Senate Budget and Fiscal Review—Senator Mark Leno, Chair
SUBCOMMITTEE NO. 2 **Agenda**

Senator Jim Beall, Chair
Senator Jim Nielsen
Senator Hannah-Beth Jackson

Thursday, April 3, 2014
9:30 a.m. or Upon Adjournment of Session
Hearing Room 112

Consultants: Farra Bracht and Catherine Freeman

PART A

CAP AND TRADE PROPOSAL

Transportation and Sustainable Communities

Energy Efficiency and Clean Energy Programs

Natural Resources and Waste Reduction

Resources—Environmental Protection—Energy—Transportation

Background and Issues to Consider

The goal of the state's climate plan is to reduce Greenhouse Gas (GHG) emissions to 1990 levels by the end of this decade. The Cap and Trade program, a key element in this Administration's plan to achieve these goals, sets a statewide limit on the sources of greenhouse gases and establishes a financial incentive for long-term investments in cleaner fuels and more efficient energy use. The Cap and Trade program places a "cap" on aggregate GHG emissions from entities responsible for roughly 85 percent of the state's GHG emissions. To implement the Cap and Trade program, the Air Resources Board (ARB) allocates a certain number of carbon allowances equal to the cap. Each allowance equals one ton of carbon dioxide equivalent. The ARB provides some allowances for free, while making others available for purchase at auctions. Once the allowances have been allocated, entities can then "trade" (buy and sell on the open market); in order to obtain enough to cover their total emissions for a given period of time. As part of its program, the ARB will give free allowances to the state's large industrial emitters, as well as the state's electric utilities, in order to reduce the economic impact of the Cap and Trade program.

The ARB has conducted five auctions since November 2012 of GHG emission allowances as part of the market-based compliance mechanism. These auctions resulted in approximately $532 million in proceeds to the state. The state plans to conduct quarterly auctions in 2014 and estimates roughly $550 million in revenues from those auctions.

Subsequent to the passage of AB 32, (Núñez and Pavley), Chapter 488, Statutes of 2006 the Legislature passed several bills related to the reduction of GHGs. These bills have provided guidance to the Administration as it continues to develop expenditure plans for auction proceeds. In addition, the Administration has issued several executive orders that, though not law, have also provided input into the development of the expenditure plan.

Drought Package—Including GHG Proposals. On March 1 of this year, the Governor signed SB 103 and SB 104 (Budget and Fiscal Review Committee), Chapters 2 and 3, Statutes of 2014. Many of the Governor's January water-related budget proposals were included in the drought package. The package included two proposals funded by cap and trade auction revenues:

- **Water-Energy Efficiency Programs (Department of Water Resources).** The drought package accelerates the Governor's proposed allocation of $20 million annually, for two years, to support a new water-energy grant program and state water efficiency projects. The package also includes an additional $10 million for local assistance for water use efficiency.

- **Agriculture Water Efficiency Programs (Department of Food and Agriculture).** The drought package includes $10 million for agricultural water efficiency projects that reduce greenhouse gas emissions.

Select Statutory and Executive Guidance for Cap and Trade Expenditures

Statute	Summary
Global Warming Solutions Act 2006, Chapter 488 Statutes of 2006 AB 32 (Núñez and Pavley)	• Established the goal to reduce greenhouse gas emissions to 1990 levels by 2020.
Chapter 830 Statutes of 2012 SB 535 (de León)	• Requires 10 percent of cap and trade proceeds be invested within the most impacted and disadvantaged communities. • Requires 25 percent of auction proceeds to benefit impacted and disadvantaged communities.
Chapter 807 Statutes of 2012 AB 1532 (Pérez)	• Required the Administration to develop a three-year investment plan for auction proceeds.
Chapter 728 Statutes of 2008 SB 375 (Steinberg)	• Directs the Air Resources Board to set regional GHG reduction targets and guides sustainable community strategies.
Chapter 39 Statutes of 2012 SB 1018 (Committee on Budget)	• Provides guidance for collection and allocation of auction funds. • Requires state agencies to provide up-front information on GHG emission reductions prior to expenditure for any proposed auction-revenue funded program. •

Executive Order	Summary
Executive Order B-18-12 (2012)	• Requires state agencies to reduce GHG emissions by 10 percent by 2015 and 20 percent by 2020.
Executive Order B-16-12 (2012)	• Establishes targets for zero-emission vehicles in the state. • Establishes a GHG emission reduction target of 80 percent less than 1990 levels in the transportation sector by 2050.

