

The 2017-18 Budget:

Resources and Environmental Protection



MAC TAYLOR • LEGISLATIVE ANALYST • FEBRUARY 2017

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2017-18 BUDGET

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. We provide a complete listing of our recommendations at the end of this report.

Budget Provides \$8 Billion for Programs

The Governor’s budget for 2017-18 proposes a total of \$8.3 billion in expenditures from various sources—the General Fund, various special funds, bond funds, and federal funds—for programs administered by the Natural Resources (\$5 billion) and Environmental Protection (\$3.3 billion) Agencies. This total funding level in 2017-18 reflects numerous changes compared to 2016-17, the most significant of which include (1) decreased bond spending of \$2.8 billion, largely attributable to how prior-year bond expenditures are accounted for in the budget; (2) a reduction of \$600 million in spending from the Greenhouse Gas Reduction Fund related to shifting this funding to a “control section” of the budget act; and (3) a net reduction of \$299 million from the General Fund, in large part due to one-time funding provided in 2016-17, such as for deferred maintenance projects.

Governor Proposes to Extend Cap-and-Trade Beyond 2020

The Governor’s budget proposes to spend \$2.2 billion in cap-and-trade auction revenue on activities intended to reduce greenhouse gas (GHG) emissions. However, \$1.3 billion would only be spent after the Legislature enacted—with a two-thirds urgency vote—new legislation extending the Air Resources Board’s authority to operate a cap-and-trade program beyond 2020. In our recent report, *The 2017-18 Budget: Cap-and-Trade*, we provide a full assessment of the policy issues raised by the Governor’s proposal. In summary, we recommend approving the extension of cap-and-trade (or a carbon tax) with a two-thirds vote in order to (1) better ensure the state meets its GHG reduction goals cost-effectively, (2) reduce uncertainty regarding the state’s authority to auction allowances, and (3) broaden the allowable uses of auction revenues based on legislative priorities.

Water Policy Continues to Be a Focus of Budget

The budget includes several notable proposals intended to continue and extend efforts related to the recent drought and implementation of the Sustainable Groundwater Management Act (SGMA).

Drought-Related Funding. While a series of winter storms has significantly increased the amount of water available for both human and environmental uses, they will not be sufficient to eliminate all of the impacts from the state’s multiyear drought. We recommend approving some of the Governor’s proposed \$178 million in one-time funding for continued drought response activities. The specific amount to approve should be based on an assessment of updated conditions later this spring, but we expect that the increase in precipitation has rendered some components of the Governor’s proposals unnecessary. We also recommend the Legislature consider providing some ongoing funding for activities that would both address current conditions and increase the state’s resilience in future droughts.

Implementation of SGMA. Effective management of its groundwater resources is a vital component of the state's overall water management strategy, and local agencies are in a critical stage of SGMA implementation. As such, we recommend the Legislature approve the Governor's proposals to provide additional resources to the Department of Water Resources to provide assistance to local agencies (\$15 million) and the State Water Resources Control Board to conduct intervention activities (\$2.3 million). We also recommend the Legislature continue to monitor and oversee implementation of the act to ensure it stays on track and to identify if additional legislative action might be needed.

Several Special Funds Face Potential Shortfalls

Many of the state's resources and environmental protection programs are funded largely from special funds, which rely on non-General Fund revenues, such as fees. In this report, we evaluate the fund condition of several special funds that face future budget shortfalls if actions are not taken to bring revenues and expenditures in line.

Base Funding for State Parks. The Governor proposes one-time augmentations from the State Parks and Recreation Fund (SPRF) and the Environmental License Plate Fund to address a projected budget-year shortfall in SPRF of \$25 million. We find that these options are not available on an ongoing basis. Consequently, we recommend the Legislature begin consideration of options that would provide an ongoing budget solution to the SPRF structural deficit.

Fish and Game Preservation Fund (FGPF). We are concerned that the Governor's proposal to address the \$20 million operating shortfall in the FGPF nondedicated account: (1) includes a commercial fishing landing fee increase that may be too large for the industry to sustain and (2) adds new activities that exacerbate the account's imbalance. Moreover, the proposals leave an ongoing shortfall for the Legislature to address in 2018-19. We recommend the Legislature (1) adopt a commercial landing fee increase but perhaps at a lower level or more gradually, (2) adopt the Governor's proposal to transfer lifetime license fee revenues to the nondedicated account, (3) modify the Governor's proposals to begin two new activities by funding them on a limited-term basis using different funding sources, and (4) begin the process of identifying and considering options for addressing the remaining shortfall on an ongoing basis.

Beverage Container Recycling Program. While the budget does not include a proposal to address the Beverage Container Recycling Fund's structural imbalance—most recently estimated at \$24 million at the end of 2017-18—the administration did release a policy paper outlining general principles and suggested approaches to addressing the problem. We find that the issues and ideas raised in the paper provide a reasonable starting place for discussion, but the Legislature will require more details in order to enact program reform.

Timber Harvest and Forestry Program. The budget includes a total of \$15.2 million for three state departments to implement various forest health related programs. The administration's proposed activities are reasonable but represent a relatively large amount of additional spending that will draw down the Timber Regulation and Forest Restoration Fund balance. We recommend that the Legislature identify program activities and grants it would prioritize and determine a funding strategy for the budget year and thereafter that reflects those priorities.

OVERVIEW OF GOVERNOR’S BUDGET

Total Proposed Spending of \$8.3 Billion.

The Governor’s budget for 2017-18 proposes a total of \$8.3 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. Specifically, the budget includes \$5 billion for resources departments and \$3.3 billion for environmental protection departments.

Funding Mostly From General Fund and Special Funds. As shown in Figure 1, more than half—\$2.8 billion—of the \$5 billion proposed for resources departments is from the General Fund. Another \$1.4 billion (27 percent) is from special funds. As shown in Figure 2 (see next page), the vast majority of the \$3.3 billion in funding for

environmental protection programs—\$2.8 billion, or 85 percent—is from special funds.

Decreases From 2016-17 Largely Reflect Technical Changes. The proposed 2017-18 funding levels for both natural resources and environmental protection departments are significantly lower than estimated expenditures for 2016-17. Notably, the budget shows significant 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.

- **Bond Funds.** Proposed bond funds are estimated to decline by a total of \$2.8 billion, half for resources departments and half for environmental protection departments. Much of this apparent

**Figure 1
Natural Resources Budget Summary**

(Dollars in Millions)

	2015-16 Actual	2016-17 Estimated	2017-18 Proposed	Change From 2016-17	
				Amount	Percent
Expenditures					
Department of Forestry and Fire Protection	\$1,306	\$1,548	\$1,423	-\$126	-8%
General obligation bond debt service	970	1,029	1,002	-27	-3
Department of Parks and Recreation	466	681	621	-60	-9
Energy Commission	436	661	489	-172	-26
Department of Water Resources	916	2,005	449	-1,556	-78
Department of Fish and Wildlife	409	493	442	-51	-10
Wildlife Conservation Board	116	502	124	-379	-75
California Conservation Corps	95	95	119	24	25
Department of Conservation	87	151	118	-33	-22
Coastal Conservancy	44	143	55	-88	-61
Other resources programs	214	226	182	-44	-19
Totals	\$5,059	\$7,535	\$5,024	-\$2,511	-33%
Funding					
General Fund	\$2,600	\$3,110	\$2,811	-\$299	-10%
Special funds	1,283	1,646	1,359	-287	-17
Bond funds	1,030	2,477	564	-1,914	-77
Federal funds	146	302	290	-11	-4

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 2016-17 bond amounts will be adjusted in the future based on actual expenditures.

- **Special Funds.** The 2017-18 budget reflects reduced special fund expenditures of \$552 million for environmental protection departments and \$287 million for natural resources departments. However, the Governor’s budget does not include spending from the Greenhouse Gas Reduction Fund (GGRF)—which receives revenue from cap-and-trade allowance auctions—in the budgets of individual departments in 2017-18 as it has in prior years. Instead, these expenditures are funded in a separate “control section” of the budget, making it appear that

spending from this fund for these departments has decreased. In 2016-17, resources and environmental protection departments are estimated to spend \$600 million from GGRF. In total, the 2017-18 budget proposes to appropriate a total of \$1.3 billion from GGRF for various programs, including resources and environmental protection programs.

- **General Fund.** The budget for resources departments includes a net reduction of \$299 million (10 percent) in General Fund support. However, much of this decrease is related to one-time funding provided in 2016-17, including \$187 million for deferred maintenance projects. Estimated current-year expenditures also include \$45 million in additional emergency firefighting costs for the Department of Forestry and Fire Protection (CalFire), an amount that is adjusted annually based on historical emergency firefighting costs.

Figure 2
Environmental Protection Budget Summary

(Dollars in Millions)

	2015-16 Actual	2016-17 Estimated	2017-18 Proposed	Change From 2016-17	
				Amount	Percent
Expenditures					
Resources Recycling and Recovery	\$1,687	\$1,599	\$1,563	-\$36	-2%
State Water Resources Control Board	897	2,943	934	-2,009	-68
Air Resources Board	698	844	401	-443	-53
Department of Toxic Substances Control	220	248	272	24	10
Department of Pesticide Regulation	91	99	96	-3	-3
Environmental Health Hazard Assessment	18	21	22	1	5
General obligation bond debt service	3	3	3	—	-4
Totals	\$3,613	\$5,757	\$3,291	-\$2,466	-43%
Funding					
General Fund	\$225	\$90	\$89	—	—
Special funds	2,656	3,347	2,795	-\$552	-16%
Bond funds	396	1,936	23	-1,914	-99
Federal funds	337	384	384	—	—

CROSS-CUTTING ISSUES

Cap-and-Trade

LAO Bottom Line. In our recent report, *The 2017-18 Budget: Cap-and-Trade*, we provide comments and recommendations related to the Governor’s proposal to spend \$2.2 billion in cap-and-trade auction revenue, contingent on the Legislature extending authority for cap-and-trade beyond 2020 with a two-thirds vote. Figure 3 provides a summary of our recommendations.

Background

Senate Bill 32 Established 2030 Greenhouse Gas (GHG) Target. The Global Warming Solutions Act of 2006 (Chapter 488 [AB 32, Núñez/Pavley]) established the goal of limiting statewide GHGs to 1990 levels by 2020. The legislation directed the Air Resources Board (ARB) to adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions by 2020. In 2016, Chapter 249 (SB 32, Pavley) established an

additional target of reducing emissions by at least 40 percent below 1990 levels by 2030.

Cap-and-Trade Aims to Limit Emissions and Encourage Cost-Effective Reductions. Assembly Bill 32 authorized ARB to implement a market-based mechanism—known as a cap-and-trade program—through 2020. Under the cap-and-trade program, ARB issues a limited number of “allowances” (essentially, emission permits), which large GHG emitters can purchase at a state-run auction or on the private market. (ARB also gives some allowances away for free.) 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.

Legal Uncertainty Around Cap-and-Trade. Currently, there is a court case challenging ARB’s authority to auction allowances and raise revenue through 2020. There is also legal uncertainty

Figure 3

Summary of LAO Recommendations

- ✓ **Should Cap-and-Trade Be Authorized Beyond 2020?**
 - Authorize cap-and-trade (or a carbon tax) beyond 2020 because it is likely the most cost-effective approach to achieving 2030 greenhouse gas target.
 - If the Legislature approves cap-and-trade, we also recommend the Legislature (1) strengthen the allowance price ceiling because there is potential for substantial price volatility and (2) provide clearer direction to the Air Resources Board regarding the criteria that will be used to determine whether a direct regulation should be adopted.
 - Ensure oversight and evaluation of major climate policies.
- ✓ **Is a Two-Thirds Vote Needed?**
 - Approve cap-and-trade (or a carbon tax) with a two-thirds vote because it would give greater legal certainty and ensure ability to design effective program.
- ✓ **How Should Cap-and-Trade Revenue Be Used?**
 - With a two-thirds vote, broaden allowable uses of revenue because it would give the Legislature flexibility to use funds on highest priorities, including offsetting higher costs for households and businesses.
 - If adopting a spending plan, then (1) reject language making spending contingent on future legislation, (2) consider alternative strategies for dealing with revenue uncertainty, and (3) allocate funds to specific programs.

whether ARB has the authority to operate the cap-and-trade program beyond 2020 and whether extending the authority to auction allowances beyond 2020 would require a two-thirds vote of the Legislature given changes to the definition of taxes and fees under Proposition 26 (2010).

Governor Proposes Extending Cap-and-Trade With Two-Thirds Vote

The Governor's 2017-18 budget proposes to spend \$2.2 billion in cap-and-trade auction revenue on activities intended to reduce GHGs. However, \$1.3 billion would only be spent after the Legislature enacted—with a two-thirds urgency vote—new legislation extending ARB's authority to operate a cap-and-trade program beyond 2020. Under the Governor's proposal, the Department of Finance (DOF) would have authority to select the specific programs within each category of activities that would receive funding. In addition, under the Governor's proposal, DOF would have the authority to adjust downward allocations to discretionary programs proportionally based on available funds.

LAO Recommendations

In our report, we make recommendations in response to three critical questions raised by the Governor's proposal:

- Should cap-and-trade be authorized beyond 2020?
- Is a two-thirds vote needed to extend cap-and-trade?
- How should the Legislature use cap-and-trade revenue?

We summarize our recommendations below.

Authorize Cap-and-Trade Beyond 2020 Because Likely Most Cost-Effective Approach. We recommend the Legislature authorize cap-and-trade (or a carbon tax, which is an alternative

market-based approach to reducing emissions) beyond 2020 because it is likely the most cost-effective approach to achieving the state's 2030 GHG emissions target. If the Legislature approves cap-and-trade, we recommend the Legislature (1) strengthen the allowance price ceiling because there is potential for substantial price volatility associated with the lower cap and (2) provide clearer direction to ARB regarding the criteria that the board should use to determine whether a complementary policy should be adopted. We also recommend the Legislature continue to take steps to ensure oversight and evaluation of major climate policies by establishing an independent expert committee.

Approve With a Two-Thirds Vote to Ensure Ability to Design Effective Program. Although cap-and-trade could be extended with a simple majority vote, we recommend the Legislature approve cap-and-trade (or a carbon tax) with a two-thirds vote because it would provide greater legal certainty and ensure ARB has the ability to design an effective program. For example, a two-thirds vote would provide legal certainty regarding ARB's authority to auction allowances—a method for distributing allowances that is generally recommended by economists. A two-thirds vote would also allow the Legislature to remove the current requirement that cap-and-trade auction revenues can only be used on activities that reduce GHG emissions.

Broaden Allowable Uses of Revenue to Include Other Legislative Priorities. With a two-thirds vote, we recommend the Legislature broaden the allowable uses of auction revenue because it would give the Legislature flexibility to use the funds on its highest priorities. The Legislature could use the funds to (1) offset higher energy costs for households and businesses by providing tax reductions or rebates; (2) promote other climate-related policy goals, such as climate

adaptation activities; and/or (3) support other legislative priorities unrelated to climate policy. In our view, returning the revenue to businesses and consumers by reducing taxes or providing rebates could become a particularly important option if allowance prices—and, consequently energy costs for households and businesses—increase substantially in the future.

When finalizing its 2017-18 cap-and-trade spending plan, we also recommend the Legislature (1) reject the administration’s proposed language making spending contingent on future legislation, (2) consider alternative strategies for dealing with revenue uncertainty, and (3) allocate funds to specific programs rather than providing DOF that authority.

Drought Response

LAO Bottom Line. While a series of winter storms has significantly increased the amount of water available for both human and environmental uses, they will not be sufficient to eliminate all of the impacts from the state’s multiyear drought. We recommend approving some one-time funding for continued drought response activities based on an assessment of updated conditions later this spring, but expect that the increase in precipitation has rendered some components of the Governor’s proposals unnecessary. We also recommend the Legislature consider providing some ongoing funding for activities that would both address current conditions and increase the state’s resilience in future droughts.

Background

State Has Experienced Serious Multiyear Drought. Until recent storms, California had been experiencing an exceptionally dry and warm period. Annual precipitation rates were below average for the past five years, and only one of the past ten years was exceptionally wet. Even

more notably, 2012 through 2015 was the driest consecutive four-year stretch since statewide precipitation record-keeping began in 1896. In addition, statewide average temperatures have been higher than normal in each of the past five years, and the past three years were the warmest on record since such measurements began in 1895. Scientific evidence indicates these warmer temperatures have contributed to the severity of recent drought conditions by leading to more precipitation falling as rain rather than snow, faster melting of winter snowpack, greater rates of evaporation, and drier soils.

Drought Has Affected Various Sectors in Different Ways. The severity of the drought’s impacts across the state have varied significantly based on sector-specific water needs and access to alternative water sources. For example, while the drought has led to a decrease in the state’s agricultural production, farmers and ranchers have moderated the drought’s impacts by employing short-term strategies, such as fallowing land, purchasing water from others, and—in particular—pumping groundwater. In contrast, some rural communities—mainly in the Central Valley—have struggled to identify alternative water sources upon which to draw when their domestic wells have gone dry. For urban communities, the primary drought impact has been a state-ordered requirement to use less water, including mandatory constraints on the frequency of outdoor watering.

Additionally, multiple years of warm temperatures and dry conditions have had severe effects on environmental conditions across the state, including degrading habitats for fish, waterbirds, and other wildlife; killing an estimated 102 million of the state’s trees; and contributing to more prevalent and intense wildfires.

State Has Funded Both Short- and Long-Term Drought Response Activities. The state has deployed numerous resources—fiscal, logistical,

and personnel—in responding to the impacts of the current drought. This includes appropriating more than \$3 billion to 13 different state departments between 2013-14 and 2016-17. Figure 4 summarizes these appropriations by type of activity. All of this funding was initially provided on a one-time basis, although funding for certain activities has been renewed—sometimes repeatedly—in subsequent years. State general obligation bonds (primarily Proposition 1, the 2014 water bond) provided about three-quarters of these funds, with the state General Fund contributing around one-fifth. The emergency response and environmental protection activities (such as fighting more frequent wildfires, providing bottled drinking water, and rescuing fish) were to meet urgent needs stemming from the current drought. In contrast, most of the water supply and some of the water conservation activities (such as building new wastewater treatment plants), which were primarily supported by bond funds, will be implemented over the course of several years, and therefore will be more helpful in mitigating the effects of *future* droughts. Some other water conservation activities (such as providing rebates for lawn removal or water efficiency upgrades) were intended to have noticeable effects in both the current *and* future droughts.

Drought Response Has Also Included Policy Changes and Regulatory Actions. In addition to

increased funding, the state’s drought response has included certain policy changes. Because drought conditions required immediate response but were not expected to continue forever, most changes were authorized on a temporary basis, primarily by gubernatorial executive order or emergency departmental regulations. For example, one of the most publicized temporary drought-related policies was the Governor’s order (enforced through regulations) to reduce statewide urban water use by 25 percent, in effect from May 2015 to May 2016. (The regulations were then modified to account for available local water supplies, and were recently extended through November 2017 unless repealed sooner.) In response to a subsequent executive order, state agencies are in the process of developing a comprehensive plan—“Making Water Conservation a California Way of Life”—to increase statewide water efficiency on an ongoing basis. State regulatory agencies also have exercised their existing authority in responding to drought conditions. For example, the State Water Resources Control Board (SWRCB) has ordered and enforced that less water be diverted from some of the state’s rivers and streams, and the Department of Fish and Wildlife (DFW) has closed some streams and rivers to fishing.

Recent Storms Have Dramatically Improved Conditions . . . A series of winter storms between

October 2016 and February 2017 has brought significant precipitation to California and will undoubtedly help ameliorate some of the drought symptoms that have plagued the state for several years. As of the beginning of February 2017, most of the state’s large reservoirs held more than their historical

Figure 4
Recent State Drought Response Appropriations
(In Millions)

Type of Activity	2013-14	2014-15	2015-16	2016-17	Totals
Water supply	\$480	\$267	\$1,488	—	\$2,235
Emergency response	108	213	183	\$325 ^a	829
Water conservation	54	44	177	4	280
Environmental protection	2	60	—	16	78
Totals	\$643	\$584	\$1,849	\$345	\$3,420

^a Includes midyear augmentation of \$90 million provided from Emergency Fund for increased fire protection.

average levels for that date, after measuring well below average for the past several years. Moreover, as of the beginning of February, the water content in the state's snowpack measured 173 percent of the historical average for that date, compared to a low of 19 percent in 2015. This is particularly significant, as runoff from the mountain snowpack typically provides about one-third of the state's annual residential and agricultural water supply. Additional water flowing through the state's rivers and streams will begin to address both the human and environmental impacts of recent shortages.

. . . But Certain Drought Impacts Linger.

