The 2018-19 Budget:

Resources and Environmental Protection

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Table of Contents

Executive Summary

In this report, we assess many of the Governor's budget proposals in the resources and environmental protection areas and recommend various changes. Below, we summarize our major findings and recommendations. We provide a complete listing of our recommendations at the end of this report.

Budget Provides $11 Billion for Programs

The Governor's budget for 2018-19 proposes a total of $10.5 billion in expenditures from various sources—the General Fund, various special funds, bond funds, and federal funds for programs administered by the Natural Resources ($6.3 billion) and Environmental Protection ($4.2 billion) Agencies. (These figures include the administration's proposed spending plans for cap-and-trade auction revenues and zero-emission vehicle (ZEV) infrastructure, which were released after the Governor's budget.) The total funding level in 2018-19 reflects numerous changes compared to 2017-18, the most significant of which include (1) decreased bond spending of $3 billion, largely attributable to how prior-year bond expenditures are accounted for in the budget; (2) an increase of $989 million to fund projects authorized under Proposition 68, which will appear on the June 2018 statewide ballot; and (3) a net reduction of $587 million from the General Fund, in large part due to one-time funding provided in 2017-18 related to emergency firefighting and recovery costs.

Cap-and-Trade Spending Plan Based on Reasonable Revenue Estimates

The administration assumes $2.4 billion in cap-and-trade auction revenue in 2018-19. While the Governor's revenue estimates are slightly lower than ours, we find them to fall within a reasonable range. Importantly, the Legislature's recent extension of the cap-and-trade program through 2030 should result in additional revenue stability compared to prior years, though there continues to be potential for volatility. Based on the administration's revenue estimate (and a projected year-end fund balance in 2017-18), the Governor proposes to spend $2.8 billion from these funds in 2018-19 (including $1.3 billion in discretionary spending). The administration's spending plan is similar to that adopted for the current year, though it includes a couple of new programs. The plan also proposes to make $232 million of the spending ongoing, mostly for light-duty ZEV rebates ($200 million). As we have in our past reports on cap-and-trade, we recommend that the Legislature ensure that the spending plan is consistent with its highest priorities for this revenue, which could include greenhouse gas reductions, as well as such things as local air pollution reductions and/or climate adaptation.

Governor Proposes New Programs

Implementation of Resources Bond. The Governor's 2018-19 budget provides $989 million from Proposition 68 (authorized by Chapter 852 of 2017 [SB 5, de León]) for various resources and environmental protection departments to administer resources-related programs, such as to expand and rehabilitate local parks and implement habitat restoration projects. With only a couple of exceptions, we find the administration's funding plan for 2018-19 to be reasonable. However, we recommend small modifications to a couple of programs and that the administration report to the Legislature on a long-term funding plan.

Safe and Affordable Drinking Water Fund. The Governor proposes new charges on drinking water customers and certain agricultural entities to generate revenue to implement a new financial assistance program to address unsafe drinking water, particularly in small and disadvantaged communities. When fully implemented, these charges are expected to generate roughly $150 million annually. In this report, we identify three issues for the Legislature to consider as it deliberates this proposal: (1) consistency with the state's human right to water policy, (2) uncertainty about the estimated revenues that would be generated by the proposal and the amount of funding needed to address the problem, and (3) consistency with the polluter pays principle.

Ventura Training Camp. The proposed budget provides a total of $9 million from the General Fund to the Department of Forestry and Fire Protection, California Conservation Corps (CCC), and California Department of Corrections and Rehabilitation to create a new firefighting training program for 80 parolees. According to the administration, the primary purpose of the proposal is to reduce parolee recidivism. We recommend rejection of the proposal because there is little evidence that the plan would be a cost-effective way to achieve the stated goal. Instead, to the extent that the Legislature wanted to prioritize recidivism reduction programs, there are likely to be evidence-based programs that could serve many more individuals than what is proposed.

Budget Includes Significant Program Expansions

ZEV Infrastructure. The administration proposes to spend $235 million for the California Energy Commission—an increase of $199 million—in 2018-19 from various special funds to install electric vehicle chargers and hydrogen refueling stations throughout the state. The proposed spending plan would provide a total of $900 million over eight years and is intended to support the Governor's goal of having 5 million ZEVs on California roads by 2030. In considering the proposal, we recommend the Legislature direct the administration to provide additional information regarding how it developed its funding estimate, expected outcomes, risks, and efforts to coordinate across state programs.

CCC Residential Facilities. The Governor's budget plan proposes to expand CCC's residential program over the coming years by building four new facilities. The budget includes $10 million from the General Fund for the acquisition and initial planning stages of these projects, which are estimated to cost a total of $185 million to complete. The decision about whether to take the initial steps towards a major expansion of CCC residential centers is ultimately a policy decision for the Legislature. We recommend the Legislature (1) wait for more information before approving funding for four new residential centers and (2) require CCC to provide reporting on corpsmember outcomes.

Department of Fish and Wildlife (DFW) Funding Augmentation. The Governor proposes providing $51 million in new funding for DFW from three sources—tire recycling fees, vehicle registration and driver's license fees, and the General Fund—to (1) address an ongoing operating shortfall ($20 million) and (2) expand several existing activities ($31 million). We recommend the Legislature approve the additional funding to address the funding shortfall and provide some level of additional augmentation for activities that reflect legislative priorities. However, we recommend rejecting the proposed use of tire fees, approving only the level of Motor Vehicle Account funding that DFW can provide evidence would support vehicle-related workload, and relying on General Fund and fees for the remaining augmentations.

Parks and Recreation Program Expansion. Under recent legislation, the State Parks and Recreation Fund (SPRF) will receive additional ongoing revenue—$79 million in 2018-19—from an increase in the state's fuel taxes associated with off-highway vehicles. We find that the administration's proposal to utilize these funds to (1) address the SPRF structural deficit and build a reserve, (2) increase service levels at state parks, and (3) continue certain activities begun in the current year is reasonable. However, we recommend that the Legislature identify park services and programs that it prioritizes and adopt a budget package that reflects those priorities.

OVERVIEW OF GOVERNOR'S BUDGET

Total Proposed Spending of $10.5 Billion. The Governor's budget for 2018-19 proposes a total of $10.5 billion in expenditures from various sources—the General Fund, various special funds, bond funds, and federal funds—for programs administered by the Natural Resources and Environmental Protection Agencies. This total includes $6.3 billion for natural resources departments and $4.2 billion for environmental protection departments. (These amounts include the Governor's spending plans for cap-and-trade auction revenues and zero-emission vehicle (ZEV) infrastructure, which were released after—and, therefore, not included in—the Governor's budget.)

Half of Natural Resources Funding From General Fund. As shown in Figure 1, almost half—$3 billion—of the $6.3 billion proposed for natural resources departments is from the General Fund. Another $1.8 billion (28 percent) is from special funds, and $1.2 billion (19 percent) is from bond funds. Of the total proposed spending, $4.8 billion (76 percent) is to administer state programs, and most of the remainder is for local assistance—generally grants to local governments and nonprofits.

Most of Environmental Protection Funding From Special Funds. As shown in Figure 2 (see next page), a large majority of funding for environmental protection programs—$3.6 billion (86 percent)—is from special

Figure 1

Natural Resources Budget Summary

(Dollars in Millions)

Expenditures	2016-17 Actual	2017-18 Estimated	2018-19 Proposed[a]	Change From 2017-18 Amount	Change From 2017-18 Percent
Total	**$5,039**	**$8,870**	**$6,266**	**-$2,603**	**-29%**
By Department					
Department of Forestry and Fire Protection	$1,305	$2,181	$1,755	-$425	-20%
Department of Parks and Recreation	480	868	1,093	224	26
General obligation bond debt service	1,025	984	993	9	1
Energy Commission	396	684	604	-79	-12
Department of Fish and Wildlife	431	438	529	92	21
Department of Water Resources	548	2,007	475	-1,532	-76
Wildlife Conservation Board	94	496	132	-364	-73
Department of Conservation	124	142	126	-16	-11
California Conservation Corps	94	123	125	2	2
Natural Resources Agency	312	333	123	-209	-63
State Lands Commission	32	45	98	53	117
Other resources programs[b]	199	570	212	-358	-63
By Funding Source					
General Fund	$2,726	$3,586	$3,034	-$552	-15%
Special funds	1,271	2,120	1,769	-351	-17
Bond funds	885	2,794	1,171	-1,623	-58
Federal funds	157	370	292	-77	-21
By Purpose					
State operations	$4,174	$5,689	$4,774	-$915	-16%
Local assistance	556	2,135	1,243	-892	-42
Capital outlay	309	1,046	250	-796	-76

[a] Includes Governor's cap-and-trade and zero-emission vehicle infrastructure spending plans, which were not included in the Governor's January 10 budget.
[b] Includes state conservancies, Coastal Commission, and other departments.

funds. Only $84 million (2 percent) of environmental protection spending is proposed from the General Fund. Over 60 percent of the proposed funding in the budget year is proposed for local assistance.

Decrease From 2017-18 Largely Reflects Technical Changes. Proposed 2018-19 spending is significantly lower than estimated expenditures in 2017-18 for both natural resources and environmental protection departments ($2.6 billion and $2.1 billion, respectively). This includes significant spending decreases in spending from bond funds, special funds, and the General Fund. However, these changes largely reflect certain technical budget adjustments rather than significant programmatic changes.

- ***Bonds From Prior Years.*** Proposed bond funds are estimated to decline by a total of $3 billion, slightly more than half associated with resources programs. Much of this apparent budget-year decrease is related to how bonds are accounted for in the budget, making year-over-year comparisons difficult. Specifically, bond funds that were appropriated but not spent in prior years are assumed to be spent in the current year. The 2017-18 bond amounts will be adjusted in the future based on actual expenditures.
- ***Special Fund Programs.*** The 2018-19 proposed spending level reflects reduced special fund expenditures of about $1 billion in natural resources and environmental protection departments. While about one-quarter of this is related to lower year-over-year proposed spending from cap-and-trade auction revenues, most of the remaining reduction is related to one-time projects and technical adjustments. In particular, the current-year spending level for the California Air Resources Board (CARB) includes $413 million for the construction of a new testing lab in Southern California. In addition, the budget includes a decrease of about $170 million in spending from two California Energy Commission (CEC) special funds—the Electric Program Investment Charge Fund and the Alternative and Renewable Fuel and Vehicle Technology Fund—which reflects how unspent prior-year

Figure 2

Environmental Protection Budget Summary

(Dollars in Millions)

Expenditures	2016-17 Actual	2017-18 Estimated	2018-19 Proposed[a]	Change From 2017-18 Amount	Change From 2017-18 Percent
Total	**$3,716**	**$6,364**	**$4,244**	**-$2,120**	**-33%**
By Department					
Resources Recycling and Recovery	$1,500	$1,646	$1,542	-$105	-6%
Air Resources Board	700	1,730	1,208	-522	-30
State Water Resources Control Board	1,137	2,578	1,069	-1,509	-59
Department of Toxic Substances Control	247	263	279	16	6
Department of Pesticide Regulation	96	104	104	—	—
Other departments[b]	37	44	43	-1	-2
By Funding Source					
General Fund	$96	$118	$84	-$35	-29%
Special funds	2,907	4,312	3,630	-682	-16
Bond funds	427	1,564	161	-1,403	-90
Federal funds	286	370	370	—	—
By Purpose					
State operations	$1,249	$1,655	$1,588	-$67	-4%
Local assistance	2,467	4,555	2,656	-1,899	-42
Capital outlay	—	—	—	—	—

[a] Includes Governor's cap-and-trade spending plan, which was not included in the Governor's budget.
[b] Includes the Environmental Protection Agency, Office of Environmental Health Hazard Assessment, and general obligation bond debt service.

appropriations are carried over into the current year.

- ***One-Time General Fund Provided in 2017-18.*** General Fund expenditures are proposed to decrease by a total of $587 million for natural resources and environmental protection departments. This is primarily attributable to one-time funding provided in 2017-18 related to (1) unanticipated firefighting expenditures for the California Department of Forestry and Fire Protection ($469 million) and (2) one-time spending by several departments to address the ongoing effects of the state's recent drought ($66 million).

Budget Includes Some Significant Spending Increases. While overall spending is proposed to decline for resources and environmental protection departments in 2018-19, the Governor's budget includes a number of major proposals to increase spending and implement significant policy changes. We briefly describe several of these proposals in the box on pages 8 and 9. This report includes in-depth reviews on each of these proposals.

CROSS-CUTTING ISSUES

CAP-AND-TRADE

LAO Bottom Line. We recommend the Legislature ensure budget allocations for cap-and-trade auction revenues and related statutory direction align with the Legislature's highest priorities. To help the Legislature evaluate the degree to which the Governor's proposal achieves legislative goals, we recommend the Legislature direct the administration to provide certain information, including past outcomes and estimated future outcomes. We also recommend the Legislature consider alternative strategies to ensure fund solvency as more information about auction revenue becomes available over the next few months.

Background

State Law Establishes 2020 and 2030 GHG Limits. The Global Warming Solutions Act of 2006 (Chapter 488 [AB 32, Núñez/Pavley]) established the goal of limiting greenhouse gas (GHG) emissions statewide to 1990 levels by 2020. Subsequently, Chapter 249 of 2016 (SB 32, Pavley) established an additional GHG target of reducing emissions by at least 40 percent below 1990 levels by 2030. CARB is required to develop a Scoping Plan, which identifies the mix of policies that will be used to achieve the emission targets, and update the plan periodically.

AB 398 Extended Authority to Implement Cap-and-Trade From 2020 to 2030. One policy the state uses to help ensure it meets these GHG goals is cap-and-trade. Assembly Bill 32 authorized CARB to implement a market-based mechanism, such as cap-and-trade, through 2020. Chapter 135 of 2017 (AB 398, E. Garcia) extended CARB's authority to operate cap-and-trade from 2020 to 2030 and provided additional direction regarding certain design features of the post-2020 program. We describe AB 398 changes and highlight key issues for legislative oversight in our December 2017 report *Cap-and-Trade Extension: Issues for Legislative Oversight*.

Cap-and-Trade Designed to Limit Emissions at Lowest Cost. The cap-and-trade regulation places a "cap" on aggregate GHG emissions from large GHG emitters, such as large industrial facilities, electricity generators and importers, and transportation fuel suppliers. Capped sources of emissions are responsible for roughly 80 percent of the state's GHGs. To implement the program, CARB issues a limited number of allowances, and each allowance is essentially a permit to emit one ton of carbon dioxide equivalent. Entities can also "trade" (buy and sell on the open market) the allowances in order to obtain enough to cover their total emissions.

From a GHG emissions perspective, the primary advantage of a cap-and-trade regulation is that total GHG emissions from the capped sector do not exceed the number of allowances issued. Some entities must reduce their emissions if the total number of allowances available is less than the number of emissions that would otherwise occur. From an economic perspective, the primary advantage of a cap-and-trade program is that the market sets a price for GHG emissions, which creates a financial incentive for businesses and households to implement the least costly emission reduction activities. (For more details on how cap-and-trade works, see our February 2017 report *The 2017-18 Budget: Cap-and-Trade*.)

Some Allowances Auctioned, Some Given Away for Free. About half of the allowances are allocated for free to certain industries, and most of the remaining allowances are sold by the state at quarterly auctions. Of the allowances given away for free, most are given to utilities and natural gas suppliers. CARB also allocates free allowances to certain energy-intensive, trade-exposed industries based on how much of their goods (not GHG emissions) they produce in California. This strategy is intended to minimize the extent to which emissions are shifted out of state because companies move their production of goods out of California in response to higher costs associated with the cap-and-trade regulation. The allowances offered at auctions are sold for a minimum price—set at $14.53 in 2018—which increases annually at 5 percent plus inflation.

State Revenue Generally Used to Facilitate GHG Reductions. The state collected about $6.5 billion in cap-and-trade auction revenue from 2012 through 2017. Money generated from the sale of allowances is deposited in the Greenhouse Gas Reduction Fund (GGRF). Various statutes enacted over the last several years direct the use of auction revenue. For example, Chapter 807 of 2012 (AB 1532, Perez) requires auction revenues be used to further the purposes of AB 32. Under state law, revenues must be used to facilitate

Major Spending Proposals for Natural Resources and Environmental Protection

The Governor's proposed budget for 2018-19 includes several significant spending and policy proposals. These include the following:

Cap-and-Trade ($1.3 Billion). At the annual State of the State address, the Governor released a $1.3 billion spending plan for the use of discretionary cap-and-trade auction revenues in 2018-19. It proposes to fund various programs, including ones to reduce local air pollution ($250 million); provide consumer rebates for low-emission vehicles ($200 million); promote healthy forests ($160 million); and reduce emissions from trucks, buses, and equipment ($160 million).

Resources Bond ($1 Billion). The budget assumes that voters approve a bond—Chapter 852 of 2017 (SB 5, de León)—on the June 2018 ballot that would provide $4.1 billion for various natural resources-related projects, such as to restore natural habitats, expand and rehabilitate state and local parks, and improve flood protection. The Governor's 2018-19 budget provides $989 million from this bond for 17 natural resources and environmental protection departments and conservancies, and an additional $31 million for the Department of Food and Agriculture (CDFA).

Zero-Emission Vehicle (ZEV) Infrastructure ($235 Million). The administration proposes to spend $235 million for the California Energy Commission—an increase of $199 million—in the budget year from various special funds to install electric vehicle chargers and hydrogen refueling stations throughout the state. This is intended to support the Governor's goal of having 5 million ZEVs on California roads by 2030.

CalFire Helicopter Fleet Replacement ($98 Million). The budget includes General Fund support for the California Department of Forestry and Fire Protection (CalFire) to purchase four additional helicopters equipped to fight forest fires. The department has begun the process of replacing its aging helicopter fleet and currently plans to purchase its first new helicopter in 2018.

Parks and Recreation Program Expansion ($79 Million). Under Chapter 5 of 2017 (SB 1, Beall), the Department of Parks and Recreation will receive additional ongoing revenue from the increase in the state's fuel taxes associated with off-highway vehicles. As in the current year, a portion of this revenue will be used to address a historic shortfall in the State Parks and Recreation Fund and build a reserve

GHG emission reductions in California and, to the extent feasible, achieve other goals such as improving local air quality and lessening the effects of climate change on the state (also known as climate adaptation).

Current Law Allocates Over 60 Percent of Annual Revenue to Certain Programs. Under current law, annual revenue is continuously appropriated as follows: (1) 25 percent for the state's high-speed rail project, (2) 20 percent for affordable housing and sustainable communities grants (with at least half of this amount for affordable housing), (3) 10 percent for intercity rail capital projects, and (4) 5 percent for low carbon transit operations. In addition, AB 398 and subsequent budget legislation created the following ongoing GGRF allocations:

- ***Backfill Revenue Loss From Expanded Manufacturing Sales Tax Exemption.*** Assembly Bill 398 extended the sunset date from December 31, 2022 to July 1, 2030 for a partial sales tax exemption for certain types manufacturing and research and development equipment (hereafter referred to as the "manufacturing exemption"). It also expanded the manufacturing exemption to include equipment for other types of activities, such as certain electric power generation and agricultural processing, through July 1, 2030. The bill, as amended by subsequent budget legislation, also directs the Department of Finance (DOF) to annually transfer cap-and-trade revenue to the General Fund to backfill revenue losses associated with these changes.

($34 million). In addition, the Governor's 2018-19 budget proposes to use $45 million in revenue towards facility improvements and program expansion, including adding 364 positions.

Oil and Gas Well Plug and Abandonment ($58 Million). The budget includes $58 million from the General Fund in 2018-19 (and an additional $51 million over the two subsequent years) for the State Lands Commission to permanently secure offshore oil wells and related facilities at two sites in Southern California.

Fish and Wildlife Funding Augmentation ($51 Million). The Governor proposes to use $26 million from the Tire Recycling Management Fund, $18 million from the Motor Vehicle Account, and $7 million from the General Fund to (1) address a $20 million structural deficit in the Fish and Game Preservation Fund and (2) expand Department of Fish and Wildlife programs and activities, including improved management of marine fisheries and enhanced efforts to monitor and restore at-risk species.

Conservation Corps Facility Expansion ($10 Million). The Governor's budget plan proposes to expand the California Conservation Corps' residential program over the coming years by building four new facilities. The budget includes $10 million from the General Fund for the acquisition and initial planning stages of these projects, which are estimated to cost a total of $185 million to complete.

Ventura Training Center ($7 Million). The budget provides a total of $7 million in 2018-19 to CalFire and the California Conservation Corps (and an additional $2 million for the California Department of Corrections and Rehabilitation) to create an 18-month firefighting training and certification program for 80 parolees. This total includes $1 million for the preliminary plans phase of a $19 million project to complete facility improvements at the existing Ventura Conservation Camp.

Safe and Affordable Drinking Water ($5 Million). The Governor proposes to increase charges on fertilizer, dairies, caged animals, and drinking water customers in order to generate additional revenue to implement a new financial assistance program to provide clean drinking water targeted to disadvantaged communities. When fully implemented, these charges are expected to generate roughly $150 million annually. The Governor's budget includes a transfer from the Underground Storage Tank Cleanup Fund to support startup activities by the State Water Resources Control Board ($3 million) and CDFA ($1 million).

- ***Intent to Backfill Revenue Loss From Suspension of State Fire Prevention Fee.*** Assembly Bill 398 suspended the state fire prevention fee from July 1, 2017 through 2030. The fee was previously imposed on landowners in State Responsibility Areas (SRAs), and the money was used to fund state fire prevention activities in these areas. The bill also expressed the Legislature's intent to use cap-and-trade revenue to backfill the lost fee revenue and continue fire prevention activities. Subsequently, the 2017-18 budget provided $80 million from the GGRF to backfill lost SRA fee revenue.

Past budgets have also allocated about $30 million ongoing to various agencies—primarily CARB—to administer GGRF funds and other air quality activities.

Governor's Proposal

The administration released a summary of its cap-and-trade expenditure plan on January 26, 2018—roughly two weeks after the release of the Governor's budget. Based on the information available at the time this report was completed, we describe the Governor's proposal below.

$2.8 Billion Cap-and-Trade Expenditure Plan. As shown in Figure 3, the Governor proposes a $2.8 billion cap-and-trade expenditure plan for 2018-19. This plan includes: (1) $1.4 billion in continuous appropriations, (2) $150 million in other existing spending commitments, and (3) $1.3 billion in new spending (also known as discretionary spending). The plan assumes $2.7 billion in auction revenue in 2017-18 and $2.4 billion in 2018-19. The $370 million difference between the proposed expenditures ($2.8 billion) and estimated revenue ($2.4 billion) in 2018-19 would largely be paid from the projected fund balance at the end of 2017-18.

Similar to the current year, the administration takes certain allocations "off the top" before determining continuous appropriations. Specifically, the plan allocates $117 million to AB 398-related actions—$28 million to backfill the SRA fee suspension and an estimated $89 million transfer to the General Fund to backfill the manufacturing exemption. (A $50 million fund balance in the SRA Fire Prevention Fund would cover the additional SRA costs on a one-time basis.) The 60 percent total continuous appropriation percentages would be applied to about $2.3 billion—$2.4 billion in annual revenue minus $117 million for AB 398-related actions.

Proposal Similar to 2017-18 Spending Plan. As illustrated in Figure 3, the 2018-19 proposal would fund many of the same programs that received funding in the 2017-18 budget. The most significant differences in the 2018-19 proposal include:

- ***Less Funding for Freight and Heavy-Duty Vehicle Incentives.*** The proposal includes $160 million for freight and heavy-duty vehicles, or half of what was provided in 2017-18. This represents the largest year-over-year decrease in funding for any program.
- ***Provides $20 Million for Integrated Climate Investment Program.*** The plan provides $20 million to the Governor's Office of Business and Economic Development for the Integrated Climate Investment Program, which will provide funding through the existing California Lending for Energy and Environmental Needs Center. This program provides financing for private sector infrastructure projects intended to reduce GHG emission and improve climate resilience, such as energy efficiency and water conservation. The administration also intends to explore ways to develop new financing mechanisms for similar types of projects.
- ***Expands and Modifies Climate Change and Energy Research Program.*** The proposal includes $35 million for the Office of Planning and Research to provide grants for research and development of innovative GHG reduction and climate adaptation technologies. This amount is $24 million more than was provided in 2017-18. In addition, the administration intends to focus on technologies that are in earlier stages of research and development.
- ***Backfills Certain Special Funds That Are Used for Other Activities.*** The plan includes $25 million for CEC to support low-carbon fuel production, which is currently funded through the Alternative and Renewable Fuel Vehicle Technology Fund (ARFVTF). It also provides $26 million to CARB for the Carl Moyer Program (included as part of the grants for local air pollution reductions), which is currently funded through the Air Pollution Control

Fund (APCF). These allocations do not reflect a net change in spending for these activities. Instead, they backfill the special funds that previously supported these activities because the administration proposes to redirect these special funds to other purposes. Specifically,

Figure 3

Cap-and-Trade Expenditure Plan

(In Millions)

Program	Department/Agency	2017-18	Proposed 2018-19
Continuous Appropriations[a]		**$1,572**	**$1,369**
High-speed rail	High-Speed Rail Authority	$655	$571
Affordable housing and sustainable communities	Strategic Growth Council	524	456
Transit and intercity rail capital	Transportation Agency	262	228
Transit operations	Department of Transportation	131	114
Other Existing Spending Commitments		**$153**	**$152**
Manufacturing sales tax exemption backfill	N/A	$43	$89
Various administrative costs	Various agencies	30	35
SRA fee backfill	CalFire/Conservation Corps	80	28
Discretionary Spending		**$1,456**	**$1,250**
Mobile Source Emissions			
Local air district programs to reduce air pollution	Air Resources Board	$250	$250
Clean Vehicle Rebate Project	Air Resources Board	140	175
Freight and heavy-duty vehicle incentives	Air Resources Board	320	160
Low-income, light-duty vehicles and school buses	Air Resources Board	100	100
Low-carbon fuel production	Energy Commission	—	25
Forestry			
Forest health and fire prevention	CalFire	200	160
Local fire prevention grants	Office of Emergency Services	25	25
Urban forestry	CalFire	20	—
Agriculture			
Agricultural equipment	Air Resources Board	85	102
Methane reductions from dairies	Food and Agriculture	99	99
Incentives for food processors	Energy Commission	60	34
Healthy Soils	Food and Agriculture	—	5
Agricultural renewable energy	Energy Commission	6	4
Other programs			
Climate and energy research	Office of Planning and Research	11	35
Transformative Climate Communities	Office of Planning and Research	10	25
Waste diversion	CalRecycle	40	20
Integrated Climate Investment Program	Go-Biz	—	20
Energy Corps	Conservation Corps	—	6
Technical assistance to community groups	Air Resources Board	5	5
Urban greening	Natural Resources Agency	26	—
Natural lands climate adaptation	Wildlife Conservation Board	20	—
Low income weatherization and solar	Community Services and Development	18	—
Wetland restoration	Department of Fish and Wildlife	15	—
Coastal climate adaptation	Various agencies	6	—
Totals		**$3,181**	**$2,771**

[a] Continuous appropriations based on Governor's revenue estimates of $2.7 billion in 2017-18 and $2.4 billion in 2018-19.

SRA = State Responsibility Area; CalFire = California Department of Forestry and Fire Protection; CalRecycle = California Department of Resources Recycling and Recovery; and Go-Biz = Governor's Office of Business and Economic Development.

the administration proposes to redirect ARFVTF resources to fund additional ZEV infrastructure and APCF resources to address the structural shortfall in the Fish and Game Preservation Fund. (We discuss each of these proposals elsewhere in this report.)

Includes $232 Million in New Multiyear Funding Commitments. Most of the proposed discretionary expenditures are one time, but some programs would receive multiyear funding. These multiyear programs are: (1) $200 million annually over eight years to continue light-duty ZEV rebates, including $175 million for the Clean Vehicle Rebate Project and $25 million for incentives for light-duty vehicles for low-income consumers; (2) about $26 million for the Carl Moyer Program backfill through at least 2023; and (3) $6 million annually to the California Conservation Corps (CCC) to continue energy efficiency activities in the Energy Corps program. The Proposition 39 (2012) revenue transfers to the CCC for the Energy Corps program expire in 2017-18.