GOVERNOR'S PROPOSAL:

Cap and Trade Expenditure Proposal. The Governor's January budget proposes to spend $850 million from cap and trade auction revenue in 2014-15. Proposals (summarized below) range from water efficiency to rail modernization. The majority of funding is directed to state agencies for both direct state projects and local assistance grant programs.

Summary of Governor's Cap and Trade Expenditure Proposal for 2014-15

Department	Activity	Amount (millions)
High-Speed Rail Authority	High-speed rail planning, land acquisition and construction	$250
Air Resources Board	Low-emission vehicle rebates and incentives for low emission vehicles	200
Strategic Growth Council	Transit oriented development grants (Sustainable Communities)	100
Community Services and Development Department	Grants for weatherization and solar installation including the Low-Income Home Energy Assistance Program	80
Caltrans	Intercity rail grants	50
Department of Forestry and Fire Protection	Fire prevention and urban forestry	50
Department of Fish and Wildlife	Wetlands restoration (state and local assistance)	30
Department of Resources Recycling and Recovery	Waste diversion	30
Department of General Services	Energy efficiency upgrades in state buildings	20
Department of Food and Agriculture	Reducing agricultural waste	20
Department of Water Resources	Water use efficiency	20
Totals		**$850 million***

Source: Legislative Analyst's Office, 2014

* This proposal was increased by $20 million (for a total of $870 million) with the acceleration of the DWR water efficiency projects (previously scheduled over two years), and the addition of the $10 million agricultural water efficiency program.

ISSUES TO CONSIDER:

Achieving Greenhouse Gas Emission Reductions. According to the Legislative Analyst's Office (LAO), in order to minimize the economic impact of cap and trade, it is important that auction revenues be invested in a way that maximizes GHG emission reductions. Maximizing emission reductions (specifically in the capped sectors) reduces competition for allowances, thereby putting downward pressure on the price of allowances. This, in turn, reduces the overall cost for covered entities to comply with AB 32 and the potential negative economic impacts of the program on consumers, businesses, and ratepayers. It is, however, unclear to what extent the complement of activities proposed by the Governor would maximize GHG emission reductions. For example, a GHG emission analysis completed by the High-Speed Rail Authority (HSRA) indicates that once the high-speed rail system is operational in 2022, it would contribute a relatively minor amount of GHG emission reductions to the state. Moreover, the construction of the project would actually produce additional emissions (though HSRA will try to offset these emissions). Despite these findings, roughly 30 percent of the funding in the Governor's proposal goes to the high-speed rail project and at this time it is unknown how much in future cap and trade revenues the Administration seeks to commit to the project because the proposed trailer bill language has not been made public. Compared to a different mix of investments that could be made with the cap and trade revenue, the Governor's proposal is unlikely to maximize GHG emission reductions. Therefore, the Legislature will need to consider the most effective use of the cap and trade auction revenue.

Legal Considerations for GHG Reductions and the 2020 Deadline. The LAO advises that the Legislature will also want to consider the potential legal risks associated with some of the activities that the Governor proposes to fund with cap and trade auction revenue. Based on an opinion that the LAO received from Legislative Counsel, the revenues generated from ARB's cap and trade auctions are considered "mitigation fee" revenues. Thus, the use of these revenues is subject to certain legal criteria. Specifically, the LAO advises that their use is subject to the so-called Sinclair nexus test. This test requires that a clear nexus must exist between an activity for which a mitigation fee is used and the adverse effects related to the activity on which that fee is levied. Given this legal requirement, the Administration's proposal to fund activities (such as high-speed rail) could be legally risky. While the high-speed rail project could eventually help reduce GHG emissions somewhat in the very long run, it would not help achieve AB 32's primary goal of reducing GHG emissions by 2020. This issue is discussed further in the Transportation section of this agenda.

High-Speed Rail or More Funding for Other Rail Projects? While the high-speed rail project may help the state to address future transportation needs, the project does little to achieve the goals of AB 32 and reducing GHG emissions by 2020. In fact, the construction of the project will increase GHG emissions in the near-term. In addition, at this time, given various lawsuits and a lack of identified future funding for the project, the likelihood of the completion of an operational section of the project is uncertain.

