Senate Budget and Fiscal Review—Nancy Skinner, Chair
SUBCOMMITTEE NO. 2 **Agenda**

Senator Bob Wieckowski, Chair
Senator Brian Dahle
Senator Mike McGuire
Senator Henry I. Stern

Tuesday, February 16, 2021
8:00 a.m.
State Capitol - Room 3191

Consultant: Joanne Roy

OUTCOMES

DISCUSSION

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VOTE-ONLY

0555 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY (CALEPA)

Issue 1: California Environmental Protection Agency Bond and Technical Adjustments

Governor's Proposal. The Governor's budget requests for various bond appropriations, reappropriations, and reversions; technical adjustments; reappropriations; and baseline adjustments to continue implementation of previously authorized programs. The tables below provide detail for each item.

CalEPA Technical Adjustments *(Whole Dollars)*					
BU	Department Name	Title	Amount	Funds/Proposition	Comment
3900	Air Resources Board	Position Authority Adjustment	$-	N/A	CARB requests the conversion of 25.0 permanent/full-time positions currently in the Temporary Help Blanket, into Regular/Ongoing positions per Budget Letter 20-16.
3900	Air Resources Board	Carl Moyer Program	$153,318,000	Air Pollution Control Fund	CARB requests a one-time increase of $153 million APCF in 2021-22 and $36 million APCF ongoing to align local assistance expenditure authority for the Carl Moyer program with the revenues generated by new smog abatement fees established in 2017.
3900	Air Resources Board	Reappropriation of Greenhouse Gas Reduction Funds	$-	Greenhouse Gas Reduction Fund	CARB requests to reappropriate Greenhouse Gas Reduction Funds authorized by the Budget Act of 2019. The funds support various low carbon transportation programs, as well as FARMER and the Community Air Protection Program (AB 617).
3900	Air Resources Board	Extensions of Liquidation for Various Low Carbon Transportation and Air Quality Programs	$-	Greenhouse Gas Reduction Fund, Air Pollution Control Fund & Air Quality Improvement Fund	CARB requests to extend the liquidation period, until June 30, 2023, for various funds for low carbon transportation programs and the enhanced fleet modernization program authorized by the Budget Act of 2017. Additionally, CARB requests to extend the liquidation period, until June 30, 2024, for various low carbon transportation and air quality programs authorized by the Budget Act of 2018.

3940	State Water Resources Control Board	Expedited Claim Account Reappropriation	N/A	Expedited Claim Account	The Expedited Claim Account (ECA) was created by SB 445 (Hill) (Chapter 547, Statutes of 2014) and required the State Water Board to implement a pilot project with the objective to reduce the overall cost for site cleanup and the time to reach closure. The funds to pay these claims ($100,000,000) were transferred from the UST Cleanup Fund in FY 15/16. The Water Board requests to reappropriate remaining unexpended funds through June 30, 2024.
3960	Department of Toxic Substances Control	Illegal Druglab Cleanup Account General Fund Backfill Pause	$-	Illegal Druglab Cleanup Account/ General Fund	DTSC requests to pause the ongoing $749,000 General Fund backfill for the Illegal Druglab Cleanup Account for one year. The fund balance has sufficient resources to fund the fiscal year 2021-22 expenditure authority without any support from the General Fund.
3970	Department of Resources Recycling and Recovery	Reappropriation of Greenhouse Gas Reduction Funds	$-	Greenhouse Gas Reduction Fund	CalRecycle requests to reappropriate Greenhouse Gas Reduction Funds appropriated in 2019. Projects receiving these grant funds include anaerobic digester and compost facilities which require complex permitting and lengthened construction timelines.
3970	Department of Resources Recycling and Recovery	Extension of Liquidation of Greenhouse Gas Reduction Funds	$-	Greenhouse Gas Reduction Fund	CalRecycle requests to extend the liquidation period to June 30, 2024 for Greenhouse Gas Reduction Funds appropriated in 2017. Projects receiving these grant funds include anaerobic digester and compost facilities which require complex permitting and lengthened construction timelines.

State Water Resources Control Board Bond Adjustments *(Whole Dollars)*

BU	Dept.	Request Title	Program	Bond Fund (Prop)	Subsection: Public Resources Code (PRC), Water Code (WC) or Fish & Game Code (FGC)
3940	State Water Resources Control Board (SWRCB)	Reappropriation	State Water Pollution Control Revolving Fund - Wastewater Treatment Projects	1	WC 79723
3940	SWRCB	Reappropriation	Water System Infrastructure Improvements - Safe Drinking Water Grant Program	1	WC 79724(a)(1)
3940	SWRCB	Reappropriation	Water Recycling - Grant Program	1	WC 79765
3940	SWRCB	Reappropriation	State Water Pollution Control Revolving Fund - Wastewater Treatment Projects	1	WC 79723
3940	SWRCB	Reappropriation	Water System Infrastructure Improvements - Safe Drinking Water Grant Program	1	WC 79724(a)(1)
3940	SWRCB	Reappropriation	Multibenefit Stormwater Management Projects	1	WC 79747(a)
3940	SWRCB	Reappropriation	Water Recycling - Grant Program	1	WC 79765
3940	SWRCB	Local Assistance Reappropriation	Groundwater Sustainability	1	WC 79771(a)
3940	SWRCB	Local Assistance Appropriation	Water Recycling	13	WC 79137(a)
3940	SWRCB	Local Assistance Reappropriation		40	PRC 5096.610(c)/.650(c)(2)
3940	SWRCB	Local Assistance Reappropriation	Clean Beaches – § 5096.650(c)(2)	40	PRC 5096.610(c)/.650(c)(2)
3940	SWRCB	Program Delivery Appropriation	Safe Drinking Water Standards - § 79530(a)(b)	50	WC 79530(a)(b)
3940	SWRCB	Local Assistance Appropriation	Santa Monica Bay Restoration – § 79543, Ref. 1	50	WC 79543, Ref. 1
3940	SWRCB	Reappropriation of the Local Assistance	Santa Monica Bay Restoration Commission – § 79543, Ref 1	50	WC 79543, Ref. 1
3940	SWRCB	Local Assistance Reversion	Safe Drinking Water Standards – § 79530(a)(b)	50	WC 79530(a)(b)
3940	SWRCB	Local Assistance Reappropriation		50	Various
3940	SWRCB	Program Delivery Reversion	San Joaquin River Hydrologic Unit	68	PRC 80140(b)
3940	SWRCB	Local Assistance Reappropriation	Water Quality and Drinking Water Grants	68	PRC 80140(a)

3940	SWRCB	Local Assistance Reappropriation	San Joaquin River regional water supply grants	68	PRC 80140(b)
3940	SWRCB	Local Assistance Reappropriation	Competitive grants for treatment and remediation for groundwater contamination	68	PRC 80141(a)
3940	SWRCB	Local Assistance Reappropriation	Pure Water Program for City of San Diego	68	PRC 80146(a)
3940	SWRCB	Program Delivery Appropriation	Small Community Water Grants	84	PRC 75022
3940	SWRCB	Local Assistance Reversion	Santa Monica Bay Restoration Commission	84	PRC 75060(a)(2)
3940	SWRCB	Local Assistance Reversion	Emergency Safe Drinking Water Supply Program	84	PRC 75021(a)

Staff Recommendation. Approve as budgeted.

3900 CALIFORNIA AIR RESOURCE BOARD (CARB)

Issue 2: Bolstering Heavy-Duty Mobile Source Testing & Enforcement

Governor's Proposal. The Governor's budget requests $2.9 million Air Pollution Control Fund and 14 positions in 2021-22, $7.3 million APCF and 28.0 positions in 2022-23, and $9.9 million APCF and 33 positions in 2023-24 for its heavy-duty mobile source testing program. These resources will be used to address non-compliance with state and federal emissions standards which may increase enforcement actions resulting from cases of non-compliance. The Certification and Compliance Fund will fully fund the proposal on an ongoing basis beginning in 2024-25.

Staff Recommendation. Approve as budgeted.

Issue 3: Implementation and Enforcement of New Control Measure for Ocean-Going Vessels at Berth

Governor's Proposal. The Governor's budget requests $962,000 Air Pollution Control Fund and five permanent positions phased in over four years ($201,000 and one position in 2021-22, $583,000 and three positions in 2022-23, $774,000 and four positions in 2023-24, and $962,000 and five positions in 2024-25 and ongoing) to implement the requirements of the At-Berth Regulation. This new regulation builds upon the At-Berth Regulation adopted in 2007 and is designed to further reduce pollution from ocean-going vessels while docked at California's busiest ports.

Staff Recommendation. Approve as budgeted.

Issue 4: Implementation of the Advanced Clean Trucks Regulation

Governor's Proposal. The Governor's budget requests two permanent positions and $386,000 Air Pollution Control Fund in 2021-22 and $384,000 ongoing to implement the newly adopted Advanced Clean Trucks Regulation. The Advanced Clean Trucks Regulation aims to accelerate adoption of medium- and heavy-duty zero-emission vehicles as part of the state's strategy to reduce emissions from the transportation sector.

Staff Recommendation. Approve as budgeted.

3940 STATE WATER RESOURCES CONTROL BOARD (SWRCB)

Issue 5: Amador County Local Primacy Revocation

Governor's Proposal. The Governor's budget requests $206,000 Safe Drinking Water Account ongoing and one position to carry out public small water system regulatory program for Amador County. The County's Primacy Delegation has been terminated per request of the County and oversight of the delegated public water systems is now with SWRCB.

Staff Recommendation. Approve as budgeted.

Issue 6: Computer-Based Operator Certification Testing

Governor's Proposal. The Governor's budget requests $850,000 Drinking Water Operator Certification Fund and $150,000 Wastewater Operator Certification Fund ongoing to administer computer-based testing. This would expand the availability and frequency of testing throughout California and help drinking water and wastewater facilities continue to comply with state and federal safe drinking water and clean water regulatory requirements.

Staff Recommendation. Approve as budgeted.

Issue 7: Industrial Stormwater Discharge Compliance

Governor's Proposal. The Governor's budget requests $951,000 Waste Discharge Permit Fund ongoing and six permanent positions to assist in permit enrollment and assist regional boards in responding to requests from industrial facility owners.

Staff Recommendation. Approve as budgeted

Issue 8: Site Cleanup Program Investigation and Cleanup

Governor's Proposal. The Governor's budget requests $4.282 million in reimbursement authority and 21 permanent positions to oversee cleanup of contaminants including Per- and Polyfluoroalkyl Substances (PFAS) source investigation orders sent by SWRCB and the Regional Water Quality Control Boards (RWQCBs) (collectively Water Boards) to airports, chrome plating facilities, bulk fuel terminals and refineries.

Background. ***Site Cleanup Program.*** Water Boards operate the Site Cleanup Program, which is responsible for oversight of investigation and cleanup efforts at over 3,900 contaminated sites to protect water quality, human health, and the environment. A key objective of the program is to support the reuse of contaminated properties (brownfields).