Governor's Plan Spends Almost All of Estimated Available Funds. The Governor's plan spends nearly all of the funds it estimates will be available through 2018-19, leaving a fund balance of about $20 million at the end of the budget year. To address the risk that actual revenue is lower than estimated and ensure fund solvency, the administration proposes budget bill language that gives DOF authority to proportionally reduce most 2018-19 discretionary allocations if auction revenues are not sufficient. The proposal also specifies that DOF could not reduce allocations to programs administered by CARB, healthy forests, and the Energy Corps program.

LAO Assessment: Revenue Projections

Auction Revenue Has Been Volatile, but Recent Actions Likely Increase Stability. Figure 4 shows the volatility in quarterly auction revenue over the last couple of years since fuel suppliers were required to obtain allowances in 2015. Notably, there was a substantial decrease in revenue collected in a few auctions in 2016 and early 2017. This decrease in revenue was primarily due to a decrease in the number of allowances purchased at auctions, rather than a significant decrease in prices. Several factors likely contributed to this decrease in the number of allowances purchased, including (1) an oversupply of allowances in the market because emissions were below the cap, (2) uncertainty related to a court case challenging the legality of state-auctioned allowances, and (3) uncertainty about CARB's legal authority to continue cap-and-trade beyond 2020.

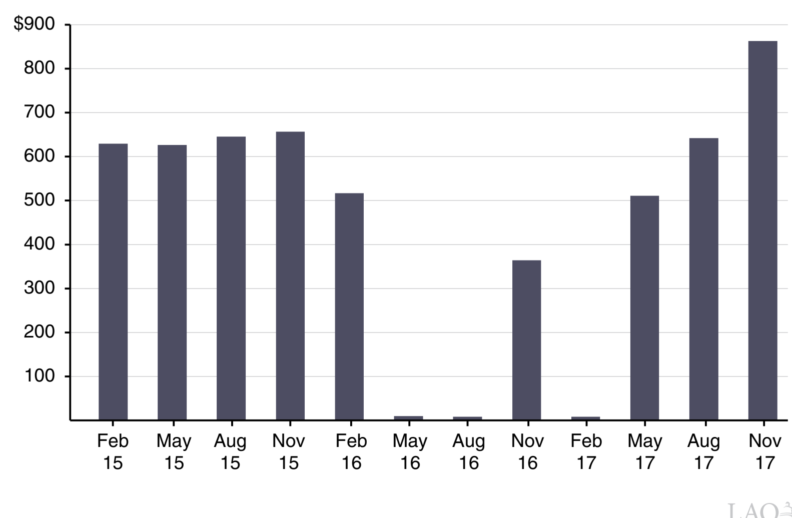
Two of the factors contributing to the low revenue were addressed last year. First, an appeals court ruled that the auctions were legal, and the state Supreme Court declined to hear an appeal of that ruling. Second, the Legislature passed AB 398, extending CARB's legal authority to continue cap-and-trade through 2030. Both actions provided greater legal certainty about the future of the program, which tends to increase demand for allowances. As a result, although there continues to be revenue uncertainty and potential for volatility (discussed below), it is unlikely that the state will have consecutive auctions with little or no revenue over the next few years.

Governor's Revenue Estimates Slightly Lower Than Ours, but Still Reasonable. The administration's

Figure 4

Cap-and-Trade Auction Revenue Has Been Volatile

(In Millions)



revenue estimates—$2.7 billion in 2017-18 and $2.4 billion in 2018-19—are slightly lower than what we consider to be most likely, but still within a reasonable range. We estimate annual state revenue from auctions will be about $3 billion in both 2017-18 and 2018-19. The first two auctions in 2017-18 generated a total of $1.5 billion. At these auctions, all allowances were sold at prices above the minimum price. Our revenue estimates assume all allowances continue to sell and allowance prices remain slightly above the minimum price through 2018-19.

There are, however, a wide variety of factors—both long and short term—that contribute to significant revenue uncertainty, which could be higher or lower than projected. Over the next decade, economic conditions and technological advancements will have major effects on market prices. In the next couple of years, additional factors contributing to uncertainty include:

- ***Allowance Banking.*** Demand for allowances and prices will depend on the extent to which entities purchase allowances at auctions with the intention of holding onto them for future years when prices are higher (also known as banking). The amount of banking will depend on factors such as market expectations about future price increases. The ultimate effects of different levels of banking on state revenue are unclear. For example, less banking would reduce demand and prices for allowances in the short term, but could increase future prices.
- ***Return of Allowances That Were Unsold in Previous Auctions.*** Allowances that go unsold at auctions are reoffered (in limited amounts) once prices exceed the minimum price for two consecutive auctions. For example, the November 2017 auction included the sale of over 13 million state allowances that previously went unsold in 2016. If auction prices remain above the floor (as our revenue estimates assume), a similar amount of previously unsold allowances will continue to be offered in the next several auctions. However, if auction prices drop to the floor, the number of allowances offered over the next several auctions will decrease. Consequently, small differences in auction prices could affect short-term revenue by hundreds of millions of dollars because of the difference in the number of allowances auctioned.
- ***Future CARB Regulatory Changes.*** Assembly Bill 398 directed CARB to make, or at least consider, a variety of changes to the cap-and-trade program, including potential changes to banking rules and the post-2020 supply of allowances. Over the next year or so, CARB will be implementing these changes. These implementation decisions could have significant effects on allowance prices and auction revenue.

LAO Assessment: Short- and Long-Term Spending Priorities

Proposal to Ensure Fund Solvency Prioritizes Certain Programs. Given the revenue uncertainty and the small projected fund balance at the end of 2018-19, there is a risk that the proposal would allocate more than the available funding if revenues are lower than the administration's estimates. As discussed above, if auction revenues are not sufficient to cover program costs, the Governor's plan would give DOF authority to proportionally reduce allocations for all discretionary programs except programs administered by CARB, healthy forests, and the Energy Corps program. Moreover, this effectively prioritizes funding for these programs over other discretionary programs if revenue is lower than expected. The Legislature will want to ensure that any such prioritization is consistent with its priorities.

Plan Increases Long-Term Spending Commitments. The Governor's proposal includes $232 million in new multiyear spending commitments. The Legislature will want to ensure any long-term spending commitments are consistent with its long-term priorities. Figure 5 (see next page) shows the total spending commitments beyond the 2018-19 budget (out-year spending) included in the administration's proposal, assuming $2.4 billion in annual revenue. Under this scenario, about $1.8 billion (over 70 percent) of annual revenue would be committed in future years, largely for the continuous appropriations, commitments related to AB 398, and rebates for ZEVs. This would leave roughly $600 million (less than 30 percent) for other program expenditures. We also note that this scenario assumes the Legislature does not make any additional out-year funding commitments in the budget.

Figure 5

Plan Increases Out-Year Spending Commitments

(In Millions)

Program	Annual Out-Year Spending	Time Period
Continuous Appropriations[a]	**$1,339**	Ongoing
Other Existing Commitments	**199**	
SRA fee backfill	80	Through 2030
Manufacturing sales tax exemption backfill	89[b]	Through 2029-30
Various administrative costs	30	Through 2030
New Commitments	**232**	
Clean Vehicle Rebate Project and other ZEV rebates	200	Through 2025-26
Carl Moyer Program backfill	26	Through 2023[c]
Energy Corps	6	Through 2030
Total	**$1,770**	

[a] Assumes $2.4 billion in annual revenue.

[b] Assumes amount of future transfers consistent with Governor's 2018-19 estimate. Under current law, amount increases to low hundreds of millions of dollars in 2023.

[c] Under current law, the revenue for this program expires at the end of 2023.

SRA = State Responsibility Area and ZEV = zero-emission vehicle.

LAO Assessment: Allocation Issues to Consider

As the Legislature considers how to spend GGRF revenues, it is important to keep in mind that the primary goal of a cap-and-trade program is to provide an economy-wide incentive for businesses and consumers to undertake cost-effective emission reductions. This is accomplished through establishing a price on emissions, not spending auction revenue. From an economic perspective, auction revenues are often thought of as a by-product of cap-and-trade programs, not the goal of the program. Furthermore, spending all auction revenue on GHG reductions is likely not necessary to meet the state's GHG goals and likely increases the overall costs of emission reduction activities. This is because, if the cap is effectively limiting emissions, spending on GHG reductions from major sources of emissions interacts with the cap-and-trade regulation in a way that changes the types of emission reduction activities undertaken, but not the overall level of emission reductions. In most cases, the different mix of reductions would be more costly overall. (For more details, see our 2016 report *Cap-and-Trade Revenue: Strategies to Promote Legislative Priorities*.)

Below, we discuss several issues for the Legislature to consider when determining how to allocate cap-and-trade expenditures.

Structure of Spending Plan Largely Depends on Legislative Priorities. The Legislature will want to consider how it could allocate revenue to achieve its highest priorities within current statutory and constitutional limitations. To the extent that the Legislature continues to focus spending on programs primarily aimed at GHG reduction activities, spending options should be evaluated in the context of how they interact with the cap-and-trade regulation, as discussed above. Potential spending strategies could include:

- ***Reductions Outside of Cap.*** The Legislature could target funds to achieve GHG reductions from uncapped sources. The Governor's plan includes several components that would provide funding for GHG reductions outside of the cap, including about $100 million for methane emission reductions from dairies and $160 million for forest health activities. The Legislature could provide more funding to these or other programs that target uncapped emissions.
- ***Targeting Other Market Failures Not Addressed by Cap-and-Trade.*** The Legislature could use funds to address other "market failures" that the cap-and-trade regulation does not address. For example, cap-and-trade might not provide adequate incentive in the private sector for research and development activities on GHG-reducing

technologies because the benefits of such activities can "spill over" to other companies that can profit by implementing developments made by others in their own products. As a result, private companies do not always invest in research and development activities at a level that is socially optimal. Thus, there could be a rationale for providing some additional state funding in this area. The budget includes $35 million for a modified research and development program intended to address these issues.

When evaluating programs that are primarily intended to reduce GHGs, the Legislature will also want to consider the degree to which these programs are likely to encourage reductions in other jurisdictions. This could be done by either encouraging technological advancements that help reduce GHGs or demonstrating cost-effective climate policies that can be adopted elsewhere.

The Legislature might also want to consider how the funds could be used to achieve other high-priority policy goals related to climate change. For example, climate adaptation is identified as a priority under current law. The Legislature could consider allocating a greater share of funding to activities intended to help the state manage the effects of climate change. The Governor's plan includes some funding intended to manage the effects of climate change as well as reduce GHGs, including $185 million for forest management and fire prevention. Similarly, current law identifies the reduction of local air pollution as a priority. As such, the Legislature could consider providing a greater share of funding to programs intended to accomplish this goal. The Governor's plan includes $160 million for freight and heavy-duty vehicle incentives and $250 million for local air district programs to reduce local air pollution. These programs are targeted at some of the most harmful local air pollutants, such as diesel particulate matter from heavy-duty engines.

Key Questions to Consider When Evaluating Different Programs. After the Legislature identifies its highest priorities, it will want to identify which programs are likely to achieve those goals effectively and how those programs should be structured. To help accomplish this, the administration is required to release an annual March report with estimated GHG reductions from programs that have been funded to date. It can be difficult to accurately estimate emission reductions from each program, and the amount and accuracy of information provided in past March reports has been limited. We discuss some of these limitations in our April 2016 web post *Administration's Cap-and-Trade Report Provides New Information, Raises Issues for Consideration*. The administration has recently undertaken efforts to improve its estimates of program outcomes, such as by adding estimates of co-benefits. However, these estimates were not included in the 2017 report. To the extent more complete and reliable estimates are included in the upcoming March report, it could enhance the quality of information available to make legislative spending decisions.

Given the later release of the cap-and-trade spending plan and some of the associated details, our office has had a limited amount of time to review all of the proposals. However, some of the key questions that we think the Legislature should consider as it reviews the plan include:

- ***Questions on Expected Outcomes.*** What outcomes is each program expected to accomplish? To what extent can each program be expected to reduce GHG emissions and meet other legislative goals, such as local air pollution reductions? How cost-effective are the proposed options at meeting these objectives?
- ***Questions for Programs That Received Funding in Past Years.*** What outcomes has the program accomplished so far? Are there enough cost-effective projects remaining to justify continuing expenditures? For example, the budget proposes $99 million to reduce methane emissions from dairies, which would bring the total amount provided in recent years to $260 million. Are there enough cost-effective methane reduction projects remaining that these funds could support in 2018-19?
- ***Questions for New Programs.*** How will projects be selected? Are criteria for selecting projects consistent with legislative priorities? For example, how will the most valuable research and development projects be identified in the climate research program?

Current Statutory Direction Might Not Align With Some Program Goals. The current GGRF statutory direction, guidance, and reporting requirements largely prioritize GHG reductions. This could be a problem if the primary goal for some of the programs is something other than GHG reductions. If statutory direction is not aligned with the primary goals of the program, the programs are less likely to be structured in a way that achieve the Legislature's goals most effectively. For example, if the primary goal of a program is to achieve local air pollutant reductions, but the statutory direction emphasizes GHG reductions, it is possible the program will be implemented in ways that do not achieve the greatest amount of local air pollutant reductions possible.

Recommendations

Ensure Allocations and Legislative Direction Are Consistent With Legislative Priorities. We recommend the Legislature allocate funds to programs that are likely to achieve its highest priority policy goals, which could include GHG reductions, as well as such things as local air pollution reductions and/or climate adaptation. The Legislature will also want to ensure the statutory direction for GGRF spending aligns with the primary policy goals of each program. This would help ensure that departments structure programs and prioritize projects that help achieve the Legislature's goals most effectively.

Direct Administration to Report on Key Program Information. We recommend the Legislature direct the administration to report at budget hearings on a variety of issues, including (1) the expected outcomes associated with each program that would receive funding in the budget, such as estimated overall costs and benefits; (2) the outcomes that existing programs have accomplished so far; and (3) how new programs will be structured, including the process and criteria that will be used to select projects. This information would help the Legislature evaluate the extent to which the plan achieves its goals effectively.

Consider Options to Ensure Solvency as Additional Revenue Information Becomes Available. We recommend the Legislature re-evaluate the overall amount of cap-and-trade allocations over the next few months as more information about auction revenue becomes available. Although 2018-19 revenue will continue to be subject to uncertainty, the Legislature will have additional information about 2017-18 revenue and it could adjust its spending plan accordingly. If revenue expectations at that time are consistent with the Governor's estimates (or lower), the spending plan would leave almost no fund balance at the end of 2018-19. In this scenario, the Legislature might want to consider options to mitigate against downside revenue risk. For example, the Legislature could allocate less money in 2018-19. Alternatively, it could adopt an approach similar to the one proposed by the administration, which designates that certain programs are guaranteed funding, and the amount provided to the remaining programs would depend on whether sufficient revenue is collected. If the Legislature adopts this strategy, it will want to ensure that guaranteed funding goes to programs that are the highest legislative priorities.

IMPLEMENTATION OF NATURAL RESOURCES BOND (SB 5)

LAO Bottom Line. The administration's 2018-19 budget plan includes $1 billion in appropriations for a number of departments to begin implementing SB 5, a resources-related bond measure—Proposition 68—that will be on the June 2018 statewide ballot. Overall, we find the administration's spending plan to be reasonable. However, we recommend two modifications: (1) specifying in budget bill language which flood management projects the Department of Water Resources (DWR) intends to undertake and (2) utilizing Proposition 1 funding in place of SB 5 funding for two Department of Fish and Wildlife (DFW) programs. In addition, we recommend that the administration report at budget hearings on its longer-term plan to allocate SB 5 funds. Finally, we recommend that the Legislature consider developing an alternative funding plan for high-priority projects and programs in the event that SB 5 should not be approved by voters.

Background

Legislature Placed $4.1 Billion Bond Measure on June 2018 Ballot. In the fall of 2017, the Legislature passed and the Governor signed SB 5 (Chapter 852, de León). This bill places a natural resources-related bond—Proposition 68—on the June 2018 statewide ballot. If approved by voters, the bond measure would authorize the state to sell a total of $4.1 billion in general obligation bonds for specified purposes, which are summarized in Figure 6. (This total includes $4 billion in new bonds and a redirection of $100 million in unsold bonds that voters previously approved for specific natural resources uses.)

SB 5 Includes Various Administrative Provisions. The bond measure includes a number of requirements designed to control how these funds are administered and overseen by state agencies. The measure requires regular reporting of how the bond funds have been spent, as well as authorizes financial audits by state oversight agencies. The measure also limits to 5 percent how much of the funding can be used for state administrative costs. The measure also includes several provisions designed to assist "disadvantaged communities" (with median incomes less than 80 percent of the statewide average) and "severely disadvantaged communities" (with median incomes less than 60 percent of the statewide average). For example, it requires that for each use specified in the bond, at least 15 percent of the funds be spent to assist severely disadvantaged communities.

Figure 6

Uses of Proposition 68 Bond Funds

(In Millions)

Natural Resource Conservation and Resiliency	**$1,547**
State conservancies and wildlife conservation	767
Climate preparedness and habitat resiliency	443
Ocean and coastal protection	175
River and waterway improvements	162
Parks and Recreation	**$1,283**
Parks in neighborhoods with few parks	725
Local and regional parks	285
State park restoration, preservation, and protection	218
Trails, greenways, and rural recreation	55
Water	**$1,270**
Flood protection	550
Groundwater recharge and cleanup	370
Safe drinking water	250
Water recycling	100
Total	**$4,100**

Governor's Proposal

Budget Includes $1 Billion From SB 5. The administration proposes to appropriate about one-quarter of the bond in the budget year. Specifically, this includes $989 million for 17 natural resources and environmental protection departments and $31 million for the California Department of Food and Agriculture (CDFA). Figure 7 (see next page) shows expenditures for each department and program proposed for SB 5 funding in 2018-19. (The administration states that it would request removal of the budget appropriations in the event that voters do not approve Proposition 68.)

Primarily Funds New Projects, but Also Some Administrative Costs. More than $8 out of every $10 proposed in 2018-19 would be for local assistance—typically allocated through a competitive grant process to local governments, nonprofits, and other organizations to implement projects. In addition, $121 million is for state capital outlay projects, including $94 million for flood protection projects and $30 million for the restoration of the Salton Sea. Less than 5 percent of the proposed funding is for state operations, which includes administrative support, planning activities, and some project work to be implemented by state agencies, such as a redwood reforestation project at Redwood National and State Parks on the northern coast of the state. As shown in Figure 8 (see page 19) the administration's spending plan would include 79.5 new positions to implement SB 5 (including 9 positions at CDFA).

LAO Assessment

Reasonable Approach to Implementing First Year of Funding. Overall, we find that the administration's SB 5 funding plan for 2018-19 is reasonable. While departments are proposing to spend hundreds of millions of dollars in the budget year, they generally have targeted this spending towards programs that are likely to be successfully implemented this first year. This includes focusing on grant programs for which administering departments are confident that they can develop grant guidelines and make awards before the end of the budget year, such as when the funding supports existing or recently active grant programs. In addition, some spending is targeted towards more narrowly defined state purposes, such as implementing

Figure 7

SB 5 Spending by Department

(In Millions)

Department and Purpose	2018-19 Amount Local Assistance	Capital Outlay	State Operations	Total
Parks and Recreation	**$460.3**	—	**$7.3**	**$467.6**
Parks in neighborhoods with few parks	460.3	—	3.1	463.4
State park maintenance planning and restoration	—	—	4.2	4.2
Water Resources	**$46.3**	**$117.9**	**$26.6**	**$190.8**
Flood protection	—	94.0	4.5	98.5
Groundwater recharge	46.3	—	15.5	61.8
Salton Sea restoration	—	23.9	6.1	30.0
Urban streams restoration	—	—	0.5	0.5
Water Resources Control Board	**$145.9**	—	**$1.3**	**$147.3**
Groundwater recharge and cleanup	83.7	—	0.3	84.0
Safe drinking water	62.3	—	1.0	63.3
Natural Resources Agency	**$56.5**	—	**$0.7**	**$57.2**
River recreation and parkways	38.0	—	0.6	38.6
Multibenefit green infrastructure	18.5	—	0.1	18.6
Food and Agriculture	**$29.6**	—	**$1.4**	**$31.0**
Water efficiency and enhancement	17.8	—	0.6	18.4
Healthy soils	8.6	—	0.4	9.1
Deferred maintenance at fairgrounds	3.2	—	0.4	3.6
Various conservancies[a]	**$23.9**	**$3.2**	**$2.1**	**$29.2**
River and waterway improvements	16.6	—	0.7	17.4
Wildlife conservation and habitat resiliency	7.3	3.2	1.3	11.8
Fish and Wildlife	**$22.1**	—	**$1.6**	**$23.6**
River and wetland restoration	22.1	—	1.6	23.6
Wildlife Conservation Board	**$20.0**	—	**$0.9**	**$20.9**
Habitat restoration	18.0	—	0.8	18.8
Lower American River restoration	2.0	—	—	2.0
Ocean Protection Council	**$20.0**	—	**$0.3**	**$20.3**
Marine wildlife and coastal ecosystems	10.0	—	0.1	10.2
Assist coastal communities	10.0	—	0.1	10.1
Forestry and Fire Protection	**$13.6**	—	**$1.1**	**$14.6**
Urban forestry	13.6	—	1.1	14.6
Coastal Conservancy	**$4.9**	—	**$0.2**	**$5.1**
San Francisco Bay restoration	4.9	—	0.1	5.0
Coastal forests	—	—	0.1	0.1
Conservation Corps	**$4.6**	—	**$5.2**	**$9.8**
Parkway restoration	0.0	—	4.9	4.9
Grants to local corps programs	4.6	—	0.3	4.9
Conservation	**$1.0**	—	**$0.2**	**$1.2**
Agricultural conservation	1.0	—	0.2	1.2
Statewide bond administration	—	—	**$1.4**	**$1.4**
Totals	**$848.5**	**$121.1**	**$50.2**	**$1,019.8**

[a] Baldwin Hills, Sacramento-San Joaquin Delta, San Diego River, San Gabriel Mountains and Los Angeles River, Santa Monica Mountains, Sierra Nevada, and Tahoe Conservancies.

the Salton Sea Management Plan. For new programs authorized by the bond, the administration generally is requesting funding for administrative positions that would be responsible for developing program guidelines during the budget year.

Figure 8

SB 5 Positions Requested

2018-19

Department	Positions
Parks and Recreation	21.0
Water Resources Control Board	10.0
Food and Agriculture	9.0
Conservation Corps	7.0
Water Resources	7.0
Natural Resources Agency	7.0
Wildlife Conservation Board	5.0
Forestry and Fire Protection	4.0
Sierra Nevada Conservancy	3.0
Ocean Protection Council	2.0
Sacramento-San Joaquin Delta Conservancy	2.0
Coastal Conservancy	1.5
San Diego River Conservancy	1.0
Total	**79.5**

We also note that in most cases, local assistance and capital outlay funding is targeted to programs where prior bond funds largely have already been spent or committed to projects, leaving little available for new projects absent this proposal. For example, the proposal would provide $47 million for DWR to offer another round of grants to local groundwater agencies that are in the process of developing plans to help implement the Sustainable Groundwater Management Act (SGMA). Proposition 1 (2014) provided such support to some agencies; however, those grants have been fully allocated and not every local agency received funding.

Notably, there are a number of programs in SB 5 for which the administration is not requesting any resources for 2018-19, including for projects or administrative support. This includes some programs with relatively large amounts of funding authorized in SB 5, such as for multibenefit projects to implement voluntary agreements that improve stream conditions for fish ($200 million), water recycling projects ($80 million), and coastal watersheds restoration ($64 million). Based on our review, however, the administration has a reasonable rationale for delaying spending on these programs. In some cases, it could be premature to appropriate spending in the budget year because program details and planning will need more time to be developed (such as for the voluntary agreements), and in other cases previously approved funds remain available (such as water recycling funds in Proposition 1).

Long-Term Funding Plan Not Identified. While the budget-year plan appears reasonable, the administration has not identified a spending plan for subsequent years. Therefore, it is unclear when the administration expects to begin funding programs that are not proposed to receive project funding in the budget year. It is also unclear how many years the administration thinks it will take to fully appropriate all of the funds.

Additional Scrutiny Needed for Some Proposals. Though the budget-year proposals generally seem reasonable, we have identified a couple proposals that raise specific concerns. These proposals include:

- ***DWR Flood Control Projects.*** The administration proposes $94 million for flood control projects. However, the proposal by DWR does not specify which projects will be funded, denying the Legislature the ability to provide sufficient oversight over how these funds will be spent. The state's flood management infrastructure has billions of dollars of needed renovations and improvements according to various reports, and it is unclear which of those needs will be targeted by the proposed funding.
- ***DFW Competitive Grant Programs.*** The budget plan proposes a total of $14 million for two grant programs related to habitat restoration and improving conditions for fish and wildlife. However, the proposed budget already includes $28 million from Proposition 1 for similar DFW activities, and there remains $179 million in authority from that bond that has not yet been committed for these types of projects. At the time of this analysis, the department was unable to explain why the SB 5 funding plan included appropriations for these

programs when there was still outstanding funds available from another bond.

High-Priority Projects Might Lack Funding if Voters Reject SB 5. The Legislature will not know until close to its constitutional deadline to pass the state budget whether voters have approved SB 5. Despite this uncertainty, we think it is appropriate that the Governor has included these proposals in his January budget because doing so allows the Legislature several months to review the proposals and ensure that the spending plan is consistent with its priorities. However, should the bond measure fail to pass, the Legislature might be faced with decisions about whether it wants to find alternative funding sources for certain programs with little time before the constitutional budget deadline to explore its options. Considering potential alternative funding sources might be especially important for programs where (1) the state has an obligation to provide funds (such as for the Salton Sea Management Plan), (2) the state could face long-term financial costs if it does not make certain investments (such as in the case of maintaining flood management or other infrastructure), or (3) additional funding might be key to successful execution of a statewide priority (such as support for local implementation of SGMA). Some existing programs might be able to utilize past funding sources. For example, the Urban Forestry Program is supported in the current year with GGRF. Other programs, however, rely on nearly exhausted bond funds and would need a new fund source to continue.

LAO Recommendations

Approve Proposals With a Couple Modifications. We recommend approval of most of the administration's SB 5 funding requests and associated positions. However, based on our review of the proposals, we recommend the following two modifications:

- ***Budget Bill Language Specifying Flood Projects.*** We recommend that the Legislature direct DWR to report at budget hearings on which specific flood management projects will be funded in the budget year. Based on this information—as well as an assessment of its own priorities—we recommend that the Legislature adopt budget bill language that would schedule the proposed flood funding by project.
- ***Replace SB 5 Funds With Proposition 1 Funding for Two DFW Grant Programs.*** We recommend reducing DFW's allocation from SB 5 by $14 million and increasing its appropriation from Proposition 1 by an equivalent amount. This will be more consistent with the administration's broader approach to allocating the first year of SB 5 funding. Moreover, it will be administratively more efficient for the department to operate one set of bond programs related to habitat restoration and improving conditions for fish and wildlife, rather than simultaneously administering parallel programs from different bonds.

Report at Budget Hearings on Long-Term Funding Plan. We recommend that the Legislature direct the administration to report at budget hearings on its longer-term strategy for expending SB 5 funds. Doing so would give the Legislature a better sense of when programs not proposed for funding in 2018-19 would be implemented and how long the administration proposes taking to fully allocate bond funding.

Consider Budget-Year Priorities and Alternative Funding if SB 5 Fails. The Legislature might wish to consider whether there are certain programs funded in SB 5 that would be high enough priorities to fund from other sources should SB 5 fail. This could involve, for example, the budget subcommittees identifying an alternative budget approach for specific programs—including funding amounts and sources—that could be adopted in June if the proposition fails. Aside from the General Fund, whether an alternative fund source could be used for a particular program would probably depend on the allowable uses of that fund. In addition, the use of alternative fund sources generally would involve the trade-off of not having those funds available for other purposes.

