AGENDA

ASSEMBLY BUDGET COMMITTEE NO. 3 RESOURCES AND TRANSPORTATION

ASSEMBLYMEMBER RICHARD BLOOM, CHAIR

WEDNESDAY, APRIL 19

9:30 A.M. - STATE CAPITOL, ROOM 447

VOTE-ONLY CALENDAR

ITEMS TO BE HEARD

VOTE-ONLY

8570 DEPARTMENT OF FOOD AND AGRICULTURE

VOTE-ONLY ISSUE 1: Environmental Auditing Unit Program Funding and Produce Safety Rule Implementation

The Governor's budget requests the following resources to implement the new Federal Produce Safety Rule requirements:

- $1.9 million in Federal Fund authority in 2017-18 and 7.0 permanent positions;
- $2.3 million in Federal Fund authority in 2018-19 and 9.0 permanent positions;
- $2.4 million in Federal Fund authority in 2019-20 and 9.0 permanent positions; and
- $3.4 million in Federal Fund authority in 2020-21 and 14.0 permanent positions.

The Food Safety Modernization Act, Produce Safety Rule is a federal mandate to reduce foodborne illness and ensure safe food supply. CDFA intends to use the requested funding and positions to make produce safety program enhancements and to establish the Environmental Auditing Unit within CDFA's Division of Inspection Services to serve as the Department's produce safety program.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 2: Fertilizing Materials: Auxiliary Soil and Plant Substances: Biochar (AB 2511)

The Governor's budget requests $110,000 in Department of Food and Agriculture Fund Authority and 1.0 position in 2017-18, and $105,000 and 1.0 position in 2018-19 and ongoing to implement AB 2511 (Levine, Chapter 331, Statutes of 2016).

AB 2511 requires CDFA to regulate biochar as a fertilizing material. Additional workload include ensuring the manufacturing firm is licensed, the biochar product is registered, the label has been reviewed and is compliant with the California Fertilizing Materials Law and Regulations and USDA's National Organic Program Standards, and that adulterants are not present in the product.

Staff Recommendation: Approve as Budgeted

3970 DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

VOTE-ONLY ISSUE 3: Single-Use Carryout Bags

The Governor's budget requests $298,000 from the Integrated Waste Management Account in 2017-18, $292,000 in 2018-19, and $197,000 in 2019-20 to implement Senate Bill 270 (Padilla, Chapter 850, Statutes of 2014).
This request was originally included in the 2015-16 Governor's budget, and was suspended pending the referendum on SB 270. On November 8, 2016, California voters approved Proposition 67, the statewide Single-Use Carryout Bag Ban.

Workload associated with implementing SB 270 includes emergency regulation to clarify the reusable bag certification and associated fee collection process, establishing and maintaining a system to receive proofs of certification and test results for reusable bags, developing and maintaining a webpage to pose the certifications, developing a fee schedule and reporting to the Legislature.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 4: Solid Waste Enforcement Implementation and Evaluation Program

The Governor's budget requests $130,000 from the Integrated Waste Management Account and one permanent Senior Environmental Scientist position to meet the increased oversight of the waste industry and long-term facility compliance issues.

AB 341 (Chesbro, Chapter 476, Statutes of 2011) and AB 901 (Gordon, Chapter 746, Statutes of 2015) expanded the reporting entities and increased evaluation, inspection, and enforcement efforts for water diversion activities.

CalRecycle currently has eight environmental scientists inspecting 555 solid waste facilities statewide to confirm inspections are consistent with state regulations and to investigate specific handling activities to support policy discussions and regulatory revisions. CalRecycle is expecting an increase of 1,250 to 1,500 facilities due to AB 901.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 5: Tire Enforcement Agency Program Evaluation

The Governor's budget requests to shift expenditure authority of $168,000 from Local Assistance to State Operations in Tire Recycling Management Fund and two permanent Environmental Scientists.

CalRecycle is responsible for the inspection of 31,000 waste tire-handling businesses. CalRecycle works with Waste Tire Enforcement (TEA) Grantees to perform the majority of the 31,000 inspections. Nine TEA Grantees (out of 45) recently withdrew from the program.

The requested resources will be used to implement a new program that will evaluate TEA Grantee performance, and to perform inspections of 2,500 covered waste tire facilities that are no longer addressed by TEA Grantees.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 6: Reimbursement authority request - Ibank

The Governor's budget requests an ongoing $104,000 reimbursement authority in the Integrated Waste Management Account to provide IT support services to the California Infrastructure and Economic Development Bank (IBank).

CalRecycle performed IT services for the IBank until 2014 when the IBank moved out of the CalEPA building. In April 2015, with the concurrence of the Governor's Office, IBank requested CalRecycle resume IT services and both parties entered into an interagency agreement. The requested resources would allow CalRecycle to continue providing these services.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 7: Audio and Video Support

The Governor's budget request an ongoing $227,000 reimbursement authority from the Integrated Waste Management Account and 2.0 permanent positions to deliver audio-visual services for CalEPA's boards, departments, and offices within the California EPA headquarters.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 8: Establishing Permanent Positions for the Waste and Used Tire Manifest System Program

The Governor's budget requests to convert 7.0 temporary positions to permanent positions for the Tire Hauler Registration process and the Uniform Waste and Used Tire Manifest System.

CalRecycle oversees the storage and transportation of waste and used tires within California. Workload include tracking the generation, transport and disposal of waste and used tires, auditing the manifest system, registering waste and used tire haulers, and assuring haulers have a surety bond.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 9: Used Oil Certified Collection Center Unit - Additional Staff for Claim Processing and Fraud Prevention

The Governor's budget requests an ongoing $77,000 from the California Used Oil Recycling Fund and 1.0 permanent full-time position to implement new fraud prevention procedures for used oil incentive claims, and identify and include additional entities subject to but not currently paying the oil fee.

Findings in a Department of Finance Audit in 2014 led CalRecycle to implement additional fraud prevention procedures to prevent ineligible payments.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 10: Special Environmental Project - Compostable Plastics Research

The Governor's budget requests a one-time expenditure authority of $50,000 from the Integrated Waste Management Account to expend recently awarded settlement fees between Napa County (and others) against Walmart Stores and Jet.com. The Wal-Mart and Jet.com settlement stipulates funds shall be provided to CalRecycle for use in compostable plastics research. The requested authority will allow CalRecycle to conduct compostable plastics research and policy development consistent with the terms of the settlement.

Staff Recommendation: Approve as Budgeted

3980 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT

VOTE-ONLY ISSUE 11: Litigation Costs (Prop 65)

The Governor's budget requests $574,000 annually, for two years from the Safe Drinking Water and Toxic Enforcement Fund to pay for defense of civil lawsuits brought against OEHHA for actions taken as lead agency for purposes of Proposition 65.

OEHHA has been party to several lawsuits relating to its decisions in listing chemicals or establishing safe harbor levels for chemicals already listed. OEHHA anticipates additional legal challenges related to its recently completed regulatory process to update the regulations concerning businesses' responsibilities for providing warnings for chemicals listed under Proposition 65.

Staff Recommendation: Approve as Budgeted.

VOTE-ONLY ISSUE 12: Compliance Assistance

The Governor's budget requests $304,000 annually, for two years from the Safe Drinking Water and Toxic Enforcement Fund to provide advice and consultation on when Proposition 65 warnings are required for specific products or facilities, and to conduct the assessments needed to make such determinations. The resources are requested in anticipation of the workload associated with increasing requests from businesses and trade organizations for this kind of compliance assistance, and from the Department of Justice and other governmental entities that are enforcing Proposition 65.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 13: Site Risk Assessment Review

The Governor's budget requests 1.0 permanent position in OEHHA to provide technical assistance to the Regional Water Quality Control Boards and to local governments on human health risk assessments on contaminated sites. The position will be funded by reimbursements from an existing interagency agreement with the State Water Resources Control Board.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 14: Indicators of Climate Change in California

The Governor's budget requests for 1.0 permanent position to prepare periodic reports presenting indicators of climate change and its impacts on California. The position will be funded through an interagency agreement between OEHHA and CalEPA.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 15: Well Stimulation Treatment Health and Environmental Risks

The Governor's budget requests $366,000 annually for three years (including $50,000 in contract funding), from the Oil, Gas and Geothermal Administrative Fund, to evaluate chemicals used in oil and gas well stimulation treatments in California. The requested resources would enable OEHHA to develop an inventory of chemicals used in well stimulation treatments, evaluate the health and environmental hazards the pose, identify and fill gaps in scientific information on these chemicals, and identify and evaluate potential alternatives to the high-hazard chemicals.

Staff Recommendation: Approve as Budgeted

3960 DEPARTMENT OF TOXIC SUBSTANCES CONTROL

VOTE-ONLY ISSUE 16: STF- Stringfellow Pretreatment Plant Site

The Governor's budget requests an extension of the liquidation period for one year for the construction of the Stringfellow Pretreatment Plant Site. Funds were appropriated in 2012-13. Construction is complete, however programming and commissioning is taking longer than anticipated, which might delay payments to contractors involved in the project. The existing appropriation expires June 30, 2017.

Staff Recommendation: Approve as Budgeted

3930 DEPARTMENT OF PESTICIDE REGULATION

VOTE-ONLY ISSUE 17: Federal Trust Fund Authority Increase

The Governor's budget requests an ongoing increase of $350,000 in Federal Trust Fund authority to bring the fund authority in line with the federal grants the department receives. DPR receives grant funding from the US Department of Food and Agriculture and the US EPA to regulate pesticides and to supplement state projects. Federal grants available to DPR over the last three years have exceeded DPR's trust fund authority by $250,000 to $350,000.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 18: Pest Management Research Grants

The Governor's budget requests $600,000 annually for two years from the Department of Pesticide Regulation Fund to continue funding Pest Management Research Grants at $1,100,000 per year. This request would extend a three-year legislative augmentation that appropriated an additional $600,000 to the program.

Pest Management Research Grants develop practices that contribute to an integrated pest management system to reduce use of high-risk pesticides and their unanticipated impacts on public health and the environment.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 19: Pesticide Registration Database Management System (PRDMS) Funding Realignment

The Governor's budget requests to revert and reappropriate $3.4 million in Department of Pesticide Regulation Fund with a four-year encumbrance period for the Pesticide Registration Data Management System (PRDMS).

