

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 08/15)

Fiscal Year 2016-17	Business Unit 3600	Department Department of Fish and Wildlife	Priority No.
Budget Request Name 3600-401-BCP-BR-2016-MR		Program VARIOUS	Subprogram VARIOUS

Budget Request Description
 2016-17 Drought Modifications and Redirection to Benefit Delta Smelt

Budget Request Summary

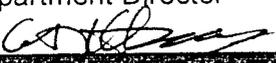
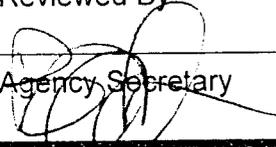
The California Department of Fish and Wildlife (Department) proposes a redirection of drought response funding proposed in the Governor's Budget by \$4.2 million General Fund to address immediate needs to protect and enhance Delta smelt populations which have been severely depleted by the drought. The Department also proposes continuation of 10 of the 13 limited-term positions proposed in the Governor's Budget. Anticipating continued drought conditions, The Department will focus Fiscal Year (FY) 2016-17 efforts on the highest priority needs. This proposal complements and builds upon the immediate actions being implemented through the Governor's Drought Task Force and is consistent with the California Water Action Plan and the joint agency Drought Operations Plan.

Requires Legislation <input type="checkbox"/> Yes <input type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	
Does this BCP contain information technology (IT) components? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO	Date

For IT requests, specify the date a Special Project Report (SPR) or Feasibility Study Report (FSR) was approved by the Department of Technology, or previously by the Department of Finance.

FSR SPR Project No. Date:

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By	Date	Reviewed By	Date
Department Director 	Date 5/10/16	Agency Secretary 	Date 5/10/16

Additional Review: Capital Outlay ITCU FSCU OSAE CALSTARS Dept. of Technology

BCP Type: Policy Workload Budget per Government Code 13308.05

PPBA Original Signed by Amanda Martin	Date submitted to the Legislature 5/13/16
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Analysis of Problem

A. Budget Request Summary

The California Department of Fish and Wildlife (Department) proposes a redirection of drought response funding proposed in the Governor's Budget by \$4.2 million General Fund to address immediate needs to protect and enhance Delta smelt populations which have been severely depleted by the drought. The Department also proposes continuation of 10 of the 13 limited-term positions proposed in the Governor's Budget. Anticipating continued drought conditions, The Department will focus Fiscal Year (FY) 2016-17 efforts on the highest priority needs. This proposal complements and builds upon the immediate actions being implemented through the Governor's Drought Task Force and is consistent with the California Water Action Plan and the joint agency Drought Operations Plan.

B. Background/History

The Governor's Budget proposed \$17.7 million (\$15.7 million General Fund, \$2 million Hatcheries and Inland Fisheries Fund) for FY 2016-17 to continue high priority emergency drought response actions. This May Revision proposal recognizes that changing conditions allow for a redirection of drought response funding, while sustaining resources needed to address the most critical impacts of the drought on fish and wildlife in California.

Delta smelt have experienced extremely poor habitat conditions during the last four years of unprecedented drought. Consequently, populations of smelt are at historic lows, and the scientific community has begun to assess the viability of the species. This winter's increase in rainfall, the state's existing aquatic weed control program, and recent advances in non-lethal means for monitoring Delta smelt provide an opportunity to accelerate habitat improvement and aggressively reduce other stressors for Delta smelt.

C. State Level Considerations

This proposal supports the Administration's direction to provide a quick and thorough response to the drought. The Department will work closely with other state departments, including the Department of Water Resources (DWR) and State Water Resource Control Board (SWRCB), as well as federal agencies, to provide the most appropriate and effective drought response. This proposal is also consistent with the Department's strategic plan, which requires the Department to develop collaborative approaches and create partnerships to restore, enhance, manage, and protect wildlife and their habitats.

D. Justification

This proposal will reduce funding for the following drought activities and redirect it to benefit Delta smelt.

Covering the Key 2016 Statewide Drought Response Needs

Governor's Budget Proposal: \$3.6 million

May Revision Proposal: Reduce the requested funding to \$2.4 million.

The Department intends to continue both rescuing and relocating vulnerable, native fish populations and collecting stream and river fish and habitat data to evaluate river and fish recovery from the drought and any ongoing, environmental stress conditions. These actions are needed for at-risk salmon and trout species contributing to ocean and river fisheries and the most at-risk threatened and endangered fish species. The Department is able to reduce its request by \$1.2 million for two reasons: a) improved river conditions in northern California mean that the most at-risk fish populations likely will be confined to southern California (i.e., south Sierra Nevada, San Joaquin Valley, southwest desert, and coastal watersheds from San Diego to San Mateo counties); b) aquatic stressor monitoring is now reduced to key watersheds across the State.