VENTURA TRAINING CENTER

LAO Bottom Line. We recommend that the Legislature reject the Governor's proposal to convert the existing Ventura conservation camp for inmates into a new Ventura Training Center that would provide a firefighter training and certification program for parolees. We find that the proposed program is unlikely to be the most cost-effective approach to reduce recidivism. To the extent that reducing recidivism is a high priority for the Legislature, it could redirect some or all of the proposed funding to support evidence-based rehabilitative programming for offenders in prison and when they are released from prison. Similarly, the Legislature could explore if other options are available to provide CCC corpsmembers training opportunities, to the extent it is interested in doing so.

Background

Offender Rehabilitation Programs Intended to Reduce Recidivism. Research has shown that certain criminal risk factors are particularly significant in influencing whether or not individuals commit new crimes following their release from prison (known as recidivating). For example, individuals who have low performance, involvement, and satisfaction with school and/or work are more likely to recidivate than individuals who do not exhibit these characteristics. Research also shows that rehabilitation programs (such as substance use disorder treatment and employment preparation) can be designed to address specific criminal risk factors. For example, employment counseling programs can help reduce or eliminate the criminal risk resulting from an offender's low involvement in work. In addition, research suggests that programs are most effective in reducing recidivism when they are targeted at individuals who have a high risk of recidivating due to factors that could be addressed with rehabilitation programs. (For more information on the key criminal risk factors and principles for reducing recidivism, please see our recent report *Improving In-Prison Rehabilitation Programs*.)

State Provides Various Rehabilitation Programs to Parolees. Prior to an inmate's release from prison, the California Department of Corrections and Rehabilitation (CDCR) generally uses assessments to determine how likely the inmate is to recidivate as well as what criminal risk factors he or she has. The department uses this information to target many of its rehabilitation programs once the inmate is released and supervised by state parole agents in the community. The 2017-18 budget included $215 million to support various parolee rehabilitation programs. One such program is the Specialized Treatment for Optimized Programming (STOP), which provides a range of services, such as substance use disorder treatment, anger management training, and employment services to parolees. To be eligible for STOP, parolees must have a moderate to high risk of reoffending and be identified as having a criminal risk factor that can be addressed by services available through the program.

Multiple Agencies Have Professional Firefighter Crews. The California Department of Forestry and Fire Protection (CalFire) employs over 7,000 firefighters each year during fire season. Of those, about 1,700 are seasonal firefighters, classified as "Firefighter I," CalFire's entry-level firefighter classification. A Firefighter I is a temporary employee who is hired only for the duration of the "fire season"—the period of time when fires are most likely to occur at the greatest intensity. Individuals are usually hired in April, May, or June—as CalFire increases staffing for the fire season—and work for up to nine months, depending on the duration and intensity of the season. More experienced firefighters can apply to become a Firefighter II—a permanent employee. Both types of firefighters typically staff "engine crews," which are made up of a fire engine and three to four firefighters, as well as an engine operator.

Federal and local agencies also operate fire crews. Some larger local agencies, such as the Los Angeles County Fire Department, provide their own wildfire protection. However, many agencies mostly respond to structure fires rather than wildfires. In addition, the U.S. Forest Service employs roughly 10,000 firefighters for fire protection in national forests.

State Conservation Camps Provide Inmate Firefighter Hand Crews. While in prison, certain inmates have the opportunity to serve as inmate firefighters as part of a hand crew and live in a conservation camp jointly operated by CDCR and CalFire (rather than remain in a prison facility). (Hand crews are usually made up of 17 firefighters that cut "fire lines"—gaps where all fire fuel and vegetation is removed—with chain saws and hand tools.) Inmates qualify for camps if CDCR has determined they (1) can be safely housed in a low-security environment, (2) can work outside a secure perimeter under relatively low supervision, and (3) are medically fit for conservation camp work. CDCR makes this determination generally based on various factors, including the nature of the crimes inmates are convicted of, their behavior while in prison, and the time they have left to serve on their sentence. CDCR provides correctional staff at each camp who are responsible for the supervision, care and discipline of inmates. CalFire maintains the camp, supervises the work of the inmate fire crews, and is responsible for inmate custody while they are working. Currently, CalFire maintains 39 conservation camps statewide that have the capacity to house more than 4,300 offenders. (One of these camps houses juvenile offenders.) As of January 10, 2018, there were about 3,500 adult inmates housed in conservation camps. Each camp costs roughly $2.4 million to operate annually, or about half a million dollars per hand crew.

Inmates on hand crews receive basic training that consists of a week of classroom training and a week of field training that covers wildland fire safety and attack, hand tool use, teamwork, and crew expectations. Once assigned to a fire crew, inmates continue to receive training in things like cardiopulmonary resusitation and emergency response, with some progressing to more responsible positions on the crew, such as a chainsaw operator.

CCC Provides Fire Crews and Support. The CCC maintains seven fire crews that are staffed by corpsmembers and typically train and operate under the supervision of CalFire Fire Captains. While assigned to wildfires, the crews are utilized primarily to construct fire lines. Fire crews also may assist fire engine crews and work after a fire is contained to extinguish any remaining hot spots. After a fire is completely extinguished, crews are used for post-fire restoration work such as reseeding. According to CalFire, each crew costs about $1 million to operate annually.

Governor's Proposal

Establish Ventura Training Center to Provide Firefighter Training and Certification for Parolees. The Governor proposes to convert the existing Ventura conservation camp for inmates into a new Ventura Training Center that would provide a firefighter training and certification program for parolees. (The inmate firefighter hand crews currently based at the Ventura conservation camp would be relocated to other state conservation camps.) Upon full implementation, the program would accommodate 80 parolees, selecting in most cases from those who had served as inmate firefighters in a conservation camp prior to their release from prison and were nominated for the program by CalFire and CDCR staff.

Parolees would be enrolled in the program for a total of 18 months. According to the administration, program participants would be paid and receive (1) 3 months of classroom instruction in basic forestry and firefighting, (2) 3 months of industry-recognized firefighting training and certification (while also being available to support fire suppression and resource management efforts as needed), and (3) 12 months of full-time assignment as part of an engine crew. The administration indicates that upon completion of the program, participants would have the experience and certifications to apply for entry-level firefighting jobs with local, state, and federal firefighting agencies. The administration proposes to contract with a nonprofit organization to provide participating parolees with life skills training, reentry and counseling services, and job placement assistance to help them maximize their scoring capabilities in hiring processes and assist them with other challenges related to reentry. Participants would also have access to high school courses through CCC's existing contract with the John Muir Charter School.

Allow Some CCC Corpsmembers to Participate in Selected Trainings. In addition to parolees, the program would allow up to 20 CCC corpsmembers at a time to participate in select trainings and certification opportunities to be identified by CCC and Calfire. The amount of time the corpsmembers would spend at the training center could vary from a week up to a month or more. The administration reports that corpsmembers at the training center would be housed separately from parolees but could participate in trainings together with them.

Provide Funding to Operate Program. The Governor requests $7.7 million from the General Fund and 12.4 positions in 2018-19 to implement and operate the program. Under the proposal, $6.3 million from the General Fund and 12.4 positions would be needed to operate the program in 2019-20 and annually thereafter. The $7.7 million proposed for 2018-19 would be allocated as follows:

- ***CalFire ($2 million).*** These resources would allow CalFire to purchase equipment and training materials for trainees, make facility repairs, and hire 24-hour site security services.
- ***CDCR ($2.1 million).***These resources would be used by CDCR to provide 1.4 parole agents to supervise parolees at the new Ventura Training Center and six other staff—including a groundskeeper, custodian, and cooks—to operate the training center. In addition, CDCR would receive funds to contract with a nonprofit

organization to provide case management and other services to participants.

- ***CCC ($3.5 million).*** The bulk of these resources would be used to pay the salaries of parolee participants in the program, which are estimated to be $2.2 million annually. Under the proposal, CCC would provide payroll services for the parolees in the program. (The CCC has a payroll system that is designed to meet the needs of a short-term, non-civil service workforce.) The CCC also requests five positions to perform payroll functions and to provide supervision of corpsmembers while they are at the training center.

Make Infrastructure Improvements. In addition, the budget includes $1.1 million from the General Fund in 2018-19 to develop preliminary plans for renovating the existing conservation camp to meet the needs of the proposed program. Specifically, these renovations would (1) replace and upgrade existing facilities (such as the staff barracks and equipment storage facilities), (2) add privacy to showers and bathrooms in existing dormitories, (3) construct a separate dormitory for female participants, (4) construct additional administrative and classroom space, and (5) build a gym for staff. The proposed renovations are expected to cost a total of $18.9 million.

Recidivism Reduction Is Primary Goal. The administration indicates that the primary goal of the proposed program is to reduce recidivism by helping ex-offenders gain employment as firefighters. However, the proposal also suggests that because trainees would be available to assist with emergency response, the program could potentially increase firefighting resources.

LAO Assessment

While providing additional resources to reduce recidivism could be a worthwhile investment, we find that the Governor's proposal raises several concerns. Specifically, we find that the proposal (1) is not evidence based; (2) would not target high-risk, high-need individuals; (3) would be unlikely to lead to employment for participants; (4) would likely not be cost-effective; and (5) includes resources that are not fully justified. We also find that providing additional training to CCC members could be achieved in other ways.

Not Evidence Based. Research shows that rehabilitation programs that are evidence based are most likely to be effective at reducing recidivism. To be evidence based, a program must be modeled after a program that has undergone rigorous evaluations showing that it reduces recidivism. However, the administration has not provided examples of any other firefighter training programs that have been found to reduce recidivism. Accordingly, it is unclear whether the proposed intervention model has ever been found to be effective elsewhere. Furthermore, the administration is not proposing a feasibility study, pilot, or sufficiently rigorous evaluation plan for the program. As a result, it unclear how the administration would know if the proposed program were successful once it was implemented.

Not Targeted to High-Risk, High-Need Parolees. As discussed above, research suggests that rehabilitation programs are most likely to be successful when targeted at high-risk, high-need individuals. However, the administration plans to primarily recruit parolees who served as inmate firefighters in a conservation camp prior to their release from prison. These parolees tend to be of low risk to the community and have demonstrated a willingness and ability to work hard. Although CDCR does not separately track recidivism rates for inmates released from conservation camps, we expect that these inmates would be among the least likely in CDCR to recidivate. Moreover, the administration indicates that conservation camp inmates would be nominated by CalFire and CDCR staff for the program based on their nonviolent behavior and conformance to rules while incarcerated. This further suggests that program participants would already have relatively low risks of recidivism and low needs for rehabilitative programming. Accordingly, we find that the proposed target population is both inconsistent with best practices and with CDCR's own efforts to target rehabilitation programs to high-risk, high-need offenders.

Unlikely to Lead to Employment. The administration indicates it has not performed any type of labor market analysis or survey to determine potential demand for graduates of the program. We note, however, that seeking employment as a CalFire firefighter is very competitive. While CalFire was not able to provide information on the ratio of applicants to position openings in time for our analysis, some news outlets have reported only a few percent of applicants being hired. The minimum qualifications for a Firefighter I require a candidate to be at least 18 years old and have a high school diploma or its equivalent. However, the department indicates that many applicants are returning Firefighter I's who have previous experience working as seasonal firefighters and many have an Emergency Medical Technician certification (which is extremely difficult for a convicted felon to obtain). Parolees would likely have difficulty competing with such applicants. Moreover, the California Department of Human Resources requires the firefighter hiring process to be competitive—meaning the department does not have the authority to directly hire those who complete the program. While it is possible that program participants could apply for firefighter positions with local and federal agencies, the availability of such positions statewide is unknown. However, the information on specific agencies that is available suggests that firefighter hiring at the local level is equally competitive, if not more so. For example, a RAND Corporation study found that the Los Angeles Fire Department had upwards of 13,000 applicants for fewer than 100 jobs in 2013.

Unlikely to Be Cost-Effective. We also find that it is highly unlikely that the proposed program would be the most cost-effective way to reduce recidivism. This is because the level of funding proposed to operate the program on an ongoing basis appears quite expensive relative to other rehabilitation programs. Specifically, the proposed program would cost $6.3 million annually to operate, or about $80,000 per parolee. However, research suggests that there are a variety of programs—such as substance use disorder treatment and academic education—that could reduce recidivism at a much lower cost. For example, with the $6.3 million requested by the Governor, we estimate for illustrative purposes that CDCR could instead provide cognitive behavioral therapy—treatment that costs about $1,200 per inmate and has been shown elsewhere to reduce recidivism—to over 5,200 inmates annually—nearly *100 times* the number that would be treated annually under the proposal. In view of the above, there are likely more cost-effective ways to reduce recidivism than the Governor's proposal.

This concern is compounded by the fact that the administration is proposing to make a large capital investment at the Ventura conservation camp to renovate and construct facilities to meet the specific needs of the proposed program. This is a substantial up-front cost, particularly for a program that appears unlikely to be effective and has not been tested through a pilot or feasibility study. (We note that expansion of other rehabilitative programs also can involve capital investments.)

Various Resources Requested Have Not Been Fully Justified. At the time of this analysis, the administration was not able to provide sufficient justification for some of the workload resources being requested. For example, the role of and need for the additional parole agents proposed are unclear. On the one hand, if these parole agents would provide specialized services or a higher level of supervision for the 80 parolees at the Ventura Training Center, then the department might need some additional staffing. On the other hand, if these parole agents would provide essentially the same supervision and services as the general parolee population receives, then it is unclear why the additional parole agents are needed. The Governor's budget includes funding for CDCR to supervise the entire projected parole population for 2018-19, which includes the 80 parolee participants.

In addition, it is unclear why CCC requires five additional staff if its main responsibility would be to provide pay and benefits to 80 program participants. Furthermore, the program is expected to accept its first participants on October 1, 2018, yet the proposed capital outlay project—which the administration argues is necessary to operate the program—is not expected to be completed until May 2022. The administration indicates that it plans to gradually ramp up the program population and utilize existing facilities and temporary structures until the renovations are complete. However, it has not provided a timeline for the planned rollout, nor has it provided adequate justification for why it needs to fully staff the program before it will be running at full capacity.

Other Options Available to Provide CCC Corpsmembers Training Opportunities. The CCC has a long-established relationship with CalFire and actively collaborates with CalFire to train fire crews. The CCC and CalFire could identify other options to allow additional corpsmembers to participate in select trainings and certification opportunities in the absence of the Ventura Training Center. This could include holding such trainings at CalFire facilities or at residential centers that serve as a hub for CCC training activities. Another possibility is to increase corpsmember options to access firefighter-related training provided by community colleges.

LAO Recommendation

In view of the above concerns, we recommend that the Legislature reject the Governor's proposal to convert the existing Ventura conservation camp for inmates into a new Ventura Training Center that would provide a firefighter training and certification program for parolees. The Legislature could instead redirect some or all of the proposed funding to support evidence-based rehabilitative programming for offenders in prison and when they are released from prison. (For more information on evidence-based programs and the need to improve CDCR's existing programs, please see our recent report *Improving In-Prison Rehabilitation Programs*.) Similarly, the Legislature could explore other options that are available to provide CCC corpsmembers training opportunities, to the extent it is interested in doing so.

SUMMARY OF NEW NATURAL RESOURCES CAPITAL OUTLAY PROJECTS

The Governor's budget includes $159 million for 21 new capital outlay projects in four departments within the California Natural Resources Agency. As shown in **Figure 9** (see page 26), these proposals fund various project phases, including study, acquisition, planning, and construction. Projects include (1) DWR projects for Salton Sea management and flood improvement; (2) four new CCC residential centers; (3) the replacement, renovation, and relocation of various CalFire facilities; and (4) several improvement projects in state parks. Total costs for completion of all proposed projects is expected to be $842 million. Of this total, most of the costs would be funded by the General Fund or bonds—specifically general obligation or lease revenue bond funds—which would be repaid with interest from the General Fund. Elsewhere in this report, we discuss in more depth the administration's plan for expenditure of SB 5 bond funds, as well as the four new CCC residential centers proposed. At this time, we do not have specific concerns with the other proposals, but overall they do amount to a significant budgetary commitment over the next few years.

CALIFORNIA CONSERVATION CORPS

The CCC provides about 1,450 young adults between the ages of 18 and 25 (and veterans to age 29) work experience and educational opportunities. Program participants, referred to as corpsmembers, work on projects that conserve and improve the environment. They also provide assistance during natural disasters. Work projects are sponsored by various governmental and nongovernmental entities that reimburse CCC for the work performed by corpsmembers. Some corpsmembers live in residential centers that serve as a hub of CCC service delivery, while most corpsmembers report to nonresidential centers for work and other service-related activities. Typical activities include academic and technical training as corpsmembers pursue educational and career development goals. Corpsmembers can earn scholarships that can be used towards higher education, apprenticeships, and vocational education.

The Governor's 2018-19 budget proposes a total of $125 million for support of CCC. Half of these funds are from the General Fund, with the remaining primarily coming from a few special funds. The proposed amount reflects a net increase of $2 million, or 2 percent, compared to projected current-year expenditures.

EXPANSION AND REPLACEMENT OF RESIDENTIAL CENTER FACILITIES

LAO Bottom Line. The decision about whether to take the initial steps towards a major expansion of CCC residential centers (as proposed by the Governor) and move from a mainly nonresidential-center based program to a mainly residential-center based program is ultimately a policy decision for the Legislature. We recommend, however, that the Legislature (1) wait for

Figure 9

New Major Resources Capital Outlay Projects Proposed in 2018-19

(Dollars in Thousands)

Project	2018-19 Funding	2018-19 Phase	Total Project Cost	Fund Source
Department of Water Resources				
Salton Sea Management Plan	$23,910	S,A,P,W,C	$383,000	Senate Bill 5 bonds, Proposition 1 bonds
Flood improvement projects	94,000	P,C	94,000	Senate Bill 5 bonds
California Conservation Corps				
Greenwood: new residential center	3,172	P	62,235	General Fund, lease revenue bonds
Auberry: new residential center	4,885	A,P	48,981	General Fund, lease revenue bonds
Yountville: new residential center	200	S	40,230	General Fund, lease revenue bonds
Los Piños: new residential center	1,725	P	33,590	General Fund
Fortuna: renovate existing residential center	1,052	P	12,459	General Fund
Los Angeles: acquire and renovate existing nonresidential center	169	A	8,061	General Fund
Department of Forestry and Fire Protection				
Intermountain Conservation Camp: replace facility	500	S	73,295	General Fund, lease revenue bonds
Ventura Conservation Camp: renovate facility	18,859	P,W,C	18,859	General Fund
Prado Helitack Base: replace facility	1,259	P	17,755	General Fund, lease revenue bonds
Alhambra Valley Fire Station: relocate facility	2,500	A	12,408	General Fund, lease revenue bonds
Higgins Corner Fire Station: relocate facility	900	A	12,029	General Fund
Ishi Conservation Camp: replace kitchen	383	P	5,873	General Fund
Perris Emergency Command Center: remodel facility	70	P,W	904	General Fund
Department of Parks and Recreation				
Anza Borrego SP: acquisition	1,656	A	4,817	Federal funds
Picacho SRA: park power system upgrade	200	S	3,791	Proposition 40 bonds
R.H. Meyer Memorial SB: parking lot expansion, other modifications	320	P	3,658	Proposition 40 bonds
Los Angeles SP: soil remediation	3,470	P,W,C	3,470	Proposition 40 bonds
Ocotillo Wells SVRA: auto shop addition	106	P,W	1,418	OHVTF
Oceano Dunes SVRA: Le Sage Bridge Replacement	108	P	1,186	OHVTF
Totals	**$159,444**		**$842,019**	

S = study; A = acquisition; P = preliminary plans; W = working drawings; C = construction; SP = State Park; SRA = State Recreation Area; SB = State Beach; SVRA = State Vehicular Recreation Area; and OHVTF = Off-Highway Vehicle Trust Fund.

more information before approving funding for four new residential centers and (2) require CCC to provide reporting on corpsmember outcomes.

Background

The CCC operates 24 facilities in urban and rural areas statewide—8 residential centers and 16 nonresidential centers. The typical residential center includes a dormitory, dining room and kitchen, administrative offices, recreational facilities, classroom space, and warehouse space. The residential centers normally house between 80 and 100 corpsmembers. About 644 corpsmembers (44 percent) live in residential centers. The typical nonresidential center includes classroom space and administrative offices. The nonresidential centers normally serve between 30 to 60 corpsmembers. About 806 corpsmembers (56 percent) report to nonresidential centers. Corpsmembers from nonresidential centers sometimes are brought to residential centers for training and other events because these centers are better equipped to support larger numbers of people. The CCC groups the residential centers and nonresidential centers into 14 districts for administrative purposes.

Governor's Proposal

Major Expansion of Residential Centers. The Governor's budget proposes $10 million from the General Fund in 2018-19 to begin a major expansion of the CCC residential center program by building four new residential centers. Under the plan, the initial acquisition and planning stages would be funded from the General Fund, as would the construction phase of the Los Piños center. Construction for the Auberry, Greenwood, and Yountville centers would be funded from lease revenue bonds that would be repaid from the General Fund over time.

Figure 10 summarizes the plan to complete by 2022-23 the construction of the four new residential centers. Specifically the plan proposes a total of $185 million over the next five years. This includes $54 million from the General Fund and $131 million from lease revenue bond funds. The four new residential centers would add capacity for 370 additional corpsmembers. This equates to $500,000 in project costs per residential corpsmember slot. (In addition, the proposed budget includes funding for the next phase of a project to replace the existing residential center at Ukiah, which would add capacity for 35 additional corpsmembers.)

As shown in Figure 11, under the Governor's plan, the total number of corpsmembers would increase, resulting in a greater share of corpsmembers who would reside in residential centers. By 2022-23 the number of residential corpsmembers would increase by 63 percent—from 644 to 1,049 corpsmembers. The share of corpsmembers in residential centers would increase from 44 percent to 58 percent.

Future Operating Costs. According to CCC, future costs to operate these facilities are estimated to total $22 million annually—with about $12.2 million expected to be supported by the General Fund—as follows:

- ***Auberry Center.*** $5.6 million ($3.1 million General Fund) for 18 positions and operations costs in support of 90 corpsmembers.
- ***Greenwood Center.*** $5.8 million ($3.2 million General Fund) for 18 positions and operations costs in support of 100 corpsmembers.
- ***Los Piños Center.*** $5.8 million ($3.2 million General Fund) for 18 positions and operations cost in support of 100 corpsmembers.

Figure 10

California Conservation Corps Five-Year Expansion Plan

(In Thousands)

Proposed New Residential Centers	2018-19	2019-20	2020-21	2021-22	2022-23	Total Project Cost
Auberry	$4,885[A,P]	—	$2,622[W]	—	$41,474[C]	$48,981
Greenwood	3,172[P]	$3,745[W]	55,318[C]	—	—	62,235
Los Piños	1,725[P]	1,999[W]	—	$29,866[C]	—	33,590
Yountville	200[S]	2,602[P]	2,821[W]	34,607[C]	—	40,230
Totals	**$9,982**	**$8,346**	**$60,761**	**$64,473**	**$41,474**	**$185,036**

Phases: A = acquisition; P = preliminary plans; S = study; W = working drawings; and C = construction.

Figure 11

Corpsmembers Slots Under Expansion Plan

	Current		Proposal (by 2022-23)		Difference	
Corpsmembers	Number	Percent	Number	Percent	Number	Percent Change
Residential centers	644	44%	1,049[a]	58%	405	63%
Nonresidential centers	806	56	751	42	-55	-68
Totals	**1,450**	**100%**	**1,800**	**100%**	**350**	**24%**

[a] Includes 35 corpsmembers added under the Ukiah residential center replacement project.

- ***Yountville Center.*** $5 million ($2.7 million General Fund) for 18 positions and operations costs in support of 80 corpsmembers. The operating costs for Yountville would be partly offset by $2.6 million ($1.4 million General Fund) because the plan is to close the Napa nonresidential center and move the staff from Napa to Yountville.

Expansion Designed to Achieve Multiple Goals. The administration argues that the proposed expansion will achieve multiple goals. First, residential centers allow access to the CCC program for young adults from all parts of the state, not just those that live within commuting distance of a nonresidential center. Corpsmembers must find affordable housing within commuting distance of a nonresidential center. This can present a barrier in regions where the cost of living is relatively high (such as Napa).

Second, CCC states that residential centers offer an enhanced level of service than its nonresidential centers by (1) providing a structured environment offering full immersion in work projects and educational programs, (2) offering stability and security, (3) providing many opportunities for community engagement and personal development, and (4) allowing CCC to respond more quickly to requests for emergency assistance. According to CCC, residential centers also provide more time for corpsmembers to dedicate to academics, in part, because they spend less time commuting. CCC has provided some limited data to show that corpsmembers in school at residential centers achieved greater gains in math and reading levels than their counterparts in nonresidential centers. The department also states that residential center corpsmembers are more likely to participate in community service projects than nonresidential center corpsmembers.

Third, CCC states that the proposed expansion would allow it to better meet the needs of the local communities by having more corpsmembers and offering a residential center program in additional areas of the state. Figure 12 shows where the proposed facilities would be located, as well as CCC's existing residential and nonresidential centers.

Construction at Existing Public Properties. The administration plans to use existing structures and state properties in order to lower the construction costs for the new residential centers. Specifically, the administration proposes to utilize the following sites:

- ***Auberry—Renovation of an Elementary School.*** The CCC plans to renovate the existing Auberry Elementary School and construct a new detached warehouse. This school has been closed for about five years.
- ***Greenwood—New Facility.*** The CCC proposes to construct a new residential center on the same parcel where the existing Greenwood residential center is located. This facility was built in the 1980s and is temporarily being used to house corpsmembers from other locations while their facilities are undergoing renovations.
- ***Los Piños—Renovation of a Juvenile Detention Facility.*** The CCC plans to renovate the Los Piños Conservation Camp, which was operated by Orange County as a juvenile detention facility for about 40 years and has remained vacant for the last six years. For the most part, the Los Piños Camp already resembles CCC's prototype for a residential center. However, several of the buildings need to be renovated to convert Los Piños from a correctional facility, as well as to comply with Americans with Disabilities Act and California Building Code requirements.
- ***Yountville—Renovation of a Warehouse.*** The CCC plans to renovate an existing warehouse at the Yountville Veterans Home—administered by the California Department of Veterans Affairs—to provide office space, dormitories, classrooms, recreation rooms, kitchen, and dining rooms. The project would also construct a new detached warehouse.

LAO Assessment

Major Cost to Expand Residential Centers. The Governor's 2018-19 budget proposes $10 million from the General Fund for the study phase at Yountville; the acquisition phase at Auberry; and the preliminary plans phase at Auberry, Greenwood, and Los Piños. As discussed above, this proposal is just the first step in a plan to spend a combined total of $185 million over the next five years to design and construct new residential centers. (Over the same time period, the total number of corpsmembers would increase only modestly by 350 corpsmembers, or by 24 percent.) In addition, once construction of the new residential centers is completed, the total annual operating cost of the four centers would be about $22 million, with more than half of that coming from the General Fund.

In our view, the Governor's proposal presents the Legislature with a policy decision about whether to spend a significant amount of General Fund to expand the residential center program, as well as shift from a majority of corpsmembers being in nonresidential centers to residential centers. By approving the

Figure 12

California Conservation Corps Existing and Proposed Facilities

Governor's 2018-19 proposal, the Legislature would be signaling its agreement with the Governor's long-term policy goal of expanding the program and shifting to greater use of residential centers.

Better Data Would Inform Capital Outlay Decisions. The CCC historically has not tracked data or corpsmember outcomes in the areas of post-CCC employment and continuing education. For example, the department does not have post-service data on employment, earnings, or participation in ongoing education. Better data on corpsmember outcomes would help inform CCC's capital outlay decisions. There might be benefits to expanding CCC capacity and shifting from a primarily nonresidential center model to a primarily residential center model. However, we do not know for certain such a shift will result in better outcomes for corpsmembers because there is such limited data on how residential center corpsmember in-service and post-service outcomes compare to outcomes for their nonresidential center colleagues. Furthermore, any such benefits would have to be weighed against the significant additional capital outlay and operational costs of providing corpsmember slots in a residential center setting compared to nonresidential slots.

