

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. 14
Budget Request Name 3600-080-BCP-DP-2016-GB		Program Various	Subprogram

Budget Request Description

Medical Marijuana - Implement AB 243, 266 & SB 643 To Protect Water Quality and Instream Flows Related to Cannabis Cultivation

Budget Request Summary

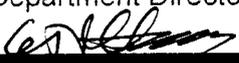
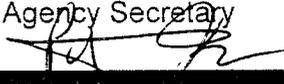
The Department of Fish and Wildlife (Department) requests \$7.7 million General Fund 31.0 permanent positions, beginning in Fiscal Year 2016-17, to meet the requirements of Assembly Bill (AB) 243, AB 266, and Senate Bill (SB) 643 (Chapters 688, 689 and 719, Statutes of 2015) related to marijuana cultivation to establish the Watershed Enforcement Program and permanent multiagency task force. In addition to the task force, the legislation mandates that individual and cumulative effects of water diversions and discharge do not affect instream flows for fishery needs.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	
Does this BCP contain information technology (IT) components? <input type="checkbox"/> Yes <input checked="" 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 12/18/15	Agency Secretary 	Date 12/18/15

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 1-8-16
------	-------------------------------------	---

BCP Fiscal Detail Sheet

BCP Title: Medical Marijuana Enforcement (AB 243, AB 266, SB 643)

DP Name: 3600-080-BCP-DP-2016-GB

Budget Request Summary

	FY16					
	CY	BY	BY+1	BY+2	BY+3	BY+4
Positions - Permanent	0.0	31.0	31.0	31.0	31.0	31.0
Total Positions	0.0	31.0	31.0	31.0	31.0	31.0
Salaries and Wages						
Earnings - Permanent	0	2,125	2,125	2,125	2,125	2,125
Total Salaries and Wages	\$0	\$2,125	\$2,125	\$2,125	\$2,125	\$2,125
Total Staff Benefits	0	1,183	1,183	1,183	1,183	1,183
Total Personal Services	\$0	\$3,308	\$3,308	\$3,308	\$3,308	\$3,308
Operating Expenses and Equipment						
5301 - General Expense	0	148	148	148	148	148
5302 - Printing	0	19	19	19	19	19
5304 - Communications	0	68	68	68	68	68
5306 - Postage	0	10	10	10	10	10
5320 - Travel: In-State	0	47	47	47	47	47
5322 - Training	0	83	83	83	83	83
5324 - Facilities Operation	0	186	186	186	186	186
5326 - Utilities	0	62	62	62	62	62
5342 - Departmental Services	0	1,452	1,452	1,452	1,452	1,452
5344 - Consolidated Data Centers	0	19	19	19	19	19
5346 - Information Technology	0	23	23	23	23	23
5368 - Non-Capital Asset Purchases - Equipment	0	2,052	156	156	156	156
539X - Other	0	178	178	178	178	178
Total Operating Expenses and Equipment	\$0	\$4,347	\$2,451	\$2,451	\$2,451	\$2,451
Total Budget Request	\$0	\$7,655	\$5,759	\$5,759	\$5,759	\$5,759
Fund Summary						
Fund Source - State Operations						
0001 - General Fund	0	7,655	5,759	5,759	5,759	5,759
Total State Operations Expenditures	\$0	\$7,655	\$5,759	\$5,759	\$5,759	\$5,759
Total All Funds	\$0	\$7,655	\$5,759	\$5,759	\$5,759	\$5,759

Program Summary

Program Funding

2590 - Biodiversity Conservation Program	0	2,990	2,894	2,894	2,894	2,894
2605 - Enforcement	0	4,665	2,865	2,865	2,865	2,865
Total All Programs	\$0	\$7,655	\$5,759	\$5,759	\$5,759	\$5,759

Personal Services Details

Salary Information

Positions	Min	Mid	Max	<u>CY</u>	<u>BY</u>	<u>BY+1</u>	<u>BY+2</u>	<u>BY+3</u>	<u>BY+4</u>
0762 - Environmental Scientist (Eff. 07-01-2016)				0.0	1.0	1.0	1.0	1.0	1.0
0764 - Sr Envirnal Scientist (Supvry) (Eff. 07-01-2016)				0.0	2.0	2.0	2.0	2.0	2.0
0765 - Sr Envirnal Scientist (Spec) (Eff. 07-01-2016)				0.0	12.0	12.0	12.0	12.0	12.0
8418 - Lieut (Supvr) (Eff. 07-01-2016)				0.0	2.0	2.0	2.0	2.0	2.0
8421 - Warden (Eff. 07-01-2016)				0.0	14.0	14.0	14.0	14.0	14.0
Total Positions				0.0	31.0	31.0	31.0	31.0	31.0

Salaries and Wages	<u>CY</u>	<u>BY</u>	<u>BY+1</u>	<u>BY+2</u>	<u>BY+3</u>	<u>BY+4</u>
0762 - Environmental Scientist (Eff. 07-01-2016)	0	56	56	56	56	56
0764 - Sr Envirnal Scientist (Supvry) (Eff. 07-01-2016)	0	214	214	214	214	214
0765 - Sr Envirnal Scientist (Spec) (Eff. 07-01-2016)	0	906	906	906	906	906
8418 - Lieut (Supvr) (Eff. 07-01-2016)	0	808	808	808	808	808
8421 - Warden (Eff. 07-01-2016)	0	141	141	141	141	141
Total Salaries and Wages	\$0	\$2,125	\$2,125	\$2,125	\$2,125	\$2,125

Staff Benefits	<u>CY</u>	<u>BY</u>	<u>BY+1</u>	<u>BY+2</u>	<u>BY+3</u>	<u>BY+4</u>
5150350 - Health Insurance	0	315	315	315	315	315
5150450 - Medicare Taxation	0	31	31	31	31	31
5150500 - OASDI	0	132	132	132	132	132
5150600 - Retirement - General	0	296	296	296	296	296
5150620 - Retirement - Public Employees - Safety	0	370	370	370	370	370
5150800 - Workers' Compensation	0	39	39	39	39	39
Total Staff Benefits	\$0	\$1,183	\$1,183	\$1,183	\$1,183	\$1,183
Total Personal Services	\$0	\$3,308	\$3,308	\$3,308	\$3,308	\$3,308

Analysis of Problem

A. Budget Request Summary

The Department of Fish and Wildlife (Department) requests \$7.7 million General Fund and 31.0 positions, beginning in Fiscal Year (FY) 2016-17, to meet the requirements of Assembly Bill (AB) 243, AB 266, and Senate Bill (SB) 643 (Chapters 688, 689 and 719, Statutes of 2015) and protect fish and wildlife resources from the harmful effects of marijuana cultivation.

