, Winter-run objective 2:** Much of the freshwater migration occurs outside the BDCP Plan Area. Should this objective specify survival through the Plan Area?

**Page 8, paragraph 2:** The information on the percentage of returning adults that emigrated as smolts, fry, and parr can only be interpreted if the reader knows what proportion of emigrating juveniles were smolts, fry, and parr.

**Page 9, Table 1:** The growth rates in Table 1 should be presented as percent of temperature adjusted maximum growth rate in order to be useful in assessing the objective. Alternatively, the objective could be based on actual measured growth rates (mm/day) in areas that are considered to be restoration successes.

**Page 12, paragraph 4:** It seems unlikely that predation is proportional to predator density, or that a 50% reduction in predator density along a 100-mile stretch of the river

could be achieved in any reasonable way. What predators are being referred to here? Fish, birds?

**Page 18, Splittail objective 1:** Is this objective meant to only be met in dry years or in all years (other than wet years)? The water year type might not be known when the inundation of floodplain for splittail spawning would occur. Also, the duration of inundation, and not simply acre-days, would be important for successful spawning.

**Page 18, Splittail objective 2:** The splittail “Growth” objective does not seem particularly well justified or necessary, and could be messy. This may be an example of a species that receives sufficient benefit from objectives met at the landscape or community level (e.g. the floodplain inundation objective).

**Page 20, paragraph 3:** The gear used in the FMWT is not very effective at sampling splittail. Consider using salvage data; salvage may be a better indicator of the general size of the age 0 year class because the salvage facilities are better at sampling splittail.

**Page 23, paragraph 2:** It seems like the “length-at-time” growth objective could be complicated by the timing of cohort production within a year. Consideration should be given to a growth rate objective.

**Page 24, paragraph 2:** It is helpful and calming when the report augments its examples of objectives with references to other obvious objectives that need to be developed.

**Page 28, paragraph 3:** This “how-much-do-you-need approach” is great, but it suggests the possible development of a zooplankton objective.

**Page 36, Section 2.3.5:** The reader is looking for a juvenile entrainment approach section, which seems to be missing.

**Page 36, paragraph 2, second to last sentence:** The phrase “...this appendix...” is used, but the report isn’t organized that way. There are no appendices, right?

**Page 36, approach steps:** This appears to be different than Kimmerer’s proportional entrainment approach. If so, provide the reasoning for the different approach.