

Sustainability Roadmap 2022-2023

Department of Rehabilitation

Sustainability Master Plan
and Biannual Progress Report on Legislative
Sustainability Mandates and the
Governor's Sustainability Goals
for California State Agencies
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DEPARTMENT OF REHABILITATION ROADMAP

Sustainability Road Map 2022-2023

Department of Rehabilitation

Nathan Shulkin

Edi Ymerson-Gonzales

Primary Author(s)

David Kwan

Deputy Director, Administrative Services

Joe Xavier

Director

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EXECUTIVE SUMMARY

The mission of the Department of Rehabilitation (DOR) is to work in partnership with consumers and other stakeholders to provide services and advocacy resulting in employment, independent living, and equality for individuals with disabilities in California. Since it was established in 1963, the DOR has reported to the Health and Human Services Agency, with functions and responsibilities contained in Section 19000-19856 of the California Welfare and Institutions Code. The DOR is the designated state administrative unit responsible for the State's vocational rehabilitation program authorized by the Federal Title IV of the Workforce Innovation and Opportunity Act (WIOA), which incorporates the Federal Rehabilitation Act of 1973, as amended.

The aforementioned laws were enacted to ensure all Americans have the opportunity to learn and develop skills, engage in productive work, make choices about their daily lives, and participate fully in community life. DOR provides vocational counseling, guidance, and services to individuals with disabilities to prepare for, obtain and maintain employment, and to live independently in their communities.

DOR facilitates numerous programs which also serve to benefit individuals with disabilities, including Assistive Technology, Blind Field Services, the Business Enterprises Program, Career Counseling & Information and Referral Services, Cooperative Programs, Deaf and Hard of Hearing Services, Disability Access Services, Independent Living, Older Individuals who are Blind, the Orientation Center for the Blind, Student Services, Supported Employment Program, Talent Acquisition, Traumatic Brain Injury services and the Web Accessibility Toolkit.

The DOR provides vocational rehabilitation services to approximately 134,369 consumers annually through 81 offices statewide. DOR has over 1,800 employees with approximately 1,300 employees in the field providing direct services to individuals with disabilities.

The majority of DOR office locations are within 74 privately leased office spaces and most of the lease terms for those locations are eight years (four years firm term and four years soft term). The DOR also occupies six Department of General Services (DGS) managed buildings. The DOR owns and manages the Orientation Center for the Blind (OCB), a three-building campus located in Albany, California. The OCB fosters independent living for blind or visually impaired adults through an immersion program in a residential environment. This live-in, dorm style community operates 24 hours a day, 7 days a week.

The Governor's Office has requested that departments owning or managing buildings prepare a Roadmap to Achieving Executive Order B-18-12 and B-16-12. Additional direction and guidance regarding meeting the state's sustainability goals has been provided through Executive Order B-30-15 and

other policy documents. In response, the DOR has prepared the 2022-2023 Sustainability Roadmap to describe the status and steps to achieving the objectives, targets, and requirement of the green initiatives. The Roadmap is separated into the six following sections.

Climate Change

The DOR is mainly comprised of privately leased suites, which present the biggest challenge and opportunity related to climate adaptation. To meet the department's mission, the DOR's services must be accessible to all Californians, which means the DOR has a wide disbursement of offices throughout the state. It also means that there is a high probability that multiple offices will be in locations impacted by climate change and potentially impacting the surrounding communities. Prior to selecting a new field office location or renewing an existing lease, the DOR prepares a climate impact assessment to assist in making decisions regarding potential field office locations. The climate impacts assessed include fluctuations in temperatures, changes in precipitation levels, sea level changes, vulnerable and disadvantaged communities, and urban heat islands. This allows the DOR to assess which potential field office location may have the least climate impacts and/or take mitigating steps to address those impacts.

The DOR's one owned facility, the Orientation Center for the Blind (OCB), also presents opportunities in preparing for and responding to climate change in the area where the facility is located, Albany, California. To educate and address climate impacts, the OCB has initiated building improvement projects, employed student training activities, responded to seasonal/situational resource impacts (drought, power needs), utilized sustainable landscaping, and engaged in other undertakings. As more resources become available for educating staff and students regarding climate impacts, the OCB has continually increased awareness and identified new opportunities to limit climate impacts in facility changes and daily campus function.

Zero-Emission Vehicles

The DOR maintains a small vehicle fleet of 5 DGS lease vehicles and 9 department owned vehicles. The usage of DOR fleet vehicles ranges from providing driving evaluations, transporting OCB students, meeting with DOR consumers and stakeholders and administrative functions. Due to the small fleet and specialized use of the majority of the DOR owned vehicles, replacement of vehicles is infrequent. However, over half of the DOR's 14 vehicles are zero emission, hybrid, or flex fuel vehicles. It continues to be the DOR's practice to identify the most fuel-efficient option when replacing an existing owned or leased vehicle.

In addition to the efforts DOR has taken to transition its fleet to fuel efficient or zero emission vehicles, the DOR has also taken steps to install electronic vehicle charging stations at two DOR facilities. In 2019 the DOR completed installation of one Level 1 electronic vehicle charging station at its Central Office in Sacramento, California. This station allows for charging an electric compact sedan recently purchased by the Department. Also, funding was secured for one Level 1 and two Level 2 charging stations of the DOR's owned campus, the Orientation Center for the Blind (OCB). The OCB project was completed in the last quarter of 2021.

Energy

The majority of energy reporting data is obtained from the Orientation Center for the Blind (OCB) and the ten privately leased office spaces, which possess separate utility meters to measure electricity and/or natural gas. From these metered locations, as of 2021 the DOR has obtained a 36.09% reduction in energy purchases compared to the 2003 baseline. The greatest measured energy usage and greatest reductions achieved have been at OCB. These reductions have been achieved through multiple measures, including cleaning and maintenance of all three boilers, replacement of less efficient appliances with Energy Star rated equipment, communication/education of staff and students regarding conservative energy usage practices and other efforts. In addition to past efforts, the DOR is currently in the process of exploring on-site renewal energy options, demand response program participation, monitor based commissioning potential, Zero Net energy feasibility, energy reduction projects and other measures with the OCB.

Despite these reductions, there is more usage data and reduction potential available through DOR's remaining 74 privately leased, non-metered field offices. As leases come up for renewal and where financially feasible, the DOR is having separate energy meters installed at DOR privately leased offices during lease renewal or when an office moves to a new building. This provides additional data to better measure, analyze, and reduce the DOR's energy usage.

Water Efficiency and Conservation

Of the DOR's office locations, currently the Orientation Center for the Blind (OCB) is the sole reporting source for water usage for the Department. From a 2003 baseline, the OCB has reduced water usage by 54.91%, meeting the reduction goals for both 2015 and 2020 as identified in Executive Order B-18-12. These goals were achieved through several measures, including cleaning and maintenance of all three boilers, termination of landscape watering, replacement of less efficient porcelain bathroom fixtures and efforts to educate staff and OCB students regarding conservative water usage practices.

However, there is still much which can be achieved to further reduce water usage in this facility as well as increasing the data available for all DOR facilities. Some measures taken or in progress include a water audit of OCB conducted by the East Bay Municipal Utility District, installation of water submeters to better regulate usage between the multiple buildings on the OCB campus and seeking to install with separate water meters at leased facilities to better identify total department water usage.

Sustainable Operations

The DOR has strived to work towards sustainable operations through several continuing efforts in facility function and acquisition. The DOR has reduced greenhouse gas emissions since 2003 by a total of 19.07% across all owned and leased facilities. High levels of indoor environmental quality are maintained at these offices through defined parameters in DGS standard lease language and through regulating usage of construction and cleaning materials, as well as furniture purchases, through a practice of environmentally preferable purchasing. Additional efforts for green operations are achieved through regular cleaning and maintenance of HVAC equipment and institution of integrated pest management at the OCB. Finally, the DOR utilizes several factors in determining placement of the DOR's privately leased offices and location efficiency scores are being integrated into placement decision to provide services with the greatest accessibility.

Within this 2022-2023 Sustainability Roadmap, the DOR provides additional detail regarding past and ongoing efforts, as well as the future planning being undertaken to meet and exceed California's State Government sustainability goals.

Funding Opportunities

Although the DOR doesn't have any projects planned, we are continuously looking for opportunities to make improvements.

Joe Xavier^{xavier}
Date: 2024.01.31
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Joe Xavier
Director

CHAPTER 1 - CLIMATE CHANGE

Department Mission and Climate Change Adaptation

The California Department of Rehabilitation (DOR) works in partnership with consumers and other stakeholders to provide services and advocacy resulting in employment, independent living, and equality for individuals with disabilities.

DOR administers the largest vocational rehabilitation and independent living programs in the country. Vocational rehabilitation services are designed to help job seekers with disabilities obtain competitive employment in integrated work settings. Independent living services may include peer support, skill development, systems advocacy, referrals, assistive technology services, transition services, housing assistance, and personal assistance services.

We believe in the talent and potential of individuals with disabilities. We invest in the future through creativity, ingenuity, and innovation. We ensure our decisions and actions are informed by interested individuals and groups. We pursue excellence through continuous improvement. We preserve the public's trust through compassionate and responsible provision of services.

Climate Change Risks to Facilities

For all infrastructures, it is important to assess the risk that a changing climate poses to an asset or project (e.g., sea level rise or increasing daily temperatures). It is also important to recognize the impact that an infrastructure project has on the surrounding community and the impacts on individual and community resilience (e.g., heat island impacts).

The DOR maintains 74 privately leased field offices throughout the state. Overall, the DOR is one of multiple tenants which occupy office space in a building, with an average office size of approximately 4,800 square feet per DOR field office. The primary focus in determining DOR field office locations is the area where current and potential DOR consumers can most easily access DOR services. These areas are referred to as the DOR "catchment areas". In addition to catchment areas, some of the other considerations employed in determining the location of DOR field offices include market rental rates, proximity to public transportation and energy efficient or LEED Certified buildings.

The lease term for DOR field offices is normally eight years (four years firm term, four years soft term). Two years prior to the conclusion of the lease term, a site search is conducted to determine if a more appropriate location for a DOR field

office is available. This relatively short lease term can assist the DOR in adapting to changing climates and vulnerable population shifts by providing the mobility to identify locations for DOR field offices with less negative climate and community impacts.

Because DOR field offices are spread throughout the state, multiple offices have potential to impact or be impacted by climate change and/or the surrounding communities. In the past, climate impacts were not primary considerations for determining DOR field office locations; however, current DOR field office selection criteria have been amended to include climate impacts. Additionally, the Cal-Adapt website, the CalEnviroScreen tool, the CalEPA Urban Heat Island maps, and other resources, are utilized when assessing viable DOR field office locations to assist in selecting most appropriate locations, inclusive of climate and community impact considerations.

A disruption of service in an identified catchment area would mean that those individuals with disabilities would have to travel farther to obtain DOR services or potentially would not be able to receive them at all. While the disruption of DOR services would not pose an unacceptable risk to the public health and safety or affect critical natural systems, critical infrastructure or other assets, disruption of services may impact vulnerable populations. One factor in determining the location of a DOR Field Office is ensuring the catchment area includes people who may not normally have ready access to DOR services. This includes areas where vulnerable populations are present and if the DOR is unable to provide services in an area, those individuals with disabilities in that area may be impacted.

In addition to the DOR field offices, the DOR has one owned facility in Albany, CA, the Orientation Center for the Blind (OCB). This three-building campus hosts a training program for blind or visually impaired adults and has been in operation since the 1960's. The OCB has always taken the climate impacted by the facility's function into consideration. The OCB is bordered by Cerrito Creek and the care and maintenance of the portion of the waterway adjacent to the OCB has consistently been a consideration. In addition to the creek, the OCB remains conscientious of other environmental impacts, including building improvement projects, student training activities, and seasonal resource impacts (drought, power needs), sustainable landscaping, etc. However, as more resources become available for educating staff and students regarding climate impacts, the OCB has increased awareness and identified new opportunities to limit climate impacts in facility changes, implemented sustainability projects and daily campus function.

For all infrastructure, it is important to assess the risk that a changing climate poses to an asset or project (e.g., sea level rise or increasing daily temperatures). It is also important to recognize the impact that an infrastructure project has on the surrounding community and the impacts on individual and community resilience (e.g., heat island impacts).

EO B-30-15 directs State agencies to prioritize the use of natural and green infrastructure solutions. Natural infrastructure is the *“preservation or restoration of ecological systems or the utilization of engineered systems that use ecological processes to increase resiliency to climate change, manage other environmental hazards, or both. This may include, but need not be limited to, flood plain and wetlands restoration or preservation, combining levees with restored natural systems to reduce flood risk, and urban tree planting to mitigate high heat days”* (Public Resource Code Section 71154(c)(3)).

Natural infrastructure solutions should be prioritized and fully considered when thinking through adaptation actions that can be taken for at risk facilities you will identify below, and in planning for future facilities. Examples of natural infrastructure include urban tree planting to address high heat days and rainwater harvesting, bioswales, and downspout disconnection to address increased precipitation.

It is also important to recognize the impact that an infrastructure project has the surrounding community and the impacts on individual and community resilience (e.g., heat island impacts). Climate change disproportionately impacts vulnerable communities, with certain populations experiencing heightened risk and increased sensitivity to climate change and have less capacity to recover from changing average conditions and more frequent and severe extreme events. Several factors contribute to vulnerability, often in overlapping and synergistic ways. These can include a number of social and economic factors, and be determined by existing environmental, cultural, and institutional arrangements. Vulnerable populations can include, but are not limited to, people living in poverty; people with underlying health conditions; incarcerated populations; linguistically or socially isolated individuals; communities with less access to healthcare or educational resources; or communities that have suffered historic exclusion or neglect.

While there is no single tool to identify vulnerable populations in an adaptation context, there are a number of state-wide, publicly available tools that when overlaid with climate projection data can help identify communities most at risk to a changing climate. Some of these tools, including a definition for vulnerable communities, are available in a [resource guide](#) developed by the Integrated

Climate Adaptation and Resiliency Program in the Office of Planning and Research.

When you evaluate criticality and climate risk to your facility, be sure to consider populations that your facilities serve and/or are located nearby. For example, prisons or state hospitals serve many populations that are considered vulnerable. In other cases, facilities may be located near communities that have characteristics that could contribute to higher vulnerability.

Assessing Risk from Changing Extreme Temperatures:

Table 1.1 provides the DOR owned facilities that will experience the largest increase in extreme heat events.

Table 1.1: Top 5-10 Facilities that Will Experience the Largest Increase in Extreme Heat Events

Facility Name	Extreme heat threshold (EHT)°F	Average # of days above EHT (1961-1990)	Average # of days above EHT (2031-2060)	Change from Historical to projected average # of days above EHT (2031-2060)	Avg. # days above EHT (2070-2099)	Change from historical to projected average # of days above EHT (2070-2099)
Orientation Center for the Blind	100	0	0	0	0	0

Table 1.2 provides the DOR owned facilities most affected by changing temperatures, using annual mean maximum temperatures.

Table 1.2: Top 5-10 Facilities Most Affected by Changing Temperature – Annual Mean Max. Temp

Facility Name	Historical Annual Mean Max. Temp. (1961 – 1990)	Annual Mean Max. Temp. (2031 – 2060)	Change from Historical Mean Max. Temp. to Annual Mean Max. Temp. (2031-2060)	Annual Mean Max. Temp. (2070-2099)	Change from Historical Mean Max. Temp. to Annual Mean Max. Temp. (2070-2099)
Orientation Center for the Blind	65	68.1	3.1	69.5	4.5

Table 1.3 provides the DOR owned facilities most affected by changing temperatures, using annual mean minimum temperatures.

Table 1.3: Top 5-10 Facilities Most Affected by Changing Temperature- Annual Mean Min Temp

Facility Name	Historical Annual Mean Min. Temp. (1961 – 1990)	Annual Mean Min. Temp. (2031 – 2060) °F	Change from Annual Mean Min. Temp (2031-2060)	Annual Mean Min. Temp. (2070-2099) °F	Change from Annual Mean Min. Temp (2070-2099)
Orientation Center for the Blind	48.6	51.5	2.9	52.9	4.3

Assessing Risk from Heating Degree Days {HDD} and Cooling Degree Days (CDD)

Table 1.3a provides the DOR owned facilities that will be most impacted by projected changes in heating degree days.

Table 1.3a: Top 5-10 Facilities that will be Most Impacted by Projected Changes in Heating Degree Days (HDD)

Facility Name	Heating Degrees 1961-1990	Average Modeled Heating Degrees (year), 2031-2060	Change in Heating Degree Days Historical to Mid-Century	Average Modeled Heating Degrees (year), 2070-2099	Change in Heating Degree Days Historical to End-Century
Orientation Center for the Blind	3123.5	1932.0	#N/A	1315.2	-1808.3

Table 1.3b provides the DOR owned facilities that will be most impacted by projected changes in cooling degree days.

Table 1.3b: Top 5-10 Facilities that will be Most Impacted by Projected Changes in Cooling Degree Days (CDD)

Facility Name	Cooling Degrees 1961-1990	Average Modeled Cooling Degrees (year), 2031-2060	Change in Cooling Degree Days Historical to Mid-Century	Average Modeled Cooling Degrees (year), 2070-2099	Change in Cooling Degree Days Historical to End-Century
Orientation Center for the Blind	112.4	442.5	330.0	946.1	833.7

Reporting Narrative on HDD and CCD

The above facility, the Orientation Center for the Blind, is DOR's only owned facility that is located in a mild climate region in the San Francisco Bay Area, which is not identified as being in an area of high risk for HDD or CDD.

The majority of DOR field offices are in privately leased office space. Although these buildings which house DOR field offices are managed by a private lessor, and not by the DOR, the DOR will still be impacted by the changes in temperature. One impact is increased utilities costs, either through separated metering or higher rental rates if utilities are included in the lease. Higher temperatures also mean more strain on the building's environmental system, which could result in HVAC failure and corresponding temporary DOR office closure. Additionally, higher temperatures can impact the health and safety of both DOR staff and consumers who visit the facility.

The DOR has amended privately leased field office site selection criteria to include climate change consideration, such as extreme heat. This addition will allow the DOR to utilize current temperature change projection resources to determine if a potential field office location is likely to experience extreme heat impacts during the span of the lease; typically, DOR lease terms are eight years. Through this assessment, the DOR can measure the severity of projected heat impacts and look to other less impacted areas for field office placement. However, because the DOR services must be available to all California individuals with disabilities, there will be occasions when the DOR will need to locate a field office in an area with projected extreme heat impacts. For these circumstances, the DOR will work cooperatively with the DGS and the location's lessor when negotiating a potential lease to formulate an extreme heat contingency plan and address preventative heat impact building modifications.

In addition, the DOR is always exploring new opportunities to better serve DOR consumers and address climate change impacts. One path currently under exploration is connecting with DOR consumers electronically, using Teams or other means of providing remote counseling. Although the DOR will always need to have a presence in DOR catchment areas to reach those who may not be able to use electronic means of communication, by having such options available to those that do, the DOR can further reduce its footprint and the need for consumer transportation to DOR field offices, thus decreasing the impacts to the surrounding environment.

Plan to Mitigate HDD and CDD

P01: a provides the plan for the DOR owned facilities for HDD and CDD Mitigation.