Given these concerns, the Legislature may wish to modify the budget request of $300 million ($250 million for high-speed rail and $50 million for rail modernization) for rail projects and provide a greater amount of funding for the Rail Modification Grant program. Grants to intercity, commuter, and urban rail operators are more likely to result in projects that can be completed in the near-term, reduce GHG emissions, and reduce congestion and improve mobility in the state. If more funding were provided for rail modernization projects, the Legislature may wish to require that the competitive grant process considers the amount of GHG reductions the project would achieve, as criteria for awarding grants. The Legislature may also wish to adopt legislation to help ensure that the program guidelines equally consider projects beyond system integration and allow for grants to fund projects, such as the electrification of rail systems or purchase of new equipment, which emits fewer GHGs.

What Should be the Mix of State Versus Local Natural Resources Programs? The three natural resources proposals (wetland restoration, water efficiency, and fire prevention) all include a mix of state projects and local assistance, mainly in the form of grants. For example, the water efficiency funding would be split 50-50 between grants to locals for water efficiency projects and a single state-owned State Water Project facility upgrade. Similarly, the forestry proposal includes $24.2 million for local assistance over two years and $75.8 million for state operations for the same time period. The wetlands restoration proposal includes about $4-5 million per year for state operations and about $25 million per year for local assistance. At the local level, there are few funding sources dedicated directly for GHG emission reductions, though efficiency is always a part of local project administration. The state also has several state conservancies dedicated to specific land and wetland restoration that are designed to have a more concerted state-local focus; however, these conservancies were not included in the proposal. The Legislature should consider these natural resources proposals individually to determine whether it agrees with the state-local funding mix proposed. Without clear metrics, it is difficult to determine whether the state or locals will achieve the greater amount of GHG emission reductions before 2020.

TRANSPORTATION AND SUSTAINABLE COMMUNITIES PROPOSALS

Greenhouse Gas Emissions Reductions through Rail Modernization—High-Speed Train System (COBCP#1)

Budget Proposal
Item 2665: High-Speed Rail Authority (HSRA). The budget includes $250 million for the state high-speed rail project. Funding will support construction of the initial operating section (IOS). This includes $58.6 million to continue environmental planning of the Phase 1 project extending from the San Francisco Bay Area to Los Angeles/Anaheim, and $191.4 million for right-of-way acquisition and construction of the approximately 130-miles of the first construction segment extending from Madera to near Bakersfield.

In addition, proposed trailer bill language would, beginning in 2015-16, appropriate 33 percent of annual cap and trade proceeds to the HSRA to construct the initial operating segment. The trailer bill language would also make available to HSRA, beginning in 2015-16, the $400 million that was loaned from the Greenhouse Gas Reduction Fund to the General Fund in the Budget Act of 2013 for work on the IOS.

The proposal anticipates a reduction of 4.3 million metric tons of carbon dioxide (CO2) equivalents by 2030, after Phase 1 of the project is completed and high-speed rail is fully operational. An additional one million CO2 annually is anticipated thereafter. The proposal does not specify a GHG reduction target for the 2020 deadline.

Background and Detail. The Legislature has appropriated approximately $5.9 billion ($2.7 billion in Proposition 1A funds and $3.3 billion federal funds) for the high-speed rail project to begin development, right-of-way acquisition, and construction of high-speed rail. However, Proposition 1A funding has not been available for expenditure because the State Treasurer's Office will not sell Proposition 1A bonds until legal uncertainties regarding the project are resolved through a "validation action" that was filed on the recommendation of the Attorney General. In the meantime, federal funds are being used for the project. However, state funds are required as a matching component to utilize the federal grant funds. The proposed $250 million, in the budget year, would be used to match federal funds.

The IOS of high-speed rail is expected to be completed by 2022, as shown in the table below. The IOS would extend 300 miles from Merced to the San Fernando Valley. Phase 1 of the high-speed rail system is planned to provide service between San Francisco and Los Angeles/Anaheim by 2028. The second phase of the system would expand service to Sacramento and San Diego.

High-Speed Rail Implementation Schedule (Phase 1)

Section	Length	Endpoints	Estimated Completion
Initial Operating Section	300 miles	Merced to San Fernando Valley	2022
Bay to Basin	410 miles	San Jose and Merced to San Fernando Valley	2026
Phase 1	520 miles	San Francisco to Los Angeles	2028

Funding to Complete the IOS Has Not Been Identified. According to HSRA's 2014 draft business plan, the HSRA estimates it will cost $31.2 billion to construct the IOS. As mentioned earlier, about $5.9 billion has been appropriated for the first construction segment and $4.2 billion in Proposition 1A funds remain available to partially fund the construction of the remainder of the IOS. However, the sources of $20.9 billion in funding needed to complete the IOS have not been identified, as shown below. The Governor's budget proposes a continuous appropriation from the state's Cap and Trade program as a potential funding source, as discussed earlier. The shortfall of funding needed to construct the entire Phase 1 of the project is even greater.