AB 243 requires the department to establish a permanent multiagency task force to address the environmental impacts of marijuana cultivation and expand enforcement efforts statewide:

Fish and Game Code 12029(c) The department, in coordination with the State Water Resources Control Board (SWRCB), shall establish a permanent multiagency task force to address the environmental impacts of marijuana cultivation. The multiagency task force, to the extent feasible and subject to available Resources, shall expand its enforcement efforts on a statewide level to ensure the reduction of adverse impacts of marijuana cultivation on fish and wildlife and their habitats throughout the State.

Additionally, AB 243 requires the department to work with the Department of Food and Agriculture (CDFA) and the State Water Resources Control Board (SWRCB) to ensure that water diversions related to marijuana cultivation do not affect the instream flows needed for fish:

Business and Professions Code 19332(d) The CDFA, in consultation with the Department of Fish and Wildlife and the SWRCB, shall ensure that individual and cumulative effects of water diversion and discharge associated with cultivation do not affect the instream flows needed for fish spawning, migration, and rearing, and the flows needed to maintain natural flow variability.

This proposal would provide the required resources to meet these mandates. The Department is requesting 23.0 positions to expand the existing Watershed Enforcement Team Task Force (WETTF) from one team to three teams. The additional two teams would meet the provisions of AB 243 by expanding the task force to a statewide level, enabling the Department to provide coverage for the highest priority areas of the State where impacts on natural resources from marijuana cultivation are the greatest. The Department requests an additional 8.0 positions ensure protection of fish and wildlife resources within regulatory structures to be established by CDFA and the SWRCB in the licensing of cultivation sites and the issuance of water rights.

B. Background/History

Watershed Enforcement Program and Permanent Multiagency Task Force

California produces more marijuana from outdoor grows than any other state in the United States. Data from the U.S. Drug Enforcement Agency (USDEA) indicates that California had more than twice as many grow sites as any other state in 2014 (http://www.dea.gov/ops/cannabis_2014.pdf). Federal statistics indicate that marijuana is California's largest cash crop (valued at \$10 to \$14 billion annually). Large-scale cultivation of marijuana has proliferated in remote forested areas throughout California in response to ballot Proposition 215, the Compassionate Use Act (1996), which legalized the use and cultivation of marijuana for medical purposes. However, nearly all of the marijuana cultivation in drought-stricken watersheds within the State is occurring without regard for other applicable laws and regulations because cultivators do not apply for permits intended to protect water quality and fish and wildlife resources.

The Department has had an increasing role in working with allied agencies to address the environmental and criminal effects of marijuana operations. In the mid-2000s, the Department, through its Law Enforcement Division (LED), began to experience a rise in workload related to illegal marijuana grows on public lands. The LED approach during that time frame was from a law enforcement perspective, emphasizing coordinated law enforcement strikes to eradicate plants and arrest criminal operators. In 2007, the Department's LED started providing operational and planning support to allied

Analysis of Problem

support to allied agencies. The Department's engagement has evolved; it has moved away from a primary focus on eradication and the "war on drugs" to prioritization and emphasis on involvement where marijuana cultivation is impacting California's wildlife and environment. During this internal evolution away from a solely law enforcement perspective, the Department's other program staff have taken a leading role in assessing and attempting to remediate species harm from marijuana cultivation, and many programs at the Department are implicated, including, but not limited to, Coho salmon recovery, streambed alteration, endangered species, and habitat conservation.

Most growers on private land claim a right to grow under Proposition 215, but these cultivation sites cause significant environmental damage throughout California. Many of these growers appear to proceed with disregard for their natural surroundings. In some regions of California, unregulated marijuana growing may now be the primary threat to water quality and other beneficial uses such as salmon and steelhead and their habitats. The iconic species most directly affected by private land (non-trespass) marijuana grows include: Coho salmon; Chinook salmon, steelhead trout; coastal cutthroat trout; southern torrent salamander; tailed frog; northern spotted owl; and, Pacific fisher. Other species such as deer, bear, and various birds are also being harmed.

A study (Bauer et al.) conducted by Department staff and published in March 2015 revealed that during drought conditions water demand for marijuana cultivation exceeded the stream flow in three of four watersheds studied by the Department. Bauer et al. concluded that diminished stream flow from this water-intensive activity is likely to have lethal to sub-lethal effects on state- and federally-listed salmon and steelhead. The study results are consistent with the events that occurred in the summer of 2014 and again in July 2015, when water diversions for marijuana cultivation caused large segments of the study streams to run dry.

The Department, as the trustee agency of the State's fish and wildlife resources, has experience to prevent, assess, and remediate environmental damage from marijuana cultivation sites. One of the Department's top priorities is to prevent environmental damage impacting streams and habitat severely afflicted by the ongoing drought. In 2014, Department Wildlife Officers assisted with eradicating 609,480 plants from unlawful marijuana cultivation sites on private and public lands. These plants used approximately 4.6 million gallons of water per day. Department Wildlife Officers have also participated in reclamation efforts that included removal of 340,603 pounds of trash, 566,510 feet of poly pipe, 45,590 pounds of fertilizer, and 70 gallons of assorted hazardous chemicals from marijuana cultivation sites. The Department also removed 137 illegal dams, restoring waterways within these sites.

The Budget Act of 2014 appropriated resources to both the Department and the SWRCB to reduce environmental damage caused by marijuana cultivation on public and private lands in California. The Department received \$1.5 million and seven positions to create a multi-disciplinary Marijuana Task Force in coordination with the SWRCB, and to implement a priority-driven approach to address the natural resources damages resulting from marijuana cultivation on private lands in northern California and on high conservation value public lands. In September 2014, the Department and the SWRCB created the WETTF to begin to address these issues focusing in northern California.

In addition to the resources and staff appropriated in the 2014 budget, a trailer bill directed the Department to enforce the laws that protect against illegal streambed alterations, pollution, and litter of streams resulting from marijuana cultivation. Most notably, this bill expanded the Department's enforcement authority to impose administrative penalties outlined in Fish and Game Code Section 12025. To date, the WETTF has conducted 195 parcel inspections, served 64 Notice of Violations, documented 287 unlawful streambed alterations and 202 pollution violations. They have inspected over 30,000 plants within these parcels.

Analysis of Problem

Resource History (Dollars in thousands)

Program Budget	PY - 4	PY - 3	PY - 2	PY - 1	PY
Authorized Expenditures					1,501
Actual Expenditures					1,501
Revenues					0
Authorized Positions					7
Filled Positions					7
Vacancies					0

Workload History

Workload Measure	PY - 4	PY - 3	PY - 2	PY - 1	PY	CY
Joint Inspections Compiled					75	195
Administrative Civil Liability Actions Initiated					12	
Judicial Enforcement Actions Initiated					5	
Cleanup and Abatement Orders Issued or Notice of Violations					20	64

Water Rights and Instream Flows (Interim Flow Criteria, Policies and Water Rights Registrations/Permitting)

Anadromous salmonids have been in steady decline for over 30 years and many population segments have been placed on the State and Federal Endangered Species lists as threatened or endangered. Results from recent special studies in Northern California indicate that water demand for marijuana cultivation has the potential to alter natural instream flow regimes by diverting substantial portions of stream flows. Estimates of instream flow regime alterations from some Northern California watersheds indicate that water demand for marijuana cultivation exceeds streamflow during the low-flow period. Unfortunately, any alteration of the natural flow regime may result in ecosystem impacts, and the risk increases with increasing magnitude of flow alteration. More specifically, fish abundance, diversity and demographic rates have shown a consistent decline in response to instream flow regime alterations. For example, in the most impacted Northern California watersheds, alteration of instream flow regimes may have lethal and/or sub-lethal effects on state-and federally-listed salmon and steelhead trout and may cause further decline of sensitive amphibian species.