Planning Outline PO1:a: Plan for Top 5-10 Facilities HDD and CDD Mitigation

Facility Name	2030
Orientation Center for the blind	No plan needed at this time

Planning Narrative to Mitigate HDD and CDD

The DOR only has one department-owed location, the Orientation Center for the Blind (OCB). The OCB, located in Albany County, which is not identified as being in an area of high risk for HDD or CDD, so at this time mitigation planning for those impacts is not needed.

DOR's other locations are leased offices in multi-tenant buildings. These leases usually follow a term of 8 years per lease. At the conclusion of each lease

agreement, a review of the area is conducted which includes temperature and environmental impacts, in addition to the continuing business need of the location, safety of the area, responsiveness of the lessor and other measures. If a location is determined a location is no longer desirable, the DOR usually can relocate a DOR office to a new location as early as four years into the lease term. As a tenant in a multi-tenant building, the DOR has limited input on facility performance, however if that or occupant health and safety are of concern and the lessor cannot or will not take action to address, relocation of a DOR office is the most likely solution.

Assessing Risk from Urban Heat Islands

Table 1.4 provides the DOR owned facilities located in urban heat islands.

Table 1.4: Facilities in Urban Heat Islands

Facility Name	Located in an Urban Heat Island (Yes or No)	sq. ft. of Surrounding Hardscape or Pavement if greater than 5000 sq. ft.
Orientation Center for the Blind	No	None

Reporting Narrative on Urban Heat Islands

The OCB is not located in an urban heat island that is in the above table.

Five of the 80 DOR field offices, or 5.9%, are in Urban Heat Islands, with daytime temperatures in urban areas about 1-7°F higher than temperatures in outlining areas and nighttime temperatures about 2-5°F higher. The offices are privately leased office spaces in multi-tenant buildings. Some of the buildings have parking lots owned by or adjacent to the building. As the leases for these locations come close to conclusion, the DOR will reexamine the placement of these offices in relation to their presence in an urban heat island and the best way the DOR can continue to provide services to individuals with disabilities in the impacted communities. If relocation is not an option due to the need for DOR services in the area, the DOR will work with the DGS and the building's lessor to determine what building improvements can be made to mitigate any contributing factors to the Urban Heat Island.

Planning Outline for Urban Heat Islands Mitigation:

P01: b provides the mitigation plan for the DOR owned facilities impacted by urban heat islands.

Planning Outline PO0:b: Plan for Urban Heat Islands Mitigation

Facility Name	Mitigation or Plan	Est. Implementation Date
Orientation Center for the Blind	No plan needed at this time	N/A

Planning Narrative for Urban Heat Islands Mitigation

The DOR's only owned facility is not located in an urban heat island. The DOR doesn't have a plan.

Assessing Risk from Changes in Precipitation

Table 1.5 provides the DOR owned that will be most impacted by projected changes in precipitation.

Table 1.5: Top 5-10 Facilities that will be Most Impacted by Projected Changes in Precipitation

Facility Name	Annual Mean Max. Precip. (1961 – 1990) (in/yrs.)	Annual Mean Precip. (2031 – 2060) (in/yrs.)	Percent Change by mid-century	Annual Mean Precip. (2070 – 2099) (in/yrs.)	Percent change by end of century	Extreme Precip (1961-1990) (in/day)	Extreme Precip (2031-2060) (in/day)	Extreme Precip (2070-2090) (in/day)
Orientation Center for the Blind	24"	27.1"	.89	26.5"	.91	0.066	0.074	0.074

Reporting Narrative on Precipitation Impacts

The impacts of climate change on the amount of precipitation that California will receive in the future are slightly less certain than the impacts on temperature. However, it is expected that California will maintain its Mediterranean climate pattern (dry summers and wet winters), but more precipitation will fall as rain than as snow. It is also likely that extremes will intensify, both drought and heavy precipitation events. Larger rains can result in flooding but will also result in shifts in runoff timing (earlier) and runoff volumes (higher). It will also result in decreased snowpack.

Planning Outline to Mitigate Precipitation Changes

P01:c provides the plan for the DOR owned facilities most impacted by projected changes in precipitation.

Planning Outline PO0: c: Plan for Top 5-10 Facilities Most Impacted by Projected Changes in Precipitation

Facility Name	Extreme Precip (2030) Plan or strategy
Orientation Center for the Blind	No plan

Planning Narrative on Precipitation Changes Mitigation Plan

The DOR only has one department-owed location, the Orientation Center for the Blind (OCB). The OCB, located in Albany County, which is not identified as being in an area of high risk for precipitation, so at this time, mitigation planning for those impacts is not needed.

Assessing Risk from Sea Level Rise

Table 1.6 shows the DOR owned facilities at risk from rising sea levels.

Table 1.6: All Facilities at Risk from Rising Sea Levels

Facility Name	Tide Chart Region	2050 Water Level (ft)	Exposed in 2050? (y/n)	2100 Water Level (ft)	Exposed at 2100? (y/n)
Orientation Center for the Blind	SF Bay area		No		No

Reporting Narrative on Sea Level Rise Impacts

The Orientation Center for the Blind (OCB), the DOR sole owned property, has experienced localized flooding from the Cerrito Creek, on the north border of the campus property. As sea level rises for the San Francisco Bay area from climate change, potential flooding impacts on campus buildings will increase as a result of unstable stream bank conditions, erosion, and overflow. The OCB has explored reinforcing the natural infrastructure of the property to minimize future flooding impacts, including utilizing assistance from the California Conservation Corps. DOR will continue to assess potential flood risks to the facility and will develop a phased planning approach to infrastructure improvement projects.

The OCB has and continues to work cooperatively with the City of Albany, local preservation groups and other stakeholders towards the maintenance of the creek and surrounding area.

Planning Outline to Mitigate Sea Level Rise Impacts

P01: d provides the plan for the DOR owned facilities for sea level rise impacts mitigation.

Planning Outline PO0:d: Planning for Sea Level Rise impacts Mitigation

Facility Name	Tide Chart Region	Plan 2030?
Orientation Center for the Blind	Bay area	No

Planning Narrative of Sea Level Rise Impact

DOR's owned Orientation Center for the Blind (OCB) campus, in the San Francisco Bay area, is continually monitored for sea level rise changes. There are many jurisdictions that sea level rise will impact in this unique location: numerous entities with active projects, mitigation planning or in development, and collaborative partnerships necessary to address such varied impacts. Environmental resources, such as the [San Francisco Bay Conservation and Development Commission](#), provide useful planning and current project information that the DOR will utilize to develop an OCB impact plan over the coming years to address rising sea levels.

Table 1.7 provides the DOR owned facilities at risk to current wildfire threats by fire hazard severity zone.

Table 1.7: Top 5-10 Facilities Most at Risk to Current Wildfire Threats by Fire Hazard Severity Zone

Facility Name	Fire Hazard Severity Zone Designation (low, medium, high, very high)
Orientation Center for the Blind	0.0

Table 1.8 shows the DOR owned facilities most impacted by projected changes in wildfire by acres burned.

Table 1.8: Top 5-10 Facilities that will be Most Impacted by Projected Changes in Wildfire by Acres Burned

Facility Name	Acres Burned (1961-1990)	Acres Burned (2031-2060)	Acres Burned (2070-2099)
Orientation Center for the Blind	8.9	7.7	6.4

Reporting Narrative on Wildfire Risks

The Orientation Center for the Blind is not in a high risk zone for Wildfires.

Planning Outline to Mitigate Wildfire Risks

P01: e provides the plan for mitigating wildfire risk by acres burned for top DOR owned facilities most at risk.

Planning Outline PO0:e: Plan for Mitigating Wildfire Risk by Acres Burned for Top 5-10 Facilities Most at Risk

Facility Name	Plan 2023-2030
Orientation Center for the Blind	No

Planning Narrative of Wildfire Risk Mitigation Plan

There currently is no plan in place for the Orientation Center for the Blind

Understanding Climate Risk to Planned Facilities

Tables 1.9 a-g show the climate risks to planned new DOR owned facilities.

Tables 1.9: a-g: Climate Risks to New Facilities

a.1 Annual Mean Max. Temperature

Facility Name	Historical Annual Mean Max. Temp. (1961 – 1990)	Annual Mean Max. Temp. (2031 – 2060)	Change from Historical to Annual Mean Max. Temp (2031-2060)	<u>Annual Mean Max Temp. (2070-2099)</u>	<u>Change from Historical to Annual Mean Max. Temp (2070-2099)</u>
No new facilities					

a.2 Annual Mean Min. Temperature

Facility Name	Historical Annual Mean Min. Temp. (1961 – 1990)	Annual Mean Min. Temp. (2031 – 2060) °F	Change from Annual Mean Min. Temp (2031-2060)	Annual Mean Min. Temp. (2070-2099) °F	Change from Annual Mean Min. Temp (2070-2099)
No new facilities					

b. Annual Mean Max. Precipitation

Facility Name	Annual Mean Maximum Precipitation (1961 – 1990) (in/yr.)	Annual Mean Precipitation (2031 – 2060) (in/yr.)	Extreme Precip (1961-1990) (in/day)	Extreme Precip (2031-2060) (in/day)
No new facilities				

c. Largest Increase in Extreme Heat Events

Facility Name	Extreme heat threshold (EHT) °F	Average number of days above EHT (1961-1990)	Average number of days above EHT (2031-2060)	Increase in number of days above EHT
No new facilities				

d. Sea Level Rise

Facility Name	Area (California Coast, San Francisco Bay, Delta)	Sea Level Rise 0.0 m	Sea Level Rise 0.5 m	Sea Level Rise 1.0 m	Sea Level Rise 1.41 m
No new facilities					

e. Wildfire Risks by Fire Hazard Severity Zone



Facility Name	Current Fire Hazard Severity Zone (low, medium, high, very high)
No new facilities	

f. Wildfire Risk by Acres Burned

Facility Name	Acres Burned (1961-1990)	Acres Burned (2031-2060)
No new facilities		

g. Risk from HDDs/CDDs

Facility Name	Heating/Cooling Degree Days (1961-1990) (HDD/CDD)	Heating/Cooling Degree Days (2031-2060) (HDD/CDD)
No new facilities		

Planning Narrative for Understanding Climate Risks to Planned Facilities

The DOR is not planning on purchasing any new facilities in the near future. The majority of the facilities in California are leased. DOR's other locations are leased offices in multi-tenant buildings. These leases usually follow a term of 8 years per lease. At the conclusion of each lease agreement, a review of the area is conducted which includes temperature and environmental impacts, in addition to the continuing business need of the location, safety of the area, responsiveness of the lessor and other measures. If a location is determined a location is no longer desirable, the DOR usually can relocate a DOR office to a new location as early as four years into the lease term. As a tenant in a multi-tenant building, the DOR has limited input on facility performance, however if that or occupant health and safety are of concern and the lessor cannot or will not take action to address, relocation of a DOR office is the most likely solution.

Understanding the Potential Impacts of Facilities on Communities

Reporting on Facilities located in Disadvantaged Communities

Table 1.10 provides the DOR owned facilities located in disadvantaged communities.

Table 1.10: Facilities Located in Disadvantaged Communities



Facility Name	CalEnviroScreen Score	Is it located in a disadvantaged community? Yes/No
Orientation Center for the Blind	20-30	No

Planning Narrative for Facilities in Disadvantaged Communities

The DOR's sole owned facility in Albany, CA is not located in a disadvantaged community.

New Facilities and Disadvantaged Communities and Urban Heat Islands

Table 1.11 provides the planned DOR owned facilities in proximity of disadvantaged communities and urban heat islands.

Table 1.11: New Facilities and Disadvantaged Communities and Urban Heat Islands

Facility Name	Located in a Disadvantaged Community (yes/no)	Located in an urban heat island (yes/no)
No new facilities		

Integrating Climate Change into Department Funding Programs

Table 1.12 provides the integration of climate change into department planning.

Table 1.12: Integration of Climate Change into Department Planning

Name of Plan	Have you integrated climate?	If no, when will it be integrated?
	Yes/No	Date
N/A	No	N/A

Reporting Narrative for Integrating Climate Change into Department Planning Process

The DOR currently doesn't have additional plans to integrate climate change into its department planning process. DOR's field offices are all leased except for our one owned facility in Albany, CA. In DOR's leased locations, the typical lease term is 8 years per lease and are leased offices in multi-tenant buildings. At the conclusion of each lease agreement, a review of the area is

conducted which includes temperature and environmental impacts, in addition to the continuing business need of the location, safety of the area, responsiveness of the lessor and other measures. If a location is determined no longer desirable, the DOR usually can relocate a DOR office to a new location as early as four years into the lease term. As a tenant in a multi-tenant building, the DOR has limited input on facility performance, however if that or occupant health and safety are of concern and the lessor cannot or will not take action to address, relocation of a DOR office is the most likely solution. Because these leased DOR offices are impermanent and can be relatively easily relocated, long-term environmental impact planning is not warranted based on current facility acquisition and usage.

Planning Narrative for Integrating Climate Change into Department Planning Process

The DOR currently doesn't have additional plans to integrate climate change into its department planning process.

Community Engagement and Planning Processes

Table 1.13 provides DOR community engagement and planning processes.

Table 1.13: Community Engagement and Planning Processes

Name of Plan	Does this plan consider impacts on vulnerable populations? Yes/No	Does this plan include coordination with local and regional agencies? Yes/No	Does this plan prioritize natural and green infrastructure? Yes/No
No Community Engagement Process	N/A	N/A	N/A

Reporting Narrative for Community Engagement and Planning Processes

The DOR works in partnership with consumers and other stakeholders to provide services and advocacy resulting in employment, independent living, and equality for individuals with disabilities. Although the DOR is active in the disabled community, opportunities for community engagement with regards to climate impacts is limited as it is out of the scope of the department's mission. However, when opportunities to include climate impacts with regarding to employment are present, the DOR will assess the ability to integrate them into our services and community engagement.

Planning Narrative for Community Engagement and Planning Processes

At this time, the DOR has not implemented climate change into communication engagement and planning processes.

Climate Change Implementation Planning in Funding Programs

Table 1.14 provides how climate change implementation planning in department funding programs.

Table 1.14: Climate Change Implementation Planning in Department Funding Programs

Name of Grant or Funding Program	Have you integrated climate change into program guidelines? Yes/No	If no, Date it be integrated?	Does this Funding Program consider impacts on vulnerable populations? Yes/No	Does this Funding Program include coordination with local and regional agencies? Yes/No
No funding or grant programs	No	N/A	No	No

Reporting Narrative for Climate Change Implementation Planning in Funding Programs

At this time, the DOR has not allocated funding towards climate change in funding programs.


Planning Narrative for Climate Change Implementation Planning in Funding Programs

At this time, the DOR has not allocated funding towards climate change in funding programs.

Measuring and Tracking Progress

Reporting Narrative on Measuring and Tracking Progress

With the updates to the DOR Sustainability Roadmaps, we are giving regular intervals to reassess DOR practices to ensure that adopted practices, such as sustainable purchasing and including climate impacts as selection criteria for



DOR offices are maintained and effective, but it also allows the DOR to learn and implement new opportunities to reduce climate impacts through daily departmental functions.

CHAPTER 2 – ZERO-EMISSION VEHICLES

Department Mission and Fleet

The mission of the DOR is to work in partnership with consumers and other stakeholders to provide services and advocacy resulting in employment, independent living, and equality for individuals with disabilities in California. The DOR provides vocational counseling, guidance, and services to individuals with disabilities to prepare for, obtain and maintain employment, and to live independently in the communities. The DOR vehicle fleet is one tool the department uses to carry out its mission.

The DOR's typical vehicle usage can be broken down based on the location the vehicles are hosted: Mobility Evaluation Program (MEP), the Orientation Center for the Blind (OCB), DOR field offices, or the DOR Central Office.

Mobility Evaluation Program (MEP)

The MEP owns and utilizes five DOR light duty vans and one full-size sedan, each modified with adaptive equipment to train and assist drivers with different physical disabilities like a paratransit van for people with wheelchairs in operating a vehicle. The MEP determines the adaptive driving equipment, vehicle and vehicle modification, and training a DOR consumer needs to be a safe and independent driver. The MEP evaluation process has two parts—a clinical assessment to determine a client's abilities in vision, cognition, movement, and an on-road assessment to establish the person's driving skills and how any problems found during the clinical assessment impact them. The MEP also evaluates the needs of consumers who cannot drive and must travel as passengers. MEP's staff are experienced driver rehabilitation professionals and include an occupational therapist/Certified Driving Rehabilitation Specialist, two driving instructors, and a rehabilitation engineer. The Mobility Evaluation Program (MEP) has six vehicles.

Orientation Center for the Blind (OCB)

The OCB owns two light duty compact sedans and one light duty van. They are primarily used for facility maintenance needs and transportation of OCB students within the city. The most frequent usage are short trips on paved city roads.

DOR Field Offices

The vehicles used in DOR field offices are leased and include two light duty compact sedans and two light duty mid-size sedans. These vehicles are used to meet with DOR clients who are unable to come to a DOR Field Office and to

meet with community partners as part of DOR's vocational rehabilitation program. Their usage varies between long and short trips on paved city and highway roads.

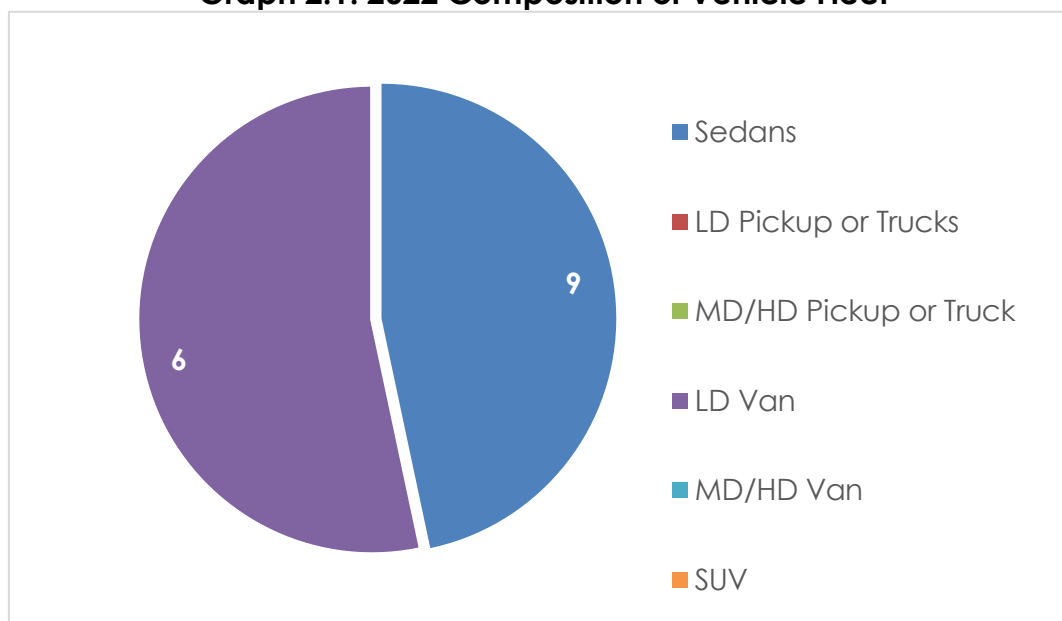
DOR Central Office

The DOR Central Office in Sacramento owns a light duty electric compact sedan. This vehicle makes two trips every weekday to deliver and collect mail, primarily in the downtown Sacramento area. These consist of short trips on paved city roads. Additionally, the DOR leases a light duty mid-sized hydrogen fuel cell sedan for use by the DOR Director. This vehicle is utilized a few times per year, normally for day trips on paved roads, both in the city and on the highway.