Sources of Funding to Complete the Initial Operating Segment
(In Millions)

Source	Amount
Appropriated Funds	
Proposition 1A	$2,684
Federal Grants	$3,316
Committed Funds	
Proposition 1A	$4,240
Total Available Funding	**$10,240**
Total Estimated IOS Cost	$31,174
Funding Shortfall	**-$20,934**

According to the HSRA's draft 2014 business plan, annual expenditures of $4 billion to $5 billion are expected once construction of the IOS is fully underway, as shown below.

Estimated Annual Capital Costs of Initial Operating Segment
(In Millions)

Year	Amount
2013	$212
2014	751
2015	4,003
2016	4,008
2017	4,229
2018	5,481
2019	5,049
2020	4,732
2021	2,708
Total	**$31,173**

LAO Comments. The LAO finds that (1) using cap-and-trade auction revenues for high-speed rail may not maximize GHG reductions, and (2) it is unclear how much cap-and-trade revenue will actually be available for high-speed rail in the future.

- ***Using Cap-and-Trade Auction Revenues for High-Speed Rail May Not Maximize GHG Reductions.*** As the LAO discussed in its recent report, The 2014-15 Budget: Cap-and-Trade Auction Revenue Expenditure Plan, in order to minimize the negative economic impact of cap-and-trade, it is important that auction revenues be invested in a way that maximizes GHG emission reductions for a given level of spending. It is unclear the extent to which using such revenues to support high-speed rail will maximize GHG emission reductions. First, the high-speed rail project would not contribute significant GHG reductions before 2020. This is because, as mentioned above, plans for the high-speed rail system indicate that the first phase of the project will not be operational until 2022. Second, the construction of the project would actually generate GHG emissions of 30,000 metric tons over the next several years. (The HSRA plans to offset these emissions with an urban forestry program that proposes to plant thousands of trees in the Central Valley.) The LAO also notes that HSRA's GHG emission estimates for construction do not include emissions associated with the production of construction materials, which suggests that the amount of emission requiring mitigation could be much higher than currently planned.

- ***Unclear How Much Cap-and-Trade Funding Will Support High-Speed Rail in Future.*** Although the Administration proposes to use revenue from the state's cap-and-trade program to help address the $21 billion shortfall, it is unclear how much cap and trade auction revenue will actually be allocated to high-speed rail in 2015-16, and beyond to complete the IOS under the Governor's plan. As indicated above, the Governor is proposing that beginning in 2015-16, 33 percent of all state auction revenues be continuously appropriated to HSRA. At this time, however, the Administration has not provided an estimate of projected cap-and-trade auction revenues. Moreover, it is unclear for how long the Administration expects there to be cap-and-trade auctions and the availability of revenue resulting from such auctions.

The absence of a detailed plan projecting the estimated amount of cap-and-trade auction revenue that would be appropriated to HSRA by year is problematic for two reasons. First, it makes it difficult for the Legislature to determine if such revenues, along with available federal funds and Proposition 1A bond funds, would be sufficient to fund the expected costs per year to complete the IOS. To the extent that there would not be sufficient revenues in a given year, the Legislature would need to identify alternative funding sources, likely from other state resources. Second, the absence of projected cap-and-trade auction revenues also makes it difficult for the Legislature to weigh the relative trade-offs of dedicating a fixed percentage of cap-and-trade auction revenues to high-speed rail each year (without further legislative action) versus allocating the funds on an annual basis to other programs intended to reduce GHG emissions, including programs that the Legislature deems to be of higher priority and could maximize GHG reductions in a more cost-effective manner. This is because it is uncertain whether there would be a sufficient amount of funding available under the Governor's proposal to support such programs.

Staff Comments. There is significant uncertainty about the sources of funding needed for the completion of the majority of the high-speed rail project. At this time, Proposition 1A bonds cannot be used for the project and it is uncertain when this legal hurdle will be cleared. In addition, it is unclear how much, if any, other non-state funds (such as local funds, and funds from operations and development, or private capital) would be secured.

If the project continues to be a priority for the Legislature, long-term stable funding sources for the project would need to be identified. While the Administration has proposed cap and trade funds as a long-term solution, there are considerable trade-offs the Legislature must weigh. For example, using a significant amount of the available cap-and-trade funds for high-speed rail will greatly reduce the amount of funds available for projects that are more likely to reduce GHGs by 2020 or projects that are more cost-effective.