Case types are variable ranging from large industrial manufacturing, former military sites, to small dry cleaners. The Site Cleanup Program also oversees sites with a wide range of contaminants including petroleum, pesticides, metals, and chlorinated hydrocarbons (solvents) which are highly toxic and persistent in nature.

The Site Cleanup Program staff is funded primarily through direct billing (cost recovery) of dischargers who have either requested oversight or have been ordered by the Water Boards to conduct investigation and cleanup efforts.

Caseload and backlogged cases. Statewide, there are about 4,000 open cases which include active and inactive cleanup cases. Approximately 81 positions support oversight for about 2,800 of the open cases primarily through cost recovery from responsible parties. Due to several reasons including but not limited to, staff resources, insolvent dischargers, restrictions in property access, etc., the Site Cleanup Program has a backlogged caseload of approximately 1,000 cases.

Per- and polyfluoroalkyl substances (PFAS). PFAS represents a suite of over 6,000 manmade chemicals used in a wide variety of products due to its water repellency and stability at very high temperatures. Some products include cleaning products, paints, water-resistant fabrics, water-resistant carpeting, and fire-fighting foams.

PFAS contamination in soil and groundwater presents a significant threat since it is highly toxic, mobile in groundwater, and will not degrade in nature. All these factors contribute to increased concern with potential impact to water supply sources and drinking water wells from these contaminants if source investigations and cleanups are not completed in a timely manner and with adequate oversight by the RWQCBs.

There are numerous PFAS cases, and they continue to grow. The Site Cleanup Program is the primary Water Boards program overseeing the Statewide PFAS initiative to identify sites that may be contaminated with PFAS and issue directives for investigation and potential cleanup. By spring 2021, the Water Board will have issued 462 investigation orders to 30 airports, 271 chrome plating facilities, and 161 bulk fuel terminals/refineries to investigate the presence of PFAS in soil and groundwater.

SWRCB anticipates that approximately 270 of the 462 PFAS sites will detect PFAS in soil and groundwater requiring further investigation and eventual cleanup. Thus, the Site Cleanup Program will add approximately 270 new PFAS cases to its active cases by the end of 2020-21 fiscal year. Beyond 2020-21 fiscal year, SWRCB will be targeting other airports, fire training areas, and other industrial sites that may have used PFAS at their facilities. As such, SWRCB anticipates an increase of active PFAS cases beyond the 2020-21 fiscal year.

Staff Comments. Given the widespread use of PFAS and its persistence in the environment, PFAS levels from past and current uses can accumulate and result in increasing levels of toxic contamination. It would be prudent to provide SWRCB with additional resources to address the increasing number of PFAS cases.

Staff Recommendation. Approve as budgeted.

3960 DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)

Issue 9: BKK Facility: Coordinated Third-Party Enforcement

Governor's Proposal. The Governor's budget requests $282,000 Toxic Substances Control Account (TSCA) annually for two years to implement a Third-Party Enforcement Initiative in coordination with the BKK Working Group, a group of approximately 50 cooperating potentially responsible parties. The ThirdParty Enforcement Initiative will conduct cost recovery against approximately 12,000 third party arrangers who sent hazardous substances to the BKK Class I Hazardous Waste Landfill (Site) with the objective of recovering past and future response costs incurred by DTSC and the BKK Working Group at the Site.

This proposal is contingent on the passage of the DTSC Control Governance and Fee Reform, which will provide a sustainable funding source for the Toxic Substances Control Account.

Staff Recommendation. Approve as budgeted.

Issue 10: Cost Recovery Management System (CRMS) IT Project

Governor's Proposal. The Governor's budget requests $2.1 million in 2021-22, $1.6 million in 2022-23, and $750,000 annually thereafter, split between the Hazardous Waste Control Account (HWCA), TSCA, and Lead Acid Battery Clean-up Fund (LABCF) to continue and complete the remaining project phases of the Cost Recovery Management System (CRMS) information technology platform upgrade project. Upgrading the CRMS platform provides the system and tools necessary to hold polluters accountable for the costs of remediating their contamination. The upgrade is also necessary to comply with AB 273 (Committee on Environmental Safety and Toxic Materials), Chapter 456, Statutes of 2015.

Staff Recommendation. Approve as budgeted.

Issue 11: National Priorities List and State Orphan Sites

Governor's Proposal. The Governor's budget requests a transfer of $19.55 million from TSCA to the Site Remediation Account to fund the state's National Priorities List obligations and state orphan sites with Priorities 1A, 1B, and 2.

Staff Recommendation. Approve as budgeted.

3970 DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE)

Issue 12: Plastic Beverage Container Minimum Content Standard Implementation

Governor's Proposal. The Governor's budget requests one position and $129,000 Beverage Container Recycling Fund (BCRF) in 2021-22, an additional five positions and $805,000 BCRF in 2023-24, and an additional three positions and $1.2 million BCRF in 2024-25 and ongoing, for a contracted biennial study. The resources will be used to implement AB 793 (Ting), Chapter 115, Statutes of 2020, which requires beverage manufacturers to include a minimum amount of postconsumer recycled plastic in all plastic beverage containers subject to the California Refund Value (CRV).

Background. ***AB 793.*** AB 793 requires beverage manufacturers to utilize specified amounts of recycled content in California Redemption Value (CRV) plastic beverage containers sold within the state. AB 793 requires the recycled content in CRV plastic beverage containers to be 15 percent by 2022, 25 percent by 2025, and 50 percent by 2030. Beginning in 2025, the CalRecycle will have the authority to review and adjust the minimum recycled content requirement annually, or at the petition of the beverage manufacturing industry.

Beginning in 2023, AB 793 authorizes the department to assess a fixed administrative penalty rate on non-compliant beverage manufacturers. CalRecycle will be able to asses the penalty rate based on the shortfall of recycled content used compared to the minimum content requirement. In addition, AB 793 requires CalREcycle to consider granting a reduction of the administrative penalty if a beverage manufacturer submits a corrective action plan. AB 793 establishes additional reporting requirements for reclaimers and manufacturers of recycled plastic. This bill creates new mandates, processes, and reporting requirements for existing participants in the Beverage Container Recycling Program (BCRP) and expands BCRP's scope of authority.

Based on data received from beverage manufacturers on the amount of virgin and recycled plastic used in CRV beverage containers, an average of 15 percent minimum recycled content was used by beverage manufacturers who reported in 2019.

Staff Recommendation. Approve as budgeted.

DISCUSSION

0555 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY (CALEPA)

Issue 13: Environmental Justice Small Grant Program

Governor's Proposal. The Governor's budget requests $1.5 million Toxic Substances Control Account (TSCA) ongoing to support the Environmental Justice (EJ) Small Grant Program. The Environmental Justice Small Grant Program awards grants to assist eligible non-profit community organizations and federally recognized Tribal governments addressing environmental justice issues in areas disproportionately affected by pollution and health and environmental hazards. This proposal is contingent on the passage of the Department of Toxic Substances Control Governance and Fee Reform proposal, which is intended to provide a sustainable funding source for TSCA.

Background. ***The Environmental Justice (EJ) Small Grant Program.*** The EJ Small Grant Program was established in 2002 for the purpose of providing small grant to community-based non-profit organizations and tribal governments affected by environmental pollution and hazards that work to address EJ issues. Since its inception, the program has awarded more than $6.5 million to community-based organizations and federally recognized tribal governments that address EJ issues at the grassroots level. The program is statutorily limited to $1.5 million annually and has been funded by a variety of CalEPA special funds on an annual basis.

In the last two years, the program has regularly received nearly 100 applications per grant cycle and has been able to award grants to a quarter of the projects proposed. In 2020, program applicants requested over $4.3 million in grant funds and the program awarded a total of $1.1 million to 28 non-profit organizations and tribal governments. Awarded projects focus on the following objectives:

- Improving access to safe and clean drinking water
- Mitigating, responding, and adapting to climate change impacts through developing and implementing community led solutions.
- Promoting pollution prevention and resource conservation.
- Reduction exposure to toxic pesticides and other chemicals.
- Building community capacity and strengthening collaboration with schools and local government to address cumulative pollution burdens and increase community knowledge.

Examples of recent projects funded by the program include:

- The California Healthy Nail Salon Collaborative project will train at least 2,500 nail salon workers and owners how to reduce their exposure to toxic chemicals and COVID-19.
- The Earth Team in Contra Costa and Alameda Counties will develop climate hazards action plans at four Title 1 high schools.
- The Conservation Corps of Long Beach project will train youth on how to provide low-income households with new, drought-tolerant garden landscapes and teach youth and residents about environmental restoration.
- The Fresno Metro Black Chamber Foundation will address birth outcome disparities in African American Fresno County communities through creation of a training curriculum and toolkit that highlights the importance of prenatal health, air quality, and the impact of climate change and the reduction of greenhouse gases (GHG) in the environment on prenatal care.

Toxic Substances Control Account (TSCA). This account was created to provide for response authority for releases of a hazardous substances, including spills and hazardous waste disposal sites posing a threat to public health or the environment. TSCA also compensates persons, under certain circumstances, for out-of-pocket medical expenses and lost wages or business income resulting from injuries proximately caused by exposure to releases of hazardous substance. TSCA provides contract costs for the cleanup of orphan and National Priority List sites, as specified. In addition, TSCA funds related activities within the Department of Justice, the Department of Public Health, the Office of Environmental Health Hazard Assessment, and the State Controller's Office.

Major sources of revenue for TSCA include various charges, fines, and penalties. TSCA typically receives about 80 percent of its revenue from an environmental change levied on organizations that use, generate, store, or conduct activities related to hazardous materials. The amount of the charge is scaled based on the number of employees the organization has. For example, organizations with between 50 employees and 75 employees pay $352 annually. Organizations with 1,000 or more employees pay $16,681 annually. In addition, over the past few years, TSCA has received General Fund loans to expedite the cleanup of contamination from the Exide Technologies Facility. These loans from TSCA have been large enough in recent years to account for roughly half of TSCA's revenues.

Staff Comments. The 2018 Budget Act included a similar request for one-time funding of up to $1.5 million for the EJ Small Grants Program appropriating money from from a variety of sources — penalty revenue within the Air Pollution Control Fund, the California Beverage Container Recycling Fund, the Waste Discharge Permit Fund, and TSCA, all of which are administered by boards and departments under CalEPA. Appropriating from several different funds that are administered by different boards and departments makes sense considering the EJ Small grant program funds a variety of these issues associated with these boards and departments.

This BCP requests funding from a single source, TSCA. However, as shown above, the EJ Small Grants Program does not provide funding exclusively for issues concerning the release of hazardous substances. To provide ongoing funding for the EJ Small Grant Program solely from TSCA raises concern considering the EJ grants are for issues in multiple arenas, not just toxics.