Composition of Vehicle Fleet

Graph 2.1 provides the composition of different types of vehicles used by the DOR in 2022.

Graph 2.1: 2022 Composition of Vehicle Fleet



Fuel Types

Reporting on Total Fuel Use by Fuel Type.

Table 2.1 provides the total fuel purchased in 2021/2022.

Table 2.1: Total Fuel Purchased in 2021/2022

Year	Diesel (Gallons)	Gasoline (Gallons)	Renewable Diesel (Gallons)
------	------------------	--------------------	----------------------------

2021	N/A	639.65	N/A
2022	N/A	482.96	N/A

Reporting Narrative on Fuel Type Selections

The DOR leases one Toyota Mirai hydrogen fuel vehicle and four other hybrid vehicles. One DOR owned electric vehicle is utilized at the DOR Central Office and the MEP owns one specialized gasoline car and 6 specialized vans for training consumers with disabilities. Because of the types of vehicle modifications on these specialized MEP vehicles, the DOR is limited in its ability to pick which type of fuel to use as only certain vehicle body types are compatible with the certain vehicle modification types. However, when possible, the DOR will choose the most fuel efficient and least climate impactful vehicle option when selecting a new leased or owned vehicle.

Rightsizing the Fleet

Teleworking, Mission Changes, and Technology Changes

The DOR maintains a small vehicle fleet, many of which has specialized usage, such as the MEP or OCB vehicles. Due to the small fleet size, impacts resulting from telework, mission changes and technology changes has impacted DOR vehicle usage. The primary impact has been from telework. More DOR staff are working from an alternative telework location, other than at DOR office which resulted in our department reducing our fleet size by two vehicles. Additionally, reduced usage has also reduced the amount of fuel purchased, which has gone down from 2021 to 2022, as provided in the table above. No DOR mission changes have occurred recently and changes in technology have not had a noticeable impact on DOR vehicle usage.

Telematics

Implementation Status

Reporting Narrative on Telematics Implementation Status

The DOR mailroom vehicle is the only DOR owned vehicle to have telematics equipment installed for vehicle monitoring. The intended purpose of the GPS equipment is to enhance and continually refine the operational efficiency of the Department's operations, monitor its assets, and enhance the safety of its employees and stakeholders, including the general public. The GPS device will also serve as a tool to track and reduce regional fuel use and better assess the DOR's contributions to reduction in greenhouse gas emissions throughout the

State. DOR requested a delay on installation of telematics equipment on DOR owned vehicles at the OCB, as the DOR intends to replace those vehicles with electric vehicles. However, once the electric vehicles are obtained, telematics equipment would be installed on those new vehicles.

Planning Narrative for Telematics Data

The DOR receives monthly telematics data from the telematic monitoring company. The data receives provides the vehicle, drive, trip date/time, distance traveled, maximum speed, driving duration, idling duration and stop duration. The intent of collecting this information is to provide a window into how the DOR currently uses the telematic monitored vehicle and how we can improve vehicle usage, performance, and environmental impact. As the usage of the one DOR vehicle with telematic monitoring equipment installed is typical, there has not been any findings in the data which has necessitated the DOR to change the current driving patterns or vehicle usage.

Existing Fleet Description

Light Duty Fleet Vehicles

The Mobility Evaluation Program (MEP) has six vehicles, each containing vehicles modifications for driving that allows DOR to identify the assistive technology (AT) necessary for persons with disabilities to drive safely and independently. These vehicles serve as MEP's assessment tools and are necessary to deliver the service of driver evaluation to disabled consumers of the DOR. California regulations require the DOR to provide the lowest cost solution for the AT needs of our consumers. The array of technology variations these six vehicles provide allow the MEP team to fulfill consumer needs in the most cost-effective manner available.

OCB utilizes three vehicles. These vehicles are comprised of one battery electric vehicle (BEV), one plug-in hybrid electric vehicle (PHEV), and one internal combustion engine (ICE) Dodge Caravan to transport visually impaired students for training purposes. The Central Office has one BEV utilized to go to the Post Office and State Controller's Office for daily DOR postal needs. All these vehicles are driven on paved roads for short trips.

Reporting On Total Miles Traveled

Table 2.2 provides the total miles traveled by DOR vehicles

Table 2.2: Total Miles Traveled

Year	2017	2018	2019	2020	2021	2022
------	------	------	------	------	------	------

Miles Traveled	106,361	88,606	82,899	34,647	33,269	30,143
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Reporting Narrative on Total Miles Traveled

The total miles driven has decreased over time, with the largest decrease stemming from a broad implementation of telework throughout the department in 2020. Since 2020, the DOR has continued with the same broad application of telework and the corresponding result has been a decreased total miles drive by DOR vehicles.

The DOR has only one vehicle at this time with telematics equipment installed. This vehicle, located at the DOR Central Office, travels an average of 3,600 mile per year. At this time, the annual milage accrued on this BEV is not expected to change.

Reporting On Miles Per Gallon

Table 2.3 provides the total miles traveled by DOR vehicles

Table 2.3: Miles per Gallon

Year	2017	2018	2019	2020	2021	2022
MPG	18.58	18.24	18.56	23.23	23.82	32.20

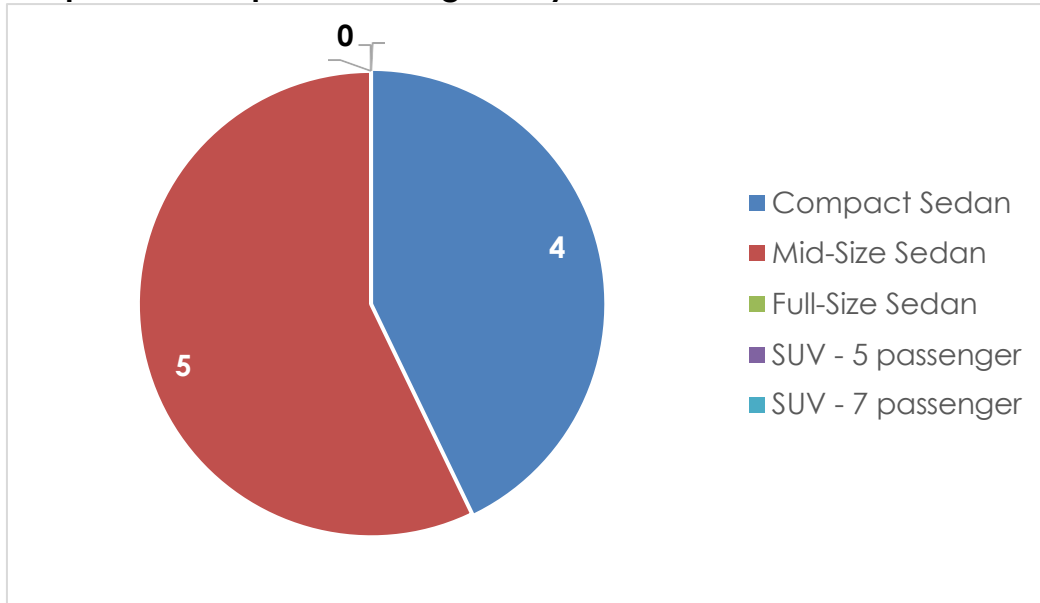
Reporting Narrative on Miles Per Gallon

The yearly miles per gallon averaged 18 mpg before COVID. Since COVID resulting in reduced miles driven, our average has gone up to 23 mpg in 2020 and in 2022, 32 mpg. The trend is going up with the mpg increasing. This is due to reduced amount of driving in our department. The DOR only has one telematics device installed on a BEV.

Composition of Light Duty Vehicle Fleet

Graph 2.2 provides the composition of light duty vehicle fleet

Graph 2.2: Composition of Light Duty Vehicle Fleet



Light Duty Take-Home Vehicle Fleet Status

Table 2.4 provides the vehicles that are taken home

Table 2.4: “Take Home” Vehicle Fleet Status

No Light Duty Take Home Vehicles

Vehicle Type	Sedans	LD Pickup or Trucks	MD/HD Pickup or Truck	LD Van	MD/HD Van	SUV
Totals	0	0	0	0	0	0

Planning Narrative on Integrating the Take Home Vehicle Program with Telework and Emissions Reduction Strategies

The DOR does not participate in a Take Home vehicle program.

Medium and Heavy-Duty Fleet Vehicles

The DOR has no Medium or Heavy-Duty vehicles in the fleet.

Incorporating ZEVs into the State Fleet

Light-Duty ZEV Adoption

Table 2.5 provides the light duty vehicles in the department fleet currently eligible for replacement

Table 2.5: Light Duty Vehicles in Department Fleet Currently Eligible for Replacement

# of Vehicles eligible for replacement	Sedans		SUVs, 5 passengers		SUVs, 7 passengers	SUVs, 8 passengers	Total
	LD vans	LD Pickups					
Totals	1	6	0	0	0	0	7

Table 2.6 provides the plan for light duty ZEV additional to the department fleet

Table 2.6: Plan for Light Duty ZEV Additions to the Department Fleet

ZEV Category	21/22	22/23	23/24	24/25
Battery Electric Vehicle (BEV)	0	0	1	0
Plug-in Hybrid Vehicle (PHEV)	0	0	1	0
Fuel Cell Vehicle	0	0	0	0
Percent of total purchases				
Required ZEV Percentage	35%	40%	45%	50%
Total number of ZEVs in Fleet*	4	4	6	6

Reporting Narrative for Light Duty ZEV Additions to the Department Fleet.

Currently at the MEP, three light duty vans are eligible for vehicle replacement. However, these vans are modified with adaptive equipment to assist drivers with different physical disabilities in operating a vehicle. Because of this specialized use and very low mileage, these vehicles will be retained by the DOR if their usage is still of value to the MEP. Additionally, available ZEV vans which could be modified with adaptive equipment are limited due to the placement of the batteries in many ZEV vans available today. However, the MEP Engineer keeps apprised of the new ZEV vans which are produced and keeps informed about any possible new ZEV options which could be utilized in the MEP.

The OCB houses one owned fleet vehicle, which is eligible for replacement. It is primarily used for facility maintenance needs and transportation of OCB students within the city. The DOR has allocated two Level 2 electric vehicle charging stations at this location. In 2023, the OCB leased two new PHEVs to replace a vehicle that was stolen and one that became inoperable.

Of the DGS leased vehicles allocated to Field Offices, one compact sedan and one light van have been identified by the DGS Office of Fleet and Asset Management (OFAM) as eligible for replacement. These vehicles are used to meet with DOR clients and community partners as part of DOR’s vocational rehabilitation program. The DOR has identified that the usage for the compact sedan is low enough that this car will be relinquished, but no replacement vehicle will be issued by the DGS OFAM.

The light van in need of replacement will be replaced by a Dodge Caravan. This make/model of van was chosen above a comparable ZEV vehicle because the van will need to be modified with a wheelchair ramp and tie down system as this van will be used by a wheelchair user. The available ZEV light van vehicles through state contract cannot be modified for the user’s needs.

Planning Narrative for Integrating ZEVs into Take-Home Vehicles

The DOR does not participate in a Take-Home vehicle program.

Medium- Heavy-Duty ZEV Adoption

Medium and Heavy-Duty Vehicles in Department Fleet currently Eligible for Replacement

Table 2.7 provides the medium and heavy duty vehicles currently eligible for replacement

Table 2.7: MD/HD Vehicles in Department Fleet Currently Eligible for Replacement

Vehicle Type	Vans, Class 2b	Vans, Class 3 & 4	Vans, Class 5 & 6	Trucks, Class 3-6	Truck, Class 8	Total
Totals Eligible for Replacement	N/A	N/A	N/A	N/A	N/A	N/A

Table 2.8 provides the planned medium and heavy duty vehicles additions to the departments fleet

Table 2.8: Planned Medium/Heavy Duty ZEV Additions to the Department Fleet

Vehicle Type	21/22	22/23	23/24	24/25	25/26
Battery Electric Vehicle (BEV)	0	0	0	0	0
Plug-in Hybrid Vehicle (PHEV)	0	0	0	0	0
Fuel Cell Vehicle	0	0	0	0	0
Percent of total purchases	0	0	0	0	0
Total number of ZEVs in Fleet	0	0	0	0	0

Reporting Narrative for Medium-Heavy Duty ZEV Adoption

The DOR has no MD/HD vehicles and does not have plans to acquire any.

ZEV Public Safety Exemption

Reporting Narrative for ZEV Public Safety Exemption

The DOR does not qualify for a public safety exemption.

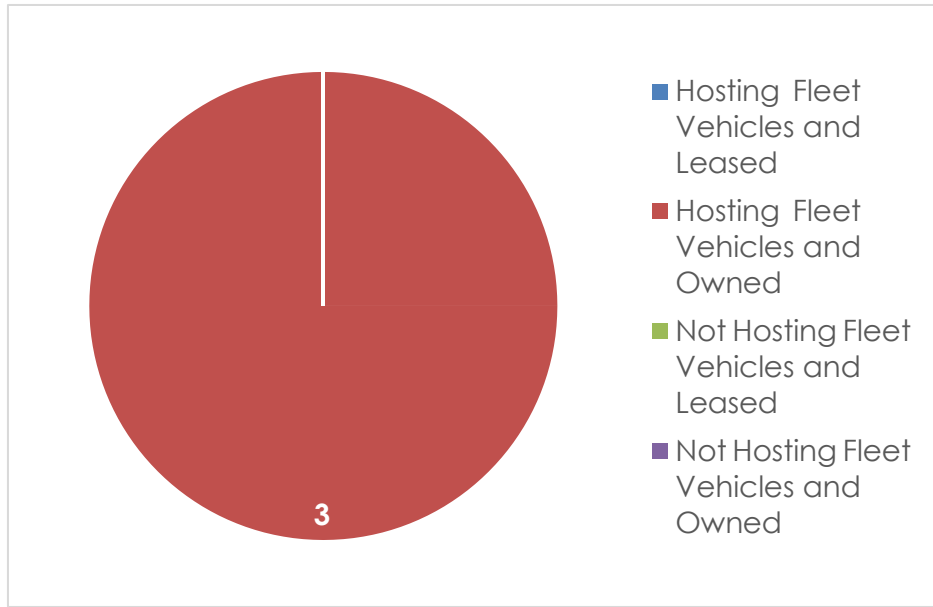
Planning Narrative for ZEV Public Safety Exemption

The DOR does not qualify for a public safety exemption.

Department's Parking Facilities

Graph 2.4 provides the department's parking facilities

Graph 2.3: Parking Facilities



Reporting Narrative on Parking Facilities

The DOR maintains 74 privately leased offices, six offices in DGS managed buildings and one owned facility, the Orientation Center for the Blind (OCB). 91% of DOR facilities are in privately leased office space and 9% in state owned buildings (8% in DGS managed buildings and 1% in a DOR owned facility).

For the 74 privately leased offices, parking spaces are identified in the lease language for use by DOR consumer and community partners, unless a DGS leased vehicle is also hosted at the office location. The leased parking spaces for DOR privately leased offices are frequently part of a larger parking lot, for other tenants of the building. The parking lots are at or adjacent to the building which hosts DOR field offices. The exception to this is the MEP, which hosts eight DOR owned fleet vehicles in a leased garage in the same building as the MEP office. Dedicated employee parking is not provided in any DOR leased parking agreements.

Of the six offices located in DGS-managed buildings, the only parking spaces associated with those locations are designated as fleet-only. Two leased sedans are hosted in a privately leased garage in Los Angeles, one leased sedan is hosted in the DGS Lot #55 in Sacramento, and one DOR owned Chevy Bolt ZEV is hosted in the DOR Central Office mailroom loading dock.

At the DOR owned OCB campus there are a total of 32 parking spaces: 29 parking spaces are available to visitors and OCB staff, the remaining three are

fleet-only parking spaces dedicated to three fleet vehicles hosted at this location.

Reporting on Status of EVSE Projects

Table 2.9 provides the status of EV charging projects

Table 2.9: Status of EV Charging Projects

Facility Name	Total Parking Spaces	Existing L1 Charging Ports (2022)	Existing L2 Charging Ports (2022)	Existing L3 Charging Ports (2022)	Total Charging Ports (2022)	EV Charging Ports Needed by 2025
Orientation Center for the Blind	32		2		2	
Total	32		2		2	

EV Charging Site Assessments

Reporting on 2022 Facility Site and Infrastructure Assessments

Table 2.10 provides 2022 charging infrastructure site assessment conducted

Table 2.10: 2022 EV Charging Infrastructure Site Assessments Conducted

Facility Name	L1 EVSE Project Assessments	L2 EVSE Project Assessments	L3 EVSE Project Assessments	Entity that Conducted the Site Assessment
Orientation Center for the Blind	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A

Planning Narrative on EVSE Construction Plan

A previous assessment of EVSE needs at the OCB was conducted, the appropriate number and type of EV charging stations was added to the facility. As this time, no additional EVSE assessments are needed.

On-going EVSE Charging Operations and Maintenance

Public EV Charging Policies

Reporting Narrative on Public EV Charging Policies

OCB EV charging stations are only designated for state vehicles, no public charging stations are available, and no public charging policy is needed at this time.

Planning Narrative on Public EV Charging Policies

OCB EV charging stations are only designated for state vehicles, no public charging stations are available, and no public charging policy is needed at this time.

Employee EV Charging Policies

Reporting Narrative on Employee EV Charging Policies

OCB EV charging stations are only designated for state vehicles, no public charging stations are available, and no public charging policy is needed at this time.

Planning Narrative on Employee EV Charging Policies

OCB EV charging stations are only designated for state vehicles, no public charging stations are available, and no public charging policy is needed at this time.

Fleet EV Charging Policies

Reporting Narrative for Fleet EV Charging


No fleet EV charging policies.

Planning Narrative for Fleet EV Charging

The DOR doesn't currently have a current need for an EV charging policy due to the limited number of charging stations and DOR vehicles associated with those stations. The DOR has two Level 2 chargers at our one owned facility in Albany, CA. The charging units are not for the public nor the employees but for the two vehicles that they use to transport students. The other EV charger is in the Central Office loading dock and is only used for the BEV that is housed in there. There are no plans in the future to have a policy in place.

Hydrogen Fueling Infrastructure

Planning Narrative for Hydrogen Fueling Infrastructure



The DOR has one lease vehicle that is a hydrogen fuel vehicle. It is housed in a DGS state garage in Downtown Sacramento. The primary fueling station is in West Sacramento. There are no hydrogen fuel plans for this vehicle.

CHAPTER 3 – ENERGY

Department Mission and Building Infrastructure

Reporting Narrative for Department Mission and Building Infrastructure: The mission of the DOR is to work in partnership with consumers and other stakeholders to provide services and advocacy resulting in employment, independent living, and equality for individuals with disabilities in California. The DOR provides vocational counseling, guidance, and services to individuals with disabilities to prepare for, obtain and maintain employment, and to live independently in their communities. The DOR provides these services through 81 locations throughout the state.

The DOR's field offices are located in 74 private leased office spaces and six DGS managed buildings. Of those locations, seven of the privately leased office space locations have office dedicated electricity and/or natural gas meters, which allow the DOR to record and track energy usage for those offices in the Energy Star Portfolio Manager. When the DOR renews or begins a new private lease, if financially feasible, the DOR obtains separate meters to measure energy consumption. This allows the DOR to better track field office energy usage to identify trends and usage saving opportunities.