In addition, the Administration has not made it clear at this time, how the continuous appropriation of 33 percent of an unknown amount of cap-and-trade revenues would be used to provide or obtain the funding needed for the project. It is possible that these funds could be used to borrow the funding necessary to complete the project; however, such a proposal has not been made, at this time.

Questions.

1. How would the continuous appropriation of 33 percent of cap-and-trade auction proceeds be used to provide the amount of capital funding needed annually to complete the initial operating segment? What is the funding plan for Phase 1 of the project?

2. How does an investment in high-speed rail satisfy the goals of AB 32, in terms of reducing greenhouse gas emissions by 2020?

Greenhouse Gas Emission Reductions through Rail Modernization Technology (BCP #11)

Budget Proposal
Item 2660: Department of Transportation (Caltrans). The Governor requests $50 million from the Greenhouse Gas Reduction Fund to support activities promoting GHG emission reductions in the transportation sector. Also, Caltrans requests four (4) permanent positions and $419,000 ($384,000 personal services and $35,000 operating expenses) to implement and administer the Rail Modernization Grant program. The four positions and funding will be offset by a redirection of State Highway Account funds from the Capital Outlay Support Program from anticipated reductions due to declining workload. The proposal does not specify a GHG reduction target for the 2020 deadline.

Detail. The newly-proposed Rail Modernization Grant Program (RMGP) would fund capital improvements and operational investments that would modernize California's intercity, commuter, and urban rail systems to expand and improve rail service to increase ridership, integrate rail service with the state's various rail operators, including high-speed rail, improve rail safety, and reduce greenhouse gas emissions.

Under this proposal, the Administration would provide $50 million for the RMGP. The Transportation Agency (CalSTA) would draft guidelines for the program using Caltrans staff, evaluate applications for funding, and prepare a list of projects recommended for funding. The California Transportation Commission (CTC) will approve the allocation of grant funds.

The Governor's proposed trailer bill language identifies projects eligible for RMGP funding that include, but are not limited to, the following:

- Rail capital projects, including acquisition of rail cars and locomotives.
- Intercity and commuter rail projects that improve service.
- Rail integration projects.

The CalSTA's evaluation of grant applications will consider:

- Co-benefits of projects that support implementation of sustainable communities' strategies.
- Project priorities developed through collaboration with other rail operators.

Staff Comments. Grants to intercity, commuter, and urban rail operators can result in projects that can be completed in the near-term, reduce GHG emissions, reduce congestion, and improve mobility in the state.

Questions:

1. What factors will be considered when awarding grants? Will the program try to achieve a geographic balance of projects around the state? Will factors such as (a) the applicant's availability of matching funds, (b) estimated time to project completion, and (c) GHG emission reductions, be considered?

2. What mechanisms will be used to evaluate if the grants resulted in GHG emission reductions?

3. How would the types of transit/rail projects awarded under this program differ from those that could be awarded under the Sustainable Communities program?

Low Carbon Transportation—Air Resources Board (ARB)

Budget Proposal
Item 3900: Low Carbon Transportation (Air Resources Board). The budget proposes $200 million to expand the existing clean transportation programs that provide incentives for sustainable freight technology, zero-emission cars, low-emission cars in disadvantaged communities, and clean trucks and bus programs. The budget also proposes to spend $30 million from current-year proceeds for low-carbon transportation projects. This would reverse a $30 million loan from the Vehicle Inspection and Repair Fund approved in the current-year mainly for electric vehicle rebate programs. The proposal does not specify a GHG reduction target for the 2020 deadline.

Background. The ARB has existing programs designed to support low- and zero-emission vehicle technology (clean transportation programs). Priority projects include, but are not limited to:

- **Sustainable Freight Technology**. Funds to support the development and demonstration of transformational zero or near zero-emission advanced goods movement technologies near California ports, rail yards, distribution centers, airports, and freeways.
- **Zero-Emission Cars.** Funding for zero-emission and plug-in hybrid passenger vehicles (including purchase and lease incentives).
- **Low-Emission Cars in Disadvantaged Communities.** Funding to retire and replace older and higher emitting vehicles with near-zero emission vehicles in disadvantaged communities.
- **Clean Trucks and Buses.** Funding to help California fleets offset the higher up-front cost of purchasing medium- and heavy-duty hybrid and zero-emission trucks and buses.

The ARB has requested budget bill language allowing for longer encumbrance periods and liquidation periods for the funds.