LAO Recommendations

Defer Decision on Four New Residential Centers. We recommend the Legislature wait until there is more information on corpsmember outcomes before approving the Governor's proposal to expand residential centers. We find that constructing new residential centers might be worth pursuing if the department can demonstrate that the benefits of such facilities are significant enough to justify the capital and ongoing operational costs of the new facilities, and that these benefits are significantly greater than what could be achieved by expanding less expensive nonresidential centers. However, the Legislature cannot not know what corpsmember outcomes should be expected from the proposed expansion because there is very limited data on residential (and nonresidential) center corpsmember in-service and post-service outcomes.

Require CCC to Report on Outcomes to Inform Longer-Term Policy Choices. We believe the Legislature should take steps to ensure that it will have sufficient information in the future to make informed decisions about whether to go forward with the residential center expansion. We recommend the Legislature require CCC to track and annually report on corpsmember outcomes that will inform CCC management decisions about how to improve the efficiency and effectiveness of the CCC program, as well as inform future legislative decisions about the potential benefits of expanding CCC. (For more information on the type of reporting that would be of value, please see our report *Improving Outcomes for California Conservation Corpsmembers*.

CORPSMEMBER COUNSELING, CASE MANAGEMENT, AND TRANSITION ASSISTANCE

LAO Bottom Line. We recommend the Legislature modify the Governor's proposal to provide three-year funding, rather than ongoing funding, for transition services for corpsmembers and require CCC to prepare a report that will better inform the need for such services on an ongoing basis. We recommend the Legislature approve the proposed funding to improve access to mental health and drug and alcohol dependency counseling.

Background

Corpsmembers Receive Career Development Training (CDT). Corpsmember development training is a mandatory 36-hour course that prepares corpsmembers for employment or continuing education following their CCC service. The curriculum is designed to teach corpsmembers how to (1) assess their job skills; (2) prepare job applications, resumes, and cover letters; (3) organize their job search; and (4) succeed at interviews and at work. The CCC's goal is to provide CDT training modules three to four times annually to ensure all corpsmembers have the opportunity to complete the curriculum.

Mental Health and Substance Abuse Issues Can Affect Corpsmembers. According to CCC, some risk factors that affect corpsmembers' success in CCC include economic hardships, tumultuous family life, alcoholism, drug addiction, and mental health issues such as depression and anxiety. While CCC does not have data on the number of corpsmembers with substance abuse or mental health problems, national statistics demonstrate these problems are prevalent. For example, according to the Centers for Disease

Control and Prevention, 4.7 percent of adults ages 18 to 39 suffer from depression, 7 percent of U.S. adults have an alcohol abuse problem or are alcoholics, and about 22 percent of adults ages 18 to 25 reported using an illicit drug in the past month.

In addition, CCC tracks reasons why corpsmembers leave the program, including reasons that might be related to substance abuse and mental health problems. In 2016-17, 19 percent of corpsmembers were terminated for negative reasons (such as alcohol and drug issues, insubordination, fighting, violence, absence without leave, and a variety of other conduct and mental health issues), and 16 percent cited personal reasons (such as medical issues, family responsibilities, and other family-related issues) as their reason for leaving CCC.

Corpsmembers' Health Insurance Covers Mental Health and Substance Abuse Counselling. The CCC provides health insurance to corpsmembers enrolled in the program. This health insurance includes some coverage of mental health services and substance abuse treatment. However, CCC frequently undertakes projects in remote areas where it can be difficult to access mental health and substance abuse treatment services. Furthermore, according to CCC, some corpsmembers need assistance accessing these services because they are not familiar with how the health care system works.

Governor's Proposal

The budget plan proposes a total of $1.1 million ($600,000 General Fund, $500,000 Collins-Dugan Reimbursement Account) in 2018-19, an amount that would grow to $1.8 million ($1 million General Fund, $794,000 Collins-Dugan Reimbursement Account) annually thereafter. This funding would support enhanced transition support services and improved access to mental health and substance abuse counseling. We describe each of these components of the Governor's request in more detail below.

Enhance Transition Support Services. The administration requests $900,000 and 8.3 positions in 2018-19, increasing to about $1.5 million annually and 14 positions (1 position for each of CCC's 14 districts) in 2019-20, to improve transition support services for corpsmembers. According to CCC, this transition support would build on the existing CDT program by:

- Implementing transition support services that (1) help corpsmembers to better understand their career and educational opportunities, (2) teach corpsmembers how to identify and research their career and educational interests, and (3) teach corpsmembers how they can apply their CCC experience to their subsequent careers and educations.
- Providing individualized counseling to corpsmembers to help them assess their educational interests and career readiness in anticipation of graduating from CCC, as well as assist them in creating action plans.
- Developing and strengthening CCC's ties with state and local agencies that can provide employment, educational opportunities, training, and other assistance to corpsmembers after they leave CCC.
- Identifying opportunities to provide corpsmembers with work experience that will facilitate their entry into apprenticeship programs and other career paths.
- Tracking and reporting corpsmembers' education and career experiences after graduation from CCC and providing information on corpsmembers' post-CCC education and career status through an alumni tracking program.

Provide Better Access to Mental Health and Substance Abuse Counseling. The Governor's budget proposes $194,000 in 2018-19, increasing to $306,000 annually in 2019-20, to contract for consulting and professional services to enhance corpsmember access to mental health and substance abuse services. The CCC would like to reduce corpsmember attrition due to mental health and substance abuse issues. According to CCC, improved access to counseling services would help mitigate these risk factors and aid corpsmembers' attendance, performance, and completion of the CCC program. Existing CCC staff lack the professional credentials to respond to the mental health and substance abuse issues presented by corpsmembers. The CCC plans to contract with counseling contractors to provide counseling and other services. Based on discussions with CCC, one contractor would cover the southern region of the state, and another would cover the northern region. These contractors would provide (1) individual counseling, small-group counseling, and large-group psychological education to address mental health issues; (2) counseling via phone or in-person; (3) referrals for further mental health care, substance abuse assistance, and other support services; (4) assistance accessing care; and (5) training for CCC staff to better support corpsmembers' mental health.

LAO Assessment

Lack of Outcome Data Makes it Difficult to Evaluate Need for Transition Services. The CCC has limited data on outcomes for corpsmembers after they leave CCC. The only post-service metric CCC tracks is corpsmember use of their scholarship awards. This provides some insight into the number of corpsmembers that go on to pursue higher education, apprenticeships, and vocational education after separating from CCC. However, CCC does not track key post-service data such as employment status or earnings that would provide a broader picture of outcomes for former corpsmembers.

Proposed Reporting on Outcomes Could Inform Future Operational Decisions. Under the proposal, CCC would implement an alumni tracking program that would provide information on corpsmembers' post-CCC employment and enrollment in continuing education. In our view, such information would help inform CCC's decisions about what program areas to focus on improving. For example, the lack of outcome data on the percentage of corpsmembers who transition into higher education and employment upon leaving CCC makes it difficult to assess what steps, if any, CCC should take to improve in these areas. For example, if CCC had data showing that it had a low success rate at transitioning corpsmembers into employment, this might suggest CCC should focus more attention and resources on improving its job placement assistance and training. However, the proposal provides no details on the specific information CCC will track and report beyond stating that it will include information and statistics on corpsmembers' post-CCC career and educational experiences.

Enhanced Transition Support Services Could Provide Benefits. While the lack of outcome data for corpsmembers makes it difficult to assess the ongoing need for transition assistance for corpmembers, we find that providing additional funding for these services could provide significant benefits, for a couple of reasons. First, many corpsmembers have limited job and post-secondary school experience and, consequently, are likely to have difficulty successfully applying for employment or enrolling in college or technical education programs without some assistance. Second, CCC reports that some corpsmembers are unable to complete the current career and education training program—CDT—because the department is only able to offer it periodically, and corpsmembers sometimes cannot attend these sessions if, for example, they are assigned to emergency response or other assignments when the training is being offered. For this reason, CCC indicates that it would be beneficial to have permanent staff assigned to provide corpsmembers with transition assistance on an ongoing basis. We note, however, that the department did not provide information on how often corpsmembers are unable to complete training.

Mental Health and Substance Abuse Consulting Services Request Appears Warranted. It is difficult to assess the overall need for mental health services of the corpsmember population. However, as discussed above, statistics suggest that some percentage of the corpsmember population suffer from a mental illness or abuse drugs and alcohol and, therefore, could benefit from improved access to treatment. Given CCC often works in areas where mental health and drug treatment services may not be readily accessible, we believe it is reasonable to make a modest investment to help ensure corpsmembers can receive these services.

LAO Recommendations

Approve Transition Services Staff as a Three-Year Pilot Program. We find that providing some additional funding for the transition services could have benefits. However, given the current lack of data on corpsmembers' post-CCC outcomes, it is difficult to fully assess the specific corpsmember needs for additional transition services on a permanent basis. Moreover, the department is internally developing a transition program that has not yet been proven effective. Therefore, we recommend that the Legislature provide transition services for a three-year period, as it would be beneficial for the department to have to come back to the Legislature in a few years to demonstrate that it has successfully implemented this program to benefit corpsmembers.

Require Report on Corpsmember Outcomes. We recommend the Legislature adopt budget trailer legislation to require CCC to provide the Legislature with an annual report on corpsmember outcomes by December 31 beginning in 2020. We note that CCC indicates in its budget proposal that it intends to publish an annual report on corpsmember transition outcomes. Given the importance of this information to monitoring the performance of CCC and to guiding state policy and funding decisions, we think this reporting should be required on an annual basis. In addition, to ensure the Legislature receives robust information about corpsmember outcomes, we further recommend the Legislature specify the information to be reported, including outcomes on post-service employment, earnings, and participation in ongoing education. (For more information about actions the Legislature could take to clarify CCC's mission and establish reporting on key corpsmember outcomes, see our report *Improving Outcomes for California Conservation Corpsmembers*.)

Approve Mental Health and Substance Abuse Consulting Services Proposal. Given the likely need for additional services and the lack of qualified personnel currently, we recommend the Legislature approve funding to provide corpsmember counseling on mental health and substance abuse issues.

DEPARTMENT OF FISH AND WILDLIFE

The Department of Fish and Wildlife (DFW) is responsible for promoting and regulating the hunting of game species, promoting and regulating recreational and commercial fishing, and protecting California's fish and wildlife for the public trust. The department manages over 1 million acres of public land including ecological reserves, wildlife management areas, and hatcheries throughout the state.

The *2018-19 Governor's Budget* proposes total expenditures of $610 million for the department from various sources (including reimbursements from other departments), an increase of $10 million (2 percent) compared to current-year expenditures. This increase reflects the net total of the proposed augmentations described below and the removal of several one-time, current-year appropriations. Of the total proposed expenditures, $133 million comes from the Fish and Game Preservation Fund (FGPF) (22 percent), $106 million from general obligation bond funds (17 percent), $94 million from the General Fund (15 percent), $82 million from federal funds (14 percent), and the rest from reimbursements and other special funds.

STRUCTURAL DEFICIT AND PROGRAM EXPANSION

LAO Bottom Line. The Governor proposes providing $51 million in new funding for DFW from three sources: tire recycling fees, vehicle registration and driver's license fees, and the General Fund. Of the total proposed, $20 million would address an ongoing operating shortfall in the department's largest fund, and $31 million would be used to expand several existing activities. We find the Governor's proposed uses of the funds to be generally reasonable—particularly the activities that focus on protecting at-risk native species. We recommend the Legislature increase DFW's budget by at least $20 million to address the funding shortfall, and provide some level of additional augmentation for activities that reflect legislative priorities. We recommend a different approach to the sources for these funding increases, however. Specifically, we recommend rejecting the proposed use of tire fees, only approving the level of Motor Vehicle Account (MVA) funding that DFW can provide evidence would support vehicle-related workload, and relying on General Fund and fees for the remaining augmentations. Finally, we recommend that DFW—together with the Department of Finance (DOF)—provide an update to the Legislature on a budgetary analysis it is currently conducting to help inform future budget decisions.

Background

Department Has Eight Major Categories of Responsibility. Figure 13 (see next page) summarizes DFW's major activities and total authorized positions for the current year. As shown, the largest single category—representing 44 percent of total expenditures in 2017-18—encompasses the department's efforts to conserve the state's diverse wildlife resources on behalf of the public. According to DFW, California has more native species than any other state and also has the greatest number of endemic species that occur nowhere else in the world. The department's workload on behalf of recreational and commercial hunting and fishing activities represents its second largest expenditure category (17 percent).

FGPF Supports Multiple Department Activities. As noted above, the FGPF is the department's largest single funding source, typically providing roughly one-fifth of overall DFW resources. The fund receives revenues from a variety of fees, including recreational hunting and fishing license and permit fees, commercial fishing fees, and fees paid by project proponents for DFW to review how a project might impact species protected under the California Endangered Species Act (CESA). Expenditures from the FGPF support portions of several of the activity categories displayed in Figure 13, including various wildlife conservation efforts, law enforcement, management of both department-owned lands as well as inland and coastal fisheries, and oversight over the state's commercial fishing industries.

FGPF Has Roughly $20 Million Shortfall. In recent years, expenditures from the FGPF have exceeded revenues into the fund by roughly $20 million annually. This gap developed in large part because the state has created new costs for the fund without adding an equivalent amount of new revenues. These costs have resulted from significant employee salary increases negotiated through the state collective bargaining process, assigning new activities to DFW without providing new funding, and shifting activities from other funding sources to the FGPF. While the department has been able to sustain the higher level of expenditures by drawing from the FGPF's fund balance, that balance has been mostly depleted. The Legislature addressed the gap in the current year largely by using

Figure 13

Activities Conducted by the Department of Fish and Wildlife

2017-18 (Dollars in Millions)

Category	Funding	Authorized Positions	Description
Biodiversity Conservation	$266.5	712.7	Conduct activities to conserve, protect, manage, and restore fish, wildlife, native plants, and habitat.
Hunting, Fishing, and Public Use	101.4	355.3	Facilitate sustainable hunting, fishing (recreational and commercial), and trapping by conserving and managing game species.
Enforcement	91.0	458.8	Enforce compliance with laws and regulations, investigate habitat destruction and pollution incidents, and investigate illegal commercialization of wildlife.
Management of Department Lands and Facilities	90.6	323.4	Manage hatcheries, wildlife areas, ecological reserves, fish and wildlife laboratories, and public access areas.
Spill Prevention and Response	44.3	236.4	Prevent damage, minimize impacts, and restore and rehabilitate fish and wildlife and their habitats from the harmful effects of oil or other spills.
Communications, Education, and Outreach	4.7	16.5	Conduct resource conservation education, conduct community and stakeholder outreach, and disseminate information.
Fish and Game Commission	1.6	10.0	Establish and oversee implementation of the state's fish and wildlife policies, rules, and regulations.
Administration	—[a]	258.0	Provide administrative support and executive leadership for the department's activities.
Totals	**$600.0**	**2,371.1**	

[a] Funding for administration is included in other categories.

one-time funding. (For a more detailed discussion of the FGPF funding shortfall, please see our February 2017 publication, *The 2017-18 Budget: Resources and Environmental Protection*.)

Changing Climate, Growing Population Likely to Increase Department's Conservation Workload in Coming Years. In recent years, the state has experienced unprecedented high temperatures, an increased prevalence of invasive species, more frequent and intense wildfires, harmful algal blooms in its waterways and oceans, and a severe and prolonged drought. These conditions have degraded the habitats and ecosystems upon which the state's fish, wildlife, and native plants depend—and caused increased workload for DFW as the department has monitored and responded to the resulting effects. Scientists suggest these types of conditions will occur with increased frequency as a result of the changing global climate. Additionally, a continually increasing state population and the associated development—including growth in cities, roads, number of vehicles, and amount of waste—place mounting pressure on the state's fish and wildlife and their habitats. Correspondingly, this growth is also likely to increase the department's workload—in particular, from its statutory responsibility to monitor and respond to threats facing species requiring special protections under CESA.

Some Have Called for Additional Funding for DFW to Meet Current-Law Responsibilities. Beyond just addressing the structural imbalance in the FGPF to maintain DFW's existing activities, arguments have been made that DFW needs a budget augmentation to *increase* its existing service levels in order to meet its statutory responsibilities, particularly given the increasing challenges discussed above. For example, the Legislature has expressed dissatisfaction with the funding available to DFW by enacting statute in 2006—which is still in law today—stating: "The Legislature finds and declares that the department continues to be inadequately funded to meet its mandates. While revenues have been declining, the department's responsibilities have increased in order to protect public trust resources in the face of increasing population and resource management demands . . . To fulfill its mandates, the department must secure a significant increase in reliable funding, in addition to user fees."

Department Undergoing Comprehensive Budget Review to Answer Key Questions. The department has faced long-term questions regarding its revenues and expenditures. In particular, stakeholders and the Legislature have sought greater clarity over how the fee revenues generated by fishers, hunters, and permit seekers—which are intended to directly benefit the fee payers—interact with the General Fund provided for public trust activities, and exactly which of the department's activities are supported by each funding source. In some cases, the department has struggled to respond to these questions because of the multiple and overlapping goals associated with their conservation responsibilities. For example, over the course of a day, a warden patrolling the coast might track and catch an illegal poacher, inspect the catch of licensed fishermen to ensure they are staying within catch limits, remove abandoned crab traps that are creating a hazard for migrating whales, ensure no one is fishing in Marine Protected Areas, and issue a citation to someone boating under the influence of alcohol. The variety of these activities illustrates why DFW can have difficulty deciding and explaining exactly how to assign costs to its various revenue sources. Paying for the cost of this warden's activities that regulate and benefit the commercial fishing industry would be an appropriate use of the fees they pay. However, maintaining a healthy fishery and marine ecosystem benefits not only the fishing industry but also the broader public trust resource, suggesting General Fund would also be an appropriate funding source for a portion of this warden's activities.

To address this budgeting challenge, the Legislature enacted language in the *2017-18 Budget Act* directing the department to complete a zero-based budget. In response, DOF has initiated a "mission-based budgeting" review of DFW. According to DOF, this analysis will "determine the appropriate level of expenditures and resources needed to implement government services and programs." The review began in the fall of 2017, and the administration has not given a timeline for its completion or when it may be able to share its findings.

Governor's Proposals

Proposes $50.6 Million in New Ongoing Funding From Three Sources. The Governor proposes to augment DFW's ongoing budget by $50.6 million as follows:

- ***$26 Million Transfer From Tire Recycling Management Fund (TRMF).*** The budget proposes budget trailer legislation to annually transfer about $26 million from the TRMF to the FGPF to support DFW. The TRMF—administered by the Department of Resources Recycling and Recovery (CalRecycle)—is a repository for fees paid by purchasers of new tires, totaling roughly $55 million annually. CalRecyle retains $1.00 per tire from this fund to support safe disposal of old tires, and $0.75 per tire (estimated to total $26 million in 2018-19) is transferred to support activities at the California Air Resources Board (CARB). The Governor's proposal would end the TRMF transfer to CARB—and instead transfer $0.75 per tire to DFW—but provide CARB with a like amount of GGRF to maintain existing programs. Under current law, the fee is scheduled to drop by 133 percent (from $1.75 to $0.75 per tire) beginning in 2024, which would significantly reduce the amount of revenues available. Moreover, under the administration's proposed trailer bill language, the transfer to DFW would sunset in 2024 when the fee drops.
- ***$18 Million From MVA.*** The budget proposes a new ongoing $18 million expenditure from the MVA for DFW. The MVA receives its revenues primarily from vehicle registration and driver's license fees. In 2017-18, these revenues are expected to total roughly $3.5 billion. The California Constitution restricts most MVA revenues to supporting the administration and enforcement of laws regulating the operation and registration of vehicles used on public highways and roads, as well as to mitigate the environmental effects of vehicles.
- ***$6.6 Million From General Fund.*** The budget augments DFW's ongoing General Fund appropriation by $6.6 million. This would bring total 2018-19 General Fund expenditures to $94 million and meet a requirement included in Proposition 64 (the 2016 initiative that legalized recreational marijuana), which required that the department receive at least as much funding from the General Fund as it received in 2016-17 ($94 million). The Governor's budget has a related proposal to reduce General Fund by a combined total of $6.6 million at two other departments—the State Water Resources Control Board and the Tahoe Regional Planning Agency—and backfill them with a like amount from the Environmental License Plate Fund, to avoid this DFW augmentation from having either a net increase in General Fund spending or programmatic impacts.

New Funding Would Address FGPF Shortfall, Expand Department's Activities. The Governor would use the proposed funding increase for two purposes. Most of the TRMF funding—$19.6 million—would be used to address the shortfall in the FGPF and support existing activities. The remaining $31 million in increased funding would be dedicated to expanding the department's activities, as detailed in Figure 14. As shown, the proposed augmentations span several areas of departmental responsibilities, with the two largest proposed expenditure categories related to managing and enforcing laws in the state's marine region.

Figure 15 (see page 38) shows how the proposals would increase existing funding levels for the selected categories of activities. As shown, in many cases the expansions would be significant—increasing funding by more than 200 percent for most activities. The proposed $31 million augmentation represents a 6 percent increase from DFW's estimated state operations expenditures in 2017-18.

Would Add 98 New Positions to Department, Mostly Scientists. As shown in Figures 14 and 15, the Governor also proposes to add 98 new positions to the department's workforce to implement the proposed activities. As with funding, the proposed augmentations are proportionally very substantial for many activities, more than doubling existing levels for five of the nine categories. Currently DFW has authority for 2,371 positions, so this would represent about a 4 percent increase. Of the new staff, 67 positions would be from three classifications of environmental scientists, 16 would be law enforcement positions, and the remainder would be from various analyst classifications.

LAO Assessment

The Governor's proposal presents the Legislature with three key decisions: (1) what overall level of services and activities it wants DFW to provide, (2) how much funding to provide, and (3) which sources it wants to use to fund those activities. Below, we discuss considerations for each of these key decisions.

Certain Components of Governor's Proposal Focus on Key Statutory Responsibilities. We believe the Governor's proposal is a reasonable starting place for the Legislature's deliberations regarding DFW's activities. We believe the proposal has two key strengths. First, by addressing the FGPF shortfall, the proposal would allow the department to continue existing service levels. Failure to sustain existing activities could result in reduced enforcement of some of the state's laws (potentially increasing poaching or pollution), harm to fish or wildlife (including those that are already threatened or endangered), long-term damage to the commercial fishing industry (from failure to monitor and maintain safe yields and fishery conditions), or foregoing some federal funds (since maintaining a certain level of state expenditures for specified activities is a condition of receiving such funds).

Second, we find that several of the proposed activities focus on activities that would enable DFW to better protect at-risk native fish and wildlife species. Many of these activities would help the department

Figure 14

Proposed 2018-19 DFW Program Expansions

(Dollars in Millions)

Activity	Description	Funding	Positions
Improve marine fisheries management and data	Increase scientific marine fishery monitoring, implement Marine Life Management Act Master Plan actions, develop centralized electronic collection system for marine fisheries data, conduct environmental review for emerging marine use projects (such as artificial reefs or desalination), and develop and implement program to reduce whale entanglements.	$8.4	38
Enhance marine enforcement	Purchase new patrol boat and skiff to be used north of San Francisco, and increase enforcement patrols in Marine Protected Areas and commercial and recreational fisheries.	5.8[a]	8
Monitor and assist salmon	Conduct various activities to monitor, assess, and recover CESA-listed salmon, and to restore salmon, steelhead, and sturgeon fisheries, including: real-time fish monitoring, coordinating and evaluating habitat restoration activities, and conducting genetic analyses.	4.9	18
Monitor and review declining species	Conduct statutorily required three- and five-year reports on status of CESA-listed species, collect information on current species and habitat assessment and monitoring efforts, and collect data on species population trends.	3.2	9
Enhance wildlife trafficking enforcement	Increase inspections, investigations (including responding to tips), and legal actions related to illegal wildlife trafficking and commercialization.	2.8	8
Support voluntary conservation programs	Develop, implement, and expand conservation agreements and strategies with private landholders and stakeholders to protect at-risk species, including through established state programs such as "safe harbor" agreements and the Regional Conservation Investment Strategy program.	2.2	8
Support hatchery production	Upgrade hatchery operations by (1) employing cryopreservation technology to improve genetic diversity and (2) installing new lighting to extend timeline for spawning.	1.3[b]	1
Increase administrative support	Provide administrative support for the department's expanded activities.	1.3	7
Update wildlife connectivity assessment	Conduct analyses of wildlife habitat "connectivity zones" to advise transportation planners on mitigation strategies, and design and conduct studies to evaluate mitigation techniques for future road projects.	1.1	1
Totals		**$31.0**	**98**

[a] Includes $2 million for one-time purchase of new patrol boat.
[b] Includes $1 million for one-time purchase of equipment.

DFW = Department of Fish and Wildlife and CESA = California Endangered Species Act.

Figure 15

Proposal Would Significantly Augment Existing DFW Activities

(Dollars in Millions)

			Proposed Increase	
Activity	**2017-18**	**2018-19**	**Amount**	**Percent**
Funding				
Improve marine fisheries management and data	$2.1	$10.5	$8.4	409%
Enhance marine enforcement	7.7	13.5	5.8	75
Monitor and assist salmon	8.2	13.1	4.9	60
Monitor and review declining species	0.7	3.9	3.2	466
Enhance wildlife trafficking enforcement	1.2	4.0	2.8	233
Support voluntary conservation programs	0.8	3.0	2.2	276
Support hatchery production	26.8	28.1	1.3	5
Increase administrative support	—[a]	—[a]	1.3	—[a]
Update wildlife connectivity assessment	0.2	1.3	1.1	618
Positions				
Improve marine fisheries management and data	15	53	38	253%
Enhance marine enforcement	45	53	8	18
Monitor and assist salmon	51	69	18	35
Monitor and review declining species	4	13	9	225
Enhance wildlife trafficking enforcement	7	15	8	114
Support voluntary conservation programs	5	13	8	160
Support hatchery production	157	158	1	1
Increase administrative support	258	265	7	3
Update wildlife connectivity assessment	1	2	1	100

[a] Data not available.
DFW = Department of Fish and Wildlife.

meet some of its existing responsibilities that it does not currently have sufficient resources to fully address, particularly in light of climate change and a growing population. Specifically, we believe the $5.8 million proposal to expand DFW's ability to patrol north of San Francisco would increase enforcement of Marine Protected Areas and thereby enable the department to better protect ocean species and habitats from overfishing, ecosystem damage, and species decline. The range and extent of DFW's monitoring and enforcement capability is currently limited by its inability to conduct long-term patrols in the northern part of the state. (As we discuss below, however, DFW has not provided justification for why the full $5.8 million is needed on an ongoing basis to achieve the intended outcomes.)

Similarly, three of the proposals would help DFW better comply with its statutory CESA responsibilities and help protect the state's most vulnerable species. These proposals include:

- ***Salmon Monitoring.*** The proposed $4.9 million would enhance efforts to help CESA-listed salmon stocks recover. While DFW currently undertakes some monitoring efforts, the proposal would introduce new technologies and tools to provide additional data and improve the department's ability to evaluate and refine its recovery efforts.
- ***Monitor and Review Declining Species.*** The proposed $3.2 million would provide the department with the resources necessary to produce statutorily required updates every five years on the status of the animal and plant species listed as threatened or endangered under CESA. These assessments are key to evaluating the success—or lack thereof—of recovery strategies.
- ***Develop and Implement Voluntary Conservation Agreements.*** The proposed $2.2 million could create additional protected habitat for CESA-listed species and aid in their recovery.

Although we find the Governor's proposed package of new activities to be generally reasonable, it does not address every priority facing the state's fish and wildlife. The Legislature could prioritize different activities. For example, the Legislature could provide more funding for habitat restoration and similar activities to help endangered species recover and change their CESA status. The Legislature could also dedicate additional funding to ongoing management of the department's wildlife areas, which have experienced significant deferred maintenance and vandalism due in part to staffing limitations. Another area both DFW and stakeholders have mentioned as being a priority—that would not receive new funding under the Governor's proposal—is expanding outdoor education and recreation programs to connect more Californians to the outdoors and to diversify the users of DFW-owned wildlife areas, with a particular focus on urban and underserved communities.