Staff Recommendation: Approve as Budgeted

3480 DEPARTMENT OF CONSERVATION

VOTE-ONLY ISSUE 20: State Mining and Geology Board Legal Costs

The Governor's budget requests for a baseline increase of $200,000 from the Mine Reclamation Account for the State Mining and Geology Board within the Department of Conservation to fund legal services provided to the Board by the State Attorney General's Office.

The Board performs a number of duties pursuant to the Surface Mining and Reclamation Act (SMARA), including acting as a lead agency when local agencies are incapable of performing those duties. SMARA was enacted to ensure that adverse environmental impacts of surface mining activities are prevented, that surface mine sites are reclaimed to a usable condition readily adaptable for an alternate, beneficial use, and to encourage production and conservation of mineral resources.

The Board's legal cost relating to SMARA has increased over the last several years.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 21: Strategic Growth Council Grant Support

The Governor's budget requests for a one-time appropriation of $220,000 from Proposition 84 for the Sustainable Communities Planning Grants and Incentives Program Grants. This grant program assists local governments in creating plans that improve air and water quality. The requested funds will be used for program delivery to ensure proper compliance of all grantees, and to provide technical assistance to grantees throughout the grant term.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 22: Sustainable Agricultural Lands Conservation Program Positions

The Governor's budget requests three permanent positions to administer the Sustainable Agricultural Lands Conservation Program on behalf of the Strategic Growth Council. An existing memorandum of understanding with the Office of Planning Research and the Strategic Growth Council will fund these positions.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 23: AB 2756 Implementation

The Governor's budget requests to transfer the 2016-17 appropriation in the Acute Orphan Well Account into the Oil and Gas Environmental Remediation Account.

AB 2756 (Thurmond and Williams, Chapter 274, Statutes of 2016) eliminated the Acute Orphan Well Account and replaced it with the Oil and Gas Environmental Remediation Account. Both accounts were established to plug and abandon orphan wells. Without action, the balance in the Acute Orphan Well Account will revert to the General Fund.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 24: CA Agricultural Lands Planning Grant Program

The Governor's budget requests $150,000 annually for four years from the Soil Conservation Fund for program support and $2 million annually for two years from the Soil Conservation Fund for local assistance. The Agricultural Protection Planning Grant Program provides grants to local governments for agricultural land conservation.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 25: Technical Adjustments

The Governor's budget request to reappropriate $10 million from 2016-17 for the continued development and implementation of the Well Statewide Tracking and Reporting, a centralized data management system.

Staff Recommendation: Approve as Budgeted

0555 ENVIRONMENTAL PROTECTION AGENCY

VOTE-ONLY ISSUE 26: Water-Energy Nexus Registry (SB 1425)

The Governor's budget requests an annual appropriation of $500,000 for three years from the Cost of Implementation Account for the creation of a water-energy nexus registry pursuant to SB 1425 (Pavley, Chapter 596, Statutes of 2016). The registry would record and register voluntary information on greenhouse gas emission reductions resulting from water systems.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 27: Rural County Certified Unified Program Agency Support

The Governor's budget requests a one-time appropriation of $1.1 million from the Rural Certified Unified Program Agencies Reimbursement Account (CUPA Account) to expand the rural county Certified Unified Program Agency support program from the existing 13 Certified Unified Program Agencies to 24. This proposal also requests to shift $835,000 in CUPA Account from state operations to local assistance.

Certified Unified Program Agencies are local agencies that are certified by CalEPA responsible for implementing and regulating the Unified Program, which is a consolidation of six state environmental programs into one program. The six programs are:

- Aboveground Petroleum Storage Act (APSA) Program
- California Accidental Release Prevention (CalARP) Program
- Hazardous Materials Business Plan (HMBP) Program
- Hazardous Materials Management and Inventory Program
- Hazardous Waste and Hazardous Waste Treatment Program
- Underground Storage Tank (UST) Program

Staff Recommendation: Approve as Budgeted

ITEMS TO BE HEARD

8570 DEPARTMENT OF FOOD AND AGRICULTURE

ISSUE 1: OVERSIGHT OF METHANE REDUCTION FROM DAIRY OPERATIONS

During the public comment period of the March 15, 2017 Subcommittee hearing, advocates for dairy digester projects requested further oversight of investments in this technology.

BACKGROUND

The methane produced by cows in California dairies account for 19.6 trillion tons of CO2 Equivalent emissions in 2012, 4.3 percent of the State's total emissions and 58.1 percent of all agriculture sector emissions. SB 1368 (Lara) authorized the California Air Resources Board to develop a comprehensive strategy to reduce emission of short-lived climate pollutants, including methane. Key to the success of this effort is the development of agricultural practices and incentives to allow California dairies to reduce emissions while retaining viability in price-regulated dairy industry.

Reducing emissions in dairies is challenging given the competitive dairy industry. Milk is California's top agricultural product. California is the largest producer of milk in the United States, producing 19 percent of the national total. In 2016, the State had 1.7 million dairy cows at 1,392 dairies. Low milk prices and high costs have led to steady decline in dairy production. Compared to the previous year, total milk California's Dairy Industry in 2016 production was down 1.1 percent, the number of dairy cows declined 0.6 percent, milk per cow was down 0.5 percent, and the number of dairies decreased 3.2 percent. The 12-month average price paid to California producers for farm milk in 2016 was $15.03 per hundredweight (cwt.), which represents a drop of 2.4 percent from the previous year.

The 2016 Budget Act provided $50 million Greenhouse Gas Reduction Funds to the Department of Food and Agriculture for early and extra methane reductions from livestock and dairy operations. The department plans to use these funds for Dairy Digester Research and Development Program provides financial assistance for the installation of dairy digesters in California, which will result in reduced greenhouse gas emissions. According to the Department, it will allocate $29-36 million from the total $50 million appropriation as incentives to support digester projects on California dairy operations. Remainder of the funding appropriation will incentivize development of non-digester practices to reduce methane emissions through the Alternative Manure Management Program. In 2015, Department of Food and Agriculture granted $11.1 million for Dairy Digesters projects, the 2016 funding would allow this program to award a second round of funding.

Studies Suggest Dairy Digesters Can Be a Cost-Effective Means to Reduce Greenhouse Gas Emissions.

A recent study by UC Davis faculty at the request of the Air Resources Board found that Dairy Digesters, in some circumstances, can be a cost effective method for mitigating Greenhouse Gas emission at certain dairies. However, due to economies-of-scale, these projects are significantly cheaper for the 225 largest dairies. The chart below, from the report, illustrates some of the costs differences between different manure management practices.

Table 1.1: Scenario Summary: Mitigation Potential and 10-yr Cost

Scenario Description		≥ 300 milk cows/dairy or 1110 dairies (~1.65 million cows)			≥ 2000 milk cows/dairy or largest 225 dairies (~800,000 cows)		
		Mitigation Potential (Tg/y)	Average Cost ($/Mg)	10-yr cost (Billion $)	Mitigation Potential (Tg/y)	Average Cost ($/Mg)	10-yr cost (Billion $)
Scrape to Open Solar Drying (6 mo.)		2.2	71	$1.6	1.1	54	$0.6
Scrape to Open Solar Drying (8 mo.)		3.0	82	$2.4	1.4	69	$1.0
Scrape to Closed Solar Drying (12 mo.)		4.3	232	$10.0	2.1	179	$3.7
Scrape to Forced Evap.(Nat.Gas Fuel) (12 mo.)		5.4	116	$6.3	2.6	98	$2.6
Scrape to Compost with Bulking (12 mo.)		4.9	195	$9.5	2.4	183	$4.3
Aeration (Low Effectiveness)		4.1	68	$2.7	2.0	65	$1.3
Aeration (High Effectiveness)		7.3	38	$2.7	3.5	36	$1.3
Solid/Liquid Separation		1.2	55	$0.6	0.6	39	$0.2
Tier 1 Upgrade with Cover and Flare		8.1	35	$2.8	4.0	29	$1.1
Lagoon Digester - Uncovered Effluent Pond*	Recip. Engine	7.3	41	$3.0	3.5	31	$1.1
	Microturbine		46	$3.4		36	$1.3
	Fuel Cell		59	$4.3		45	$1.6
	RNG fuel		54	$3.9		33	$1.2
Tank / Plug Flow Digester - Covered Effluent Pond**	Recip. Engine	8.3	55	$4.6	4.1	41	$1.7
	Microturbine		60	$5.0		46	$1.9
	Fuel Cell		72	$6.0		55	$2.2
	RNG fuel		65	$5.5		42	$1.7

* Represents lowest cost/ lowest mitigation potential of Digester Scenarios
** Represents highest cost & mitigation potential of Digester Scenarios

[6] Mg means metric tonne (Mg = 1000 kg = 1 metric tonne). Tg = million Mg = million metric tonnes.

As the data shows, the most effective method of reducing CO2 varies by the size of the dairy. High Effectiveness Aeration and a simple dairy digester that covers a lagoon of manure and flares the resulting methane are the most cost effective solutions. Upgrading these digesters to capture the methane to generate power or heat is shown to reduce cost effectiveness in all scenarios.

The following graph illustrates how digesters in particular become far less cost effective in smaller dairies.

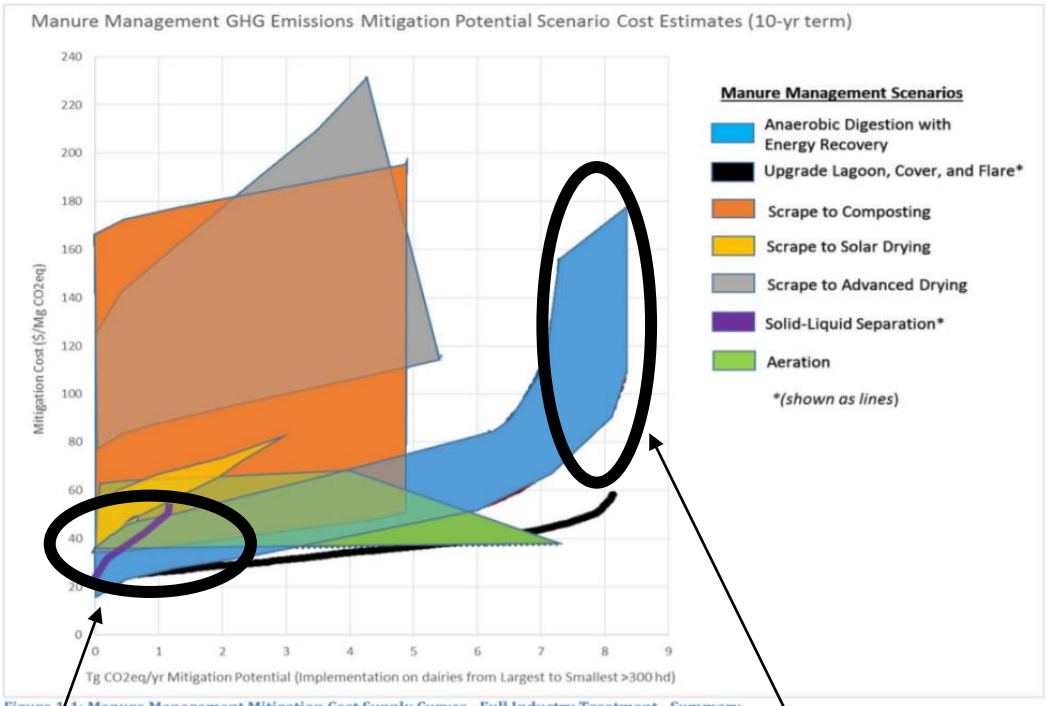


Figure 1-1: Manure Management Mitigation Cost Supply Curves - Full Industry Treatment - Summary

Dairy Digesters are cost-effective for very large dairies

Costs skyrocket for small dairies

Some Evaluated Options more Mature than Others.

