Attached are draft actions for the water quality common program:

- The first 3 pages provide brief narrative descriptions
- The next 10 pages provide suggested ranges for parameters of concern
- The last 3 pages show suggested actions for the Sacramento River Basin, the San Joaquin Basin, and the Delta. The suggested actions are **at the bottom of each page.**

CALFED Water Quality Actions

Agricultural Drainage

Source Control
Implement additional agricultural source control for water quality parameters of concern found in agricultural surface and sub-surface drainage. Implementation may include: incentives and/or enforcement of existing regulations; incentives for pesticide users to increase implementation of best management practices (BMPs) including integrated pest management (IPM); fallowing or retirement of land that is a major source of water quality parameters of concern (i.e., landowner participation should be voluntary and by compensated purchase or lease payment); and improved source irrigation water quality in sub-surface drainage areas.

Treatment
Reduce the loadings of water quality parameters of concern entering the Delta and San Joaquin tributaries from San Joaquin Valley agricultural sub-surface drainage by concentration and disposal in evaporation ponds; and/or treatment by reverse osmosis, or by other means.

Reduce the loadings of water quality parameters of concern entering the Delta by treating agricultural surface drainage and/or Delta agricultural sub-surface drainage in constructed wetlands or by other means.

Dilution
Control the timing of agricultural drainage discharge to coincide with periods when dilution flow is sufficient to achieve CALFED water quality target ranges.

Other
Improve water circulation in the Delta by development of improvements at the head of Old River to block fish movement into Old River and by management of water flow and stage down Old River.

Urban and Industrial Runoff

Source Control
Reduce urban and industrial water quality parameters of concern loadings to the Delta and its tributaries through enforcement of existing source control regulations or provision of incentives for additional source control of urban and industrial runoff. Examples of incentives include: provision of rebates on construction permit fees when erosion control measures have been applied; provision of incentives for pesticide users to increase implementation of best management practices (BMPs) including integrated pest management (IPM); and better planning of new developments (e.g., design of storm drainage systems that target maximum infiltration of stormwater into the ground or on-site or regional stormwater sedimentation facilities that detain the majority of stormwater for at least 8 hours,etc.).

Dilution

Reduce urban and industrial water quality parameters of concern loadings to the Delta and its tributaries by detention and strategic release of 20 to 30 percent of urban runoff water. Action would involve retrofitting existing urban and industrial areas with detention basins at the outlets of drainage basins contributing largest loadings of parameters of concern.

Mine Drainage

Source Control or Treatment

Reduce metal loadings (e.g., cadmium, copper, mercury and zinc) to the Delta and its tributaries by implementation of moderate on-site mine drainage remediation measures at inactive and abandoned mine sites.

Wastewater and Industrial Discharges

Source Control

Control discharges of domestic wastes from boats within the Delta and Delta tributaries by more extensive enforcement of existing regulations.

Treatment/Source Control.

Reduce point source water quality parameters of concern loadings to the Delta and its tributaries through cost effective control of industrial and municipal wastewater discharges. Methods may include incentives for reclamation and reuse and/or treatment of a portion of upstream municipal wastewater effluent in wetlands.

Dilution

Reduce the concentration of water quality parameters of concern entering the Delta and its tributaries during low flow periods by acquiring dilution water (50,000 to 100,000 acre-feet) from: willing sellers; provision of incentives for more efficient water management of dams, including reservoir re-operation; urban water conservation; greater use of reclaimed wastewater (e.g.,recharge groundwater, treated agricultural drainage, use for agricultural irrigation, recycling and treating for potable or non-potable urban, use of grey water,and storage for use in meeting X2 standards); enhanced seasonal recharge and development of additional groundwater supplies.

Note: Conservation might be achieved through use of incentives for implementation of best management practices by more suppliers and water users. Implementation of the action may reduce demand for existing water and may make dilution water available (including transfers), especially on the San Joaquin River. Reclamation programs would focus on facilities that currently discharge treated wastewater to salt sinks or other degraded bodies of water that are not reusable.

Water Treatment

Improve treated drinking water quality parameters of concern (including reduction in formation of disinfection by-products) by providing incentives for the addition of enhanced coagulation, ozone, granular activated carbon filtration and/or membrane filtration facilities to the water systems treating water from the Delta.

Improve source water quality parameters of concern at domestic water supply intakes, as identified in the geographic scope, by relocating water supply intakes to areas that are not influenced by those discharges.

Watershed Coordination *[These actions will not be used during environmental impact analysis but are included for there relevance to the water quality program in general.]*

Other

Promote and support efforts of local watershed programs that improve water quality parameters of concern within the Delta and Delta tributary watersheds. Efforts may include coordination, incentives, and/or other assistance.

Identify and implement actions to address potential toxicity to water and sediment within the Delta and its tributaries by conducting toxicity testing and toxicity identification evaluations and/or other appropriate methods. Coordinate these efforts with other programs.