In considering its preferred funding package, the Legislature could also opt to modify the Governor's proposal by downscaling some of the proposed activities. In contrast to those activities focused on at-risk native species, we find that some of the other activities proposed by the Governor might represent less urgent needs. For example, increasing enforcement activities for illegal wildlife trafficking by $2.8 million might be less of a priority for the Legislature than responding to the threats facing a large proportion of California's native species. While illegal trafficking and commercialization of wildlife species clearly is a challenge for the state—the department states that California is one of the biggest producers and consumers in the nation—DFW received a $1.2 million ongoing budget augmentation in 2016-17 to help enforce the ban on illegal ivory and rhinoceros horn in order to partially address this need. Moreover, many of the trafficking violations center around species being brought into California from other places, meaning the proposed activities are not primarily focused on protecting California native species. The Legislature also might want to consider downscaling the largest single proposal—to spend $8.4 million to improve management of the state's ocean fisheries—to instead prioritize funding for at-risk native species. The effects of providing less for these management activities could be at least partially offset if the Legislature chose to adopt some or all of the Governor's proposed increase in funding for marine enforcement, which would also benefit those fisheries.

Most of Proposed Funding Amount Justified, With Exception of $3 Million on Ongoing Basis. Ultimately, the amount of funding to provide the department will depend on the specific mix of activities the Legislature directs the department to undertake. We find the Governor's proposed funding and staffing levels to be generally well aligned with his proposed package of activities, with one exception. DFW is requesting the full $31 million increase on an ongoing basis, even though two of the proposals are for one-time purchases—$2 million for a new patrol boat and $1 million for hatchery equipment. It is unclear how this $3 million would be used in future years.

Proposed—and Alternative—Funding Sources Come With Trade-Offs. Once the Legislature determines both the activities it wants DFW to accomplish and the corresponding funding needed, it faces the difficult task of identifying an appropriate and available source of funding. We find that while there are some concerns associated with the Governor's proposed sources, potential alternative sources are also not without trade-offs.

We find both strengths and weaknesses with the Governor's proposed use of transportation-related funds for DFW.

- ***MVA.*** Given that the MVA can be used for environmental mitigation, we believe this could be an allowable source to support the share of DFW's workload resulting from vehicles. DFW states that such activities include responding to incidents of wildlife-vehicle collisions, enforcing motor vehicle laws (wildlife officers have statewide law enforcement jurisdiction), and planning efforts to minimize impacts on fish and wildlife from transportation projects. At the time this report was prepared, however, the department had not provided a detailed and substantiated accounting of how much of its workload results from vehicles. As such, it is difficult to assess whether the full $18 million proposed from the MVA is justified. While the MVA has experienced operating shortfalls in the past, it is projected to have a fund balance of $429 million in 2018-19, falling to $336 million in 2019-20 and stabilizing thereafter. These estimates reflect MVA expenditures proposed by the Governor, including the $18 million for DFW. While the MVA would maintain a reasonable reserve, the DFW proposal would reduce the amount available for other MVA spending priorities.

- ***TRMF.*** We find the department's rationale for using TRMF less compelling than that provided for the MVA. First, DFW was not able to provide evidence that it has significant workload related to tires. While the tire fees that fund the TRMF were authorized by a two-thirds vote of the Legislature, in general some nexus between the source and use of the funds must exist to be considered a constitutionally legal use of a fee. Second, using the TRMF to expand ongoing programs at DFW could present the Legislature with another funding shortfall to address in 2024, when the per-tire fee level is scheduled to drop significantly and the Governor proposes ending the transfer to DFW. Third, the proposal is contingent on spending $26 million in GGRF to backfill the air pollution programs for the loss of TRMF, assuming the Legislature wants to sustain existing service levels at CARB. This thereby limits the amount of GGRF available for the Legislature to direct to other priorities.

Instead of or in addition to the Governor's TRMF or MVA proposals, the Legislature could look to other fund sources for DFW. These could include providing more from the General Fund, given that much of DFW's work contributes to broad public benefits. The Legislature could also consider imposing a new, dedicated tax on specific goods or activities related to the type of work the department conducts. Another option is raising the fees collected from recreational hunters and fishermen, the commercial fishing industry, and/or permit applicants for projects over which DFW has regulatory responsibilities. For example, the Legislature could consider raising fees to support some or all of the proposed $8.4 million increase to marine fisheries management and data collection. Because many of these activities would directly benefit the commercial and recreational fishing industries, the Legislature could look to increase their fees to help support those expanded services.

Like using the MVA and TRMF, however, these alternative revenue sources all involve trade-offs. Using the General Fund would reduce available funds for other statewide priorities. A new dedicated tax would create additional obligations for state taxpayers and limit the Legislature's flexibility to direct tax revenues towards the state's highest priorities in future years. Additionally, under the Constitution, fees can only be used to directly support the associated workload, which limits both the amount and potential use of fee revenues. Raising fees may also be a considerable burden for some potential payers, as was discussed through the 2017-18 budget process when the administration proposed to significantly increase landing fees for the commercial fishing industry.

Moreover, outstanding questions about DFW's budget complicate the Legislature's funding decisions. As noted earlier, fundamental questions remain regarding exactly how DFW's different funding sources support the various components of the department's responsibilities. Even if it seems clear that the department needs additional resources overall, determining the appropriate source for funding new activities is difficult without first reviewing the findings of DOF's mission-based budgeting analysis. For example, if that analysis finds that the department has been using fees paid by recreational fishermen to largely subsidize work that serves the public trust (such as monitoring of non-sport fish like the Delta Smelt), that would suggest that recreational fees might need to be reduced and replaced with funding from an alternative source such as the General Fund. If, in contrast, the analysis finds that a large share of General Fund has been used to manage hunting activities on department-owned lands or to process permit applications for construction projects, that would suggest that those corresponding fees should be raised. Adding a significant amount of new funding for the department to conduct new activities without first understanding the budget foundation upon which that augmentation is built raises some concerns.

LAO Recommendations

Adopt Funding Package to, at a Minimum, Address FGPF Shortfall. We recommend the Legislature identify sufficient new ongoing revenues to provide at least $19.6 million to support DFW's existing activities. Failure to do so would further limit the department's ability to implement current law and protect the state's public trust resources. While the department has sustained its service levels in recent years using one-time budget solutions, we recommend the Legislature address this issue with a permanent solution in 2018-19 and avoid further uncertainty or the need to repeatedly revisit how to address the funding gap in future budgets. The Proposition 64 requirement to spend an additional $6.6 million in General Fund can begin to address this shortfall, and the Legislature could provide the additional $13 million from a combination of other sources, including MVA or additional General Fund.

Adopt Ongoing Augmentation Package That Reflects Legislative Priorities. We concur with the administration that providing the department with some additional resources would improve its ability to respond to both existing and growing responsibilities. We therefore recommend the Legislature augment DFW's budget based on what it views as the highest state priorities. We find that the Governor's proposal provides a reasonable starting place, but the Legislature can add, modify, or remove activities based on its assessment of the most important priorities. Because we find that both the threats to wildlife—particularly species that are already threatened or endangered—and the associated responsibilities for the department will increase with the effects of a changing climate, we recommend prioritizing proposals that respond to such pressures. These include those that would protect endangered salmon, increase enforcement in Marine Protected Areas, and monitor and assist species identified under CESA.

Require DFW to Provide More Detailed Justification for Use of MVA, Approve Corresponding Amount of Funding. While the proposed use of MVA for DFW's vehicle-related tasks seems reasonable in concept, at the time this report was prepared the department had not yet provided sufficient justification for what amount of funding would be appropriate. We therefore recommend requiring that DFW provide the budget subcommittees an accounting for how much of its workload is directly related to motor vehicles. While we understand this exercise might be difficult given the multiple activities that staff such as wardens may undertake in a given day—only some of which might be related to vehicles—we believe developing a reasonable estimate is important to justify the use of MVA for this new purpose. We recommend the budget subcommittees review these data before approving the use of MVA for DFW. To the extent the department is able to quantify its vehicle-related workload, we recommend the Legislature appropriate a corresponding amount of MVA to DFW.

Reject Proposed Use of TRMF. We recommend the Legislature reject the Governor's proposal to use $26 million from the TRMF for DFW. We believe the department has not sufficiently justified the legal nexus for using tire fees to support its workload. Furthermore, given the fund is scheduled to experience a significant drop in revenues in 2024—and the Governor proposes to stop using it for DFW at that time—we recommend the Legislature avoid using it to establish new ongoing activities and positions that will be difficult to sustain in the future. Correspondingly, we also recommend against directing $26 million from the GGRF to CARB, as rejecting the proposed TRMF transfer to DFW would negate the need for that backfill.

Balance Use of Other Funding Sources With Other State Priorities, Consider Revisiting Based on Results of Budgetary Review. As noted above, we were not able to identify an obvious source for augmenting DFW's budget—all of the options before the Legislature come with trade-offs. The Legislature will need to balance the strengths and weaknesses of each source to fund the service levels it wants DFW to provide. Moreover, as discussed earlier, determining the right mix of General Fund and fees for a budget augmentation is complicated by the uncertainty surrounding DFW's use of existing revenues. Assuming it chooses to focus program augmentations on new activities that benefit the public trust—such as protecting native species—relying primarily on the General Fund for program expansions in 2018-19 would be appropriate. However, the Legislature may want to revisit the mix of funding sources in future years once additional information on the department's existing budget is available. For example, if DOF's budget analysis reveals that significant General Fund is being used to support activities that benefit specific groups—such as hunters, recreational or commercial fishers, or permit applicants—the Legislature may want to raise corresponding fees and reduce the General Fund support.

Require DFW and DOF to Provide Update on Progress of Budgetary Review. We recommend requiring DOF and DFW to provide the Legislature with updates on their mission-based budgeting review.

Specifically, we recommend requesting a verbal update on the status of the review during spring budget hearings, and enacting budget bill language to require a formal written update and summary of initial findings to be provided no later than October 1, 2018. This information will be important for informing development of the 2019-20 budget. We recommend requiring that this written update include a summary of initial findings related to (1) how DFW uses its existing revenues and which fund sources support which types of activities; (2) instances where DFW should readjust how it is directing existing revenues to support its activities and to better meet legal and programmatic requirements; (3) instances where DFW appears to have insufficient funding—either in total, or from a particular source—to implement specific statutory responsibilities; (4) instances where DFW might be undertaking activities outside of its core mission; (5) instances where statutory changes might be needed to improve DFW's service delivery; (6) data or information that is lacking or unavailable and therefore precludes answering some of these key budgetary questions, and suggestions for how to overcome those gaps, and (7) to the degree that the full review is not yet complete, what data and questions remain to be analyzed, and a timeline for its completion.

DEPARTMENT OF PARKS AND RECREATION

The state park system, administered by the Department of Parks and Recreation (DPR), contains 280 parks and serves about 75 million visitors per year. State parks vary widely by type and features, including state beaches, museums, historical sites, and rare ecological reserves. The size of each park also varies, ranging from less than one acre to 600,000 acres. In addition, parks offer a wide range of amenities—including campsites, golf courses, ski runs, visitor information centers, tours, trails, fishing and boating opportunities, restaurants, and stores. Parks also vary in the types of infrastructure they maintain, including buildings, roads, power generation facilities, and water and wastewater systems.

For 2018-19, the Governor's budget proposes $1.1 billion in total expenditures for the department. This includes $480 million for state park operations, $601 million for local assistance grant programs, and $11 million for capital projects. The proposed budget total represents an increase of $224 million, or 20 percent, above the estimated level of current-year spending for state parks. This increase largely reflects a proposal for $468 million from SB 5 bond funds in 2018-19 (discussed in more detail earlier in this report), as well as a proposal to increase spending on various park services using revenue from a recent fuel tax increase (discussed below). These increases are partially offset by the carryover of one-time funds in the 2017-18 budget.

PARKS FUNDING AUGMENTATION

LAO Bottom Line. The administration's proposal to utilize the recently authorized transfer of increased fuel taxes to (1) address the State Parks and Recreation Fund (SPRF) structural deficit and build a reserve, (2) increase service levels at state parks, and (3) continue certain activities begun in the current year is reasonable, but the Legislature can consider other spending alternatives. We recommend that the Legislature identify park services and programs that it prioritizes and adopt a budget package that reflects those priorities.

Background

Major Funding Sources for State Park Operations. Operation of the state's park system involves various activities, including utilizing rangers to maintain public safety, providing educational and enrichment experiences to the public, maintaining facilities and trails, and performing revenue collection and other administrative activities. The state park system receives funding from many sources to support its operations, including:

- ***State Parks and Recreation Fund.*** The department's largest fund source for operations has been the SPRF. This fund source is proposed to support about half of the department's operations in 2018-19. The fund is supported primarily by revenues collected from fees charged to park users. Parks frequently charge user fees, including for parking, park entrance, and specific recreational activities (such as the use of overnight campsites). The fund also receives revenue from contracts with state park concessionaires that provide certain services. Revenue from user fees and concession agreements is estimated to be about $140 million in 2018-19.

- ***General Fund.*** With a few exceptions, state parks cost more to operate and maintain than they currently generate in revenue. Moreover, parks provide many broad public benefits, such as preservation of California's natural and cultural resources. For these reasons, state park operations are partly funded from the state General Fund. The Governor's 2018-19 budget includes $147 million in General Fund support for DPR operations.
- ***Transfers From the Motor Vehicle Fuel Account (MVFA).*** Historically, fuel tax revenue that is attributable to gasoline and diesel purchased for boats and off-highway recreational vehicles usually has been transferred to the Harbors and Watercraft Revolving Fund and the Off-Highway Vehicle (OHV) Trust Fund, respectively. (Some funds, however, were transferred to SPRF instead of the OHV Trust Fund in 2016-17 to address a shortfall.) These two funds are primarily used to support opportunities for boating and OHV recreation. Under recent legislation—Chapter 5 of 2017 (SB 1, Beall)—that increased fuel taxes, any *additional* revenue from these increased taxes associated with boating or OHV usage is transferred into the SPRF. Incremental revenue from the recent fuel tax increases is projected to be $79 million in 2018-19. (For additional information regarding revenues generated from the implementation of SB 1 and their proposed expenditure, please see our recent report *The 2018-19 Budget: Transportation Proposals.*)
- ***Other Special Funds and Bond Funds.*** State parks also receive support from various special funds, including revenue from the state boating gas tax, federal highway dollars for trails, and various state revenue sources earmarked for natural resource habitat protection. In addition, since 2000, $3.5 billion in bonds have been allocated for parks, including funding for DPR to administer grants to local park systems. If approved by voters, SB 5 would provide an additional $1.3 billion for state and local parks.

Recent SPRF Shortfalls. Changes to DPR's budget since 2011-12 resulted in a SPRF operating deficit and depletion of the SPRF fund balance. During the recent recession, the 2011-12 and 2012-13 budgets reduced baseline General Fund support for the department by a total of $22 million to achieve General Fund savings. In response to the reduction, the Legislature provided additional SPRF funding on a temporary basis in order to prevent the closure of state parks. This action, coupled with other one-time and ongoing spending, caused expenditures from SPRF and its subaccounts to increase by more than revenues and transfers to the fund over that period. These trends resulted in a structural deficit and drew down the SPRF fund balance. The recent passage of SB 1 provided additional revenue and eliminated the shortfall.

Parks Forward Commission and Transformation Team Initiated Service-Based Budgeting. The California State Parks Stewardship Act of 2012 (Chapter 533 of 2012 [AB 1589, Huffman]) and Chapter 530 of 2012 (AB 1478, Blumenfield) called for the formation of an advisory council to conduct an independent assessment of the state parks system. One of the results was the design and implementation of "service-based budgeting" (SBB), which was first used in 2017. This new tool uses estimates of the number of staff hours and other costs necessary to carry out different tasks (such as public safety patrols and specific facility maintenance tasks). These estimates are then used to calculate the amount of services parks can provide at varying levels of funding. The department has used its SBB tool to compare current service levels across parks, as well as to estimate the level of resources necessary for each park to achieve its "optimum service level" based on its mission, facilities, and other factors. DPR then identified both across the parks system and for various types of services where there were the largest gaps between the current and optimum service levels.

Governor's Proposal

Additional Funding to Address Several Purposes. The Governor's proposed budget assumes that $79 million of fuel tax revenue will be transferred to SPRF in 2018-19 as a result of SB 1. This is an increase of $25 million from the amount transferred in 2017-18, which primarily reflects the full implementation of the fuel tax increases established in SB 1. The Governor proposes to use the funds transferred in 2018-19 for three main purposes. First, the budget provides $26.6 million to address the SPRF deficit and $7.7 million to build up the fund's year-end reserve. Second, it provides $41.9 million ongoing and 361 positions to expand service levels throughout the state park system. (We describe each of the components of this part of the administration's proposal in more detail below.) Third, it continues $3 million in support that was initiated in 2017-18 for recruitment and training, OHV grants, and abandoned watercraft abatement grants. Figure 16 shows how the SB 1 revenues transferred to SPRF under SB 1 are being spent in 2017-18—which included one-time repairs to parks affected by winter storms and a large local assistance grant to Jurupa Area Recreation and Park District—and are proposed for expenditure in 2018-19.

More Than Half of Additional Resources for Main Functions, Largest Increase for Facilities and Maintenance. As mentioned above, $41.9 million of the total $79 million estimated to be transferred to SPRF is proposed for the expansion of state park service levels. The department utilized its newly implemented SBB system to help determine the proposed allocation of resources and positions across the main functions of state parks. The budget provides additional staff and resources to expand service levels in the following areas of operation:

- ***Facilities and Maintenance ($8.5 Million).*** The largest augmentation is for facilities and maintenance, which includes maintaining clean water supplies, clean restrooms, trail systems, historic structures, and roads. The additional resources requested are intended to increase

Figure 16

Additional Revenue From SB 1 Increases SPRF Expenditures, Fund Balance

(Dollars in Millions)

		2018-19	
Revenue	**2017-18 Amount**	**Amount**	**Positions**
Transfer From Increased Fuel Taxes	**$54.3**	**$79.2**	—
SPRF Fund Condition	**1.8**	**34.3**	—
Backfill shortfall	—	26.6	—
SPRF reserve	1.8	7.7	—
Expanded Service Levels	—	**41.9**	**361**
Facilities and maintenance	—	8.5	103
Natural resource management	—	7.6	45
Local engagement	—	6.0	33
Public safety	—	5.9	51
Cultural resource management	—	4.6	42
District services	—	4.0	34
Interpretation and education	—	2.7	26
Revenue generation	—	2.7	28
Programs and Grants	**3.0**	**3.0**	**3**
Recruitment and training program	1.0	1.0	3
OHV grants	1.0	1.0	—
Abandoned watercraft abatement grants	1.0	1.0	—
Other One-Time Spending	**49.5**	—	—
Jurupa Area Recreation and Park District	18.0	—	—
Repairing storm damage	31.5	—	—

SPRF = State Parks and Recreation Fund and OHV = off-highway vehicle.

maintenance activities and reduce the amount of maintenance that is deferred.

- ***Natural Resource Management ($7.6 Million).*** The budget proposes additional funding for natural resource management, which includes thinning forests, restoration projects, protecting habitat, and monitoring rare and endangered species. For example, it includes $1.9 million ongoing for maintenance of the sediment basins at Border Field State Park.
- ***Local Engagement ($6 Million).*** Additional funding for local engagement would support community outreach, concessions management, local partnerships, marketing, and volunteer management. It also includes $500,000 to continue a pilot seeking to improve access to parks.
- ***Public Safety ($5.9 Million)***. The budget proposes additional funding and positions (primarily park rangers and lifeguards) for law enforcement, aquatics safety, resource protection, and emergency preparedness.
- ***Cultural Resource Management ($4.6 Million).*** The budget includes resources to inventory, evaluate, and manage departmental cultural resources. Examples include properties or structures that are significant to the labor movement, agricultural history, and the state's ethnic heritage.
- ***District Services ($4 Million).*** The budget provides additional funding for various administrative services related to regional and statewide operations, planning, and compliance.
- ***Interpretation and Education ($2.7 Million).*** The budget includes funding for public information and programming related to state parks' natural, cultural, historical, and recreational resources. Some examples include the Junior Ranger program, online resources for teachers and students, and educational tours.
- ***Revenue Generation ($2.7 Million).*** The budget provides additional funding for parks to implement new projects and services designed to increase revenues, such as marketing, developing new programming to attract visitors, and providing kiosks to increase fee collection.

LAO Assessment

We find that the Governor's proposal is a reasonable way to utilize the MVFA transfer. However, the proposal reflects the administration's spending priorities, and the Legislature could consider alternative spending approaches. We describe some issues for legislative consideration below.

Backfilling the Shortfall and Building a Reserve Make Sense. In our view, it is reasonable to stabilize the financial condition of SPRF by backfilling the shortfall and leaving additional funds to build a year-end fund balance. Under the Governor's budget, SPRF would end 2018-19 with a reserve of $26 million, an amount equal to about 10 percent of annual revenues and transfers. Figure 17 (see next page) shows that the proposal would reverse the recent trend of depleting the SPRF fund balance. In our view, the proposal would result in a reasonable fund balance, though the Legislature could choose a higher or lower amount depending on its priorities. For context, we note that the proposed fund balance is likely to be more than sufficient to cover typical fluctuations in the amount of revenues generated from park user fees, which can fluctuate from year to year. For example, these revenues decreased by $4.3 million in 2012-13. However, the proposed fund balance would only barely have been sufficient to cover the reduction in General Fund provided to the department during the recession—a decrease of $22 million.

SBB Provides Reasonable Tool for Determining Priorities. In our view, the new SBB system appears provides the department an improved approach to evaluating its current resources and estimating the largest gaps between those resources and what increases would be necessary to achieve the goals of park administrators. However, the allocation of resources among needs still reflects the administration's prioritization of different state park functions. While we have no specific concerns with the activities and position authority proposed, we think the Legislature should evaluate whether the proposed mix of activities reflects its top priorities for the department. To the extent the Legislature preferred a different mix, it could dedicate a greater share of the funding towards particular services.

We find, for example, that the administration's proposed funding for increased maintenance makes sense given the department's history of deferred maintenance and because properly maintaining facilities can reduce costs in the long term if costly repairs are avoided in the future. We also note that several areas of proposed spending could encourage visitorship and enhance the public's enjoyment of state parks, including efforts to maintain trails and facilities, increase public engagement, and provide more educational services. Lastly, the administration's proposal includes $2.7 million for revenue generation efforts. We note that this is consistent with existing statutory direction that directs DPR to increase park-generated revenue. If these or other services are a higher priority for the Legislature than what is reflected in the Governor's proposal, the Legislature could increase funding for those particular services. However, doing so would require a commensurate reduction in funding for other services and/or the amount of funds going towards the fund balance.

The Governor's proposal is mostly for additional staffing for the functions described above. The Legislature could also consider using the proposed funding in other ways. For example, the funds could be used to fund specific projects, such as building more campsites or implementing deferred maintenance projects.

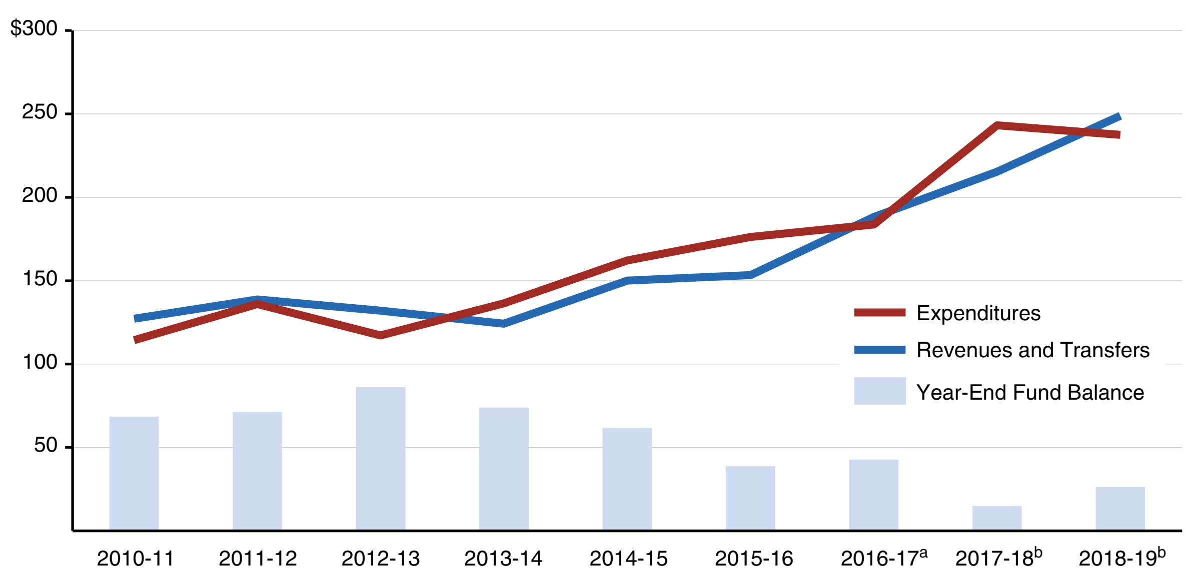
LAO Recommendations

Ensure That Needs Identified by SBB Align With Legislative Priorities. To the extent that the Legislature's priorities differ from the administration's, the Legislature could request additional information on current service levels throughout the state, the cost associated with reaching its desired service levels for certain functions, or what services are not included for funding in the proposal. Ultimately, we recommend that the Legislature utilize this information to adopt a budget package that reflects its priorities.

Figure 17

SPRF Fund Condition Would Improve Under Proposal

(In Millions)



[a] The 2016-17 budget included a one-time diversion of $31 million in motor vehicle fuel tax revenues to SPRF.

[b] Revenue increases due to Chapter 5 of 2017 (SB 1, Beall) which directed any additional revenue from increased motor vehicle fuel tax revenue attributable to off-highway recreational vehicles to SPRF.

SPRF = State Parks and Recreation Fund.

REGIONAL INFRASTRUCTURE PROJECTS

LAO Bottom Line. The Governor's budget proposes $7.5 million from the General Fund on a one-time basis for two local parks projects, but it has not provided a clear explanation as to why it selected these specific projects to receive General Fund support. Moreover, Proposition 68, which will appear on the June 2018 ballot, would provide local jurisdictions with additional resources for parks and recreation. Should the voters approve Proposition 68, we recommend the Legislature reject the Governor's proposal. If Proposition 68 is not approved, the Legislature will want to weigh these two projects against other General Fund priorities.

Background

Existing DPR Local Assistance Programs. DPR has historically administered several local assistance programs, including grants to build, maintain, or restore local parks and outdoor spaces, recreational facilities, historical structures, trail systems, and museums. The department has administered approximately $3 billion in grant funding throughout California since 2000—mostly federal and bond funds, including grants from Propositions 84 (2006), 40 (2002), and 12 (2000). The types of projects funded by these bond programs include the development of new youth sports recreation facilities, as well as restoration and rehabilitation of historic buildings. Most of funds—over 90 percent—authorized in these bonds for local parks have been spent or are now committed to projects. Additionally, DPR's Office of Historic Preservation administers grants from the federal Certified Local Government program, which encourages the direct participation of local governments in the identification, evaluation, registration, and preservation of historic properties. Four cities received a total of $160,000 under this program in 2017-18.

Local Assistance Funds Generally Awarded as Per Capita or Competitive Grants. Typically, DPR awards funds to local jurisdictions on either a per capita basis or through competitive grant awards based on the requirements of the bond. Cities, counties, and districts are eligible to apply for per capita grants and are frequently used by local agencies to address high priority maintenance items, but generally are not enough for larger projects. DPR develops guidelines for each competitive grant program that are based on statewide priorities as determined by its Statewide Comprehensive Outdoor Recreation Plan or statutory direction.

In addition, in some cases, the Legislature has appropriated funds for specific local park projects. For example, the 2017-18 budget included a $4 million grant to the San Mateo County Resource Conservation District for its Butano Channel Restoration and Resiliency project and $3.5 million was provided for the restoration of the Geneva Car Barn and Powerhouse, an art center and event space in San Francisco. Both grants were supported from the General Fund.

Governor's Proposal

The Governor's budget includes $7.5 million from the General Fund for one-time local assistance grants for the construction of a Young Men's Christian Association (YMCA) Active Living Center in Anaheim and to the restoration of the Fox Fullerton Theatre.