Analysis of Problem

Water Infrastructure and Conveyance Improvements on Department Wildlife Areas and Ecological Reserves

Governor's Budget Proposal: \$3.0 million

May Revision Proposal: Reduced the requested funding to \$2.0 Million

Increased river flows and improved reservoir conditions this March are a welcome development for wetlands and the wildlife they support. Even with the rains, most of California is experiencing drought conditions, which are projected to continue. This is especially true in the San Joaquin Valley and Tulare Basin and Department lands in the southern portions of the state, where water supplies are low, drought conditions are extreme to exceptional, groundwater reserves are rapidly depleting, and wildlife are drought stressed. We anticipate some relief in the Sacramento Valley and thus reduced the need for emergency response. Water infrastructure and conveyance improvements completed on Department lands in the San Joaquin and Tulare Basins and Department lands in the southern portions of the state in response to the Governor's Executive Orders have made important improvements in the Department's ability to make the most efficient use of available water for wetlands and wildlife. It is important for this progress to continue, as much work remains to instill resiliency in water infrastructure and conveyance systems that support wetlands essential for wildlife, including threatened and endangered species. The \$2.0 million requested will continue the important work of conserving wetlands and wildlife in the most water efficient way possible.

Complete Essential Water Treatment Systems to Support State Hatcheries

Governor's Budget Proposal: \$4.0 million

May Revision Proposal: Reduced the requested funding to \$2.0 Million

This proposal would eliminate \$2.0 million General Fund by eliminating the proposed Hot Creek Hatchery improvements, and sustain \$2.0 million Hatcheries and Inland Fisheries Fund for the infrastructure improvement project for Darrah Springs Hatchery to eliminate whirling disease.

Applying the proven technology of filtration and ultraviolet irradiation, along with epoxy coating of the concrete fish rearing ponds will eliminate the parasite causing whirling disease which became a problem during the drought and caused cessation of fish stocking. Darrah Springs Hatchery is one for the Department's most cost efficient facilities and it is a prudent use of existing monies, will enhance recreational angling in the region, and will protect native fishes downstream from the hatchery discharge from contracting this deadly disease. The Department proposes cancelling the infrastructure improvement project for Hot Creek Hatchery to improve flows and eliminate whirling disease. In light of recent information gathered on the Hot Creek Hatchery, further research and planning will need to be performed before the Department undertakes this project.

In addition to the drought reduction, this proposal will redirect \$4.2 million General Fund for the following activities to benefit Delta smelt:

Habitat Restoration and Food Production

May Revision Proposal: \$2.0 million

The Department will create an adaptive management pilot project to promote food production where Delta smelt are known to occur, and complete a restoration design plan to restore intertidal habitat near the confluence of the Sacramento and San Joaquin rivers. Food limitation remains a major stressor affecting Delta smelt related to insufficient transport of food to downstream areas inhabited by the fishes. Habitat restoration that converts shallow water habitat to intertidal elevations and modifies tidal circulations to restore historic tidal channel patterns can reduce invasive aquatic weeds, reduce predation, and improve food webs in the western Delta.

Analysis of Problem

Aquatic Weed Control

May Revision Proposal: \$1.8 million

The Department will provide support to California State Parks, Division of Boating and Waterways (DBW) for a number of items to ensure the program is providing maximum benefits to Delta smelt habitat focused on Franks Tract and Sherman Lake. As part of this effort, the Department and collaborating agencies will:

- Assist DBW in Delta-wide mapping of aquatic weeds,
- Work with DWR to conduct a retrospective analysis regarding the ecological effects from previous weed control, using IEP and other data,
- Conduct an ecological effectiveness study in 2016,
- Provide weed disposal areas to accommodate the full potential of the weed removal program,
- Provide funding or other support to DBW including and expanded evaluation program in 2017 to improve the effectiveness of the aquatic weed control program specific to Delta smelt, consistent with the a new Biological Opinion being developed with the U.S. Fish and Wildlife Service for expanded control activities in the Delta. Performance metrics include aquatic weed distribution, Delta smelt distribution, turbidity, salinity, clam, macroinvertebrate, and zooplankton densities; temperature, and predator distribution and abundance.
- The Department will work with DWR's and it's modeling team to simulate the effect of aquatic weeds on tidal flows in key areas like Franks Tract. This tool will be used to generate hypotheses about the spatial effects of different actions. This tool will be used to generate hypotheses about the spatial effects of different treatment actions.

Performance metrics include aquatic weed distribution; Delta smelt distribution, turbidity, salinity, clam, macroinvertebrate, and zooplankton densities, temperature, and predator distribution and abundance.

Enhanced Monitoring and Targeted Studies

May Revision Proposal: \$400 Thousand

The Department will oversee the development of non-lethal monitoring of Delta smelt distribution, and create a pilot project using new technologies for turbidity monitoring to further refine data on smelt location and movement during periods of conflict with water pumps. Species conservation relies on monitoring for reliable distribution patterns and population estimates. Modernizing monitoring through Environmental DNA and Smelt Cam technologies improves data collection while reduces impacts to the actual fish. Smarter data collection can be linked with targeted research to better inform management during high conflict periods such as winter storms, turbidity, and increased chance of Delta smelt movement towards the water pumps.