In recent years, the growth in expenditures from TSCA has outpaced growth in revenues, transfers, and other adjustments, creating a structural imbalance. According to estimates, in 2018-19, TSCA expenditures were $13.1 million greater than revenues (excluding expenditures and the General Fund transfer for Exide cleanup). According to the Administration, the structural imbalance is due, in part, to additional operational costs to implement expanded responsibilities the department has been given since 2000. In a separate proposal, the Administration proposes governance and fiscal reform to DTSC, including revamping how TSCA receives revenues. The DTSC structural deficit, TSCA, has been an ongoing issue for several years now with multiple attempts to resolve it. This BCP is contingent on the passage of the DTSC reform proposal..

Staff Recommendation. Hold open.

0555 California Environmental Protection Agency (CalEPA)
3900 California Air Resource Board (CARB)

Issue 14: Oversight Hearing: Cap-and-Trade Program

Speakers.

- Ross Brown, Principal Fiscal & Policy Analyst, Legislative Analyst's Office (LAO)
- Jared Blumenfeld, Secretary, California Environmental Protection Agency
- Liane Randolph, Chair, California Air Resources Board
- Danny Cullenward, Policy Director, Carbon Plan, and Lecturer, Stanford Law School

Background. ***Climate Change Impacts and State Actions.*** According to the LAO, researchers project that climate change will have myriad consequential effects through California. These include sea-level rise, inland flooding, more severe heat days, more frequent drought, and increased risk of wildfires. These climate change effects have the potential to damage infrastructure, adversely affect human health, impair natural habitats, and affect regional economies.

State and local governments are already taking action to try to reduce the magnitude of future damages from climate change. Perhaps most notably, the Global Warming Solutions Act of 2006 (AB 32 (Nunez and Pavley), Chapter 488, Statutes of 2006) established the goal of limiting greenhouse gas (GH) emissions statewide to 1990 levels by 2020. Subsequently, SB 32 (Pavley), Chapter 249, Statutes of 2016, established an additional GHG target of reducing emissions by at least 40 percent below 1990 levels by 2030. To achieve these goals, the state has adopted a wide variety of regulations and provided funding to different programs — largely from the state's Greenhouse Gas Reduction Fund (GGRF) — to reduce emissions. Collectively, these activities are often referred to as climate mitigation.

Another sort of action — often known as climate adaptation — relates to planning for and implementing projects that reduce the risk of future damage that could occur as a result of climate change even if global GHG emissions are reduced substantially in the coming decades. Unlike mitigation, there are no statutory goals guiding climate adaptation, but the state is in the early stages of expanding and increasing focus on adaptation activities.

The state has dozens of different programs aimed at reducing GHG emissions — many of which are regulatory programs. Major policies to meet statewide GHG limits include:

- *Cap-and-Trade.* Regulation that establishes a "cap" on overall emissions from large emitters by issuing a limited number of permits (also known as allowances). Allowances can be brought and sold (traded), which creates a market price for allowances and an incentive for lowest cost reductions.

- *Short-Lived Climate Pollutants*. Regulations and financial incentives (such as grants) intended to reduce certain types of emissions from dairies, landfills, and refrigeration equipment.

- *Renewable Portfolio Standard.* Regulations that require utilities to provide 60 percent of electricity from qualifying renewable sources, such as wind and solar, by 2030.

- *Energy Efficiency.* Regulations and financial incentives to encourage more efficient energy use in commercial buildings, homes, and manufacturing facilities.

- *Low Carbon Fuel Standard (LCFS).* Regulation that requires transportation fuel suppliers to reduce the amount of GHGs per unit of fuel used in California — also known as the carbon intensity of fuels.

- *Vehicle-Related Programs.* Regulations and incentives (such as grants and rebates) to encourage more efficient light- and heavy-duty vehicles, as well as promote certain types of technologies such as electric vehicles.

- *Vehicle Miles Traveled.* Planning strategies and financial incentives intended to reduce the amount of light-duty vehicle use through such things as increased transit and changes to land use.

As shown above, the Cap-and-Trade program is one in a suite of programs aimed at reducing GHG emissions.

Cap-and-Trade Program. *Purpose of Market-Based Mechanisms.* Cap-and-trade is one commonly discussed market-based approach to reducing GHG emissions. (The other market-based approach most commonly discussed is a carbon tax.) Cap-and-trade differs from other regulatory approaches, such as traditional command-and-control regulations. Under traditional regulations for reducing emissions, government requires businesses to install a certain type of emission reduction technology or meet a certain minimum emissions standard. When discussed in relation to market-based approaches, these regulatory approaches are sometimes referred to as direct regulations or complementary polities. In contrast, a market-based approach like cap-and-trade adds a financial incentive for private business and consumers to reduce emissions. The private sector has flexibility to determine which emission reduction activities are least costly and whether the costs of the activities are less than the financial cost of continuing to emit GHGs. The supply and demand of allowances in a trading market generally determine the price of an allowance.

California's Cap-and-Trade Program. The original Cap-and-Trade program was recommended by CARB as a central approach to flexibility and iteratively reduce emissions over time. AB 32 authorized ARB to implement a market-based mechanism — known as a cap-and-trade program — through 2020. CARB adopted Cap-and-Trade regulations and those regulations were approved in December, 2011.

AB 398 (E. Garcia), Chapter 135, Statutes of 2017, extended the authority of CARB to implement a Cap-and-Trade program to reduce GHG emissions throughout the state until December 31, 2030. AB 398 specified a variety of requirements on the post-2020 Cap-and-Trade program; most notable are (1) requiring the banking of allowances from the current Cap-and-Trade program into the post-2020 program, (2) specifying industry assistance factors for the post-2020 program, and (3) the adoption of a price ceiling in the program, at which point an unlimited number of allowances must be made available for purchase.

The Cap-and-Trade regulation — administered by CARB — places a "cap" on aggregate GHG emissions from large emitters, such as large industrial facilities, electricity generators and importers, and transportation fuel suppliers. Capped sources of emissions are responsible for roughly 75-80 percent of the state's GHGs. To implement the program, CARB issues a limited number of allowances, and each allowance is essentially a permit to emit one ton of carbon dioxide equivalent. Entities can also "trade" (buy and sell on the open market) the allowances in order to cover their total emissions. Covered entities can also purchase "offsets" generated from projects that reduce emissions from sources that are not capped.

Over time, the cap declines, resulting in GHG emission reductions. Two forms of compliance instruments are used: allowances and offsets. Allowances are generated by the state in an amount equal to the cap and may be "banked" (i.e., allowing current allowances to be used for future compliance). An offset is a credit for a real, verified, permanent, and enforceable emission reduction project from a source outside a capped sector (e.g., a certified carbon-storing forestry project). Some fraction of allowances are allocated freely to covered entities, a small portion are set aside as part of an allowance price-containment reserve (a cost-containment mechanism that releases additional allowances into the market to slow price increases), and the rest are auctioned off quarterly.

One important aspect of implementing a cap-and-trade program is determining how to distribute allowances. In theory, allowances can be issued in one of three general ways: (1) they can be given away for free, (2) they can be auctioned by the state, or (3) some portion can be freely allocated while the other portion is auctioned. For example, ARB offered 46 percent of 2016 allowances at auctions and gave 50 percent away for free. (four percent of allowances are made available at predetermined prices — a strategy intended to moderate potential spikes in allowance prices.) Of the 50 percent of allowances given away for free, most were given to investor-owned utilities (IOUs) (16 percent), certain industrial emitters (14 percent), natural gas suppliers (12 percent), and publicly owned utilities (8 percent). State law and regulation require IOUs to auction their allowances and most of the resulting revenue must be credited to their industrial, small businesses, and residential electricity customers. CARB allocates free allowances to certain energy-intensive trade-exposed industries based on how much of their product (not GHG emissions) they produce in California. The more they produce in the state, the more free allowances they receive. This strategy is intended to prevent emissions leakage.

Cap-and-Trade was designed as a "backstop" to other climate change policies in the march to the AB 32 goal, with the bulk of GHG emission reductions coming from other measures. Although these measures are often called "complimentary," including the Short-Lived Climate Pollutant Strategy, Renewable Portfolio Standard, energy efficiency, Low Carbon Fuel Standard, and various vehicle-related programs, these measures have been the main drivers of GHG emissions reductions in California. As such, it would be more accurate to describe the Cap-and-Trade program as the complimentary measure to California's other GHG emission reduction strategies. The design of the Cap-and-Trade program also explains why forecasts estimate that the program will only be responsible for 5-22 percent of the GHG emission reductions needed to reach the AB 32 goal (the range being the result of how skeptical or generous those doing forecasts chose to be).

The anticipated emissions reductions attributable to the Cap-and-Trade program have risen from 20 percent by 2020 (according to the 2008 Scoping Plan), to 38 percent cumulatively over the next decade, including nearly half of the annual emission reductions in 2030 (according to the 2017 Scoping Plan).

However, at a CARB meeting on December 13, 2018, while the board was contemplating amendments to the Cap-and-Trade program post-2020, Chair Nichols stated:

> We have a lot more [greenhouse gas emissions] reductions that we need going forward. We now know that we are not on a line that's going to meet the 2030 target, much less the 2045 goal of carbon neutrality, and so we're going to have to step back and take a serious look at the role that Cap-and-Trade and other measures play in getting us to that point.

Last year, Senate Budget Subcommittee 2 and subsequently the Senate adopted a directive to CARB to consider changes to the Cap-and-Trade program. CalEPA Secretary Jared Blumenfeld responded to the Senate's proposal with a letter committing CalEPA committing CalEPA to work with the Legislature and CARB to examine the program's role in California's 2030 climate strategy and ensuring a comprehensive review to consider the extent to which the state's climate strategy should rely on the Cap-and-Trade program, an evaluation of potential changes to the program, and identification of areas where new legislation could further the successful implementation of California's climate strategy.

State GHG Targets and Policies. *AB 32 and Scoping Plan.* AB 32 established the goal of limiting GHG emissions statewide to 1990 levels by 2020. The legislation directed ARB to adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions by 2020.

CARB is required to develop a Scoping Plan to achieve the emission targets and update the plan periodically. These scoping plans include a wide variety of regulations intended to help the state meet its GHG goal, such as regulations mentioned previously like Cap-and-Trade, LCFS, and energy efficiency. Considering Chair Nichols remarks in December 2018 noted above, a question arises of how much of a role should the Cap-and-Trade Program have in the overall plan to achieve emission targets. The next update to the Scoping Plan is slated for 2022 and the process for doing the update is expected to begin soon.

