

## List of Action Categories and Actions

Comments on Action Categories and Actions

Fax return by January 10, 1996 to (916) 654-9780  
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Name: \_\_\_\_\_

	Importance 1 - 5	Core Action C
<b>Action Categories to Restore Bay-Delta System Habitats</b>		
Restoration of Bay-Delta System Shallow Water (Tidal) Habitat	_____	_____
Actions:		
-Convert existing leveed lands to tidal action	_____	_____
-Protect existing shallow habitat from erosion	_____	_____
-Restore tidal action to existing diked wetlands	_____	_____
-Reconstruct levees to include shallow water habitat	_____	_____
-Fill deep water to produce shallow habitat	_____	_____
Restoration of Bay-Delta System Riverine Habitat	_____	_____
Actions:		
-Reconstruct river banks and shallow areas	_____	_____
-Restore and preserve channel islands	_____	_____
-Restore natural channel configurations	_____	_____
-Modify channel/levee construction practices to include riverine elements	_____	_____
Restoration of Bay-Delta System Riparian Habitat	_____	_____
Actions:		
-Improve and protect degraded riparian habitats	_____	_____
-Establish new areas of riparian habitat	_____	_____
-Reestablish historic riparian areas	_____	_____
-Modify levee maintenance practices	_____	_____
-Protect existing riparian habitat	_____	_____

	Importance 1 - 5	Core Action C
Restoration of Bay-Delta System Wetland Habitat	_____	_____
Actions:		
-Restore, enhance, and create wetlands	_____	_____
-Expand wetland acquisition programs	_____	_____
-Convert agricultural lands to wetlands	_____	_____
-Protect existing wetland habitat	_____	_____
Restoration of Bay-Delta System Terrestrial Habitat	_____	_____
Actions:		
-Protect existing upland habitat	_____	_____
-Establish upland habitat on levees	_____	_____
-Establish upland habitat on fallowed croplands	_____	_____
-Establish oak woodlands on suitable soils	_____	_____
-Encourage wildlife-friendly agricultural practices	_____	_____
-Preserve agricultural land uses providing habitat	_____	_____
-Clean up sites contaminated with toxic substances	_____	_____
Implementation of Integrated Habitat Management Programs	_____	_____
Actions:		
-Establish regional ecosystem restoration guidelines	_____	_____
-Implement integrated regional habitat management	_____	_____
-Develop cooperative management agreements	_____	_____
-Establish mitigation banking program	_____	_____
Establishment of Floodways and Meander Belts	_____	_____
Actions:		
-Relocate levees to widen floodways	_____	_____
-Allow river channels to meander	_____	_____
-Acquire Delta islands as overflow areas	_____	_____
-Restore floodways as habitat corridors	_____	_____
Control of Introduced Species	_____	_____
Actions:		
-Remove or reduce nuisance species in key habitats	_____	_____
-Improve regulation of ballast-water releases	_____	_____
-Improve border inspection practices	_____	_____
-Inspect for invasions of nuisance species	_____	_____
-Modify habitat to favor native species	_____	_____

	Importance 1 - 5	Core Action C
Delta Waterfowl Habitat Management	_____	_____
Actions:		
-Manage agricultural crops for waterfowl forage production	_____	_____
-Improve management of public waterfowl areas	_____	_____
-Implement terrestrial predator control programs	_____	_____
-Increase sources and availability of wildlife forage	_____	_____

**Action Categories to Restore Upstream Habitat**

Restoration of Upstream Anadromous Fish Habitat	_____	_____
Actions:		
-Manage flows and temperatures in upstream habitats	_____	_____
-Restore and replenish spawning gravels	_____	_____
-Restore channel configurations	_____	_____
-Restore shoreline habitat conditions	_____	_____
-Modify gravel mining practices	_____	_____
-Improve floodway drainage to reduce fish stranding	_____	_____
Improvements for Upstream Fish Passage	_____	_____
Actions:		
-Modify passage at upstream dams and other barriers	_____	_____
-Modify natural barriers to improve passage	_____	_____
Restoration of Upstream Riparian Habitat	_____	_____
Actions:		
-Restrict livestock grazing in riparian corridors	_____	_____
-Revegetate degraded riparian habitats	_____	_____
-Protect riparian lands through purchase/easements	_____	_____
-Restore flows to dewatered riparian habitats	_____	_____
Restoration of Upstream Wetland Habitat	_____	_____
Actions:		
-Modify floodways to support wetland habitats	_____	_____
-Reuse agricultural drainage to create wetlands	_____	_____
-Reuse urban wastewater effluent to create wetlands	_____	_____
-Manage groundwater recharge for wetland habitat	_____	_____