In addition, the DOR owns and manages the Orientation Center for the Blind (OCB), a three-building campus located in Albany, California. The OCB fosters independent living for the blind or visually impaired adults through an immersion program in a residential environment. This live-in, dorm style community operates 24 hours a day, 7 days a week. As the DOR's only owned facility it provides the department with the greatest opportunity to make building modification towards meeting the identified sustainability goals.

Total Purchased Energy

Table 3.1 provides the total energy purchased in 2021 and 2022

Table 3.1: Total Purchased Energy 2021 and 2022

Purchased Energy	2003 Baseline Quantity	Unit	2021 Quantity	2022 Quantity	% Qty. Change 2003-22
Electricity	6,600,000	kWh	4,220,000	5,222,818	-36.09%
Less EV Charging		kWh			
Natural Gas	5,877,559	therms	37,984	41,906	-99%
Propane		gallons			

Fuel Oil		gallons			
Steam		pounds			
Chilled H2O		kBtu			
TOTALS	-	kBtu Site			

Department Energy Use

Reporting High Energy Use Buildings

Table 3.2 provides the properties with the largest 2022 energy consumption

Table 3.2: Properties with Largest 2022 Energy Consumption

Building Name	Floor Area (ft ²)	Site Energy (kBTU)	Source Energy (kBTU)	Source EUI (kBTU/ft ² -yr)
Orientation Center for the Blind	42,152	4,109,777	5,816,549	138
Total for Buildings in This Table	42,152	4,109,777	5,816,549	---
Total for All Department Buildings	42,152	4,109,777	5,816,549	---
% of Totals	100 %	100%	100 %	---

Energy Efficiency Solutions for Largest Energy Using Buildings

Planning Outline PO3a: Planning for Buildings with Largest Energy Use

Narrative for Building Energy Efficiency

Currently, only 7 of the DOR's 74 privately leased office spaces have separate utility meters. As new leases and lease renewals are established, the DOR transitions group meters office space to separate metering whenever financially feasible. However, despite the inability to measure, the DOR does possess

strategies of how energy can be conserved in leased office spaces. The DOR can reduce energy usage throughout the leased office space, through employee continued participation in conservation efforts, energy efficient equipment purchasing, power regulation, Title 24 requirements in office build outs, etc. However, as leased office spaces are managed by a private lessor, space modification and building-wide changes are limited due to cost and lessor’s willingness to pursue. These can include separating energy meters to DOR office space, participation in demand response programs, installation of electronic vehicle charging stations in public parking areas, transitioning to LEED or ZNE buildings and other energy conserving efforts. The DOR and the DGS address these items with private lessors by making requests and providing information on energy savings and funding opportunities for energy efficient building modifications.

The DOR’s owned facility, the OCB, was constructed in 1964 and still retains some of its original fixtures and systems. The campus does not currently employ a building commissioning system, so energy usage between systems or buildings is not measured separately. As the DOR’s only owned facility, the greatest opportunity for energy conservation actions is available at the OCB. In considering sustainability improvements, the age of the facility, costs to undertake these efforts and the disruption to students and staff are some of the DOR’s primary concerns. The efforts currently underway and being researched are discussed in greater detail below. However, the OCB has been able to meet and exceed the identified goals to date for grid-based energy purchases.

Zero Net Energy (ZNE)

Reporting on Existing Building ZNE

Table 3.3 provides the zero net energy buildings

Table 3.3 Zero Net Energy Buildings

Status of ZNE Buildings	Number of Buildings	Floor Area (ft ²)	% of Building Area
Buildings Completed and Verified	0	0	N/A
Building in Design or Under Construction	0	0	N/A
Building Proposed for Before 2025 (but not yet in design)	0	0	N/A
Add’l. Exist. Bldg. Area within 15% of ZNE target EUI and have EE projects planned	0	0	N/A
Totals for ZNE Buildings by 2025	0	0	N/A
Totals for All Department Buildings by 2025	0	0	N/A

% ZNE by 2025	0 %	0 %	N/A
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Planning Narrative of Table 3.3: Zero Net Energy Buildings

The DOR has only one department owned facility, the Orientation Center for the Blind (OCB), which is not Zero Net Energy (ZNE). However, based on the age of the building, existing environmental system equipment and that the building has been included on the California Historic Building list, the feasibility to transition the OCB to a ZNE is extremely limited. However, the DOR continues to work with PG&E regarding the options available for this facility.

New Construction Exceeds Title 24 by 15%

Table 3.4 provides new building constructions exceeding Title 24 by 15%

Table 3.4: New Building Construction Exceeding Title 24 by 15%

New Buildings Exceeding Title 24 by 15%	Number of Buildings	Floor Area (ft ²)
Completed Since July 2012	0	N/A
Under Design or Construction	0	N/A
Proposed Before 2025	0	N/A

Narrative of Table 3.4 New Building Construction Exceeding Title 24 by 15%

The DOR has had no new building construction or major renovation since July 2012 and has no plans for any new construction or major renovations within the next five years.

Existing Buildings Energy Efficiency

Reporting on Energy Efficiency for Existing Buildings

Table 3.5 provides department-wide energy trends

Table 3.5: Department-Wide Energy Trends (if available)



Year	Floor Area (ft²)	Total Source kBTU Consumption	Department Average EUI (Source kBtu /square foot)
Baseline Year 2003	42,152	6,461,463	153
2013	42,152	8,927,358	212
2014	42,152	6,752,471	160
2015	42,152	6,959,650	165
2016	42,152	1,038,336	25
2017	42,152	1,100,384	26
2018	42,152	3,149,497	75
2019	42,152	2,769,651	66
2020	42,152	2,470,055	59
2021	42,152	5,903,391	140
2022	42,152	5,816,549	138
% Change 2003-2022	0	-10%	-10%

Narrative for Table 3.5: Department-Wide Energy Trends

The chart above identifies the total kBtu consumptions for the DOR's owned facility, the Orientation Center for the Blind (OCB). The energy usage at this 42,152 sq. ft. facility has fluctuated over the years due to renovation projects, environmental system repairs, building usage changes, and the varying number of students participating in the program. Despite this, the cost and quantity of grid-based energy purchase has not fluctuated significantly since the baseline year.

The function of the OCB facility differs between the three buildings. The OCB campus is comprised of a two-story dormitory (14,442 sq. ft.), a one-story administration/classroom building (16,952 sq. ft.) and a one-story cafeteria/gym building (10,758 sq. ft.). The dormitory remains functional 24 hours a day, seven days a week. The administration/classroom building operates weekdays, during normal business hours (6am-6pm) and the cafeteria/gym building usage fluctuates, mostly centering on food preparation and dining 7 days a week. Because of the varying usages and operating hours, the energy usage also varies. Currently, there is not separate metering of energy usage between these three campus buildings, however that is an objective for this facility which will be explored this year.

The OCB campus is currently identified as an "Office – Small <50K sq. ft. - Others" use type, which was selected initially as the campus' buildings are not

individually metered and could not be separated based on energy usage. Currently the average Source EUI for climate zone 3 for this building use type is 70, however the 2022 Source EUI for the OCB is 82. This high Source EUI can be attributed to a misidentification of use-type due to the three building's separate functions.

The DOR continues its success with reduction of grid-based energy purchases when compared with the 2003 baseline. As of the last energy reporting by CalEPA on the State of California Green Building website, the DOR reduced measured energy usage from 6.6 million kBtu in 2003 to 3.5 Million kBtu in 2022, a 46% reduction.

The DOR is exploring several initiatives to better record and track energy usage. One options being explored is separate energy metering of the OCB campus buildings. With a better understanding of what and how individual OCB buildings and DOR field offices are using energy, we can better assess energy reduction potential.

Energy Savings Projects

Table 3.6 provides the energy savings projects 2021-2022

Table 3.6: Summary of Energy Savings Projects 2021-2022

Year Funded	Estimated Energy Savings (kBtu/yr.)	Floor Area Retrofit (sq. ft.)	Percent of Department Floor Area
2021	0	0	0
2022	0	0	0
Total	0	0	0

Planning Narrative for Table 3.6 Energy Savings Projects 2021-2022

In 2018, the DOR initiated an energy audit of the DOR's owned Orientation Center for the Blind (OCB) with the assistance of Pacific Gas and Electric (PG&E) and a third-party vendor. The first portion of the audit consisted of a walk-through of the three-building campus's mechanical systems. The second portion of the energy audit was to be an examination of the campus' lightings; however, since the OCB underwent a lighting upgrade project for the Dorm and Administration/Classroom buildings, it was agreed upon to suspend that portion of the energy audit until the light project was completed. With the completion of the lighting project in the Spring of 2023, the DOR will reinstate an energy audit to assess the energy savings opportunities at the OCB.

Energy Audits/Surveys Completed or In-Progress

Table 3.7 provides the energy audits/surveys completed or in-progress

Table 3.7: Energy Audits/Surveys Completed or In-Progress

Year	Total Department Floor Area (sq. ft.)	Energy Audits/ Surveys Under Way (sq. ft.)	Percent of Department Floor Area
2021	42,152	None	100%
2022	42,152	None	100%

Planning Narrative for Table 3.7 Energy Audits/Surveys Completed or In-Progress

The DOR didn't have any energy audits in 2021 or 2022 for our sole owned facility. The last energy audit was completed in 2018. The OCB will schedule another energy audit this year to follow up on the lighting upgrade and to see what changes have occurred.

Demand Response (DR)

Participating in DR Utility Programs & Participating in DR Events

Table 3.7 provides demand response program participation

Table 3.8: Demand Response (DR) Program Participation

DR Program Participation	Number of Buildings	Estimated Available Energy Reduction (kW)	Actual Curtailment (kW)
Number of Buildings Participating in 2021	0		
Number of Buildings Participating in 2022	0		
Planned Number of Buildings that will Participate in 2023	0		
Total Number of Department Buildings	0		
2022 Department Buildings Participating (Percent)	0		

Planning Narrative for Table 3.8: Demand Response (DR) Program Participation

The DOR has explored the potential use of Demand Response programs available for the department's owned three building campus, the Orientation Center for the Blind (OCB). The DOR coordinated with the electrical utility provider PG&E and third-party vendor to determine an appropriate program.

Peak Day Pricing tariff is not an appropriate program as the total annual bill for the OCB would increase \$3,000-\$4,000 and it would be very unlikely that the OCB could shed 75 kW during demand response events to break even.

Participating in a Capacity Bidding Program shows promise (demand response potential is approximately 16-35 kW and participation incentive of \$3,200-\$7,000), but the current electrical generation service environment in this service area (East SF Bay) is in flux due to the renewable energy supply market and concerns over PG&E's capabilities during restructuring.

The DOR will continue to work with PG&E, potential third-party vendors, and the DGS to determine the best way to track and measure what reduction methods can best be employed at the OCB during a demand response event to establish what the DOR's level of commitment should be during those events and obtain a narrower view of the actual participation incentive range.

Renewable Energy

Table 3.7 provides on-site and off-site renewable energy

Table 3.9: On-Site and Off-Site Renewable Energy

Status	Number of Sites	Capacity (kW)	Estimated Annual Power Generation (kWh)	Percent of Total Annual DGS Power Use
Current On-Site Renewables in Operation or Construction	0			
On-Site Renewables Planned	0			
On-Site Renewables Totals	0			
Department-Wide Total Energy Use (kWh equivalent)	-	-		
Current Off-Site Renewables	0			
Planned Off-Site Renewables	0			
Off-Site Renewables Combined Current & Planned	0			
Current Combined On-Site and Off-Site Renewable Energy	0			



Additional Planned On-Site and Off-Site Renewables	0			
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Planning Narrative for Table 3.9, for all Existing Building Renewable Energy

The DOR is assessing energy usage at the Orientation Center for the Blind (OCB) to determine the feasibility of exploring renewable energy production at this campus. This exploration is being conducted with the assistance of the DGS and private vendors.

Monitoring-Based Commissioning (MBCx)

Table 3.10 provides current & potential MBCx projects

Table 3.10: Current & Potential MBCx Projects

Facility	Building Name	Location	Floor Area	EMS Make	EMS Year	MBCx Capable	Start Date	MBCx Cost
OCB	DOR	Sacto	163,350	Alerton Envision	2007	Capable	2022	\$80,000

Planning Narrative for Table 3.10: MBCx Status of Buildings

The DOR's owned facility, the OCB, currently has an individual monitoring program for the environmental system at that facility, but no Monitoring Based Commissioning system to oversee facility resource usage and efficiency. The DOR will be exploring potential options to incorporate an MBCx system at the OCB campus.

Building Controls

Reporting on EMS/BMS/Controls Building Capability

Table 3.11 provides building controls

Table 3.11: Building Controls

Equipment Controls	% of Buildings Controlled Remotely Offsite	% of Buildings with Controls Onsite	% of Total Buildings
Lighting	0	0	0
HVAC: EMS/BMS	0	0	0
HVAC: Smart Thermostats	0	0	0
Other: _____			

Planning Narrative for Table 3.11: EMS/BMS/Controls Building Capability

DOR's owned OCB facility doesn't have air conditioning or a Smart Thermostat, but only boilers to heat the facility during cooler temperatures. Because of the limited environmental systems, the DOR has no plans for installing an EMS/BMS at that facility.

Energy Reduction Strategies - Best Management Practices (BMPs)

Planning Narrative) for Energy Reduction Strategies in Department Buildings Best Management Practices (BMPs)

Due to the age of the OCB and that is it has been identified as a historic building by the Office of Historic Preservation, Department of Parks and Recreation, modification to the building electrical and environmental systems has proven too cost prohibitive at this time. However, the DOR will continue to explore what actions may be feasible to measure, monitor and control the energy usage at this owned facility. **Error! Bookmark not defined.**

CHAPTER 4 - WATER EFFICIENCY AND CONSERVATION

Department Mission and Water Use

The mission of the DOR is to work in partnership with consumers and other stakeholders to provide services and advocacy resulting in employment, independent living, and equality for individuals with disabilities in California. The DOR provides vocational counseling, guidance, and services to individuals with disabilities to prepare for, obtain and maintain employment, and to live independently in their communities.

The DOR's field offices are located in 74 private leased office spaces, which generally occupy a portion of a larger office building. Additionally, the DOR occupies six DGS managed buildings. Water usage in these locations is included in the lease costs for each location and is not separately metered for the individual office spaces used.

The DOR also owns and manages the Orientation Center for the Blind (OCB), a three-building campus encompassing 42,152 sq. ft. and located in Albany, California. The OCB fosters independent living for the blind or visually impaired adults through an immersion program in a residential environment. This live-in, dorm style community operates 24 hours a day, 7 days a week. Of the DOR office locations, currently the OCB is the sole reporting source for water usage for the Department.

The OCB campus is comprised of a two-story dormitory (14,442 sq. ft.), a one-story administration/classroom building (16,952 sq. ft.) and a one-story cafeteria/gym building (10,758 sq. ft.). The dormitory remains functional 24 hours a day, seven days a week. The administration/classroom building operates weekdays, during normal business hours (6am-6pm) and the cafeteria/gym building usage fluctuates, mostly centering on food preparation and dining 7 days a week. Because of the varying usages and operating hours, the water usage also varies. Currently, the three buildings are not separately metered by sub-water meters, so usage between the three cannot be specified at this time. However, the DOR plans to install sub-meters to better identify usage and conservation opportunities.

Reporting on Total Purchased Water

Table 4.1 provides total purchased water

Table 4.1: Total Purchased Water

Purchased Water	2021 Quantity	2022 Quantity	2021 Cost (\$/yr.)	2022 Cost (\$/ yr.)
Potable	940,236	1,298,528	\$14,054	\$21,893
Recycled Water				

Reporting on Properties with Largest Purchased Water Use per Capita.

Table 4.2 provides the properties with purchased largest water use per capita

Table 4.2: Properties with Purchased Largest Water Use Per Capita

Building Name	Area (ft2)	# of Building Occupants	Total 2022 Gallons	Total 2022 Irrigation in Gallons (if known)	Gallons per Capita
Orientation Center for the Blind	42,152	39	1,449,500		37,167
Total for Buildings in This Table	42,152	39	1,449,500		37,167
Total for All Department Buildings	42,152	39	1,449,500		37,167
% of Totals	100%		100%		100%

Reporting on Properties with Largest Landscape Area Using Purchased Water

Table 4.3 provides properties with largest landscape area using purchased water

Table 4.3: Properties with Largest Landscape Area Using Purchased Water

Building Name	Landscape Area (ft2)
Orientation Center for the Blind	12,100
Total Landscaping area for Buildings in This Table	12,100
Total Landscaping for All Department Buildings	12,100
% of Totals that is large landscape	0%

Reporting on the Department’s Purchased Water Use Trends from 2010 to Present

Table 4.4 provides department-wide purchase water trends

Table 4.4: Department Wide Purchased Water Use Trends

Year	Total Occupancy /year	Total Amount Used (Gallons/year)	Per capita Gallons per person per day
Baseline Year 2010	60	1,922,100	87.77
2018	60	768,700	35.10
2019	60	873,800	39.90
2020	60	474,600	21.67
2021	60	849,800	38.80
2022	60	1,449,500	66.19
2024 Goal	60	403,410	18.42

Reporting Narrative on Purchased Water Use Trends from 2010 to Present

The OCB has experienced several challenges in meeting the Governor's water efficiency and conservation goals. Most notably was a pervasive underground water leak, and because of the time and difficulty involved in locating and repairing the leak, water usage in 2015 rose from 1.22 thousand gallons to 3.95 thousand gallons. Upon repair, the reduction in water usage fell dramatically to 1.24 thousand gallons in 2016.

The DOR was successful in obtaining \$70,000 for Water Conservation Grant funding for replacement of porcelain bathroom fixtures in 2015. The project included replacement of 2 urinals and 20 toilets, many of which were original to the 1964 construction of the campus. Additionally, there was addition/replacement of 30 aerators, including replacement of several faucet fixtures to accommodate aerators. Finally, 14 handheld shower heads with ADA compliant shower slide bars were replaced in the student dormitories.

The OCB conducts regular maintenance and cleaning of its three boilers to ensure efficient operation. Efforts include cleaning of the burner to mounting plate gasket, cleaning of the Graf oil burner flange to heat exchanger head gasket, cleaning of the heat inspector replacement of the igniter and cable. In addition, the following parts are regularly replaced in one or more of the three boilers during maintenance, as needed: inverter, temperature sensor, flame scanner, variable frequency drive, UV scanner, burner element, loop pump.

In 2022, another leak was discovered in our parking lot. We are in the process of obtaining estimates and approval to fix. The increased water usage in 2022 is due to this new leak.

Finally, the OCB has always been proactive in their communication to staff, students, and other stakeholders regarding their responsibilities at OCB and at home for sustainable practices, including water conservation. This transfer of knowledge, especially to the changing student population at this facility, promotes conservation efforts both within the campus and beyond.