While this year's boost in precipitation will increase the amount of water available for both human and environmental uses, it will not be sufficient to eliminate all of the drought's impacts. Most notably, while increased availability of surface water should help stem groundwater pumping rates in the coming year, it likely will take many years of both natural and engineered replenishment to reestablish groundwater levels. Groundwater depletion has left some communities—primarily in the Central Valley—without a safe drinking water supply. Moreover, existing surface water supplies in some areas of the state—especially in the Santa Barbara region—are still dangerously low. As of early February, the U.S. Drought Monitor still classified about one-tenth of the state—focused in the southern half—as being in “severe” drought status. These lingering dry conditions continue to threaten fish and wildlife in that part of the state, including runs of steelhead trout along the southern-central coast and in Southern California that the federal government had listed as threatened and endangered even before the most recent drought began.

Science Suggests State Will Experience More Frequent and Intense Droughts in the Future.

Numerous climate models predict that warmer temperatures are indicative of future trends.

For example, a recent study from researchers at Stanford University predicts that by around 2040, California's climate will have transitioned to one in which there is nearly a 100 percent likelihood that low precipitation years will also be severely warm. This is one factor contributing to warnings from many climate researchers that the state will experience more frequent and intense droughts in the coming years.

Governor's Proposal

Proposes \$178 Million for Drought Response Activities in 2017-18. Figure 5 (see next page) summarizes the Governor's proposals for drought response activities in 2017-18. Generally, the proposals represent continuations of activities conducted in prior years and are proposed to be funded on a one-time basis. As shown, the activities span five departments and total \$178 million, primarily from the General Fund (\$174 million).

Majority of Funding Is for Fire Protection and Tree Mortality. About 70 percent of the proposed drought-related funding (\$121 million) is related to increased fire danger and responding to the estimated 102 million trees that have died during the drought. The largest single proposal (\$91 million) would fund CalFire to hire and train firefighters, purchase and repair equipment and vehicles, and remove dead trees. The budget also includes an augmentation for the California Disaster Assistance Act (CDAA) program in the Office of Emergency Services (OES) for disaster assistance activities. This includes \$30 million that could be used to provide grants to counties to remove dead or dying trees that represent a threat to public safety. Under the Governor's proposal, these CDAA funds could also be used for any CDAA-eligible activity related or unrelated to the drought.

Funds State Agency Drought Response and Coordination. As shown in Figure 5, the budget

also proposes funding for the Department of Water Resources (DWR), SWRCB, DFW, and OES to continue various drought response activities. This includes a total of \$24 million for all four agencies to coordinate statewide responses through the Governor’s Drought Task Force and to respond to emergency needs as they emerge. Such needs might include implementing temporary permits for changes in water rights and flow requirements or rescuing fish that become stranded in dangerously low or warm streams.

Includes Funding for Drinking Water, Delta Smelt, and Water Conservation Campaign.

The budget includes \$22 million for OES and

\$5 million for DWR to address emergency drinking water shortages that continue to afflict certain communities. (As noted above, CDAA funding through OES can also be used for other, non-drought related disaster assistance activities.) Additionally, the budget proposes funding for DWR to implement a targeted effort to improve conditions for the endangered Delta smelt (\$3.5 million) and conduct a statewide water conservation campaign (\$2 million).

Framework for Considering Proposals

Because the state’s rainy season is still only halfway completed, it is premature to determine

what drought conditions will remain and what state-level responses will be required in 2017-18. The significant increase in precipitation that has occurred since the Governor prepared his budget proposal, however, likely will reduce the need for some of his proposed activities and funding. Additionally, even as the state appears to be emerging from the recent drought, it faces the challenge of how to best prepare for more prevalent droughts in the future. These evolving conditions—both with current-year precipitation and longer-term climate—suggest the Legislature may want to modify the drought response proposal currently before it. In

Figure 5
Governor’s 2017-18 Drought Response Spending Proposals
(In Millions)

Activity	Department	Amount ^a
Fire Protection and Tree Mortality		
Expand/enhance fire protection	CalFire	\$91.0 ^b
Disaster assistance: tree removal ^c	OES	30.0
Subtotal		(\$121.0)
Statewide Emergency Response and Coordination		
Rescue and monitor fish and wildlife	DFW	\$8.2
Conduct drought assistance and response	DWR	7.0
Monitor/enforce water rights and conservation	SWRCB	5.3
Coordinate statewide drought response	OES	3.5
Subtotal		(\$24.0)
Address Drinking Water Shortages		
Disaster assistance: emergency drinking water ^c	OES	\$22.2
Provide temporary and permanent water supplies	DWR	5.0
Subtotal		(\$27.2)
Other Activities		
Conduct activities to assist Delta smelt	DWR	\$3.5 ^d
Save Our Water conservation campaign	DWR	2.0
Subtotal		(\$5.5)
Total		\$177.7

^a General Fund unless otherwise noted.
^b Includes \$3 million from State Responsibility Area Fund.
^c Could also be used for other drought or non-drought related disaster response activities.
^d Includes \$0.9 million from Harbors and Watercraft Fund.
 CalFire = California Department of Forestry and Fire Protection; OES = Office of Emergency Services; DFW = Department of Fish and Wildlife; DWR = Department of Water Resources; and SWRCB = State Water Resources Control Board.

Figure 6, we offer a framework the Legislature could use to consider the proposal, consisting of three categories:

- **Necessary Emergency Response.** One-time emergency response activities needed to address lingering drought impacts (consistent with the Governor’s portrayal).
- **Build Drought Resilience.** Activities that both respond to current conditions and could be continued on an ongoing basis to help build the state’s resilience for future droughts.
- **Potentially Not Necessary.** Activities that could be decreased or eliminated based on improved hydrologic conditions and decreased response needs.

In the figure, we illustrate one specific approach to how the Legislature could modify the Governor’s

proposals within this framework. The amount of funding under each category is based on our analysis of the proposed activities in the context of updated hydrologic conditions. We discuss the rationale behind our classifications in more detail below.

Most Funding Addresses Lingering Emergency Needs. We expect that some drought response activities will continue to be needed despite increased precipitation and improved conditions. As shown in Figure 6, we estimate that this represents \$154 million of the Governor’s drought proposals. The vast number of dead and dying trees in the state’s forests has contributed to an increased risk of wildfire and many need to be removed to improve public safety. We therefore anticipate that funding for tree removal and firefighting through CalFire and OES still will be needed in 2017-18.

Additionally, as discussed above, drought conditions and impacts linger, particularly in

Figure 6
LAO Preliminary Classification of Governor’s Drought Proposals
(In Millions)

Activity	Department	Necessary Emergency Response	Build Drought Resilience	Potentially Not Necessary	Totals
Fire Protection and Tree Mortality					
Expand/enhance fire protection	CalFire	\$91.0	—	—	\$91.0
Disaster assistance: tree removal	OES	30.0	—	—	30.0
Statewide Emergency Response and Coordination					
Rescue and monitor fish and wildlife	DFW	3.5	\$1.0	\$3.7	8.2
Conduct drought assistance and response	DWR	3.0	1.0	3.0	7.0
Monitor/enforce water rights and conservation	SWRCB	2.2	1.0	2.1	5.3
Coordinate statewide drought response	OES	1.7	—	1.8	3.5
Address Drinking Water Shortages					
Disaster assistance: emergency drinking water	OES	14.0	—	8.2	22.2
Provide temporary and permanent water supplies	DWR	5.0	—	—	5.0
Other Activities					
Conduct activities to assist Delta smelt	DWR	3.5	—	—	3.5
Save Our Water conservation campaign	DWR	—	—	2.0	2.0
Totals		\$153.9	\$3.0	\$20.8	\$177.7

CalFire = California Department of Forestry and Fire Protection; OES = Office of Emergency Services; DFW = Department of Fish and Wildlife; DWR = Department of Water Resources; and SWRCB = State Water Resources Control Board.

the southern half of the state. As such, we expect that DWR, SWRCB, DFW, and OES will need to continue conducting some level of statewide coordination and emergency response. Given that the amount of urgent response that is needed in 2017-18 is likely to be less than in recent years, however, one possible approach would be to provide about half of the Governor's proposed funding for coordination and emergency response (after backing out the \$3 million that we find could be made ongoing, as described below). We also anticipate a continued need for DWR and OES to address emergency drinking water needs, and for DWR to provide support for the endangered Delta smelt.

Some Proposals Address Longer-Term Drought Resilience. While requested to be funded on a one-time basis, our review found that certain emergency drought response activities proposed by the Governor at DWR, SWRCB, and DFW actually address ongoing needs. In addition to responding to current conditions, these activities, if ongoing, would help the state prepare for and build resilience for future droughts. Examples of proposed activities we believe could provide ongoing value include (1) data collection and analysis, including modeling various hydrologic scenarios; (2) monitoring conditions and developing resiliency approaches for how to address needs of fish and wildlife in light of climate change and recurring water shortages; and (3) implementing the administration's long-term water conservation plan, including supporting urban water agencies in developing local plans for sustainable water use and drought planning. Based on our initial review of the activities described in the Governor's proposals—and considering funding the state has already provided in recent years—in Figure 6 we identified a total of \$3 million, or \$1 million per department, for these types of efforts.

Given Recent Increase in Precipitation, Some Proposals May Not Be Needed. We believe improved hydrologic conditions around the state have negated the need for some of the proposed drought spending—perhaps around \$21 million—as there likely will be fewer urgent issues requiring state agency response. As discussed above, we find that it might be reasonable to reduce about half of proposed statewide coordination and emergency response funding for DWR, SWRCB, DFW, and OES. Prior-year spending data suggest that OES will not need the full amount proposed to provide emergency drinking water. Thus, our preliminary classification reduces this proposed amount by \$8 million. Additionally, improved water conditions across much of the state suggest one-time funding for the statewide Save Our Water public relations campaign will no longer be needed. Rather than this short-term effort, the state could focus on longer-term policies for encouraging sustainable water use at the local level, as described in the administration's conservation plan.

LAO Recommendations

Delay Decisions Until May When Statewide Conditions Are More Certain. Given ongoing storms are still affecting statewide hydrology, we recommend delaying any action on the Governor's drought response proposals until after the May Revision. The administration has also indicated it will reexamine its proposals based on evolving conditions, and likely will submit a revised proposal for the Legislature to consider. As discussed above, while increased precipitation suggests less one-time funding than initially proposed may be warranted, there may also be value in providing ongoing resources for certain activities. In considering its final drought response funding package, we recommend the Legislature adopt a combination of the following three actions:

- ***Approve Some Amount of One-Time Funding for Continued Emergency Response.*** Determine which needs will continue to require statewide action despite improved hydrology. Should this include funding for OES to provide disaster assistance, we recommend restricting those CDAA funds to be used for drought-related tree removal and drinking water—and not for non-drought related activities—to ensure that intended outcomes are achieved.
- ***Consider Making Some Funding Ongoing to Increase State’s Resilience for Future Droughts.*** Given scientific evidence that the state is likely to experience more frequent and intense droughts in the future, identify activities that are important to addressing both the current and future droughts, and provide resources to support them on an ongoing basis. This would reduce the amount of General Fund resources available for other state purposes in future years.
- ***Reduce Some Funding in Recognition of Improved Hydrology and Conditions.*** Determine which emergency response needs will no longer be necessary.

Proposition 1—2014 Water Bond

LAO Bottom Line. We recommend the Legislature adopt the Governor’s proposal to appropriate \$421 million from Proposition 1 in 2017-18, as it is generally consistent with the bond language and with an appropriation schedule previously approved by the Legislature. We also recommend the Legislature continue to monitor Proposition 1 implementation through oversight hearings and information provided by stakeholders and the administration.

Background

Proposition 1 Provides \$7.5 Billion in General Obligation Bonds. In November 2014, voters approved Proposition 1, a \$7.5 billion water bond measure aimed primarily at restoring habitat and increasing the supply of clean, safe, and reliable water. Most of the projects funded by Proposition 1 will be selected on a competitive basis, based on guidelines developed by state departments. Generally, the measure prohibits the Legislature from allocating funding to specific projects.

State in Midst of Implementing Proposition 1. As shown in Figure 7 (see next page), the bond provides funding for eight categories of activities. These funds will be distributed across 16 state departments (including ten state conservancies). As shown in the figure, the Legislature already has appropriated a combined \$3 billion of available bond funding. The \$2.7 billion for water storage projects is not subject to legislative appropriation but rather is continuously appropriated to the California Water Commission (CWC). As such, \$1.8 billion in authorized Proposition 1 funding remains for the Legislature to appropriate.

Of the amount available for appropriation, \$1.3 billion represents funding to continue activities initiated in prior years. (Departments do not plan to submit formal funding requests in budget change proposals for these funds unless they wish to deviate significantly from the multiyear plan presented to the Legislature in prior years.) The remaining \$500 million represents funding for two new activities that are not yet underway and for which the Legislature has not yet approved any appropriations: Los Angeles River restoration (\$100 million) and flood management (\$395 million).

Bond Implementation Subject to Certain Accountability Provisions. Proposition 1 included a requirement that the California Natural Resources Agency (CNRA) annually publish a

list of all program and project expenditures on its website. Additionally, last year the Legislature enacted statutory requirement that CNRA publish an annual report summarizing bond implementation. The report is to include status updates on funding allocations, projects initiated and completed, measurable project outcomes, and common challenges and successes reported by project grantees. This annual report is due

to the Legislature on January 10 but as of this publication had not yet been submitted for 2017. The administration indicates the report is in the process of being finalized and will be submitted in the coming weeks.

Governor’s Proposals

Appropriates \$421 Million From Proposition 1.

As shown in Figure 7, the Governor’s budget

Figure 7
Summary of Proposition 1 Bond Funds

(In Millions)

Purpose	Implementing Departments	Bond Allocation	Prior Appropriations	2017-18 Proposed
Water Storage		\$2,700	\$10	\$416
Water storage projects	CWC	2,700	10	416
Watershed Protection and Restoration		\$1,496	\$792	\$162
State obligations and agreements	CNRA	475	448 ^a	17
Watershed restoration benefiting state and Delta	DFW	373	93	37
Conservancy restoration projects	Conservancies	328	163	60
Enhanced stream flows	WCB	200	78	39
Los Angeles River restoration	Conservancies	100	—	—
Urban watersheds	CNRA	20	10	9
Groundwater Sustainability		\$900	\$825	\$35
Groundwater cleanup projects	SWRCB	800	764 ^a	—
Groundwater sustainability plans and projects	DWR	100	61	35
Regional Water Management		\$810	\$290	\$217
Integrated Regional Water Management	DWR	510	87	214
Stormwater management	SWRCB	200	105	3
Water use efficiency	DWR	100	98	—
Water Recycling and Desalination		\$725	\$648	\$1
Water recycling	SWRCB	725	598 ^a	—
Desalination	DWR	—	51	1
Drinking Water Quality		\$520	\$475	\$5
Drinking water for disadvantaged communities	SWRCB	260	248	3
Wastewater treatment in small communities	SWRCB	260	227	2
Flood Management		\$395	—	—
Delta flood management	DWR and CVFPB	295	—	—
Statewide flood management	DWR and CVFPB	100	—	—
Administration and Oversight		—	\$2	\$1
Administration ^b	DWR and CNRA	—	2	1
Totals		\$7,546	\$3,042	\$837

^a Reflects reversion of some previously appropriated funds, as proposed in the 2017-18 Governor’s Budget.

^b Bond does not provide a specific allocation for bond administration and oversight, but allows a portion of other allocations to be used for this purpose.

CWC = California Water Commission; CNRA = California Natural Resources Agency; DFW = Department of Fish and Wildlife; WCB = Wildlife Conservation Board; SWRCB = State Water Resources Control Board; DWR = Department of Water Resources; and CVFPB = Central Valley Flood Protection Board.

plan assumes total spending of \$837 million from Proposition 1 in 2017-18. Of this total, the administration projects that the CWC will award \$416 million in grants for water storage projects. (As noted earlier, the funding for water storage projects are continuously appropriated outside of the legislative budget process.) Additionally, \$421 million is proposed to be appropriated in the budget. All of these budgeted spending proposals before the Legislature represent additional funding for activities that have received initial appropriations in prior years. The largest proposal is for DWR to award \$214 million in additional grants for integrated regional water management projects. This continues a program the state has also funded through previous bonds, in which local groups can apply for funding to implement water management projects on a regional scale.

No Proposals to Allocate Funding From Unappropriated Categories of Bond. Similar to prior budgets, no appropriations are yet proposed from the sections of the bond set aside for restoring the Los Angeles River or flood management projects. Discussions amongst stakeholders are still underway regarding the best way to allocate funds between the two conservancies identified in the bond for Los Angeles River restoration. The administration plans to wait to begin requesting appropriation authority for flood-related funding until 2020-21 because funds from previous bonds are still available for flood management projects.

LAO Assessment

Governor's Proposal Largely Reflects Multiyear Funding Plan Presented to Legislature in Prior Years. In general, the Governor's proposals for Proposition 1 reflect the "rollout" plan the administration presented in prior budget proposals. Our review found that deviations from that plan are relatively minor and justifiable. For example, whereas the previous plan indicated the

administration's intention to request \$22 million in 2017-18 and \$3 million in 2018-19 for SWRCB to allocate wastewater treatment grants, the actual budget-year proposal swaps those amounts. That is, the 2017-18 proposal is for \$3 million, and the administration now plans to request \$22 million in 2018-19. This is in response to delays in allocating the nearly \$230 million for this activity that has already been appropriated and a desire to avoid appropriating funding more quickly than departments can manage its allocation.

The administration has also submitted a few technical budget change proposals to the Legislature for Proposition 1 funds, mostly reclassifying small amounts of funding from local assistance to state operations for some agencies to better administer grant programs. We view these as similarly minor and justifiable changes from the original plan presented to the Legislature.

LAO Recommendations

Adopt Governor's Proposition 1 Proposals. Because they continue implementing Proposition 1 projects consistent with the bond language and with an appropriation schedule previously approved by the Legislature, we recommend adopting the Governor's Proposition 1 proposals for 2017-18.

Continue Ongoing Oversight, Modify Course if Needed. We recommend the Legislature continue to monitor Proposition 1 through oversight hearings and information provided by stakeholders and the administration. This could include asking the administration to present its annual Proposition 1 implementation report, which at the time of this publication was not yet available for our review. While the Legislature approved the administration's multiyear funding plan in previous years, it has the authority to revisit this approach each year via the annual budget act if it has concerns about bond implementation.

Moreover, lessons learned from implementation of Proposition 1 can help shape potential future bonds or state programs by identifying the programs and practices that are (and are not) successful at achieving desired outcomes.

Sustainable Groundwater Management Act (SGMA)

LAO Bottom Line. Effective management of its groundwater resources is a vital component of the state’s overall water management strategy, and local agencies are in a critical stage of SGMA implementation. As such, we recommend the Legislature approve the Governor’s proposals to provide additional resources to DWR to provide assistance to local agencies and to SWRCB to conduct intervention activities. We also recommend the Legislature continue to monitor and oversee implementation of the act to ensure it stays on track and to identify if additional legislative action might be needed.

Background

Groundwater Is Important Component of State’s Overall Water Resources. Groundwater is the portion of water from precipitation that infiltrates (either naturally or deliberately) under the surface of the ground. In a sense, all groundwater starts as some form of surface water, meaning that the two types of water are integrally connected. Much like a sponge, the ground—depending on soil type—soaks up the water into underground basins available to be pumped out of the ground for human uses, such as residential purposes or agricultural irrigation. This infiltration can happen over a period ranging from several years to over a millennium. Historically, California’s groundwater provides about 30 percent of the state’s total water supply in wet years and nearly 60 percent in dry years. Groundwater may provide up to 100 percent of water supplies in

communities without access to surface water or in other areas during years where surface water deliveries are not available and rainfall is scarce.

Severe Groundwater Depletion Exists in Some Areas of the State. When the rate at which groundwater is pumped out of a basin exceeds the rate at which the water is restored or “recharged,” the basin can become depleted, or “overdrafted.” While not every basin is overdrafted, overall, California uses more groundwater than is restored through natural or artificial means. Estimates suggest that on average, extractors pump about 15 million acre-feet a year, whereas 13 million to 14 million acre-feet seeps back into the ground through rain, runoff, irrigation, or intentional recharge efforts. This imbalance has led to several groundwater basins across the state reaching serious levels of overdraft. Specifically, based on data collected between 1989 and 2009, DWR identified 21 of the state’s 515 groundwater basins as being “critically overdrafted,” such that a “continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts.” Implications of such overdraft can be serious, including failed wells, deteriorated water quality (from intrusion of seawater or other contaminants), and irreversible land subsidence that can damage infrastructure and diminish aquifers’ future water storage capacity. DWR has not identified which other basins around the state may be experiencing a lower level of overdraft—and some of these concerning impacts—but have not yet reached its definition of critical status. Moreover, groundwater pumping rates increased during the recent drought, potentially worsening the risk and prevalence of such impacts compared to when DWR conducted its analysis.

Groundwater Use Has Not Been Regulated on Statewide Basis. In contrast to its practice of monitoring and enforcing surface water rights,

the state historically has not directly regulated groundwater use. (Groundwater usage in certain areas of the state, referred to as adjudicated basins, is regulated through court orders.) Indeed, for many years California was one of the only western states without a comprehensive state-managed groundwater use permitting system. Experts argue this lack of state management has contributed to excessive groundwater extraction in some regions, resulting in the aforementioned critical levels of overdraft.