While the UC Davis Study evaluated several approaches to managing manure, it also noted that some of these options had more data than others. Since Dairy Digester projects have 45 years of history and research these projects have predictable outcomes. However, some of the newer manure practices such as converting flush practices to scrape have not been evaluated as rigorously. For example, California does not have a single solar drying pad project, which appears to offer promise as an alternative to reducing emissions that would also offer the co-benefit of reducing water used by dairies.

Dairy Digesters have a High Rate of Project Failure.

According to the US EPA, since 1972, over 319 manure digester projects have been created in the United States, with 29 such projects in California. Digesters are used in conjunction with cow, duck, pig, and chicken farms, but in California all of these projects have been centered at dairies.

	Dairy Digesters			Other Digesters			All Digesters		
	Total Projects	Shut Down Projects	Operating/ Under Const. Projects	Total Projects	Shut Down Projects	Operating/ Under Const. Projects	Total Projects	Shut Down Projects	Operating/ Under Const. Projects
California	39	13	26	0	0	0	39	13	26
Rest of United States	254	45	209	26	2	24	280	47	233
Total	293	58	235	26	2	24	319	60	259

Dairy digesters projects have a high rate of shutting down, with approximately 20 percent of these projects failing nationwide. Of the 29 Dairy Digester projects undertaken in California, 13, or one-third, of all projects have closed.

The UC Davis study noted that the economic viability of Dairy Digesters was a challenge in California:

*Digester Scenarios Digesters offer significant potential for GHG reductions, are proven technologies (**though not necessarily economic in California),** and could be implemented with moderate changes to manure handling and dairy operation. Mitigation costs are sensitive to assumptions which may be incorrect, though more recent (and higher) installed cost values were used here than in earlier studies. **Dairy digesters have had a difficult path in California.** Comparatively few are in existence and several have ceased operation. They have experienced issues with utility connectivity (delays, unexpected or high costs), permitting delays, higher than expected operating costs and other issues.*

Previous State effort to Incentive Dairy Digesters had a 50 percent Success Rate.

During California's Energy Crisis, the state began an effort to invest in dairy digesters through the work of the California Energy Commission. In 2001, SB 5X (Sher) established the Dairy Power Production Program to encourage the development of dairy digesters for electric power generation. The bill included $10 million General Fund for grants to develop dairy digester projects. Of this amount $8.6 million was available for grants, with 14 projects awarded grants. Ultimately only ten projects began construction funding for a total expenditure of $3.4 million in incentive funds.

PIER DPPP Projects	System Cost	DPPP PIER Grant Amount	Project Start	Project End	Herd Size	Cost Per Cow	Project Breakeven
Hilarides Dairy	$ 1,239,923	$ 500,000	2004	Operational	6,000	$ 207	5.1 Years
Cottonwood Dairy	$ 2,498,038	$ 600,000	2004	Operational	4,971	$ 503	3.5 Years
Blakes Landing	$ 334,680	$ 67,900	2004	Operational	245	$ 1,366	9.8 Years
Castelnelli Bros.	$ 882,136	$ 320,000	2004	Operational	1,601	$ 551	4.5 Years
Koetsier Dairy	$ 1,361,087	$ 190,925	2005	2008	1,286	$ 1,075	48.3 Years
Van Ommering Dairy	$ 836,838	$ 244,642	2004	2009	480	$ 1,743	18 Years
Meadowview Dairy	$ 720,605	$ 262,449	2004	Operational	2,093	$ 344	5.3 Years
Lourenco Dairy	$ 372,912	$ 114,779	2006	2009	1,258	$ 296	Never Operational
Inland Empire Utilities Agency	$ 3,551,448	$ 773,175	2003	2008	7,931	$ 448	6.6 Years
Eden-Vale Dairy	$ 802,810	$ 300,000	2006	2007	800	$ 1,004	11.7 Years
Total	$ 12,600,477	$3,373,870					

The incentive fund covered roughly 26 percent of the total system cost, with dairies bearing most of the cost. Five of the ten projects failed to operate long enough to break even, with dairies that had smaller herds having more difficulty penciling out the costs because of a higher cost per cow.

California 2015 Dairy Digester Research and Development Program Phase 1

According to the Department of Food and Agriculture, $11.1 million of incentives have been awarded for six dairy digesters with a total project cost of $40 million. These larger projects will use biogas to generate electricity.

Two entities received 91 percent of the incentive awards. Projects partnered with American Biogas Electric Company (ABEC), of Dallas Texas, received 43.6 percent of all incentives and Philip Verwey Farms received 47.6 percent of the total funding for two projects.

Project Name	Applicant	Location	Award	Total Project Costs
Verwy-Hanford	Philip Verwy Farms	Hanford	$3,000,000	$7,003,176
Verwy-Madera	Philip Verwy Farms	Madera	$2,281,091	$4,563,845
Open Sky Ranch	Open Sky Ranch	Riverdale	$ 973,430	$1,946,864
ABEC #2 West-Star Biogas	West-Star North Biogas	Buttonwillow	$1,837,005	$9,000,000
ABEC #3 Lakeview Farms	Lakeview Farms	Bakersfield	$2,000,000	$8,500,000
ABEC #4 Carlos Echeverria & Sons Dairy	Carlos Echeverria & Sons	Bakersfield	$1,000,000	$8,969,700
Total			**$11,091,526**	**$39,983,585**

Dairy Digesters Increase Air Pollution

Significant concerns exist about increased localized pollutants associated with digesters. Those that use an internal combustion engine are much more polluting than a modern natural gas-fired power plant. For example, approximately 20 digesters would emit the same amount of ozone-forming (smog) pollution as one such power plant, but only produce 3 percent of the electricity.

The 2015 UC Irvine study on biomass emissions conducted for the Air Resources Board stated the following:

> *With current technology and at the emission levels of current installations, maximum biopower production could increase NOX emissions by 10% in 2020, which would cause increases in ozone and PM concentrations in large areas of the Central Valley where ozone and PM concentrations exceed air quality standards constantly throughout the year.*

In response to the critique, SB 859, 2016-17 Cap and Trade trailer bill, contained language that restricts the use of funding provided for manure management projects:

> SEC. 6. Section 16428.86 is added to the Government Code, to read:
> 16428.86. (a) Prior to awarding grant funds from moneys made available from the Greenhouse Gas Reduction Fund, the Department of Food and Agriculture shall review the applicant's analysis identifying potential adverse impacts of the proposed project, including a net increase in criteria pollutants, toxic air contaminants, and hazardous air pollutants; groundwater and surface water impacts; and truck traffic and odor.
> (b) A project shall not receive funding unless the applicant has demonstrated to the Department of Food and Agriculture that the applicant has done all of the following:
> (1) Conducted outreach in areas that will potentially be adversely impacted by the project.
> (2) Determined potential adverse impacts of the project.
> (3) Committed to measures to mitigate impacts.
> (c) In making awards, the Department of Food and Agriculture shall prioritize projects based on the criteria pollutant emission benefits achieved by the project.
> (d) A project funded by the Department of Food and Agriculture that results in localized impacts in disadvantaged communities shall not be considered to provide a benefit to disadvantaged communities for the purposes of Section 39713 of the Health and Safety Code.

On February 2, 2017, the Subcommittee received a letter from 10 environmental groups that expressed concern that the Department's approach towards the expenditures of these funds do not comply with the requirements of SB 859. The letter further requested that the Subcommittee hold an oversight hearing on the Department's process for awarding funds. Environmental justice advocates note that dairy digester projects do not prevent groundwater contamination, do not reduce air pollution, and do not benefit nearby communities already disadvantaged from other social and environmental factors.

All Previous Biogas to Pipeline Projects in the United States have Shut Down

The Department comments that it believes that new market conditions and technology will make the next round of dairy digester projects more viable than the previous experience. In particular, the Department cites the ability of projects to earn Low Carbon Fuel Credits with the development of biogas projects that offset existing fuels. The Department says that the next round of funding will focus on projects that develop biogas for use as a fuel and for direct injection to the pipeline.

According to a 2015 study conducted by UC Irvine for the Air Resources Board, this converting biogas to CNG would significantly reduce emissions from these facilities.

However, these projects may have a substantially higher risk than the previous projects, which used dairy digesters to generate electricity. According to the US EPA, all of five previous efforts to link dairy digesters with the pipeline fuels have failed. The chart below details these projects:

Project	Location	Status	Project Start	Project End
Vintage Dairy	Fresno, CA	Shut down	2008	2010
Whitesides Dairy	Minidoka, ID	Shut down	2004	2009
Westpoint Dairy	Gooding, ID	Shut down	2008	2009
Huckabay Ridge	Erath, TX	Shut down	2008	2013
R-Qubed Energy - Dona Ana	Dona Ana, NM	Under Construction Since 2012	2012	Still "under construction"

STAFF COMMENTS

In the March 15, 2017 hearing on Cap and Trade, it was suggested that Assembly Budget staff was biased against dairy digester projects. This characterization is inaccurate. Dairy digesters can sometimes work, but they are not a "silver bullet" for dairies and the environment. In many cases, they might be a "white elephant" that result in more cost and pollution than if no project was undertaken at all. There is a high probability that many of these new projects, as noted by staff, are going to be shut down. In addition, by focusing too much on these big, expensive projects, the Department may be going down a dangerous path for smaller dairies, where these projects don't seem viable.