Instream Flow and Related Policies:

Whereas recent Department efforts in the area of instream flow protection have focused on drought emergency regulations to provide protection to specific fisheries in specific watersheds, AB 243 identifies a critical need for interim flow criteria or requirements that more broadly address the instream flow needs associated with marijuana cultivation activities throughout the State.

Since the passage of SBX7 1 in 2009, the Department, in coordination with the SWRCB, has been working to develop flow criteria pursuant to Water Code section 85086, subd. (c)(1) as well as conduct instream flow studies pursuant to the Public Resources Code (Pub. Resources Code, § 10000; Stream Flow Protection Standards). Coordinated efforts between the Department and the SWRCB to fulfill SBX7 1 and Public Resources Code section 10000 mandates have been underway since FY 2010-11.

Analysis of Problem

Current efforts are also being made to better understand the streamflow requirements of tributaries outside of the Bay-Delta watershed. In 2015, the Department initiated activities to enhance stream flows in five tributaries throughout the State (Mark West Creek, Mill Creek, Shasta River, South Fork Eel River, and Ventura River), in coordination with the SWRCB, under Action 4 of the California Water Action Plan. However, due to limited resources, the current effort is focused on the five tributaries identified as part of the Action Plan effort, and does not extend statewide. These are long-term efforts designed to enhance flows to address fishery streamflow needs and will not address the short-term need to protect instream flows for fishery resources in light of existing and new diversions for marijuana cultivation.

In 2014 and 2015, the Department worked with the SWRCB to adopt and implement drought emergency regulations to protect fishery resources. In 2014 the SWRCB adopted the Curtailment of Diversions due to Insufficient Flow for Specific Fisheries, which applied to Mill, Deer, and Antelope Creeks (tributaries to the Sacramento River) – California Code of Regulations §877. The Department in collaboration with NOAA Fisheries recommended minimum drought related flows to the SWRCB for anadromous salmonids. In 2015, the SWRCB adopted the Mill, Deer, and Antelope Creeks emergency regulation and adopted a new emergency regulation (Emergency Actions due to Insufficient Flow for Specific Fisheries in Tributaries to the Russian River – California Code of Regulations §876) for four Russian River tributaries (Dutch Bill Creek, Green Valley Creek, Mark West Creek, and Mill Creek). These emergency regulations required immediate actions to provide minimal protection for fishery resources during the drought. A significant portion of the emergency regulation work was done with redirected Department staff from regional offices and the Office of General Counsel.

Water Rights:

As a trustee agency, the Department evaluates all water right applications to appropriate water to limit adverse impacts to fish and wildlife. For each water right project, local site specific conditions are analyzed and appropriate conditions are developed and incorporated into SWRCB permits and registrations for the protection of fish and wildlife resources. The Department reviews all aspects of the application process, which includes: documents developed in compliance with the California Environmental Quality Act (CEQA), consideration of the project's effects on public trust resources, cumulative impacts from all diversions in the watershed, and the availability of unappropriated water for the project described in the water right application. In addition, the Department provides terms and conditions for water right registrations for appropriation of water for three types of uses: small domestic, livestock stock ponds, and small irrigation use. In some cases, Lake and Streambed Alteration Agreement and/or a California Endangered Species take authorization is required.

It is anticipated that the SWRCB will expand the geographic area for small irrigation use registrations to include areas where large marijuana cultivation operations are occurring. The Department will be involved in the development of the expanded program, including providing input on aspects needed to protect fish and wildlife. Once established, the Department will need to review the registrations and develop terms and conditions in a timely manner. Until the SWRCB expands the irrigation registration program, marijuana cultivators in most areas of the State who need to acquire appropriate permits will need to file more complex water right applications. The Department would continue to be engaged throughout the water rights permitting process.

C. State Level Considerations

This proposal will also involve the Department working closely with many state departments, including the CDFA, SWRCB, the Department of Parks and Recreation (Parks) and the Department of Forestry and Fire Protection (CAL FIRE) throughout the State to address the impacts of marijuana cultivation. For example, CAL FIRE is increasingly encountering grows during fire suppression operations and while in the field often finds unpermitted removal of trees resulting in the loss of timberland productivity.

These state agencies and other partners have sought to raise awareness of the natural resource damages from marijuana cultivation. That work garnered state, national, and international attention in numerous print and television media.

Analysis of Problem

In 2007, the Department established seven Strategic Initiatives that were identified as key areas of focus for planning and developing the Department's priorities. In addition to addressing the key mission of the Department (above), this proposal addresses three of these initiatives:

- **Initiative 1:** Enhance Communications, Education, and Outreach
An important part of the Department's operations is forming public partnerships to provide education and outreach throughout the State. The Department develops external partnerships, both private and public, to help to guide education on responsible use and conservation.
- **Initiative 4:** Developing and Enhancing Partnerships
Partnering with state and federal agencies and local organizations within California are a key component to the Department achieving program stability and successfully meeting mandates. Working partnerships allow multiple organizations to pool resources, both intellectual and manpower, in order to achieve the collective goals of the group. As the State grows and changes developing new and enhancing existing working partnerships will be critical to meeting the Department's mission.
- **Initiative 7:** Expand Scientific Capacity.
The underlying strategy is to raise the level of science carried out by Department employees and make our data readily available. This will increase staff's acceptance as authorities in their fields and facilitate their findings and opinions being accepted by other agencies, legislators and stakeholders.

D. Justification

Watershed Enforcement Program and Permanent Multiagency Task Force (26.0 positions)

The remediation of existing marijuana cultivation sites is complex and requires significant Department staff time and personnel expenditures. Typical commercial marijuana cultivation operations involve: (1) bulldozing and grading sites; (2) road building; (3) conversion of timberland; (4) construction of permanent and temporary structures; (5) extensive use of water and irrigation pipe; (6) pesticide and rodenticide use; (7) storage and handling of hazardous materials; (8) discharge of pollutants into waterways; (9) erosion and sedimentation and other water quality impacts; (10) generation of hazardous waste; (11) operation of portable diesel generators or pumps; (12) poaching; (13) habitat fragmentation and conversion; and, (14) the death of threatened and endangered species and other animals. Many sites are located in remote, forested, and mountainous location where detection is minimized. Cumulatively, these impacts are threatening California's natural resources in an unprecedented manner.