SGMA Marks Significant Change in State's Approach. In 2014, the Legislature passed and the Governor signed three new laws—Chapters 346 (SB 1168, Pavley), 347 (AB 1739, Dickinson), and 348 (SB 1319, Pavley)—collectively known as SGMA. With the goal of achieving long-term groundwater resource sustainability, the legislation represents the first comprehensive statewide requirement to monitor and operate groundwater basins to avoid overdraft. The act's requirements apply to the 127 of the state's 515 groundwater basins that DWR has found to be high and medium priority based on various factors, including overlying population and irrigated acreage, number of wells, and reliance on groundwater. (DWR will update this prioritization in future years if any of the factors change significantly—for example, if groundwater use data shows notable changes for a particular basin, or if an updated census shows significant shifts in population.) While only comprising about one-fourth of the groundwater basins in California, the 127 high and medium priority basins account for 96 percent of California's annual groundwater pumping and supply water for nearly 90 percent of Californians who live over a groundwater basin. The remaining basins ranked as being lower in priority—generally smaller and more remote—are encouraged but not required to adhere to SGMA.

SGMA Requires That Groundwater Be Managed Locally . . . The act assigns primary responsibility for ongoing groundwater management to local entities. Local groundwater sustainability agencies (GSAs) are responsible for developing and implementing long-term groundwater sustainability plans (GSPs) defining the specific guidelines and practices that will govern the use of individual groundwater basins. These GSAs will be formed by a single or combination of local public agencies with existing water or land management duties, such as cities, counties, or special districts. The GSAs are vested with broad management authority, including the ability to (1) define the sustainable yield of a groundwater basin, (2) limit extractions from that basin, (3) impose fees to pay for management costs, and (4) enforce the terms established in the GSP. Basins that are already legally adjudicated are not required to form GSAs or develop GSPs, provided they can prove they are already being managed sustainably. Additionally, certain basins that can display existing plans and sustainable practices can submit alternative plans in lieu of formal GSPs.

. . . But Overseen by Two State Agencies. The legislation tasks DWR and SWRCB with discrete roles in carrying out SGMA. DWR has primary responsibility for the initial phases of implementation, including defining and prioritizing groundwater basins, collecting and disseminating data and best practices, providing technical and financial assistance to GSAs, and reviewing GSPs. Previous budgets have provided DWR with roughly \$15 million annually to begin these activities; however, this initial funding was only provided through 2019-20.

SWRCB is tasked with enforcing the law and intervening when local entities fail to follow SGMA's requirements. Specifically, SWRCB is responsible for intervening when it designates

a basin as being in “probationary status” due to (1) failing to form a GSA (referred to as an “unmanaged basin”), (2) failing to complete a GSP, or (3) developing or implementing an inadequate or ineffective GSP (one that will cause significant depletion of groundwater or interconnected surface water). SWRCB’s intervention activities may include imposing reporting requirements around groundwater extractions and use, issuing fees, assuming management responsibilities, developing interim management plans governing how groundwater may be used in the basin, and conducting enforcement actions for noncompliance. SWRCB currently receives \$1.9 million from the General Fund annually for ten staff to conduct SGMA-related activities. Over

time, funding support for these positions will transfer to fee revenue as the board’s SGMA-related responsibilities and fee authorities increase.

Requirements Phased in Over Several Years.

Given the magnitude of the changes it entails, SGMA is designed to be implemented over a period of several decades. Figure 8 highlights the significant milestones for implementing the act. As shown, local entities currently are in the process of forming GSAs to oversee the management of individual groundwater basins, with a requirement to do so by June 30, 2017. Basins that fail to meet this deadline are subject to intervention from SWRCB. The figure also shows that the deadline for implementing a GSP is expedited for the 21 groundwater basins that DWR has defined as

Figure 8

Implementation Timeline for Major Sustainable Groundwater Management Act (SGMA) Requirements



- January 2015**
DWR released initial basin prioritization. High and medium priority basins are subject to SGMA requirements.
- January 2016**
DWR identified final list of basins subject to critical conditions of overdraft. These basins face some expedited compliance deadlines.
- June 30, 2017**
Local agencies must establish groundwater sustainability agencies (GSAs). SWRCB may designate probationary basins subject to intervention for areas that fail to comply.
- January 31, 2020**
GSAs from basins in critical overdraft must adopt and begin to implement groundwater sustainability plans (GSPs). DWR will review plans for adequacy after adoption.
- January 31, 2022**
GSAs from basins not in critical overdraft must adopt and begin to implement GSPs. DWR will review plans for adequacy after adoption.
- January 31, 2040**
GSAs from basins in critical overdraft must achieve sustainability goals.
- January 31, 2042**
GSAs from basins not in critical overdraft must achieve sustainability goals.

DWR = Department of Water Resources and SWRCB = State Water Resources Control Board.

being in critical overdraft status—January 2020, as compared to 2022 for the remaining basins.

Governor's Proposals

The Governor has two 2017-18 budget proposals related to SGMA implementation that total \$17.3 million, which we discuss below.

Support Local Agencies in Planning and Implementation (DWR, \$15 Million). The Governor's budget proposes an ongoing \$15 million General Fund augmentation to both continue and expand DWR's SGMA implementation activities. These funds would be in addition to the limited-term funding—roughly \$15 million a year—that the Legislature previously provided to DWR for SGMA-related activities. (The previously approved funding will phase out over the next few years.)

DWR would use the combined roughly \$30 million in 2017-18 and 2018-19 to accomplish activities such as assisting in the formation of GSAs, reviewing alternative management plans submitted by qualifying GSAs, and collecting and disseminating the data GSAs need to develop their GSPs. In future years, the proposed \$15 million would be used for ongoing activities such as providing technical assistance to GSAs, reviewing and evaluating GSPs, monitoring groundwater levels, and continued data collection and dissemination. The department would accomplish the proposed activities within its existing position authority.

Intervene in Areas That Fail to Comply With SGMA (SWRCB, \$2.3 Million). The Governor's budget proposes five new positions and \$2.3 million (\$750,000 ongoing and \$1.5 million on a one-time basis) for SWRCB to assume management responsibilities in basins that fail to form GSAs by June 30, 2017. The ongoing funding and new staff would be used to establish a new SGMA Reporting Unit within SWRCB that would (1) identify

groundwater users and usage rates within unmanaged basins, (2) issue and collect fees, and (3) conduct enforcement efforts for noncompliance. The \$750,000 funding request is based on an estimate that five basins will fail to form GSAs and will require SWRCB intervention in 2017-18. The number, size, and complexity of potential unmanaged basins, however, remains unknown. As such, the proposed one-time \$1.5 million would be contingency funding for the department to contract for assistance if there are significantly more than five unmanaged basins and associated workload exceeds the ongoing resources.

The proposed funding source for these activities in 2017-18 would be a loan from the Underground Storage Tank Clean-Up Fund to the Water Rights Fund. According to the administration, revenue from fees paid by groundwater extractors in unmanaged basins will be used to repay the loan in 2019 and provide ongoing support for program activities beginning in 2018-19. (These fees are required under SGMA.)

LAO Assessment

Successful Implementation of SGMA Is Fundamental to State's Management of Water Resources. The passage of SGMA was an important first step towards better groundwater management, and there are a number of reasons why successful implementation of the act's requirements should continue to be a key state priority. First, because of the geological connectivity of above- and below-ground water sources in many locations, the increased efforts the state has taken to measure, restrict, and regulate surface water usage will be somewhat ineffective if groundwater extraction is allowed to continue or increase without similarly robust oversight. Second, surface water supplies face increasing pressures from a growing population and projected reductions due to climate change, resulting in groundwater playing

an increasingly important role in the state's overall water supply. Third, possible impacts from continued overdraft of groundwater resources—including land subsidence, contamination of underground aquifers, and widespread well failures and drinking water shortages—are serious and potentially irreversible. Fourth, consistent and reliable monitoring could encourage additional efforts to recharge groundwater basins. Regional management of basins could provide individual parties with greater certainty that they would benefit from their efforts to recharge their basins without fear that the additional water would be pumped out by other parties.

SGMA Implementation at Critical Stage. As shown in the earlier figure, the next five to seven years represent a critically important period for establishing how SGMA will guide local operations and practices in future years. Local agencies must negotiate and collaborate to form functional GSAs, then undertake the difficult work of gathering and analyzing data about their areas' groundwater use, defining sustainability targets for their basins, and developing enforceable plans and practices for how the basins can be managed to achieve those sustainability goals. The comprehensiveness and effectiveness of these processes and plans will determine the overall success of the act and of the state's nascent efforts at comprehensively managing its groundwater resources.

State Plays Important Role in Ultimate Success of Implementation. The significant and complex workload facing local agencies in the coming years heightens the importance of assistance from state agencies during this period. In particular, the state can help by providing GSAs with baseline data to inform their GSPs. When possible, collecting data on a statewide basis—such as through remote sensing technology—can save funding by taking advantage of economies of scale, and ensure that data are valid and consistent across different areas

of the state. Additionally, the state can play an important role in providing technical assistance, offering neutral facilitation services, monitoring local agency progress, and providing additional support when needed to ensure GSAs stay on track to meet deadlines. Finally, the state serving as a “backstop” if local agencies fail to meet SGMA's requirements both raises the pressure for local compliance as well as increases the likelihood that the act's sustainability goals ultimately will be met.

LAO Recommendations

Given the essential function that successful implementation of SGMA plays in the state's overall approach to water management, we recommend the Legislature:

- ***Adopt Governor's Proposals.*** Because state agencies could provide helpful assistance to local agencies during this critical implementation period, we recommend adopting the Governor's proposals for DWR and SWRCB.
- ***Continue to Monitor Successes and Challenges of SGMA Implementation.*** Because the next several years are a decisive period of SGMA implementation, we recommend maintaining careful and regular oversight over how it is proceeding. This could include asking the administration to report on implementation status, successes, and challenges through budget and oversight hearings. To avoid delays, pitfalls, or unforeseen consequences, we recommend that the Legislature monitor whether additional state action—such as follow-up legislation or a modification to the activities conducted by state agencies—might be warranted to stay on track and achieve sustainability goals.

Timber Regulation and Forest Restoration Program (TRFRP)

LAO Bottom Line. The budget includes a total of \$15.2 million for three state departments to implement various forest health related programs. The administration's proposed activities are reasonable but represent a relatively large amount of additional spending that would draw down the Timber Regulation and Forest Restoration Fund (TRFRF) balance. We recommend that the Legislature identify program activities and grants it would prioritize and determine a funding strategy for the budget year and thereafter that reflects those priorities.

Background

TRFRP Reviews Timber Harvest Permits.

Under the state's Z'Berg-Nejedly Forest Practice Act of 1973, timber harvesters must submit and comply with an approved timber harvesting permit. The most common permit is a Timber Harvesting Plan (THP), which describes the scope, yield, harvesting methods, and mitigation measures that the timber harvester intends to perform within a specified geographical area over a period of five years. After the plan is prepared, TRFRP staff review and approve them for compliance with timber harvesting regulations designed to ensure sustainable harvesting practices and lessen environmental harms. CalFire takes the lead role in conducting these reviews but gets assistance from DFW, the Department of Conservation, and SWRCB. The regulation of timber harvesting is exempt from meeting certain California Environmental Quality Act (CEQA) requirements, including the preparation of an environmental impact report, because this process is sufficiently equivalent to the CEQA process. The state approved 254 THPs in 2015-16.

Lumber Assessment Established to Pay for Regulatory Activities. Prior to 2012-13, the state's review of THPs was funded mainly from the General Fund. In addition, DFW and SWRCB also levied a few fees for various THP-related permits to support such activities. Total funding for THP reviews was about \$25 million. However, General Fund support for THP-related activities was reduced to less than \$20 million as a result of the state's fiscal condition during the recession. Position authority also declined during this period. For example, DFW had fewer than eight positions working on THP review in 2010-11, a decline of over 75 percent from 2007-08 staffing levels. Staff reductions limited the ability of administering departments to perform some required THP review activities in a timely fashion.

In 2012, the Legislature approved Chapter 289 (AB 1492, Committee on Budget), which authorized a tax on the sale of lumber products in California—effective January 2013—to fully fund THP regulatory activities. This revenue was to be used to increase staffing and reduce the amount of time it takes for departments to review THPs, as well as provide departments with additional resources necessary to perform more comprehensive THP reviews. Revenues collected from this tax are deposited into the TRFRF and are intended to fully fund the timber harvest regulatory program. In 2015-16, the lumber assessment generated \$40 million in revenues.

Staffing Increases Have Contributed to Faster Reviews on Average. As shown in Figure 9 (see next page), staffing at the departments conducting THP review has increased under the TRFRP. Overall staffing has increased by more than 50 percent since 2010-11, the year before the TRFRP was implemented. In fact, staffing levels are higher now than they were in the years prior to the budget cuts described above. In total, the program had 216 authorized positions in 2015-16.

It appears that the increase in staffing has contributed to a moderate reduction in review times overall. Since the program was established, the average review time for THPs has declined from more than 150 days in 2011-12 to 127 days in 2015-16 (a 16 percent decline), as shown in Figure 10. In addition, the maximum number of days a THP is in review and the median review time have also declined since the TRFRP was implemented in 2012-13. Notably, reduced review times have occurred even though, according to the departments, they have undertaken more comprehensive plan reviews. It is also important to note that other factors could be affecting average review times, such as the size and complexity of the THP, weather and wildfire conditions that can

affect departments’ ability to perform inspections, and the completeness of the information submitted.

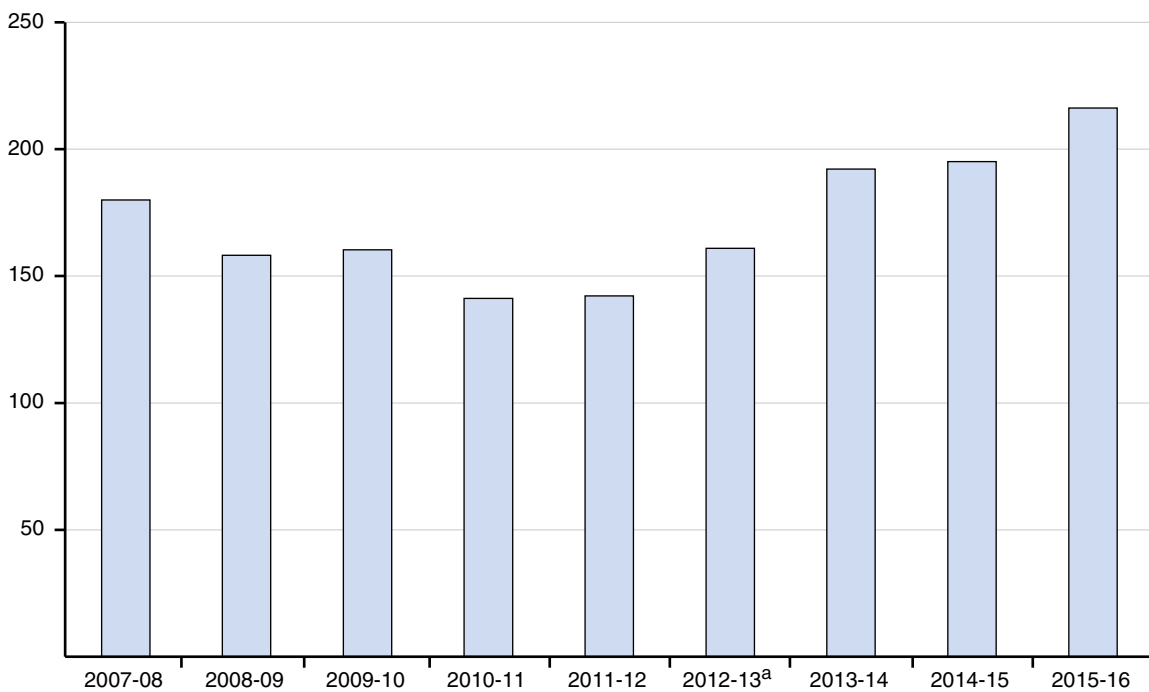
TRFRP Also Supports Forest Health Activities.

Assembly Bill 1492 specifies that in addition to funding regulatory costs (and maintaining a minimum \$4 million reserve), revenue from the TRFRF can be spent on specific programs to improve forest health and promote climate change mitigation or adaptation in the forestry sector. In 2016-17, about \$7.5 million—or roughly one-fifth of the TRFRP budget—is budgeted for local assistance grants for forest restoration. The largest program is the California Forest Improvement Program (CFIP) run by CalFire, which currently receives about \$5 million from TRFRF. CFIP reimburses part of the costs for smaller landowners (between 20 and 5,000 acres) to conduct certain

Figure 9

THP Review Staffing Has Increased Under TRFRP

Authorized Positions



^a Implementation of TRFRP began during 2012-13.

THP = Timber Harvest Plan and TRFRP = Timber Regulation and Forest Restoration Program.

forest health activities on their land, such as preparing management plans, tree planting, land conservation, and improvement of fish and wildlife habitat. In 2015-16, this program provided 96 grants to treat 35,000 acres of forest land.

The rest of the TRFRF local assistance funding is administered by DFW and SWRCB and supports grants to nonprofits and local governments, primarily for restoration of habitat and watersheds. For example, in 2015-16, funding for SWRCB supported four projects for habitat restoration and watershed assessments and planning.

Governor’s Budget

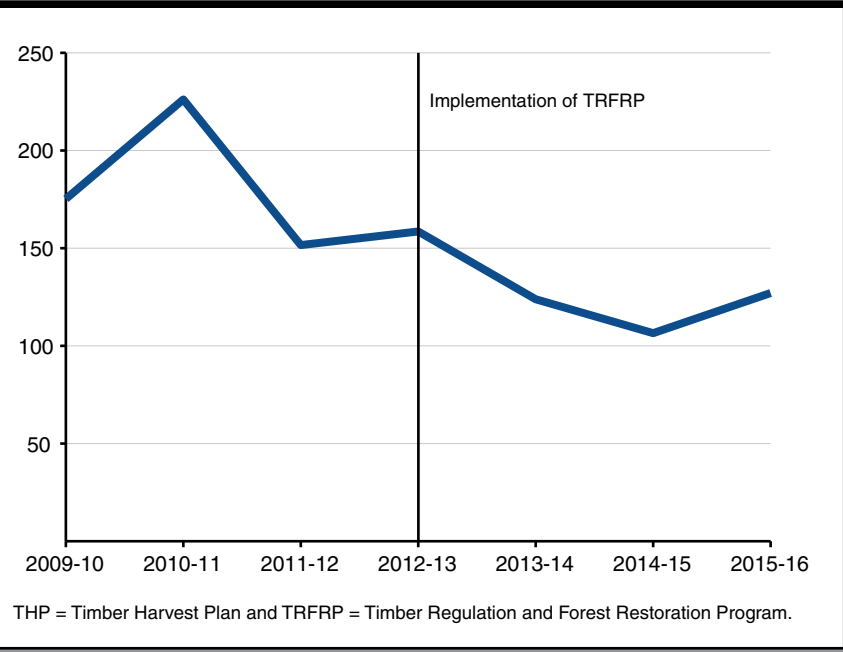
The Governor’s budget includes three proposals supported from TRFRF that total \$15.2 million in 2017-18, declining in subsequent years to \$4.4 million annually beginning in 2019-20.

Forest Restoration and Accountability (\$9 Million). The largest proposal is for \$9 million and 15 positions in 2017-18 (declining to \$1.2 million and 7 positions in 2019-20 and thereafter) to support activities in three departments:

- **Forest Restoration Grants (\$7 Million).** The budget includes \$5 million to support CFIP, which extends for one additional year the same level of resources that CFIP has received for the past two years. The Governor also proposes extending current SWRCB grants for another two years at their current funding level of \$2 million annually.

Figure 10

Average Days in THP Review Has Declined



- **State Operations (\$2 Million).** The budget includes about \$1 million (\$472,000 ongoing) for CNRA and CalFire to support development of an online timber harvest permitting system, \$549,000 to convert four limited-term positions at SWRCB to permanent status, \$300,000 annually for CNRA to continue existing pilot projects for an additional two years, and \$149,000 for one additional support position at CNRA to assist in the development of ecological metrics and monitoring protocols.

Restore Nursery Operations (\$4.9 Million).

The budget includes \$4.9 million (\$2.1 million ongoing) for CalFire to resume state nursery operations at L.A. Moran Reforestation Center (LAMRC), which has been used in the past to support the reforestation of public and private forest lands, especially those that have been damaged by fire, flood, drought, insects, and disease. The administration proposes resuming

these activities to encourage landowners to participate in reforestation activities as soon as possible following natural disasters in order to begin recovery of forest health and reduce soil erosion and water pollution. The center is expected to provide 300,000 seedlings annually.