Importance	Core
1 - 5	Action
	C

**Action Categories to Reduce Effects of Diversions**

Delta Inflow/Outflow/Export Management	_____	_____
Actions regarding Delta Inflows:		
-Modify upstream consumptive use	_____	_____
-Modify upstream reservoir operations criteria	_____	_____
-Modify Delta inflow timing pattern	_____	_____
-Provide instream pulse flows for fish passage	_____	_____
-Provide instream flows for fish attraction	_____	_____
Actions regarding Delta Diversions and Outflows:		
-Modify volumes and timing of exports	_____	_____
-Modify in-Delta consumptive use	_____	_____
-Modify central Delta channel operations	_____	_____
-Modify export operations criteria	_____	_____
-Establish a Delta watermaster to manage flows	_____	_____
-Use real-time monitoring and adaptive management	_____	_____
Modification of Diversion Timing Patterns		
Actions: -Modify diversion timing of in-Delta diversions	_____	_____
-Modify diversion timing of export diversions	_____	_____
-Coordinate SWP/CVP diversion timing	_____	_____
-Modify diversion timing through Montezuma Salinity Control Gate	_____	_____
-Use real-time monitoring and adaptive management	_____	_____
Increased Rates of Diversion Capacity		
Actions: -Obtain approvals for expanded export capacities	_____	_____
-Enlarge export pumping capacities	_____	_____
-Increase diversion capability at Red Bluff Diversion Dam	_____	_____
Acquisition of Long-Term Water Supplies for Fish and Wildlife		
Actions: -Acquire water to augment instream flows	_____	_____
-Obtain shifts in timing of instream flows	_____	_____
-Obtain shifts in diversion timing patterns	_____	_____

	Importance 1 - 5	Core Action C
-Acquire water for refuge habitat use	_____	_____
-Modify water law to establish instream rights	_____	_____
Installation and Improvement of Fish Screens	_____	_____
Actions:		
-Improve screens at Delta export pumps	_____	_____
-Improve other existing fish screen systems	_____	_____
-Install screens on other in-Delta diversions	_____	_____
-Install screens on upstream diversions	_____	_____
-Consolidate and screen existing small diversions	_____	_____
-Enforce screening requirements	_____	_____
Improvement of Bay-Delta System Fish Migration	_____	_____
Actions:		
-Install barriers to block fish movement into Old River	_____	_____
-Install barriers to keep fish in Sacramento River	_____	_____
-Install barriers to divert fish from Sacramento River to western distributaries	_____	_____
-Operate fish barrier on San Joaquin River at Merced River confluence in fall	_____	_____
-Provide instream pulse flows for fish passage	_____	_____
-Provide instream flows for fish attraction	_____	_____
Improvement of Fish Salvage Operations	_____	_____
Actions:		
-Improve design of salvage facilities	_____	_____
-Improve operation of salvage facilities	_____	_____
-Improve fish hauling and release procedures	_____	_____
Removal and Control of Aquatic Predators	_____	_____
Actions:		
-Harvest predators at Delta export pumps	_____	_____
-Harvest predators in upstream habitats	_____	_____
<b>Action Categories to Manage the Enhancement of Anadromous Fish Populations</b>		
Fish Hatchery Operations	_____	_____
Actions:		
-Expand hatchery capacities	_____	_____
-Construct new hatcheries on the San Joaquin River	_____	_____
-Improve hatchery operations	_____	_____

	Importance 1 - 5	Core Action C
-Reduce hatchery effects on wild fish populations	_____	_____
-Implement tagging of hatchery-bred fish	_____	_____
-Establish new captive breeding programs	_____	_____
<b>Fish Harvest Management</b>	_____	_____
Actions: -Improve regulation of commercial take	_____	_____
-Improve regulation of recreational take	_____	_____
-Improve enforcement of harvest regulations	_____	_____

**Action Categories for Reducing Reliance on Delta Exports**

<b>Desalination</b>	_____	_____
Actions: -Expand desalination of Southern California supplies	_____	_____
-Expand desalination of San Joaquin Valley supplies	_____	_____
-Improve desalination technologies and cost	_____	_____
-Educate users about desalination feasibility	_____	_____
<b>Water Conservation</b>	_____	_____
Actions: -Increase use of district-wide conservation practices	_____	_____
-Increase use of on-farm conservation practices	_____	_____
-Increase use of municipal conservation practices	_____	_____
-Increase use of industrial conservation practices	_____	_____
-Implement financial incentive policies	_____	_____
-Implement conservation-oriented rate structures	_____	_____
-Educate users about conservation technologies	_____	_____
<b>Water Reclamation</b>	_____	_____
Actions: -Recharge groundwater with reclaimed water	_____	_____
-Use reclaimed water for agricultural irrigation	_____	_____
-Reclaim saline agricultural drainage water	_____	_____
-Recycle and treat water for potable reuse	_____	_____
-Use reclaimed water for nonpotable urban uses	_____	_____
-Use reclaimed water for landscape irrigation	_____	_____
-Use reclaimed water for power plant cooling	_____	_____
-Use reclaimed water for industrial processes	_____	_____
-Use reclaimed water to repel salinity intrusion	_____	_____
-Improve reclamation technologies and cost	_____	_____
-Educate public about water reclamation	_____	_____