Questions:

1. What factors will be considered when determining how much funding will be allocated to individual programs? Could any single program receive more than 50 percent of the funds proposed? Will the program try to achieve a geographic balance of projects around the state?

2. What mechanisms will be used to evaluate if the grants resulted in GHG emission reductions?

Greenhouse Gas Emissions Reductions through Sustainable Communities Implementation (BCP#1)

Budget Proposal

Item 0650: Governor's Office of Planning and Research, Strategic Growth Council. The budget proposes $100 million ($1 million state operations and $99 million local assistance) from the Greenhouse Gas Reduction Fund, annually for two years, to establish and implement a Sustainable Communities Implementation Program. The program will support local project implementation of regional sustainable community strategy plans, compact and infill development near transit, and development which benefits disadvantaged communities. The proposal incorporates current sustainable communities and clean transportation priorities into a cohesive program, including transit and active transportation infrastructure projects.

The proposal includes shifting the Strategic Growth Council from the Natural Resources Agency to the Governor's Office of Planning and Research. The six positions staffing the Strategic Growth Council are currently funded from the administrative allocation of Proposition 84 and this funding expires at the end of 2013-14. The proposal does not specify a GHG reduction target for the 2020 deadline.

Background and Detail. SB 375 (Steinberg), Chapter 728, Statutes of 2008, directs regions to integrate development patterns and transportation networks in a way that achieves GHG emission reductions, while addressing housing needs, and other regional planning objectives. Each of the state's 18 metropolitan planning organizations (MPOs) must prepare a Sustainable Communities Strategy (SCS) along with its Regional Transportation Plan that demonstrates how the region will meet the GHG emission reduction targets (established by the Air Resources Board) for 2020, and 2035 through integrated land-use, housing, and transportation planning. According to the Administration, investments in land-use planning, and transportation infrastructure and operations is needed to implement the SCSs.

As specified in the Administration's proposed trailer bill language, to be eligible for funding, a project would need to do the following:

- Demonstrate that it would achieve a reduction in GHG emissions.
- Support implementation of a SCS.
- Demonstrate consistency with the state's planning priorities.

Eligible projects could include the following:

- Intermodal, affordable housing projects that support infill and compact development.
- Transit capital projects and programs supporting transit ridership.
- Active transportation capital projects.
- Transit-oriented development projects.
- Acquisition of agricultural lands.
- Planning to support implementation of a sustainable communities strategy.

Staff Comments. Cap-and-trade revenues could provide funding needed to implement SB 375. Without a coordinated approach to addressing land-use, housing, and transportation planning, it will be difficult to reduce the number of vehicles miles traveled by persons in the state and achieve GHG emission reductions.

Questions:

1. Under a competitive program operated at the state level, how would the state know which proposed projects would best implement local Sustainable Communities Strategies?

2. Alternatively, could a portion, or all, of the funding proposed here be directed to regional agencies on formula basis? What would be the advantages and disadvantages of such an approach?

Energy Efficiency and Clean Energy Programs

Weatherization Upgrades and Local Energy Efficiency

Budget Proposal.
Item 4700: Community Services and Development Department (CSD). The budget proposes $80 million ($75 million local assistance and $5 million state operations) to support the expansion of existing weatherization and solar programs through local service providers, combined with the federal Low-Income Home Energy Assistance Program (LIHEAP), and Weatherization Assistance Program. Services will benefit disadvantaged communities through the installation of solar photovoltaic systems, solar water heating systems, and weatherization measures. The use of energy audit tools will determine the installation of cost-effective measures such as insulation, weather stripping and caulking, water heater blankets, fixing or replacing windows, refrigerator replacement, and other specific projects.

The proposal does not specify a GHG reduction target for the 2020 deadline, but does include specific outcomes and accountability metrics for the number of homes weatherized and the number of homes receiving solar technologies.

Background. The CSD partners with a statewide network of more than 40 local service providers (LSPs), which include private, nonprofit, and local government organizations. The CSD traditionally allocates federal block grants for low-income programs to the LSPs for workforce development, weatherization, and energy assistance.

Federal funding declined over several years until 2009, when CSD received $186 million in American Recovery and Reinvestment Act (ARRA) federal funds. With these funds, CSD, in conjunction with its LSP partners, weatherized nearly 60,000 low-income homes. Funds from this initial allocation are nearly exhausted; however, the networks and program capacity remains.