Historically, the state operated three nurseries, which provided 600,000 to 800,000 seedlings annually that were native to the state's approximately 80 "seed zones" or habitat types. The last of these nurseries closed in 2011 due to budget constraints during the recession. The department indicates that federal and private nurseries were unable to fully backfill the loss of state seedlings, and that there are currently no private nurseries operating within California that cover all of California's seed zones. Additionally, according to the department, private nurseries typically only grow seedlings on request, which can result in significant delays in acquiring seedlings after a natural disaster. Conversely, state nurseries keep seedlings stocked so they are immediately available. Seedling delays can allow unwanted vegetation to take over and increase erosion. The department anticipates a significant demand for seedlings over the next few years due to tree mortality and the associated increased fire risk.

Monitoring Exemptions and Emergency Notice Provisions (\$1.4 Million). The budget includes \$1.4 million (\$1.2 ongoing) from TRFRF for CalFire to implement the following three pieces of recent legislation:

- Chapter 583 of 2016 (AB 1958, Wood) exempts the removal of non-oak trees for the purpose of restoring or conserving oak woodlands from being subject to a THP. The law also requires CalFire to evaluate and report on the effects of this exemption.
- Chapter 563 of 2016 (AB 2029, Dahle) requires the department to evaluate

the Forest Fire Prevention Pilot, which provides a THP exemption for specific tree removal activities that could reduce fire risk. The department is required to monitor all projects submitted under the pilot.

- Chapter 476 of 2016 (SB 122, Jackson) requires CalFire to prepare a record of proceedings—an official record of all project application materials, reports, and related documents—concurrently with a THP or other type of harvest permit at the request of the applicant. (These costs are reimbursed by the applicant.)

LAO Assessment

Budget Requests Reasonable. We have no specific concerns with the activities proposed by the administration. Much of the proposal is the continuation of forest health activities that have been funded for the past couple of years. Additionally, these activities are in line with those identified in TRFRF statute to promote forest health, and requested funding levels appear to be in line with associated workload.

TRFRF Unlikely to Be Able to Support Current Efforts Ongoing. While we have no specific concerns with the proposed activities, we note that under the Governor's budget plan, total spending from TRFRF is expected to be about \$15 million higher than revenues in the budget year, as shown in Figure 11. This does not present a problem in 2017-18 because the fund has accumulated a large fund balance. However, in out years—perhaps as early as in 2018-19—the fund is unlikely to be able to support the same level of spending for program operations and grants. While the funding for CFIP and SWRCB grants is only proposed on a limited-term basis, the Legislature has supported these programs in each of the past few years, suggesting they might reflect ongoing

legislative priorities. Consequently, decisions about whether to approve the increase in ongoing funding from TRFRF—totaling \$4.4 million—should take into consideration how these new funding requests should be prioritized against other spending options in the future, such as for local assistance grants.

Future Revenue Uncertainty. We note that the revenue from the lumber assessment depends in large part on new housing construction, which can be subject to significant fluctuations. Over the past several decades, the number of new housing permits has experienced several very large swings, including some dramatic decreases. Keeping this revenue uncertainty in mind will be important as the Legislature is considering its funding plan for TRFRP.

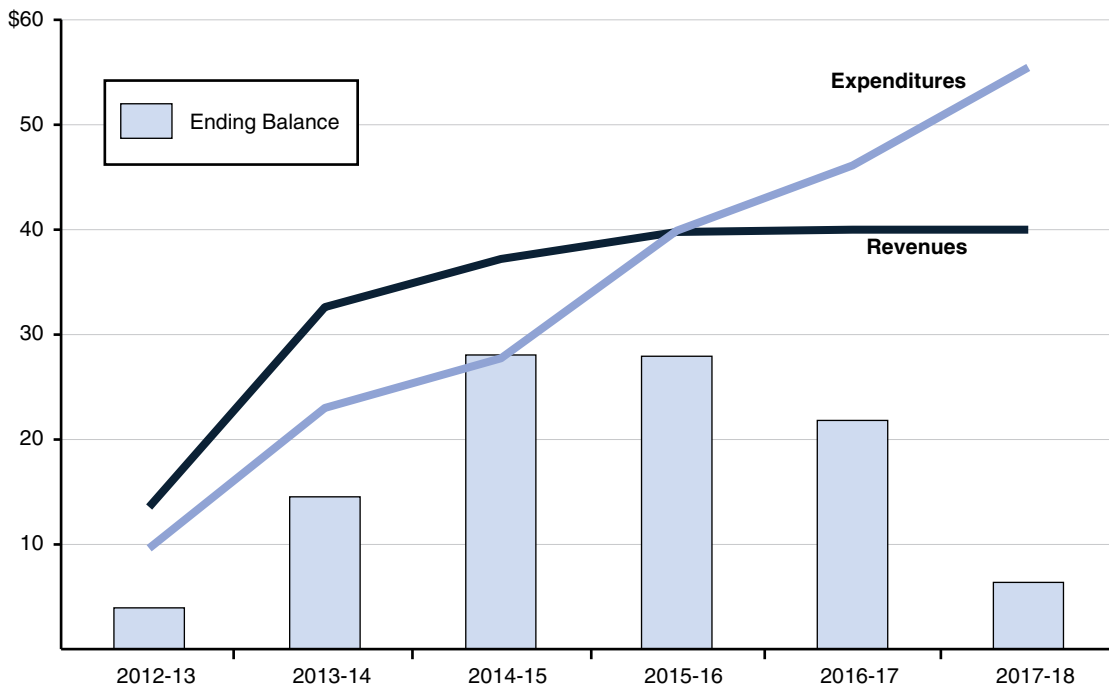
LAO Recommendations

Budget Action Should Depend on Legislative Priorities. Given the potentially limited amount of future TRFRF funds available, we recommend that the Legislature identify the specific program activities and grants it would prioritize and determine a funding strategy for the budget year and out years that reflects those priorities. In making this prioritization, one of the first considerations could be the degree to which the Legislature is satisfied with the current length of time it takes departments to complete plan reviews, as well as the comprehensiveness of those reviews. To the extent the Legislature wanted to further reduce review time or increase the comprehensiveness of the reviews, that would likely require additional resources, thereby reducing future funding available for other activities.

Figure 11

TRFRF Balance Reduced in Recent Years

(In Millions)



TRFRF = Timber Regulation and Forest Restoration Fund.

To the extent that the Legislature is generally satisfied with the current THP review program, it could then consider how much funding to provide to other programs in the future. For example, to the extent the Legislature places a high priority on local assistance grants, it might want to consider rejecting or reducing the amount of ongoing funding requested in the Governor’s budget for the new state operations activities proposed. On the other hand, if the Legislature prioritizes the proposed ongoing expenditures—such as the seedling program—and it is comfortable with significantly reduced funding for the grant programs in the future, it could approve the Governor’s budget as proposed.

In making its determination about priorities, the Legislature might want to consider factors such as whether there are other funding sources or partnerships available to support local forest restoration efforts or seedling programs. For example, there might additional funding available from local conservation groups or possible partnerships with federal or private nurseries. The Legislature might also want to consider which set of activities is likely to be most effective at addressing the state’s current tree mortality problem. Another consideration might be whether the Legislature wants to make the significant up-front investments necessary to reestablish the LAMRC seedling program—such as for facility

improvements and new equipment—if the program would be a lower priority in the future in the event of declining revenues. The Legislature could direct the department to report at budget hearings on these issues, as well as any other options available to the state to achieve TRFRP goals.

Summary of New Natural Resources Capital Outlay Projects

The Governor’s budget includes \$18 million for 16 new capital outlay projects in two departments within CNRA. As shown in Figure 12, these proposals primarily fund the acquisition and planning phases for these projects. Projects include replacement of three CalFire facilities, as well as several projects to improve and expand state vehicular recreation areas and implement other improvement projects in state parks. Total costs for completion of all proposed projects is expected to be \$132 million. Of this total, 80 percent is for the CalFire projects, which would be funded from the General Fund or the Public Buildings Construction Fund, which would be repaid with interest from the General Fund. The projects at the Department of Parks and Recreation (DPR) would be funded from various special funds. While we do not have specific concerns with the individual proposals, overall they do amount to a significant budgetary commitment over the next few years.

DEPARTMENT OF PARKS AND RECREATION

The state park system, administered by DPR, contains almost 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 of 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.

Figure 12

New Resources Capital Outlay Projects Proposed in 2017-18

(Dollars in Thousands)

Project	2017-18 Funding	2017-18 Phase	Total Project Cost	Fund Source
Department of Forestry and Fire Protection				
Shasta Trinity unit headquarters relocation	\$365	A	\$65,505	PBCF
Statewide: communications facilities phase V	1,755	W	21,233	General Fund
Macdoel Fire Station relocation	500	A	9,922	General Fund
Temecula Fire Station relocation	1,065	A	9,384	General Fund
Department of Parks and Recreation				
Hollister Hills SVRA: Martin Ranch acquisition	5,000	A	5,000	OHVTF
Candlestick SRA: Yosemite Slough public use improvements	4,125	P,W,C	4,125	Reimbursements
Ocotillo Wells SVRA: Holly Road solar well	3,500	A	3,500	OHVTF
San Luis Reservoir SRA: ramp and parking improvements	142	P	2,048	HWRP
Calaveras Big Trees SP: campsite relocation	138	P	1,847	Reimbursements
Mendocino Headlands SP: Ford House restoration	205	P	1,785	HWRP
Lake Oroville SVRA: Gold Flat campground upgrades	216	P	1,628	Proposition 84 bonds
Ocotillo Wells SVRA: Holmes Camp water system upgrades	107	P	1,412	OHVTF
Oceano Dunes SVRA: Grand Avenue lifeguard tower	91	P	1,339	OHVTF
Lake Del Valle SRA: boat ramp replacement	132	P	1,228	HWRP
Pismo SB: entrance kiosk replacement	124	P	1,042	OHVTF
Hungry Valley SVRA: 4x4 obstacle improvements	74	P	569	OHVTF
Totals	\$17,539		\$131,567	

PBCF = Public Buildings Construction Fund; SVRA = State Vehicular Recreation Area; OHVTF = Off-Highway Vehicle Trust Fund; SRA = State Recreation Area; HWRP = Harbors and Watercraft Revolving Fund; SP = state park; and SB = state beach.
 A = acquisition; W = working drawings; P = preliminary plans; and C = construction.

For 2017-18, the Governor’s budget proposes \$621 million in total expenditures for the department. This includes \$433 million for state park operations, \$151 million for local assistance grant programs, and \$37 million for capital projects. The proposed budget total represents a decrease of \$60 million, or 9 percent, below the estimated level of current-year spending for state parks. This in large part reflects a one-time appropriation of \$60 million in the current year to undertake deferred maintenance projects.

Base Funding to Maintain Operations

LAO Bottom Line. The Governor’s proposal to provide one-time funding from the State Parks and Recreation Fund (SPRF) and the Environmental License Plate Fund (ELPF) addresses the projected

budget-year shortfall in SPRF. However, these options are not available on an ongoing basis. Consequently, we recommend the Legislature begin consideration of options that would provide an ongoing budget solution to the SPRF structural deficit.

Background

Major Funding Sources for State Park Operations. Park operations are ongoing activities necessary to run the park system, including staffing, management, maintenance, fee collection, and administration. Other activities performed by DPR, such as capital outlay projects and grants provided to local governments, are not considered part of park operations. The state park system receives funding from many sources to support its operations. The major sources for funding include:

- SPRF.** In recent years, the department's largest fund source for operations has been SPRF, which has provided about 40 percent of the department's operations funding. 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, as well as some revenue from the Highway Users Tax Account and the Motor Vehicle Fuel Account for constructing and maintaining public roads in state park units.
 - General Fund.** With a few exceptions, state parks cost more to operate and maintain than they currently generate in revenue. For this reason, state park operations are partly funded from the state General Fund. The Governor's 2017-18 budget includes \$137 million in General Fund support for DPR operations. As we discuss in more detail below, the amount of General Fund support for the parks has declined since 2006-07.
 - Off-Highway Vehicle (OHV) Trust Fund.** The department also receives roughly \$60 million annually from the OHV Trust Fund for operations of the Off-Highway Motor Vehicle Recreation Division of DPR. Revenue for the OHV Trust Fund primarily comes from (1) fuel taxes that are attributable to the recreational use of vehicles off highway, (2) OHV registration fees, and (3) fees collected at State Vehicular Recreation Areas (SVRAs). This fund primarily is spent to operate and expand the state's eight SVRAs, to acquire land for new SVRAs, and make grants to agencies for OHV trails on other public lands.
 - Other Special 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. Historically, DPR has also received funding from ELPF, which collects revenue from specialty license plate sales. However, this funding was eliminated as part of a solution to ELPF's structural deficit in 2015-16.
- Recent SPRF Shortfalls.** Changes to DPR's budget since 2011-12 have 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 rather than close state parks. The Legislature also took other actions to encourage parks to become more self-sufficient through increased revenue generation, which we discuss in more detail below. This also increased expenditures and transfers from SPRF to provide funding for new projects and activities intended to generate revenue.
- These changes, coupled with other one-time and ongoing spending, caused expenditures from SPRF and its subaccounts to increase by more than \$66 million between 2011-12 and the projected 2017-18 level. Revenues and transfers to the fund did not increase at the same rate over that period. As shown in Figure 13, these trends resulted in a structural deficit and the virtual depletion of the SPRF fund balance.

Legislature Created Revenue Generation

Program. State parks have historically relied on park-generated revenue to help support operations. In recent years, the Legislature has directed DPR to improve its revenue generation. Specifically, Chapter 39 of 2012 (SB 1018, Committee on Budget and Fiscal Review) directed DPR to maximize revenue generation activities (consistent with the mission of the department).

A major component of Chapter 39 is the District Incentive Program. This program sets annual revenue targets for each district based on how much revenue that district earned in the previous three years. If both the state as a whole and an individual district exceed revenue targets, half of the district’s revenue earned above its target is allocated back to that district. The remainder stays in SPRF—in the Revenue Incentive Subaccount—to be used for specified purposes, including new fee collection equipment

and projects to improve the experiences of visitors. A district that does not exceed its target does not receive an allocation under the program. Chapter 39 also created and transferred bond funds to the State Park Enterprise Fund to be used for infrastructure and facility improvement projects designed to increase revenue.

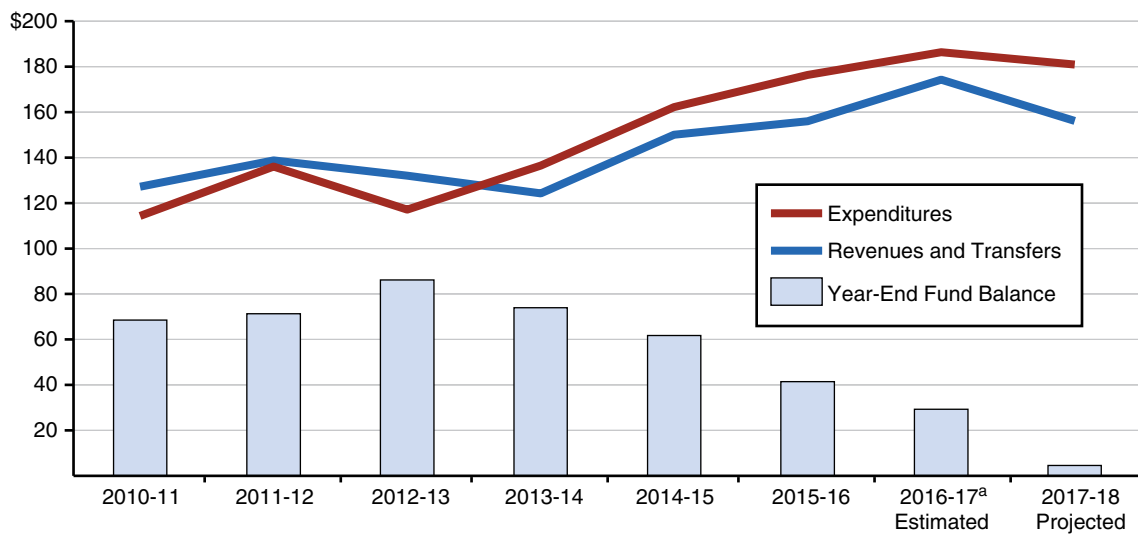
Parks Forward Commission and Transformation Team Created to Address Issues.

The California State Parks Stewardship Act of 2012 (Chapter 533 of 2012 [AB 1589, Huffman]) and Chapter 530 of 2012 (AB 1478, Blumenfeld) called for the formation of a multidisciplinary advisory council to conduct an independent assessment of the state parks system and make recommendations for improvement of the management, planning, and funding of state parks. In response, the California Parks Forward Commission was formed, and it issued its final recommendations in February 2015. Among the recommendations was the creation of a

Figure 13

SPRF Expenditures Exceeded Revenues in Recent Years

(In Millions)



^a The 2016-17 budget included a one-time diversion of \$31 million in motor vehicle fuel tax revenues to SPRF. SPRF = State Parks and Recreation Fund.

dedicated Transformation Team to implement and oversee changes—including developing a sustainable ongoing budget for DPR—within two years.

One-Year Budget Actions Used in Past Three Years. To address the SPRF shortfall discussed above while maintaining overall service levels at state parks, the past three budgets have relied on reserve draw downs and special fund transfers. In 2014-15 and 2015-16, the state accessed the SPRF fund balance. In 2016-17, that balance would have been depleted, so the budget redirected \$31 million in fuel tax revenue that would otherwise have gone to the OHV Trust Fund to SPRF. The redirected revenue was enough to cover the SPRF shortfall in 2016-17 and leave the fund with a small balance. The 2016-17 budget package also included language that it was the Legislature’s intent for the transfer to be one-time only and was made with the expectation that the department would provide a sustainable solution to balance SPRF as part of the administration’s 2017-18 budget proposal.

Governor’s Proposal

The 2017-18 budget includes two, one-time funding sources totaling \$16.6 million in order to maintain operations at current-year levels. Of that amount, \$12.6 million would come from the SPRF fund balance. The remaining \$4 million in funding would be provided from ELPF.

The budget also provides \$477,000 to move the operational costs for four existing revenue generation projects into the SPRF base budget. The projects include new tours at Hearst Castle, the Morro Strand State Beach campsite conversion project, the South Carlsbad State Beach electrical hookups project, and retrofitting and rehabilitation of lodging facilities in the Central Valley District. The department anticipates that the projects will continue to generate more revenue than they cost to operate.

LAO Assessment

Governor’s Proposal Is Reasonable Way to Address Shortfall on One-Time Basis. SPRF and ELPF can support these expenditures on a one-time basis. The Governor’s budget projects that SPRF will have a year-end fund balance of only \$4.6 million (3 percent of revenues and transfers) at the end of the budget year. In addition, while ELPF is projected to have a fund balance of \$10.8 million at the end of 2017-18, it could not sustain the proposed funding for parks on an ongoing basis without putting that fund into a structural deficit. In fact, the ELPF had its own structural deficit until a series of budget actions was taken last year that included eliminating ELPF support for DPR. Thus, ELPF would not be able to support the proposed use for DPR on an ongoing basis without reductions in spending for other ELPF-funded programs. One reason ELPF could support this expenditure in the budget year is because of a proposed one-time transfer of \$6.3 million from the Motor Vehicle Account into ELPF. This transfer is related to past overcharges to the ELPF discovered in a 2013 audit by the California State Auditor. We would also note that using ELPF to support DPR in the budget year delays rebuilding the fund’s balance and reduces the amount available for other ELPF-supported activities.

Long-Term Solution Still Needed to Address SPRF Structural Shortfall. The budget year will be the fourth year in a row that SPRF has needed a “one-time” action. The department has not indicated when it anticipates proposing an ongoing solution to bring SPRF into structural balance as intended by the Legislature. The department is still in the process of implementing programs and collecting data to inform such a proposal. For example, an important initiative the department is working on is referred to as the “service-based budgeting” initiative, which is intended to gather

data on the staffing and costs associated with various operational tasks. The department could use this data to determine what level of funding would be required to provide different levels of service. The department originally anticipated the service-based budgeting program would be implemented in time to incorporate the resulting data as part of a 2017-18 budget proposal to address the SPRF structural deficit. However, implementation is still underway.

LAO Recommendations

One-Time Funding Makes Sense for Budget Year but Requires Decision on Fund Source. We find that the one-time SPRF and ELPF actions for parks are reasonable, are roughly the same magnitude as in the past three years, will allow DPR to maintain current service levels, and can be supported by these funds on a one-year basis.

However, we note that the proposal reduces funding available for other ELPF activities in the future. The only existing alternative funding sources that we have identified are the General Fund or another diversion of fuel tax revenue. As noted above, however, the Legislature included budget bill language as part of the 2016-17 budget stating that it intended to divert fuel tax revenues on a one-time basis only. We recommend the Legislature choose the funding source that aligns with its priorities regarding ELPF-supported activities and other competing priorities.

Begin Consideration of Ongoing Budget Solutions. We find that one-time fixes are not sustainable in the long-run. We recommend that the Legislature begin deliberations in budget hearings on possible ongoing solutions to bring SPRF revenues and expenditures into balance. In so doing, we recommend that the Legislature require the department to report information that could help inform decisions on a long-term budget solution.

