

# Section V

## Findings on Cumulative Impacts

Cumulative impacts are the direct and indirect impacts of a proposed project considered in combination with the impacts of past projects, other current projects and reasonably foreseeable future projects. CEQA provides some general guidelines for the assessment of cumulative impacts as follows:

"Cumulative impacts refer to two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact of several projects is the change in environment that results from the incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable, probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (CEQA Guidelines, Section 15355).

The assessment of cumulative impacts takes into account not only impacts identified as significant, but also those identified as less than significant. These less than significant impacts can become significant when considered in conjunction with similar impacts from other related projects. Criteria for selecting related projects for the cumulative impact analysis are the following:

- The project must be sufficiently related to the proposed project either by location in the general Delta-Suisun Marsh project area, or by production of similar types of impacts on similar resources.
- The project must be reasonably foreseeable.
- The specifics of project design or operation must be known or predictable.

Projects that fit these criteria include the following:

- CALFED Bay-Delta Program (CALFED)
- South Delta Improvements Program (SDIP)
- South Delta Temporary Barriers Project (SDTBP)
- Delta Wetlands Project (DW)
- Water Hyacinth Control Program (WHCP)
- Montezuma Wetlands Project (MWP)
- Suisun Marsh Preservation Agreement Amendment Three (SMPA).

A summary of each of these projects is provided in Section 6.1 of the final EIR.

The proposed project (EDCP and Two-Year Komeen Research Trials) would create significant adverse cumulative impacts in the following two general resource categories: Hydrology and Water Quality (water quality and sediments) and Biological Resources (including shallow water habitat, wetlands, special status fish species, special status plant species, special status wildlife species, and aquatic invertebrates).

The DBW has identified mitigation measures for Water Quality and Biological Resources in Section IV of this document. These mitigation measures are incorporated by reference into this section as measures the DBW proposes to balance against the cumulative impacts identified in this section.

**A.****EDCP**

Even with mitigation measures proposed for the EDCP, the DBW finds that there will be significant and unavoidable impacts for the EDCP. These nine (9) significant impacts (including project specific and cumulative impacts) are listed below:

**Hydrology and Water Quality**

1. Impact #1 – Aquatic herbicides conflict with general Basin Plan standards for toxicity
2. Impact #3 – Significant temporary increase in turbidity from mechanical harvesting operations

**Biological Resources**

3. Impact #8 – Loss of special status intertidal wetland plant communities
4. Impact #9 – Temporarily decrease aquatic invertebrate abundance
5. Impact #11 – Potential loss of special status fish species
6. Impact #13 – Temporary decrease in aquatic invertebrate abundance potentially adversely impacting special status fish species who rely on aquatic invertebrates for a food source
7. Impact #14 – Potential adverse impact to reptiles and amphibians utilizing Delta channel banks from aquatic herbicide wash or mechanical harvesting operations
8. Impact #15 – Potential adverse impact to birds who forage on channel banks for vegetation
9. Impact #20 – (cumulative) - Potential cumulative impact to native aquatic plants and algae

Note that though the DBW finds that the project had a less-than-significant impact to native aquatic plants and algae (due to the relatively small acreage of the treatment areas and the low habitat quality of *Egeria* beds), the DBW finds the cumulative impact is significant since five of the seven related programs (CALFED, SDIP, TBP, DW, WHCP) also could impact native aquatic plants and algae (identified as impact #20 above).

## B. Two-Year Komeen Trials

Even with mitigation measures proposed for the Two-Year Komeen Trials, the DBW finds that there will be significant and unavoidable impacts for the Two-Year Komeen Trials. These nine (9) significant impacts are listed below:

### Hydrology and Water Quality

1. Impact #1 – Aquatic herbicides conflict with general Basin Plan standards for toxicity
2. Impact #2 – Komeen use conflicts with general Basin Plan standards for toxicity
3. Impact #3 – Chelated copper contained in Komeen does not biodegrade and could accumulate in sediments

### Biological Resources

4. Impact #6 – Loss of special status intertidal wetland plant communities
5. Impact #7 – Temporary decrease aquatic invertebrate abundance
6. Impact #9 – Potential loss of special status fish species
7. Impact #10 – Temporary decrease in aquatic invertebrate abundance potentially adversely impacting special status fish species who rely on aquatic invertebrates for food source
8. Impact #11 – Potential adverse impact to reptiles and amphibians utilizing Delta channel banks from Komeen wash
9. Impact #12 – Potential adverse impact to birds who forage on channel banks for vegetation

The DBW finds that the specific economic, technological, environmental, social, and other considerations in support of the EDCP and Two-Year Komeen Trials outweigh these significant adverse impacts for the reasons described in the Statement of Overriding Considerations.