The Subcommittee may wish to consider the following questions:

How Much Should the State Gamble on Dairy Digesters?

Dairy Digesters projects are risky and difficult to implement and are likely not economically viable for most dairies in California. The next phase of digester incentives proposed by the Department of Food and Agriculture encourage the use direct injection of biogas to the pipeline, an approach that has failed to work in every previous attempt. It was the intent of the Legislature that one-time Cap and Trade funding appropriated in 2016 to encourage innovating in allowing dairies to meet Short Lived Climate Pollutant reduction goals. However, what level of risk is appropriate and should so much of the total resources be devoted to such a narrow approach?

Is the State making the most of the opportunity of this funding? The 2016 funding for manure reduction is a sizable investment to pilot approaches to reduce greenhouse gases at dairies, but it is one-time funding. Eventually dairies of all sizes will need to find a cost-effective way to reduce emissions. How will Phase 2 advance this goal?

The Department's preference for dairy digester programs could provide the largest 225 dairies with a subsidized competitive advantage over smaller dairies. Since milk prices are set by the US Department of Agriculture, dairies can only compete with each other based on cost of production. Research shows that the high fixed instillation and operating costs of these programs make and economy-of-scale necessary to achieve a return on investment.

Using the UC Davis Study as a guideline, the Subcommittee may wish to explore how the State's investment will lead to innovation that benefits all dairies, including the hundreds of small family-run dairies with smaller herds.

One of the most striking finding in the UC Davis report is the massive reductions in emissions by improving the effectiveness of aeration. Why is this approach not more of a focus in the Department's efforts?

The data also shows that upgrading digesters, a major focus of State investments, seem make the overall project less cost-effective in all cases. Will such investments continue to be made in Phase 2 and if so, why?

Table 1.1: Scenario Summary: Mitigation Potential and 10-yr Cost

Scenario Description		≥ 300 milk cows/dairy or 1110 dairies (~1.65 million cows)			≥ 2000 milk cows/dairy or largest 225 dairies (~800,000 cows)		
		Mitigation Potential (Tg/y)	Average Cost ($/Mg)	10-yr cost (Billion $)	Mitigation Potential (Tg/y)	Average Cost ($/Mg)	10-yr cost (Billion $)
Scrape to Open Solar Drying (6 mo.)		2.2	71	$1.6	1.1	54	$0.6
Scrape to Open Solar Drying (8 mo.)		3.0	82	$2.4	1.4	69	$1.0
Scrape to Closed Solar Drying (12 mo.)		4.3	232	$10.0	2.1	179	$3.7
Scrape to Forced Evap.(Nat.Gas Fuel) (12 mo.)		5.4	116	$6.3	2.6	98	$2.6
Scrape to Compost with Bulking (12 mo.)		4.9	195	$9.5	2.4	183	$4.3
Aeration (Low Effectiveness)		4.1	68	$2.7	2.0	65	$1.3
Aeration (High Effectiveness)		7.3	38	$2.7	3.5	36	$1.3
Solid/Liquid Separation		1.2	55	$0.6	0.6	39	$0.2
Tier 1 Upgrade with Cover and Flare		8.1	35	$2.8	4.0	29	$1.1
Lagoon Digester - Uncovered Effluent Pond*	Recip. Engine	7.3	41	$3.0	3.5	31	$1.1
	Microturbine		46	$3.4		36	$1.3
	Fuel Cell		59	$4.3		45	$1.6
	RNG fuel		54	$3.9		33	$1.2
Tank / Plug Flow Digester - Covered Effluent Pond**	Recip. Engine	8.3	55	$4.6	4.1	41	$1.7
	Microturbine		60	$5.0		46	$1.9
	Fuel Cell		72	$6.0		55	$2.2
	RNG fuel		65	$5.5		42	$1.7

* Represents lowest cost/ lowest mitigation potential of Digester Scenarios
** Represents highest cost & mitigation potential of Digester Scenarios

[6] Mg means metric tonne (Mg = 1000 kg = 1 metric tonne). Tg = million Mg = million metric tonnes.

Additional, this data prompts questions about how the State can incentives the innovation that will help our dairy industry, as illustrated below.

This stuff is very new, could research reduce the costs?

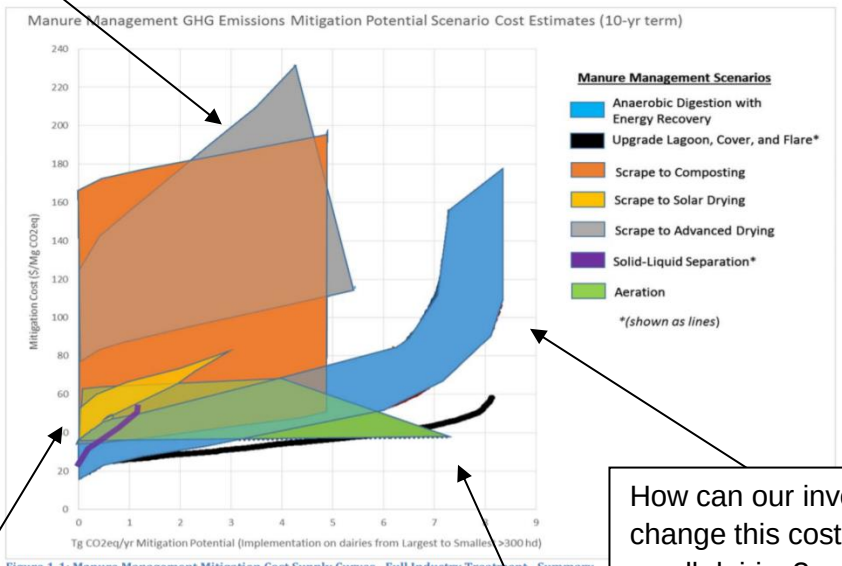


Figure 1-1: Manure Management Mitigation Cost Supply Curves - Full Industry Treatment - Summary

How can our investment help change this cost curve for small dairies?

Seems promising, but not one solar drying pad in California!

Effective aeration seems cost effective for dairies of all sizes, why is this not more of a focus?

Does the Department Pick Winners in the Industry?

The Department commented that it has a several "shovel-ready projects" ready for Phase 2 ready to launch. However, the winners of the previous round of grants appears to be a very small community of vendors and farms. In Phase 1, 91 percent of the $11.1 million incentive awards went to projects partnered with American Biogas Energy Company (ABEC), from Dallas Texas, which received 43.6 percent or to Philip Verwey Farms, whose two projects received 47.6 percent of the total awards. There are two likely reasons why this could have happened: 1) The industry is small and dominated by a few key providers or 2) the Department's criteria for selecting projects is biased toward certain vendors.

The Subcommittee may wish to explore this dynamic in further detail if Phase 2 has a similar concentration of grant winners. It is hard to see how the State can learn or innovate from an approach that buys multiple contracts for the same type of project with the same vendor.

How Will the Department Comply with Requirements of SB 859 to Mitigate the Impact of these Projects on Disadvantaged Communities?

The Department has met with the environmental justice advocates that authored the letter sent to the Subcommittee. The Subcommittee may want to receive an update as to the extent the concerns of these important groups have been addresses in any way.

Staff Recommendation for Further Oversight

California's effort to tackle climate change is bold, risky, and ambitious-- the Department's approach towards the manure management program mirrors these qualities. The plan for the 2016 funding has considerable risk and will likely result in a high level of failure. The Subcommittee should insure it learns from these failures. Therefore staff recommends adopting the following Supplemental Report Language:

- Require the Department of Food and Agriculture to report to the Legislature on the awards for the 2016-17 methane reduction funding, including vendor, location, and expected outcomes in terms of pollution reduction. This report should include a discussion of required mitigation efforts undertaken by the department to comply with the provisions of SB 859.

- Given the historic rate of project failures, require that the department track any project awarded funding in the 2014-15 and 2016-17 budget for at least ten years to analyze whether the investments became cost effective.

- So the State can learn from its mistakes, require that if any of the projects fail or cease in that time, require the department to report within 3 months to the Joint Legislative Budget Committee on the status of the project, the impact of the project on the dairy, and the reasons why the project failed.

- Since Dairy Digesters do not work for small dairies, require the Department to create a Small Dairy Climate Action Plan to articulate cost effective strategies to reduce methane emissions in small dairies.

Staff Recommendation: Adopt Supplemental Reporting Language

ISSUE 2: SUSTAINING THE VIABILITY OF EMERGENCY EXOTIC PEST RESPONSES

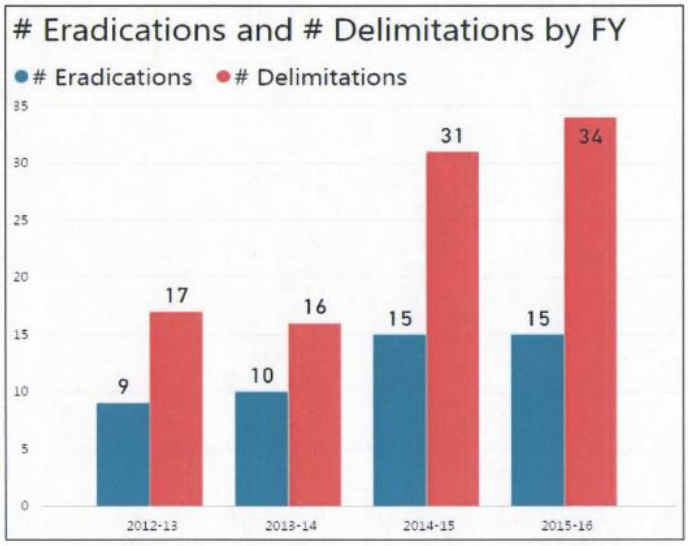
The Governor's budget requests $1,751,000 in Federal Fund authority annually for two years and 20 permanent positions to create Emergency Plant Health Response Teams.

BACKGROUND

Exotic pests are organisms introduced into an area beyond their natural range and become pests in the new environment. Most introductions have been unintentional and accidental. Having evolved in a different ecosystem, these non-native species may have few natural enemies in their new locations, which can often lead to population increases that can overwhelm native species by out-competing them for resources.