Reporting on Total Purchased Water Reductions from 2010 to Present

Table 4.5 provides purchased water reductions achieved in gallons

Table 4.5: Total Purchased Water Reductions Achieved in Gallons

2010 Baseline totals (Gallons)	2021 Totals (Gallons)	2022 Totals (Gallons)
1,922,100	849,800	1,449,500
+ or -Gallons Compared to Baseline Year	-1,072,300	-472,600
Department- Wide Reduction as a % from 2010 baseline	-56%	-25%

Department Indoor Water Use

Fixtures and Water Using Appliances Needs Inventories

Reporting on Building Indoor Water Fixtures and Water Using Appliances Needs

Table 4.6 provides building indoor water fixtures and water using appliances

Table 4.6: Building Indoor Water Fixtures and Water Using Appliances Needs Inventories Summary

# of toilets to be replaced	# of urinals to be replaced	# of faucet aerators to be replaced	# of showerheads to be replaced *	# of clothes washers to be replaced	# of garbage disposals to be replaced.	# of pre-rinse valves to be replaced
0	0	0	0	0	0	0

Planning Narrative for Indoor Building Water Fixtures and Water Using Appliances Needs

As mentioned above, in 2015, OCB replaced showerheads, aerators, urinals, and toilets with more efficient models. The garbage disposals were replaced in the last few year with power/water efficient devices. Additionally, there are no current plans to replace the clothes washers and valves at the facility

Water Conservation and Water Efficiency Projects for Purchased Water

Reporting on Current Indoor Water Efficiency Projects 2020- Present

Table 4.7 provides the summary of current indoor water efficiency projects completed 2020-present or in progress

Table 4.7: Summary of Current Indoor Water Efficiency Projects Completed 2020-Present or In Progress

Completed Projects per Year	Water Saved (Gallons/yr.)	Number of Indoor Water Efficiency Projects Completed	Cost Savings per Year
2020	No Current Projects	0	N/A
2021	No Current Projects	0	N/A
2022	No Current Projects	0	N/A

Planning for Future Indoor Water Efficiency for the Next 5 Years- Building Priority Projects

Planning Outline PO4.a: Building Indoor Water Efficiency Priority Projects for the Next 5 Years

Building Name	Type of Project	Est Water Savings	Est. Start Date
OCB	No projects planned		

Planning Narrative for Future Indoor Water Efficiency - Building Priority Projects

The current priority at OCB is the repair of the current leak and no additional water efficiency projects are planned at this time.

Planning Narrative on General Water Management BMP

There are no water efficiency projects planned at this time, however, the DOR will continue to monitor and look into a procedure by 2026.

Planning Narrative on Leak Detection and Repair BMP

The OCB will continue to monitor for leaks. In 2022, it was found that there is another leak on campus. Due to the location of the leak and the water line is

used for fire suppression, special licensing is needed for this effort, which has delayed the repair of this latest leak.

Planning Narrative on Kitchen Water Conservation BMPs, Fixtures

The only kitchen that the DOR has is at the OCB. The DOR currently doesn't have a plan but will work on one by 2026.

Planning Narrative on Laundry Facilities Water Conservation BMPS

Currently the OCB utilizes water efficient clothes washers at the campus. OCB has 2 washers and 2 dryers used by participants for laundering their clothes while they live there and go through the program. These are the same machines participants learn on during daily living skills instruction. As part of the program, participants are taught to wash appropriate laundry size loads, appropriate settings, often cold water, in an effort to be ecofriendly. The OCB also has a washer and dryer used by custodial and cafeteria staff to wash rags and mop heads, etc. In addition, the facility utilizes a laundry service, Aramark, who launders the dormitory sheets, towels, and cafeteria aprons. Since the DOR utilizes water efficient clothes washers at the OCB, the DOR will develop a plan sometime before 2026.

Department Total Non-purchased Water

Reporting on Total Non-purchased Water Excluding Water Reuse or Recycling

Table 4.8 provides department-wide non-purchased water use

Table 4.8: Department-Wide Non-purchased Water Use

Year	Groundwater Basin(s) Name	Number of Domestic or Irrigation Wells	Groundwater Use in Gallons	Surface Water Use in Gallons	Total (Gallons/Year)
Baseline Year 2020					Non purchased water not used
2021					Non purchased water not used



2022					Non purchased water not used
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Reporting Narrative for Non-purchased Water

The OCB does not use non-purchased water.

Reporting Narrative for Non-purchased Water Use Trends

The OCB does not use non-purchased water.

Planning Narrative for Non-purchased Water Unavailability.

Currently, there no plans for using non-purchased water at the OCB.

Department Water Energy Nexus Reporting

Reporting on Annual Amount of Boiler Makeup Water Used

Table 4.9 provides the annual amount of boiler makeup water used

Table 4.9: Annual Amount of Boiler Makeup Water Used

Boiler Water Use	Year 2021	Year 2022
Amount of Water Used for Makeup (Gallons)	No Data	No Data
Amount of Water Currently Reused. (Gallons)	No Data	No Data
Remaining additional water suitable for other purposes (Gallons)	No Data	No Data
Totals for all Facilities	No Data	No Data

Planning Narrative on Boiler Water Reuse Opportunities

Currently the OCB does not have plans for boiler water reuse. As mentioned earlier, the OCB is looking for an engineer to help in the process of finding reuse opportunities.

Planning Narrative for Boiler Efficiency

The OCB conducts regular maintenance and cleaning of its three boilers to ensure efficient operation. Efforts include cleaning of the burner to mounting plate gasket, cleaning of the Graf oil burner flange to heat exchanger head gasket, cleaning of the heat inspector replacement of the igniter and cable. In addition, the following parts are regularly replaced in one or more of the three boilers during maintenance, as needed: inverter, temperature sensor, flame scanner, variable frequency drive, UV scanner, burner element, loop pump. The OCB continues to monitor the efficiency of the boiler and looks for opportunities for cleaner and more efficient operations.

Reporting on Cooling Towers' Water Use

Table 4.10 provides cooling tower water use

Table 4.10: Cooling Tower Water Use

Totals for all Facilities	No cooling towers	No cooling towers

Planning Narrative on Cooling Tower Water Use.

No cooling towers

Planning Narrative for Cooling Tower Water Reuse

No cooling towers

Planning for Narrative for Cooling Tower Efficiency

No cooling towers

Reporting on Boilers Needs Inventories Summary

Table 4.11 provides the summary of boiler needs

Table 4.11: Summary of Boilers Needs Inventory

Number of meters to purchase and install	Water Treatment	Other
No Boiler water treatment needs		

Planning Narrative for Boilers Needs

No boiler water treatment needs, as current system filtration addressing treatment need.

Reporting on Cooling Systems Needs Inventory Summary

Table 4.12 provides the summary of cooling system needs

Table 4.12: Summary of Cooling System Needs Inventory

Equipment Needed	Equipment Totals for all Facilities
Meters	No cooling system needs
Water Treatment	
Other	

Planning Narrative for Cooling Systems Needs

The OCB in Albany, CA doesn't have a cooling system.

Reporting on Efficiency Projects for Boilers and Cooling Systems 2020-Present

Table 4.12 provides the summary of efficient projects for boilers and colling systems

Table 4.13: Summary of Efficiency Projects for Boilers and Cooling Systems

Project Type	Water Saved (Gallons/yr.)	Number of Completed Projects	Number of Projects in Progress
2020	No current projects		
2021	No current projects		
2022	No current projects		

Planning Narrative for BMPs for Building Boilers and Cooling Systems

The OCB conducts regular maintenance and cleaning of its three boilers to ensure efficient operation. These efforts will continue, as the OCB monitors the efficiency of the boiler and looks for opportunities for cleaner and more efficient operations.

Department Outdoor Water Use:

Reporting on Outdoor Irrigation Hardware Inventory

Table 4.14 provides the summary of outdoor irrigation hardware needs

Table 4.14: Summary of Outdoor Irrigation Hardware Needs Inventory

Irrigation Hardware Type	Total Hardware Needed
Separate meters or sub-meters	No Data
Irrigation controllers required with weather or soil moisture adjustment and flow sensing capabilities	No Data
Backflow prevention devices	No Data
Flow sensors to be purchased and installed	No Data
Automatic rain shut-off devices	No Data
New pressure regulators	
New hydro-zones	
New valves	
Filter assemblies	
Drip irrigation emitters	
Booster pumps	
Rotary nozzles or other high efficiency nozzles	

Planning Narrative for Outdoor Irrigation Hardware Needs

The DOR's OCB campus is the department's only facility with landscape or an irrigation system. The OCB campus has a total of 16,777 sq. ft. of lawns and plants with decomposed granite or other drought tolerant substrate and vegetation. In 2015, in response to the Governor's declaration of drought, the OCB shut off all landscape watering to the facility. The irrigation equipment remains shut down to date, with only minor hand watering accomplished when most needed. Prior to the 2015 shutdown, the OCB irrigation system was identified as in need of replacement, due to inconsistent watering and broken components. However, with irrigation discontinued since 2015, the mild climate in Albany, California and that the campus is bordered by the fertile Cerrito Creek, inventory and replacement of the campus irrigation system has not been a priority. This is still a component of the campus' function which the DOR intends to address, but it will remain a low priority as the need for watering is still minimal. The DOR feels that the OCB campus is climate appropriate based on the fact that the landscaping hasn't been watered since 2015 and meets MWEL requirements.

Reporting on Outdoor Irrigation Hardware Water Efficiency Projects

Table 4.15 provides the summary of outdoor water efficiency project completed 2020

Table 4.15: Summary of Outdoor Hardware Water Efficiency Projects Completed 2020 -Present or In Progress

Year Funded	Water Saved (Gallons/yr.)	Completed Hardware Water Efficiency Projects	Hardware Water Efficiency Projects in Progress
2020	No current projects	No current projects	No current projects
2021	No current projects	No current projects	No current projects
2022	No current projects	No current projects	No current projects

Planning Narrative for Irrigation Hardware Water Efficiency Projects

Currently, the DOR's owned facility doesn't have any projects planned.

Planning Narrative on Irrigation Hardware Maintenance BMPS

The OCB currently does not have separate water meters to identify water usage between buildings or its irrigation system (currently not in use). The DOR intends to install water sub-meters at the OCB campus in the next couple years. Until such time, water usage is monitored through the Energy Star Portfolio, to identify usage changes, as was the case in identification of the water leak which occurred in 2015 and 2022.

Reporting on Living Landscape Inventory

Table 4.16 provides all facilities with > 500 sq. ft. of living landscape inventory

Table 4.16: All Facilities With > 500 sq. ft. of Living Landscape Inventory

Facilities with Landscape >500 Sq. ft.)	Total Turf (sq. ft.)	Number Of Historic Sites Or Memorials MWELO Landscape Area (sq. ft.)	Climate Appropriate Landscape Area (sq. ft.) Groundwater Basin Name	Irrigation Source is Groundwater (Yes or No)	Irrigation source is Surface Water (Yes or No)
Orientation Center for the Blind	16,777	N/A	16,777 sq ft Santa Clara Valley	No	Yes

Reporting Narrative on Living Landscape Inventory

As mentioned earlier, the DOR's OCB campus is the department's only facility with landscape or an irrigation system. The OCB campus has a total of 16,777 sq. ft. of lawns and plants with decomposed granite or other drought tolerant substrate and vegetation. In 2015, in response to the Governor's declaration of drought, the OCB shut off all landscape watering to the facility. The irrigation equipment remains shut down to date, with only minor hand watering accomplished when most needed. Prior to the 2015 shutdown, the OCB irrigation system was identified as in need of replacement, due to inconsistent watering and broken components. However, with irrigation discontinued since 2015, the mild climate in Albany, California and that the campus is bordered by the fertile Cerrito Creek, inventory and replacement of the campus irrigation system has not been a priority. This is still a component of the campus' function which the DOR intends to address, but it will remain a low priority as the need for watering is still minimal.

Reporting on Living Landscape Upgrades for the Next 5 Years

Planning Outline PO4:b provides planned projects for living landscape upgrades for the next 5 years

Planning Outline PO4:b: Planned Projects for Living Landscape Upgrades for the Next 5 Years

Landscape >500Sq. ft.) Facility Name	Replace Turf (Sq. ft.)	MWELO landscape area Upgrade (sq. ft.)	Climate appropriate landscape Upgrade area (sq. ft.)	Date for Achieving Upgrades
Orientation Center for the Blind	No plans			

Planning Narrative on Living Landscape Upgrades for the Next 5 Years

The OCB doesn't have any current plans in the future for upgrades

Planning Narrative for Remaining non MWELO Compliant Living Landscape Upgrades

The OCB doesn't have any plans in the future for upgrades

Reporting on Living Landscape Water Efficiency Projects 2020 – Present

Table 4.17 provides the summary of completed living landscaping water efficiency projects

Table 4.17: Summary of Completed Living Landscaping Water Efficiency Projects

Year Funded	Est Annual Water Savings (Gallons)	Sum of MWELO Landscape installed (sq. ft.)	Sum of Climate Appropriate Landscape Installed (sq. ft.)
2020	No current projects		
2021	No current projects		
2022	No current projects		

Planning Narrative on Living Landscape BMPs

The DOR's owned facility at OCB currently has their irrigation system shut off and only manually waters when needed. Water usage is monitored through the Energy Star Portfolio, to identify usage changes, as was the case in identification of the water leak which occurred in 2015 and 2022.

Reporting on Large Living Landscape Inventory (>20,000 sq. ft.)

Table 4.18 provides large landscape inventory and water budget requirements

Table 4.18: Large Landscape Inventory and Water Budget Requirements

Name of Facility Sites/Locations with > 20,000 sq. ft. of Landscaping	Landscape Area per Facility	Water Budget per Facility	EPA WaterSense or Irrigation Association Certified Staff per Facility
No large landscapes			

Reporting on Achieving Large Living Landscape Requirements

The DOR has no facilities with > 20,000 sq. ft. of landscaping.

Planning Outline PO4:c provides achieving large living landscape area requirements

Planning Outline PO4:c: Achieving Large Living Landscape Area Requirements

Facility Name	Landscaping sq. ft. to be upgraded to MWELO standards	Water Budget per Facility in Gallons	Ground Water Basin	# of staff Needing EPA WaterSense certification	Date for Achieving
No large landscapes					

Planning Narrative on Achieving Large Living Landscape Requirements

The DOR currently doesn't have any landscapes over 20,000 sq ft.

Critically Overdrafted Groundwater Basins and Water Shortage Contingency Plans

Reporting on Buildings in Critically Overdrafted Groundwater Basins

Table 4.19 provides buildings in designated critically overdrafted groundwater basins

Table 4.19: Buildings in Designated Critically Overdrafted Groundwater Basins

Building Name	Basin Name	Amount of water Used 2021 (Gallons)	Amount of water Used 2022 (Gallons)
No facilities			

Reporting on Buildings with Urban Water Shortage Contingency Plans


Table 4.20 provides buildings with urban water shortage contingency plans

Table 4.20: Buildings with Urban Water Shortage Contingency Plans

Building Name	Name of Water Supplier with Urban Water Shortage Contingency Plans	Year of Publication or Update
Orientation Center for the Blind	East Bay Municipal Utility District	2020

Planning Narrative for Urban Water Shortage Contingency Plans

As the DOR has 74 field offices throughout California, there are numerous locations that may be subject to drought impacts. The water usage at DOR field



offices is low as would be expected in a standard office setting, e.g. break room and restroom usage. In the event of a drought, the DOR field offices would follow guidelines for water usage as provided by the local municipal utility district's water shortage contingency plans

The DOR's OCB resides in the East Bay Municipal Utility District (EBMUD), which possesses a [2020 Urban Water Management Plan](#) for addressing drought conditions in this region. In the event there is a water shortage in the area of the facility, the DOR will follow the EBMUD contingency plan accordingly.

Reporting Narrative for Department's Contingency Plan

The OCB will follow the EBMUD plan that was stated above for our owned facility. For all of DOR's lease locations, the DOR will follow the building's local water provider contingency plan. The impact is very minimal to the Department because at the OCB, the water usage is sparse due to the drought tolerant landscaping.

Planning Narrative on Department's Contingency Plan

The OCB will follow the EBMUD plan that was stated above for our owned facility. For all of DOR's lease locations, the DOR will follow the building's local water provider contingency plan. The DOR will work on a water contingency plan and look at implementing one in the next couple years.

CHAPTER 5 - SUSTAINABLE OPERATIONS

Greenhouse Gas Emissions

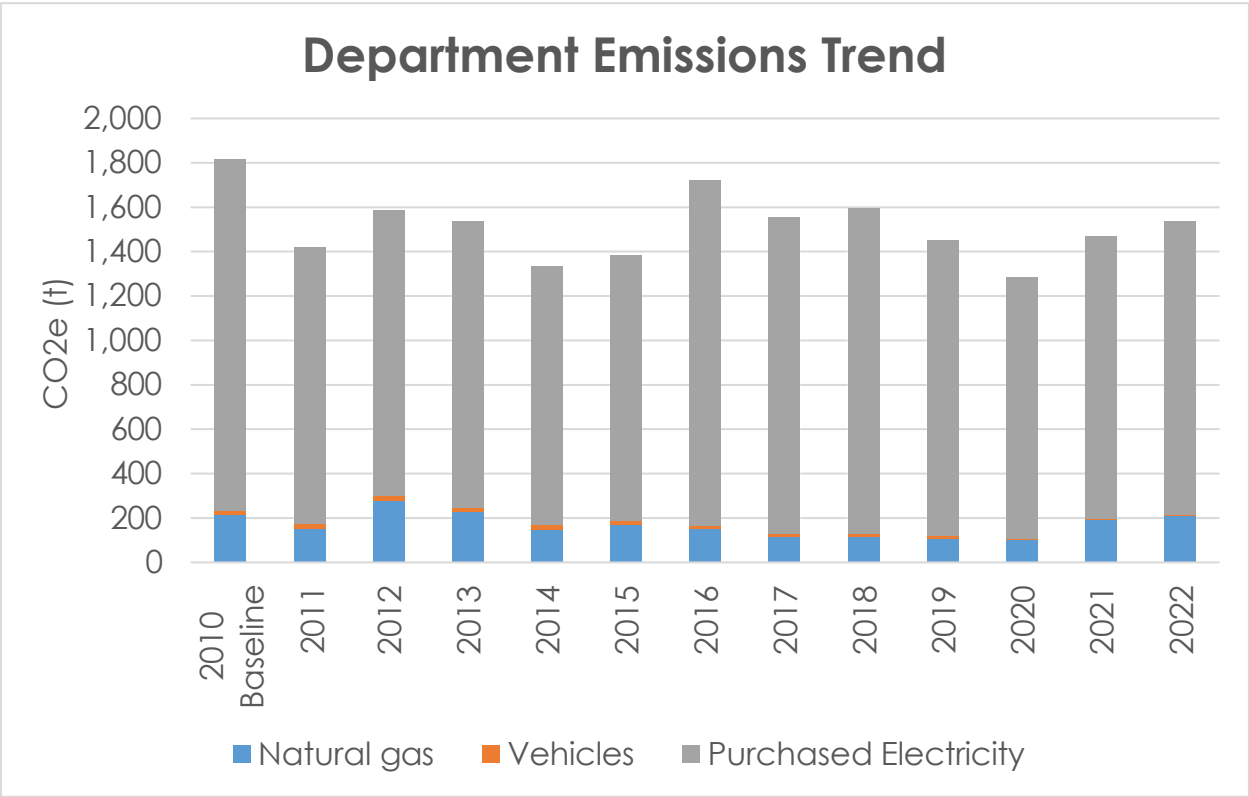
Table 5.1 provides GHG emissions since 2010

Table 5.1: GHG Emissions since 2010 (Metric Tons)

Emissions Source	Natural gas	Vehicles	Purchased Electricity	Total
2010 Baseline	215	16	1,583	1,814
2011	152	20	1,246	1,418
2012	277	21	1,287	1,585
2013	225	22	1,290	1,537
2014	149	20	1,167	1,336
2015	169	20	1,196	1,385
2016	151	12	1,557	1,720
2017	115	14	1,425	1,554
2018	116	13	1,466	1,595
2019	108	13	1,332	1,453
2020	102	5	1,180	1,287
2021	190	4	1,274	1,468
2022	212	4	1,320	1,536
Percent Change since Baseline	-1%	-75%	-17%	-15%

Graph 5.1 provides GHG emissions since 2010

Graph 5.1: GHG Emissions since 2010



Planning Narrative for Current GHG Reduction Goals and 2035 Reduction Goals Strategies

The DOR has made reductions in natural gas, vehicle fuel and purchased electricity usage, as provided in other Sustainability Roadmaps and the State of California Green Building website. However, despite these reductions, many of which have exceeded the Executive Order reduction goals up to and including 2020 goals, the reduction of greenhouse gas (GHG) emissions achieved is currently 19.07%. Executive Order goals for GHG emissions are 10% by 2015 and 20% by 2020.