Scoping Plan. According to the 2020 Annual Report of the Independent Emissions Market Advisory Committee (IEMAC) chapter, "Scoping Plan," authored by Meredith Fowlie and Danny Cullenward:

> State law requires [CARB] to update its official strategy for achieving California's climate targets at least once every five years. California has considered the role of the Cap-and-Trade program in three such Scoping Plans to date ([CARB], 2008; [CARB], 2013, [CARB], 2017; Mastrandrea et al. (2020), Assessing California's progress toward its 2020 greenhouse gas emissions limit, *Energy Policy* 138: 111219.) and is preparing to commence a regulatory process in early 2021 to develop a fourth effort...
>
> The Board has a statutory obligation to establish sufficiently stringent emissions regulations so as to provide has a statutory obligation to establish sufficiently stringent emissions regulations so as to provide confidence that the state will meet its annual GHG emissions targets in milestone years. In each of the three previous Scoping Plans, the Board has relied on the Cap-and-Trade program as a backstop guarantee that the state will meet these annual targets. However, to function in this role, the Cap-and-Trade program must be designed so that the limited supply of compliance instruments will deliver targeted GHG emissions outcomes, such as the statutory statewide limits on annual emissions in 2020 and 2030 — no matter the performance or stringency of other climate policy measures in the Scoping Plan.
>
> The most important GHG, carbon dioxide, known as a "stock" pollutant because its climate impacts are a function of cumulative emissions over time. In theory, there are significant efficiency gains from designing GHG Cap-and-Trade programs to meet a *cumulative* emissions target. Under a cumulative target, allocating permits in advance of need (and allowing banking over time) can increase economic efficiency by improving price stability, facilitating inter temporal arbitrage, and enabling cost-effective abatement investment trajectories. In contrast, California's statewide policy targets, such as the limits set by AB 32 and SB 32 for 2020 and 2030, respectively, are denominated in terms of *annual* emissions. A Cap-and-Trade program that features allowance banking rules (as California's does) can deliver on a cumulative emissions target, but does not provide the backstop guarantee on annual emissions targets that

many policymakers assume. Furthermore, compliance with statewide policy targets is measured on the basis of statewide emissions, about 75 percent of which are covered by the Cap-and-Trade program.

As a result of these two issues — the difference between cumulative and annual emissions, as well as the difference between cumulative and annual emissions — the Cap-and-Trade program's cumulative emissions budgets do not guarantee that the state achieves a specific annual emissions limit. Translating a cumulative emissions budget into annual statewide emissions outcomes requires detailed assumptions about uncertain variables such as macroeconomic growth, technological change, non-covered emissions outside the Cap-and-Trade program, and allowance banking with the Cap-and-Trade program. If expectations about any of these variables turn out to be incorrect, changes to future Cap-and-Trade emissions budgets could be needed to recalibrate the system and maintain a backstop approach.

Cap-and-Trade programs can also be designed with "hybrid" features, such as administratively determined minimum floor and maximum ceiling prices. These features are particularly important because uncertainty in business-as-usual emissions and n emission reductions from other climate policies increase the likelihood that hybrid program features will constrain market prices (Borenstein et al., 2019, Expecting the Unexpected: Emissions Uncertainty and Environmental Market Design, *American Economic Review* 109(11): 3953-77). This finding highlights the importance of setting hybrid program features through careful analysis that is linked to specific policy goals.

Although the California Cap-and-Trade program was initially designed without a price ceiling to ensure the state would meet milestone annual emissions targets, the 2017 Cap-and-Trade extension bill, AB 398 (E.Garcia), Chapter 135, Statutes of 2017, required [CARB] to add one. A 2018 rulemaking process implementing that bill retained the program's minimum floor prices, which were developed in 2010 before California adopted its 2030 climate target. It also added new intermediate price containment points, implemented the new price ceiling, and emphasized a "steadily increasing carbon price signal" in support of needed emission reductions ([CARB] (2018), 2018 cap-and-trade regulations ISOR Appendix D: AB 398L: Evaluation of Allowance Budgets 2021 through 2030; Cullenward (2018), IEMAC 2018 Annual Report, Appendix B). Although there is nothing wrong with this description — indeed we should expect to see steadily increasing carbon prices when annual emissions limits are tightening — The Board did not specify what price levels would likely be needed to support the SB 32 target. Meanwhile, the large quantity of banked allowances raises concerns that the Cap-and-Trade program will not be up to the task of constraining 2030 emissions below the SB 32 target (Cullenward et al. (2019), Tracking banking in the Western Climate Initiative cap-and-trade program, *Environmental Research Letters* 14: 124037; Inman et al. (2020), An open-source model of the the Western Climate Initiative cap-and-trade programme with supply-demand scenarios to 2030, *Climate Policy* 20(5): 626-40.).

Economists agree that carbon pricing programs can contribute to the cost-effective realization of climate policy goals, whether structured in terms of explicit prices, quantity targets, or a hybrid policy that combines both features (Goulder and Scheib (2013), Carbon Taxes Versus Cap-and-Trade: A Critical Review, *Climate Change Economics* 4(3): 1350010.). Nevertheless, it is important to align California's Cap-and-Trade program design with its evolving role in the state's comprehensive climate policy portfolio.

[CARB] has an opportunity in the upcoming Scoping Plan process to align the analytical framework it uses to design the Cap-and-Trade program and the role the Board expects the program to play in supporting its statutory obligation to limit annual emissions in 2030. [IEMAC] believe[s] the additional clarity about the intended function of the Cap-and-Trade program would be beneficial in the upcoming Scoping Plan process and could be used to help guide any consideration of potential Cap-and-Trade program reforms.

IEMAC Recommendations. IEMAC urges CARB to focus on analytical consistency between the upcoming Scoping Plan, which charts a course towards an annual GHG target, and the Cap-and-Trade program, which is designed to meet a cumulative GHG target. To achieve consistency, CARB should elucidate the desired role of the Cap-and-Trade program in California's overall climate strategy and review the current market design in light of that preferred direction. Given the "hybrid" design of the current Cap-and-Trade program, CARB could consider identifying a range of carbon prices that are consistent with the portfolio of strategies adopted in its final Scoping Plan and align the Cap-and-Trade program design with its desire carbon price trajectories. Alternatively, if CARB prefers to design the program as a backstop guarantee on the state's 2030 climate target, then it should focus on a comprehensive analysis of market oversupply conditions and design cap-and-trade program reforms to fully address those concerns.

Conclusion. This is a time of several fresh starts — A change in leadership at the federal level, a new Chair at CARB, three other newly appointed CARB members, and an update to the Scoping Plan beginning soon. It is an opportune moment to reevaluate the Cap-and-Trade program's role in achieving the state's GHG emissions reduction goals as well as make improvements to the program in order to reach those goals.

3900 CALIFORNIA AIR RESOURCE BOARD (CARB)
3940 STATE WATER RESOURCES CONTROL BOARD
3540 DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CALFIRE)
8570 DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)

Issue 15: Cap-and-Trade Expenditure Plan

Governor's Proposal. The Governor's budget proposes $1.369 billion Greenhouse Gas Reduction Fund (GGRF) for a number of programs. Specifically, this proposal includes $624 million for early action in 2020-21 and $745 million in 2021-22. This proposal also includes budget bill language for 2020-21 and 2021-22 restricting departments from encumbering or committing more than 75 percent of their GGRF appropriations prior to the fiscal year's fourth quarterly Cap-and-Trade auction. The chart below details each proposed discretionary expenditure and their amounts for early action or budget year.

Cap and Trade Expenditure Plan
(Dollars in Millions)

Investment Category	Department	Program	Early Action 2020-21	Budget Year 2021-22	Total
Equity Programs	California Air Resources Board	AB 617 - Community Air Protection	$125	$140	$265
		AB 617 - Local Air District Implementation	$0	$50	$50
		AB 617 - Technical Assistance to Community Groups	$0	$10	$10
	Water Board	Safe & Affordable Drinking Water ($130 million total)	$30	$24	$54
Low Carbon Transportation & ZEV Strategy	California Air Resources Board	Clean Trucks, Buses, & Off-Road Freight Equipment	$165	$150	$315
		Clean Cars 4 All & Transportation Equity Projects	$74	$76	$150
		Agricultural Diesel Engine Replacement & Upgrades	$90	$80	$170
Natural & Working Lands	CAL FIRE	Healthy & Resilient Forests (SB 901) ($75 million included in 2020 Budget)	$125	$200	$325
	Department of Food & Agriculture	Healthy Soils	$15	$15	$30
	Total		**$624**	**$745**	**$1,369**

Below are descriptions of each of the expenditure proposals:

Equity Programs. The Cap-and-Trade Expenditure Plan continues a strong focus on community air protection by providing $325 million to support the AB 617 program, which reduces exposure in communities with disproportionate exposure to air pollution through targeted air monitoring and community emissions reduction programs. This support includes grants to community-based organizations, implementation funding for local air districts, and incentives for cleaner vehicles and equipment.

CARB: AB 617—Community Air Protection — $125 million in 2020-21 and $140 million in 2021-22 for incentive actions to reduce both stationary and mobile source emissions in communities identified as heavily impacted by air pollution. Under the Community Air Protection Program (AB 617), CARB will continue to identify at-risk communities and key measures to reduce neighborhood pollution.

CARB: AB 617—Local Air District Implementation—$50M in 2021-222 to support local air districts' implementation of AB 617, including establishing and coordinating community steering committees, emissions reduction program development, deployment of air monitoring within communities, and implementation of Best Available Retrofit Control Technologies (BARCT) requirements.

CARB: AB 617—Technical Assistance to Community Groups—$10 million in 2021-22 for technical assistance grants to community-based organizations to participate in the AB 617 process, including for involvement and support of the development of community emission reduction plans.

SWRCB: Safe and Affordable Drinking Water — SB 200 (Monning), Chapter 120, Statutes of 2019, created the Safe and Affordable Drinking Water Fund, which provides up to $130 million per year to assist water systems in providing a safe and affordable supply of drinking water to communities. This is achieved by accelerating the implementation of short- and long-term solutions, funding consolidations, planning, technical assistance, administrators, replacement water, and operations and maintenance. Projects funded by the program will improve climate change adaptation and resiliency of disadvantaged communities. Health and Safety Code Section 39719(a)(3) requires five percent of annual Cap and Trade proceeds be transferred to the Safe and Affordable Drinking Water Fund. This proposal authorizes an additional amount to be transferred to the Safe and Affordable Drinking Water Fund but not to exceed a total of $130 million.

Low Carbon Transportation & ZEV Strategy. Executive Order N-79-20 directly addresses California's transportation emissions challenge by position state agencies to work with stakeholders to aggressively scale the zero-emission vehicle (ZEV) market in ways that benefit all Californians. To help the state meet the targets set in the order, the Cap and Trade Expenditure Plan includes $465 million to improve access to new and used zero-emission vehicles, including passenger cars and trucks, medium- and heavy-duty vehicles, and off-road equipment. The Expenditure Plan also includes investments in existing transportation equity programs such as Clean Cars 4 All, Clean Mobility Options, and Financing Assistance, as well as heavy-duty vehicles programs such as the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project and the Clean Off-Road Equipment Voucher Incentive Project. These programs also reduce harmful air pollutants that have a disproportionate impact on disadvantaged populations in both urban and rural communities. Complementing this funding, the Expenditure Plan includes $170 million dedicated to reducing emissions from agricultural vehicles.