According to the Center for Invasive Species Research at UC Riverside, agricultural losses to exotic pests in California exceed $3 billion annually. CDFA is responsible for early detection and prompt eradication of such agricultural pests. CDFA accomplishes this through the operation of a statewide detection-trapping program, special detection surveys, and the maintenance of emergency projects response teams.

Over the past five years, CDFA identified over 377,740 pests that pose economic threat to California. CDFA conducts several eradication programs each year and has either delimited or eradicated 147 pests.



Due to an increase of exotic pest eradication projects over the past five years, the United States Department of Agriculture awarded CDFA $1,751,000 in federal funds in 2016-17 to support the hiring and maintenance of Emergency Plant Health Response Teams. These teams develop and implement comprehensive approaches to invasive species eradication.

STAFF COMMENTS

A multitude of factors such as warmer climates, changes in precipitation patterns, and the movement of people and goods are all contributing to pests moving into new environments. Not all exotic pests are harmful, but those that are, the risks are great. For example, the Polyphagous Shot Hole Borer (PSHB) native from South Asia has made its way to Southern California and has attacked over 200 species of trees there. The PSHB has been found to attack healthy trees by interrupting the transport of water, which results in the death of the tree. Providing CDFA with resources to combat invasive and exotic pests will help protect biodiversity and financial loss in CA's agricultural industry.

The subcommittee may wish to ask CDFA the following:

- Are the funds awarded restricted to agricultural pests?
- What efforts have you undertaken to combat PSHB?
- Do you have an assessment on how PSHB is affecting trees outside the agricultural industry?

Staff Recommendation: Hold Open

ISSUE 3: USE OF ANTIMICROBIAL DRUGS ON LIVESTOCK

The Governor's budget requests an ongoing appropriation of $2,046,000 General Fund and 8.5 positions to implement SB 27 (Hill, Chapter 758, Statutes of 2015).

BACKGROUND

Antimicrobial drugs are widely used in medicine to treat illness and prevent infection. An antimicrobial drug is a general term that refers to a class of drugs that includes antibiotics, antifungals, antiprotozoal, and antivirals. These drugs functions by destroying or inhibiting the growth of harmful microorganisms. However, the widespread use of antimicrobial drugs led to the emergence of antimicrobial-resistance, which is when an antimicrobial drug loses its effectiveness because the microorganisms are resistant to the drugs. The Centers for Disease Control and Prevention estimates at least two million Americans fall sick every year and about 23,000 die from antibiotic-resistant infections.

An analysis by the Federal Food and Drug Administration reveals that use of antibiotics in farm animals to be a major contributing factor in the spread of antimicrobial resistance. Industrial farms feed animals low doses of the drugs in order to promote growth and ward off infections within densely packed herds. From there, natural selection does its job: bacteria that can overpower the drugs survive and multiply, and they make their way out into the environment through water, urine, and feces.

To address the overuse of antibiotics in livestock and poultry, the legislature passed SB 27 (Hill, Chapter 758, Statutes of 2015). SB 27 enforces limits on antimicrobial use in livestock and requires CDFA to develop stewardship guidelines, track antimicrobial sales and collect information about on-farm use, sample pathogens for resistance trends and report to the legislature.

The 2016 Budget Act included 8.0 positions and $1,393,000 in General Fund authority for CDFA to gather information on livestock antimicrobial sales and usage, anti-microbial-resistant bacteria, livestock management practice data, and develop science-based antimicrobial stewardship guidelines and best management practices for veterinarians and livestock owners and managers.

This request seeks additional resources for CDFA to contract with the CAHFS Laboratory to perform pathogen surveillance and antimicrobial resistance testing on samples, as well as to contract with universities to develop and maintain stewardship materials to promote antimicrobial stewardship in livestock and ensure each animal receives the intended benefit from the prescribed drug.

STAFF COMMENTS

The requested resources would enable CDFA to fully implement SB 27 and enforce the appropriate use of all medically important antimicrobials in livestock.

Staff Recommendation: Hold Open

ISSUE 4: SHORT-LIVED CLIMATE POLLUTANTS (SB 1383)

The Governor's budget requests an ongoing appropriation of $312,000 from the Cost of Implementation Account and two permanent positions to implement SB 1383 (Lara, Chapter 395, Statutes of 2016).

BACKGROUND

Short-lived climate pollutants (SLCPs) are a class of greenhouse gases or climate pollutants that remain in the atmosphere for a relatively short period of time. SLCPs, such as methane and black carbon (soot), remain in the atmosphere anywhere from a few days to a few decades. This is in contrast to carbon dioxide, which remains in the atmosphere for centuries.

Though short-lived, SLCPs have an exponentially greater impact on global warming than other climate pollutant due to their molecular ability to trap heat. As a result, there are targeted efforts to reduce SLCP emissions.

SB 1383 (Lara, Chapter 395, Statutes of 2016) requires the Air Resources Board to develop dairy/livestock manure methane regulations and analyze progress in consultation with CDFA.

CDFA operates a Dairy Digester Research and Development Program, which provides financial incentives and research funds to assist dairy operators with building and maintaining digesters and energy generating technologies to reduce methane.

CDFA is also the lead state agency on the California/Federal Dairy Digester Working Group, which includes stakeholders from academia, industry, non-profits and utilities that participated in subcommittees on economics, regulatory issues and technology. The goals of the collaboration were to recognize the widespread adoption of dairy digester systems to better manage manure and nutrients, help address air and water quality concerns, reduce greenhouse gas emissions and produce renewable energy, fertilizer, and other value-added products.

STAFF COMMENTS

Efforts to reduce short-lived climate pollutants are in furtherance of the state's climate change goals. CDFA currently implements the dairy digester program to reduce methane. SB 1383, which envisions a much boarder approach in dealing with methane and short-lived climate pollutant, requires CDFA to provide consultation and coordination on research activities with the Air Resources Board on such efforts.

Staff Recommendation: Hold Open

ISSUE 5: PLANT PEST PREVENTION SYSTEM

The Governor's budget requests the following resources to fortify the infrastructure of the state's pest prevention system:

- For 2017-18: $1.8 million General Fund, $2.6 million in Department of Food and Agriculture Fund authority, and 190.5 positions (25.5 permanent positions and a conversion of 165 temporary positions to permanent positions).
- For 2018-19 and ongoing: $1.9 million General Fund, $2.9 million in Agriculture Fund and $570,000 of Reimbursements and 194 positions (29 permanent positions and a conversion of 165 temporary positions to permanent positions)

Specifically, this request include:

- $438,000 GF and $438,000 Agricultural Fund and 5 positions in 2017-18 and $461,000 GF and $461,000 Agricultural Fund and 5 positions in 2018-19 and ongoing to rapidly respond to slow the spread of newly-detected pests and sustain consistent actions throughout the state.
- $830,000 GF and $1.9 million Agricultural Fund and 175 positions (10 new positions and the conversion of 165 temporary positions to permanent) in 2017-18 and $921,000 GF and $2.1 million Agricultural Fund and 175 positions (10 new positions and the conversion of 165 temporary positions to permanent) in 2018-19 and ongoing to address year-round detection and eradication efforts.

- $224,000 Agriculture Fund and 2 positions in 2017-18 and $281,000 Agriculture Fund and 2 positions in 2018-19 and ongoing to provide an additional investment in the identification element of the pest prevention system to handle the increase in samples and the quick turnaround of sample results to support agricultural trade.

- $527,000 GF and 3.5 positions in 2017-18 and $518,000 GF and $570,000 in Reimbursements and 7 positions in 2018-19 and ongoing to create a Biological Control Program.

- $566,000 in distributed administration costs and 5 positions in 2017-18 and $464,000 and 5 positions in 2018-19 and ongoing.

BACKGROUND

CDFA's Plant Health and Pest Prevention Services (PHPPS) Division's mission is to protect ornamental and native plantings as well as agricultural crops from the harm caused by exotic pest invasions. The pest prevention system incorporates the following elements in order to protect California:

Pest Prevention System Elements	
Exclusion	External and internal exclusion activities designed to prevent pest introduction and respond in a timely manner to contain the spread of newly detected pests.
Detection	Early detection of plant pests before they become well established.
Eradication	Timely and effective eradication actions to eliminate new pest infestations.
Control	Control and containment systems for plant pests that have become widely established.
Identification	Accurate and timely pest identification.
Public Outreach	Outreach programs to enlist public support of pest prevention activities through enhanced public awareness and education.
Scientific Support	Research, information technology and pest risk analysis systems to assure that the pest prevention program is relevant, scientifically based and continuously improved.

Existing law provides that the secretary is obligated to investigate the existence of any pest that is not generally distributed within California and determine the probability of its spread and the feasibility of its control or eradication. The secretary may establish, maintain and enforce quarantine, eradication and other such regulations as necessary to protect the agricultural industry from the introduction and spread of pests. These pests include:

- Asian Citrus Psyllid (ACP) is the vector for the Huanglongbing (HLB) disease which is fatal to citrus trees. HLB is established in areas with climates similar to California and is the most devastating of all citrus diseases. ACP was first found in California in 2008 in San Diego County. Subsequent to this initial detection, ACP has been detected in several other counties in California. ACP has the potential to establish itself throughout the State. HLB was first detected in California in 2012 in Hacienda Heights, Los Angeles County. It was subsequently detected in San Gabriel, Los Angeles County in 2015.

- Japanese beetles (JB) attack a wide range of plants in the eastern United States. JB adults feed on leaves and fruit. Hosts include small fruits, tree fruits, truck and garden crops, and ornamental shrubs, vines and trees. The JB larva feed on the roots of turf and other ground cover plants. There are three eradication projects ongoing in California.

- Exotic fruit flies are of concern to the agriculture industry and home gardeners. The larval stage of fruit flies such as Mediterranean fruit fly, Mexican fruit fly and Oriental fruit fly can damage most of the fruits and vegetables grown in the state. CDFA, in concert with most of the county agricultural commissioners, deploys

and maintains over 63,000 detection traps statewide just for exotic fruit flies. Each year several exotic fruit fly infestations are detected throughout the state. Integrated pest management and quarantine actions are implemented in order to ensure eradication.

Implementing the pest prevention system in California is a partnership involving many organizations, public and private. In addition to PHPPS, the primary participants are USDA, county agricultural commissioners, the agricultural industry, and other state agencies. The USDA focuses on pests of national significance and international pest pathways, while PHPPS and county agricultural commissioners focus on state and local activities and concerns. Agricultural industry groups primarily focus on pests of concern to a specific commodity group.