Questions:

1. How will the programs administered by CSD be similar to, or different from, the ARRA funded weatherization and LIHEAP programs? Will the program try to achieve a geographic balance of projects around the state?

2. What mechanisms will be used to evaluate if the grants provided resulted in GHG emission reductions?

Green State Buildings

Budget Proposal

Item 7760: Department of General Services (DGS). The budget proposes $20 million to support the expansion of existing energy efficiency programs to reduce GHGs and energy usage in state buildings. The department will use the existing distributed generation, energy retrofit, and zero-net energy building design programs to allocate funding. The proposal also includes the establishment of a state-funded revolving loan fund for energy efficiency retrofit projects in the future.

The proposal includes metrics for installation of megawatts (MW) of clean energy (solar and wind, for example) and for the conversion of buildings to zero net energy, but does not specify a GHG reduction target for 2020.

Background. The DGS provides a variety of green and sustainable services to state agencies and serves as the "business manager" for the departments and entities under the executive branch. The department implements energy-related programs under the Governor's Green Building Action Plan, including:

- Programs to promote the use of zero-net energy building design.
- Energy efficiency retrofit programs.
- Reduction in grid-based energy purchases by at least 20 percent by 2018.
- Increased use of on-site power generation, including solar photovoltaic, solar-thermal, wind power generation, and clean backup power supplies.
- Financing and project delivery systems including revolving loan funds and other financing solutions for state buildings and facilities.

Questions:

1. Can any of these funds be used for local public buildings not owned by the state? Is there a similar need at the local level?

2. To date, what are the net energy reductions and greenhouse gas emission reductions provided by the Governor's Green Building Action Plan?

3. Could these funds be used to retrofit major state energy users such as the State Water Project?

Natural Resources and Waste Reduction

Wetland Restoration

Budget Proposal.
Item 3600: Department of Fish and Wildlife (DFW). The budget proposes $30 million ($4.2 million state operations, $25.8 million local assistance) for wetland restoration. Projects include: (1) planning and implementation of Sacramento-San Joaquin Delta and coastal restoration projects that integrate GHG reduction, flood protection, habitat restoration, and climate change readiness; (2) planning and implementation of mountain meadows restoration in the Cascade and Sierra Nevada mountain ranges including groundwater storage, stream flow stability, water supply and habitat restoration; and, (3) planning and implementation of wetland restoration and water efficiency projects on state-owned and administered lands.

These projects will provide the state a dedicated program for integrating wetland restoration for fish and wildlife with water supply improvement and carbon sequestration. This proposal does not include a specific GHG reduction target, but does include metrics for measurement of reduction of GHGs through carbon update, measured in carbon per acre.

Background. The DFW currently manages or participates in several wetland-related programs, including:

- **Wetland Habitat Program.** Wetland habitat preservation and enhancement are accomplished primarily through technical and financial assistance, participation on key wetland steering committees such as the Central Valley Joint Venture, and the authoring and distribution of current wetland management information.
- **Natural Communities Conservation Plans and Habitat Conservation Planning.** In addition to consulting with locals on natural area planning, the department coordinates habitat acquisition associated with plans, local assistance grants for conservation planning and implementation, conservation and mitigation banking, and voluntary integrated resource management plans. This includes activities within the Sacramento-San Joaquin River Deltas and the Bay-Delta Conservation Plan.

Questions:

1. How will the department prioritize the use of wetlands and working lands that result in permanent and enforceable commitments to improved habitat and watershed function?

2. How will the department fund ongoing maintenance of lands restored with these funds?

3. A number of recent purchases by state conservancies have major wetland restoration components, such as the South Bay Salt Ponds. How will the department prioritize these often-expensive projects? Will there be a geographic distribution component to the funding?

4. Will state conservancies be eligible for funding?

Forest Management and Fire Prevention

Budget Proposal

Item 3450: Department of Forestry and Fire Protection (CalFIRE). The budget proposes $50 million per year, for two years ($25.8 million state operations and $24.2 million local assistance in year one, $50 million in state operations in year two) to support existing and expanded programs at CalFIRE. These include:

(1) urban and community forestry local assistance grants;
(2) demonstration state forests and cooperative wildland research, mainly at state forest facilities;
(3) fuel reduction through CalFIRE's vegetation management program, which are designed to reduce wildland fire threat through a cost-sharing program with landowners that focuses on a combination of treatment types;
(4) reforestation services under the authority of the state nurseries and reforestation studies statutory guidance;
(5) funding for the forest legacy program to invest in forestlands to prevent future conversion to non-forest use; and,
(6) continued implementation of the forest practice program and forest pest control programs.