These operations, whether on public or private lands, are also increasing the threat of wildfires. The living arrangements on these remote grow sites, unwise vegetation management, and poor equipment management or installation all increase fire risk in remote areas. Haphazard and unregulated land conversion causes the same effect. This timberland conversion is happening at a rapid pace, and has resulted in CalFire taking more enforcement actions. Marijuana grow site workers can also create serious wildfire hazards by using campfires for cooking, heat, and sterilizing water. The 2009 La Brea wildfire began in the Los Padres National Forest in Santa Barbara County from illegal cooking fires at a known outdoor grow site. The suppression and resource damage costs of that fire were almost \$35 million.

These impacts can hinder progress made by the Department to protect fish and restore water quality. For example, California has spent hundreds of millions of dollars over the past several decades restoring native anadromous fish habitat. In FY 2012-13, the Department's Fisheries Restoration Grants Program funded more than \$13 million in projects designed to recover imperiled populations of salmon and steelhead. This restoration effort and those through the SWRCB granting programs are making great strides in protected watersheds. In watersheds that contain hundreds of marijuana cultivation sites, the serious resources damage can adversely affect this restoration work. Recently, the Department has received field reports for at least 19 streams in Northern California, all of which

Analysis of Problem

contain state or federally-listed anadromous fish, which are negatively impacted by water diversion and chemical runoff. The situation is dire for fish, especially considering that law enforcement estimates there are at least 4,100 marijuana grows in the County of Humboldt alone, in addition to those found in other California counties

Current resources allow the WETTF to cover seven counties (Humboldt, Shasta, Trinity, Mendocino, Tehama, Butte, Lassen). This proposal will allow the Department to expand our target area to other counties with the greatest environmental need. While the Department has prioritized available resources on the most impacted areas, the data clearly show the need for action in other parts of the State. USDEA data below shows the number of grow sites in each county between 2010 and 2014. These were a combination of public and private grow sites which were removed. While the data does not include all "215 grow sites" within California that need to be inspected it does point out the statewide problem of marijuana cultivation. Several of these sites were replanted year after year. Each grow site is only listed once even if replanted several times throughout this time period.

USDEA Domestic Cannabis Eradication Suppression Program data between 2010 – 2014 for each County:

County	# of Grows
Alameda	13
Alpine	4
Amador	8
Butte	45
Calaveras	15
Colusa	19
Contra Costa	1
Del Norte	26
El Dorado	29
Fresno	59
Glenn	34
Humboldt	33
Imperial	0
Inyo	11
Kern	77
Kings	2
Lake	83
Lassen	4
Los Angeles	101
Madera	60
Marin	12
Mariposa	56
Mendocino	71
Merced	13
Modoc	7
Mono	1
Monterey	54
Napa	21
Nevada	22
Orange	9
Placer	13
Plumas	19
Riverside	131
Sacramento	11
San Benito	4
San Bernardino	87
San Diego	123
San Francisco	2

Analysis of Problem

San Joaquin	12
San Luis Obispo	26
San Mateo	11
Santa Barbara	50
Santa Clara	83
Santa Cruz	17
Shasta	87
Sierra	4
Santa Clara	83
Santa Cruz	17
Shasta	87
Sierra	4
Siskiyou	69
Solano	0
Sonoma	9
Stanislaus	12
Sutter	0
Tehama	91
Trinity	143
Tulare	97
Tuolumne	63
Ventura	97
Yolo	3
Yuba	7

Combining positions provided by the Budget Act of 2014 with existing resources, the current WETTF team is composed of eight enforcement and five scientific staff. The Department proposes additional staffing consistent with the makeup of the existing team to provide for an additional two teams. This will require 26 new positions (16 enforcement and 10 scientific staff). Following are detailed descriptions of the proposed duties for the requested positions.

Law Enforcement (16 Positions)

14 Wildlife Officers: These law enforcement positions are needed for statewide coverage and will perform complex investigations dealing with environmental and health and safety violations; file formal complaints and issue violations of Fish & Game Code sections 1602, 5650, and 5652 under Fish and Game administrative authority; conduct tactical entry operations into marijuana cultivation sites and provide security to civilian staff during sampling and evidence gathering; perform eradication and reclamation of these sites when necessary and coordination with allied law enforcement agencies; ensure data collection is being completed; interview witnesses and informants and take custody of physical evidence; secure and serve search warrants; complete crime reports; testify in court and coordinate cases with the district attorney, attorney general and circuit prosecutors; and take the lead in the investigation and coordination of the eradication and reclamation efforts for marijuana cultivation sites discovered on state-owned lands. These officers may serve as resources for allied state agencies such as CAL FIRE and Parks.

2 Lieutenant Supervisors: These law enforcement supervisors will be first line supervisors for the Wildlife Officers. They will also perform all duties mentioned above when needed. They will ensure the work load is being completed accurately and completely. They will designate environmental target areas for the team members to inspect. They will liaison with other supervisory staff to ensure deconfliction and notifications of inspections. They will be the Incident Commanders on scene during the inspection process and complete the Incident Action Plans under State Emergency Management System's Incident Command System. They will monitor budgets for individual staff and prepare monthly reports and letters of correspondence as required. They will ensure team members are meeting Department mandated training requirements.

Analysis of Problem

Resource Assessment (10 Positions)

7 SENIOR ENVIRONMENTAL SCIENTIST SPECIALIST plus 1 ENVIRONMENTAL SCIENTIST:

These additional environmental scientist positions are needed for statewide coverage. These positions would conduct inspections on lands affected by marijuana cultivation to determine the extent of the damage to fish and wildlife, and develop remedial actions that could be taken to mitigate the damage. Scientists would conduct rapid watershed assessments to help prioritize target areas, and conduct research on environmental effects associated with marijuana cultivation. These positions will ensure that growers request and obtain approvals and permits just like any other project proponent, developer, or agricultural producer must under the California Endangered Species Act, the Department's streambed alteration agreement program, other departmental regulatory programs, or other provisions of the Fish and Game Code.

2 SENIOR ENVIRONMENTAL SCIENTIST SUPERVISOR: These environmental scientist supervisors will be first line supervisors for the environmental scientists. They will also perform all duties mentioned above when needed. They will ensure the work load is being completed accurately and completely. They will correspond with the lieutenant supervisor to help designate environmental target areas for the inspection team. They will maintain environmental databases concerning each grow site inspected. They will review all environmental reports, notice of violations and correspondence from environmental science staff.