In August 2017, the State of California Green Building website began employing Climate Registry Information System (CRIS) data for determining GHG emission reduction. This inclusion changed the calculated GHG reduction previously posted on the State of California Green Building website from 24% to 5%. The previous calculation for GHG emission utilized only Energy Star Portfolio Manager reported energy usage for determining GHG emission production. The DOR has seven offices where energy usage is measured due to separate energy meters and that energy usage is reported in the Energy Star Portfolio Manager. However, the CRIS employs a general calculation for space not separately metered, to estimate GHG emission production based on square footage. With

the utilization of the CRIS estimated data, the reduction in GHG emissions provided was lower than previously identified.

This presents some unique challenges for the DOR in how to obtain specific energy use data for non-metered field offices and what reduction options are feasible for privately leased space. Because the field offices operate as a standard business office, operating between the hours of 8am and 5pm weekdays, the energy usage is not substantial at these locations and the CRIS calculation may not provide data true to the actual energy usage and greenhouse gas production. The solution the DOR will employ, where feasible, is to install separate energy meters at these locations so the DOR can accurately record and track energy usage. However, the expense to add separate energy meters to all existing leased offices is cost prohibitive, in consideration of the number of privately leased offices the DOR employs.

Additionally, the DOR has sent out communications to DOR field offices providing information on sustainable practices, including reducing water and energy usage, as well as recycling. These communications are being expanded to provide more information and resources to assist in increasing awareness of GHG production and the measures that can be taken in DOR field offices.

It has been from these communications and the efforts taken at the DOR's one owned facility, the OCB campus, that the greatest reductions to greenhouse production have occurred. Aside from educating staff and students regarding sustainable practices, reduction in GHG production at the OCB can be attributed to the cleaning and maintenance of the campus' three boilers and replacement of less efficient appliances with Energy Star rated equipment. Additional efforts have been taken or are in review to further decrease OCB campus energy usage, including replacement of T-12 fluorescent lighting with energy efficient LED lighting, expanded employment of occupancy sensors for lighting, and installation of separate energy meters between the three campus buildings to better regulate energy usage and identify savings potential.

Although the DOR has not currently met the Executive Order 2020 goal for GHG reduction, it is from the above efforts and new initiatives that the department hopes to close the gap towards achieving a sustainable presence in California.

Carbon Inventory Worksheet

Planning Narrative for Carbon Inventory Worksheet

The DOR is working towards the completion of carbon inventory worksheet in 2024.

Building Design and Construction

New Building LEED Certification

Table 5.2 provides new building construction since July 1, 2012

Table 5.2: New Building Construction since July 1, 2012

Building Name	LEED Certification Type & Level Achieved	Commissioning Performed (Y/N)
Anaheim	No	No
Greater Los Angeles	No	No
Inland Empire	No	No

Planning Narrative of Table 5.2: New Building Construction since July 1, 2012

The three facilities listed in the table above are lease office spaces in privately owned buildings. The DOR review potential environmental impacts when renewing or obtaining a lease. Each lease term is for eight years, at which point the DOR either renews a lease in place or seeks out new office space.

LEED for Existing Buildings Operations and Maintenance

Table 5.3 provides large building LEED certification for existing buildings

Table 5.3: Large Building LEED Certification for Existing Buildings

Number of Buildings over 50,000 sq. ft. and eligible for LEED EBOM	Number of Building over 50,000 sq. ft. that have achieved LEED EBOM	Percentage of Buildings over 50,000 sq. ft. that have achieved LEED EBOM
N/A	N/A	N/A

Planning Narrative for Table 5.3 Large Building LEED Certification

The DOR has no owned buildings over 50,000 square feet.

Indoor Environmental Quality (IEQ)

Daylighting in New Construction

The DOR does not have any plans for new construction. The Orientation Center for the Blind (OCB) had a lighting upgrade that started in 2015 that completed in the Spring of 2023. The project increased the number of occupational sensors and provides the ability to adjust the light levels for the new areas, providing the

OCB better control of light usage and the ability to maintain and decrease light usage when daylight is available.

Planning Narrative for CALGreen Tier 1 Indoor Environmental Quality Measures

The DOR does not currently have plans for any new construction or major renovation projects at the Department's one owned facility, the Orientation Center for the Blind (OCB) campus. The OCB works with the Department of General Services (DGS) Direct Construction Unit (DCU) in ensuring that all CalGreen mandatory and feasible voluntary measures are taken to ensure Indoor Environmental Quality standards are met during and after any upgrades. This includes the adhering to volatile organic chemical content limits for materials (adhesives, sealants, caulks, paints, coatings, acoustical ceiling replacement, lighting fixtures and bulbs).

Aside from the DOR's owned facility, the DOR maintains 74 privately leased field offices throughout the state. The lease term for the field office is eight years, at which point the DOR either renews a lease in place or seeks out new office space. The transition of DOR field offices to new leased spaces occurs four to six times per year. When a new lease or renewal is signed, the lessor is required to adhere to specific Indoor Environmental Quality standards for construction and building operation, as identified in the DGS standard lease and Exhibit B Specifications. These specifications include CalGreen mandates pertaining to toxic materials, floor construction and finishes, roof and insulation, acoustical ceilings, painting/wallcovering/sealants, heating ventilating and cooling, among other requirements. These provisions allow for the DOR to maintain a high level of Indoor Environmental Quality in DOR field offices.

Planning Narrative for IEQ-New Buildings and Renovation Measures

The DOR has no plans to purchase a new building or has any renovations planned.

Planning Narrative for Compliance with Furnishing Standards

Most furnishings purchased by the DOR for its office are acquired from the California Prison Industry Authority (CALPIA) and comply to DGS' Purchasing Standard and Specification (Technical Environmental Bid Specification 1-09-71-52). The furniture not purchased through CALPIA is purchased through small business vendors, who are also required to adhere to the same specification as CALPIA. DOR large furniture purchases are initiated, and appropriate products selected by the DOR's Leasing and Space Planning Specialists, who work in conjunction with the DGS in the design of DOR office floorplans for the modular systems furniture and free-standing furniture purchased.

Planning Narrative on Using Green Seal Cleaning Products

Most cleaning products purchased by the DOR are for the OCB campus. At the OCB, two of the cleaning products currently used are green seal certified. Three additional cleaning products are environmentally friendly products, but not green seal certified. The remaining two cleaning products used are not specifically identified as environmentally friendly. The OCB is in the process of assessing other comparable cleaning products to substitute for those which are not currently green seal certified.

The parameters for maintaining and general cleaning in privately leased DOR field offices are addressed in the DGS Standard Lease form. Currently, that language does not call out for the specific use of Green Seal certified products, Integrated Pest Management or reference published cleaning standards to be used in DOR field offices. However, the DGS continues to update their standard lease language in the DGS lease to address the numerous Sustainability measures which have been implemented in recent years.

Planning Narrative for Cleaning Procedures – Various Standards

Cleaning Procedures Standards Achieved, no additional planning needed at this time.

Planning Narrative for HVAC Operations

The HVAC operations for DOR field offices is specified in the DGS standard lease and Exhibit B Specifications, however those requirements are pending updates from the DGS to meet new sustainability standards. Likewise, the current boiler operation is monitored by the Orcaview 3.33 Delta Control software for system function and efficiency.

Planning Narrative for HVAC Inspection Requirements

HVAC operations standards achieved.

Integrated Pest Management (IPM)

Reporting on IPM plans

Table 5.4: Integrated Pest Management Contracts

Pest Control Contractor Name	IPM Specified (Y/N)	Contract Renewal Date
Advanced Integrated Pest Management	Y	9/30/2024

Planning Narrative for Pest Control Contracts

The OCB has a contract with Advanced Integrated Pest Management to provide pest control services for the OCB campus. The scope of work for the contract specified that the vendor must develop and employ an Integrated Pest Management plan, as described in Management Memo 15-06, to address pests at the OCB.

Fossil Fuel Landscaping Equipment Replacement with Low Emitting Landscaping Equipment

Planning Narrative for Replacing Fossil Fuel Landscaping Equipment

The DOR's only owned facility at the OCB has 12,100 sq ft of turf. There is several gas-powered landscaping equipment such as a push mower, riding mower, leaf blowers, billy goat, auger, etc. As there remains useful life in the current landscape equipment for five years, the DOR will work on a replacement schedule by 2026.

Waste and Recycling Programs

Designated Waste and Recycle Coordinator and Program Basics

Reporting Narrative on Designated Waste and Recycle Coordinator and Program Basics

The DOR has made every effort in trying to reuse and/or recycle unwanted/obsolete/broken equipment, surplus office supplies, office furniture and vending equipment as well as kitchen equipment throughout our different programs and in conjunction with CalRecycle and DGS Property Reuse. The DGS Property Reuse Program is a resource DOR has in helping DOR with getting our unwanted/obsolete/broken equipment, surplus office supplies, office furniture and vending equipment reused. DGS periodically can accept unwanted "good condition" equipment, surplus office supplies, office furniture and vending equipment and have it reused by other state agencies/departments. DGS can also approve to have them donated to the public schools for reuse. DGS keeps an inventory of miscellaneous office and vending equipment to resell for the public domain, but DGS will only accept certain items and will not accept anything if their inventory of items is fully stocked. In this situation, we turn over our broken, unwanted, and no longer needed and vending equipment to the local recycler for disposal or donate them to the public-school system. Difficulty in finding free public programs that are willing to pick up large equipment in bulk quantities for recycling can be challenging at times. Most will require that we deliver the items to the recycling location, but we do not have the vehicles

or the manpower to make such deliveries without paying hauling services to take care of the transporting of the items to recycle.

The DOR Recycling Coordinator is responsible for tracking and reporting all waste generated, disposed of and method of disposal for DOR offices. Additionally, they provide assistance and guidance for recycling programs and opportunities in regional DOR Field Offices throughout the state. At each DOR Field Office, there is a designated contact who assists the DOR's Recycle Coordinator with the tracking and reporting of waste generated, disposed of and methods of disposal for their DOR Field Office.

The eight recycling materials the DOR reports on annually in a State Agency Waste Management Annual Report are as follows:

- Beverage containers
- Glass
- Plastics (#3-7)
- Cardboard
- Office paper (white)
- Office paper (mixed)
- Confidential shredded paper
- Copier/toner cartridges

Planning Narrative on Designated Waste and Recycle Coordinator and Program Basics

Designated waste, recycle coordinator, and program basics achieved, no additional planning needed at this time.

SARC Report

Table 5.5 provides state agency reporting center (SARC) report on total waste per capita.

Table 5.5: State Agency Reporting Center (SARC) Report on Total Waste per Capita

Per Capita Disposal Rate	2021	2022	Total Waste 2021	Total Waste 2022	% Change from 2021/2022
.6	.39	.25	118.47	87.78	74%

Reporting Narrative on SARC Report on Total Waste per Capita

Our Department's Central Office is a Department of General Services (DGS) owned building. The DGS maintains and collects all recyclable paper, cardboard, organic waste, glass/plastic/beverage containers, as well as waste/trash. Within this building organic waste and glass/plastic/beverage recycling containers and trash bins are located on each floor's breakroom. In every copier room and at each workstation and office blue "white only paper" recycle bins are placed for the recycling of non-confidential documents. In each mail station on each floor there are recycle bins for mixed paper, white only and the recycling of magazines, catalogs, and newspapers. Proper signage with instructions is either placed on the bins or adjacent to the bins, to instruct employees on what can and cannot go into each type of bin.

The DOR currently employs 1888 employees with 356 Central Office employees, 32 Orientation Center for the Blind employees, and 1500 field staff. The current 2022 waste disposal per capita is .25 which was reduced from the amount of waste in 2021 of .39. This is in large part from employees teleworking and implementing organic waste practices. The DOR is exceeding its target rate of .6.

Planning Narrative on SARC Report on Total Waste per Capita

Per Capita Disposal Rate Achieved, no additional planning needed at this time.

Recycling Program and Practices

Reporting Narrative on Recycling Program and Practices

Our Department has recycling programs set in place for most items that are recyclable within our department. We also use various local recycling locations in the Sacramento region to recycle all toner and ink cartridges or we send our empty toner and ink cartridges back to the manufacturer with the supplied return containers for the manufacturer to recycle.

We also have a number of DOR Field Offices within the Department that do not address their own recycling needs because the buildings the DOR Field Offices reside in already have recycling programs set in place. For those office that do not participate in a building-wide recycling program, recycling is accomplished by building staff transporting the non-bulk recyclable material to a recycling center in their area.

Planning Narrative on Recycling Program and Practices

Recycling practices achieved; no additional planning needed at this time.

Organics Recycling

Reporting Narrative on Organic Recycling Program and Practices

The only DOR owned facility is the Orientation Center for the Blind (OCB). This facility produces approximately less than 4 cubic yards of organic waste material per week. The food waste, green waste, landscape and pruning waste, nonhazardous wood waste and food-soiled paper produced at the OCB is collected in a specialized receptacle and collected by a vendor licensed to recycle organic material. Cafeteria staff are trained in sorting organic waste. Organic waste bins are not placed throughout the campus and are only located in the cafeteria and kitchen area. There is one 4 cubic foot organic waste dumpster located outside. The cafeteria staff have an organic waste garbage bin in the dishwashing area where food waste and food-soiled paper is collected from the trays prior to washing. Other food waste created by the cafeteria during the cooking process, also gets put into a bin that gets dumped into the organic waste dumpster daily. All organic waste is dumped into the 4 cubic foot organic waste dumpster and is picked up weekly by the vendor licensed to recycle organic material. All green waste is put directly into the organic waste dumpster by the groundskeeping staff. OCB does not donate leftover or surplus food.

For organic waste produced by DOR offices housed in DGS managed buildings, the DGS collects and recycles organic waste at these facilities. For other DOR field offices in privately leased office space, the amount of organic waste produced does not necessitate arranging for recycling services. However, the recycling of organic waste by the property management of a building is a feature that the DOR looks for in securing new leased space and staff are encouraged to participate in such efforts.

Planning Narrative on Organic Recycling Program and Practices

Organics recycling requirements achieved, no additional planning needed at this time.

Reporting on Edible Food Recovery Program

Table 5.6 provides edible food recovery program elements

Table 5.6: Edible Food Recovery Program Elements

Building Name	Cafeteria ≥ 5,000 Square Feet (Enter sq. ft.)	Cafeteria +250 Seats (Enter actual number of seats)	Was Cafeteria Open in 2022?	Food Recovery Agreement Yes, No or Unknown
Orientation Center for the Blind	No	No	Yes	No

Reporting Narrative on Edible Food Recovery Program

Based on the size of the cafeteria, the OCB is not required to participate in an edible food recovery program.

Planning Narrative on Edible Food Recovery Program

Based on the size of the cafeteria, the OCB is not required to participate in an edible food recovery program. However, the DOR has explored this option even with the small amount of food produced for program participants and if a viable edible food recovery alternative is presented, the OCB will explore this option.

Reporting on Food Service Items Program

Table 5.7 provides food service concessionaire items program elements

Table 5.7: Food Service Concessionaire Items Program Elements

Building Name	Prepared Food Service Operations Type	Food Service Packaging Meets Requirements	Process in Place for selecting Food Services that meet Packaging Requirements
Orientation Center for the Blind	No	N/A	N/A

Planning Narrative on Food Service Items Program

The OCB that is the DOR's only owned facility does not sell any prepared food. Everything is made fresh by a chef that is an employee of OCB.

Hazardous Waste Materials

Reporting on Hazardous Waste Materials

Table 5.8 provides hazardous waste material

Table 5.8: Hazardous Waste Materials

Department -Wide Hazardous Material Name	Department Total Hazardous Material Amount (lbs.)
No hazardous waste materials produced	

Reporting Narrative for Hazardous Waste Materials

The DOR produces no identifiable hazardous waste.

Planning Narrative for Hazardous Waste Materials

The DOR produces no identifiable hazardous waste.

Universal Waste

Reporting on Department-Wide Universal Waste Materials

Table 5.9 provides reporting on department-wide universal waste materials

Table 5.9: Reporting on Department-Wide Universal Waste Materials

Category	Universal Waste Contract in Place YES or NO
Electronic Waste	No
Batteries	No
CRTS	No
CRT glass	No
Lamps	No
Mercury Wastes	No
Non-empty aerosol cans	No
PV modules	No

Planning Narrative for Department-Wide Universal Waste Materials

The DOR does not have any contracts in place for universal waste material collection. The DOR uses the Tri Valley Recycling, that picks up all electronic waste in the area of the DOR Central Office for free. The DOR produces universal waste and responsibly disposes of it through approved recycling methods.

Material Exchange

Reporting Narrative on Department-Wide Material Exchange

During the survey process DOR field offices will solicit to the DGS surplus warehouse or public schools and public-school districts to either transfer or donate the equipment or surplus supplies before surveying and disposing at a recycler or e-waste recyclers. When feasible offices will investigate obtaining any vendor credit for excess surplus supplies no longer needed.

Planning Narrative on Department-Wide Material Exchange

Before disposal, the DOR will assess the viability for material exchanges within an office or a regional district. If the material can be utilized by another source, for example modular systems furniture, the DOR will transfer that material to the location needed. This a standard practice for the DOR, but not a department-wide exchange event, due to the number and location of DOR offices, spread throughout the state. The DOR will continue to explore this option, but there are no current plans for such a department-wide material exchange.

Waste Prevention Program

Reporting Narrative on Department-Wide Waste Prevention

The DOR encourages employees to participate in waste prevention and recycling. One method to promote waste prevention has been through the annual celebration of EARTH DAY. The DOR typically devotes a week to hosting special events and recycling campaigns to boost our employee recycling. This effort was suspended during the pandemic; however, the DOR is looking to reincorporate this effort in 2024.

Planning Narrative on Department-Wide Waste Prevention

During the period the DOR celebrates EARTH DAY, the DOR sends out tips and resources to educate employees on recycling and how it can be practiced in the office and at home. As part of EARTH Day, members of each office are reviewing the adequacy and condition of receptacles for recyclable material and ensuring there is associated signage. Electronic waste and sustainable home/office practices are heavily focused on for recycling tips and resources. DOR Earth Week has been a very successful reminder to continue "green" practices in DOR offices.

Reuse Program

Reporting Narrative for Department-Wide Material Reuse

The 12-waste prevention and reuse activities the DOR reports on annually in a State Agency Waste Management Annual Report are as follows:

- Paper forms reduction - online forms
- Bulletin boards
- Remanufactured toner cartridges
- Reusable boxes
- Reusable pallets
- Electronic document storage
- Intranet
- Reuse of office furniture, equipment & supplies
- Reuse of packing materials
- Double-sided copies
- Email vs. paper memos
- Food Donation

Planning Narrative for Department-Wide Material Reuse

The DOR makes efforts to have our forms, department manuals, memos, and inter-department announcements distributed via email and available read material on a local hard drive to reduce paper waste. We also have started utilizing our intranet web page to publish and provide electronic documents to reduce paper distribution and communicate all announcements and information to reach all our employees whenever possible. Our mailroom staff practices the reusing of packing materials used from other packages received through our mail. All our copy machines and printers are set to default to print double-sided to maximize paper usage.