Below, we identify some of the key questions the Legislature could consider, as well as the type of information that might assist its deliberations:

- ***What Is the Desired Service Level for State Parks?*** The total amount of funding needed for DPR will ultimately depend on the service levels it provides to the public at state parks. It is difficult to know what those service levels are currently. The last survey of hours of operations and other services was conducted several years ago. The Legislature could ask DPR how it defines current and optimal service levels and require the department to perform another survey in order to update available service level information.
- ***What Efficiencies Has the Department Implemented and What Efficiencies Could They Implement in the Future?*** The department is in the process of making several changes that could result in efficiencies and reduce the total funding need, including changes to its organizational structure. As part of the department's transformation activities, it is exploring other options that could result in additional philanthropy and reduced costs. For example, the Parks Forward Commission recommended that the department partner with a nonprofit organization to expand fundraising opportunities and provide certain services currently done by the department, such as volunteer coordination and community outreach. The Legislature could ask the department what changes it is implementing or considering that could result in efficiencies and, therefore, reduced operating costs.

- What Share of Park Operational Costs Should Be Covered by Park Users Versus General Fund or Other Funding Sources?*** In our view, a key decision for the Legislature to make is to broadly determine how it prioritizes the different goals of the state park system and, based on that assessment, establish what share of statewide park operational costs should be borne by users versus the General Fund (or alternative funding sources). On the one hand, the Legislature might view state parks primarily as a public benefit that all Californians should be able to easily access at low or no cost. This approach would imply lower fee levels and greater reliance on funding parks through the General Fund. On the other hand, it might decide to treat state parks more like an enterprise that should be more self-sufficient and funded by the visitors that benefit directly. This approach would imply that a relatively high share of park operations be funded by user fees. Ultimately, the share of costs that should be borne by park users is a policy decision about the state's priorities for the park system. (For more information on this issue, please see our January 2017 report *Improving State's Approach to Park User Fees*.)
- What Incentives Could Help Achieve Desired Revenue Generation Levels?*** Currently, the revenue generation programs are designed to encourage park districts to generate more revenue. However, it can be difficult to determine to what extent these programs have been successful and how much revenue can be attributed to them. We recommend the Legislature ask the department to estimate the outcomes of these programs. Depending on the Legislature's goals for park-generated revenue, it might wish to strengthen or weaken the revenue generation incentives in order to increase or reduce park-generated revenue.
- What Revenue Alternatives Are Available Besides the Current Sources?*** We recommend the Legislature ask the department to identify all possible sources of revenue for state parks and consider the trade-offs of each. For example, a report prepared for the Parks Forward Commission identified several dedicated tax options to increase revenues for parks. As another example, some states offer motorists the option to purchase an annual parks pass when they register their vehicles.

THE DEPARTMENT OF FISH AND WILDLIFE

The 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. The department currently manages over 1 million acres of public land including ecological reserves, wildlife management areas, and hatcheries throughout the state.

The *2017-18 Governor's Budget* proposes total expenditures of \$523 million for the department from various sources, a decrease of \$51 million (9 percent) compared to current-year expenditures. Most of this decrease reflects the removal of one-time appropriations from bond funds and for deferred maintenance projects. Of the total proposed expenditures, \$121 million comes from

the Fish and Game Preservation Fund (FGPF) (23 percent), \$89 million from the General Fund (17 percent), \$80 million from federal funds (15 percent), \$64 million from general obligation bond funds (12 percent), and the rest from reimbursements and other special funds.

Fish and Game Preservation Fund

LAO Bottom Line. We are concerned that the Governor’s proposal to address the operating shortfall for the FGPF nondedicated account includes a commercial fishing landing fee increase that may be too large for the industry to sustain, and adds new activities that exacerbate the account’s imbalance. Moreover, the proposals leave an ongoing shortfall for the Legislature to address in 2018-19. We recommend the Legislature (1) adopt a commercial landing fee increase but perhaps at a lower level or more gradually, (2) adopt the Governor’s proposal to transfer lifetime license fee revenues to the nondedicated account, (3) modify the Governor’s proposals to begin two new activities by funding them on a limited-term basis using different funding sources, and (4) begin the process of identifying and considering options for addressing the remaining shortfall on an ongoing basis.

Background

FGPF Contains Multiple Accounts. The FGPF is the largest source of ongoing support for DFW’s activities. Established in 1909, it is one of the oldest special funds in the state. The fund is divided into 29 “dedicated accounts” (for which revenues can only be spent on specified activities linked to the particular source of revenue, such as the Duck Stamp Account for restoring duck habitat) and a “nondedicated” account (for which revenues can be spent on a variety of the department’s activities). The majority of FGPF revenues, comprising

80 percent (\$75 million) in 2015-16, are deposited into the nondedicated account. As shown in Figure 14 (see next page), the nondedicated account receives revenues from recreational hunting and fishing license and permit fees, commercial fishing fees, and environmental review fees paid by project proponents. The department issues more than 500 different types of hunting and fishing licenses and permits.

Nondedicated Account Supports Multiple Department Activities. The nondedicated FGPF account supports a wide range of activities. The largest expenditure category is law enforcement. This includes supporting wildlife officers and wardens to enforce the state’s laws and regulations, protecting fish and wildlife resources, preventing habitat destruction, and investigating illegal commercialization of wildlife. Additionally, the account supports management of both department-owned lands (including wildlife areas, ecological reserves, and public access areas), as well as inland and coastal fisheries. (A fishery is an area where fish or sea animals are caught.) Land management activities include scientific research, implementation of policies to protect and restore species and their habitats, and support for recreational hunting and fishing opportunities.

The nondedicated account also funds various activities related to overseeing the state’s commercial fishing industries, including implementing and enforcing laws, collecting and managing data and records, monitoring catches and quotas to prevent overfishing, and scientific research to preserve the health and sustainability of the fisheries.

Funds from the nondedicated account are also used to support departmental review activities required by CEQA. Finally, the account supports various wildlife conservation activities, including specific efforts targeted at preserving salmon and steelhead trout.

Nondedicated Account Has Roughly \$20 Million Operating Shortfall. Figure 15 compares revenues and expenditures from the nondedicated account of the FGPF for the last eight years. As shown, in recent years expenditures have exceeded revenues, with the gap reaching over \$20 million annually beginning in 2014-15. While the department has been able to sustain the higher level of expenditures by drawing from the account’s fund balance, that balance has been mostly depleted. Reasons that expenditures from the account have increased in recent years include:

- ***Employee Salary Increases.*** Several classifications of DFW employees have received salary increases through the state’s collective bargaining process in recent years. For example, from 2010-11 to 2015-16, average per-employee salary

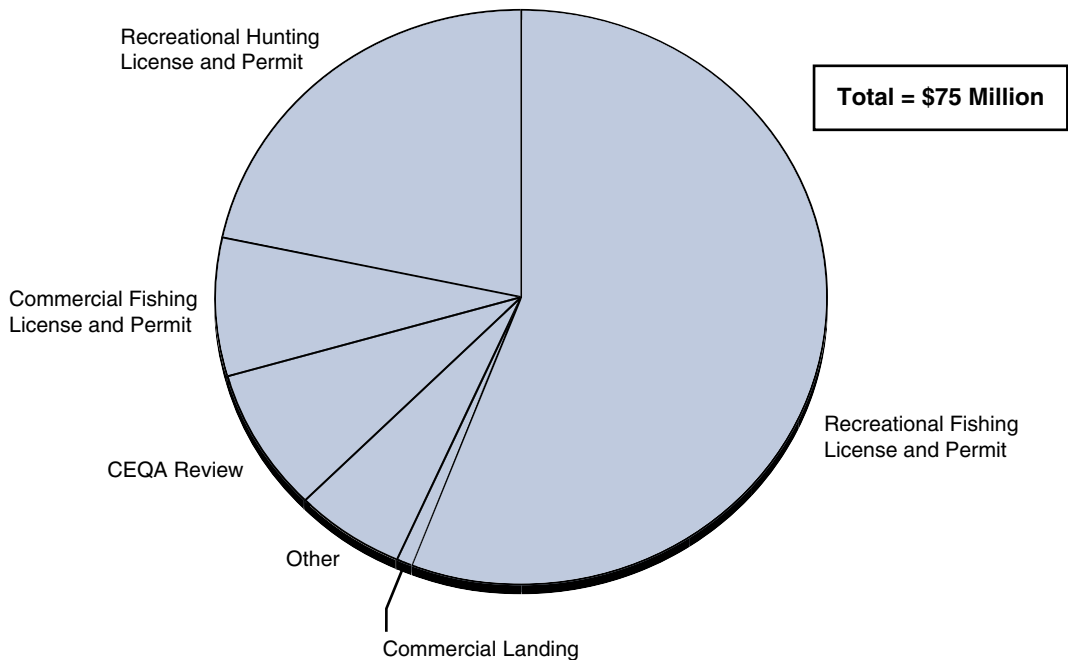
and benefit costs for the state’s fish and game wardens increased by 16 percent, environmental scientists by 13 percent, and senior environmental scientist supervisors by 61 percent. These classifications make up just over half of all of the positions supported by the nondedicated account (mostly wardens and environmental scientists). These personnel costs exceeded the inflationary adjustments that were made to most of the license fees that are deposited into the nondedicated FGPF account, which were increased by 10 percent over the same period.

- ***Shifting Existing Activities Into FGPF Without Increasing Revenues.*** The state has shifted expenditures for existing DFW

Figure 14

Nondedicated FGPF Revenues Come From a Variety of Fees

2015-16



FGPF = Fish and Game Preservation Fund and CEQA = California Environmental Quality Act.

activities from other funding sources to the FGPF nondedicated account, both to reduce General Fund costs during the recession and to remove costs from a different oversubscribed state fund, the ELPF. Ongoing shifts that have increased FGPF expenditures have totaled at least \$4.3 million since 2009-10. In addition, various one-time shifts (which diminished the account’s reserves) have totaled at least \$37 million over the same period.

- New Activities Without New Funding.** The Legislature has also assigned the department new costs to be funded by the account without providing additional resources. Such costs have included new law enforcement positions beginning in 2009-10 and 2010-11 (at an ongoing cost of \$5 million), the purchase of law enforcement radio infrastructure in 2011-12 (\$4 million one time), and drought

response activities in 2015-16 (\$3 million one time).

- Lifting of Temporary Spending Restrictions.** During the recession, normal department expenditures were reduced by mandatory statewide spending restrictions such as worker furloughs and a ban on purchasing vehicles. The state lifted those temporary limitations in recent years, resulting in a resumption of baseline costs as well as higher short-term costs to address accumulated needs. For example, vehicle expenditures from the account, which typically average around \$2.5 million annually, were only \$7,000 in 2010-11, but jumped to \$5 million in 2015-16.

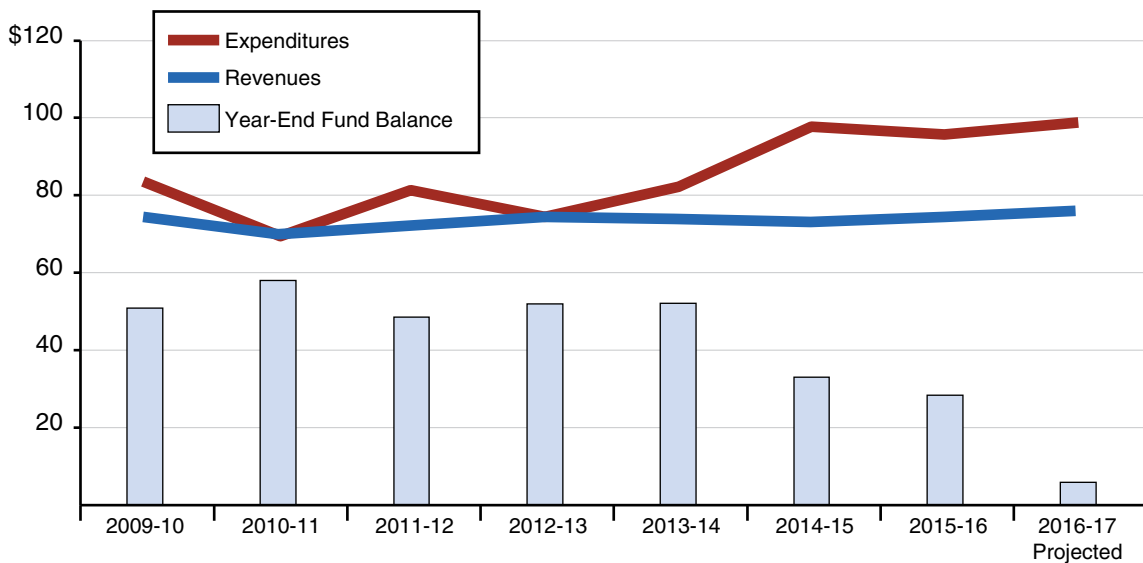
Governor’s Proposals

The Governor has three proposals to address the FGPF nondedicated account’s structural

Figure 15

FGPF Nondedicated Account Expenditures Exceed Revenues in Recent Years

(In Millions)



FGPF = Fish and Game Preservation Fund.

imbalance and two proposals for new spending from the account. As summarized in Figure 16, the combination of proposals yields about \$18 million towards solving the funding shortfall in 2017-18, but only \$10.7 million in 2018-19. We discuss the proposals in more detail below.

Increase Commercial Landing Fees
Significantly. To address just over half of the account’s structural imbalance, the Governor proposes trailer bill language that would increase the fee that commercial fishermen pay on the amount of seafood they catch, or “land.” Currently, the statutorily established fees assessed on seafood that is commercially landed in California range from 0.13 cents per pound to 5 cents per pound depending on the species. These rates have not been changed since 1992. (Unlike most of the other license fees that are deposited into the account, landing fees are not automatically adjusted for inflation.) Landing fee revenues totaled \$500,000 in 2015-16, and the administration estimates the fees will generate \$900,000 in the current year. The Governor’s proposal would increase landing fee revenue by \$12.4 million, or more than 1,300 percent. Based on the administration’s description of its proposal, the new fees would be

established based on an 11-tier system linked to the value of the specific fishery, with the species that generate higher revenue triggering a higher fee. This is similar to ad valorem systems used by several other western states. At the time of this publication, the administration had not provided our office with its proposed fee schedule or draft trailer bill language.

Transfer Funds From and Eliminate Lifetime License Trust Account. The other major component of the Governor’s approach to addressing the nondedicated account’s imbalance in 2017-18 is to shift \$8.7 million from a different account, the Lifetime License Trust Account, into the nondedicated account on a one-time basis. The Lifetime License Trust Account contains revenue from recreational hunters and anglers who have opted to purchase lifetime—rather than annual—hunting and fishing licenses. Currently, a small portion of the fee revenues from the account is annually transferred to the nondedicated FGPF account (as well as to a few other dedicated accounts) and used for the broad variety of activities the nondedicated account supports. This account has accumulated a large fund balance, however, due to statutory formulas that limit the

Figure 16
Summary of Governor’s FGPF Nondedicated Account Proposals

(In Thousands)

	2017-18	2018-19
Reduces Shortfall		
Increase commercial landing fees	\$12,400	\$12,400
Transfer from and eliminate Lifetime License Trust Account	8,725	750
Shift advisory program to other fund source ^a	381	381
Subtotals	(\$21,506)	(\$13,531)
Adds to Shortfall		
Water diversion assessment	-\$1,800	-\$1,800
Algal bloom monitoring program	-1,717	-996
Subtotals	(-\$3,517)	(-\$2,796)
Net Solutions	\$17,989	\$10,735

^a The administration is still in the process of identifying a viable new fund source.
 FGPF = Fish and Game Preservation Fund.

rate at which funds can be transferred to the other accounts for expenditure.

The Governor also proposes trailer bill language to abolish the Lifetime License Trust Account and instead allow most of the revenues from future sales of lifetime licenses to be annually deposited directly into the nondedicated account. This would provide \$750,000 in ongoing annual revenues to the nondedicated account beginning in 2018-19. (A separate portion of revenues from lifetime license sales would also be directed to certain dedicated FGPF accounts and to the Hatchery and Inland Fisheries Fund in both 2017-18 and on an ongoing basis, corresponding to the types of licenses purchased.)

Shift Funding for Advisory Program to Different Fund Source. The Governor proposes to reduce FGPF nondedicated account costs by \$381,000 by finding a replacement funding source for two positions that are currently funded through an interagency agreement with DFW. The administration indicates that the alternative funding source it initially identified—the Clean-up and Abatement Account of the State Water Quality Control Fund—is actually not appropriate for these activities, so it will propose a different source later in the spring. The program, run out of the Office of Environmental Health Hazard Assessment, issues fish consumption advisories based on evaluations of fish chemical contaminant data. The advisories provide guidance to sport fish consumers to minimize their exposure to contaminants, and are also used to inform decisions by SWRCB, regional waters boards, DFW, and the Fish and Game Commission to regulate specific water bodies and fisheries and protect public health.

Add Two New Programs to Nondedicated FGPF Account. The Governor also proposes creating two new ongoing activities to be funded out of the nondedicated account beginning in 2017-18.

- Measure Water Diversions on Department Lands.** The Governor proposes \$1.8 million in ongoing funding for the department to measure and report to the SWRCB the amount of surface water it diverts and uses on its lands and facilities. This proposal responds to a new state reporting requirement that took effect in 2016 applying to all public and private entities that divert at least ten acre-feet of surface water a year. The department estimates it has at least 140 points of diversion, but indicates that it does not currently measure the amount of water diverted, nor have the staff or equipment to begin doing so. The proposed funding would be for the department to conduct an assessment of the equipment and costs it will need to comply with the law. The administration indicates it will submit a subsequent budget request in future years for the funding to purchase and install the measurement devices, and potentially for additional staff to oversee their operation and maintenance.
- Monitor Harmful Algal Blooms.** The Governor proposes \$1.7 million in 2017-18 and \$996,000 annually thereafter to establish a new program to collect and analyze samples of biotoxin-producing harmful coastal algal blooms. These blooms, which can make seafood species unfit for human consumption, have become more prevalent in recent years, and have led the state to close certain coastal fisheries to commercial fishing. The department, working together with the California Department of Public Health, would use the information collected to inform and more accurately target fishery closures.

LAO Assessment

Current Commercial Landing Fees Insufficient to Support Associated Department Workload.

An analysis the department conducted in 2007 estimated that its expenditures on behalf of the commercial fishing industry totaled around \$22 million. While it has not conducted a similarly detailed analysis since that time, the department estimates that associated costs have increased over the past decade due to inflationary costs and additional regulatory mandates. However, combined revenues deposited into the FGPF nondedicated account from commercial licenses, permits, and landing fees totaled only around \$5 million in 2015-16. Other revenue sources—particularly from recreational hunting and fishing licenses—have, therefore, been subsidizing the department’s commercial fishing-related work. Moreover, the state has not increased commercial landing fees for 25 years, so current fee levels have not kept pace with inflationary increases.

Detail Lacking on How New Fees Would Be Structured. Since the administration has not yet shared its proposed trailer bill language or fee schedule, we are unable to conduct an in-depth analysis of the merits of the landing fee proposal. Moreover, while the administration describes the proposed increase as a fee, without reviewing the specific language we are unable to confirm that it meets the requirements established by voters through Proposition 26 (2010). Under the constitutional provisions of Proposition 26, the fee level must be reasonably related to the costs of the services being provided in order to be approved with a majority vote of the Legislature. By comparison, revenues from a tax can be used more broadly and must be approved by two-thirds of the Legislature.

Rate of Proposed Increase Is Considerable.

Even without specific information as to how the fee would be structured, the magnitude of

the proposed increase raises some concerns about whether it will be set at a level the state’s commercial fishing industry could sustain. The industry has struggled in recent years due to poor conditions and closures brought about by drought, El Niño weather patterns, and climate change. While prices for many types of seafood have increased, in many cases the catch amounts are way down. For example, the California coast was closed to Dungeness crab, rock crab, and razor clam fishing for extended periods starting in the fall of 2015 due to widespread algal blooms and resulting domoic acid concentrations in the shellfish. Additionally, the state’s salmon catch has declined precipitously in recent years due to the drought’s effects on the state’s rivers and high mortality rates experienced by the fish.

Adjusting the landing fees by changes in the Consumer Price Index since 1992 (when they were last increased) would result in a roughly 80 percent (about \$725,000) increase over projected current-year levels, compared to the more than 1,300 percent (\$12.4 million) increase proposed by the Governor. However, a modest increase of this amount would not cover much more of the actual department costs related to commercial fishing.

Use of Lifetime License Account Fee Revenues Consistent With Intended Purpose. While the Governor’s proposal to shift funds from and then statutorily abolish the Lifetime License Trust Account would break from longstanding practice, it would not alter the ultimate use of the funds in either the budget year or future years. Abolishing the account would simply allow the revenues to be used more rapidly—for the same types of activities—and avoid the continued accumulation of a large fund balance that has resulted from outdated fund transfer formulas.

Viable Alternative Fund Source for Advisory Program Still Not Identified. Looking to shift costs for the fish consumption advisory program

to a different source may be a useful way to relieve a small portion of the nondedicated account's structural imbalance. Until the administration has identified an appropriate alternative, however, we are unable to evaluate the merits of this proposal.