Workload Matrix – Watershed Enforcement Program and Permanent Multiagency Task Force

Positions Requested	Workload	Workload Standard	Basis for Standard
14.0 Wildlife Officers	Performs specialized environmental investigations targeting illegal marijuana cultivation sites. These positions work within a joint task force of Department environmental scientists and SWRCB personnel.	Performs specialized environmental investigations targeting illegal marijuana cultivation sites; work within a WETTF of Department environmental scientists and SWRCB personnel; responsible for intelligence gathering and case management work; conduct scout and tactical entry missions with personnel specific to details identified by the WETTF = 35%; perform eradication and/or reclamation of marijuana cultivation sites relative to the task force operations plans = 10%; investigates the importation, buying and selling, transportation and possession of environmental and narcotic related crimes relative to task force identified details = 10%; provide and collect intelligence reports to WETTF members; searching for and take custody of physical evidence relating to marijuana cultivation crimes relative to task force details; seizure of evidence including asset forfeiture = 15%; Assist legal counsel in developing prosecutorial records; coordinate cases with the district attorney, attorney general, and circuit prosecutors; prepare complex search warrants including wiretap, pen register and tracker warrants; follow up with court subpoenas and provide testimony in court = 15%; In conjunction with department legal counsel and the WETTF chain of command, incumbent will prepare case reports and	Accumulated work effort / time of wildlife officers working on the WETTF.

Analysis of Problem

		findings for Fish and Game Code 12025(e) which provides administrative penalties for violators who have violated Fish and Game Code sections 1602, 5650, or 5652 in connection with the production or cultivation of a controlled substance = 15%. Based on the existing Warden positions that support the current WETTF, this requested position will work full time. 14 positions = 24,892 hours	
2.0 Lieutenant Supervisors	Plans, oversees and directs the work of the WETTF targeting illegal marijuana cultivation sites; provides guidance and direction to wardens and WETTF members conducting complex investigations; takes lead on all WETTF operations; reviews criminal reports and recommends corrections as necessary; makes decisions or recommendations concerning arrest and prosecution of violators; maintains liaisons and coordinates watershed impact activities with department staff and other agencies.	Plans, oversees and directs the work of the WETTF targeting illegal marijuana cultivation sites; provides guidance and direction to wardens and WETTF members conducting complex investigations; takes lead on all WETTF operations = 25%; reviews criminal reports and recommends corrections as necessary; makes decisions or recommendations concerning arrest and prosecution of violators = 10%; maintains liaisons and coordinates watershed impact activities with department staff, SWRCB and other local and governmental agencies to prioritize enforcement efforts in high value watersheds where impacts from marijuana grow sites are acute or rising = 20%; reviews and prepares enforcement special detail summaries; reviews and coordinates regulation proposals; monitors budgets for individual staff; prepares monthly reports and letters of correspondence as required; develops and maintains various databases; develops and administers work plans, team plans, duty assignments and specialized enforcement details and Incident Action Plans under State Emergency Management System's Incident Command System = 25%; ensures all WETTF members are coordinating with Department legal counsel in developing prosecutorial records; coordination of cases with the district attorney, attorney general, and circuit prosecutors; ensures preparation of complex search warrants including wiretap, pen register and tracker warrants; follow up with court subpoenas; oversee administrative functions for the WETTF = 20%. Based on the existing Lieutenant that supports the current WETTF, this requested position will work full time. 2 positions = 3,556 hours	Accumulated work effort / time of lieutenant supervisor working on the WETTF.
7.0 Senior Environmental Scientist Specialist Plus	Coordinate with law enforcement, SWRCB and other local, state and federal agencies to prioritize enforcement efforts in high value watersheds where	<ul style="list-style-type: none"> • 8.0 positions= 14,224 hours • Conduct inspections of existing marijuana cultivation sites for compliance with Fish and Game Code. Coordinate with Law Enforcement and SWRCB staff on the prioritization of sites in high value watersheds; review watershed and 	Based on past Department participation in coordinated environmental investigation and

Analysis of Problem

<p>1.0 Environmental Scientist</p>	<p>impacts from marijuana grows are acute or rising; review pertinent data and information to prepare for inspections; perform site inspections; write-up resource damage assessment reports and remediation plans; assess and analyze the potential environmental impacts associated with marijuana cultivation; develop site-specific conditions needed to protect fish, wildlife, and their habitat; prepare and testify at administrative and judicial enforcement proceedings; develop permits and regulations; assist with outreach and education to the regulated public; evaluate local ordinances related to marijuana cultivation to ensure protection of fish and wildlife.</p>	<p>resource data in preparation. Report preparation. Requires 6,286 hours per year.</p> <ul style="list-style-type: none"> • Prepare Lake and Streambed Alteration Agreement permits for sites. Develop conditions specific to sites; coordinate with Water Branch flow and water right staff on flow conditions; negotiate with applicants; conduct site inspections. Requires 3,171 hours per year. • Participation in Administrative Civil Penalty proceedings as expert witness; coordination with Law Enforcement and Legal staff; support cases taken through the County DA as criminal law enforcement. Requires 2,366 hours per year. • Review of SWRCB policies and statewide coordination of permitting processes, including participation in SWRCB workshops and hearings to provide regional information regarding fish and wildlife. Requires 800 hours per year. • Reviews remediation plans for cleanup of hazardous materials, stream alterations, and erodible soils. Requires 458 hours per year. • Develop education and outreach materials and presentations; coordinate with SWRCB on joint efforts. Requires 1,142 hours per year. 	<p>enforcement programs and processes, and permitting. Accumulated work effort consistent with other Environmental Scientists in the Department working with specialized programs</p>
<p>2.0 Senior Environmental Scientist Supervisor</p>	<p>Plans, oversees and directs the work of the Department's scientific staff as part of the WETTF targeting illegal marijuana cultivation sites; provides guidance and direction to environmental scientists and taskforce team members conducting complex investigations; takes lead on directing and finalizing resource damage assessments, remediation plans and streambed alteration agreements; provides guidance and direction to environmental scientists; participates in interagency meetings; maintains liaisons and coordinates workload with Department staff and other agencies. In coordination with</p>	<ul style="list-style-type: none"> • 2.0 position= 3,556 hours • Activities associated with supervision of other staff require 660 hours per year, depending on the nature of the work and the previous expertise of staff. Most staff does not have the experience and initially require training, development, and supervision. • Coordination with SWRCB and local agencies to prioritize investigations and assessment of environmental damage. Requires 800 hours per year, depending on the nature of the work and previous expertise of staff. • Review of SWRCB policies and statewide coordination of water rights related processes, including participation in SWRCB workshops and hearings requires 800 hours per year, depending on the nature of the work and previous expertise of staff. • Coordinate with Legal and Law Enforcement on pursuing Administrative Civil Penalty cases. Detailed review of work products; preparation of staff for expert witness. Requires 600 hours per year. 	<p>Based on past Department participation in coordinated environmental investigation and enforcement programs and processes, and permitting. Accumulated work effort consistent with other Supervisors in the Department working with specialized programs.</p>

Analysis of Problem

	SWRCB, develop and implement policies, guidelines, and procedures for the scientific staff working on investigations, environmental damage assessments, and permitting.	<ul style="list-style-type: none"> • Development of legislative reports and bill analysis, media inquiries, and program development; and coordinate with regional staff when implementing targeted actions. Involvement and review of products requires 400 hours per year. • Development of work plans and management of associated work requires 296 hours per year to ensure work is carried out in an effective and efficient manner. 	
26.0	Total Positions		

Instream Flows Protection – Interim Flow Criteria, Policies, and Water Rights Registrations/Permitting (5.0 positions)

The Department is requesting five positions to ensure that individual and cumulative effects of water diversion and discharges associated with marijuana cultivation do not affect the instream flows needed for fish spawning, migration, and rearing, and the flows needed to maintain natural flow variability. Given the geographic scope of current and anticipated marijuana cultivation, and the sheer number of operations, this is a substantial charge. These efforts will require extensive field work (e.g. site inspections, collection of field data, etc.), data analysis, regulatory development, outreach, public involvement and CEQA compliance, which will take years to complete. As such, the Department proposes to engage in a path for compliance in coordination with the SWRCB until a more targeted ongoing instream flow setting process can be applied.