This proposal does not include a specified GHG reduction target but does include a plan to develop GHG reduction metrics prior to implementation.

Questions:

1. How will the department prioritize the use of working forest conservation easements that result in permanent and enforceable commitments to improved habitat and watershed function?

2. The department has a dedicated funding source for fuel reduction statewide on all State-Responsibility Area (SRA) lands (SRA fee). The SRA fee has a healthy fund-balance that the department has not proposed to use this budget year. Why would the highest priority for the cap-and-trade funds be for additional fuel reduction activities that can be funded by the SRA fee, rather than other forest priorities?

3. How will the department handle monitoring and enforcement without additional cost to the state? Would the department use third-party land trusts?

4. Did the Administration consider funding the Wildlife Conservation Board's Forest Program which is the state's expert in conservation easements, particularly those that cross department boundaries, and that includes a Legislative Advisory Committee for ongoing legislative oversight?

Waste Reduction, Recycling, and Composting

Budget Proposal:
Item 3970: Department of Resources Recycling and Recovery (CalRecycle).
The budget proposes $30 million annually, for two years, to support the expansion of existing recycling programs designed to reduce methane emissions at landfills and reduce further GHG in upstream management and manufacturing processes. The majority of funding ($20 million per year) will be used for grants and loans for in-state development of infrastructure to process organic materials and recyclable commodities into new value-added products. An additional $10 million per year will be used to establish a new GHG revolving loan fund to provide financial assistance through low-interest loans for recycling market development zones.

This proposal includes metrics for measurement of GHG reduction and a specific target of 1-2 million metric tons of GHG reduction by the end of 2014-15.

Background. Significant GHG reduction can be achieved by redirecting organic materials from landfills to composting and anaerobic digestion. Similar significant emission reductions can be obtained by substituting recyclable commodities for virgin materials in manufacturing processes, to produce recycled-content products. The department has co-developed six technical papers and an implementation plan through the ARB's 2013 Scoping Plan Update. The current draft of the waste sector plan acknowledges that meeting waste reduction and greenhouse gas emission reduction goals will require adjustments in waste streams.

Questions:

1. How does this proposal meet the state's 75 percent recycling goal?

2. The department recently released a major reform to the beverage container recycling program which will impact the glass industry. Has the department considered using some portion of cap-and-trade funds as incentive payments to encourage more recycled glass and to modernize current glass-manufacturing plants to reduce GHGs?

3. With two to five loans per year, and repayment beginning immediately, how long does the department need to "seed" the revolving loan in order to make it a permanent source of funding?

Emission Reductions through Agriculture

Budget Proposal:
Item 8570: Department of Food and Agriculture (CDFA).
The budget proposes $20 million to support the development and implementation of three specific programs at CDFA: (1) $12 million for a dairy digester research and development program to facilitate the design and construction of dairy digester systems; (2) nitrogen research and management program to fund research and technical assistance on reducing nitrous oxide emissions, nitrification inhibitors, water and nitrogen movement in the environment, and evaluation of water and nitrogen management practices; and, (3) an alternative and renewable fuels program to develop fuel quality specifications and standards for renewable and zero emission fuels, such as biofuels produced from dairy digesters and other agricultural waste.

This proposal anticipates the reduction of between 15,000 and 21,600 metric tons of CO_2 through the dairy digester program. The other programs do not specify a GHG reduction target but do include metrics for such measurement. This proposal includes metrics for measurement of GHG reduction and a specific target of 1-2 million metric tons of GHG reduction by the end of 2014-15.

Background. According to the department, methane emitted from dairy operations is approximately 21 times more potent than carbon dioxide as a greenhouse gas. Dairy digesters capture methane gas at dairy farms and convert it into energy in the form of electricity or fuel. Despite having the largest number of dairies of any state, there are only 15 dairy digesters in operation in California. New York, with fewer dairies and less land, has 22 digesters.

Questions:

1. As discussed on page two, the recent drought package includes $10 million for agricultural water efficiency projects that reduce greenhouse gas emissions. What is the difference in GHG reduction capacity of the agriculture sector between the proposals described above and water use efficiency throughout the agriculture sector?

2. The department's proposal is focused largely on three aspects of agriculture, most of which have co-benefits related to biofuels. What other areas of agriculture did the department explore as it came up with its proposal and what are the relative GHG reduction amounts and co-benefits from those sectors?

3. Will the use of dairy digesters have any impact on water quality? If so, what?