Funding

In recent years, PHPPS has become increasingly reliant upon federal and industry funding in order to carry out its mission. All elements of PHPPS receive some level of federal funds to support the pest prevention system. Additionally, these funds support California's $21 billion of agricultural exports by providing for detection surveys to prove the state is free from pests of concern to other states and countries. Although federal and industry funds are key to the success of the pest prevention system, there are no operational positions associated with the ACP and HLB funding, and the PHPPS has redirected existing staff to address the increase in federal and industry funded activities. In 2015-16, the pest prevention system was supported by $46.7 million in GF, including $6.4 million for Local Assistance, to supplement county agriculture commissioner activities. Approximately $12 million is received from a variety of fund sources or from other state agencies for exclusion activities at the Border Protection Stations (BPS) and for aquatic weed surveys. A total of $56 million in Federal Funds was received to supplement state, county, and industry funded activities, including $13.2 million for ACP and HLB and $15.8 million for Pierce’s disease/Glassy-winged sharp shooter. The counties expended $29.6 million in county general funds and $19.3 million in Agriculture Fund for pest prevention in the 2014-15 fiscal year in support of the pest prevention system. Additionally, in the 2015-16 fiscal year, various agriculture industry groups contributed $29.4 million to combat a variety of pests, including over $15 million from citrus growers to support efforts to combat ACP and HLB and $5.3 million from grape growers to combat PD/GWSS. The 2015-16 Pest Prevention total for all funding sources was $193.3 million.

Growing Concern

According to the CDFA, statistics show that over the previous five years there has been a steady increase of international passenger travel and imports of food and agriculture products which increase the risk of pest introductions into California. This is occurring simultaneously with steadily increasing crop production value and export value which indicates there is increasingly more value at risk. Funding, especially public funding for the pest prevention system, has not kept pace with the increase in pest introduction risk and the value of what is at risk.

According to a recent update of ongoing research, CDFA conducted in concert with the University Of California (UC) about pest establishment in California:

- From 1990 to 2010 the annual rate of detection of established populations of new invertebrate species in California increased to approximately nine per year, which is a 50-percent increase over the previous 20-year period.

- Approximately 44 percent of non-native invertebrates likely arrived from populations established elsewhere in North America. The rest came from a foreign country through an international border. The rate of establishment has remained unchanged after Customs and Border Protection took over the exclusion responsibility from USDA in the mid-2000s.

- The UC Center for Invasive Species Research estimates that invasive species cost California over $6 billion per year.

The following factors contribute to why the negative impact of invasive species in California is greater now than in the past:

- A warmer climate has increased the value of the urban and natural forests that sequester carbon, clean the air, and save energy.

- The transition to permanent, high-value crops like almonds, walnuts, pistachios, wine grapes, and citrus, due to consumer demand, reduced pest management options like host-free periods or crop rotation that are available for annual crops.

- The increase in organically-produced food, due to consumer demand, means there are fewer cost effective pest management options for an increasing percentage of crops, and the loss of organic status crops and properties is greater than a comparable loss to conventionally-produced food.

According to CDFA, the increasing demand on the pest prevention system's resources required to address the increasing threat of ACP and HLB have reduced the ability to respond to other invasive pests. Although the battle against ACP and HLB is supported by the citrus growers and Federal Funds, the funding covers salaries of existing staff, but does not provide permanent position authority. PHPPS' existing permanent staff has been reassigned to cover the increasing workload created by ACP and HLB response activities, leaving holes in PHPPS' core programs.

An internal trend analysis within PHPPS has shown that to keep up with the increased pest introductions, over the past few years, there has been a 100 percent increase in overtime costs, a 157.8 percent increase in overtime hours, and a 41 percent increase in temporary help hiring. To maintain these critical functions without a corresponding increase in funding, PHPPS has delayed the purchase of equipment, reduced core

functions (such as quality control inspections and trap inspections), and reduced inspections and quarantine enforcement activities, leaving the state vulnerable to other invasive species.

LAO COMMENTS

The LAO recommends approving the new positions and half of the positions requested to be shifted from temporary status. They further recommend the Legislature require the department to report at budget hearings on the need for new office facilities to house the additional staff requested under the Governor's proposal, as well as the estimated cost of the greenhouse structures that might be needed in order to implement the Governor's proposed biocontrol program.

STAFF COMMENTS

CDFA routinely conducts HLB surveys throughout the state and recently found eight citrus trees confirmed to be infected with HLB. All trees were in the core area of San Gabriel where HLB has previously been detected. This brings the total number of HLB-positive trees in California to 46. This request supports the increased suppression and control activities at CDFA.

The Subcommittee may wish to ask CDFA the following questions:

- What are your efforts in protecting urban forests and trees in riparian habitat from exotic pests?
- What are your efforts in coordinating with DFW and CalFire in combating pest that affect trees outside the agricultural industry?

Staff Recommendation: Hold Open

ISSUE 6: TURLOCK NORTH VALLEY LABORATORY REPLACEMENT

The Governor's budget requests $3.088 million General Fund to construct the North Valley Animal Health Laboratory, a new full-service animal health laboratory in the northern San Joaquin Valley.

BACKGROUND

The California Animal Health and Food Safety Laboratory System (CAHFS) is a network of four laboratories throughout California, providing broad-based surveillance for diseases in agriculture to ensure food and animal feed safety. CAHFS serves to prevent, detect, contain and eliminate livestock and poultry disease outbreaks through livestock and poultry necropsy examinations (animal autopsy) submitted by vets or animal owners to determine the cause of illness or death of an animal. CAHFS also tests environmental samples submitted to assist with diagnosing diseases, certifying animals/environments are free from disease (often a requirement prior to import/export), and to maintain flock or herd health.

CAHFS' four laboratories (Davis, Turlock, Tulare, and San Bernardino) are strategically located throughout the State to facilitate receiving an adequate sample surveillance stream and serve as an early warning system to rapidly detect diseases of concern so they can be contained by CDFA before they spread. The laboratory system offers the following testing disciplines:

Current Capabilities with Existing Infrastructure:

Discipline	Davis	Turlock	Tulare	San Bernardino
Pathology	Avian/Mammalian	Avian Only	Avian/Mammalian	Avian/Mammalian
Histology	Avian/Mammalian	Avian Only	Avian/Mammalian	Avian/Mammalian
Immunology	Avian/Mammalian	Avian Only	Avian/Mammalian	Avian/Mammalian
Bacteriology (Including Parasitology)	Avian/Mammalian	Avian Only	Avian/Mammalian	Avian/Mammalian
Molecular Biology/Biotechnology	Bacteria/Virus	Bacteria Only	Bacteria/Virus	Bacteria Only
Serology	Avian/Mammalian	Avian Only	Avian/Mammalian	Avian/Mammalian
Toxicology	Yes	No	No	No
Food Safety	Yes	No	No	Yes

Laboratories in Davis, Tulare, and San Bernardino provide full-service necropsies and testing on biological samples (eg. blood, tissue biopsies, etc.). Turlock is the only laboratory that is restricted to poultry testing. The laboratory in Turlock opened in 1958 and has two on-site trailers for a total square footage of 5,100. The laboratory can only accept avian (bird) species and cannot provide mammalian necropsy/pathology services.

According to CDFA, the testing limitations of the Turlock Laboratory leave a gap in the surveillance system given the large population of cattle, sheep and other livestock in the northern central valley of California. CDFA further asserts that the existing laboratory does not meet current standards for diagnostic testing, lacks adequate biocontainment

safeguards, and cannot be modified to comply due to its age, the presence of asbestos, and the size and location of the existing site.

This proposal seeks to replace the laboratory facility in Turlock with a full-service animal health laboratory. The total estimated cost of this project is $54.1 million.

STAFF COMMENTS

Multiple DGS studies as well as CAHFS' accrediting body notes that the existing Turlock laboratory does not meet current laboratory standards. The laboratory was built in 1958 and is not designed for modern day biosafety, biocontainment or testing.

Staff Recommendation: Hold Open

3960 DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ISSUE 7: LEAD-ACID BATTERY RECYCLING ACT OF 2016 (AB 2153, CHAPTER 666, STATUTES OF 2016)

The Governor's Budget requests $610,000 from the Lead-acid Battery Cleanup Fund and five positions to implement the Lead-acid Battery Recycling Act of 2016.

BACKGROUND

Lead is a toxic metal that does not break down in the environment and accumulates in the human body. Exposures to lead can lead to a number of health problems, including behavioral problems, learning disabilities, joint and muscle weakness, anemia, organ failure, and even death.

A number of studies over the past 30 years have thoroughly documented the serious and cumulative impacts associated with lead exposure. According to the Centers for Disease Control and Prevention, there is no identified safe blood lead level in children.

Lead is a leading environmental threat to children's health in the United States. When children are exposed to lead it has lifelong adverse effects, including lower IQ scores, learning and hearing disabilities, behavioral problems, difficulty paying attention, hyperactivity and disrupted postnatal growth.

Lead-acid batteries constitute a significant contributor to lead in the environment. In 2013, DTSC ordered Exide Technologies, a battery recycler in the City of Vernon, to cease operations. Exide was found to have discharged harmful quantities of lead for years and poses an unacceptable risk to human health and environment. DTSC conducted soil tests and found lead contamination could have affected as many as 10,000 homes up to 1.7 miles away. A General Fund loan of $176.6 million has been given to DTSC to expedite and expand the testing area and to cleanup properties with the highest levels of lead and greatest risk of exposure. The state intends to seek reimbursement from Exide for this loan to DTSC.

AB 2153 (Garcia, Chapter 666, Statutes of 2016) establishes the Lead-Acid Battery Recycling Act of 2016, which imposes new fees on manufacturers and consumers of lead-acid batteries to fund lead contamination cleanup. Among other things, this Act requires DTSC to identify, investigate and cleanup areas reasonably suspected to have been contaminated by the operation of lead-acid battery recycling facilities.

According to DTSC, in addition to the Exide site, it has identified 14 former lead smelting facilities in California that may fall under the AB 2153's definition of a lead-acid battery recycling facility. These types of facilities have been in operation in California since at least the 1920s. There could potentially be additional lead-acid battery recycling sites identified in coming years.