Existing funding provides the Department with the ability to address instream flows for anadromous salmonids in five key critical tributaries as stated in the California Water Action Plan. While one or two of the streams may be current areas of marijuana operations, the existing effort cannot be rapidly expanded statewide to cover the widespread marijuana cultivation priority areas. Typically, the first step is the development of flow criteria, which provides the technical basis for the establishment of flow requirements/objectives. The on-the-ground timeframe necessary to develop flow criteria generally ranges from one to three years per stream depending on the complexity of issues the study addresses, as well as the hydrologic conditions (e.g., may need additional years to collect data in persistent drought conditions to account for variety in water year types). Additionally, time is often included for peer review and stakeholder involvement. Once the Department finalizes the flow criteria or flow recommendation, the SWRCB can utilize the flow criteria to develop regulatory requirements, often referred to as flow objectives. Given the need for quick protection of resources and a path to marijuana cultivation compliance, the Department needs to prepare rapid interim flow criteria until long term tributary specific instream flow studies can be prepared for streams impacted by marijuana cultivation.

This proposal would provide the Department with the resources to: 1) participate and provide input to CDFA to ensure that individual and cumulative effects of water diversions associated with marijuana cultivation do not affect instream flows needed for fishery resources; 2) participate and provide input to the SWRCB on efforts to regulate marijuana cultivation through the establishment of policies or streamlined water rights efforts; and 3) ensure water right applications (permits and registrations) associated with marijuana cultivation receive timely terms and conditions to ensure protection of fishery resources.

Water Rights Policies and Programs (1 Position)

The Department requests one position to engage in the SWRCB's water rights policy efforts. The SWRCB is the sole agency with responsibility to implement the State's water rights system for the

Analysis of Problem

beneficial use of surface water in California. The Department anticipates the SWRCB will develop policies similar to the Northern California Instream Flow Policy in response to this legislation. The SWRCB has determined the establishment of such policies provides a good framework to evaluate and protect public trust resource needs on a regional scale, while also considering other beneficial uses of water, such as irrigation. Once established, such policies provide a more time efficient processing of water right permit applications and registrations. Implementation of any effort to develop additional policies similar to the Northern California Instream Flow Policy will require active participation by Department staff to ensure potential impacts to fish and wildlife are addressed.

The Department will be actively engaged in coordination with CDFA, Department of Pesticide Regulations, and SWRCB on the development of regulations to address the application of pesticides or other pest control measures for marijuana cultivation. The Department will also actively engage in other regulatory efforts by CDFA to minimize impacts from marijuana cultivation. The Department also anticipates some local agencies will develop ordinances to minimize impacts from marijuana cultivation.

To address the large amount of unauthorized diversion and use of water related to marijuana cultivation, the SWRCB will need to evaluate existing water right programs and develop regional policies to ensure water use does not adversely affect fish and wildlife resources, as well as senior water rights in the watershed. An example of this workload would be evaluating the feasibility of expanding the small irrigation use registration program to areas of the State where this program does not currently exist.

Water Rights Permitting (4 Positions)

The Department requests four positions to engage in the SWRCB's water rights efforts. The Department provides terms and conditions for water rights and registrations issued by the SWRCB to ensure protection of fish and wildlife resources from the diversion and use of water. Unauthorized diversions associated with cultivation will be required to obtain a valid water right, which will require the department's active involvement to place conditions on the diversion including appropriate instream flow or bypass flow conditions for the diversion. The workload associated with unauthorized diversions associated with marijuana cultivation seeking valid water rights cannot be absorbed by the limited water rights staff in the department. This request for additional resources would provide for one position in each of the Department's terrestrial regions to engage in the SWRCB's water rights permitting process to ensure protection of fish and wildlife.

It is anticipated that the SWRCB will implement a suite of efforts to modify and implement the program for processing water right applications and registrations in order to provide a timely and efficient procedure for obtaining an appropriate water right. The Department will need to be involved throughout this process to ensure individual and cumulative effects of water diversion and discharge associated with marijuana cultivation do not affect instream flows needed for fish and wildlife, including performing site visits to evaluate project conditions.

While parties subject to the new marijuana cultivation regulation will have several options to establish a water right, the SWRCB anticipates that a significant portion of parties will choose the water right Registration Program if it is available. The SWRCB has identified the potential for more than 50,000 registrations that may need to be analyzed in the context of program development. Currently, the registration program for small irrigation use does not apply to many geographic areas that have significant amounts of marijuana cultivation. Small irrigation use registrations are currently only being accepted for diversions from coastal streams in Marin, Sonoma, and portions of Napa, Mendocino, and Humboldt Counties. Without the availability of the small irrigation use registration program in other impacted areas, cultivators will be forced to submit more lengthy and complex applications to appropriate water. The application process requires significant investment of resources from the applicant, SWRCB, and the Department, and permit issuance may not occur for five years or more. Significant delays in acquiring appropriate water rights is anticipated to be a bottleneck that will hinder the new CDFA licensing program for marijuana cultivation unless the SWRCB can streamline the appropriation process with an expanded registration program. The small irrigation use registration program requires the Department to establish terms and conditions to protect fish and wildlife. This

Analysis of Problem

legislation will require immediate action on the part of the Department's water right program in regards to the coordination of water right permitting and issuance of registrations by the SWRCB.