E. **Outcomes and Accountability**

This proposal will reduce the adverse impacts of the drought on Delta smelt and improve overall ecological conditions in the summer and fall of 2016. The proposal includes performance metrics and control measures such as monitoring of project effectiveness to ensure that the proposed actions are achieving their intended objectives, the Department will continue to monitor expenditures to ensure that the funds are spent appropriately and consistent with the intent of this proposal. In addition, the Department will continue to provide monthly drought expenditure reports to the Department of Finance.

Analysis of Problem

F. Analysis of All Feasible Alternatives

Alternative 1: Redirect \$4,200,000 General Fund included in the current Governor's Budget for emergency drought response to these actions to protect and enhance Delta smelt.

Cost: \$4.2 million General Fund

Advantage: This alternative will allow the Department to protect and enhance Delta smelt by redirecting funding previously intended for drought projects.

Disadvantage: This alternative requires a redirection of General Fund.

Alternative 2: Sustain the Governor's Budget proposal of \$17.7 million and provide an additional \$4.2 million to benefit Delta smelt

Cost: \$21.9 million General Fund

Advantage: The Department will be able to fully implement both the drought response funding proposal included in the Governor's Budget and carryout projects to protect and enhance Delta smelt.

Disadvantage: This alternative relies on an additional General Fund obligation of \$4.2 million in addition to the previously approved \$17.7 million drought funding.

Alternative 3: Reduce drought funding by \$4.2 million and do not redirect funding to protect and enhance Delta smelt.

Cost: -\$4.2 million General Fund

Advantage: This alternative does not require a redirection of General Fund.

Disadvantage: Due to the lack of redirected General Fund, the Department would not be able to protect and enhance Delta smelt.

G. Implementation Plan

This proposal will be implemented on July 1, 2016 or upon enactment of the budget.

H. Supplemental Information

N/A.

I. Recommendation

The Department recommends **Alternative 1:** Redirect \$4,200,000 General Fund included in the current Governors budget for emergency drought response to these actions to protect and enhance Delta smelt.

BCP Fiscal Detail Sheet

BCP Title: Improved Drought Conditions

DP Name: 3600-400-BCP-DP-2016-MR

Budget Request Summary

	FY16					
	CY	BY	BY+1	BY+2	BY+3	BY+4
Positions - Temporary	0.0	-3.0	0.0	0.0	0.0	0.0
Total Positions	0.0	-3.0	0.0	0.0	0.0	0.0
Salaries and Wages						
Earnings - Temporary Help	0	-244	0	0	0	0
Total Salaries and Wages	\$0	\$-244	\$0	\$0	\$0	\$0
Total Staff Benefits	0	-117	0	0	0	0
Total Personal Services	\$0	\$-361	\$0	\$0	\$0	\$0
Operating Expenses and Equipment						
5301 - General Expense	0	-10	0	0	0	0
5302 - Printing	0	-3	0	0	0	0
5304 - Communications	0	-5	0	0	0	0
5306 - Postage	0	-1	0	0	0	0
5320 - Travel: In-State	0	-4	0	0	0	0
5322 - Training	0	-130	0	0	0	0
5324 - Facilities Operation	0	-18	0	0	0	0
5326 - Utilities	0	-6	0	0	0	0
5340 - Consulting and Professional Services - Interdepartmental	0	-3,626	0	0	0	0
5344 - Consolidated Data Centers	0	-2	0	0	0	0
5346 - Information Technology	0	-2	0	0	0	0
5368 - Non-Capital Asset Purchases - Equipment	0	-24	0	0	0	0
539X - Other	0	-8	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$-3,839	\$0	\$0	\$0	\$0
Total Budget Request	\$0	\$-4,200	\$0	\$0	\$0	\$0
Fund Summary						
Fund Source - State Operations						
0001 - General Fund	0	-4,200	0	0	0	0
Total State Operations Expenditures	\$0	\$-4,200	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$-4,200	\$0	\$0	\$0	\$0

Program Summary

Program Funding

2590 - Biodiversity Conservation Program	0	-3,200	0	0	0	0
2600019 - Hatcheries and Fish Planting Facilities	0	-1,000	0	0	0	0
Total All Programs	\$0	\$-4,200	\$0	\$0	\$0	\$0

BCP Fiscal Detail Sheet

BCP Title: Emergency Drought Actions for Delta Smelt

DP Name: 3600-402-BCP-DP-2016-MR

Budget Request Summary

	FY16					
	CY	BY	BY+1	BY+2	BY+3	BY+4
Operating Expenses and Equipment						
5340 - Consulting and Professional Services - External	0	4,200	0	0	0	0
Total Operating Expenses and Equipment	\$0	\$4,200	\$0	\$0	\$0	\$0
Total Budget Request	\$0	\$4,200	\$0	\$0	\$0	\$0

Fund Summary

Fund Source - State Operations						
0001 - General Fund	0	4,200	0	0	0	0
Total State Operations Expenditures	\$0	\$4,200	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$4,200	\$0	\$0	\$0	\$0

Program Summary

Program Funding						
2590 - Biodiversity Conservation Program	0	4,200	0	0	0	0
Total All Programs	\$0	\$4,200	\$0	\$0	\$0	\$0