- ***Anaheim YMCA Active Living Center ($5 Million).*** The administration proposes to provide this funding to the Anaheim Family YMCA to construct a new four-acre, 16,800 square foot indoor and outdoor facility that would include outdoor soccer arenas, an indoor gymnasium, a teaching kitchen, and community gathering spaces. Total costs are estimated to be $10 million, with the difference between the proposed state funding and the cost to be made up by fundraising efforts. Proponents estimate that more than 3,000 residents would visit each week.
- ***Fox Fullerton Theater ($2.5 Million).*** The administration proposes funding to the City of Fullerton to support the restoration of the Fox Fullerton Theatre, which was built in 1925 and is listed in the National Register of Historic Places. Renovation of the theater is already underway, and is expected to cost at least $15 million, with the funds coming mostly from grants, donated supplies, and volunteer hours.

LAO Assessment

Unclear Why These Projects Selected for General Fund Support. While there are a few exceptions, as noted above, the state generally funds local projects through grant programs, often through a competitive application process. At the time of this analysis, the administration has not provided an explanation as to why these proposed projects were selected for General Fund support, such as by identifying a statewide benefit that would be achieved. Additionally, assessment of the potential merits of these proposals is difficult to evaluate because the administration has not provided many details, such as why they were selected for funding over other projects, how they contribute to achieving state goals, or detailed cost and revenue information.

Projects Potentially Could Apply for Traditional Grant Programs Should Voters Approve Proposition 68. State voters will have the chance to consider Proposition 68 on the June 2018 ballot. (Proposition 68 was put on the ballot by Chapter 852 of 2017 [SB 5, de León].) This measure, if approved, would provide about $1 billion to DPR for local assistance, including $725 million for the competitive grant program established by the Statewide Park Development and Community Revitalization Act of 2008 for park-poor neighborhoods, as well as $215 million for per capita block grants. The Governor's budget includes $460.3 million from Proposition 68 in 2018-19 for DPR local assistance. Accordingly, the jurisdictions in which these two proposed projects are located would have access to two new pots of funding for local park projects. The per capita block grants would be awarded to all jurisdictions for local park rehabilitation, creation, and improvements, and these projects could also compete for the competitive grants. While DPR has not yet drafted its guidelines for the grant programs that would be funded by Proposition 68, we think it seems possible that these projects could be eligible. Even if the projects are ultimately not eligible for Proposition 68, the cities will still receive per capita grants and other projects in their jurisdiction could be awarded competitive funds. This could free up funds in the cities' park and recreation budgets for these projects.

LAO Recommendation

Require Projects to Go Through Typical Process if Proposition 68 Is Enacted. Should the voters approve Proposition 68, we recommend that the Legislature reject the Governor's proposal and encourage the project proponents to apply for Proposition 68 grant funds. If recreational facilities and historical restoration projects are a high priority for the Legislature, it could ask the department to prioritize those types of projects when designing guidelines.

If Proposition 68 does not pass, the Legislature will want to weigh these two projects against other General Fund priorities. If they are a high enough priority, the Legislature can still fund them directly, despite that not being the typical process for providing local assistance.

DEPARTMENT OF FORESTRY AND FIRE PROTECTION

The California Department of Forestry and Fire Protection (CalFire), under the policy direction of the Board of Forestry and Fire Protection, provides fire protection services directly or through contracts for timberlands, rangelands, and brushlands owned privately or by state or local agencies. These areas of CalFire responsibility are referred to as "state responsibility areas" and represent approximately one-third of the acreage of the state. In addition, CalFire regulates timber harvesting on forestland owned privately or by the state and provides a variety of resource management services for owners of forestlands, rangelands, and brushlands.

The Governor's budget proposes $1.8 billion—over 80 percent from the General Fund—for support of CalFire in 2018-19. This total represents a decrease of $425 million, or 20 percent, from current-year estimated expenditures. This is primarily due to one-time expenditures of $469 million from the General Fund in the current year for emergency fire suppression.

HELICOPTER FLEET REPLACEMENT

LAO Bottom Line. The Governor's budget proposes $98 million (General Fund) for CalFire to purchase four helicopters. While CalFire's helicopter fleet will eventually need to be replaced, the administration has not provided the type of accompanying information that is typical for budget augmentation. Specifically, the administration has not provided estimates of the ancillary costs associated with fleet replacement or possible alternatives, which makes it difficult for the Legislature to weigh the relative trade-offs of this proposal. We recommend that the Legislature withhold action on the proposal pending this information from the department at budget hearings. Based on the information presented by the administration, the Legislature can determine whether the proposed fleet replacement plan is consistent with its General Fund priorities.

Background

CalFire Utilizes Helicopter Fleet for Fighting Wildfires. When fighting wildland fires, CalFire uses helicopters to quickly deliver fire crews and to perform water or retardant drops that slow the fires' spread. Helicopters are also used for other firefighting and fire prevention operations, medical evacuations, cargo transport, mapping, rescues, and other missions. The department currently has 12 helicopters that were acquired in 1990 through the Federal Excess Personal Property Program at no cost to the state. They were originally owned by the U.S. Army from 1963 to 1975 for troop and cargo transport. Once acquired by CalFire, these helicopters were modified for wildland firefighting at a cost of about $500,000 per aircraft.

2016-17 Budget Authorized First Step of Fleet Replacement. The 2016-17 budget included $12 million (General Fund, one time) and related budget bill language for the procurement of one helicopter as the initial phase of a plan by the department to replace its entire helicopter fleet. At the time the budget was passed, the procurement process was still underway, and many details about the replacement plan were unknown, including details on the helicopter model and its costs, as well as potential ancillary costs related to facility upgrades, staffing, and equipment costs. Given this uncertainty, the budget provided funds for just one helicopter, which allowed the procurement process to proceed without committing to a full fleet replacement.

In December 2017, the administration notified the Joint Legislative Budget Committee (JLBC) that CalFire and the Department of General Services had completed a competitive procurement and that the department was ready to award a zero-commitment contract as a result. A zero-commitment contract does not obligate the state to purchase any helicopters—it only designates the specifications, pricing, and other terms that were determined in the bidding process. The cost of the first helicopter will be $24.5 million. The notification included some additional details, such as identifying that the cost of replacing all 12 helicopters would be $296 million and specifying the department's intention to fully replace the fleet over the next three fiscal years. However, the department's notification did not include other details, particularly estimates of the ancillary costs associated with the new helicopters. Prior to purchasing the first helicopter, the department is required to again notify the JLBC.

Governor's Proposal

The Governor's budget includes $98 million from the General Fund for CalFire to purchase four additional helicopters in 2018-19.

LAO Assessment

Funding Request Lacks Key Information. While we agree that the eventual replacement of CalFire's helicopter fleet is reasonable given the capabilities, maintenance needs, and age of the current fleet, it is difficult for the Legislature to weigh the relative trade-offs of the proposed plan without additional information. The Governor's request for funds associated with helicopter fleet replacement did not include the type of accompanying information that is typical for budget augmentation. In particular, the administration has not provided an estimate of ancillary costs associated with fleet replacement, nor has it provided an analysis of possible alternatives, such as acquiring other helicopter models or on a different timeline. This information should be provided to the Legislature because of the likelihood that the costs to replace the helicopter fleet will be sizable when accounting for both the direct and ancillary costs. While the department has not provided estimates of the potential ancillary costs, they could total a few hundred million dollars spread over several years. Without information on the proposal's full costs for each year, it is difficult for the Legislature to determine if fleet replacement should be funded before other competing General Fund priorities or whether an alternative approach to fleet replacement should be considered.

LAO Recommendations

Require Department to Provide Additional Information. We recommend that the Legislature withhold action on the Governor's proposal pending a report from CalFire at budget hearings on all ancillary costs associated with fleet replacement, as well as the anticipated timing of when those expenditures would occur. The main ancillary costs we have identified are facility modifications that could be needed to accommodate the new helicopters, increases in operational and maintenance costs, and additional staffing needs. We also recommend requiring the department to report on alternative helicopter models or procurement timelines that were considered and the rationale for selecting this replacement plan. Based on the department's report, the Legislature can decide if it wants to support the fleet replacement and at what pace.

DEPARTMENT OF WATER RESOURCES

The Department of Water Resources (DWR) protects and manages California's water resources. In this capacity, DWR plans for future water development and offers financial and technical assistance to local water agencies for water projects. In addition, the department maintains the State Water Project, which is the nation's largest state-built water conveyance system. Finally, DWR performs public safety functions such as constructing, inspecting, and maintaining levees and dams.

The Governor's 2018-19 budget proposes a total of $475 million from various funds for support of the department. This is a net decrease of $1.5 billion compared to projected current-year expenditures. This year-to-year decrease is primarily due to the way bond funds are accounted for in the annual budget. Specifically, DWR had $1.8 billion in 2017-18 spending authority from bond funds appropriated over the past several years, compared to roughly $310 million proposed for appropriation in 2018-19. (These totals exclude the roughly $1.7 billion in annual payments from water contractors for DWR's work on the State Water Project, as those funds are not appropriated through the annual budget act.)

CENTRAL VALLEY FLOOD PROTECTION BOARD

LAO Bottom Line. The Governor proposes providing a $1.4 million increase in General Fund to replace expiring bond funds and support ten existing positions at the Central Valley Flood Protection Board (CVFPB). The proposal requests the augmentation on a two-year basis to allow the board time to explore options for generating other sources of revenue that might be able to support these positions beginning in 2020-21. We recommend the Legislature adopt the proposal, but require the board to submit a report in February 2019 that provides an update on its revenue-generation efforts.

Background

CVFPB Oversees Central Valley Flood Protection System on Behalf of the State. Formerly called the State Reclamation Board, the CVFPB was created in 1911 to address flood issues in the Central Valley. Funding for CVFPB is included in DWR's budget, though the board is an independent agency with its own regulatory authority. The board oversees the State Plan of Flood Control (SPFC) on behalf of the state. The SPFC is a system of flood protection infrastructure along the main stem and certain tributaries of the Sacramento and San Joaquin rivers, consisting of about 1,600 miles of levees and other flood protection structures such as dams and weirs. Although many SPFC components were locally or federally constructed, in the 1950s the state committed to the federal government that it would oversee the SPFC system and maintain it pursuant to federal standards. For most segments of SPFC levees, the state has developed formal agreements with local governments (primarily local reclamation districts) to handle regular operations and maintenance responsibilities. CVFPB's activities include: (1) collaborating with local agencies to improve SPFC flood protection structures; (2) issuing permits for work on SPFC levees and facilities; and (3) ensuring that levees are maintained up to required standards, including ensuring that levee "encroachments" such as pipes or docks either meet code requirements and receive permits or are removed. A court decision in 2003 found that the state was ultimately financially responsible for the failure of SPFC facilities, even when they had been maintained by local entities.

The board also oversees state-owned properties within the Sacramento San Joaquin Drainage District (SSJDD), which is a statutorily defined area containing the SPFC that encompasses over 1.7 million acres in 14 counties. Such properties include land holdings as well as flood-related structures like levees. Besides overseeing the flood protection system, as part of its property management role the board also oversees leases for state-owned lands—primarily located within flood bypasses—for farming, natural gas extraction, or other purposes.

2017-18 Budget Included Funding and Staffing Augmentation, New Fee Authority. The *2017-18 Budget Act* provided an increase in funding and staffing for CVFPB to better accomplish its statutory responsibilities. Specifically, the budget provided an increase of $2.2 million in General Fund and authorized nine new positions. This brought the board's total funding to $9.6 million and total staffing to 47 authorized positions. About half of the new funding was to support the new positions, and the remainder was for the board to contract with DWR to develop a comprehensive database of the property owned by the state within the SSJDD. All of this new funding—including the funding for the positions—was provided on a three-year basis and will expire in 2020-21. Though the workload for these positions is ongoing, the funding was provided on a limited-term basis because the administration wants the board to develop options for generating additional revenue to support its operations in future years in lieu of General Fund support.

Additionally, the 2017-18 budget package gave CVFPB expanded statutory authority to charge fees to cover the costs of its services, including its costs related to issuing permits for encroachments, inspecting encroachments on SPFC levees, and managing SSJDD property.

Governor's Proposal

The *2018-19 Governor's Budget* proposes total expenditures of $9.6 million for CVFPB, which is the same overall expenditure level estimated for the current year. As we discuss below, the Governor proposes to increase General Fund support for the board to replace expiring bond funds—thereby making it fully supported by the General Fund. The budget proposal also would maintain staffing levels at current-year levels—47 authorized positions.

Proposes Shifting $1.4 Million for Ten Existing Positions From Bond Funds to General Fund. The Governor's budget proposal would increase General Fund support for CVFPB by $1.4 million and reduce funding from Proposition 1E by a like amount. Proposition 1E is a general obligation bond approved by voters in 2006 for flood protection activities. This funding supports personnel costs for ten of the board's existing positions. The administration proposes this fund shift because Proposition 1E funds are nearly fully expended and will no longer be available for the budget year. Although these positions were previously funded with bond funds, they carry out ongoing, core responsibilities for the board that are not exclusively linked to the bond, including processing permit applications for SPFC projects. Consistent with the approach the administration used to fund the board in the current year—to provide funding on a limited-term basis while CVFPB pursues options for generating additional revenues—this proposal requests the $1.4 million in General Fund for just two years even though the workload is ongoing.

LAO Assessment

Proposed Funding Needed to Maintain Existing Activities. The Governor's proposal would sustain existing work and enable CVFPB staff to continue meeting the board's statutory responsibilities. For example, the staff will continue to review permit applications for work on SPFC levees; coordinate with local, state, and federal agencies for SPFC system maintenance and improvements; and identify unsafe and illegal levee encroachments and enforce their removal. Failing to provide this funding could increase both flood risk and state liability for flood damage because the board would find it more difficult to sufficiently oversee and enforce the integrity of the SPFC system. Because CVFPB is implementing the state's responsibility over state-owned infrastructure, General Fund is an appropriate funding source for these activities.

Board Will Face Significant Funding Reduction Beginning in 2020-21. CVFPB is requesting funding for these ten positions for only two years. Combined with the three-year funding that was provided in 2017-18, this means that the funding for 19 of CVFPB's positions—40 percent of its total position authority—will expire in 2020-21. The administration states that the board currently is laying the groundwork for generating additional revenues to support its workload, and is requesting General Fund on a limited-term basis to provide the state the opportunity to reassess potential funding sources for CVFPB in the future.

How Much New Revenue Could Be Generated Is Unclear. CVFPB is pursuing four potential options for raising additional revenues. The four options are:

- ***Permitting Fees.*** Fees could cover the staff time needed to review, issue, and manage permits.
- ***Inspection Fees.*** Fees could cover the staff time and travel costs for inspecting initial construction of levee projects and for conducting ongoing monitoring inspections of levee encroachments to ensure permit conditions continue to be met.
- ***Noncompliance Penalties.*** Issuing fines to landowners for levee encroachments that violate codes, are unpermitted, or violate permit conditions could help support the board's enforcement workload.
- ***Lease and Royalty Revenues.*** Renewing existing agreements or entering into new lease and royalty agreements for SSJDD-owned properties—including for land use and oil and gas production—or selling such properties could provide funding to support the share of CVFPB operations related to managing these leases and agreements. Some revenues have been generated from these properties in the past, but they have been transferred into the General Fund—rather than used to directly support the board—and CVFPB staff is unaware of the amounts.

In all of these cases, the board currently has the authority to collect revenues to support its workload—such as by implementing new fees—but thus far has not done so. In some cases, such as for inspections of encroachment-related permits, this is because the Legislature only recently granted CVFPB the authority to charge fees. In other cases, such as for issuing penalties for noncompliant encroachments, the board received authority several years ago but thus far has been able to resolve compliance issues before resorting to issuing fines. Additionally, a lack of comprehensive information about SSJDD's property rights has precluded the board from fully realizing the potential to generate revenues from them. (Funding provided in 2017-18 is helping CVFPB and DWR develop a database of these properties.) Because the board has not yet fully implemented any of these options, estimating how much revenue each might generate—and whether it will be sufficient to support 19 positions beginning in 2020-21—is difficult.

In addition to these four options, the board could also pursue the possibility of reestablishing SSJDD as an assessment district that could assess charges on property owners to help pay for flood protection activities. This authority currently exists in statute; however, no assessment has been charged for over 80 years, and current law limits the use of such revenues to capital improvements for the SPFC. Some stakeholders—including CVFPB and DWR—have raised the possibility of revising statute to reauthorize the district to conduct assessments and allow the revenues to be used for ongoing operations and maintenance of the SPFC. Should this approach be pursued, a portion of the funding generated could potentially be used to support CVFPB's role in overseeing and maintaining the system.

LAO Recommendations

Approve Governor's Proposal. We recommend the Legislature adopt the Governor's proposal. Allowing CVFPB to continue its existing level of oversight of SPFC facilities is an important component of state efforts to maintain flood protection and public safety. We also find merit in the Governor's proposal to provide the funding on a two-year basis, as this would allow the board the opportunity to exercise its existing fee authority and begin generating additional revenues to use in lieu of General Fund in the future.

Require CVFPB to Provide Status Update on Revenue-Generating Activities. We recommend the Legislature adopt supplemental reporting language requiring CVFPB to submit a report to the Legislature by February 1, 2019 that provides an update on its activities to generate additional revenues. This would help prepare the Legislature for how it might approach funding the existing positions whose General Fund is scheduled to expire. Having this information before it faces that 2020-21 budget decision would also allow the Legislature the opportunity to provide additional direction or assistance to CVFPB if the board is encountering barriers or making insufficient progress in implementing new revenue-generating practices. We recommend the report address five potential options for generating new revenues: permitting fees, inspection fees, noncompliance penalties, lease and royalty revenues, and a new SSJDD assessment. For each of these options, we recommend the report provide the following information: (1) status of implementation, (2) amount of revenue generated thus far, (3) estimated annual revenues in 2020-21 and future years, (4) barriers to implementation, and (5) suggestions for addressing those barriers.

STATE LANDS COMMISSION

The State Lands Commission (SLC) manages California's sovereign lands and resources for the benefit, use, and enjoyment of the public. These lands include tidelands situated between the ordinary high water and low water marks of tidal waters; submerged lands reaching from the ordinary low water mark out to the state-federal fixed boundary three miles offshore; navigable natural waterways (such as lakes and rivers) that existed upon statehood in 1850; and "school lands," mostly in the desert, which the federal government conveyed to the state to generate revenue for schools. On some of these state lands, SLC grants and oversees leases and permits for extraction and production of oil, gas, minerals, and geothermal energy.

The *2018-19 Governor's Budget* proposes total expenditures of $98 million for the commission, which is more than double the current-year estimated expenditure level. The significant increase is due to two proposals to plug offshore oil and gas wells, as described below. Of the total proposed expenditures, $77 million (79 percent) is from the General Fund, $14 million (14 percent) is from the Oil Spill Prevention and Administration Fund, and the remainder is from various other special funds.

ABANDONED OIL AND GAS WELLS

LAO Bottom Line. The Governor's budget includes $58 million in 2018-19 and an additional $51 million over the subsequent two years from the General Fund to plug and secure two offshore oil and gas sites. SLC has assumed control and responsibility for the facilities at these sites after the lessees declared fiscal insolvency and quitclaimed the leases they had held with the state. Because these wells and facilities are on state lands and will continue to pose risks to the environment and public health until they are fully plugged and secured, we recommend the Legislature adopt the Governor's proposed funding request so that work can begin immediately. We also recommend requiring SLC to provide the Legislature with a status update on funding, work, costs, and the terms of other offshore leases by January 10, 2019. The ultimate cost to the state is likely to be less than the $109 million that is requested, as the state is in active negotiations for a prior lessee to pay some of the costs. Any funds that the state ultimately receives would reimburse the General Fund for these upfront appropriations.

Background

SLC Responsible for State's Coastal Oil and Gas Resources. Many of California's most productive oil and gas resources are located along its coastline. In 1921, the Legislature created the first program to permit oil and gas development in the state's coastal waters. According to SLC, between 1921 and 1929 the state issued approximately 100 permits and leases, and over 850 wells were drilled in Santa Barbara and Ventura Counties. Environmental concerns regarding offshore drilling have, however, led to various limitations on such development in the ensuing years. Following a large oil spill off the coast of Santa Barbara in 1969, the commission enacted a moratorium on new offshore leases, and in 1994 the Legislature enacted the California Coastal Sanctuary Act, which prohibited the state from entering into new leases for oil and gas development in the state's coastal waters. Many of the preexisting leases and facilities remain in operation and under SLC's jurisdiction. Specifically, SLC oversees leases for four offshore oil platforms in state waters: platforms Holly in Santa Barbara County, Eva and Emmy in Huntington Beach, and Esther off Seal Beach. The commission also has some jurisdiction over five artificial islands built for oil and gas drilling—four in the Long Beach Harbor, and Rincon Island in Ventura County.

State Recently Assumed Control of Two Facilities After Lessees Declared Insolvency. In two separate instances, SLC recently had to take control of offshore oil and gas drilling and production facilities. In both cases, the holders of the leases declared fiscal insolvency, failed to meet their lease obligations to remove the facilities and restore the land to its natural condition, and relinquished the facilities back to the state, resulting in the state having to assume responsibility for protecting against the release of oil into the marine environment. The two sites of these facilities are:

- ***Platform Holly.*** The lease for Platform Holly (and its associated processing facilities) was held by Venoco LLC from 1997 to 2017. ExxonMobil Corporation was a prior lessee of these facilities. The oil produced from the offshore platform flows through subsea pipelines and is processed and stored at the Ellwood Onshore Facility, which also incinerates the hydrogen sulfide gas produced at the platform. No production has taken place at Platform Holly since 2015, when the pipeline that transported the oil produced from these facilities ruptured, causing the Refugio oil spill. That pipeline, which is owned by another entity, is still not operational. In April 2017, Venoco filed for bankruptcy and quitclaimed its oil and gas leases back to SLC. Since that time, SLC has been staffing and operating Platform Holly, the associated 32 wells, and the Elwood Onshore Facility.
- ***Rincon Island.*** The lease for Rincon Island was held by the Rincon Island Limited Partnership (RILP) from 1995 to 2017. The Atlantic Richfield Company (ARCO) was a prior lessee of these facilities. This artificial island, which is connected to the shore by a causeway, has 49 wells and contains various other processing equipment and facilities. Rincon Island has not produced oil or gas since 2008, due in part to damage to the causeway that connects the island to shore. RILP failed to meet regulatory and contractual terms for several years, resulting in significant deterioration of the facilities and leading SLC to initiate termination of the lease in 2016. That termination was preempted by RILP declaring bankruptcy, and the bankruptcy court granted SLC a quitclaim of the lease in December 2017.

Currently, SLC is undertaking the initial steps to permanently plug the wells and prepare the facilities at these two sites for safe abandonment.

Governor's Proposals

The Governor's budget proposes limited-term funding from the General Fund to plug and "abandon" (secure) the wells and facilities at Platform Holly and Rincon Island. Specifically, $58 million in 2018-19—$38 million for Platform Holly and $20 million for Rincon Island—and decreasing amounts in the two subsequent years. As shown in **Figure 18**, the total amount requested over the three-year period is $108.5 million.

$58 Million Over Two Years to Address Platform Holly. SLC requests funding to prioritize plugging the most complex wells at Platform Holly—the ones with the greatest hydrogen sulfide gas capacity. The commission anticipates permanently plugging and abandoning between 6 and 12 of the 32 wells in the first year of work. Once the most complex wells are addressed, the gas levels will be better controlled and the pace of subsequent work should accelerate. Funding will also be used to continually staff the facilities and monitor well integrity and gas pressure until all of the wells are plugged. The commission anticipates that plugging and abandonment operations will take a total of between 24 and 30 months. We note that the $38 million proposed for 2018-19 is in addition to $22 million that was authorized in 2017-18 for initial activities at Platform Holly. The Legislature authorized SLC to access up to $22 million from the General Fund as part of the 2017-18 budget. SLC has since received payment from a $22 million performance bond held by Venoco, and will ultimately be able to reimburse the General Fund for any of the state funds it ends up spending in 2017-18. While the state is in negotiations with prior lessee ExxonMobil to cover some of the remaining costs, the administration is requesting a General Fund appropriation for 2018-19 so it can continue work without delay. (Any contribution from ExxonMobil that SLC eventually receives will be deposited into the General Fund.)

$51 Million Over Three Years to Address Rincon Island. The funding requested for Rincon Island would be used to plug and abandon its 49 wells, remove and decommission the oil production and processing equipment on the island, and remove the 3,000-foot long causeway connecting the island to shore. While SLC has not yet developed a detailed timeline for conducting this work, it estimates both planning and execution will take between 24 and 36 months. We note that the $20 million proposed for 2018-19 is in addition to $8 million that the commission received as a settlement from prior lessee ARCO. (This settlement absolved ARCO of liability for any additional costs.) The commission also anticipates it will receive an additional $9.7 million from a performance bond held by RILP.

Figure 18

Governor's Proposals to Secure Offshore Oil and Gas Facilities

General Fund (In Millions)

Site	2018-19	2019-20	2020-21	Totals
Platform Holly	$38.0	$20.0	—	$58.0
Rincon Island	20.0	20.0	$10.5	50.5
Totals	**$58.0**	**$40.0**	**$10.5**	**$108.5**

LAO Assessment

Immediate Action Needed to Address Environmental and Public Health Risks. We concur with the administration that commencing work to plug and abandon Platform Holly and Rincon Island immediately would be prudent. The potential for an oil spill or gas leak from these active facilities poses a dangerous environmental and public health risk that should be addressed as quickly as possible. State action requires a General Fund appropriation because payouts from ExxonMobil and the RILP performance bond are uncertain and could take years to be paid. Moreover, the state is already incurring the costs of staffing and monitoring these facilities in the interim, and these costs will continue to accrue until the plugging and abandonment activities are completed.

State Costs Could Ultimately Be Significantly Lower. While the Governor's proposal represents a significant multiyear General Fund expenditure, the ultimate cost to the state is likely to be less than the $108.5 million that is requested. In particular, SLC is negotiating with ExxonMobil to cover a considerable portion of costs to plug and abandon Platform Holly. The commission believes that under the terms of its prior lease, ExxonMobil retains significant liability to plug, abandon, and decommission Platform Holly since the subsequent lessee is unable to do so. While ExxonMobil acknowledges these terms, it disputes the extent of that liability, and the state could pursue future litigation to resolve the dispute.

SLC Taking Steps to Protect State From Future Liability. As noted earlier, in addition to Platform Holly and Rincon Island, the state has leased out three other offshore platforms and four artificial islands that are still operational. While SLC indicates that the lessees of those sites appear to maintain healthy fiscal solvency, the commission is taking steps to revise those lease terms to protect the state's liability and prevent a recurrence of the Venoco and RILP outcomes. Specifically, SLC is negotiating to build in conditions such as (1) increasing the amount of the performance bonds the lessees must hold; (2) requiring the lessees to begin plugging and abandoning idle wells now, rather than delaying until the leases expire; (3) placing liens on other properties the lessees own; and (4) establishing terms that name SLC as a priority claimant if bankruptcy were to be declared.

State Will Face Future Decisions Regarding Decommissioned Facilities. The amount of funding requested by the Governor will not cover the full costs of decommissioning Platform Holly and Rincon Island. The proposed $108.5 million is to undertake the plugging and abandoning activities that will render the facilities safe and stable, but is not sufficient to fully remove the platform and island. SLC indicates that once the initial abandonment activities are completed, it will undertake a California Environmental Quality Act review—in collaboration with input from local residents and stakeholders—to identify the implications of removing, partially removing, or retaining and repurposing the remaining infrastructure. The Legislature should expect future budget requests for the planning and implementation of the final decommissioning phases for these sites.

LAO Recommendations

Adopt Governor's Proposals. Because Platform Holly and Rincon Island (and their associated wells and facilities) continue to pose risks to the environment and public health until they are fully plugged and secured, we recommend the Legislature adopt the Governor's proposed funding request so that work can begin immediately.