Budget-Year Proposals Buy Time, but Additional Ongoing Solution Clearly Needed.

The Governor acknowledges that additional action will be required to balance the FGPF nondedicated account in 2018-19 and beyond, and expresses plans to work with stakeholders to develop an ongoing solution. As shown in Figure 16, the administration estimates that its three proposals would provide an additional \$21.5 million to the account in 2017-18, which would be sufficient to fund all proposed activities (including the two new proposals) and leave a balance of \$1.1 million at the end of the fiscal year. Because most of the additional revenue from the Lifetime License Trust Account is only available on a one-time basis, however, the proposals would only increase revenues to the account by \$13.5 million annually after 2017-18. This would leave an out-year annual gap between revenues and expenditures of roughly \$10 million if the Legislature also adopts the Governor's two new spending proposals (or \$7 million if the Legislature rejects the two new spending proposals or funds them with a different source).

Two New Proposed Activities Meet Important Needs . . . We believe the Governor's two new proposed activities have some merit. The information produced through additional sampling of harmful algal blooms would enable the state to more precisely target fishery closures to where and when contamination exists. This would both improve public health protections and avoid potentially unnecessary closures and the resulting economic effects on the commercial fishing industry.

Similarly, measuring water diversions and uses on department lands and properties is a

worthwhile activity and consistent with state law. Efforts to account for surface water diversions are an important part of improving statewide water management, and the department would face costly penalties for failing to comply with the new statutory requirements to do so. Moreover, continued provision of water to department lands is vital for the wildlife that live there.

. . . But Funding With Nondedicated Account Would Exacerbate Structural Imbalance. While monitoring algal blooms and water diversions both are worthwhile activities, the Governor's proposed approach to funding them is problematic. Adding additional new expenditures to the nondedicated account when it already faces a funding shortfall worsens the problem the Legislature will have to solve in 2018-19 and future years. Even if the Legislature adopts the proposed landing fee increase and Lifetime License Trust Account shift, adding new costs would increase the amount of additional revenue or cuts that the Legislature will need to approve to keep the account in balance beginning in 2018-19.

Proposal to Measure Water Diversions Represents Short-Term—Not Ongoing—Activity.

While we believe the Governor's proposal to account for the water diverted and used on department lands has merit, the specific activities proposed do not warrant the ongoing funding requested. The Governor's proposal is to conduct an initial assessment of where the department is diverting water and what equipment and actions—and associated costs—ultimately will be necessary to comply with the new law and efficiently meet wildlife needs. These assessments represent one-time activities, so the Governor's rationale for requesting \$1.8 million in ongoing funding—before the ongoing costs have been determined—is unclear.

Legislature Has Several Options for Addressing Remaining Shortfall. Below, we

describe three broad options that the Legislature could pursue to solve the remaining structural imbalance in the nondedicated account in 2018-19 and future years, as well as some trade-offs associated with each option. Additionally, should the Legislature opt to modify or reject the Governor's two proposals for addressing the shortfall in the budget year—for example by adopting a smaller increase to commercial landing fees—it also could implement one or a combination of these solutions for 2017-18.

- ***Provide Increased General Fund Support.***

The Legislature could increase General Fund support for the department to pay for some of the activities currently funded by the FGPF. One argument in favor of this approach is that some of the work supported by the nondedicated FGPF contributes to broad public benefits—such as land preservation, enforcement of the state's laws, and protection of nongame species and habitats—and that the general public (not just hunters and anglers) should therefore contribute more to support such efforts. One argument against this approach is that it would reduce available funds for other statewide General Fund priorities.

- ***Impose New Dedicated Tax.*** Some have suggested the state impose a new excise tax on specific activities or goods that are somewhat related to the type of work the department conducts and direct the new revenues into the FGPF. For example, it could impose a tax on outdoor gear (such as tents or binoculars) or activities (such as whale watching or boat rentals) under the rationale that individuals who enjoy outdoor recreation generally benefit from the department's work to protect lands,

waterways, and wildlife. Alternatively, the Legislature could impose a tax on products that can pollute the natural environment (such as tires, gasoline, or pesticides) since these can impact fish and wildlife and result in a need for the department's preservation work. One argument in favor of such an approach is the intent that parties who benefit from or are responsible for the department's activities would help to support them. On the other hand, the linkage between the entities paying the tax and the department's workload is relatively tenuous. Moreover, adding individual excise taxes that have restricted uses limits the Legislature's flexibility to direct tax revenues towards the state's highest priorities in future years, should those priorities change.

- ***Reduce Expenditures.*** The Legislature also has the option of addressing the account's operating shortfall by reducing some of its current expenditures. This approach would lessen or avoid the need to raise new tax revenue or redirect General Fund from other state priorities. We did not have sufficient time or information to conduct an in-depth analysis of the department's activities. Our initial review, however, was unable to identify obvious candidates for reduction. Eliminating certain existing activities could result in failing to enforce 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).

LAO Recommendations

Adopt Some Form of Commercial Landing Fee Increase. We recommend the Legislature adopt some level of increase for commercial landing fees because they have not kept pace with either the department's associated workload or inflation. Because the administration has not yet provided detail on the specific structure of its proposal, we are unable to advise the Legislature as to its merits. The amount of increase proposed, however, is substantial, and could result in negative consequences for some in the industry. The Legislature may want to consider adopting a lower level of increase, or phasing the increase in over a number of years to temper its impact. Adopting an increase that raises less funding than proposed by the Governor could require the Legislature to also adopt one of the additional solutions described above for 2017-18 in order to balance the fund in the budget year. (Adopting our recommendation below to use a different funding source for the Governor's new proposed activities would reduce the amount of solution needed for the account in 2017-18.)

Approve Permanent Transfer From Lifetime License Fees. We recommend the Legislature adopt the Governor's proposal to transfer the fund balance from and then abolish the Lifetime License Trust Account. These funds would help provide a short-term fix to the nondedicated account's funding shortfall and thereby allow the Legislature more time to identify an ongoing solution. The fee revenues still would be used consistently with previous practice in both the budget year and future years.

Consider Fund Shift Based on Revised Proposal. The administration will submit a

modified funding proposal later this spring for the \$381,000 supporting fish consumption advisories. Provided it can identify an appropriate alternative, we believe this is a reasonable approach to lowering the FGPF nondedicated account's costs. We will conduct further analysis and provide a recommendation to the Legislature once we have reviewed the administration's revised proposal.

Modify Two New Proposed Activities. While we find there is some merit in the Governor's two new proposed activities, we do not believe the state should worsen the ongoing operating shortfall for the FGPF nondedicated account before identifying an ongoing solution for how to fund the account's *existing* activities in future years. As such, we recommend the Legislature modify the Governor's two proposals as follows:

- ***Use Other Fund Sources.*** Until the nondedicated account has sufficient annual revenues to cover the costs of algal bloom monitoring, we recommend funding it using General Fund (\$1.7 million in 2017-18). Additionally, we find that some amount of the federal funds the department receives for land conservation could be used to pay for a portion of the costs of monitoring water diversions on department lands. We recommend the Legislature direct the department to provide an estimate of how much federal funding could be made available for this activity, then allocate General Fund for the remaining amount.
- ***Provide Funding on Limited-Term Basis.*** We recommend the Legislature limit General Fund support for these activities to two years, then revisit whether the FGPF nondedicated account has sufficient resources to absorb them after the funding shortfall has been addressed. Additionally,

conducting a needs assessment for water diversions on department lands is a short-term activity. The administration can submit a subsequent request for one-time equipment and ongoing maintenance costs in future years once they are better defined.

Identify Additional Ongoing Solution for Account by 2018-19. We recommend the Legislature begin the process of identifying which ongoing options it will want to pursue to address the full operating shortfall in the FGPF nondedicated account. Even if it opts to adopt short-term solutions—such as the lifetime license fee transfer or perhaps limited-term use of General

Fund—for the budget year, using the coming year to discuss and consider the trade-offs of potential permanent changes to revenues or expenditures can help inform future decisions. This could include soliciting feedback from stakeholders during budget hearings, such as representatives from the commercial fishing industry, recreational hunters and anglers, and environmental and conservation groups. The Legislature could also form work groups to explore and vet potential proposals. Additionally, the Legislature will want to ask the administration to report on what options it is considering for an ongoing solution to the shortfall.

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 \$118 million for DOC in 2017-18, a net decrease of about \$33 million (22 percent) from estimated expenditures in the current year. The year-over-year net decrease in spending is mainly explained by a decrease in expenditures from the Greenhouse Gas Reduction Fund—which receives revenue from cap-and-trade allowance auctions—that is partially offset by an increase in spending from the Oil, Gas, and Geothermal Administrative Fund (OGGAF) for initiatives to improve regulation of oil and natural gas drilling operations.

Oil, Gas, and Geothermal Well Statewide Tracking and Reporting (WellSTAR)

LAO Bottom Line. We recommend that the Legislature approve the request for \$21.1 million in 2017-18 to fund only the first year of development of the WellSTAR database system. We further recommend the Legislature fund the remainder of the request on a year-to-year basis. This approach will require the administration to return with additional funding requests in the future, thereby ensuring that the Legislature has additional opportunities to exercise oversight over this complex information technology 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 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. EPA Letter Requires California to Improve Oversight of Oil and Gas Production. In February 2015, DOGGR and SWRCB submitted a comprehensive plan to the United States Environmental Protection Agency (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 2014 (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.

2015-16 Budget Included Funding for Oil and Gas Data Management System. The Legislature approved \$20 million in funding—\$10 million per year in 2015-16 and 2016-17—for an oil and gas data management system, which has since been named WellSTAR. WellSTAR is designed to give DOGGR, other state agencies, industry, and the public an integrated information system that provides the information on oil and gas production operations that is required by recent legislation and U.S. EPA. DOGGR entered into an agreement with the California Department of Technology (CDT) to complete a "Stage/Gate" process with assistance and direction of staff from the CDT Consulting and Planning Division. This process consists of providing legal and technical evidence of the project's vitality, sustainability, and cost-effectiveness.

The initial stages of the project demonstrated how complex it would be to identify all of the system requirements necessary to meet legislative

and U.S. EPA requirements. Notably, during one of the initial stages, 473 requirements were identified. However, a later in-depth analysis revealed the initial analysis was incomplete, and a total of 1,384 requirements were documented and confirmed by DOGGR. The division states that because of the rigorous process that was followed to gather, document, and reconfirm requirements, it is confident in the final requirements for the new system.

Governor’s Proposal

As shown in Figure 17, the Governor’s budget plan proposes \$45 million (OGGAF) over five years beginning in 2017-18 to implement WellSTAR. This includes a request of \$21.1 million for 2017-18. The activities funded in this proposal will be performed by a mix of external vendors, CDT staff, and DOC staff. The bulk of this funding occurs in 2017-18 and 2018-19 and would support project design, development, and implementation costs. In 2019-20, funding primarily will 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. Beginning in 2020-21, funding would support

ongoing M&O of the system. 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 new legislation or regulations.

LAO Assessment

The administration’s proposal 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 through 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, information technology projects—especially complicated projects such as WellSTAR—are funded on a year-to-year basis. This funding

Figure 17
Governor’s Budget Request for Well Statewide Tracking and Reporting

(In Millions)

	Project Stages					Five-Year Total ^a
	Design, Development, and Implementation Stages		Stabilization and M&O	M&O		
	2017-18	2018-19	2019-20	2020-21	2021-22 (Ongoing)	
Vendor services	\$18.9	\$12.9	\$4.1	\$2.2	\$1.0	\$39.1
CDT services	0.8	0.8	0.1	—	—	1.7
DOC staff	1.4	1.3	1.3	0.3	0.3	4.6
Totals	\$21.1	\$15.0	\$5.5	\$2.5	\$1.3	\$45.5

^a May not total due to rounding.

CDT = California Department of Technology; DOC = Department of Conservation; and M&O = Maintenance and Operations.

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 Requested for WellSTAR Project. We recommend that the Legislature approve the request for \$21.1 million in 2017-18 to fund the next year of WellSTAR design, development, and implementation. As discussed earlier in this analysis, it is a complex undertaking

to design, develop, and implement a data system that can meet the requirements of the U.S. EPA, Chapters 313 and 561, and maintain the flexibility to be modified to meet new regulatory demands. 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 O&M stage. This will trigger a review of WellSTAR’s development and implementation as part of the Legislature’s budget process, thereby ensuring an opportunity for members of the Legislature to exercise further oversight of the project.

DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

CalRecycle regulates solid waste facilities (including landfills) and manages the recycling of various materials, such as beverage containers, electronic waste, tires, and used oil. The department also promotes waste diversion practices, such as source reduction, composting, and reuse.

The Governor’s budget proposes \$1.6 billion from various special funds for support of CalRecycle in 2017-18. This is a reduction of \$36 million, or 2 percent, from current-year estimated expenditures. This is largely due to a technical budget adjustment that moved Greenhouse Gas Reduction Fund appropriations from the budgets of departments—such as CalRecycle—into a control section of the budget.

Beverage Container Recycling Reforms

LAO Bottom Line. The general principles and suggested approaches discussed in the administration’s policy paper are a reasonable starting

place for Beverage Container Recycling Program (BCRP) reform, but the Legislature will require more details in order to enact program reform.

Overview of the BCRP

The BCRP was established 30 years ago for the purpose of encouraging consumers to recycle certain beverage containers. Under the program, consumers must pay a deposit for each eligible container purchased and then have that deposit repaid for each eligible container returned to a certified recycler. The repayment amount is referred to as the California Redemption Value, or “CRV.” Most containers made from glass, plastic, and aluminum are eligible for CRV, though there are exceptions, such as containers for wine, spirits, and milk. Statute includes two main goals for the program: (1) reducing litter and (2) achieving a recycling rate of 80 percent for eligible containers. (For more information on the BCRP, please see our 2015 report entitled *An Analysis of the Beverage Container Recycling Program.*)

Flow of CRV Containers and Payments.

The CRV program involves the flow of beverage containers and payments between several sets of parties. This includes (1) manufacturers that produce containers, (2) distributors that deliver beverages to retailers, (3) retailers that sell beverages, (4) consumers that purchase the beverages, (5) recyclers that collect empty containers, and (6) processors that prepare the materials for reuse. As shown in Figure 18,

beverage containers and CRV are exchanged at each stage between participants. The Beverage Container Recycling Fund (BCRF) is the state fund used to collect and distribute payments for the CRV program.

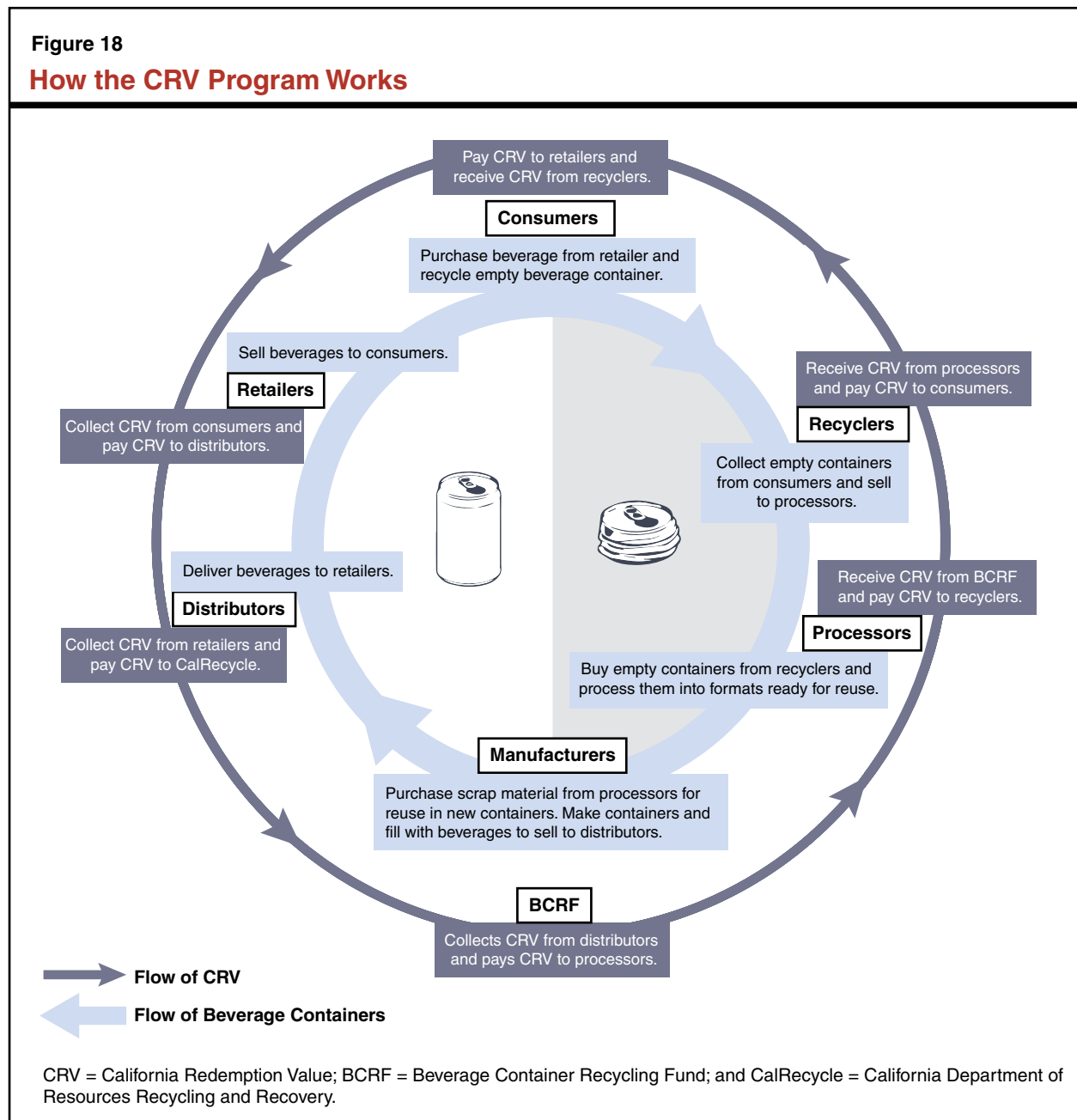
Several Ways to Redeem Containers.

Consumers can redeem containers in one of several ways.

- **Traditional Recycling Centers.** Most beverage containers are returned to

Figure 18

How the CRV Program Works



traditional recycling centers, which usually accept large quantities of materials, frequently by truckload, from municipal or commercial waste collection services.

- **Convenience Zone Recyclers.** These centers must be located close to a supermarket in order to provide a convenient location for consumers to return their bottles. These recyclers typically collect a lower volume of containers than traditional recycling centers and consequently receive a “handling fee” payment from the BCRF to help cover their operating costs.
- **Curbside Collection.** Consumers can also place containers in their residential curbside recycling collection or take them to other community drop-off programs, such as those operated as fundraisers or by local nonprofit groups. Under these options, the CRV is kept by the collecting organization when it sends the material to a processor.

Unredeemed Deposits Support Supplemental Programs. The CRV redemption rate—the percent of all CRV that is actually collected by consumers from recyclers—is less than 100 percent. This means that more CRV is paid into the BCRF than is claimed by consumers. In 2017-18, for example, the BCRF is projected to receive roughly \$1.3 billion in deposits, but only about \$1 billion is projected to be spent on redemptions—an 80 percent redemption rate. State law requires that much of the unredeemed CRV be spent on specified recycling-related programs. In total, there are currently 11 supplemental programs funded from the BCRF (including program administration). Such programs include subsidizing glass and plastic recycling, subsidizing supermarket

recycling collection sites, and providing grants for market development and other recycling-related activities. These particular programs are projected to cost about \$292 million in 2017-18. Each of the supplemental programs is described in Figure 19 (see next page).

High Redemption Rates and Supplemental Programs Create Shortfall in BCRF. Over time, redemption rates have increased and are roughly the target recycling rate defined in statute—80 percent. This leaves less money for the supplemental programs supported by BCRF. As a result, CalRecycle projects that the BCRF will have a structural deficit of \$24 million by the end of 2017-18, as shown in Figure 20 (see page 49). While the BCRF has had operating deficits in recent years, it has been able to absorb the deficits from its large fund balance built up when the CRV redemption rate was low. This balance is now estimated to be \$170 million at the end of the budget year, about 13 percent of annual revenues. Given the structural imbalance, the fund is likely to be further depleted in future years.

Proportional Reductions. Under current law, if there are insufficient funds available in the BCRF to make all of the required CRV and supplemental payments while maintaining a 5 percent reserve, the department is required to reduce supplemental program payments (except program administration) in equal proportions, in order to keep the fund in balance (commonly referred to as “proportional reductions”). The only time the department has had to implement proportional reductions was in 2009, which resulted in significant cuts to supplemental programs.