CARB: Clean Trucks, Buses, and Off-Road Freight Equipment — $165 million in 2020-21 and $150 million in 2021-22 for incentives for zero-emission trucks, transit buses, school buses, and freight equipment in the early stages of commercialization. These investments support the equitable transition of the transportation sector to zero-emission and provide critical air quality and health benefits to communities.

CARB: Clean Cars 4 All and Transportation Equity Projects — $74 million in 2020-21 and $76 million in 2021-22 for equity-focused investments that increase access to clean transportation for low-income households and disadvantaged communities. Projects include voluntary Clean Cars 4 All car scrap-and-replace incentives, financing assistance for low-income consumers, clean mobility options such as car sharing, community-based transportation equity projects, and rural school bus replacement.

CARB: Agricultural Diesel Engine Replacement & Upgrades — $90 million in 2020-21 and $80 million in 2021-22 for farmers and agricultural businesses to replace existing diesel, agricultural vehicles and equipment with the cleanest available diesel or advanced technologies. Emissions from agricultural equipment are a significant source of air pollution, especially in the San Joaquin Valley, and reducing these emissions is critical for meeting health protective federal air quality standards.

Natural & Working Lands. As the state works to achieve carbon neutrality by mid-century, the agricultural and forestry sectors will be essential to both reducing emissions and sequestering carbon. Consistent with the Natural and Working Lands Executive Order N-82-20, this proposal includes $30 million one-time for the Healthy Soils Program to provide grants for on-farm soil management practices that sequester carbon. The Expenditure Plan also continues investments for CalFire for forest health and fire prevention programs consistent with the directives of SB 901 (Dodd), Chapter 626, Statutes of 2018.

CalFire, Healthy & Resilient Forests and Prescribed Fire and Fuels Crews — $125 million in 2020-21 and $200 million for forest health and fire prevention activities, including prescribed fire and other fuel reduction activities, to build healthy and fire resilient forests. This includes funding for projects and grants for fuel reduction and tree thinning; reforestation; forest insect and disease mitigations; prescribed fire; local community capacity development; research; and other forest resilience activities, such as conservation easements or other actions to restore watershed health and function, and support biodiversity and adaptation to climate change. This also includes funding for a total of 10 dedicated fuels crews and related staff necessary for CalFire to increase the pace and scale of prescribed fire and other fuel reduction activities to better meet CalFire annual fuel reduction goals and the state's carbon goals. Additionally, SB 901 made $200 million available to CalFire for these purposes annually through 2023-24. The 2021-22 Budget proposes trailer bill language to make this annual funding available to CalFire through 2030.

In addition to the resources above, the Budget proposes additional one-time funding for CalFire and various other departments to increase the pace and scale of forest health and fire prevention activities. For more information, see the Wildfire and Forest Resilience Strategy Budget Change Proposal.

California Department of Food and Agriculture, Healthy Soils Program — $15 million in 2020-21 and $15 million in 2021-22 to support the Healthy Soils Program (HSP). The HSP consists of Healthy Soils Incentives and Demonstration Project grants. The HSP Incentives Program provides financial incentives to California growers and ranchers to implement conservation management practices that sequester carbon, reduce atmospheric GHG, and improve soil health. The HSP Demonstration Project grants provide on-farm demonstration projects that collect data and/or showcase conservation management practices that mitigate GHG emissions and increase soil health. The projects create a platform to promote widespread adoption of conservation management practices throughout the state. The funds will also be used for Technical Assistance for the Healthy Soils Incentives applicants, planning grants for HSP Demonstration Projects, and administrative costs to implement the HSP.

Background. ***Cap-and-Trade Part of State's Strategy for Reducing GHGs.*** AB 32 (Núñez/Pavley), Chapter 488, Statutes of 2006 established the goal of limiting greenhouse gas (GHG) emissions, statewide, to 1990 levels by 2020. Subsequently, SB 32 (Pavley), Chapter 249, Statutes of 2016 established an additional GHG target of reducing emissions by at least 40 percent below 1990 levels by 2030. One policy the state uses to achieve these goals is a cap-and-trade program. The cap-and-trade regulation—administered by CARB — places a "cap" on aggregate GHG emissions from large emitters, such as large industrial facilities, electricity generators and importers, and transportation fuel suppliers. Capped sources of emissions are responsible for roughly 80 percent of the state's GHGs. To implement the program, CARB issues a limited number of allowances, and each allowance is essentially a permit to emit one ton of carbon dioxide equivalent. Entities can also "trade" (buy and sell on the open market) the allowances in order to obtain enough to cover their total emissions.

Auction revenue has been volatile in the past, but since the enactment of AB 398 (E. Garcia), Chapter 135, Statutes of 2017, which extended the program through 2030, revenues have stabilized and quarterly auction revenue has consistently exceeded $600 million—reaching about $800 million in the most recent auction.

Auction proceeds. The proposed expenditure plan is based on cap and trade auctions generating an estimated $2.121 billion in 2020-21, which reflects actual August and November 2020 auctions results and assumes an average of these results for the February and May 2021 auctions. After accounting for estimates of the required transfers for the manufacturing tax credit (- $51 million) and fire prevention fee backfill (- $74 million), as well as additional interest earnings (currently assumed at $60 million), $2.056 billion is estimated to be available.

Cap and Trade Availability
Current Year 2020-21
(Dollars in Millions)

Revenues	Auction Proceeds	$2,121
	Estimated Interest Earnings	$60
	Subtotal, Revenues	**$2,181**
Statutory Obligations	State Responsibility Area Fee Backfill	$74
	Manufacturing Tax Credit	$51
	Net Available Resources	**$2,056**
Continuous Appropriations	High-Speed Rail Project	$499
	Affordable Housing & Sustainable Communities Program	$399
	Transit and Intercity Rail Capital Program	$200
	Low Carbon Transit Operations Program	$100
	Safe & Affordable Drinking Water Program	$100
	Subtotal, Continuous Appropriations	**$1,298**
Existing Commitments	2020 Budget Act—Baseline State Operations	$134
	Subtotal	**$134**
Amount Available for 2020-21 Appropriations		**$624**

Cap and Trade Availability
Budget Year 2021-22
(Dollars in Millions)

Revenues	Auction Proceeds	$2,256
	Estimated Interest Earnings	$60
	Subtotal, Revenues	**$2,316**
Statutory Obligations	State Responsibility Area Fee Backfill	$77
	Manufacturing Tax Credit	$52
	Net Available Resources	**$2,187**
Continuous Appropriations	High-Speed Rail Project	$532
	Affordable Housing & Sustainable Communities Program	$426
	Transit and Intercity Rail Capital Program	$213
	Low Carbon Transit Operations Program	$106
	Safe & Affordable Drinking Water Program	$106
	Subtotal, Continuous Appropriations	**$1,383**
Existing Commitments	Baseline State Operations	$59
	Subtotal	**$134**
Amount Available for 2021-22 Appropriations		**$745**

A Percentage of the Cap-and-Trade Proceeds are Continuous Appropriations. 65 percent of Cap-and-Trade auction proceeds are continuously appropriated on an annual basis to five programs, totaling an estimated $1.298 billion in 2020-21 and $1.383 billion in 2021-22. These programs are focused on reducing transportation emissions through investments in transit and transit-oriented development and include: High Speed Rail, Affordable Housing and Sustainable Communities, Transit and Intercity Rail Capital, Low Carbon Transit Operations, as well as Safe and Affordable Drinking Water.

Baseline State Operations. The 2020 Budget Act includes $133.6 million for departments to continue implementation of programs with funds authorized in previous fiscal years. The 2021-22 Budget proposes $59 million for this purpose. The main difference from 2020-21 levels is the inclusion of SB 901, expenditures in the Expenditure Plan proposal.

LAO Comments. ***Cap-and-Trade Auction Revenue Deposited in the GGRF.*** Funds are spent on a variety of environmental programs. About 65 percent of auction revenue is continuously appropriated to certain programs and projects, including high-speed rail, transit-related actives, and a program to provide safe and affordable drinking water. About $185 million is spent on annual state administrative costs and other ongoing statutory allocations such as backfilling revenue losses associated with 2017 legislation that suspended (1) a fee to support fire protection activities and (2) sales taxes for certain manufacturing equipment. The remaining revenue is available for expenditure in the annual budget — sometimes referred to as "discretionary expenditures."

2020-21 Budget Provided Limited Discretionary Funding Due to Revenue Uncertainty. Given uncertainty about auction revenue, the 2020-21 GGRF budget was limited to: (1) continuous appropriations, (2) about $125 million for ongoing statutory allocations, (3) $75 million for wildfire activities related to SB 901 (Dodd), Chapter 626, Statutes of 2018, and (4) $59 million to continue state administrative activities. The budget also authorized a loan from the Underground Storage Tank Clean-

Up (USTC) Fund to the Safe and Affordable Drinking Water Fund to ensure the program received $130 million in total funding even in the event that GGRF revenues were insufficient. The loan will be repaid by GGRF at a future date.

Expenditure Plan Assumes Lower Revenue Than Prior Years. Revenue is down from a high of $3.2 billion in 2018-19 to an estimated $2.1 billion in 2020-21 and $2.3 billion in 2021-22.

Less Funding Available for Discretionary Spending. The Governor's budget plan includes additional "early action" discretionary spending of $624 million in 2020-21, as well as total discretionary spending of $745 million in 2021-22. Discretionary spending in 2021-22 is only about half of what was provided in 2019-20 ($1.4 billion). Discretionary spending in the budget year is lower than previously primarily because lower revenue reduces the amount of funding available for spending — including for both continuous appropriations and discretionary spending. In addition, as part of the 2019-20 budget, the Legislature added a five percent continuous appropriation for safe and affordable drinking water, beginning in 2020-21. This reduces the amount of funding available for discretionary spending by about $100 million in 2021-22.

Funding Would Go to Programs That Have Received GGRF in Recent Years. Funding would go to a mix of programs that commonly receive discretionary GGRF funding. The Administration is not proposing funding for any new programs. The plan prioritizes repayment of the USTC Fund loan in 2020-21 (estimated to be $30 million) and additional funding to ensure the safe drinking water program receives a total of $130 million in 2021-22.

Other Programs That Commonly Received GGRF Are Not Included. Notably, the plan does not include funding for the Clean Vehicle Rebate Project (CVRP) — the state's main program to provide rebates for zero-emission vehicles. The expenditure plan has included funding for CVRP every year from 2014-15 to 2019-20. Other programs that have frequently received substantial annual GGRF allocations, but that are not included in this year's plan include waste diversion, dairy methane emission reductions, and Transformative Climate Communities. The Administration indicates that other programs will help support some of the activities that would not receive GGRF. For example, the newly implemented Clean Fuel Rewards Program administered by utilities provides $1,500 rebates for electric vehicles, and the Governor is proposing a new loan program through the Climate Catalyst Fund for dairy methane projects.