Employee Waste and Recycling Training and Education

Reporting Narrative for Employee Waste and Recycle Training and Education

The DOR encourages employees to participate in waste prevention and recycling. One method to promote waste prevention has been through the annual celebration of EARTH DAY. The DOR typically devotes a week to hosting

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The DOR will continue to look for opportunities to train and educate DOR staff on waste prevention and recycling.

Planning Narrative for Employee Waste and Recycle Training and Education

Employee training and education achieved, no additional planning needed at this time.

Environmentally Preferred Purchasing (EPP)

Reporting Narrative for Measure and Report Progress on EPP Spend

The DOR is committed to environmentally preferable purchasing towards efficient green operations of all DOR offices. The DOR follows current State Agency buy Recycled Campaign (SABRC) guidelines as derived from California Law, California Regulation and Federal Regulations implemented to ensure recycled content products are purchased by state entities and those purchases are tracked and reported. Through following SABRC guidelines, the DOR reduces energy and water usage when compared to purchasing non-recycled content products, as well as reducing the strain on natural resources. The DOR also extends these requirements to contractors through inclusion of SABRC guidelines in the scope of work for contracted services.

The DOR employs identified regulations for purchasing recycled content materials and equipment, including:

- Paint purchased for use in OCB is recycled paint or master painter's institute certified paint. Paint used in DOR lease offices or DGS managed buildings also adhere to these guidelines, as provided in DGS lease language or DGS Facility Management Branch (FMB) policy.

- IT goods (computers, printers, copiers, etc.), Business Enterprises Program vending machines and other electrical appliance purchases (shredders, kitchen appliances, etc.) made by the DOR are energy star rated, where possible. If an energy star rated appliance is not available for a piece of equipment, energy efficient products are chosen as a priority in determining product choice. The EPEAT website is utilized to assist in identifying suitable product purchases.
- Janitorial supplies purchased are SABRC and Green Seal rated where possible. Internal policy guidelines are being refined for these types of purchases to assist in directing DOR purchasers to effective, green cleaning products.
- Paper products purchased adhere to SABRC standards. From a recent reporting, it was identified that although copy paper products met the SABRC standards, the specific type of paper file used for DOR consumer files was not of sufficient recycled content. A new product is currently being investigated to ensure all paper product purchases can meet or exceed the SABRC purchase thresholds wherever possible.

Planning Narrative for Measure and Report Progress on EPP Spend

EPP spend achieved, no additional planning needed at this time.

Goods and Services Categories with the Greatest Potential to Green:

Reporting on Goods and Services Categories with the Greatest Potential to Green

Table 5.10 provides goods and services categories with the greatest potential to green

Table 5.10: Goods and Services Categories with the Greatest Potential to Green

Good or Service	2022 Total Spend (\$)	2022 Percent EPP Spend (%)	EPP Target (%)
Paper products	\$35,575.33	77.3%	75%
Printing and writing paper	\$52,463.42	60.94%	75%

EPP BMPs

Reporting Narrative for EPP BMPS

The DOR reduces environmental impacts such as energy, water, and natural resource conservation by purchasing EPP goods in alignment with SABRC. Regular reviews are made of DOR purchases and if affordable alternative options are available, the DOR Purchasing Unit suggests alternatives to the DOR purchaser.

Planning Narrative for EPP BMPs

EPP EMPS achieved, no additional planning needed at this time.

Reporting on EPP Training and Outreach

Table 5.11 provides 2022 EPP Basic Training Completions

Table 5.11: 2022 EPP Basic Training Completions

CalHR Classification	Total Number of Staff	EPP Basic Training Completion	Percent Trained	2023 EPP Training Goal
AGPA	4	Yes	100	N/A
Retired annuitant AGPA	1	Yes	100	N/A
SSM1	1	Yes	100	N/A
SSM2	1	Yes	100	N/A

Table 5.12 provides 2022 EPP Intermediate Training Completions at DOR

Table 5.12: 2022 EPP Intermediate Training Completions at DOR

Classification	Total number of staff	EPP Intermediate Training Completions	Percent Trained	2023 EPP Training Goal (%)
0				

Table 5.13 provides 2022 EPP Executive Training Completions for Executive Members at DOR

Table 5.13: 2022 EPP Executive Training Completions for Executive Members at [Agency Name]



Executive Member	Title	Date Completed
0		

Reporting Narrative on EPP Training and Education

All DOR Administrative or Consumer CalCard holders, Approving Officials, or staff responsible for initiating purchasing of goods and services is required to complete the DGS Acquisitions Under \$5,000 training. Compliance to this requirement is monitored closely by the DOR Procurement team and over 300 DOR staff have completed this training. The training includes EPP and SABRC training. Additionally, the DOR is developing supplemental communications and additional in-house training on assisting DOR staff in understanding and meeting EPP goals.

Planning Narrative on EPP Training and Education

EPP BMPS achieved, no additional planning needed at this time.

Reporting on State Agency Buy Recycled Campaign (SABRC), and Reducing Impacts

Reporting on SABRC Progress

Table 5.14 provides state agency buy recycled campaign (SABRC) FY 21-22 performance

Table 5.14: State Agency Buy Recycled Campaign (SABRC) FY 21/22 Performance

Product Category	SABRC Reportable Dollars	SABRC Compliant Dollars	% SABRC Compliant
Antifreeze			
Carpet			
Compost and Mulch			
Glass Products	\$14.99	\$14.99	100%
Erosion Control Products:			
Lubricating Oils			
Paint			

Product Category	SABRC Reportable Dollars	SABRC Compliant Dollars	% SABRC Compliant
Paper Products	\$128,321.91	\$99,743.23	77.73%
Pavement Surfacing			
Plastic Products	\$12,102.88	\$10,214.07	84.39%
Printing and Writing Paper	\$26,167.87	\$15,947.60	60.94%
Metal Products	\$48,942.97	\$41,170.97	84.12%
Soil Amendments and Soil Toppings			
Textiles	\$546.16	\$546.16	100%
Tire Derived Products			
Tires			

Planning Narrative for Measure and Report SABRC Progress

The DOR strives to adhere to SABRC guidelines for both purchasing and recording recycled products. In 2022, the DOR spent \$3,820,044.50 on statewide procurement contracts. Of that amount, \$46,728.94 of products was SABRC reportable with \$40,496.34 or 100% which was SABRC compliant. This information, as well as the 2022 SABRC Performance information above, was included in the 2022 SABRC Summary Report to CalRecycle.

In addition to the DOR's success in meeting SABRC compliance in all purchase categories, the department persists in identifying new opportunities to exceed SABRC thresholds. Such efforts include further training of procurement staff to provide improved guidance, identify more recycled content purchase options to buyers in DOR business areas, increased emphasis on SABRC purchasing in trainings provided to responsible for initiating the purchasing of goods and services and closer monitoring of progress through the year on SABRC compliance so opportunities for improvement can be identified and implemented as soon as possible.

Reducing Impacts

Reporting Narrative for Reducing Impacts

The DOR is committed to environmentally preferable purchasing towards efficient green operations of all DOR offices. The DOR follows current State Agency buy Recycled Campaign (SABRC) guidelines as derived from California Law, California Regulation and Federal Regulations implemented to ensure recycled content products are purchased by state entities and those purchases are tracked and reported. Through following SABRC guidelines, the DOR

reduces energy and water usage when compared to purchasing non-recycled content products, as well as reducing the strain on natural resources. The DOR also extends these requirements to contractors through inclusion of SABRC guidelines in the scope of work for contracted services.

Location Efficiency

Smart Location Score for New Leases after January 1, 2020

Table 5.15 provides smart location score for new leases after January 1, 2020

Table 5.15: Smart Location Score for New Leases after January 1, 2020

Facility name	Smart Location Calculator Score
Visalia Branch Office	45
Chico Branch Office	80
Average	62.5
Baseline	
% change from Baseline	

Planning Narrative Instructions for Smart Location Score after January 1, 2020

The DOR's primary goal is to provide assistance and services resulting in employment for Californians with mental and physical disabilities. To fulfill the DOR's goal, our services must be accessible to our consumers throughout California. The placement of DOR field offices is determined from several factors, but most importantly is placement where existing or potential DOR consumers can access our services. Although location efficiency was not previously a factor in determining DOR field office location, current DOR offices typically have good location efficiency scores because many of the factors we do use (population centers, public transportation routes, etc.) are factored into the location efficiency scores.

Current (non-expired) Leases Prior to 2020 - Lowest Smart Location Score

Table 5.16 provides current (non-expired) leases prior to 2020 – lowest smart location score

Table 5.16: Current (non-expired) Leases Prior to 2020 - Lowest Smart Location Score

Facility name	Smart Location Calculator Score
Fairfield Branch Office	4
East Los Angeles Branch Office	4



Victorville Branch Office	5
Fremont Branch Office	5

CHAPTER 6 -FUNDING OPPORTUNITIES

Funding Opportunity Climate Change Adaptation

There are no identified funding opportunities at this time for sustainability efforts.

Table 6.1 provides climate change priority projects

Table 6.1: Climate Change Priority Projects

Building Name	Project	Funding Source	Est. Begin Date	Est. Completion Date
No Planned Projects		Choose an item.		

Funding Opportunities for ZEVs and EV Infrastructure

Table 6.2 provides EV priority projects

Table 6.2: EV Priority Projects

Building Name	Project	Funding Source	Est. Begin Date	Est. Completion Date
No Planned Projects		Choose an item.		

Funding Opportunities for Building Energy Conservation and Efficiency

Table 6.3 provides building energy conservation and efficiency priority projects

Table 6.3: Building Energy Conservation and Efficiency Priority Projects

Building Name	Project	Funding Source	Est. Begin Date	Est. Completion Date
No Planned Projects		Choose an item.		

Funding Opportunities for Water Conservation and Efficiency

Table 6.4 provides water conservation and efficiency priority projects

Table 6.4: Water Conservation and Efficiency Priority Projects



Building Name	Project	Funding Source	Est. Begin Date	Est. Completion Date
No projects planned		Choose an item.		

Funding Opportunities for Sustainable Operations

Table 6.5 provides sustainable operations priorities

Table 6.5: Sustainable Operations Priorities

Building Name	Project	Funding Source	Est. Begin Date	Est. Completion Date
No Projects Planned	Choose an item.	Choose an item.		
	Need Special Equipment	Choose an item.		
	Need Staff Training	Choose an item.		
	Need Signage	Choose an item.		
	Need Department Wide Outreach	Choose an item.		

Full Life Cycle Cost Accounting

Reporting on Life Cycle Cost Accounting

No infrastructure investments

Planning for Implementing Life Cycle Cost Accounting

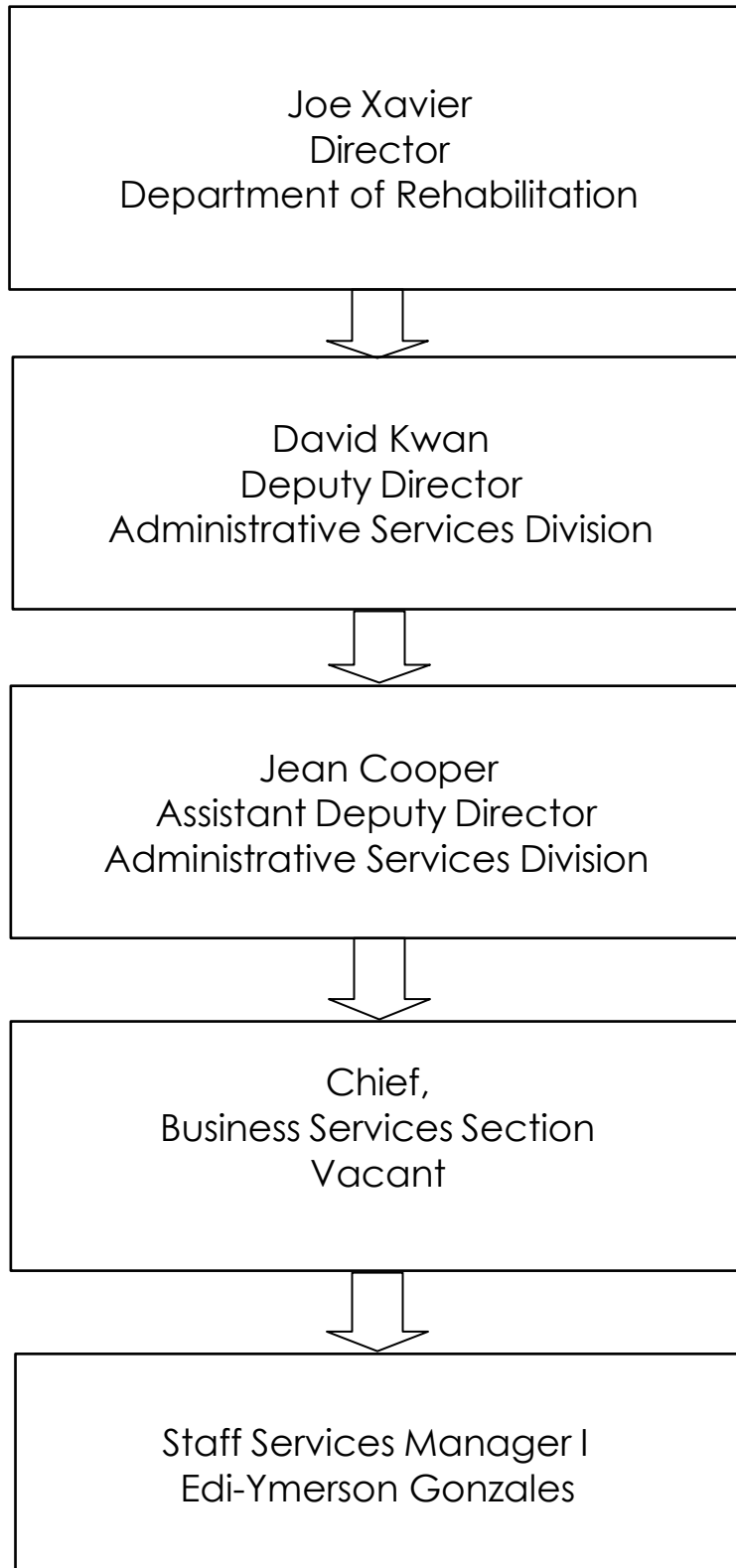
No infrastructure investments



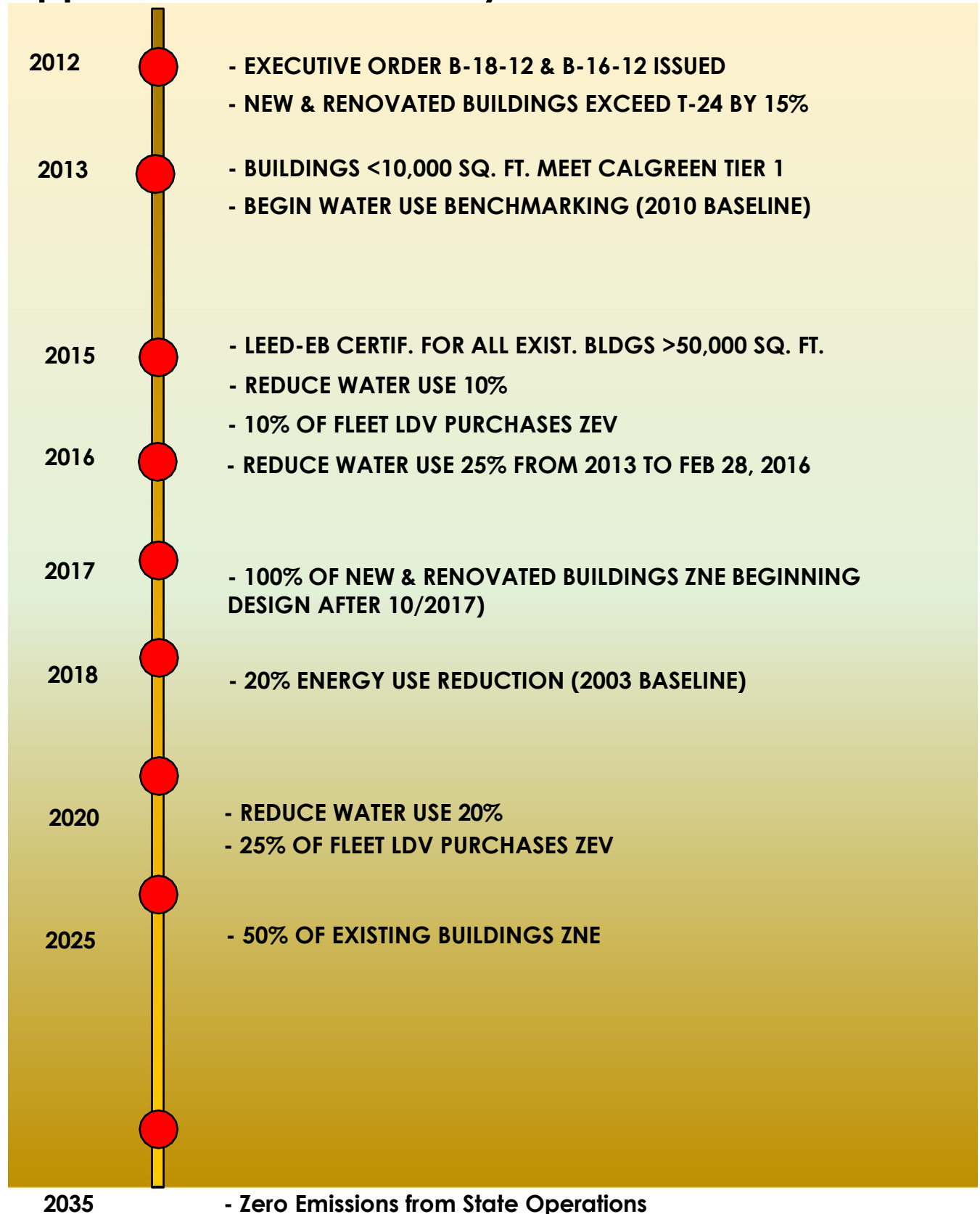
CHAPTER 7 – PUBLIC EDUCATION AND OUTREACH

There are no identified public education and outreach plans at this time for sustainability efforts.