Convenience Zone Recycling Center Closures. Since January 1, 2016, more than 300 (about 15 percent) “convenience zone” (CZ) recycling centers have closed. These closures have been the result of (1) a decline in scrap values for recycled materials that have reduced revenues for recyclers,

Figure 19
Supplemental Programs Funded by Unclaimed California Redemption Value

Projected 2017-18 (In Millions)

Description		Amount
Processing fee offsets	Processing payments by manufacturers are intended to cover the difference between the cost of recycling and the scrap value of recycled materials. Processing fee offsets from the BCRF are currently provided to manufacturers so that they do not pay the full cost.	\$103.6
Program administration	Costs to CalRecycle of running the Beverage Container Recycling Program.	50.0
Handling fees	Monthly payments made to recycling centers located in convenience zones near supermarkets.	47.8
Administrative fees	Administrative payments to participants to defray costs associated with program.	39.1
Curbside Supplemental Payments	Payments to operators of single-family residential curbside recycling collection programs and neighborhood drop-off programs.	15.0
Payments to local governments	Payments to city and county governments for beverage container recycling and litter reduction activities.	10.5
Quality Incentive Payments	Payments to curbside programs or other certified entities for higher quality of materials collected through curbside programs.	10.0
Local Conservation Corps (LCC)	Grants to LCC to be used for beverage container recycling and litter reduction programs.	7.2
Plastic Market Development	Payments to processors and manufacturers for processing plastic bottles into a format for manufacturing and for manufacturing products with recycled plastic.	5.0
Public education	Education campaigns encouraging recycling.	2.5
Beverage Container Recycling Competitive Grants	Grants to governments, nonprofit entities, and private businesses for beverage container recycling programs.	1.5
Total		\$292.1

BCRF = Beverage Container Recycling Fund and CalRecycle = California Department of Resources Recycling and Recovery.

(2) increased operating costs for recyclers, and (3) BCRF payment formulas that do not reflect most recent changes in scrap value. (Please see our 2016 web post entitled *Addressing California’s Convenience Zone Recycling Center Closures* for a detailed discuss of these issues.) Based on our conversations with CalRecycle, many of the CZ recycling center closures have been at rural, low-volume sites. This is likely because many low-volume recyclers have higher per-container recycling costs, which makes them more financially vulnerable to market changes. Based on surveys

of recyclers conducted by CalRecycle, it costs small CZ recyclers over twice as much on average to recycle a container than large CZ recyclers. Payments from the state intended to cover recycling costs are based on a per-container statewide average rate, so they are usually less than a low-volume recycler’s actual costs.

Governor’s Budget

The Governor’s budget does not include a proposal to address the BCRF structural shortfall. Rather, the administration has submitted a policy

paper identifying high-level principles and general suggestions for program improvement. The department indicates that it will hold stakeholder meetings in the coming months, and it plans to return with a detailed proposal to reform the BCRP this spring. Major components of the administration’s policy paper are below.

- Expand Eligible Containers.** As discussed above, not all beverage containers are included in the BCRP. Those containers that are not eligible are typically recycled at lower rates. CalRecycle suggests expanding container eligibility, for example, by including wine, distilled spirits, and large juice bottles, as well as other beverage container material types such as cartons and pouches.
- Restructure Various Payments to Program Participants.** CalRecycle suggests reorganizing some payments in order to improve collection and processing of recycled materials. This includes (1) making payments to recyclers based on a tiered structure to better support low-volume recyclers, (2) allowing greater flexibility to meet CZ recycler requirements, (3) restructuring payments made to cities and counties into a competitive grant program, (4) incentivizing less contamination of materials in curbside collection programs, and (5) replacing the curbside supplemental payments with a competitive grant program.
- Shift Responsibility of Container Recycling Back to Beverage Manufacturers.** For some materials, the cost of recycling can be greater than the scrap value that recyclers can get for the material. The department suggests requiring beverage manufacturers to

Figure 20	
BCRF Structural Deficit	
Projected in 2017-18	
<i>(In Millions)</i>	
Revenues	
Total CRV paid by consumers	\$1,310
Other revenue	3
Subtotal	(\$1,313)
Expenditures	
Total CRV paid out on redeemed containers	\$1,044
Other program expenditures ^a	292
Subtotal	(\$1,337)
Net (Structural Deficit)	\$24
Projected Ending Fund Balance	\$170
^a Supplemental programs including administrative fees and processing fee offsets. BCRF = Beverage Container Recycling Fund and CRV = California Redemption Value.	

cover more of these costs, as was the case earlier in the program’s history. The department’s paper also discusses requiring manufacturers to play a stronger role in supporting recycled material markets through minimum content requirements, material buy-back requirements, refillable beverage container options, and/or container designs that are more easily recycled.

- Improve Program Efficiency and Update Requirements.** The department indicates that it should review the BCRP in order to remove out-dated provisions, clarify definitions and requirements, and update payment calculations and mechanisms. For example, the department suggests modifying certain payment formulas for recyclers in order to better reflect market changes (an issue that has contributed to recycling center closures).

LAO Assessment

BCRP Requires Legislative Attention. We agree with the administration that comprehensive BCRP reform has merit. The BCRF has faced a structural deficit for several years, and while the BCRF is currently projected to have a modest balance in the budget year, it is unclear how soon it could be depleted. If this occurs, the department will need to implement proportional reductions, which are problematic because they do not allow for discretion in spending based on priorities or other factors. For example, under proportional reductions, the department cannot prioritize programs that are most effective or central to the BCRP's overall mission. Additionally, proportional reductions are very disruptive to program participants. Since all payments are reduced equally and quickly, participants can experience a significant cut in funding without much warning to plan accordingly.

Principles Outlined in Administration's Policy Paper Are Reasonable. We find that the general principals and suggested changes discussed in the administration's policy paper are reasonable program changes in concept. In fact, we have

suggested several similar approaches in past publications. For example, in our 2016 web post *Addressing California's Convenience Zone Recycling Center Closures*, we noted that some options to address CZ recycling center closures included making adjustments to their payment formulas, requiring manufacturers to buy recycled materials, and shifting some payments to a tiered structure based on recycler size. Additionally, in our 2015 report *An Analysis of the Beverage Container Recycling Program*, we recommended shifting recycling costs back to manufacturers, considering changing the purpose of curbside payments, and considering expanding containers in the program.

Enacting Broad Program Reform Will Require More Specifics. The merit of any specific proposal will depend on the details. More specific language and implementation details will be important in determining whether the reform makes sense. Reaching a consensus for reform will be challenging given the large number of stakeholders involved in the BCRP and might be difficult to accomplish if the department does not provide a detailed proposal in the spring.

AIR RESOURCES BOARD (ARB)

In California, regulation of pollution is divided between ARB and 35 local air quality management districts. The local air districts manage the regulation of stationary sources of pollution (such as industrial facilities) and prepare local implementation plans to achieve compliance with the federal Clean Air Act. ARB is responsible primarily for the regulation of mobile sources of pollution (such as automobiles) and for the review of local district programs and plans. Historically, the ARB's regulations focused on emissions that affect air quality, such as particulate matter and ozone-forming emissions. More recently,

ARB also began overseeing the state's efforts to reduce greenhouse gas (GHG) emissions—including regulations that affect both stationary and mobile sources of GHGs.

The Governor's budget proposes \$401 million for ARB in 2017-18, a net decrease of \$443 million (53 percent) compared to estimated expenditures in the current year. This year-over-year decrease is primarily the result of a technical change in the way cap-and-trade expenditures are budgeted. (We discuss the Governor's proposed cap-and-trade expenditures earlier in this report.)

Volkswagen (VW) Settlement

LAO Bottom Line. The Governor’s budget requests a total of \$2.3 million and 14 positions for ARB to administer and implement the VW Consent Decree. We recommend the Legislature approve a portion of the request—ten positions and \$1.6 million—related to testing and monitoring VW’s vehicle modifications. We recommend the Legislature withhold action on the remaining four positions related to overseeing Zero Emission Vehicle (ZEV) investment plans and administering programs funded from the Mitigation Trust, pending additional information on the Legislature’s role in directing these funds and how the funds will fit into the state’s broader ZEV and air quality strategies. After the Legislature has had an opportunity to evaluate this information and determine the extent to which ARB’s plans are consistent with the authority and direction provided to ARB by the courts and the Legislature, it could act on the Governor’s proposal accordingly. We also recommend reducing the ARB’s budget by \$1.2 million (Air Pollution Control Fund [APCF]) and two positions because the ARB no longer has workload associated with litigating VW civil penalties.

Background

VW Consent Decree. Between 2009 and 2015, VW sold approximately 500,000 2-liter diesel vehicles nationwide equipped with “defeat devices.” Defeat devices are designed to control nitrogen oxide (NOx) emissions during vehicle certification but then to illegally turn off emissions controls during on-road driving. (NOx emissions contribute to ozone.) Roughly 70,000 of these vehicles were sold in California. In October 2016, the courts finalized a settlement between VW, U.S. EPA, and ARB. The terms of the settlement are described in a Consent Decree that includes the following requirements:

- **Modify VW Vehicles.** Requires VW to implement engine and emission control system modifications to vehicles equipped with defeat devices to bring them into compliance with emissions standards. ARB is responsible for ensuring these modifications adequately control NOx emissions.
- **Invest in ZEV Technologies.** Requires VW to invest \$2 billion nationwide—including \$800 million in California—over ten years to increase the use of ZEVs. Investments will be made in four 30-month cycles and may go to four different types of activities: (1) promoting ZEV infrastructure such as electric vehicle charging infrastructure; (2) increasing public awareness campaigns; (3) supporting programs to increase access to ZEVs, such as ZEV car sharing; and (4) investing in a “Green City” program meant to promote zero-emission car sharing, transit, and freight projects in a select city. These funds will be managed by VW, but ARB is responsible for advising the development of, as well as reviewing and approving, the investment plans in California. ARB expects VW to submit its first plan in February 2017.
- **Deposit Funds in Mitigation Trust.** Requires VW to deposit \$2.7 billion into a Mitigation Trust to fund projects that reduce NOx emissions, including \$381 million for projects in California. For example, funds may be used to replace older heavy duty vehicles and equipment with low- or zero-emission alternatives. The Mitigation Trust will be overseen by a court-appointed trustee. Projects will be selected by individual states and funded over a five-year period. Under the terms of

the settlement, the Governor must select a lead agency to identify and oversee the projects in California.

Civil Penalties Settlement. Last year, the Legislature approved eight positions and \$3.2 million from the APCF for costs associated with litigating VW civil penalties and additional compliance and enforcement activities. Of this amount, \$1.2 million and two permanent positions were approved on an ongoing basis for activities associated with litigating VW civil penalties.

On January 11, 2017, ARB announced that it reached a civil penalty settlement with VW. The settlement provides a total of \$154 million in civil penalties to the state, including \$60 million in cost reimbursement to ARB. Under current state law, penalties for violating air pollution laws are deposited in the APCF. (The APCF generally supports ARB's regulatory activities related to air quality.)

State Air Pollution and ZEV Policies and Programs. The Legislature has adopted various policies and programs for promoting ZEVs and reducing pollution from mobile sources. For example, Chapter 524 of 2014 (SB 1204, Lara) created the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program, which provides a framework for spending cap-and-trade revenue on heavy duty zero- and near-zero emission technologies and projects, including giving priority to projects that benefit disadvantaged communities. In 2016-17, the Legislature allocated \$150 million in cap-and-trade revenues for heavy duty vehicle and off-road equipment projects, consistent with SB 1204. These projects are intended to reduce GHG and NOx emissions.

In addition, Chapter 547 of 2015 (SB 350, de León) directs the California Public Utilities Commission (CPUC) to require investor-owned utilities (IOUs) to submit plans to accelerate transportation electrification, such as ZEV

infrastructure. In 2016, CPUC authorized three IOUs to implement electric vehicle charging infrastructure pilot programs. These programs are estimated to result in the installation of 12,500 charging stations at a ratepayer cost of about \$200 million. These utilities recently filed new proposals with CPUC to spend an additional \$1 billion on electric vehicle infrastructure over the next few years.

Governor's Proposal

ARB requests a total of \$2.3 million and 14 positions to administer and implement the VW Consent Decree. The request includes resources to conduct three different types of activities:

- **Test and Monitor VW Vehicle Modifications (\$1.6 Million).** Ongoing funding for ten permanent positions, plus \$125,000 annually for five years, from the APCF to test and monitor VW vehicle modifications to ensure they comply with emissions standards.
- **Review and Approve VW's ZEV Investment Plans (\$135,000).** One position funded from APCF to review and approve ZEV investment plans submitted by VW.
- **Implement and Monitor Mitigation Trust Programs (\$490,000).** Three positions to develop a spending plan and administer the programs that are funded in California. These positions would be funded by reimbursements from the Mitigation Trust.

The budget does not include a request for authority to spend any funds from the Mitigation Trust on actual emission-reduction projects. Nor does the budget include a proposal to spend civil penalty funds. (The civil penalty agreement was reached after the Governor's budget proposal was released.)

LAO Assessment

Process for Mitigation Trust Fund Activities Unclear. The specific processes for allocating funds from the Mitigation Trust are not detailed in the consent decree. According to ARB, these details will likely become clearer after the court appoints a trustee and the Governor selects a lead agency, both of which ARB expects will happen within the next couple of months. The administration indicates that the related budget request for three positions and \$490,000 will be withdrawn if the Governor does not select ARB as the lead agency.

Importantly, ARB has not indicated whether the administration will need appropriation authority from the Legislature to allocate the project funds from the Mitigation Trust. It is also unclear what authority the Legislature has to direct the use of California's share of funds that are in the Mitigation Trust. Consequently, it is unclear what role, if any, the Legislature will have in directing these funds to meet its priorities or, more generally, how the funded programs will fit into the state's broader ZEV and air quality strategies. For example, it is unclear whether heavy duty vehicle programs funded from the Mitigation Trust will follow the direction provided in SB 1204 or whether different criteria and processes will be used to select projects.

ARB Provides Limited Justification for Continuing Legal Resources Approved Last Year. Since the VW civil case was settled last month, ARB no longer has the workload associated with litigating VW civil penalties that was used to justify the \$1.2 million and two permanent positions authorized in 2016-17. According to ARB, these resources might still be needed to litigate similar civil cases against other car manufacturers in the future. For example, the ARB recently issued Notices of Violation to Fiat-Chrysler following the discovery of undisclosed auxiliary emission control devices in certain vehicles. However, at the time

of this report, ARB has not provided a detailed justification that this notice is likely to drive ongoing workload.

LAO Recommendations

Approve Ten Positions and \$1.6 Million to Test and Monitor Vehicle Modifications. We recommend the Legislature approve the ARB's request for ten positions and \$1.6 million to test and monitor the vehicle repairs made by VW. These resources are justified based on the additional workload required by the consent decree.

Withhold Action on Positions Related to ZEV Investments and Mitigation Trust. We recommend the Legislature withhold action on the four positions related to overseeing ZEV investment plans and administering programs funded from the Mitigation Trust, pending additional information on the planned investments, as well as the Legislature's role in directing these funds. ARB expects VW to submit its first ZEV investment plan for ARB review in February and, at the time of this report, the court has still not appointed a trustee for the Mitigation Trust.

Accordingly, the board should report at budget hearings on the status and spending plans for ZEV investments and the Mitigation Trust. This information will help the Legislature better evaluate the extent to which the proposed activities are targeted towards the most effective efforts, consistent with the Legislature's priorities, and are being coordinated with existing ZEV and air quality programs operated by various state agencies.

In addition, ARB should report at budget hearings on whether it plans to seek appropriation authority from the Legislature to allocate the project funds from the Mitigation Trust. After the Legislature has had an opportunity to evaluate this information and determine the extent to which ARB's plans are consistent with the authority and direction provided

to ARB by the courts and the Legislature, it could act on the Governor's proposal accordingly.

Reduce Funding for Legal Resources Approved Last Year. We recommend the Legislature reduce ARB's budget by \$1.2 million and eliminate two positions that were initially approved in the 2016-17 budget for litigating VW civil penalties. The workload that was used to justify these resources no longer exists. If ARB has ongoing workload that justifies the continuation of these resources, it can submit a new request to the Legislature.

Southern California Consolidation Project

LAO Bottom Line. Prior to taking action on the proposed \$413 million for the construction of a new testing and research facility in Riverside, we recommend the Legislature direct the administration to consider alternative fund sources—such as VW civil penalty revenues—to pay for at least a portion of the new lab. We also recommend the Legislature direct ARB to report at budget hearings on the rationale and trade-offs associated with changes in building design that led to an increase in estimated costs, such as installing solar panels.

Background

Mobile Source Regulations. Mobile sources, such as automobiles, are a large portion of the state's overall emissions. For example, 83 percent of statewide NO_x emissions—a major contributor to ground-level ozone—comes from mobile sources. Under the federal Clean Air Act, California is authorized to adopt motor vehicle emissions standards that are more stringent than the federal standards, subject to U.S. EPA approval. While California has made progress in reducing air pollution in recent decades, it still faces significant air quality challenges. For example, the federal government has designated two of the state's air

districts—South Coast and San Joaquin Valley—as the two areas with the highest ozone concentrations in the nation. These districts are required to achieve the most stringent federal ozone standards by 2031.

As part of ARB's mobile source regulatory activities, it administers emissions testing and research activities that are used for such things as developing regulations, researching new emission control technologies and vehicles, evaluating the effects of different fuels on engine emissions, and developing methods for measuring emissions.

Existing Southern California Testing and Research Facilities. Most of the ARB's mobile emission testing and research occurs at facilities in Southern California. The state-owned Haagen-Smit Laboratory (HSL), located in El Monte and built in 1971, is ARB's primary testing and research facility. The state also leases five buildings adjacent to the HSL for additional testing and office space. In addition, ARB currently conducts heavy-duty testing—such as testing of large diesel truck emissions—at the Metropolitan Transit Authority (MTA) facility about ten miles away in Los Angeles. The various testing facilities use specialized equipment, such as dynamometers (equipment used to simulate road conditions) and chambers specifically designed to measure emissions from vehicles and other engines. Staff at these various facilities conduct vehicle testing, laboratory analysis, regulatory development, and enforcement activities.

2015-16 Budget Provided \$6 Million to Develop Performance Criteria for New Facility. In 2015, the administration proposed to consolidate and relocate the existing Southern California testing and research facilities. According to the administration, the existing Southern California facilities do not meet current and future emission testing needs. Some of the main concerns include:

- The MTA facility is too small to meet heavy-duty testing needs.

- The HSL property is too small and cannot be adapted to accommodate the equipment needed for current and future testing operations.
- Some of the equipment at the HSL has reached the end of its service life and will need to be replaced soon.

The 2015-16 budget provided a total of \$6 million from the Motor Vehicle Account (MVA), the APCF, and the Vehicle Inspection Repair Fund (VIRF) to begin the planning work necessary to move mobile emissions testing operations—including light-duty and heavy-duty vehicle testing operations—to a new consolidated facility in Southern California. The funding was used to assess the suitability of two potential sites—Riverside and Pomona—and develop performance criteria. At the time that the 2015-16 budget was adopted, the total estimated project cost was \$366 million, including site assessment and development of performance criteria (\$6 million), construction (\$258 million), and equipment (\$102 million). Construction was scheduled to begin July 2017 and be completed January 2020.

Governor’s Proposal

Requests \$413 Million to Construct Testing Facility. ARB requests \$413 million to construct a new testing and research facility in Riverside, to be completed in December 2020. The new facility would be roughly 383,000 square feet, including testing centers, a chemistry laboratory, offices, and space for administrative services (such as receiving and shipping and storage areas). The administration proposes to use a design-build procurement process, and the project would be funded through lease revenue bonds. The administration estimates \$29 million in annual debt service costs over 25 years—split between MVA (\$19 million), APCF (\$6 million), and

VIRF (\$4 million)—for a total project cost of \$739 million. These costs would be partially offset by no longer having to pay \$2 million in annual lease payments at the existing facilities.

Several Project Changes Contribute to \$53 Million Estimated Net Cost Increase. The estimated construction and equipment costs for the project have increased by \$53 million since 2015-16—from \$360 million to \$413 million. According to ARB, the major factors that contribute to the higher cost estimates are:

- **Grading and Roadways—\$21 Million.** ARB estimates additional site development costs, including additional grading and road development. These costs are associated with selecting the Riverside site (19 acres) instead of Pomona (14 acres).
- **Solar Photovoltaics (PV)—\$19 Million.** The revised project proposal includes the installation of solar panels on the property. The board indicates that the solar panels are needed as part of its effort to obtain LEED Platinum certification and achieve a goal of zero net energy for the building. The board did not identify the estimated reduction in ongoing electricity costs associated with the solar panels.
- **Central Plant—\$16 Million.** The proposal includes additional costs associated with constructing a central plant to provide the heating, ventilation, and air conditioning (HVAC). The original proposal assumed a less expensive ground sourced heat pump that would provide HVAC, but this type of system was determined to be infeasible at the Riverside location.
- **Updated Estimates for Fees, Contingencies, and Inflation—\$12 Million.** There are increased costs

estimated for such things as additional contingencies, design fees, and cost escalations due to a delay in the estimated start of construction.