Revenue Estimates Are Reasonable, But Significant Uncertainty Remains. Revenue could be several hundred million dollars higher or lower in both the current year and budget year. A decline in overall economic conditions and/or financial markets can result in dramatic drops in quarterly auction revenues witnessed last year. On the other hand, it is possible that there is a substantial increase in revenue. For example, the Secretary of the California Environmental Protection Agency has expressed his intent to work with CARB to evaluate potential changes to the Cap-and-Trade program that might be necessary to achieve the state's GHG goals. Depending on the specific outcomes of this evaluation, changes could increase demand for allowances and prices.

Proposal Would Leave Small Fund Balance. Under the Governor's proposal, the GGRF fund balance would be slightly mor than $100 million at the end of the current year and budget year — roughly five percent of the estimated annual revenue. This is a small fund balance, particularly given the ongoing uncertainty and potential volatility of the revenue.

Early Action More Justified for Some Programs Than Others. *Early Action Presents Trade-Offs.* The main benefit of providing funding through early actions is that projects could be implemented a few months earlier than if funding were provided in the 2021-22 budget. However, early action reduces the Legislature's time to deliberate the merits and trade-offs associated with each proposal.

Most Cap-and-Trade Expenditures Not Addressing Urgent Needs. There could be a strong rationale for approving some funding a few months early. For example, early action can make sense if spending is needed to address an urgent public safety or economic challenges, such as those related to the pandemic. Most Cap-and-Trade programs do not fit these criteria.

Early Action on Wildfire-Related Funding Could Make Sense. There could be merit in providing funding for some forest health and resilience activities a few months earlier than if they were included in the 2021-22 budget. This allocation would be consistent with the direction in SB 901 to provide $200 million annually for these programs. In addition, based on discussions with the Administration, allocating GGRF funding this spring — before the 2021 fire season begins — could make it more likely that some high-priority projects are in place in advance of the 2022 fire season.

LAO Recommendations. ***Consider Reducing Amount Provided in 2020-21 Expenditure Plan.*** Given ongoing revenue uncertainty and a lack of urgency around many of the programs, the LAO recommends the Legislature consider limiting early action to an amount less than the $624 million proposed by the Governor. A couple of alternative early action plans that the Legislature could consider are:

- *Alternative No. 1 — Augment Only for Wildfire-Related Programs.* Limit additional current-year funding to only those activities where a strong rationale for early action exists, such as the $125 million for healthy and resilient forests.

- *Alternative No. 2 — Limit Early Action Spending to What Is "In the Bank."* For example, the LAO estimates there is currently about $300 million GGRF that has already been raised from earlier auctions, but that has not yet been allocated to other programs. This amount will likely increase after the upcoming auction in February. The Legislature could allocate up to $300 million — plus a portion of discretionary revenue collected from the February auction — in 2020-21 for programs that it determines to be high priorities.

Assess Resources Available for 2021-22 Expenditure Plan After Upcoming Auctions. The Legislature might want to re-assess the amount proposed in the 2021-22 Cap-and-Trade expenditure plan until after the results of the February and May auctions are available (late May). The state will have complete information about 2020-21 auction revenue at that time, including how much funding is available from the year-end fund reserves. These auction results could also help inform 2021-22 revenue estimates, although there will likely continue to be significant revenue uncertainty.

Consider Larger Reserve to Promote Long-Term Fund Solvency and Funding Predictability. Over the last several years, revenue volatility has resulted in unpredictable funding for many GGRF programs and administrative actions. For example, after the May 2020 auction generated very little revenue, the Department of Finance reduced over $100 million in GGRF allocations to select programs to ensure fund solvency, consistent with the authority it was given in the 2019-20 budget. The LAO recommends the Legislature consider alternative strategies to better ensure long-term fund solvency, as well as greater funding stability for high priority programs.

For example, the Legislature could begin building a larger reserve in the fund that would serve as a buffer against future revenue volatility. This is similar in concept to the approach the state has enacted for the General Fund, which relies heavily on volatile personal income tax revenues.

The "right" size of the reserve depends on the Legislature's overall risk tolerance, but the LAO thinks a target of 10 percent of annual revenue — which would be over $200 million for the GGRF — is a reasonable starting goal. However, the Legislature might want to consider a somewhat higher target, given the revenue volatility.

Allocate Discretionary Funding Based on Legislative Priorities. The Legislature will have to weigh many different priorities when considering how to allocate funds, including GHG reductions, local air quality improvements, safe drinking water, and forest health.

The state has multiple funding and regulatory programs designed to achieve many of these goals. So, once the Legislature determines its priorities for GGRF funds, it will want to try to identify the mix of programs that achieve those goals most effectively and, therefore, where GGRF funds can best be targeted.

For example, to the extent the Legislature considers GHG emission reductions the highest priority use of GGRF funds, it will want to identify the programs that achieve the goals most effectively. In prior reports, the LAO has identified some key factors the Legislature might want to consider when spending GGRF funds on GHG emission reduction efforts. For instance, the Legislature could:

- Consider targeting funds to address other "market failures" that current regulations do not address. For example, it could target funds to pilots and demonstrations for GHG reducing technologies because private companies do not always invest in these activities at a level that is socially optimal.

- Target funds to achieve GHG reductions from sources that are not currently covered but the Cap-and-Trade regulation. For example, it could prioritize programs aimed at reducing methane emissions from dairies or sequestering carbon in natural and working lands.

Staff Recommendation. Hold open.

Issue 16: Continuing Resources to Support Implementation of the Community Air Protection Program (AB 617)

Governor's Proposal. The Governor's budget requests $4.165 million GGRF ongoing to support 22 existing permanent positions that were approved in the 2017-18 Budget to meet the statutory requirements of AB 617 (C. Garcia), Chapter 136, Statutes of 2017. The positions are currently supported by temporary funding that is set to expire on June 30, 2021.

Background. ***Air Quality Regulation Divided Between CARB and Regional Air Districts.*** In California, CARB and 35 regional air pollution control and air quality management districts (air districts) share responsibility for the regulation of air quality. Historically, regulatory efforts have largely focused don reducing "criteria" pollutants that affect regional air quality, such as nitrogen oxides that contribute to smog. Regular air districts generally manage the regulation of *stationary sources* of pollution (such as factories) and prepare regional implementation plans to achieve compliance with federal and state air quality standards. CARB is responsible primarily for the regulation of *mobile sources* of pollution (such as cars and trucks) and for the review of regional air district programs and plans. (Regional air districts also administer some mobile source incentive programs.) Over the last few decades, the state has also developed various programs intended to reduce local toxic air pollution — such as diesel particulate matter and hexavalent chromium — and global pollution that contributes to climate change, such as carbon dioxide.

AB 617 Established New Program Focusing on Heavily Polluted Communities. Passed in 2017, AB 617 made a variety of changes that are intended to help monitor and reduce criteria and toxic air pollutants that have adverse effects on heavily polluted communities. Importantly, these changes focus on pollution a the *community level*, rather than focusing primarily on *global* or *regional* effects. Community-level effects include the cumulative pollution from regional criteria pollutants, as well as local toxic air pollutants. The changes are implemented by both CARB and air districts, in consultation with community groups and other state agencies. The major requirements and implementation time frames include:

- *Community Air Monitoring Systems.* AB 617 required CARB, by October 1, 2018, to (1) develop a statewide plan for monitoring community air pollution and (2) select the highest priority locations to deploy monitoring systems, based on their exposure to toxic and criteria pollutants. The purpose of the statewide monitoring plan is to provide guidance to air districts that will be deploying the monitoring systems in the selected communities. Once the initial communities (also known as "first year" communities) are selected, air districts must deploy the monitoring systems in those communities by July 1, 2020. Each year thereafter, CARB mist select additional communities to deploy monitoring systems, as it deems appropriate, and the regional air districts must deploy systems in those communities within one year.

- *Community Emission Reduction Plans.* AB 617 also required CARB to develop, by October 1, 2018, a statewide strategy to reduce toxic and criteria emissions in communities with high pollution, and to update the strategy every five years. As part of the statewide strategy, CARB is also required to select communities with high cumulative exposure to air pollutants that will develop emission reduction programs (also known as first year communities). Within one year of selecting the communities, air districts — in consultation with local community groups and other stakeholders — must develop community emission reduction plans for each selected community and submit them to CARB for review. The plans must include emission reduction targets, specific reduction measures, a schedule for implementation, and an enforcement plan.

CARB must select additional communities for emission reduction plans annually thereafter, as it deems appropriate.

- *Other AB 617 Changes.* AB 617 made a variety of other changes to air quality monitoring and regulation, including requirements that (1) CARB establish a uniform statewide system of reporting annual emissions of criteria pollutants from stationary sources, (2) CARB establish a clearinghouse that identifies best available technologies for pollution control, and (3) air districts adopt expedited schedules for requiring industrial facilities that are subject to the state's Cap-and-Trade regulation to install updated pollution control technologies if they have not done so since 2007. It also required CARB to provide grants to community-based organizations for technical assistance and to support community participation in the AB 617 process.

LAO Comments. In the 2017-18 budget, the Legislature approved $12 million GGRF ongoing funding for 50 positions and $4.2 million 2-year limited-term funding for 22 position to implement AB 617. The limited-term funding was provided with recognition that this was a new program and the ongoing implementation costs were uncertain. In the 2019-20 budget, the Legislature extended the limited-term funding through 2020-21 and adopted Supplemental Report Language (SRL) requiring CARB to report on its costs to implement AB 617. The SRL report was intended to accompany any request to extend funding for these 22 positions and inform legislative budget discussions about ongoing funding. The SRL report must include:

1) Detailed information about past workload and estimated future workload.
2) A description of how CARB workload is different from local air district activities and why CARB staff is needed.
3) A description of the degree to which attendance of CARB at community steering committee meetings is helpful for developing emission reduction plans.
4) An evaluation of the degree to which CARB staff help achieve programmatic outcomes.

The Governor's budget proposes to make ongoing the $4.2 million GGRF for 22 positions at CARB.

The Administration has not yet submitted the SRL report to the Legislature. Therefore, the Legislature does not have all of the information that is required, including detailed information about overall CARB workload. This makes it difficult to fully evaluate the ongoing funding needs.

LAO Recommendation. The LAO recommends the Legislature withhold action on this item until the Administration provides the required SRL report. Once the report is available, the LAO will review the information and report back to the Legislature.

Staff Recommendation. Hold open.

3960 DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)

Issue 17: Exide: Cost Recovery and Residential Cleanup

Governor's Proposal. The Governor's budget requests the following for Exide related activities. Specifically:

- For outside bankruptcy counsel to support Exide cost recovery efforts.
  - Six positions
  - $16.5 million in 2021-22 ($14 million General Fund and $2.5 million Lead-Acid Battery Cleanup Fund (LABCF))
  - $2.5 million LABCF in 2022-23 and annually thereafter.