LAO COMMENTS

The LAO recommends approving this request for additional positions and funding to implement the provisions of the Lead-Acid Battery Recycling Act of 2016 that require investigation and remediation of contamination from lead-acid battery recycling facilities. In addition, we recommend that the Legislature adopt budget bill language requiring DTSC to provide a report summarizing its progress implementing the act. Given the uncertainty about the amount of contamination that may have been caused by lead-acid battery recycling facilities in some areas of the state, the report would serve to update the Legislature on the department's progress towards addressing this issue and inform the Legislature on future resource needs for this program.

STAFF COMMENTS

The requested resources are consistent with the Lead-Acid Battery Recycling Act of 2016, AB 2153. Staff concurs with the LAO that there is a fair amount of uncertainty about the total number of lead-acid battery recycling facilities in California and the extent of contamination caused by these facilities, and therefore the uncertainly about the amount of work DTSC will be required to perform in the future.

Staff concurs with the LAO that there is a fair amount of uncertainty surrounding the extent of contamination caused by lead-acid battery recycling facilities in California and the extent of contamination caused by these facilities, and therefore the uncertainly about the amount of work DTSC will be required to perform in the future.

The Subcommittee may wish to require DTSC to report its progress toward implementing the Lead-Acid Battery Recycling Act of 2016 at the next budget hearing to inform the Legislature on future decisions on the level of resources necessary to meet the Act's intent.

Staff Recommendation: Approve as budgeted and adopt budget bill language requiring DTSC to provide a report summarizing its progress implementing the Act by June 2018.

ISSUE 8: STRINGFELLOW SUPERFUND REMOVAL AND REMEDIATION ACTION

The Governor's budget request $2.5 million General Fund in 2017-18, $3 million in 2018-19, and $2.6 million in FY 2019-20 for removal and remedial at the Stringfellow Hazardous Waste Site.

BACKGROUND

The Stringfellow site, located in Riverside County in Pyrite Canyon, was originally a rock quarry operated by the Stringfellow Quarry Company. In 1956, the Stringfellow Quarry Company opened the site for dumping toxic waste. The hazardous waste disposal facility operated from 1956 until 1972. In its 16 years of operation, more than 35 million gallons of liquid industrial waste were disposed in unlined ponds. The wastes included spent acids and caustics, metals, solvents, and pesticide byproducts from metal finishing, electroplating, and pesticide production.

California became the primary responsible party in 2002 and the US EPA assumed the role of lead regulatory agency for the site. DTSC, on behalf of California, has been remediating, operating, maintaining, and monitoring the Site. Failure to perform could subject the state to regulatory enforcement action by the US EPA.

STAFF COMMENTS

Staff has no concerns with this proposal. The Stringfellow site is one of the most contaminated hazardous sites in California, for which the State has been found to be 100 percent liable. The requested resources would allow DTSC to continue remediation and perform essential activities as required.

Staff Recommendation: Hold Open

3480 DEPARTMENT OF CONSERVATION

ISSUE 9: TBL - CA AG LANDS PLANNING GRANT PROGRAMS - GRANT LIMITS

The Governor's budget proposes trailer bill language to revises the purpose of the Agricultural Protection Planning Grant Program to incorporate climate change goals. The trailer bill also includes language to increase the grant limits from $500,000 to $750,000.

BACKGROUND

The Department of Conservation's Division of Land Resource operates several programs to conserve farmland and open space resources. One such program is the Sustainable Communities Agricultural Land Conservation (SALC) Program, which funds agricultural land conservation with revenue from California's Greenhouse Gas Reduction Fund (GGRF).

The SALC Program is part of California Climate Investments, a statewide program that seeks to reduce greenhouse gas emissions (GHG), strengthen the economy and improve public health and the environment. SALC complements investments made in urban areas with the purchase of agricultural conservation easements and development of agricultural land strategy plans that result in GHG reductions and a more resilient agricultural sector.

While the SALC Program includes funding for planning grants to support cities and counties with developing local and regional land use policies and strategies that protect critical agricultural land, the Department has had difficulty actually encumbering the funding.

For 2015-16, the Strategic Growth Council delegated $2.5 million in GGRF to the Department for expenditure on planning grants under the SALC Program. However, the Department may only award grants to reimburse local governments after they have undertaken the planning work and demonstrated reductions in emissions. Further, this requires a significant initial investment from local governments that they may be unwilling or unable to make.

During the last round of grants, only two local governments applied for the planning grants by the established deadline. Their combined request totaled $335,000, representing just 13.4 percent of total funding available. After review, the Department could only award one of the grants.

Due to the restrictions placed on GGRF, SALC has not been successful in supporting local planning. The Department is suggesting trailer bill language to include greenhouse gas reduction goals in the Agricultural Protection Planning Grant in order to complement the efforts of the SALC program.

Agricultural Protection Planning Grant Program (APPGP), which was created by AB 52 (Wiggins, Ch. 983, Statutes of 2002), provides local governments with planning grants to improve the protection of agricultural lands and grazing lands, including oak woodlands and grasslands. This program provides the Department the greatest flexibility to develop a targeted agricultural land protection planning grant program.

STAFF COMMENTS

Funding agricultural conservation easements alone without prior planning prevents the state from fully maximizing its investments into local conservation programs. Including greenhouse gas reduction goals in the Agricultural Protection Planning Grant, which provides for planning grants, would better position the Department to accomplish the goal of comprehensive agricultural land protection planning that also achieves greenhouse gas reduction targets. This request would improve decision-making at the local level on where to target easement acquisitions in order to maximize farmland protection and avoid increases in greenhouse gas emissions through the SALC program.

Staff Recommendation: Hold Open

ISSUE 10: AB 2729 IMPLEMENTATION, IDLE WELL TESTING

The Governor's budget requests $1,500,000 ($2,500,000 ongoing) from the Oil, Gas and Geothermal Administrative Fund and 15.0 permanent positions to develop the new Idle Well Management Program.

BACKGROUND

California has approximately 20,000 idle oil and gas wells. Of these wells, approximately half have been idle for more than 10 years and almost one quarter has been idle for 25 years or more. As they degrade, aging idle wells pose a risk to underground sources of drinking water by leaking.

Unlike wells in production, where operators will likely see changes in production levels if a leak or damage occurs, leaks or damage to idle wells may go unnoticed for many years. Testing for wells that are not producing or injecting is not required until the well officially becomes idle—after five years. Testing and risk assessment needs to be done more frequently in order to adequately protect groundwater.

Additionally, the longer a well remains idle, the more likely it is to be deserted by the operator. This can threaten public health and the environment, and lead to significant costs for the state to properly plug wells and remediate any environmental damage. Further, Low idle well fees and relatively inexpensive bonding requirements create a significant financial incentive for operators to idle low performing wells, rather than to properly plug wells. As a result, thousands of wells remain idle for decades.

The large inventory of idle wells is of special concern when oil prices are low. As operators struggle to remain profitable in a worldwide market, there is an increased possibility that more of them will become insolvent or otherwise financially incapable of plugging potentially problematic wells. As domestic production continues to decline, private funding for plugging wells may become increasingly scarce, potentially leaving the State responsible for plugging and remediation efforts.

AB 2729 (Williams and Thurmond, Chapter 272, Statutes of 2016) enacted substantive changes to the management of idle wells. AB 2729 ensures that funding is available to cap idle wells and creates disincentives for operators to maintain large numbers of idle wells. Specifically, AB 2729 does the following:

- Redefines “idle well” and “long-term idle well” to ensure that the testing and monitoring necessary to ensure public safety and environmental protection occurs.
- Increases idle well fees and provides an alternative to paying idle well fees for operators who develop and implement a plan to aggressively reduce their long-term idle well inventory.

- Eliminates exemptions and requires that all idle wells and long-term idle wells are subject to either idle well fees or an approved idle well management plan. Requires the Division of Oil, Gas, and Geothermal Resources to update idle well testing and monitoring requirements to detect risks to public health and the environment.

Under the new definitions of idle and long-term idle wells, DOGGR estimates there to be 29,565 idle wells in CA. Pursuant to AB 2729, DOGGR would need to perform additional testing of idle wells, review test results for anomalies, ensure testing is done according to a prescribed schedule. DOGGR would also need to issue notices of violation when it is not, review and approve idle well management plans, and evaluate risks posed to underground sources of drinking water, and require additional testing based on identified risks or proximity to ground water. It is a fairly extensive undertaking that represents a substantial overhaul of how idle well are dealt with in the state.

STAFF COMMENTS

The state is responsible for plugging and abandoning orphan wells. The requested resources would enable DOGGR to protect public health and the environment by better managing idle wells.

Staff Recommendation: Hold Open

ISSUE 11: WELL STATEWIDE TRACKING AND REPORTING (WELLSTAR)

The Governor's budget requests an appropriation of $21,087,000 in 2017-18, $15,012,000 in 2018-19, $5,545,000 in 2019-20, $2,540,000 in 2020-21, and $1,327,000 ongoing from the Oil, Gas, and Geothermal Administrative Fund; and 2.0 permanent positions, and 12.0 three-year limited term positions to further develop and implement the Well Statewide Tracking and Reporting, a centralized database system to help run operations and meet the requirements of recent legislation.

	2017-18	**2018 - 19**	**2019 - 20**	**2020 - 21**	**2021 - 22 (ongoing)**
Solution Provider	$17,856	$11,776	0	0	0
Independent Verification & Validation	$251	$300	0	0	0
Infrastructure Hosting	$845	$800	$685	$493	$493
Solution Support and Maintenance	0	0	$3,427	$1,713	$500
CDT Services	$769	$792	$89	0	0
12 Program Technicians	$1,010	$1,010	$1,010	0	0
2 IT Staff	$356	$334	$334	$334	$334
TOTAL:	**$21,087**	**$15,012**	**$5,545**	**$2,540**	**$1,327**

**dollars in thousands*

BACKGROUND

DOGGR has faced many challenges in recent years. Most notably, the US EPA audit in 2011 that revealed serious problems with the way DOGGR managed its UIC Class II Program. Through this audit, DOGGR acknowledged that that nearly 2,500 wells have been permitted to inject oil and gas waste into protected aquifers, a clear violation of the Safe Drinking Water Act. DOGGR admitted that poor communication, inadequate record-keeping, inconsistent information, and general confusion among the agencies responsible for overseeing the injection well program led to permits being issued that allowed drinking water supplies to potentially be poisoned by dangerous byproducts of oil and gas production.

