

## Central Valley Project Municipal and Industrial Water Shortage Policy Environmental Impact Statement Alternatives Summary

A large number of potential Central Valley Project (CVP) Municipal and Industrial Water Shortage Policy (M&I WSP) alternatives could be developed for inclusion and analysis in the Environmental Impact Statement (EIS). However, it is not practical to develop alternatives that include all of the potential combinations of elements that could be considered in alternative WSPs.

The National Environmental Policy Act allows development of representative alternatives that bound the full range of reasonable alternatives. Upper, lower, and intermediate bounding alternatives can be developed in terms of the maximum and minimum range of water shortage sharing conditions between Agricultural and M&I water service contractors. This approach will ensure that the full range of potential changes in water deliveries and resulting environmental impacts from these alternative M&I WSPs can be evaluated in the EIS.

The recommended alternatives for the M&I WSP EIS are summarized below.

### **No Action Alternative – Equal Agricultural and M&I Allocations**

The No Action Alternative provides no preference for M&I contractors. M&I and Agricultural water service contractors would receive equal levels of CVP water deliveries during water shortage conditions. The alternative considers the following factors:

- Water delivery reductions to M&I and Agricultural contractors would occur at the same levels (on a percentage basis) during water shortage conditions.
- This alternative allows for a reasonable baseline that can be used to compare effects of alternative M&I WSPs.
- Operational preference for M&I contractor's unmet need<sup>1</sup> is provided without a guarantee. This will be looked at on a contractor specific basis provided there is sufficient CVP water available.

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<sup>1</sup> Unmet need is calculated as the difference between a contractor's public health and safety level of demand and its available non-CVP supplies. The public health and safety level is defined as the sum of (Current Population X 55 gallons per day) + (80% of Projected Commercial & Institutional Demand) + (90% of Projected Industrial Demand) + (10% of residential demand + commercial/institutional demand + industrial demand for system losses).



## **Action Alternative No. 1 – 100% Allocation to M&I**

This action alternative provides maximum deliveries to M&I water service contractors during water shortage conditions, to the extent that adequate CVP water supplies are available. The alternative considers the following factors:

- The M&I contractors would receive 100% of their contract allocation until CVP supplies are not available to meet those demands.
- Agricultural deliveries would be reduced to maintain 100% allocations to M&I contractors, based on a tiered delivery reduction schedule correlated to the reduced CVP water supply allocations.
- The alternative would target minimum M&I deliveries equal to their unmet need levels. However, 100% M&I allocation may not be met in all years.

## **Action Alternative No. 2 – Updated M&I WSP and Allocation Methodology**

This alternative comprises the “working draft” M&I WSP developed by Reclamation with stakeholder input received during the M&I WSP workshops held between May 2010 and January 2011. The alternative considers the following factors:

- The working draft reflects stakeholder recommended improvements to the M&I WSP considered in the 2005 M&I WSP Environmental Assessment.
- Water supply allocations are reduced until deliveries are as close as possible to available supply using the following criteria (Stanislaus and Friant Divisions are excluded):
  - Reduce Agricultural water deliveries to 75% without reducing M&I allocation.
  - Reduce Agricultural and M&I deliveries by the same percentage until Agricultural water service contractors reach 50% and M&I contractors reach 75%.
  - Reduce Agricultural deliveries until Agricultural service contractors reach 25% (M&I contractors stay unchanged at 75%).
  - Reduce Agricultural and M&I deliveries by the same percentage until Agricultural contractors reach 0% and M&I contractors reach 50%.
  - Reduce M&I to minimum unmet need amounts, but no guarantee.
- Once available CVP water supply is estimated, water allocations are made based on each region’s water supply condition and ability to convey CVP water.



## **Action Alternative No. 3 – M&I Contractors Suggested M&I WSP and Allocation Methodology**

This alternative represents the red-line/strike-out version of the M&I WSP that was developed and submitted by the M&I Contractors. The alternative also considers the following factors:

- The alternative is similar to Alternative 2 with the major difference being that this alternative tries to meet minimum unmet need deliveries through operational changes.
- Would require modification to CVP operations, i.e., would provide increased carryover to reserve water in storage to meet ensuing year unmet need of M&I contractors.
- The tradeoff between average year delivery and dry year M&I water supply reliability will be derived from this alternative.
- The alternative will facilitate evaluation of tradeoffs of higher M&I deliveries and reduced deliveries to Agricultural contractors and possible reduced environmental releases (Bay-Delta).