Require SLC to Provide Funding Update in 2019. Given the uncertainty surrounding how much funding SLC may ultimately receive from ExxonMobil, we recommend that the Legislature require the commission to provide an update to inform the 2019-20 budget process and the need for General Fund support. This would also be a good opportunity for the Legislature to monitor the work in progress and the status of other offshore leases. Specifically, we recommend the Legislature adopt supplemental reporting language requiring SLC to provide a report by January 10, 2019 that includes an update on the following: (1) the status of negotiations with and amount of funding received from ExxonMobil for the Platform Holly project and the amount ultimately received from the RILP performance bond; (2) the project status and work accomplished, timelines for completion, and latest project cost estimates for both Platform Holly and Rincon Island; and (3) the status of lease renegotiations with existing offshore platform and island lessees and the specific protections put in place to limit future state liability.

DEPARTMENT OF CONSERVATION

The Department of Conservation (DOC) is charged with the development and management of the state's land, energy, and mineral resources. The department manages programs in the areas of (1) geology, seismology, and mineral resources; (2) oil, gas, and geothermal resources; and (3) agricultural and open-space land. The Governor's budget proposes $126 million for DOC in 2018-19, a decrease of about $16 million (11 percent) from estimated expenditures in the current year. The year-over-year decrease is mainly explained by a reduction in Greenhouse Gas Reduction Fund spending of $15.8 million.

WELL STATEWIDE TRACKING AND REPORTING (WELLSTAR)

LAO Bottom Line. We recommend the Legislature only approve the request for $15 million in 2018-19 to fund just the second year of development of the WellSTAR database system, rather than the multiyear funding plan proposed by the Governor. This approach will require the administration to return with additional funding requests annually until the project is fully implemented, thereby ensuring that the Legislature has additional opportunities to exercise oversight over this complex information technology (IT) project.

Background

Division of Oil, Gas, and Geothermal Resources (DOGGR) Regulates Oil and Natural Gas Production. DOGGR regulates onshore and offshore oil, natural gas, and geothermal wells. The division is charged with ensuring the safe development of oil, natural gas, and geothermal resources in the state through sound engineering practices that protect the environment, prevent pollution, and ensure public safety. The division's regulatory responsibilities include (1) well permitting and testing; (2) safety inspections; (3) oversight of oil, natural gas, and geothermal well drilling; (4) inspecting oil field tanks, pipelines, and sumps; (5) oversight of well stimulation such as hydraulic fracturing and steam injection; and (6) oversight of plugging and abandonment of wells.

The division works in collaboration with local governments and other state agencies to meet its regulatory mandate. For example, the division collects information on water production, water use, and water disposal from oil and natural gas production operations and provides this information to the State Water Resources Control Board (SWRCB). This information helps SWRCB identify oil and natural gas injection wells that may be injecting fluids into aquifers used for drinking water.

U.S. Environmental Protection Agency (EPA) Letter Requires California to Improve Oversight of Oil and Gas Production. In February 2015, DOGGR and SWRCB submitted a comprehensive plan to the U.S. EPA to bring California's Class II Underground Injection Control (UIC) program into compliance with the federal Safe Drinking Water Act. (Class II wells are wells where fluids associated with oil and natural gas production are injected into the ground.) In a letter sent in March of 2015, the U.S. EPA responded to California's plan and directed DOGGR to create a searchable injection well database. U.S. EPA stated that an effectively designed searchable database is necessary for (1) DOGGR to properly manage permitting and enforcement of injection activity across the state, (2) U.S. EPA to conduct its oversight of the Class II UIC program, and (3) the public to monitor injection activity.

Recent Legislation Mandates DOGGR to Collect Data on Oil and Gas Wells. In Chapter 313 of 2013 (SB 4, Pavley), the Legislature found that insufficient information is available to fully assess the potential effects of hydraulic fracturing and other well stimulation treatments in California, including environmental, occupational, and public health hazards and risks. The Legislature enacted several requirements designed to provide greater transparency and accountability to the public regarding well stimulation treatments; emissions to the environment; and the handling, processing, and disposal of well stimulation wastes. Chapter 561 of 2014 (SB 1281, Pavley) requires reporting of specific data regarding the source, volume, and storage and disposal status of water produced during oil and natural gas drilling operations. This reporting should provide regulators and policy makers with key information to evaluate how industry practices affect groundwater.

Funding for Oil and Gas Data Management System. The Legislature approved $20 million in 2015-16—$10 million per year in 2015-16 and 2016-17—to create an oil and gas data management system, which has since been named WellSTAR. (The $10 million approved for 2016-17 was subsequently reappropriated in 2017-18.) In 2017-18, the Legislature approved an additional $21.1 million to continue the development of the project. WellSTAR is designed to give DOGGR, other state agencies, industry, and the public an integrated information system that provides data on oil and gas production operations as required by recent legislation and U.S. EPA. DOGGR entered into an agreement with the California Department of Technology (CDT) to complete the state's IT planning process—known as the Project Approval Lifecycle—with assistance and direction of staff from the CDT Project Management Office.

WellSTAR Project on Schedule and on Budget According to CDT. According to the December 2017 Independent Project Oversight Report (IPOR) prepared by CDT, the overall health of the WellSTAR project is "satisfactory," meaning no corrective action is necessary at this time. For example, the project is operating (1) on schedule, (2) within the approved budget, and (3) within the approved scope. The project is also meeting other requirements for a satisfactory rating in seven other areas tracked on IPOR's independent project oversight dashboard (such as having an approved staff management plan in place).

Governor's Proposal

As shown in Figure 19, the Governor's budget plan proposes a total of $24.4 million (Oil, Gas, and Geothermal Administrative Fund [OGGAF]) over four

Figure 19

Governor's Budget Request for WellSTAR

(In Millions)

	Project Stages				
	Design, Development, and Implementation Stages	Stabilization and M&O	M&O		
	2018-19	2019-20	2020-21	2021-22 (Ongoing)	Four-Year Total
Vendor services	$12.9	$4.1	$2.2	$1.0	$20.2
CDT services	0.8	0.1	—	—	0.9
DOC staff	1.3	1.3	0.3	0.3	3.3
Totals	**$15.0**	**$5.5**	**$2.5**	**$1.3**	**$24.4**

WellSTAR = Well Statewide Tracking and Reporting; M&O = maintenance and operation; CDT = California Department of Technology; and DOC = Department of Conservation.

years beginning in 2018-19 to continue implementation of WellSTAR. This includes a request of $15 million for 2018-19. The activities funded in this proposal will be performed by a mix of external vendors, CDT staff, and DOC staff. The bulk of the funding occurs in 2018-19 and would support project design, development, and implementation costs. In 2019-20, funding primarily would support one year of stabilization costs (related to transitioning operational ownership of the project from the developer to DOC), as well as the first year of ongoing maintenance and operation (M&O) costs. This M&O is essential for maintaining system technologies and for making any necessary fixes identified by DOGGR during operational use. The M&O estimated cost does not include any enhancements to WellSTAR that may be necessary to comply with future legislation or regulations.

LAO Assessment

The WellSTAR project is necessary to comply with U.S. EPA requirements and to implement the requirements of Chapters 313 and 561. However, we have concerns regarding how effectively the Legislature will be able to exercise oversight of the WellSTAR project if the administration's proposal is approved as budgeted. As proposed, the request would be approved for funding in 2018-19 for project design, development, and implementation costs, and then from 2019-20 onward for stabilization costs and ongoing M&O costs. Under this proposal, the administration would not have to make a request for additional expenditure authority unless the project experienced a shortfall. Typically, IT projects—especially complicated projects such as WellSTAR, a project with an estimated total cost of $69 million—are funded on a year-to-year basis until fully implemented. This funding approach ensures that the administration will submit a request for funding for such projects as part of the Governor's annual budget plan, providing an opportunity for the Legislature to exercise oversight of the project in budget subcommittee hearings.

LAO Recommendation

Approve Only Budget-Year Funding. We recommend that the Legislature only approve the request for $15 million in 2018-19 to fund the next year of WellSTAR design, development, and implementation. By taking this year-by-year approach to funding, the Legislature would ensure that the administration will have to return with an additional funding request annually as part of the Governor's budget proposal until the project has reached the M&O stage in 2020-21. This would trigger a review of WellSTAR's development and implementation as part of the annual state budget process, thereby ensuring an opportunity for the Legislature to exercise further oversight of the project.

REGULATORY FIELD INSPECTION

LAO Bottom Line. We recommend the Legislature approve funding for three years—rather than on an ongoing basis as proposed by the Governor—to increase inspections and enforcement activities on oil and natural gas fields by establishing 21 positions. We further recommend the Legislature require DOC to annually report on the extent to which it is performing certain regulatory and oversight activities. Funding the positions for three years, combined with requiring some additional reporting, would require the administration to return with additional funding request, and allow the Legislature to make a better-informed decision about the number of positions that are justified on a permanent basis.

Background

DOGGR Field Inspectors Perform Various Regulatory Functions. DOGGR's field inspectors evaluate the condition of oil and natural gas production facilities and equipment. This includes testing of oil and natural gas production equipment and practices to ensure they meet specified standards. For example, inspectors can require that a production crew perform a drill to demonstrate its ability to quickly and safely control a well during an emergency such as a blowout. In addition, when a well operator has been issued a permit by DOGGR for oil and gas operations, the operator is required to notify the division when certain operations and testing will be performed. This allows DOGGR to dispatch a field inspector to observe the operations and/or testing and ensure the operator is in compliance with state regulations. Field inspectors also are charged with ensuring that wells and facilities are constructed according to applicable laws and regulations and ensure key production and maintenance information is submitted by operators.

DOGGR Is Mandated to Witness Certain Operations and Testing. State law and regulations require DOGGR to witness certain oil and gas production operations and testing of equipment—the division calls these "shall-witness" operations. According to DOGGR, there are about 30 different shall-witness operations. For example, the plugging and abandonment of a well encompasses numerous tests that are required to be witnessed by field inspectors. The requirements for a shall-witness designation are based upon technical risk factors and the probability that an oil or natural gas operation could lead to an incident such as (1) well blowout, (2) the release of hazardous fluids into the environment, or (3) contamination to groundwater and surface waters.

DOGGR May Witness Certain Operations and Testing at Its Discretion. State law and regulations allow DOGGR to witness certain oil and natural gas production operations and testing of equipment—the division calls these "may-witness" operations. Generally, DOGGR places a higher priority on sending field inspectors to observe may-witness operations when they are performed near a building intended for human occupancy such as a home, apartment building, or school. Under such circumstances, the well is deemed "critical" by DOGGR. Due to these wells' proximity to urban areas, DOGGR indicates they represent a greater risk to human health and safety than wells located in rural areas.

Because of urban encroachment, many wells that were not deemed critical decades ago when they were drilled are now deemed critical by the division. About 91 percent of critical wells are in three of DOGGR's regulatory districts. The Southern District (which includes the Los Angeles metro area) has 50 percent of the state's critical wells. Two other districts, Inland (which includes the Tulare basin) and Coastal (which includes the coast between Los Angeles and Monterey) have 41 percent of the states remaining critical wells. More than 90 percent of California's oil and natural gas production wells are located in the Southern, Inland, and Coastal districts.

Governor's Proposal

The administration requests $4.3 million in 2018-19 ($3.7 million ongoing) from the OGGAF and 21 permanent positions to increase inspections and enforcement activities on oil and gas fields. The department's goal is to observe 100 percent of shall-witness and critical may-witness operations and testing. The requested funding includes costs for eight vehicles to be purchased in 2018-19 and used by field engineering staff who travel to perform regulatory activities such as witnessing oil and natural gas operations.

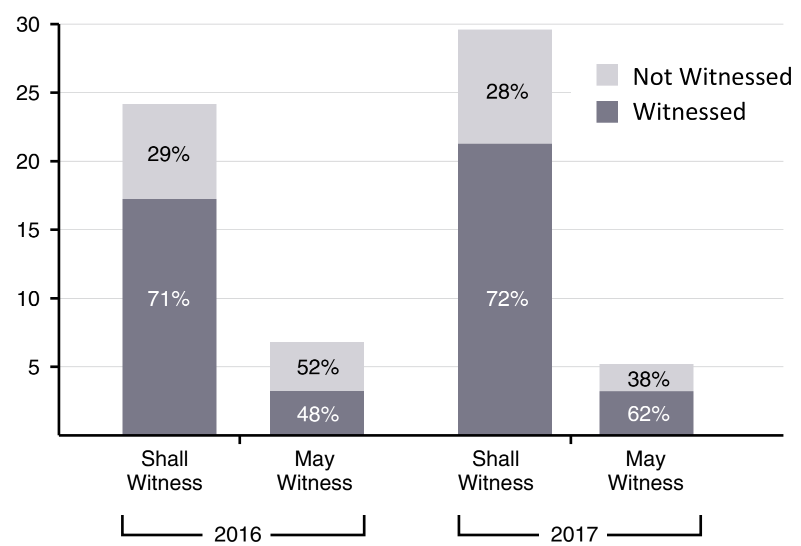
LAO Assessment

DOGGR Does Not Witness All Shall-Witness and May-Witness Field Operations. As shown in Figure 20, in the Inland, Coastal, and Southern districts the divisions' inspectors witnessed 71 percent of the shall-witness operations in 2016, and 72 percent of the shall-witness operations in 2017. Similarly, the division's inspectors witnessed 48 percent of the may-witness

Figure 20

Oil and Natural Gas Operations Witnessed by Inspectors in Selected Districts[a]

Number of Operations (In Thousands)



[a] Inland, Coastal, and Southern districts.

operations in 2016 and 62 percent of the may-witness operations in 2017. DOC does not regularly track the number of may-witness operations it observed in 2016 and 2017 that were performed on critical wells.

DOGGR Field Inspection Workload Can Vary Due to a Number of Factors. The amount of annual inspection workload is somewhat uncertain from year to year. There are a number of factors that can affect DOGGR's field inspection workload. These factors include:

- ***Market Forces That Impact Amount of Oil and Natural Gas Production.*** The amount of oil and natural gas produced in California varies from year to year depending on market factors. Generally, significant production slowdowns in California's oil and natural gas industry result in a decrease in enforcement-related workload for the division.
- ***Travel Time to Field.*** In the Inland and Coastal districts, the amount of time it takes to witness oil and natural gas operations and testing varies depending on the distance the inspector has to travel to get to the field. In the Southern district, travel time may vary due to traffic congestion in the Los Angeles metro area. As a result, the amount of time it takes for an inspector to witness an operation can vary significantly from observation to observation.

Due to the factors described above, it is difficult to determine the precise number of field inspectors necessary to ensure that the division complies with its mandate to observe all shall-witness operations and has the capacity to observe may-witness operations deemed critical.

LAO Recommendation

Approve Three-Year Funding. We recommend the Legislature approve the Governor's proposal on a three-year, limited-term basis, rather than on an ongoing basis. In our view, the amount of annual inspection workload is uncertain because (1) the department has not tracked the number of unobserved critical may-witness operations and testing activities and (2) variability in workload due to market conditions and other factors. By approving funding for the positions for three years, the department would need to report back to the Legislature on its progress towards improving its oversight of oil and natural gas field operations if it requests ongoing resources in the future.

Require Annual Reporting on Completion of Mandated Oversight Activities. We recommend the Legislature enact budget trailer legislation to require the department to annually report the following information statewide by district: (1) number of shall-witness and may-witness operations performed, (2) number of shall-witness and may-witness operations observed by DOGGR, (3) number of critical may-witness operations performed, and (4) number of critical may-witness operations observed. This information would help the Legislature to monitor the division's progress towards complying with mandated inspection requirements. The department could fulfill this reporting requirement by posting the information to their website or preparing a written report for the Legislature. The information would also help inform the Legislature's decision about the level of permanent resources needed for the division to perform inspection and enforcement activities.

CALIFORNIA ENERGY COMMISSION

The Energy Resources Conservation and Development Commission (commonly referred to as the California Energy Commission, or CEC) is responsible for forecasting energy supply and demand, developing and implementing energy conservation measures, conducting energy-related research and development programs, and siting major power plants.

The Governor proposes to allocate $604 million for CEC in 2018-19, a net decrease of $79 million (12 percent) compared to estimated expenditures in the current year. This net decrease is primarily the result of a technical issue related to unspent prior-year funds being carried over into the current year. This decrease is partially offset by a proposed increase in one-time spending for zero-emission vehicle (ZEV) fueling infrastructure, which we discuss below.

ZEV INFRASTRUCTURE

LAO Bottom Line. We recommend the Legislature direct the administration to provide (1) a more detailed justification for the amount of funding requested for ZEV infrastructure; (2) additional information about how the funding would affect key policy outcomes, such as greenhouse gas (GHG) emission levels; (3) its assessment of potential risks and costs associated with a substantial expansion of ZEVs, and (4) a plan for evaluating outcomes after program implementation. Additionally, we recommend the Legislature direct the administration to develop a detailed strategy for coordinating spending for ZEV infrastructure across various state programs. We further recommend the Legislature consider whether the administration's proposal to use various special funds and ratepayer funds to support ZEV infrastructure is consistent with legislative priorities.

Background

State ZEV Goals. Light-duty ZEVs are passenger vehicles that do not directly produce emissions of either GHGs or smog-forming air pollution. There are two primary types of ZEVs: (1) electric vehicles, which are battery powered vehicles that are typically recharged by connecting to an electric outlet or charging station and (2) hydrogen fuel cell electric vehicles, which are powered by hydrogen gas that is distributed at hydrogen fueling stations. There are currently about 350,000 light-duty ZEVs in the state, including more than 1,600 hydrogen vehicles. About 14,000 public charging stations and 31 hydrogen refueling stations currently are operating in California.

Both the Legislature and the Governor have adopted goals for increasing the number of statewide ZEVs as a means of achieving GHG reduction goals and improving local air quality. For example, in 2012, the Governor issued Executive Order B-16-12, which directed state agencies to take actions to achieve 1.5 million ZEVs on California roads by 2025. Chapter 530 of 2014 (SB 1275, de León) set a state goal of at least 1 million ZEVs and near ZEVs in the state by 2023. Subsequently, Chapter 547 of 2015 (SB 350, de León) directed state agencies such as the CEC, California Public Utilities Commission (CPUC), and California Air Resources Board (CARB) to support widespread transportation electrification. As part of its planning efforts to achieve federal air quality standards and statewide GHG limits, CARB has established a goal of 4.2 million ZEVs by 2030. On January 26, 2018, Governor Brown issued Executive Order B-48-18, establishing a new state goal of 5 million ZEVs by 2030.

State Has a Variety of Programs Intended to Promote ZEVs. The state has several programs intended to increase the number of ZEVs in the state. These include: (1) CARB regulations requiring that automobile manufacturers produce a certain percentage of ZEVs; (2) state programs that provide consumer rebates for purchasing ZEVs, including the Clean Vehicle Rebate Project; and (3) High-Occupancy Vehicle lane decals for ZEVs. Additionally, as shown in Figure 21 (see next page), the state funds or oversees several programs designed to expand ZEV charging and fueling infrastructure.

ARFVTP Funds Activities Intended to Reduce Vehicle Emissions. Chapter 750 of 2007 (AB 118, Núñez) temporarily authorized vehicle-related charges—such as smog exemption fees for newer vehicles—and directed the resulting revenues to programs intended to reduce vehicle emissions. Chapter 401 of 2013 (AB 8, Perea) extended the charges and funding for these programs through 2023. Currently, about $40 million annually is deposited in the Air Quality Improvement Fund (AQIF) and is used for clean vehicle loans administered by CARB. Another $100 million annually is deposited in the Alternative and Renewable Fuels and Vehicle Technology Fund (ARFVTF) to support the Alternative and Renewable Fuels and Vehicle Technology Program (ARFVTP). The ARFVTP supports grants for projects intended to transform California's fuel and vehicle types to help meet the state's GHG reduction goals. Programs funded from ARFVTF include the following:

- ***Low-Carbon Fuel Production.*** Supports the expansion of the production of low-carbon fuels, such as biomethane and gasoline and diesel substitutes from waste-based and renewable feedstocks in the state.
- ***Advanced Freight and Fleet Technologies.*** Promotes the development of zero- and near-zero-emission freight and fleet vehicles and technologies. Freight and fleet vehicles produce 22 percent of the state's on-road GHG emissions and are a primary source of local air pollution.

- ***Manufacturing.*** Provides funding to alternative vehicle developers to create economical and viable manufacturing processes that enable full commercialization of their products. Such grants are provided to companies that may have difficulty obtaining enough funding from traditional lenders because of the high-risk nature of developing unproven manufacturing processes.
- ***Workforce Training and Development.*** Supports training and development of a qualified alternative transportation workforce. For example, the CEC works with academic organizations and industry partners, such as community colleges and alternative fuel and vehicle manufacturers, to identify workforce skills needs and provide training in those skills.

To date, the ARFVTP has provided more than $757 million to 600 alternative fuels and technologies projects. CEC is required to submit an annual investment plan update recommending changes in future program funding allocations based on the identified needs and opportunities of various alternative fuels and vehicle technologies.

New Solar Homes Partnership (NSHP) Program Spending Authority Expires in 2018. CEC administers the NSHP, which provides financial incentive rebates for the installation of solar energy systems in new homes. Chapter 132 of 2006 (SB 1, Murray) authorized $400 million for the NSHP program with the goal of achieving 360 megawatts (MW) of solar capacity installed by 2016. The program was originally funded with a portion of revenue from a surcharge on electricity bills, also known as the public goods charge. However,

Figure 21

Funding for Major State Zero-Emission Vehicle (ZEV) Infrastructure Programs

Program	Agency	Funding Amount	Description
Volkswagen (VW) ZEV investment commitment	California Air Resources Board	$800 million over ten years	A 2016 settlement requires VW to invest $800 million in ZEV projects—mostly for ZEV fueling infrastructure—in California over ten years. The first round of spending will invest $120 million to construct 350 neighborhood charging stations and 50 fast charging stations
Investor-owned utilities (IOU) electric vehicle infrastructure	California Public Utilities Commission (CPUC)	$200 million since 2016	Since 2016, CPUC has approved over $200 million for ZEV infrastructure pilot projects. CPUC is currently evaluating IOU proposals to spend an additional $1 billion on ZEV infrastructure.
NRG settlement	CPUC	$100 million one time	A 2012 settlement requires the energy company NRG to install at least 200 public fast-charging stations and infrastructure for up to 10,000 privately owned charging stations at residences and workplaces, estimated to cost about $100 million.
Alternative and Renewable Fuel and Vehicle Technology Program	Energy Commission	$40 million annually	Spends roughly $40 million annually for public ZEV infrastructure and has funded the construction of about 7,000 charging and fueling stations to date.
Highway charging	Department of Transportation	$20 million one time	The 2017-18 budget provided $20 million to install 32 electric vehicle chargers along highway corridors.
Vehicle charging at state buildings	Department of General Services	$7 million in 2017-18	The 2017-18 budget provided $7 million to install 230 chargers at state buildings. The proposed 2018-19 budget includes $16 million for 1,200 chargers. The administration has a long-term plan to spend $87 million over four years to install over 6,200 charging stations.

the public goods charge expired in 2012 before the entire $400 million was collected for NSHP. In 2016, the CPUC authorized investor-owned utilities (IOUs) to collect about $112 million to pay for the shortfall in funds for the program after the public goods charge expired. Current law authorizes CEC to spend the NSHP funds through June 2018. According to the administration, the state has not yet met the 360 MW goal established in Chapter 132.

Governor's Proposal

Plan to Significantly Increase Spending on ZEV Infrastructure Over Eight Years. To help achieve the Governor's new state goal of 5 million ZEVs by 2030, the CEC requests to provide a total of $900 million over eight years from the ARFVTF and other funds to support the construction of ZEV fueling infrastructure. (The budget also includes a proposal for $1.6 billion over eight years to fund rebates for consumers purchasing ZEVs, which we discuss in the cap-and-trade section of this report.) According to the administration, these funds would be used to construct a portion of the additional 146,000 charging stations and 135 hydrogen refueling stations the state would need on top of those already projected to be constructed in order to have a total of 250,000 charging stations and 200 hydrogen refueling stations in the state by 2025.

Figure 22 shows how the administration's proposal would change funding for ZEV infrastructure and the existing ARFVTF-funded activities. The administration's proposed spending plan for ZEV infrastructure includes the one-time use of several funds in the budget year. In addition, the plan proposes to shift over a two-year period all ARFVTF to exclusively being used for ZEV infrastructure through 2025-26. These actions would provide a total of $235 million for ZEV infrastructure in 2018-19, decreasing to $95 million annually thereafter. After the budget year, there would be no ongoing allocations for the other types of projects that are currently funded from the ARFVTF.

Budget-Year Spending From Multiple Sources. The $235 million allocated to ZEV infrastructure in 2018-19 includes the following:

- ***$77 Million From Annual ARFVTF Allocation.*** The administration proposes to use $77 million out of the total annual $95 million ARFVTF allocation for ZEV infrastructure. In 2018-19, $18 million of ARFVTF funds would continue to be used for alternative freight and fleet technologies. (After 2018-19, the full annual allocation would be provided for ZEV infrastructure.) Low-carbon fuel production projects would receive $25 million from the Greenhouse Gas Reduction Fund (GGRF) in 2018-19 under the Governor's 2018-19 cap-and-trade proposal.
- ***$70 Million One Time From Special Fund Balances.*** The proposal includes a one-time allocation of ARFVTF ($55 million) and AQIF ($15 million) fund balances.

Figure 22

Annual Funding Under Governor's Zero-Emission Vehicle Infrastructure Proposal

(In Millions)

	Current Spending	Governor's Proposal	
	2017-18	2018-19	2019-20 Through 2025-26
Zero-emission vehicle infrastructure	$36	$235[a]	$95
Low-carbon fuel production	23	25[b]	—
Alternative fuel vehicles	27	18	—
Manufacturing	5	—	—
Workforce training	3	—	—
Other	2	—	—
Totals	**$97**	**$278**	**$95**

[a] Includes $70 million one-time funding from the Alternative and Renewable Fuel and Vehicle Technology Fund and Air Quality Improvement Fund as well as $88 million from ratepayer funds reserved for New Solar Homes Partnership.
[b] One-time funding from Greenhouse Gas Reduction Fund.

- ***$88 Million One-Time Allocation of Unspent NSHP Funds.*** The administration estimates that there will be $88 million in unspent NSHP funds when CEC authority to spend the funds expires in June 2018. The administration proposes to redirect these funds to ZEV infrastructure. According to the administration, it will propose budget trailer legislation to authorize the proposed use of these funds, and CPUC might need to authorize the change.

LAO Assessment

ZEV Proposal Raises Key Policy Questions. The administration's new ZEV goal raises key policy questions that the Legislature will want to consider before allocating additional funding. For example, are state goals and policies—such as ZEV-specific policies—that are aimed at supporting specific technologies or reducing emissions from certain sources a necessary or cost-effective way to achieve the Legislature's GHG goals? The state has several major initiatives aimed at reducing GHG emissions, including a cap-and-trade program designed to encourage cost-effective GHG emission reductions by placing a price on emissions. Furthermore, policies targeted at emission reductions from capped sources—such as transportation-related emissions—likely would not be necessary to meet the state's GHG goals and likely increase the overall costs of emission-reduction activities. (For more details, see our 2016 report *Cap-and-Trade Revenue: Strategies to Promote Legislative Priorities*.) In light of these factors, the Legislature will want to consider the rationale and justification for more aggressive policies focused specifically on ZEVs. For example, the Legislature could direct the administration to explain (1) whether state funding for ZEV infrastructure is necessary to address a market failure that cap-and-trade does not; (2) the extent to which ZEV infrastructure spending would be the most effective way to achieve other goals, such as reducing local air pollution; and (3) in what cases the private sector is unlikely to supply enough charging and refueling stations to support increased consumer demand for ZEVs, thereby requiring state support.