SB 855 (Chapter 718, Statutes of 2010) required DOGGR to give the Legislature an annual report each January until 2015 on various features of the Division's Class II Underground Injection Control (UIC) Program. DOGGR only submitted two of the four reports, in 2011 and in 2015. The report submitted in 2015 found systematic problems that have existed within DOGGR for many years, including poor recordkeeping, lack of modern data tools and systems, inconsistent and undersized program leadership, insufficient breadth and depth of technical talent, insufficient coordination among fields districts and Sacramento, and lack of consistent, regular, high-quality technical training.

New programs place additional pressure and scrutiny on DOGGR to increase performance and transparency. SB 4 (Pavley, Chapter 313, Statutes of 2013) requires DOGGR to collect data on oil and gas wells in order to provide greater transparency and accountability to the public regarding well stimulation treatments, its impacts on the environment and the disposal of well stimulation wastes. SB 1281 (Pavley, Chapter 561, Statutes of 2013) requires reporting of specific data regarding water produced during oil and natural gas drilling operations in order to evaluate how industry practices affect groundwater.

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

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

LAO COMMENTS

The LAO recommend that the Legislature approve the request for $21.1 million in 2017-18 to fund only the first year of development of the WellSTAR database system. The LAO further recommends the Legislature fund the remainder of the request on a year-to-year basis. This approach will require the administration to return with additional funding requests in the future, thereby ensuring that the Legislature has additional opportunities to exercise oversight over this complex information technology project.

STAFF COMMENTS

A modern integrated information system would bring DOGGR in line with the digital age. Such a system would help strengthen and improve the state's oversight of oil and gas production by improving data collection and analysis, and streamlining operations and processes.

The Subcommittee may wish to ask the Department of Conservation the following questions:

- What is the current status of WellSTAR?
- Is WellSTAR being designed in a way that is flexible and can be augmented should there be a change in reporting or permitting?

Staff Recommendation: Hold Open

3970 DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

ISSUE 12: ADMINISTRATIVE SUPPORT WORKLOAD

The Governor's budget requests an ongoing appropriation of $929,000 Distributed Administration and 8.0 permanent positions for increased fiscal activity, information technology services, and departmental operations.

BACKGROUND

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

Over the last several years, CalRecyle has experienced an increase in reporting needs and information technology needs. In part due to new programs created by legislation (Carpet and Paint Program), migration of programs from other departments (Office of Education and the Environment from CalEPA to CalRecycle), implementation of new funds, grants, and loan program relating to greenhouse gas emission goals, and general increase in the complexity of various functions requiring additional attention and detail.

According to CalRecycle, workload increase relating to fiscal and information technology activity includes:

- Budget preparation was previously at a budget line item level from the budget act or the State Controller's Office records. Now it is submitted down to individual expenditure categories (e.g. salaries, benefits, travel, internal contracts, external contracts, facilities, postage. etc). CalRecycle went from working with 90 appropriations, to 90 appropriations with each appropriation broken down into 20 subcategories or more. Each of the 1800 lines requires accounting data extraction.
- The preparation, validation, and analysis of legislative reports such as the Quarterly Beverage Container Recycling Fund (BCRF), annual Tire and Oil plans have become much more labor intensive as the programs get more complex. Significant policy decisions for the BCRF are triggered when cash is predicted to fall below a certain threshold. Thus, there is no margin for error in the Quarterly BCRF process.

STAFF COMMENTS

CalRecycle is asking for a one-time true up of IT and fiscal staffing deficiencies that have existed since 2010-2011 based on quantified increases in program staffing. The subcommittee may wish to ask CalRecycle how they have managed with IT and fiscal needs for the past 5 years.

Staff Recommendation: Hold Open

ISSUE 13: BONZI SANITARY LANDFILL CLOSURE FUNDING

The Governor's budget requests one-time spending authority of $4.2 million Integrated Waste Management Account (IWMA) in 2017-18 to fund the closure of the inactive Bonzi Sanitary Landfill. The budget also requests that the annual transfer from IWMA to the Solid Waste Disposal Site Cleanup Trust Fund be reduced from $5 million to $800,000 for 2017-18 to provide funds for this proposal.

BACKGROUND

The Bonzi Sanitary Landfill, located in Modesto, was a solid waste disposal facility that stopped accepting waste in November 2009. The site has a history of groundwater contamination and landfill gas migration violations. There have been numerous enforcement actions against the operator-owner, starting in 1984, addressing inadequate financial assurances, groundwater contamination, violations of State minimum standards, and failure to comply with permit conditions.

Although Bonzi ceased operations in 2009, it did not properly “close” pursuant to state regulations. After a landfill stops receiving waste, it must begin preparing for post closure maintenance according to an approved plan. An approved closure plan is a prerequisite of a facility’s operating permit. The post closure maintenance plan identifies steps needed to ensure the integrity of containment features and how to monitor compliance with applicable performance standards.

The Bonzi Landfill is also registered as a superfund site by the US EPA, which means this site poses potential risk to human health and/or environment due to contamination by one or more hazardous waste.

Since the facility ceased accepting waste in 2009, the State and Regional Water Quality Control Board, the Central Valley Regional Water Quality Control Board, and CalRecycle have been working together to compel the current owner, the Bonzi Trust, to fully fund the closure and post closure maintenance trust fund and to bring the facility into regulatory compliance. The California Attorney General's office placed an injunction on the Bonzi Trust and its Trustees in 2009, to collect on the remaining and available assets to address financial assurance deficiencies.
In March 2010, the Bonzi Trustees notified CalRecycle and the Regional Water Quality Control Board that they were financially unable to continue critical operations and maintenance activities at the site.

In 2012, CalRecycle, in consultation with the State and Regional Water Quality Control Board as well as the Bonzi Trust, determined that to reduce the ongoing environmental and health and safety impacts associated with the site, CalRecycle would fund one-time remedial actions at the site by spending $1.9 million Solid Waste Disposal Site Cleanup Trust Fund. These actions included consolidation of waste, constructing an intermediate cover, improving site drainage, and making improvements to the landfill gas collection

system. These actions also had the effect of reducing the expanse of actions required to close the site.

The California Attorney General's Office has determined, for now and the foreseeable future, all enforcement options to access funds to cover the cost associated with closing the site have been exhausted. Moreover, all Trust assets have been identified and no additional financial resources are available.

In short, the Trust's assets can support approximately $7million in site-related costs. However, projected combined costs for closure, and post-closure maintenance are estimated between $11.2 million and $14.2 million.

CalRecycle believes that the sooner the site is closed there is more potential to keep the post-closure costs at $7 million, which the Trust will support. This does not include the corrective action costs of $4 million, which the RWQCB is currently evaluating. As such, there are currently insufficient Trust assets to both close the site (a projected $4.2 million cost) and pay for the 30-year post-closure maintenance (up to $14.2 million). Any post-closure maintenance costs not covered by the Trust would fall to the State. Therefore, funding site closure via this proposal will minimize the State's long-term obligation and risk.

STAFF COMMENTS

The requested resources would promote the timely closure of the Bonzi site. This can help with cost containment and minimizing the potential risk to human health and environment.

Staff Recommendation: Hold Open

ISSUE 14: SB 1383: ORGANIC WASTES

The Governor's budget requests an ongoing appropriation of $650,000 Cost of Implementation Account, Air Pollution Control Fund, and $508,000 Integrated Waste Management Account and 6.0 permanent full-time positions to implement SB 1383 (Lara, Chapter 395, Statutes of 2016).

BACKGROUND

Organic wastes do not contain methane. However, as they decompose in an anaerobic environment (landfills are buried), methane is produced. Organic materials make up one-third of the waste stream. Recycling organic waste through composting and other organics processing technologies, including anaerobic digestion, reduces such emissions. While most modern landfills have systems in place to capture methane, significant amounts continue to escape into the atmosphere. According to ARB's Greenhouse Gas inventory, nearly 8.28 million metric tons of CO2 equivalent are released annually by landfills in California.

In 2016, the legislature passed Senate Bill 1383 (Lara, Chapter 395, Statutes of 2016), which directed CalRecycle to reduce the State's annual organic waste disposal by at least 50 percent by 2020 and a 75 percent by 2025.

This new requirement requires CalRecycle to develop regulations and perform oversight directed at reducing organic waste in landfills. In addition to these duties, CalRecycle requests a one-time expenditure authority of $508,000 to conduct a Waste Characterization study.

CalRecycle asserts that a Waste Characterization study would enable them to comply with the waste sector evaluation requirements of Section 42563, by providing them with updated and scientifically informed information in the areas of waste disposal and recycling. CalRecycle has historically hired a professional solid waste sorting firm to conduct these studies, due to the very specific expertise needed for efficient and accurate data collection.

STAFF COMMENTS

Reducing organic waste disposal is in furtherance of California's climate goals. The requested resources enables CalRecycle to implement SB 1383.

Staff Recommendation: Hold Open

ISSUE 15: TBL - STATE AGENCIES TO RETAIN RECYCLING REVENUE

The Governor's budget proposes trailer bill language to allow state agencies to contract for recycling services and retain revenue received.

BACKGROUND

AB 4 (Eastin, Chapter 1094, Statutes of 1989) created the state's in-house recycling program in 1990. Known as Project Recycle, the law was designed to reduce agency-generated solid waste and recoup value from discards when possible.

During this time, recycling services were not widespread and few agencies had experience in setting up recycling programs. Project Recycle was an effort in bringing these services to state agencies by tasking CalRecycle (the Integrated Waste Management Board at the time) with negotiating and managing commodity recycling contracts for agencies.

In the following 27 years, private and public recycling services have become abundant and state agencies now have access to and awareness of these services. Today all agencies have recycling coordinators who manage recycling programs and contracts. The number of recycling contracts managed by CalRecycle has been reduced to three.

Despite have agency recycling coordinators, the law still requires state agencies to first receive approval from CalRecycle prior to establishing or entering into an agreement for recycling services.

Further, the revenue generated from the recycling programs that exceed $2,000 annually are remitted to CalRecycle. Agencies may request approval from CalRecycle to retain up to $2,000 in revenue annually from recycling contracts. To retain more than $2,000 in annual revenue, agencies must receive approval from the Legislature through the budget process. Current statute restricts such revenue to the offset of recycling program costs.

STAFF COMMENTS

Enabling state agencies to contract and manage a recycling process that best fit their individual needs without obtaining approval from CalRecycle would promote operational efficiency. Further, allowing agencies to retain all recycling program revenues to reinvest into their recycling and waste reduction programs would provide agencies with financial incentive to implement more effective programs.

Staff Recommendation: Hold Open