	Importance 1 - 5	Core Action C
Land Retirement and Fallowing	_____	_____
Actions:		
-Encourage land fallowing during drought periods	_____	_____
-Develop incentive programs for land retirement	_____	_____
-Purchase lands or easements	_____	_____
-Retire lands with drainage problems	_____	_____
Water Pricing	_____	_____
Actions:		
-Establish incentives for pricing to reduce demand	_____	_____
-Educate users about pricing feasibility	_____	_____
-Remove legal obstacles to pricing incentive programs	_____	_____
<b>Action Categories to Enhance Water Supplies</b>		
Watershed Management	_____	_____
Actions:		
-Manage vegetation cover to increase yield	_____	_____
-Manage riparian zones to protect water quality	_____	_____
-Manage land uses to reduce sedimentation	_____	_____
-Modify weather to increase precipitation	_____	_____
New or Expanded Onstream Storage	_____	_____
Actions:		
-Construct new storage facilities south of the Delta	_____	_____
-Construct new storage facilities north of the Delta	_____	_____
-Enlarge existing onstream storage reservoirs	_____	_____
-Modify operations of existing onstream reservoirs	_____	_____
New or Expanded Offstream Storage	_____	_____
Actions:		
-Construct new storage facilities south of the Delta	_____	_____
-Construct new storage facilities north of the Delta	_____	_____
-Construct new storage facilities in Delta	_____	_____
-Enlarge existing offstream storage reservoirs	_____	_____
-Modify operations of existing offstream reservoirs	_____	_____
Groundwater Banking and Conjunctive Use	_____	_____
Actions:		
-Establish incentives for conjunctive use	_____	_____
-Modify Water Code to encourage conjunctive use	_____	_____
-Establish conjunctive use programs	_____	_____

	Importance 1 - 5	Core Action C
-Store groundwater south of the Delta	_____	_____
-Store groundwater north of the Delta	_____	_____
-Implement techniques to increase groundwater recharge	_____	_____
<b>Improvement of Through-Delta Conveyance</b>	_____	_____
Actions:		
-Increase capacities of existing east-side channels	_____	_____
-Increase flows from the Sacramento River to the central Delta	_____	_____
-Modify Delta levees to increase flow cross sections	_____	_____
-Construct pump/siphon systems between Delta channels	_____	_____
-Expand existing intakes at the Delta export facilities	_____	_____
-Construct expanded export intake/forebay pumping system	_____	_____
<b>Construction and Improvement of Conveyance Facilities</b>	_____	_____
Actions:		
-Construct east-side isolated transfer system	_____	_____
-Construct west-side isolated transfer system	_____	_____
-Construct small isolated transfer facility	_____	_____
-Convert Delta islands to storage/conveyance system	_____	_____
-Construct conveyance to offstream storage	_____	_____
-Construct conveyance to groundwater storage	_____	_____
<b>Changes in Locations of Diversions</b>	_____	_____
Actions:		
-Relocate Delta export pumps from key habitats	_____	_____
-Relocate other in-Delta diversions for more reliable supplies	_____	_____
-Consolidate in-Delta agricultural diversions	_____	_____
-Relocate upstream diversions from key habitats	_____	_____
-Improve diversion designs when relocating	_____	_____
<b>Action Categories to Increase Supply Predictability</b>		
<b>Water Transfers</b>	_____	_____
Actions:		
-Modify Water Code to ease transfers	_____	_____
-Improve procedures for transfer permitting	_____	_____
-Coordinate diversion and conveyance of transfers	_____	_____