- For cleaning 3,200 properties identified within the 1.7 miles of the former Exide Technologies facility.
  - $31.4 million General Fund loan from the Toxic Substances Control Account. ($23.9 million will be used to fund contracts and $7.5 million will be used for support costs to complete cleanup activities at residences, schools, parks, daycare centers, and childcare facilities near the former Exide facility.)

Background. ***Exide Technologies Facility Closed in 2015.*** Exide Technologies was a manufacturer of lead acid batteries and owned a battery recycling facility in Vernon, California. The facility began operations in 1922, with Exide beginning operations there in 2000 until its closure in 2015, recycling lead from used automotive batteries and other sources. The facility processed about 25,000 batteries a day, providing a source of lead for new batteries.

Lead Contamination from Exide Operations. Over the course of decades of operation, the facility polluted the soil beneath it with high levels of lead, arsenic, cadmium and other toxic metals. It also contaminated groundwater, released battery acid onto roads and contaminated homes and yards in surrounding communities with lead emissions. DTSC estimates properties up to 1.7 miles away from the facility may potentially be affected by Exide's lead contamination, which amounts to roughly 10,000 properties. Tests show more than 7,500 properties exceed California's Human Health Screening Level for lead of 80 parts per million (ppm). Under California's conservative screening level, properties below 80 ppm are considered safe, while those with levels greater than 80 ppm require further evaluation.

Exide Closure. In March 2013, the South Coast Air Quality Management District (SCAQMD) released a human health risk assessment that showed that arsenic emissions from the Exide facility created an elevated risk of cancer for as many as 110,000 people in an area, stretching from Boyle Heights to Huntington Park. In the spring of 2014, DTSC ordered Exide to suspend operations because Exide was violating hazardous waste laws and by posing a significant risk to the community with its emissions based upon the SCAQMD health risk assessment. In October of 2013, DTSC issued an enforcement order, directing Exide to resolve its hazardous waste violations, develop a cleanup plan for approximately 219 residential properties near Exide and provide funds to Los Angeles County to provide free blood lead testing.

In November, 2014, DTSC issued an enforcement order requiring Exide to provide financial assurances in the amount of $38.6 million that will be used by DTSC to safely close the Vernon facility, if Exide is unable or unwilling to do so, and required Exide to establish a trust fund of $9 million to cover the costs of cleaning up the 219 residential properties near the facility, if Exide is unable or unwilling to do so. On January 30, 2015, DTSC ordered Exide to investigate the extent of contamination under the containment building, so that Exide could implement any necessary corrective actions at the facility. In addition to facility closure activities, DTSC ordered Exide to conduct sampling at nearest residences to the north and south of the Exide Facility in the communities of Boyle Heights/East Los Angeles and Maywood.

In March, 2015, Exide was required to cease operations and permanently close its Vernon facility pursuant to an enforcement order it agreed to with DTSC and a non-prosecution agreement it reached with the United States Department of Justice, that allowed the company to avoid federal criminal prosecution for violations of hazardous waste laws. As a result of this closure agreement, Exide is required to submit a closure plan to safely close the facility, investigate potential contamination in the industrial area near Exide and, by October 2019, submit a corrective measures study to DTSC to address the off-site impacts in the residential area affected by Exide's operations.

On December 8, 2016, DTSC released the Final Exide Closure Plan and Final Environmental Impact Report. The Final Exide Closure Plan describes how the hazardous waste management units at Exide will be decontaminated and removed in a manner that is protective of public health and the environment. The plan incorporates many of the recommendations submitted by the community during the public engagement process.

Residential Cleanup Near Exide. DTSC is the lead agency overseeing the investigation and cleanup of residential properties, schools, parks, daycare, and childcare centers within the approximately 1.7-mile radius of the former Exide facility. DTSC is working with communities within this proposed cleanup area, which includes the Cities of Bell, Commerce, Huntington Park, Los Angeles (Boyle Heights neighborhood), Maywood, and Vernon, and the County of Los Angeles (East Los Angeles).

The Exide residential cleanup project constitutes the largest cleanup effort undertaken by California. Several factors contribute to its complexity, including the nature of the contamination, the concentration of people in a relatively small area, the high number of impacted property owners and residents, the comparatively short timeline to conduct the cleanup, and the keen interest in the project by members of the community and stakeholders.

As of December 28, 2020, DTSC has overseen the cleanup of 2,213 properties with the highest lead concentrations and greatest exposure risk. DTSC has fully committed $251.1 million in appropriations toward the investigation and cleanup of lead-contaminated properties. DTSC estimates that current appropriations totaling $251.1 million will be fully expended by June 2021 and approximately 2,858 properties will be cleaned up by September 2021. Additional resources are needed to clean the remaining estimated 342 properties to achieve the 3,200-property goal.

Numerous Cleanup Delays and Cost Overruns. There were a number of issues that occurred during the cleanup process resulting in increased costs and delays. Some of the challenges include delays in selecting a cleanup contractor, higher than anticipated labor costs due to the project labor agreement, delays and cost increases as a result of COVID and wildfires, and others.

Legislature Has Provided Several Rounds of Funds for Exide Cleanup. In order to expedite the cleanup of contamination in the residential neighborhoods surrounding Exide to address the public health threat posed, the Legislature has provided the following funding for cleanup and enforcement activities:

- ***Exide Enforcement Order ($1.7 Million).*** In 2015-16, the Legislature provided $734,000 (Hazardous Waste Control Account) annually for two years, and in 2018-19, the Legislature provided an additional $1 million from the Lead-Acid Battery Cleanup Fund (LABCF) annually for two years to continue overseeing the Exide enforcement order.

- ***Emergency Funding ($7 Million).*** In 2015-16, the Legislature provided $7 million (special funds) in emergency funding to: (1) sample up to 1,500 residential properties around the Exide facility; (2) develop a comprehensive cleanup plan; and, (3) begin cleanup of the 50 highest-priority properties based on the extent of lead contamination and the potential for exposure.

- ***General Fund Loan to TSCA ($176.6 Million).*** AB 118, (Santiago), Chapter 10, Statutes of 2016, and SB 93 (de León), Chapter 9, Statutes of 2016, provided a one-time $176.6 million General Fund loan to TSCA for Exide-related cleanup of residential properties. DTSC has committed all of the $176.6 million to cleanup activities and anticipates fully expending it by June 2021.

- ***Third-Party Quality Assurance Contractor ($1.4 Million).*** In 2017-18, the Legislature provided $1.4 million annually, for three years, from a loan from LABCF to the Hazardous Waste Control Account for a third-party quality contractor to monitor Exide cleanup activities.

- ***Parkways Cleanup Funding ($6.5 Million).*** In 2018-19, the Legislature provided $6.5 million ($5 million General Fund and $1.5 million California Environmental License Plate Fund) on a one-time basis to sample soil and clean up parkways in the communities around Exide.

- ***Complete Cleanup Activities ($24.5 Million).*** In 2019-20, the Legislature approved a loan of $24.5 million from the General Fund to TSCA to complete cleanup activities at residences, schools, parks, day care centers, and child care facilities near the Exide Technologies, Inc. lead-acid battery recycling facility in the City of Vernon.

- ***Accelerate Cleanup Activities ($50 Million).*** In 2019-20, the Legislature approved a loan of $50 million one-time General Fund to TSCA to accelerate the cleanup of additional properties within 1.7 miles of the Exide Technologies facility in Vernon.

- ***Enforcement Order Oversight ($1 Million).*** In 2020-21, the Legislature approved $1 million LABCF for the Exide 2014 Enforcement Order Program oversight.

- ***Exide Closure Implementation ($600,000).*** In 2020-21, the Legislature approved $600,000 LABCF for the Third-Party Quality Assurance Oversight Contract for Exide Closure Implementation.

Exide Bankruptcy. Exide filed its third bankruptcy petition on May 19, 2020, and following the federal bankruptcy court's approval on October 20, 2020, Exide's assets were liquidated. On October 26, 2020, Exide transferred title of the Vernon Plant to the trustee for the Exide Vernon Environmental Response Trust, a trust created pursuant to Exide's Fourth Amended Bankruptcy Plan. The trustee is required to implement closure activities and corrective action at the Vernon Plant, but the trustee has insufficient resources to complete these actions. DTSC has incurred and will continue to incur response costs related to its oversight and enforcement of these corrective action and closure activities, for which DTSC received $1 million in 2020-21 and 2021-22.

Staff Comments. Since Exide's bankruptcy filing, DTSC has been working with the Attorney General's Office and outside counsel that specializes in bankruptcy. DTSC appealed the bankruptcy court's decision and is preparing for the appeal hearing. DTSC intends to continue to work with outside counsel in 2021-22 as the appeal process continues. Funding this request is intended to enable the state to pursue cost recovery against Exide and other potentially responsible parties to hold them accountable for contamination from operations of the former Exide Facility, including contamination in communities surrounding the former Exide Facility. Holding these liable parties accountable should give the state the opportunity to recover taxpayer funds expended to clean up the contamination.

Staff Recommendation. Hold open.

3970 Department of Resources Recycling and Recovery (CalRecycle)

Issue 18: Beverage Container Recycling Pilot Project Grants

Governor's Proposal. The Governor's budget requests $5 million Beverage Container Recycling Fund (BCRF) in 2020-21 and $5 million (BCRF) in 2021-22 to provide grants for the Beverage Container Recycling Pilot Project Program.

With the additional funding, CalRecycle proposes to extend the program sunset date from January 1, 2022 to December 31, 2025 and allow for an additional five pilot projects for a maximum of 10 pilot projects at any one time. If a pilot project ends, a new pilot project can be approved, If monies are still available, the pilot recyclers may apply for additional funding.

Background. The California Beverage Container Recycling and Litter Reduction Act (Act) was established in 1986 to promote beverage container recycling and reduce litter by utilizing the California Refund Value (CRV) deposit and return system. The Act requires CalRecycle to designate convenience zones located within a half-mile radius from a supermarket that has a gross annual sales of $2 million or more and is considered a "full-line" store selling dry groceries, canned goods, or non-food items and some perishable items. The Act requires that each convenience zone be served by at least one certified recycling center in order to provide consumers convenient opportunities to redeem CRV beverage containers near places where beverages are purchased. If there is no recycling center within a convenience zone, the zone is considered unserved. Beverage dealers (retailers that sell beverage containers) in unserved zones must either redeem empty CRV containers in-store or pay a daily $100 fee.

Market Changes Have Reduced the Number of Recycling Centers. Over the last several years, changes in the global markets — including a decrease in prices for recyclable materials — has reduced recycler profitability. This, in turn, has led to a substantial decrease in the number of recycling centers operating in the state. As a result, there are a large number of unserved zones.