- ***Equipment Cost Escalation and Electric Vehicle Chargers—\$7 Million.*** The proposal assumes additional equipment costs, which now total \$108 million. Most of the increase is due to updated equipment cost estimates to adjust for inflation. About \$1 million of the higher costs are associated with installing 111 electric vehicle charging stations and the underground electrical infrastructure necessary to support an additional 139 charging stations.

In addition, the proposal assumes a \$15 million cost reduction relative to the initial budget proposal in 2015-16 because a parking structure is no longer needed. The larger Riverside site provides space for ground-level parking.

Approval Would Likely Result in Additional Future Costs Not Included in Proposal. ARB estimates that the new facility would result in some additional future ongoing costs that are not included in this budget request. For example, ARB estimates that 75 additional staff would be needed to fully staff the new testing facility once it is complete. In addition, ARB estimates \$2 million to \$7 million in one-time staff relocation costs.

LAO Assessment

Alternative Fund Sources Might Be Available.

We find that there are several important considerations when deciding how to fund this project. First, we note that ARB's request—as well as other budget proposals to increase MVA expenditures—would impact the condition of the MVA. As part of the 2016-17 budget package, the Legislature increased the vehicle registration fee to prevent the MVA from becoming insolvent.

The Department of Finance's five-year projections (2017-18 through 2021-22) estimate there will be sufficient funding available in the MVA to pay for projected expenditures, including the new ARB facility. However, over the next few years, the MVA would be barely balanced and likely face a modest operational shortfall in certain years.

Second, as discussed above, a settlement in the VW civil penalties case was announced soon after the budget was released. Under the settlement, \$154 million in penalties will be deposited in the APCF. The only restriction on the funds that we are aware of is that \$60 million must be used for ARB testing, compliance, and enforcement activities. The construction of the new facility might meet these requirements. The exact timing of when the funds will be deposited is unclear at this time. If the penalty revenue were used to fund some of the construction costs, the state could issue fewer bonds and, thereby, reduce long-term debt payments.

Third, the Legislature might want to consider using revenue from cap-and-trade auctions to pay for at least a portion of the lab. Under current law, the funds must be used to advance the purposes of AB 32 and facilitate GHG reductions. Some of the testing and research activities conducted at the new facility would help ARB develop and enforce GHG regulations related to mobile sources. Using the funds to help construct the lab would potentially be an allowable use.

Certain Design Decisions Have Trade-Offs.

ARB has made some design decisions that involve trade-offs. For example, it is unclear whether the additional investment in PV panels will pay for itself in long-term reductions in future electricity costs. At the time this report was prepared, ARB had not provided a cost-benefit analysis to demonstrate that these costs would be fully offset by future electricity savings. In addition, ARB does not have a formal estimate of the costs of achieving

LEED Platinum building certification. However, according to ARB staff, efforts to achieve LEED Platinum certification typically increase building costs by at least a couple of percent.

LAO Recommendations

Prior to taking action on ARB's request for \$413 million to construct a new testing and research facility in Riverside, we recommend that the Legislature:

- **Consider Alternate Fund Sources to Pay for Part of Lab.** We recommend the Legislature direct the administration to report at budget hearings on the potential for using alternative fund sources to pay for at least a portion of the construction costs.

If viable alternative funding sources were identified, it could help ease long-term cost pressures on the MVA, as well as reduce overall project borrowing costs.

- **Direct ARB to Report on Net Costs and Trade-Offs Associated With Major Design Decisions.** We recommend the Legislature direct ARB to report at budget hearings on the trade-offs and rationale for any major design decisions that led to changes in program costs. For example, what amount of environmental benefits—such as GHG emission reductions—and future energy savings are expected to be achieved with the \$19 million solar panels?

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

The Department of Toxic Substances Control (DTSC) regulates hazardous waste management, cleans up or oversees the cleanup of contaminated hazardous waste sites, and promotes the reduction of hazardous waste generation. The department is funded from (1) fees paid by persons who generate, transport, store, treat, or dispose of hazardous wastes; (2) other environmental fees levied on businesses; (3) the General Fund; and (4) federal funds. The Governor's budget requests \$272 million from various funds for support of DTSC in 2017-18. This is a net increase of \$24 million, or 10 percent, from the estimated current-year level. The net increase primarily reflects increased spending of \$43 million—loaned from the General Fund—from the Toxic Substances Control Account (TSCA) for the Exide Technologies Facility Contamination Cleanup Program, offset by (1) one-time funding of \$14 million from the General Fund provided in the current year to retrofit the Argonaut Mine Dam in Jackson and (2) a \$3.6 million reduction

in spending in the Hazardous Waste Control Account, primarily related to limited-term funding provided in prior years.

Statutorily Required Budget Estimate

LAO Bottom Line. At the time this analysis was prepared, DTSC had not provided a statutorily required estimate of expenditures necessary to meet the state's obligations to pay for (1) cleanup and operations and maintenance (O&M) at federal Superfund sites, and (2) O&M at state-only orphan sites. We recommend the Legislature require the department to report at budget hearings on the status of the overdue estimate.

Background

U.S. EPA Remediates Largest, Most Complex Hazardous Waste Sites. The federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of

1980—as amended by the Superfund Amendments and Reauthorization Act in 1986—was enacted to reduce and eliminate threats to human health and the environment posed by hazardous waste sites. CERCLA, also known as the Federal Superfund Act, gives U.S. EPA authority to (1) identify and investigate hazardous waste sites that need cleanup, (2) clean up contaminated sites or direct responsible parties (RPs) to do the cleanup themselves, and (3) require RPs to pay cleanup costs. U.S. EPA evaluates and ranks sites based on their potential to pose a threat to human health or the environment. Sites ranked highly enough are eligible to be placed on the National Priorities List (NPL) for cleanup.

Under the “polluter pays” principle, when RPs for a site have been identified, the U.S. EPA’s policy is to pursue the RPs to conduct and pay for the site response rather than conduct the cleanup with federal funds. Sites where the RP has either not been identified, is insolvent, cannot be located, or enforcement activities have not resulted in the RP performing site cleanup actions are considered orphan sites. CERCLA authorizes U.S. EPA to pay for cleanups at orphan sites. While U.S. EPA pays for all of the costs to design the remedy, CERCLA requires states to pay other costs as follows:

- ***State Pays 10 Percent of Costs for Remedial Phase.*** For the remedial action phase at orphan sites, federal funds pay for 90 percent of the costs and the state pays for 10 percent of the costs. The remedial phase includes design of the remedy followed by the remedial action (construction) phase when the project is carried out.
- ***State Pays All O&M Costs.*** The state pays 100 percent of the O&M costs after the remedial action phase at an orphan site is complete. For example, in some cases,

fences around sites have to be inspected and maintained, and this is considered O&M.

State Law Provides DTSC With Hazardous Waste Site Cleanup Authority. The Hazardous Substances Account Act (HSAA) was enacted by the Legislature in 1981 (which sunset and was reenacted by Chapter 23 of 1999 [SB 47, Sher]) to address the need for cleanup of hazardous waste sites that pose a threat to human health and the environment. The HSAA is also known as the State Superfund Act. The Site Mitigation and Brownfields Reuse Program administered by DTSC implements the HSAA provisions regarding hazardous waste site cleanup and the state funding requirements under CERCLA. Like U.S. EPA, DTSC has the authority to identify and investigate sites, clean up contaminated sites, and require RPs to perform the cleanup or pay the cleanup costs. DTSC can undertake all of these actions independently from or in coordination with U.S. EPA.

While U.S. EPA focuses on the largest, most complex sites, DTSC investigates and remediates many different types of sites, including smaller and less complex sites than those typically listed as federal Superfund sites. DTSC has legal authority to recover cleanup costs from RPs. When done independently from U.S. EPA, DTSC pays for investigation, remediation, and O&M from state funds if no RP can be compelled to pay these costs. These projects are referred to as “state-only orphan sites.”

Costs for Federal NPL Sites Prioritized Over State-Only Sites. The Site Remediation Account (SRA) administered by DTSC is used to fund the state’s share of the remedial phase and O&M costs at NPL orphan sites, as well as the costs for state-only orphan sites. State obligations for federal NPL sites take priority over state-only orphan site funding. Funding for state-only orphan sites is generally available only to the extent that there

are funds available in the SRA after meeting obligations to pay for remediation and O&M at NPL orphan sites.

Recent Legislation Requires DTSC to Provide an Estimate of the State Cleanup Costs. Chapter 704 of 2016 (AB 2891, Committee on Environmental Safety and Toxic Materials) requires DTSC to submit to the Legislature with the Governor's budget each year a report on DTSC's estimated hazardous waste cleanup costs. The law requires this report to include an estimate of the state funding needed for direct site remediation costs at state and federal orphan sites. Chapter 704 further requires the estimate to include projected costs in the current and following two fiscal years for the state's (1) 10 percent funding obligation for remedial actions at NPL orphan sites, (2) 100 percent obligation for ongoing O&M at NPL orphan sites, and (3) ongoing O&M costs at state-only orphan sites.

Chapter 704 expressed the Legislature's intent that the funds deposited in SRA be appropriated in the annual budget act each year. Chapter 704 further expressed the Legislature's intent that funding for the SRA be in an amount that is sufficient to pay for estimated costs for direct site remediation and O&M at both federal NPL orphan sites and at state-only orphan sites, and not less than \$10.8 million (an amount adjusted annually for inflation).

Governor's Proposal

The Governor's budget plan proposes to transfer \$10.9 million from the TSCA to SRA in 2017-18, and projects expenditures from SRA of \$9.6 million. This leaves a reserve of \$1.8 million in the SRA. At the time this analysis was prepared, DTSC had not provided the report required in Chapter 704.

LAO Assessment

Legislature Needs Estimate to Assess NPL and State-Only Orphan Site Cleanup Costs and Options. At the time this analysis was prepared, the DTSC had not released the statutorily required estimate of the state's fiscal obligations at NPL orphan sites and ongoing O&M costs at state-only orphan sites. Without this information, the Legislature does not have the information it needs to (1) assess whether the proposed SRA funding level is sufficient to meet federal NPL orphan site obligations, (2) determine the amount of SRA funds available to pay for O&M costs at state-only orphan sites, and (3) weigh the need for funding to begin the cleanup of additional state-only orphan sites against other legislative spending priorities.

LAO Recommendation

Require DTSC to Report at Budget Hearings on the Status of Overdue Estimate. We recommend the Legislature require DTSC to report at budget hearings on the status of the estimate required under Chapter 704. Once the Legislature has the estimate required under Chapter 704, key information will be available to help it decide whether to approve the Governor's proposed funding level for SRA or to adjust the proposal to reflect legislative priorities.

Lead-Acid Battery Recycling Act Implementation

LAO Bottom Line. We recommend the Legislature approve DTSC's request for additional positions and funding to implement the provisions of the Lead-Acid Battery Recycling Act of 2016 that require investigation and remediation of contamination from lead-acid battery recycling facilities. In addition, we recommend that the Legislature adopt budget bill language requiring DTSC to provide a report summarizing its progress implementing the act. Given the uncertainty about

the amount of contamination that may have been caused by lead-acid battery recycling facilities in some areas of the state, the report would serve to update the Legislature on the department's progress towards addressing this issue and inform the Legislature on future resource needs for this program.

Background

Lead-Acid Battery Recycling Act of 2016.

Chapter 666 of 2016 (AB 2153, Garcia), known as the Lead-Acid Battery Recycling Act of 2016 (act), imposes several new requirements on lead-acid battery manufacturers and dealers, and on state agencies. Among these new requirements, the act generally requires lead-acid battery dealers to charge customers a nonrefundable \$1 fee on each lead-acid battery sold beginning April 1, 2017 (increasing to \$2 per battery after April 1, 2022). The act also generally requires manufacturers of lead-acid batteries to pay a \$1 per battery fee beginning April 1, 2017. Revenues from both fees will be deposited into the Lead-Acid Battery Cleanup Fund (LABCF) and may be used for certain purposes specified in the act. These purposes include:

- ***Loan Repayment.*** Repayment of a \$177 million loan made from the General Fund to TSCA in 2016 to provide funding for activities related to lead contamination in the communities surrounding the Exide lead-acid battery recycling facility in the City of Vernon.
- ***Response Actions to Contaminated Areas.*** Investigation, site evaluation, cleanup, remedial action, removal, monitoring, or other response actions at any area of the state that is reasonably suspected to have been contaminated by the operation of a lead-acid battery recycling facility.

According to DTSC, in addition to the Exide site, it has so far identified 14 former lead smelting facilities in California that may fall under the act's definition of a lead-acid battery recycling facility. These types of facilities have been in operation in California since at least the 1920s. Under the act's definition of lead-acid battery recycling facility, there could be many more sites identified in coming years.

Governor's Proposal

The Governor's budget proposes \$610,000 from LABCF for five environmental scientist positions to begin the investigation, evaluation, and cleanup of contamination from lead-acid battery recycling facilities. DTSC will conduct investigations of properties to determine if they qualify as lead-acid battery recycling facilities that require further investigation and cleanup. DTSC will also conduct investigations to determine if residential and other properties in the vicinity of lead-acid battery recycling facilities are potentially contaminated. Where cleanups are needed, DTSC will develop and implement remediation plans. Part of this process will include DTSC's coordination of public workshops in neighborhoods contaminated by lead-acid battery recycling facilities.

LAO Assessment

Some Key Information Not Available. DTSC is in the early stages of implementing the act and will need to research historical smelting facilities and gather additional information on each of these facilities to ascertain the scope and nature of their operations and their impact on the surrounding communities. Therefore, there is uncertainty about the total number of lead-acid battery recycling facilities that have operated in California, the extent of contamination caused by all of these facilities, and the resources that will be required to remedy the contamination.

LAO Recommendation

Approve Request but Require Report on Progress Implementing Program. The Governor's proposal is consistent with the act and has merit. Therefore, we recommend approval of the requested positions and funding. However, given the considerable uncertainty about the amount of workload DTSC will be required to perform in the future, we recommend the Legislature enact budget bill language requiring that DTSC provide a report to the Legislature by April 1, 2018 that describes the department's progress towards implementing the

provisions of the act. Specifically, the department should report on sites (1) identified as potentially meeting the definition of a lead-acid battery recycling facility under the act; (2) investigated, along with a summary of the results of those investigations; (3) pending investigation; and (4) evaluated for lead contamination. The information provided in the report would help inform discussions about the department's progress towards implementing the act and future decisions about the level of resources necessary to meet the act's intent.

SUMMARY OF RECOMMENDATIONS

Issue	Governor's Proposal	LAO Recommendation
Crosscutting Issues		
Cap-and-trade expenditure plan	\$2.2 billion from cap-and-trade auction revenue for activities intended to reduce greenhouse gas emissions, contingent on extending authority for cap-and-trade beyond 2020 with a two-thirds vote.	(1) Authorize cap-and-trade (or a carbon tax) beyond 2020 with a two-thirds vote, (2) strengthen the allowance price ceiling and provide clearer direction to ARB regarding complementary policies, (3) take actions to ensure adequate oversight and evaluation of major climate policies, (4) broaden the allowable uses of auction revenue, and (5) adopt various changes intended to maintain legislative authority.
Drought response	\$178 million (one time) primarily from the General Fund to continue several drought emergency response activities.	Delay decisions until late spring when statewide conditions are more certain. Consider a package that (1) continues some funding for one-time emergency response, (2) provides some ongoing funding to improve the state's drought resilience, and (3) reduces some of the proposals in light of improved hydrology.
Proposition 1—2014 water bond	\$421 million from Proposition 1 to continue a variety of grant programs, largely consistent with multiyear appropriation schedule provided in previous years.	Approve Governor's proposal. Continue to monitor Proposition 1 implementation through oversight hearings and information provided by stakeholders and the administration.
Sustainable Groundwater Management Act (SGMA)	\$15 million ongoing from the General Fund for DWR to support local agencies' implementation of SGMA. \$2.3 million (\$750,000 ongoing) from a special fund loan and five new permanent positions for SWRCB to intervene in noncompliant areas, to be repaid and sustained using fee revenue.	Approve Governor's proposals. Continue to monitor SGMA implementation to ensure it stays on track and to identify whether additional legislative action might be needed.
Timber Regulation and Forest Restoration Program	\$15.2 million (Timber Regulation and Forest Restoration Fund) for three departments to implement forest health related programs, including forest restoration grants, seedling nursery operations, and development of an online timber harvest permitting system.	Identify program activities and grants the Legislature prioritizes and determine a funding strategy for the budget year and thereafter that reflects those priorities.
New Natural Resources capital outlay projects	\$18 million for 16 new capital outlay projects in two departments within CNRA, including construction of a new northern regional operations center for CalFire.	No specific concerns with the individual proposals, but overall they do amount to a significant budgetary commitment—\$132 million total—over the next few years.
Department of Parks and Recreation		
Base funding for parks	\$16.6 million (\$12.2 million State Parks and Recreation Fund [SPRF] and \$4 million Environmental License Plate Fund) in 2017-18 in order to maintain park operations at current-year levels.	Begin consideration of options that would provide an ongoing budget solution to the SPRF structural deficit.
Department of Fish and Wildlife		
Fish and Game Preservation Fund	(1) Increase commercial landing fees by \$12.4 million, (2) transfer \$8.7 million from and then abolish Lifetime License Trust Account, (3) shift \$381,000 for fish advisory program to another source, and (4) establish new \$1.7 million algal bloom monitoring program (\$1 million ongoing) and \$1.8 million (ongoing) assessment of water diversions.	(1) Adopt some commercial landing fee increase but perhaps at a lower level or more gradually, (2) adopt proposal to transfer lifetime license fee revenues, (3) consider fund shift based on revised proposal later this spring, (4) modify proposals to begin two new activities by funding them on a limited-term basis using different fund sources, and (5) begin identifying options for addressing ongoing shortfall.

(Continued)

2017-18 BUDGET

Issue	Governor's Proposal	LAO Recommendation
Department of Conservation		
Well Statewide Tracking and Reporting (WellSTAR)	\$21.1 million (Oil, Gas, and Geothermal Administrative Fund) to continue implementation of WellSTAR information technology system. Total request of \$45 million over next five years.	Approve only \$21.1 million in 2017-18 to fund the next year of WellSTAR design, development, and implementation. Will better ensure opportunity for legislative oversight of the project.
Department of Resources Recycling and Recovery		
Beverage Container Recycling Program (BCRP)	Policy paper identifying high-level principles and general suggestions for program improvement. The department indicates that it will hold stakeholder meetings in the coming months, and it plans to return with a detailed proposal to reform the BCRP in the spring.	Begin deliberations on BCRP reform in budget hearings and require regular updates from the department throughout the stakeholder process.
Air Resources Board		
Volkswagen settlement	\$2.3 million and 14 positions to administer and implement the Volkswagen (VW) Consent Decree.	Approve ten positions and \$1.6 million related to vehicle modifications. Withhold action on the remaining four positions related to ZEV investment plans and Mitigation Trust pending additional information on legislative role in directing these funds. Reduce budget by \$1.2 million and two positions for resources related VW civil penalty litigation approved in 2016-17 budget.
Southern California Consolidation Project	\$413 million to construct a new testing and research facility in Riverside.	Direct the administration to consider alternative fund sources—such as VW civil penalty revenues—to pay for at least a portion of the new lab. Direct board to report at budget hearings on the rationale and trade-offs associated with changes in building design that led to an increase in estimated costs.
Department of Toxic Substances Control		
Department has not provided statutorily required budget estimate	\$10.9 million transfer from the Toxic Substances Control Account to the Site Remediation Account (SRA) and projected expenditures from SRA of \$9.6 million to pay for remediation and operations and maintenance (O&M) at federal Superfund and state-only orphan sites.	Require department to report at budget hearings on the status of the estimate required under Chapter 704 of 2016 (AB 891, Committee on Environmental Safety and Toxic Materials) on the amount of expenditures necessary to meet the state's obligations to (1) pay for cleanup and O&M at federal Superfund sites, and (2) pay for O&M at state-only orphan sites.
Lead-Acid Battery Recycling Act implementation	\$610,000 from the Lead-Acid Battery Cleanup Fund and five positions to begin the implementation of the Lead-Acid Battery Act's provisions regarding investigation, evaluation, and cleanup of contamination from lead-acid battery recycling facilities.	Enact budget bill language to require DTSC to provide a report to the Legislature by April 1, 2018, that describes the department's progress towards implementing provisions of the Lead-Acid Battery Recycling Act.

Contact Information

Brian Brown	Managing Principal Analyst, Resources and Environment	319-8325	Brian.Brown@lao.ca.gov
Ashley Ames	Forestry and Fire, Parks, and Recycling	319-8352	Ashley.Ames@lao.ca.gov
Ross Brown	Cap-and-Trade and Air Pollution	319-8345	Ross.Brown@lao.ca.gov
Rachel Ehlers	Water and Fish and Wildlife	319-8330	Rachel.Ehlers@lao.ca.gov
Shawn Martin	Conservation and Toxics	319-8362	Shawn.Martin@lao.ca.gov

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