Workload Matrix – Instream Flows Protection

Positions Requested	Workload	Workload Justification (Activities and Hours)	Basis for Workload
<p>1.0 Senior Environmental Scientist (Specialist)</p>	<p>Coordinate with CDFA, SWRCB and other agencies on implementation of instream flow and water rights processes to address marijuana cultivation impacts; research and evaluate additional tools to develop interim flow criteria; and provide environmental and fishery input related to the development of polices by the SWRCB or Regional Boards.</p>	<p>1.0 positions = 1,778 hours</p> <p>Provide support to the Senior Environmental Scientist by participation and coordination with CDFA on the development of a regulatory program for marijuana cultivation requires 691 hours per year.</p> <p>Review of SWRCB policies and statewide coordination of water rights related processes, including participation in SWRCB workshops and hearings requires 395 hours per year.</p> <p>Participation in SWRCB water rights policies and program efficiencies, including expansion of registration programs and other associated water rights processes requires 296 hours per year.</p> <p>Research and evaluation of interim flow criteria, including providing supporting documents for SWRCB workshops and hearings requires 198 hours per year, depending on the nature of the work and previous expertise of staff.</p> <p>Participation and preparation of material for interagency meetings for the development of interim flow criteria and associated SWRCB policy efforts. Involvement in interagency meetings requires 198 hours per year depending on the complexity of the issues discussed and the needed meeting preparation.</p>	<p>Based on past Department coordination and participation in similar regulatory efforts, including SWRCB water quality and water rights programs and processes.</p>
<p>4.0 Senior Environmental Scientist (Specialist)</p>	<p>Assess and analyze the potential environmental impacts associated with the diversion of water for projects associated with marijuana cultivation through the water</p>	<p>4.0 positions = 7,112 hours</p> <p>Preparation of lawful conditions by the Department for registrations to appropriate water by the SWRCB requires</p>	<p>Based on past Department work in conditioning water rights registrations and permits, overall</p>

Analysis of Problem

Positions Requested	Workload	Workload Justification (Activities and Hours)	Basis for Workload
	<p>rights processes administered by the SWRCB; develop site-specific conditions needed to protect fish, wildlife, and their habitat; and work with SWRCB staff and project proponents to ensure protective terms and conditions are included in water right permits and registrations. Participate in outreach efforts to educate diverters on achieving regulatory compliance and provide information on funding programs available. Coordinate with SWRCB on the development of regional policies or other related efforts. Evaluate local ordinances related to marijuana cultivation to ensure protection of fish and wildlife.</p>	<p>80 hours per diversion requesting a registration depending on the complexity. It is anticipated that the Department would condition 50 registrations per year, which requires 2,473 hours per year.</p> <p>Preparation of lawful conditions by the Department for applications to appropriate water by the SWRCB (water rights permit) requires 216.4 hours per diversion requesting a water rights permit depending on the complexity. It is anticipated that the Department would condition 10 permits per year, which requires 2,164 hours per year.</p> <p>Review of SWRCB policies and statewide coordination of water rights related processes, including participation in SWRCB workshops and hearings to provide regional information regarding fish and wildlife requires 309 hours per year, depending on the nature of the work and previous expertise of staff.</p> <p>Participation in the development of interim flow criteria for regional watersheds requires 92.8 hours per year for each watershed to ensure work is carried out in an effective and efficient manner. Program planning anticipates development of flow criteria in up to 10 watersheds per year for a total of 928 hours per year.</p> <p>Participation in SWRCB water rights policies and program efficiencies, including expansion of registration programs and other associated water rights processes requires 1,238 hours per year.</p>	<p>participation in SWRCB policy development, and development of flow criteria.</p>

Analysis of Problem

E. Outcomes and Accountability

Watershed Enforcement Program and Permanent Multiagency Task Force

AB 243, AB 266, and SB 643 establish a permanent multiagency task force which will have input in standards and regulations relating to medical marijuana and its cultivation. These new laws require the various state agencies involved to take specified actions to mitigate the impact that marijuana cultivation has on the environment. The Department specifically shall ensure that individual and cumulative effects of water diversions and discharge associated with cultivation do not affect the instream flows needed for fish spawning, migrations, and rearing, and the flows needed to maintain natural flow variability. Success of this program will include the decrease of environmental impacts due to marijuana cultivation and cannabis cultivation by licensees is conducted in accordance with state and local laws.

The Department follows a statewide official fiscal reporting process and internal standardized fiscal reporting procedures. Funds for this program will have a unique accounting code that will be tracked and monitored by the budget analyst. Monthly reports will be generated by support staff and statistics reported to law enforcement management on a quarterly basis.

The Department's case work and daily activities associated with the WETTF are intensively recorded and monitored in the form of an Electronic Daily Activity Reports (eDAR) and enforcement form 65, which includes marijuana site inspection statistics. Information captured by the eDAR includes officer, date, times, locations, contacts, warnings, citations, hours worked, and accounting information. Lieutenants and captains are required to review eDARs for every subordinate they supervise. Statistics will be reported to the Chief of Patrol.

Projected Outcomes

Workload Measure	CY	BY	BY+1	BY+2	BY+3	BY+4
Joint Inspections Compiled	195	250	1,250	1,500	1,700	2,000
Violations found during Inspections	489	750	1,500	2,500	,2000	1,500
Notice of Violations Issued	72	100	300	200	200	150
Administrative Actions (estimated)	6	6	12	24	24	24
Lake and Streambed Alteration Agreements issued (violation and compliance related)	10	50	200	400	600	1,000

Instream Flows (Interim Flow Criteria, Policies and Water Rights Registrations/Permitting):

The Department's approach to protect instream flows and related fishery resources is comprised of three primary elements: (1) establishment of interim flow requirements; (2) development of regional instream flow policies; and (3) expansion of the registration program and processing of water right registrations and applications to appropriate water (i.e., permits). The work associated with each of these elements is broken out and described below.

Interim Flow Criteria

These positions are requested for this element of the Instream Flows Protection effort, as shown in the Workload Matrix. This element includes coordination with the CDFA and SWRCB on regulations to protect fishery resources, as well as the development and implementation of interim flow requirements that would provide minimal protection of public trust resources in the absence of tributary-specific flow

Analysis of Problem

objectives. This effort would be performed over five years with the adoption of interim flow requirements targeted within the first two years, followed by implementation of the interim flow requirement and associated coordination on the policies and registrations/permitting to ensure consistency between all elements. The interim flow requirements would be developed to target public trust resources in high resource value streams in various geographic areas statewide with marijuana cultivation activities. The interim flow requirements would be developed using existing data and information to provide minimal protection to fishery resources in the absence of broader policies and tributary-specific flow requirements. It is anticipated the interim flow requirements would be developed through regulations, which would require compliance with CEQA. Interim flow requirements would be in place until tributary-specific or other flow requirements that more fully protect public trust resources are in place. It is anticipated that the SWRCB will rely on information provided by the Department to inform interim flow requirements that would be designed to provide interim protection for the survival of threatened and endangered anadromous fish while more informed and refined flow requirements are developed to provide for the long-term survival and recovery of threatened and endangered fish species. It is also anticipated the Department staff will be requested to provide testimony as part of any SWRCB meetings, workshops, or hearings related to the development and implementation of the interim flow requirements.