Furthermore, the Legislature will want to evaluate the potential trade-offs and risks associated with dramatically expanding ZEV usage in California. For example, a substantial increase in electric vehicles could pose both challenges and benefits to electricity grid operators trying to balance supply and demand. The effects on grid operations largely depend on when future owners charge the vehicles. If vehicle owners were to charge often when there is an excess supply of electricity—such as when there is abundant solar energy during the early afternoon—then these vehicles could have minimal adverse (or even beneficial) impacts on grid operations. However, if owners were to charge the vehicles when demand is typically high relative to the supply of electricity, the additional ZEVs could make it more difficult to balance supply and demand, potentially resulting in less grid reliability. Another potential risk is that a significant increase in ZEVs could cause a considerable decline in gas and diesel tax revenue that might not be offset by a newly implemented registration fee on ZEVs. To the extent this were to occur, it would reduce available funds for transportation infrastructure. If the Legislature determines that an increase in ZEVs could result in significant risks or costs, it might want to consider options to mitigate potential adverse consequences from ZEV policies. For example, the state might want to consider designing retail electricity rate structures to minimize grid impacts. This could be done by establishing pricing structures, such as time-of-use pricing, that discourage ZEV charging when electricity demand is high and electricity supply is relatively low.

Justification for Amount of Additional ZEV Infrastructure Funding Is Unclear. The administration provided our office a summary of the gap analysis it used as the basis for the total estimated amount of funding needed to support its ZEV goal. Figure 23 summarizes this analysis. The administration projects that current programs and settlements supporting ZEV infrastructure will result in the installation of an additional 90,000 charging stations and 34 hydrogen fueling stations. Combined with the current amount of charging and fueling stations, this leaves a gap of 146,000 charging stations and 135 fueling stations the state would need to make up in order to achieve the administration's goals. The administration estimates the total cost to install those stations—including public and private funds—would be $1.5 billion to $2.1 billion.

However, the administration has not provided detailed information about how it conducted this analysis, including modeling methods, data, and assumptions. Greater detail in these areas could help the Legislature better assess the estimated amount of funding needed to meet the administration's ZEV goals. For example, key information include (1) future infrastructure investments anticipated from the private sector, (2) future developments in charging and refueling technology and cost, and (3) whether the target number of charging and refueling stations is the correct amount needed to meet the Governor's 5 million ZEV goal. These assumptions could have significant effects on the amount of state funds that would be needed to meet ZEV goals.

In addition, the administration has not provided detailed information about how the requested funding would affect key policy outcomes of interest, such as the net effect on GHG emissions and local air pollution. For example, it is unclear how the additional funding would change the estimated number of ZEVs and, as a result, the overall level of GHG emissions. More complete information about the expected outcomes from the administration's ZEV initiative could help the Legislature better evaluate the costs and benefits of increasing funding for ZEV infrastructure relative to alternative programs for reducing GHG emissions.

No Plan Released for Evaluating Outcomes After Program Implementation. At the time this report was prepared, the administration has not released a plan to evaluate the effects of the proposed ZEV infrastructure expansion program after implementation begins. Although the CEC currently has a process for estimating the effects of ZEV infrastructure funding—such as GHG reductions—before the projects are implemented, we are not aware of any current process or plan for evaluating the effects after the infrastructure is installed. Such a process could help assess the value of the program, identify potential adverse effects, and determine what adjustments to the program should be made in order to optimize desired outcomes. An evaluation of the administration's initiative could include such information as (1) how many additional ZEV charging and fueling stations were installed as a result of the additional funding, (2) how those additional stations affected the number of ZEVs purchased, (3) the cost-effectiveness of the program relative to alternative approaches, and (4) what other economic and environmental effects can be attributed to ZEV infrastructure expansion efforts.

No Coordinated Statewide Plan for Allocating Funds. As noted above, the state funds or oversees a variety of ZEV infrastructure programs. The Governor's Interagency Working Group on Zero-Emission Vehicles issued its most recent ZEV Action Plan in 2016. The plan summarizes state activities related to ZEVs, establishes broad goals for state activities to advance ZEVs, and assigns tasks to different agencies for promoting ZEV expansion. However, to our knowledge, the administration does not have an overarching strategic plan for coordinating spending. Such a plan would describe how funding for various state programs would be targeted to the highest priority locations and technologies taking into account other sources of public and private funding. For example, such a plan would identify where charging stations could be located to be used most often or have the most influence on customer decisions to purchase ZEVs. The administration indicates that these types of decisions will be made through future interagency working group activities and the annual ARFVTP investment plan process.

Plan Redirects Funds From Other Activities. As described above, the administration's 2018-19 proposal prioritizes funding for ZEV infrastructure over other potential uses. For example, the administration allocates $70 million one-time special fund balances to ZEV infrastructure. These funds would otherwise be available for alternative emission-reduction activities, such as low-carbon fuel production or advanced freight technologies. In addition, the proposal would redirect

Figure 23

Gap Analysis Summary

	Electric Charging Stations	Hydrogen Fueling Stations
Administration 2025 goal	250,000	200
Current number	14,000	31
Projected increase for existing programs	90,000	34
Total projected number	104,000	65
Gap to Achieve 2025 Target	**146,000**	**135**
Cost Per Station	$6,000 to $110,000	$2.5 to $4.0 million
Total Cost to Fill Gap	**$1.2 to $1.6 billion**	**$340 to $540 million**

an estimated $88 million in unspent ratepayer funds designated for the expiring NSHP program to ZEV infrastructure projects. We note that there are other options for the use of these funds. The Legislature could extend CEC's authority to spend the funds on the NSHP program if the state has not fully achieved its goal by June 2018. Alternatively, CPUC could direct IOUs to return the unspent money to ratepayers.

In the out-years, all ARFVTP funds would be devoted solely to ZEV infrastructure projects. Other existing ARFVTP activities would no longer receive annual funding. According to the administration, other ARFVTP activities could be eligible for GGRF in future years. However, without any specific ongoing allocations for these activities, the proposal creates a greater risk that they will not be funded in future years. Such a change presents trade-offs between providing more stable funding for ZEV infrastructure and providing less stable funding for other existing projects.

LAO Recommendations

Direct Administration to Report Key Information. We recommend the Legislature direct the administration to report at budget hearings on (1) additional information about how the funding would affect key policy outcomes, such as GHG emissions; (2) its assessment of potential risks and costs associated with a rapid expansion of ZEVs, as well as actions that it plans to undertake to mitigate those risks; (3) a more detailed justification for the amount of funding requested for ZEV infrastructure; and (4) a plan for evaluating outcomes after program implementation. This information would help the Legislature evaluate the potential costs and benefits of allocating the additional funding.

Direct Administration to Provide Coordinated Strategy for ZEV Infrastructure. We recommend the Legislature adopt supplemental reporting language to direct the administration to develop a detailed report by January 10, 2019 setting a strategy for coordinating spending for ZEV infrastructure across various state programs and updated annually over the life of the program. This would help avoid duplication of effort and ensure funds are being applied to the highest priority locations and on the most effective technologies.

Consider Whether Redirection of Funds Is Consistent With Legislative Priorities. We recommend the Legislature consider whether the administration's proposed shifts in funding are consistent with legislative priorities. In 2018-19, the administration's proposal prioritizes ZEV infrastructure over other possible uses for the funds, including funding for other existing ARFVTP activities, incentives for solar energy on new homes, and returning certain funds to IOU ratepayers. In the out-years, the proposal eliminates funding for all of the other current ARFVTP activities, including low-carbon fuel production and advanced freight technology. Alternatively, the Legislature could fund a different mix of activities if it prioritizes programs differently from the Governor. The Legislature also could consider whether to use other funds to support ZEV infrastructure expansion. If, for example, the Legislature wanted to continue to fund existing ARFVTP programs and expand ZEV infrastructure, it could provide additional support to ZEV infrastructure through allocations from GGRF. This, however, would reduce the amount of GGRF available for other programs.

STATE WATER RESOURCES CONTROL BOARD

The State Water Resources Control Board (SWRCB) regulates water quality and administers water rights in the state. SWRCB consists of a state board in Sacramento (composed of five members representing differing areas of expertise) and nine regional boards (each composed of seven members). The state board sets the policy direction for the regional boards and acts as an appellate body for regional board decisions. The state board is also responsible for administering the state's system of water rights. The regional boards issue and enforce compliance with waste discharge permits, monitor water quality, and carry out water pollution control programs in accordance with state board policies.

The Governor's budget proposes $1.1 billion ($40 million General Fund) for the SWRCB in 2018-19. This is a reduction of $1.5 billion, or 59 percent, from current-year estimated expenditures. The decrease is primarily due to an almost $1.5 billion reduction in bond funding from Proposition 1 (2014).

SAFE AND AFFORDABLE DRINKING WATER FUND

LAO Bottom Line. The administration proposes budget trailer legislation to implement a significant new policy that would impose new charges on water system customers and certain agricultural entities to implement a new financial assistance program to address unsafe drinking water. We identify three issues for the Legislature to consider as it deliberates on the proposal: (1) consistency with the state's human right to water policy, (2) uncertainty about the estimated revenues that would be generated by the proposal and the amount of funding needed to address the problem, and (3) consistency with the polluter pays principle.

Background

Federal, State, and Local Entities Regulate Drinking Water. The federal Safe and Affordable Drinking Water Act (SDWA) was enacted in 1974 to protect public health by regulating drinking water. California has enacted its own safe drinking water act to implement the federal law and establish state standards. The U.S. EPA enforces the federal SDWA at the national level. However, most states, including California, have been granted "primacy" by the U.S. EPA, giving them authority to implement and enforce the federal SDWA at the state level.

Maximum contaminant levels (MCLs) are health-based drinking water standards that public water systems are required to meet. MCLs take into account the health risk, detectability, treatability, and costs of treatment associated with a pollutant. Agencies responsible for regulating water quality enforce these standards.

The SWRCB's Division of Drinking Water (DDW) regulates public water systems that provide water for human consumption and have 15 or more service connections, or regularly serve at least 25 individuals daily at least 60 days out of the year. (A "service connection" is usually the point of access between a water system's service pipe and a user's piping.) The state does not regulate water systems with less than 15 connections; county health officers oversee them. At the local level, 30 of the 58 county environmental health departments in California have been delegated primacy—known as Local Primacy Agencies (LPAs)—by the SWRCB to regulate systems with between 15 and 200 connections within their jurisdiction. For investor-owned water utilities under the jurisdiction of CPUC, the DDW or LPAs share water quality regulatory authority with CPUC.

The DDW regulates approximately 7,500 water systems. About one-third of these systems have between 15 and 200 service connections. The number of smaller systems—specifically, those with 14 or fewer connections—is unknown but estimated to be in the thousands.

Multiple Causes of Unsafe Drinking Water. The causes of unsafe drinking water can generally be separated into two categories (1) contamination caused by human action and (2) naturally occurring contaminants. In some areas, there are both human caused and natural contaminants in the drinking water.

Three of the most commonly detected pollutants in contaminated water are arsenic, perchlorate, and nitrates. While arsenic is naturally occurring, perchlorate contamination is generally a result of military and industrial uses. High concentrations of nitrate in groundwater are primarily caused by human activities, including fertilizer application (synthetic and manure), animal operations, industrial sources (wastewater treatment and food processing facilities), and septic systems. Agricultural fertilizers and animal wastes applied to cropland are by far the largest regional sources of nitrate in groundwater, although other sources can be important in certain areas.

Unsafe Drinking Water a Statewide Problem. SWRCB has identified a total of 331 water systems that it or LPAs regulate that are in violation of water quality standards. These water systems serve an estimated 500,000 people throughout the state. The number of water systems with 14 or fewer connections that are currently in violation of water quality standards is unknown, but estimated to be in the thousands by SWRCB. Of the 331 systems identified by SWRCB, 68 have violations associated with nitrates (and in some cases, additional contaminants). In some of these water systems, unsafe contamination levels persist over time because the local agency cannot generate sufficient revenue from its customer base to implement, operate, or maintain the improvements necessary to address the problem. The challenge in these systems is often a product of a combination of factors, including the high costs of the investments required, low income of the customers, and the small number of customers across whom the costs would need to be spread.

Safe and Affordable Drinking Water a Human Right. In response to concerns about the prevalence of unsafe drinking water in California, Chapter 524 of 2012 (AB 685, Eng) was enacted. This law declares the state's policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. Under Chapter 524, state agencies are required to consider this policy when revising, adopting, or establishing policies, regulations, and grant criteria. Chapter 524 clarifies that it does not expand the state's obligations to provide water or require the state to fund water infrastructure.

SWRCB Administers Programs to Provide Safe Drinking Water. The SWRCB administers the Drinking Water State Revolving Fund (DWSRF), which provides continuously appropriated funding for low- and zero-interest loans, debt refinancing, principal forgiveness, and grants to public water systems for infrastructure improvements to correct system deficiencies and improve drinking water quality. Eligible projects include the planning, design, and construction of drinking water projects such as water treatment systems, distribution systems, and consolidation with another water system that has safe drinking water. The program is funded by annual capitalization grants from the U.S. EPA and a federally required 20 percent state match (usually from bond funds). The federal and state funds are then used to provide financial assistance for eligible projects. In 2016-17, SWRCB estimates the DWSRF disbursed about $330 million and provided technical assistance to water systems.

SWRCB also administers temporary programs to provide safe and affordable drinking water. For example, SWRCB administers the Clean Drinking Water Program for Disadvantaged Households, which provided one-time funding of $8 million General Fund in 2017-18 to disadvantaged households and small water systems to ensure they have adequate access to clean drinking water and adequate sanitation. Eligible projects include capital costs for replacement and repair of existing domestic wells. The board has also administered funds approved by the voters through various bond measures for capital investments, and some operations and maintenance costs aimed at providing safe drinking water. For example, Proposition 1 (2014) authorized $520 million for grants and loans for projects that improve water quality, including to help provide clean, safe, and reliable drinking water to all Californians. Some of this funding supports the DWSRF.

Governor's Proposal

The administration proposes to establish a new program—the Safe and Affordable Drinking Water Fund (SADWF)—to be administered by SWRCB and designed to increase access to safe drinking water for Californians. Specifically, the program would provide certain local water agencies—particularly ones in disadvantaged communities—with grants, loans, contracts, or services to help support their operations and maintenance costs. This funding would be supported by new charges proposed by the Governor on water system ratepayers and certain agricultural entities. For 2018-19, the administration requests a one-time loan of $4.7 million from the Underground Storage Tank Cleanup Fund to begin implementation of the new program. Below, we provide additional details about key aspects of the administration's proposal.

Provides Disadvantaged Communities With Funding for Maintenance and Operations. Under the administration's proposal, SWRCB would prioritize the use of funds to assist disadvantaged communities and low-income households served by a water system with less than 14 connections. Funding would be prioritized to support operations and maintenance costs, as well as capital costs associated with water system consolidation and service extensions. Allowable uses would include providing replacement water on a short-term basis, as well as the development, implementation, maintenance, and operation of more permanent solutions (such as treatment systems).

Imposes Various Charges. In total, the administration estimates that the various proposed charges would generate roughly $150 million annually when fully implemented. The charges on agricultural entities would be required to be targeted to water systems affected by nitrate contamination. Specifically, the administration proposes budget trailer legislation to implement the following charges:

- ***Charge on Water System Customers ($130 to $140 Million).*** Beginning July 2019, the administration proposes imposing monthly charges on most water system customers ranging from $0.95 to $10 based on the size of the customer's water meter. According to a recent CPUC report, the average water bill across 113 California public water systems was $78 in the summer and $60 in the winter. SWRCB estimates that these charges will generate between $130 million and $140 million annually when fully implemented. Customers would be exempted from this charge if they (1) belong to a water system with fewer than 200 connections or (2) self-certify that their household income is equal to or less than 200 percent of the federal poverty level (The 2018 federal poverty level is $25,100 for a family of four.) Beginning July 2021, SWRCB could reduce these charges. Local water systems would be authorized to retain some of the revenue to cover costs associated with the collection of the charges.
- ***Mill Fee ($14 Million).*** The administration proposes a mill fee of six "mills" (equal to six-tenths of a cent) per dollar on the sale of all fertilizer. This would be in addition to the current mill fee of three mills. According to the California Department of Food and Agriculture (CDFA), this charge is estimated to generate $14 million per year when fully implemented.
- ***Charges on Milk Producers ($5 Million).*** The administration proposes to impose charges on milk producers beginning January 2021. In total, these charges are estimated to generate $5 million per year when fully implemented. For context, cash receipts for milk and cream production in California were $6.1 billion in 2016.
- ***Charge on Confined Animal Facilities (Amount Not Estimated).*** Finally, the administration proposes to impose a charge on confined animal facilities—excluding dairies—such as egg-production facilities. The charges are capped at $1,000 per facility per year. At the time this analysis was prepared, the administration did not have revenue estimates available for the confined animal facilities charge.

The administration has not estimated the total cost associated with bringing drinking water systems that are currently unable to meet water quality standards into compliance on an ongoing basis. However, a private consulting firm recently did a statewide drinking water needs assessment for advocates and stakeholders to determine this amount. According to the assessment, $140 million would be required annually to improve conditions at all drinking water systems and domestic wells with substandard water quality. In our discussions with SWRCB staff, they indicated that the methodology used to generate the estimate appeared reasonable, but any estimate in this area is highly uncertain, particularly due to the lack of data on smaller water systems and domestic wells. The assessment estimated the costs to address systems with nitrate problems would be around $30 million annually, and the costs to address all other systems would be $110 million annually.

Shields Certain Agricultural Entities From Regulatory Actions. In accordance with current law, SWRCB and regional water boards set objectives for the amount of nitrate contamination in the groundwater. Agricultural entities that contribute to levels of nitrate contamination that exceed these objectives are subject to enforcement actions that can include cleanup and abatement orders and cease and desist orders. However, under the Governor's proposal, if an agricultural operation meets certain requirements, such as implementing the best practicable treatment control, and pays the charges required by this proposal, the operation would not be subject to these types of regulatory actions.

Requires SWRCB to Administer SADWF. The proposal includes a number of administrative requirements, particularly for SWRCB. In a process that requires a public hearing and opportunities for stakeholder participation, SWRCB would adopt a fund implementation plan and policy handbook with priorities and guidelines for expenditures from SADWF. In addition, SWRCB staff would be required to annually develop and present to the board an assessment of the total annual funding needed to assist water systems in the state to secure the delivery of safe drinking water. By January 1, 2020, SWRCB—in consultation with local health officers—would also have to make available a map of aquifers that are at high risk of containing contaminants that are used or likely to be used as a source of drinking water for certain smaller water systems and domestic wells. This would include identification of water systems potentially in need of assistance to address water contamination issues.

Under the Governor's proposal, SWRCB may expend up to 5 percent of revenues from SADWF for costs associated with its administration. In addition, CDFA may retain up to 4 percent of the monies collected from the charges on agricultural entities for its costs associated with implementation and enforcement, such as to establish a charge collection program and perform outreach to affected agricultural entities. This amount would decrease to 2 percent beginning July 2021.

2018-19 Budget Proposals. As previously mentioned, the Governor's budget proposes a $4.7 million loan from the Underground Storage Tank Cleanup Fund in 2018-19 to fund the initial implementation of SADWF. These funds would mainly support 30 new positions at SWRCB and CDFA as follows:

- ***SWRCB ($3.3 Million).*** The budget proposes $3.3 million on a one-time basis primarily to support 23 positions at SWRCB to (1) develop and adopt a fund implementation plan, (2) process charges that would be deposited into SADWF, (3) map areas at high risk for drinking water contamination and process drinking water data provided by local agencies, (4) develop an assessment of the total amount of annual funding needed to assist water systems in the state to provide safe drinking water, and (5) perform accounting and other administrative tasks. The administration indicates it will submit a request next year for permanent resources to administer the SADWF.
- ***CDFA ($1.4 Million).*** The budget proposes $1.4 million in 2018-19 ($1.1 million ongoing) to support seven positions at CDFA to collect charges from agricultural entities.

Issues for Legislative Consideration

The Legislature faces a policy decision about whether to increase charges on different products and consumers in order to implement a new program to address unsafe drinking water. Below, we raise some issues for the Legislature to consider as it deliberates this proposal.

Proposal Is Consistent With Human Right to Water Policy. The Governor's proposal is consistent with the state's statutory policy that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption. The proposal would make safe and affordable drinking water more widely available throughout the state largely by providing funding for operations and maintenance activities for water treatment systems. While the administration has not conducted its own estimate of the number of people this proposal would help, based on the information available, it would appear that this funding could address a large share of the problem. In particular, the proposal would prioritize additional funding to disadvantaged communities and low-income households served by water systems with less than 14 connections.

Uncertain to the Extent Proposed Revenues Will Fully Address Problems. As described above, a private consulting firm estimated the total annual cost to address contaminated drinking water at $140 million ($30 million for nitrate treatment and $110 million for other contaminants). However, this estimate is highly uncertain given the lack of data about the number of smaller water systems and domestic wells that fail to provide safe drinking water. It is possible that actual costs could be significantly higher or lower. We note that under the proposal, SWRCB would be required to prepare an annual needs assessment, which could provide the Legislature with greater certainty in the future.

There is also uncertainty about the amount of revenue that will be generated under this proposal, particularly from the agricultural entities. The budget trailer legislation allows SWRCB to adjust ratepayer charges downward if the funding provided exceeds future demand for the funds. However, if the demand exceeds funding in the future, any increase in charges would require approval by the Legislature.

Might Not Fully Implement the Polluter Pays Principle. The "polluter pays" principle is the concept that those entities that cause an environmental harm should be responsible for the costs associated with cleaning up that contamination and addressing the harm done. The vast majority of nitrate contamination is caused by agricultural activities. As such, the administration's proposal to have agricultural entities pay charges to address the effects of that contamination appears consistent with the polluter pays principle. However, in at least two ways, the proposal might not be entirely consistent with the principle. First, it is worth noting that some of the current nitrate contaminants in groundwater are not from current agricultural operations. Instead, some of these nitrates are legacy contamination that could be from as much as decades ago. Therefore, it might not be entirely consistent with the polluter pays principle to have current operators pay for contamination caused by previous operators. Second, based on the information available, it appears that the funds raised by charges on agricultural entities might not be sufficient to address the costs related to nitrate contamination. As described above, the assessment performed by the private consulting firm estimated annual total costs of $30 million to address drinking water systems exceeding the nitrate MCL. However, CDFA estimates the charges on dairies and fertilizer combined would total about $19 million per year when fully implemented. (At the time this analysis was prepared, the administration had not completed a revenue estimate for the charge on confined animals.) Consequently, the proposal could result in nitrate-related contamination in drinking water being addressed from revenues generated by the charge on water system customers rather than from agricultural entities. To the extent that occurs, it would be inconsistent with the polluter pays principal.

SUMMARY OF RECOMMENDATIONS

Issue	Governor's Proposal	LAO Recommendation
Crosscutting Issues		
Cap-and-trade expenditure plan	$2.8 billion cap-and-trade expenditure plan, including (1) $1.5 billion for continuous appropriations and other existing spending commitments and (2) $1.3 billion in discretionary spending.	Ensure budget allocations and related statutory direction aligns with Legislature's highest priorities. Direct administration to provide certain information, such as estimated outcomes from past funding and proposed funding. Consider alternative strategies to ensure fund solvency as more information about auction revenue becomes available over the next few months.
Resources bond (SB 5)	$1 billion—including $989 million for 17 natural resources and environmental protection departments—from natural resources-related bond (Proposition 68) on the June 2018 statewide ballot.	Approve proposals, but (1) adopt budget bill language specifying flood projects and (2) replace $14 million proposed for specific DFW programs with an equivalent amount from existing Proposition 1 authority. Also, require administration to report at budget hearings on long-term spending plan, and consider alternative funding plan for high-priority projects should voters reject the bond measure.
Ventura Training Program	$8.8 million in 2018-19 ($6.3 million ongoing) for three departments—and capital outlay out-year costs of $18 million—from the General Fund to convert the existing Ventura conservation camp for inmates to a new firefighter training center for parolees.	Reject proposal because program is unlikely to be the most cost-effective approach to reduce recidivism or increase parolee employment, requested resources have not been fully justified, and other options exist for CCC training.
California Conservation Corps (CCC)		
Expansion of residential centers	$10 million from the General Fund in 2018-19 to begin a major expansion of the CCC residential center program by building four new residential centers. Total cost of projects estimated at $185 million.	Wait for more information before approving funding for new residential centers and require CCC to provide reporting on corpsmember outcomes.
Corpsmember counseling	$1.1 million in 2018-19 ($1.8 million ongoing) from the General Fund and Collins-Dugan Reimbursement Account to improve corpsmember access to mental health and drug dependency counseling and to enhance transition services.	Modify the Governor's proposal to provide three-year funding, rather than ongoing funding, for transition services for corpsmembers and require CCC to prepare a report that will better inform the need for such services on an ongoing basis. Approve proposed funding to improve access to mental health and drug and alcohol dependency counseling.
Department of Fish and Wildlife (DFW)		
Structural deficit and program expansion	$51 million ongoing augmentation from tire recycling fees, Motor Vehicle Account (MVA), and General Fund. Of this total, $20 million is to address existing funding shortfall and $31 million is to expand existing activities.	Adopt funding package that addresses the $20 million shortfall and expands activities that reflect legislative priorities. Reject use of tire fees, approve level of MVA for which DFW can justify workload nexus, and rely on General Fund and fees for remainder of package. Require administration to report on its DFW budgetary analysis by October 1, 2018.
Department of Parks and Recreation		
Structural deficit and program expansion	$79 million in increased fuel tax revenues to (1) address the State Parks and Recreation Fund structural deficit and build a reserve, (2) increase service levels at state parks, and (3) continue certain activities begun in the current year.	Adopt a spending package that reflects legislative priorities.

(Continued)

Issue	Governor's Proposal	LAO Recommendation
Regional infrastructure projects	$7.5 million from the General Fund on a one-time basis for two local parks projects.	Reject proposal should voters approve Proposition 68, which would provide local jurisdictions with additional resources for park projects.
Department of Forestry and Fire Protection (CalFire)		
Helicopter fleet replacement	$98 million from the General Fund for CalFire to purchase four helicopters to continue its fleet replacement.	Withhold action on the funding pending the provision of information on the ancillary costs associated with fleet replacement and possible alternatives.
Department of Water Resources		
Central Valley Flood Protection Board (CVFPB)	$1.4 million from the General Fund for two years to support ten existing CVFPB positions.	Adopt proposal and supplemental reporting language requiring CVFPB to provide an update by February 1, 2019 on its efforts to generate new revenues.
State Lands Commission		
Abandoned oil and gas wells	$58 million in 2018-19 and an additional $51 million over the subsequent two years from the General Fund to plug and secure two offshore oil and gas sites.	Adopt proposal and adopt supplemental reporting language requiring the commission to provide a status update on funding and activities by January 10, 2019.
Department of Conservation (DOC)		
Well Statewide Tracking and Reporting (WellSTAR)	$15 million in 2018-19 and an additional $9.4 million over the subsequent three years from the Oil, Gas, and Geothermal Administrative Fund (OGGAF) for development, implementation, and ongoing maintenance and operations of the WellSTAR database system.	Approve only the request for $15 million in 2018-19, thereby ensuring that the Legislature has additional oversight opportunities in coming years.
Regulatory field inspections	$4.3 million from OGGAF and 21 permanent positions to increase inspection and enforcement activities on oil and gas fields.	Approve funding for three years rather than on an ongoing basis as proposed. Require DOC to report on the extent to which it is performing certain regulatory activities. This approach would require the administration to provide additional information in the future to identify the number of positions justified on a permanent basis.
California Energy Commission		
Zero-emission vehicle (ZEV) infrastructure	$900 million expenditure plan over eight years, including $235 million in 2018-19, from various special funds to support installation of ZEV charging and refueling infrastructure.	Direct administration to provide (1) a more detailed justification for the amount of funding requested, (2) more information about how the funding would affect key policy outcomes, (3) its assessment of potential risks and costs associated with the expansion of ZEVs, and (4) a plan for evaluating outcomes after program implementation. Direct administration to develop a strategy for coordinating spending across state programs. Adopt spending plan that is consistent with legislative priorities.
State Water Resources Control Board (SWRCB)		
Safe and Affordable Drinking Water Fund	$4.7 million ($3.3 million for SWRCB and $1.4 million for the California Department of Food and Agriculture) to fund the initial implementation of a new financial assistance program to provide clean drinking water.	Consider three issues when deliberating the proposal: (1) consistency with human right to water policy, (2) uncertainty about the estimated revenues that would be generated by the proposal and the amount of funding needed to address the problem, and (3) consistency with the polluter pays principle.

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