The total number of convenience zones (CZs) in the state is 3,967 CZs. As of January 4, 2021, the status of those convenience zones (CZs) is as follows:

- Unserved: 1,645 (42 percent)
- Served: 1,129 (28 percent)
- Hold (under review): 192 (five percent)
- Exempt: 1,001 (25 percent)

Within the unserved CZs are 6,311 retailers. Of those retailers, 5,067 choose to redeem containers and 1,244 choose to pay $100/day to opt out of redeeming containers.

Of the unserved CZs, the following is the number of CZs in each pilot project:

- San Francisco: 60+ CZs
- Culver City: 10 CZs
- San Mateo: 20 CZs
- Sonoma: 50 CZs
- Irvine: 29 CZs

Beverage Container Recycling Pilot Program (Pilot Program). SB 458 (Wiener), Chapter 648, Statutes of 2017, authorized CalRecycle to develop the Pilot Program, which allows a maximum of five pilot projects proposed in jurisdictions to provide convenient beverage container redemption in both rug and and rural areas that lack recycling opportunities. AB 54 (Ting), Chapter 793, Statutes of 2019, extended the Pilot Program's sunset date from January 1, 2020 to January 1, 2022, allowed for greater flexibility for where pilot projects may operate, and appropriated one-time funding of $5 million from the Beverage Container Recycling Fund to support pilot projects.

CalRecycle currently has five pilot projects in the jurisdictions of San Francisco, Culver City, San Mateo County, Irvine, and Sonoma County (cities of Santa Rosa, Petaluma, Sonoma, Sebastopol, Healdsburg, and Cloverdale). San Francisco, Culver City, and Irvine have proposed a mobile collection program. Half Moon Bay (San Mateo County) has proposed a fixed recycling center and Sonoma County has proposed a stationary drop-off location.

The Pilot Program requires local jurisdictions and recycling center operators work together to provide more redemption opportunities for consumers. The jurisdictions need to meet specified requirements before they can apply for a pilot project. Pilot project recyclers can operate in jurisdictions where there is an approved pilot project after certification by CalRecycle. Pilot project recyclers are eligible to receive handling fees for material redeemed without the current convenience zone limitations and have flexibility to create innovative recycling business models.

In evaluating the pilots, CalRecycle will consider factors including the number of containers redeemed and cost of operating the different redemption models to evaluate the effectiveness of the program.

CalRecycle responded, "CalRecycle has received significant interest in the Pilot Program. With additional funding and a sunset extension, CalRecycle will be able to work with jurisdictions to develop additional pilot projects and further explore recycling opportunities in unserved areas. There continues to be unserved [CZs] in the state may be resolved by the flexibility the pilots offer in terms of recycling center locations and modes of collection. Additional pilot spots can provide greater diversity in geographic and population distribution as well as opportunities to evaluate a greater variety of innovative recycling models."

LAO Comments. *Governor's Proposal Provides $10 Million to Expand and Extend Pilot Programs.* The Governor proposes to allocate an additional $5 million (BCRF) to the pilot programs in 2020-21 as part of his "early action" package and an additional $5 million in the 2021-22 budget.

Makes Statutory Changes to Allow Up to Ten Pilots. The proposal would also make statutory changes to (1) allow up to ten pilot projects to operate at any given time and (2) extend the sunset date for the pilots from July 1, 2022 to December 31, 2025.

Expands Pilots to Additional Jurisdictions and Potentially Provides Funding to Extend Current Pilots. According to the Administration, funding would be used to expand the number of pilots, as well as potentially provide additional funding to extend some existing pilots. The Administration indicates that an expansion would allow it to explore more redemption options in different parts of the state, such as rural areas.

Expansion of Pilots Has Merit. Given ongoing consumer convenience challenges, the LAO thinks expanding the pilot programs to explore new redemption options in a more diverse range of jurisdictions (such as urban, suburban, and rural) could be valuable. An expansion could provide the state with additional information about how effective different collection methods are, as well ass how efficacy might differ depending on the area. Although the LAO does not think there is a "right" number of pilots, the LAO thinks allowing up to ten pilots is a reasonable number.

Scale of Request Not Adequately Justified. The proposal would triple the total funding for the pilots — going from $5 million to $15 million. The need for an increase of this magnitude is unclear, particularly as the existing pilots are in the early stages of implementation.

Amount of Funding Not Proportionate to Scale of Expansion. This proposal would allow five more pilots to operate at any given time (up to ten total) and requests $10 million in additional funding. This reflects $2 million per additional pilot — twice the $1 million per pilot that the Legislature authorized in AB 54. The Administration has not demonstrated that a significant increase in per pilot funding is needed.

Level of Interest From Diverse Set of Jurisdictions Is Unclear. The number of additional jurisdictions that would both apply for the funding and be able to implement a new collection model in a different part of the state is unclear at this time. According to CalRecycle, it rejected three applications in the initial pilot solicitation because those jurisdictions expressed an interest in implementing pilots, but did not submit applications.

Funding to Extend Existing Pilots Is Premature. The Administration indicates that a portion of the proposed funding could be used to extend the existing pilots. However, most of the existing pilots have not begun to operate yet. As a result, providing funding to extend pilots would be premature until there is additional outcome information to evaluate the pilot and/or the Administration provides a clear justification for why funding for a pilot would need to be extended.

Administration Has Not Provided a Strong Rationale for Early Action. In general, the LAO thinks there should be a strong rationale for taking early action to provide funding in the current year. Providing $5 million this spring might allow the Administration to implement additional pilots a few months earlier than if the funding were provided in 2021-22, but it limits the amount of time the Legislature has to deliberate and assess the merits fo the proposal. The LAO does not think the Administration has provided a strong rationale for early action on this item.

Proposal Expansion Does Not Include Legislative Reporting. There is no requirement in current law — or in the Administration's proposal — for CalRecycle to report to the Legislature on pilot outcomes, including the degree to which the pilots helped improve redemption rates. Since the pilots are intended to provide the state with information about how different CRV redemption models could help improve convenience and recycling, the LAO thinks it is important to ensure the department provides the Legislature with such information. This would help the Legislature evaluate the success of these pilots prior to determining whether to expand certain redemption methods statewide.

LAO Recommendations. ***Reduce Amount of Additional Funding for Pilot Expansion to $5 Million.*** The LAO recommends the Legislature reduce the amount of funding provided to expand the pilots to $5 million.

- This amount would be consistent with the $1 million per pilot that the Legislature previously authorized.

- This would allow the department to explore additional redemption methods in different areas of the state, but also limit the fiscal cost.

- Under this approach, if the Administration determines that there is a need for additional pilots or funding to extend certain pilots in future years, it could submit a proposal as part of a future budget request.

Provide Funding as Part of 2021-22 Budget. If the Legislature provides additional funding for pilot expansion, the LAO recommends it provide funding as part of the 2021-22 budget, rather than as an early action item. This would give the Legislature more time to evaluate the merits of the proposal. To help inform its deliberations, the Legislature could require the department to report at budget hearings on the status of the current pilots, as well as which jurisdictions and redemption models would likely be piloted with the additional funding.

Require CalRecycle to Report on Pilot Project Outcomes. The LAO recommends the Legislature adopt budget trailer legislation requiring CalRecycle to report annually on pilot outcomes, including the (1) number of containers redeemed, (2) how redemption rates in the pilot jurisdiction compare to rates before the pilot was implemented, and (3) the costs of operating the different redemption models. This would ensure the Legislature has information that could be used to evaluate potential statewide programmatic changes.

Staff Recommendation. Hold open.

Issue 19: Organic Waste Reduction Implementation

Governor's Proposal. The Governor's budget requests five permanent, full-time positions and $782,000 Cost of Implementation Account (COIA) in 2021-22, an additional four permanent, full-time positions and $1.388 million COIA in 2022-23, and $1.38 million COIA ongoing. This proposal also includes redirecting 38 positions from the Local Assistance and Market Development Branch to Waste Permitting, Compliance and Mitigation Division. The redirected and newly requested positions will focus on compliance and enforcement oversight to implement the regulations adopted by SB 1383 (Lara), Chapter 395, Statutes of 2016.

Additionally, the proposal includes to amend Public Resources Code Section 41821(h) to reduce the frequency of jurisdiction inspections.

Background. ***COIA.*** COIA is within the Air Pollution Control Fund. The account provides funding for approved program costs regarding development and implementation of programs to reduce the state's greenhouse gas (GHG) emission and improve air quality. The account revenue is generated by the AB 32 Cost of Implementation Fee. AB 32 (Nunez and Pavley), Chapter 488, Statutes of 2006, established the California Global Warming Solutions Act of 2006 and authorized CARB to adopt a schedule of fees to be paid by sources of GHG emissions. Fees are paid by the following types of entities: cement manufacturers; electricity importers and in-state generating facilities; facilities that combust coal, coke, or refinery fuel gas; natural gas utilities and suppliers; oil and gas producers; producers and importers of gasoline and diesel fuel; and refineries. There are approximately 265 fee payers.

SB 1383 (Lara), Chapter 395, Statutes of 2016. SB 1383 established methane remissions reduction targets in a statewide effort to reduce short-lived climate pollutants (SLCP) in various sectors of California's economy. SB 1383 established targets to achieve a 50 percent reduction in the statewide disposal of organic waste by 2020 based on the 2014 level, and a 75 percent reduction by 2025. SB 1383 also established a target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025. Lastly, the law provided CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets. CalRecycle estimates the state will need to divert an additional 27 million tons of organics by 2025 to meet the goals.

There are about 3,000 regulated entities subject to SB 1383 regulations including jurisdictions, solid waste facilities, schools, school districts, and non-local entities such as state agencies, public universities, and federal facilities. The edible food recovery target adds regulated entities such as commercial edible food generators, food recovery services, and food recovery organizations. While the regulations do not take effect until January 1, 2022, regulated entities need to start planning now to ensure compliance by that date.

Redirected Positions. According to CalRecycle, the 38 redirected positions are currently providing assistance to jurisdictions, school districts, and state agencies. These positions monitor state agencies for compliance with recycling and buy-recycled requirements. They monitor local jurisdictions for compliance with existing statutes regarding waste diversion and household hazardous waste management. Compliance monitoring responsibilities will follow this staff to their new organizational structure. As a result of the redirection, the Local Assistance and Market Development Branch will assess what can be streamlined, done differently, or no longer needed to be done. The positions are mainly funded under the Integrated Waste Management Account and are intended to continue after the redirection.

Staff Comments. Concern has been raised about this BCP shifting 69 percent of LAMD Branch staff away from providing technical assistance to help local governments develop their new organic waste recycling programs and instead redirect those personnel to enforcement efforts, which would leave less than one third of the LAMD Branch's current staff to continue providing technical assistance during the program's infancy. Concern has also been raised that the proposed statutory changes to reduce the frequency of the department's jurisdiction visits could inhibit the regulators' ability to fully understand local programs they oversee and the diversity challenges faced in different parts of the state.

Staff Recommendation. Hold open.