Regional Policies

These positions are requested for this effort of the Instream Flows Protection effort, as shown in the Workload Matrix. Initially the Department would need to coordinate with the SWRCB to determine how best to divide the areas of marijuana cultivation in California that could be covered by individual regional instream flow policies. Key steps associated with the policies include: (1) review and evaluation of hydrologic and fishery and other resources to establish instream flows for fishery spawning, rearing migration, and natural flow variability; (2) review and evaluate existing diversions and beneficial uses of water; (3) compliance with CEQA; (4) stakeholder outreach; (5) develop and adopt policies, including peer review; and (6) respond to litigation, if necessary. The policies would be developed to protect instream flow and allow for efficient processing of water right applications (permits) and registrations.

Registrations and Applications to Appropriate Water

These positions allocated to Department Regional Offices are requested for this element of the Instream Flows Protection effort, as shown in the Workload Matrix.

Registrations –Outcomes are based on the number of registrations issued and registrations renewed with increased staff. This includes issuance of small irrigation registration certificates once general conditions are established and issuance of any applicable small domestic registrations. Registrations are renewed every 5 years and new conditions may be added at that time. This would include conditions generated by the development of narrative standards and Instream Flow policies. Increased staffing for registrations will also allow the Department to engage on the development of expanded general conditions for small irrigation use registrations that incorporate interim flows and general polices developed to protect instream beneficial uses. Projected outcomes include interagency meetings with CDFA and SWRCB to ensure that the general conditions complement CDFA's marijuana licensing approach and provide the SWRCB appropriate, protective instream resource conditioning.

Staff will also be responsible for conducting analyses to ensure that individual and cumulative effects of water diversion and discharge associated with cultivation do not adversely impact fish and wildlife resources. This may also include providing information to the SWRCB to ensure new registrations would not be issued if the water body may become fully appropriated.

Applications - For processing of water right applications, projected outcomes focus on application review and providing terms and conditions to protect fish and wildlife resources.

Analysis of Problem

Projected Outcomes

Workload Measure	CY	BY	BY+1	BY+2	BY+3	BY+4
Interagency Meetings with Relevant Agencies	0	15	15	15	15	15
Collaboration on SWRCB Regional Flow Policies	0	0	0	1	2	2
Interim Flow Criteria Approach Development	0	0	1	0	0	0
Development of Hydrologic Record for Priority Areas	0	20	20	20	20	20
Review of Regional Board Policies	0	0	1	1	1	1
Interagency Flow Coordination Meetings	4	4	4	4	4	4
Water Rights Permit Application Reviews (marijuana cultivation)	0	5	10	15	15	20
Water Rights Registration Application Reviews (marijuana cultivation)	0	50	75	100	100	100
Small Irrigation Use Registration Interagency Meetings (CDFA, SWRCB)	0	2	2	2	2	2
Water Rights related Site Inspections	0	50	100	100	100	100
Stakeholder Outreach Meetings	0	1	2	2	2	2

F. Analysis of All Feasible Alternatives

Alternative 1: Provide \$7.7 million General Fund and 31.0 positions to meet the requirements of Assembly Bill (AB) 243, AB 266, and Senate Bill (SB) 643 (Chapters 688, 689 and 719, Statutes of 2015) by establishing the Watershed Enforcement Program and permanent multiagency task force. The multiagency task force will continue a priority-driven approach to mitigate the impacts on natural resources from marijuana being cultivated, and coordinate with other Departments, cities, counties, and their law enforcement efforts. In addition, this proposal will provide resources to comply with the mandate in the legislation to ensure that the individual and cumulative effects of water diversions and discharge do not affect instream flows for fishery needs.

Advantage:

- Allows the Department to create the Watershed Enforcement Program, and for expansion of a permanent multiagency task force to address the environmental impacts of marijuana cultivation statewide. The WETTF will expand its operations to other high priority watersheds throughout the State and perform inspections and enforcement a state help restore stream flows and stop the discharge of sediments and chemical pollutants. It allows for continuing other critical regulatory and enforcement actions. It ensures the necessary resources for a comprehensive approach including outreach and education efforts, as well as involvement and close coordination with other state agencies such as the CDFG, SWRCB, CAL FIRE and Parks. It would ensure the Department meets the mandates of AB 243, AB 266, and SB 643.
- Complies with the Legislative directive to ensure that individual and cumulative effects of water diversion and discharges associated with marijuana cultivation do not affect the instream flows needed for fish spawning, migration, and rearing, and the flows needed to maintain natural flow variability. The alternative provides staff resources to condition water right registrations and permits associated with irrigation of marijuana to limit impacts to fish and wildlife. Resources will

Analysis of Problem

allow the Department to help marijuana cultivation operations come into compliance in a timely manner. Additionally, the staff resources requested would decrease the time diverters would receive Department terms and conditions for small irrigation use registrations targeted at high marijuana cultivation production areas and provide an expedited pathway to obtaining a water right, compared to filing an application to obtain a permit. This will allow parties to more quickly transition from summertime riparian diversion to appropriative rights for storage during times of more abundant stream flow.

Disadvantage:

- This alternative would require additional General Fund.

Alternative 2: Phase in the proposed funding over two years.

Advantage:

- Lower initial General Fund cost in 2016-17.
- Allows the Department to create the Watershed Enforcement Program, and for expansion of a permanent multiagency task force to address the environmental impacts of marijuana cultivation on a more limited scope than the bills intended.
- Provides some support to attempt to ensure that individual and cumulative effects of water diversion and discharges associated with marijuana cultivation do not affect the instream flows needed for fish spawning, migration, and rearing, and the flows needed to maintain natural flow variability.

Disadvantage:

- This alternative would result in delayed compliance with Assembly Bill (AB) 243, AB 266, and Senate Bill (SB) 643 (Chapters 688, 689 and 719, Statutes of 2015).
- This alternative could require the redirection of staff from the Department who are currently engaged in and integral to existing programs to comply with the mandates. Due to the specialized knowledge and background needed to perform this work (e.g. enforcement, fisheries, instream flow, and water rights), it is likely that staff from existing Department Programs would be redirected, severely impacting enforcement activities, further delaying important work on the California Water Action Plan, and other related water rights permitting activities.

Alternative 3: Do not provide any additional resources to meet the requirements of Assembly Bill (AB) 243, AB 266, and Senate Bill (SB) 643 (Chapters 688, 689 and 719, Statutes of 2015).

Advantage:

- No additional funding would be required.

Disadvantage:

- The Department would not meet the requirements of Assembly Bill (AB) 243, AB 266, and Senate Bill (SB) 643 (Chapters 688, 689 and 719, Statutes of 2015).

G. Implementation Plan

Implementation of this proposal would begin on January 1, 2016.

H. Supplemental Information

The Request involves intensive travel to grow sites by both Law Enforcement and Scientific Staff and therefore includes 16 code 3 equipped vehicles.

Analysis of Problem

I. Recommendation

Approve Alternative 1: \$7.7 million General Fund and 31.0 positions, beginning in FY 2016-17, to meet the requirements of AB 243, AB 266, and SB 643 (Chapters 688, 689 and 719, Statutes of 2015) and protect fish and wildlife resources from the harmful effects of marijuana cultivation.