	Importance 1 - 5	Core Action C
Long-Term Planning for Drought Contingencies	_____	_____
Actions:		
-Increase water storage capacities at user locations	_____	_____
-Establish incentives for long-term planning	_____	_____
-Conduct Integrated Resources Planning	_____	_____
-Establish incentives for long-term conservation	_____	_____
-Develop alternate supplies for drought situations	_____	_____
Water Resources Data and Information Management	_____	_____
Actions:		
-Establish a comprehensive water data system	_____	_____
-Implement real-time data management system	_____	_____
-Integrate data for adaptive management decisions	_____	_____
-Establish accessible data management system	_____	_____
Establishment of Institution for Integrated Long-Term Water Management	_____	_____
Actions:		
-Establish long-term guarantees for management	_____	_____
-Establish institution to implement guarantees	_____	_____
-Coordinate multiagency roles in management	_____	_____
-Coordinate groundwater and surface water management	_____	_____
-Establish incentives for cooperation/coordination	_____	_____
-Establish a public awareness and education program	_____	_____
Establishment of Export Capacity Market	_____	_____
Actions:		
-Establish procedures for allocation of export capacity	_____	_____
-Establish institution to allocate export capacity	_____	_____
-Coordinate water transfers and export capacity	_____	_____
-Market export capacity for environmental benefits	_____	_____
Integration of Land Use and Water Supply Planning	_____	_____
Actions:		
-Coordinate land uses with water supplies	_____	_____
-Encourage local determination of supplies available	_____	_____
-Encourage local assessment of water supply reliability	_____	_____

### Action Categories for Managing Water Quality

Installation and Operation of Flow Barriers	_____	_____
Actions:		
-Install flow barriers to manage south Delta quality	_____	_____
-Install weirs to control salinity intrusion	_____	_____
Management of Agricultural Drainage	_____	_____
Actions:		
-Implement source control regulations for pollutants	_____	_____
-Implement pollutant-load limits in San Joaquin River	_____	_____
-Reduce or control volume of agricultural discharges	_____	_____
-Modify cropping and irrigation practices	_____	_____
-Export agricultural drainage to other watersheds	_____	_____
-Retire lands with drainage disposal problems	_____	_____
-Improve pest-control practices	_____	_____
-Avoid use of high-salinity irrigation water	_____	_____
-Manage irrigation tailwater to reduce pesticides	_____	_____
-Manage drainage timing to reduce instream impacts	_____	_____
-Treat drainage to remove salt or other pollutants	_____	_____
-Dilute pollutants in Delta inflows from SJR using stored water	_____	_____
Management of Urban/Industrial Drainage and Wastewater Discharge	_____	_____
Actions:		
-Retain and manage stormwater runoff	_____	_____
-Implement urban awareness/education programs	_____	_____
-Treat discharges to remove problem constituents	_____	_____
-Construct wetlands to treat wastewater effluent	_____	_____
-Increase key nutrient inputs to estuary	_____	_____
-Enforce wastewater discharge requirements	_____	_____
-Prevent toxic discharges from industrial plants	_____	_____
Dredged Material Management	_____	_____
Actions:		
-Limit dredging to slack tides	_____	_____
-Limit dredging to avoid fish migration periods	_____	_____
-Use techniques to localize sediment movement	_____	_____
-Dispose dredged materials at nonaquatic or other suitable sites	_____	_____
-Remove contaminated sediments in critical habitat sites	_____	_____
-Ensure material used for levee maintenance is noncontaminated	_____	_____

	Importance 1 - 5	Core Action C
Management of Abandoned-Mine Drainage	_____	_____
Actions:		
-Manage discharges from abandoned mines	_____	_____
-Remediate abandoned mining sites discharging pollutants	_____	_____

**Action Categories for Improving System Reliability**

Levee Maintenance and Stabilization	_____	_____
Actions:		
-Maintain and stabilize existing levees	_____	_____
-Modify agricultural practices to reduce subsidence	_____	_____
-Use infilling to correct past subsidence	_____	_____
-Implement uniform maintenance standards	_____	_____
-Provide funding for maintenance and stabilization	_____	_____
Improvement of Flood Protection Levels and Seismic Stabilities	_____	_____
Actions:		
-Reconstruct levees to higher design standards	_____	_____
-Reconstruct levees to higher seismic standards	_____	_____
-Relocate levees to more stable sites	_____	_____
-Widen floodways to increase flood conveyance	_____	_____
-Establish and manage flood overflow areas	_____	_____
Rerouting and Protection of Infrastructure from Flooding and Seismic Risk	_____	_____
Actions:		
-Maintain/reconstruct levees around infrastructure	_____	_____
-Reconstruct infrastructure to increase reliability	_____	_____
-Relocate/reroute infrastructure	_____	_____
Establishment of Long-Term Funding Mechanisms	_____	_____
Actions:		
-Establish a disaster contingency funding program	_____	_____
-Establish a Bay-Delta financing authority	_____	_____
-Provide low-cost debt financing for local agencies	_____	_____
-Establish a bond financing mechanism	_____	_____
-Establish a statewide water utility surcharge	_____	_____

COMMENTS: \_\_\_\_\_  
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