APPENDIX A – SUSTAINABILITY LEADERSHIP



Appendix B - Sustainability Milestones & Timeline



APPENDIX C – ACRONYMS

Customize to include organizations and acronyms within your specific department

AB	Assembly Bill
ADR	Automated Demand Response
AMB	Asset Management Branch (at DGS)
BMP	Best management practices
CA	California
CALGREEN	California Green Building Code (Title 24, Part 11)
CEC	California Energy Commission
DGS	Department of General Services
DWR	Department of Water Resources
EHT	Extreme heat threshold
EMS	Energy management system (aka EMCS)
EMCS	Energy management control system (aka EMS)
EO	Executive Order
EPP	Environmentally preferable purchasing
ESCO	Energy service company
ESPM	Energy Star Portfolio Manager
ETS	Enterprise Technology Solutions (a division at DGS)
EUI	Energy use intensity (source kBtu/sq. ft.)
EVSE	Electric vehicle supply equipment (charging equipment)
FMD	Facilities Management Division (a division at DGS)
GCM	Global circulation model
GHG	Greenhouse gas
GHGe	Greenhouse gas emissions
GSP	Groundwater Sustainability Plan
IEQ	Indoor environmental quality

KBTU	Thousand British thermal units (unit of energy)
LCM	The Landscape Coefficient Method
LEED	Leadership in Energy and Environmental Design
MAWA	Maximum applied water allowance
MM	Management Memo
MWELO	Model Water Efficient Landscape Ordinance
OBAS	Office of Business and Acquisition Services (at DGS)
OBF	On-bill financing
OFAM	Office of Fleet and Asset Management (at DGS)
OS	Office of Sustainability (at DGS)
PMDB	Project Management and Development Branch (at DGS)
PPA	Power purchase agreement
PUE	Power usage effectiveness
RCP	Representative Concentration Pathway
SABRC	State Agency Buy Recycled Campaign
SAM	State Administrative Manual
SB	Senate Bill
SCM	State Contracting Manual
SGA	Sustainable groundwater agency
SGMA	Sustainable Groundwater Management Act
WMC	Water management coordinator
VHSP(s)	Vehicle home storage permits
WUCOLS	Water Use Classifications of Landscape Species
ZEV	Zero-emission vehicle
ZNE	Zero net energy

APPENDIX D - GLOSSARY

Backflow - is the undesirable reversal of the flow of water or mixtures of water and other undesirable substances from any source (such as used water, industrial fluids, gasses, or any substance other than the intended potable water) into the distribution pipes of the potable water system.

Back flow prevention device – a device that prevents contaminants from entering the potable water system in the event of back pressure or back siphonage.

Blowdown, boilers - is the periodic or continuous removal of water from a boiler to remove accumulated dissolved solids and/or sludge. Proper control of blowdown is critical to boiler operation. Insufficient blowdown may lead to deposits or carryover. Excessive blowdown wastes water, energy, and chemicals.

Blowdown, cooling towers – Is the water discharged to remove high mineral content system water, impurities, and sediment.

Building Best Management Practices (BMPs) - are ongoing actions that establish and maintain building water use efficiency. BMPs can be continuously updated based on need and tailored to fit the facility depending on occupancy and specific operations.

Compost – Compost is the product resulting from the controlled biological decomposition of organic material from a feedstock into a stable, humus-like product that has many environmental benefits. Composting is a natural process that is managed to optimize the conditions for decomposing microbes to thrive. This generally involves providing air and moisture, and achieving sufficient temperatures to ensure weed seeds, invasive pests, and pathogens are destroyed. A wide range of material (feedstock) may be composted, such as yard trimmings, wood chips, vegetable scraps, paper products, manures and biosolids. Compost may be applied to the top of the soil or incorporated into the soil (tilling).

Cooling Degree Day (CDD) - is defined as the number of degrees by which a daily average temperature exceeds a reference temperature. The reference temperature is also typically 65 degrees Fahrenheit, and different utilities and planning entities sometimes use different reference temperatures. The reference temperature loosely represents an average

daily temperature below which space cooling (e.g., air conditioning) is not needed.

Critical overdraft - a condition in which significantly more water has been taken out of a groundwater basin than has been put in, either by natural recharge or by recharging basins. Critical overdraft leads to various undesirable conditions such as ground subsidence and saltwater intrusion.

Ecosystem services - are the direct and indirect contributions of ecosystems to human well-being. They support directly or indirectly our survival and quality of life. Ecosystem services can be categorized in four main types:

- Provisioning services are the products obtained from ecosystems such as food, fresh water, wood, fiber, genetic resources, and medicines.
- Regulating services are the benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification and waste management, pollination, or pest control.
- Habitat services provide living places for all species and maintain the viability of gene-pools.
- Cultural services include non-material benefits such as spiritual enrichment, intellectual development, recreation, and aesthetic values.

Grass cycling - refers to an aerobic (requires air) method of handling grass clippings by leaving them on the lawn when mowing. Because grass consists largely of water (80% or more), contains little lignin, and has high nitrogen content, grass clippings easily break down during an aerobic process. Grass cycling returns the decomposed clippings to the soil within one to two weeks acting primarily as a fertilizer supplement and, to a much smaller degree, mulch. Grass cycling can provide 15 to 20% or more of a lawn's yearly nitrogen requirements

Heating Degree Day (HDD) - is defined as the number of degrees by which a daily average temperature is below a reference temperature (i.e., a proxy for when heat would be needed). The reference temperature is typically 65 degrees Fahrenheit, although different utilities and planning entities sometimes use different reference temperatures. The reference temperature loosely represents an average daily temperature *above which* space heating is not needed. The average temperature is

represented by the average of the maximum and minimum daily temperature.

Hydrozone – is a portion of a landscaped area having plants with similar water needs that are served by one irrigation valve or set of valves with the same schedule.

Landscape Coefficient Method (LCM) - describes a method of estimating irrigation needs of landscape plantings in California. It is intended as a guide for landscape professionals.

Landscape water budget - is the calculated irrigation requirement of a landscape based on landscape area, local climate factors, specific plant requirements and the irrigation system performance.

Lifecycle cost accounting - includes initial investment costs, as well as lifetime operation and maintenance costs under changing climate conditions, including changing average conditions and increases in extreme events. It may involve applying non-market evaluation methods such as travel cost, avoided costs or contingent valuation to capture hard to quantify benefits and costs

Make Up Water - Makeup water, or the water replacing evaporated or leaked water from the boiler, is first drawn from its source, whether raw water, city water, city-treated effluent, in-plant wastewater recycle (cooling tower blowdown recycle), well water, or any other surface water source.

Model Water Efficient Landscape Ordinance (MWELO) - The Water Conservation in Landscaping Act was signed into law on September 29, 1990. The premise was that landscape design, installation, and maintenance can and should be water efficient. Some of the provisions specified in the statute included plant selection and groupings of plants based on water needs and climatic, geological, or topographical conditions, efficient irrigation systems, practices that foster long term water conservation and routine repair and maintenance of irrigation systems. The latest update to MWELO was in 2015. MWELO applies to all state agencies' landscaping.

Mulch – Mulch is a layer of material applied on top of soil. Examples of material that can be used as mulch include wood chips, grass clippings, leaves, straw, cardboard, newspaper, rocks, and even shredded tires. Benefits of applying mulch include reducing erosion and weeds and increasing

water retention and soil vitality. Whenever possible, look for mulch that has been through a sanitization process to kill weed seeds and pests.

Natural infrastructure - is the “*preservation or restoration of ecological systems or the utilization of engineered systems that use ecological processes to increase resiliency to climate change, manage other environmental hazards, or both. This may include, but need not be limited to, flood plain and wetlands restoration or preservation, combining levees with restored natural systems to reduce flood risk, and urban tree planting to mitigate high heat days*” (Public Resource Code Section 71154(c)(3)).


Nonpurchased Water – is water that a department uses that does not come from a 3rd party supplier. It may be water from domestic wells owned by the department or water that is taken from a river, lake, canal, or other source and used by the department. The water may be returned to source after use.

Trickle flow – A device that allows users to reduce flow to a trickle while using soap and shampoo. When the device is switched off, the flow is reinstated with the temperature and pressure resumes to previous settings.

Sprinkler system backflow prevention devices – are devices to prevent contaminants from entering water supplies. These devices connect to the sprinkler system and are an important safety feature. They are required by the California Plumbing Code.

Submeter- a metering device installed to measure water use in a specific area or for a specific purpose. Also known as dedicated meters, landscape submeters are effective for separating landscape water use from interior water use, evaluating the landscape water budget and for leak detection within the irrigation system.

Urban heat islands - are areas with localized spikes in temperature, which impact human health, increase pollution, and increase energy demand. Urban heat islands occur during the hot summer months in areas with higher percentages of impervious surface and less vegetation. This is likely in areas with large parking lots, dense development, and lower tree density and shading. Urban heat islands can be mitigated (i.e., reduced) through tree planting and other greening measures, cool roofs (e.g., lighter roofing materials that reflect light), cooler pavements, and other measures.



Water Budget - A landscape water budget is the calculated irrigation requirement of a landscape based on landscape area, local climate factors, specific plant requirements and the irrigation system performance.

Water-energy nexus - Water and energy are often managed separately despite the important links between the two. 12 percent of California's energy use is related to water use with nearly 10 percent being used at the end water use. Water is used in the production of nearly every major energy source. Likewise, energy is used in multiple ways and at multiple steps in water delivery and treatment systems as well as wastewater collection and treatment.

Water Shortage Contingency Plans - Each urban water purveyor serving more than 3,000 connections or 3,000 acre-feet of water annually must have an Urban Water Shortage Contingency Plan (Water Shortage Plan) which details how a community would react to a reduction in water supply of up to 50% for droughts lasting up to three years.

WUCOLS - Water Use Classification of Landscape Species. WUCOLS are used to help determine water budgets and irrigation schedules. Use this link to access the necessary information for your landscaping needs. [WUCOLS Plant Search Database \(ucdavis.edu\)](http://ucdavis.edu/wucols)

APPENDIX E – DEPARTMENT STAKEHOLDERS

List individuals, offices, and divisions responsible for leading efforts related to each initiative identified in this report. Include their respective titles, roles, responsibilities.

Climate Change Adaptation

Understanding Climate Risk at Existing Facilities
Individual or division name Title, role, responsibilities, managers, etc.

Understanding Climate Risk at Planned Facilities
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Integrating Climate Change into Department Planning and Funding Programs
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Measuring and Tracking Progress
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Zero Emission Vehicles

Incorporating ZEVs Into the Department Fleet
Individual or division name Nathan Shulkin – Sustainability Analyst Title, role, responsibilities, managers, and other relevant information.

Telematics
Individual or division name Nathan Shulkin – Sustainability Analyst Title, role, responsibilities, managers, and other relevant information.

Public Safety Exemption
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Outside Funding Sources for ZEV Infrastructure
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Hydrogen Fueling Infrastructure
Individual or division name Title, role, responsibilities, managers, and other relevant information.



Comprehensive Facility Site and Infrastructure Assessments
Individual or division name Title, role, responsibilities, managers, and other relevant information.

EVSE Construction Plan
Individual or division name Title, role, responsibilities, managers, and other relevant information.

EVSE Operation
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Energy

Zero Net Energy (ZNE)
Individual or division name Title, role, responsibilities, managers, and other relevant information.

New Construction Exceeds Title 24 by 15%
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Reduce Grid-Based Energy Purchased by 20% by 2018
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Server Room Energy Use
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Demand Response
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Renewable Energy
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Monitoring-Based Commissioning (MBCx)
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Financing

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Water Efficiency and Conservation

Indoor Water Efficiency Projects In Progress First initiative

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Boilers and Cooling Systems Projects In Progress

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Landscaping Hardware Water Efficiency Projects In Progress

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Living Landscaping Water Efficiency Projects In Progress

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Buildings with Urban Water Shortage Contingency Plans In Progress

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Green Operations

Greenhouse Gas Emissions

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Building Design and Construction

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

LEED for Existing Buildings Operations and Maintenance

Individual or division name

Title, role, responsibilities, managers, and other relevant information.

Indoor Environmental Quality

Individual or division name

Title, role, responsibilities, managers, and other relevant information.



Integrated Pest Management
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Waste Management and Recycling
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Environmentally Preferable Purchasing
Individual or division name Title, role, responsibilities, managers, and other relevant information.

Location Efficiency
Individual or division name Title, role, responsibilities, managers, and other relevant information.

APPENDIX F – SUSTAINABILITY STATUTORY REQUIREMENTS. EXECUTIVE ORDERS AND MANAGEMENT MEMOS REFERENCES

The following executive orders, Management Memos, legislative actions, resources, and guidance documents provide the sustainability criteria, requirements, and targets tracked and reported herein.

Executive Orders

The governor issued the following executive order relevant to chapters of this roadmap:

- [Executive Order B-16-12](#)

EO B-16-12 directs state agencies to integrate zero-emission vehicles (ZEVs) into the state vehicle fleet. It also directs state agencies to develop the infrastructure to support increased public and private sector use of ZEVs. Specifically, it directs state agencies replacing fleet vehicles to replace at least 10 percent with ZEVs, and by 2020 to ensure at least 25 percent of replacement fleet vehicles are ZEVs.

- [Executive Order B-18-12](#)

EO B-18-12 and the companion *Green Building Action Plan* require state agencies to reduce the environmental impacts of state operations by reducing greenhouse gas emissions, managing energy and water use, improving indoor air quality, generating on-site renewable energy when feasible, implementing environmentally preferable purchasing, and developing the infrastructure for electric vehicle charging stations at state facilities. The Green Building Action Plan also established two oversight groups – the staff-level Sustainability Working Group and the executive-level Sustainability Task Force – to ensure these measures are met. Agencies annually report current energy and water use into the Energy Star Portfolio Manager (ESPM).

- [Executive Order B-29-15](#)

EO B-29-15 directs state agencies to take actions in response to the ongoing drought and to the state of emergency due to severe drought conditions proclaimed on January 17, 2014. Governor Brown directed numerous state agencies to develop new programs and regulations to mitigate the effects of the drought and required increased enforcement of water waste statewide. Agencies were instructed to reduce potable urban water use by 25 percent between 2013 and February 28, 2016.

- [Executive Order B-30-15](#)

In 2015, the governor issued EO B-30-15, which declared climate change to be a “threat to the well-being, public health, natural resources,

economy and environment of California.” It established a new interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 and reaffirms California’s intent to reduce GHG emissions to 80 percent below 1990 levels by 2050. To support these goals, this order requires numerous state agencies to develop plans and programs to reduce emissions. It also directs state agencies to take climate change into account in their planning and investment decisions and employ life-cycle cost accounting to evaluate and compare infrastructure investments and alternatives. State agencies are directed to prioritize investments that both build climate preparedness and reduce GHG emissions; prioritize natural infrastructure; and protect the state’s most vulnerable populations.

State Administrative Manual & Management Memos

The following section of the State Administrative Manual (SAM), and associated Management Memos (MMs) currently impose sustainability requirements on the department under the governor’s executive authority:

- [SAM Chapter 1800](#): Energy and Sustainability
- [MM14-02](#): Water Efficiency and Conservation
- [MM 14-05](#): Indoor Environmental Quality: New, Renovated, And Existing Buildings
- [MM 14-09](#): Energy Efficiency in Data Centers and Server Rooms
- [MM 15-03](#): Minimum Fuel Economy Standards Policy
- [MM 15-04](#): Energy Use Reduction for New, Existing, and Leased Buildings
- [MM 15-06](#): State Buildings and Grounds Maintenance and Operation
- [MM 15-07](#): Diesel, Biodiesel, and Renewable Hydrocarbon Diesel Bulk Fuel Purchases
- [MM 16-07](#): Zero-Emission Vehicle Purchasing and EVSE Infrastructure Requirements

Recent Legislative Actions

Several pieces of legislation were signed in 2015-16 that codified several elements of the executive orders, or provided further requirements included in the policies. These include the following:

- [Assembly Bill \(AB\) 1482 \(Gordon, 2015\)](#): Requires that the California Natural Resources Agency (CNRA) update the state's adaptation strategy safeguarding California every three years. Directs state agencies to promote climate adaptation in planning decisions and ensure that state investments consider climate change impacts, as well as the use of natural systems and natural infrastructure. (Public Resources Code Section 71153)
- [Senate Bill \(SB\) 246 \(Wieckowski, 2015\)](#): Established the Integrated Climate Adaptation and Resiliency Program within the Governor's Office of Planning and Research to coordinate regional and local efforts with state climate adaptation strategies to adapt to the impacts of climate change. (Public Resources Code Section 71354)
- [AB 2800 \(Quirk, 2016\)](#): Requires state agencies to take the current and future impacts of climate change into planning, designing, building, operating, maintaining, and investing in state infrastructure. CNRA will establish a Climate-Safe Infrastructure Working Group to determine how to integrate climate change impacts into state infrastructure engineering. (Public Resources Code Section 71155)

Other Legislative Actions

- **Assembly Bill (AB) 4**: Passed in 1989. The State Agency Buy Recycled Campaign (SABRC) statutes are in Public Contract Code Section [12153-12217](#). The intent of SABRC is to stimulate markets for materials diverted by California local government and agencies. It requires state agencies to purchase enough recycled-content products to meet annual targets, report on purchases of recycled and nonrecycled products, and submit plans for meeting the annual goals for purchasing recycled-content products.
- [AB 32 Scoping Plan](#): The scoping plan assumes widespread electrification of the transportation sector as a critical component of every scenario that leads to the mandated 40 percent reduction in GHG by 2030 and 80 percent reduction by 2015.
- [AB 2583 \(Blumenfield 2012\)](#) **Public Resources Code §25722.8**: Statute requires reducing consumption of petroleum products by the state fleet compared to a 2003 baseline. Mandates a 10 percent reduction or

displacement by Jan. 1, 2012, and a 20 percent reduction or displacement by Jan. 1, 2020.

- [AB 75](#) – Implement an integrated waste management program and achieve 50 percent disposal reduction target. State Agencies report annually on waste management program
- [SB 1106](#) – Have at least one designated waste management coordinator. Report annually on how your designated waste and recycling coordinator meets the requirement.
- [AB 2812](#) - Provide adequate receptacles, signage, education, staffing, and arrange for recycling services. Report annually on how each of these is being implemented
- [AB 341](#) – Implement mandatory commercial recycling program (if meet threshold). Report annually on recycling program
- [AB 1826](#) – Implement mandatory commercial organics recycling program (if meet threshold). Report annually on organics recycling program
- [SB 1383](#) - 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020, a 75 percent reduction by 2025, and 20 percent of currently disposed edible food is recovered for human consumption by 2025.
 - Agencies already in compliance with AB 1826 may need to further expand their organic waste recycling service to comply with the new requirements
 - Jan. 1, 2024, Tier 2 Commercial Edible food Generators will be required to donate edible food to a recovery organization.
- [SB 1335](#) - requires food service facilities located in a state-owned facility, a concessionaire on state-owned property, or under contract to dispense prepared food using reusable, recyclable, or compostable. food service packaging

Action Plan

- [2016 Zero-Emission Vehicle Action Plan](#)

The plan establishes a goal to provide electric vehicle charging to 5 percent of state-owned parking spaces by 2022. It also advances the ZEV procurement target to 50 percent of light-duty vehicles by 2025.

State Resources and Guidance Documents

California has invested significant resources in understanding the risks of climate change, water efficiency, strategic growth, and state actions available to respond to and reduce these risks. These include the following:

- **[Safeguarding California](#)**: The state's climate adaptation strategy organized by sector. Each sector identifies risks from climate change and actions to reduce those risks.
- **[Safeguarding California Implementation Action Plans](#)**: Directed under EO B-30-15, the Implementation Action Plans outline the steps that will be taken in each sector to reduce risks from climate change.
- **[Planning and Investing for a Resilient California](#)**: Prepared under direction of EO B-30-15, this document provides a framework for state agencies to integrate climate change into planning and investment, including guidance on data selection and analytical approach.
- **[California's Climate Change Assessments](#)**: California has completed three comprehensive assessments of climate change impacts on California. Each assessment has included development of projections of climate impacts on a scale that is relevant to state planning (i.e., downscaled climate projections). These data are available through **[Cal-Adapt](#)**, an online data visualization and access tool.
- **[Water Use Reduction Guidelines and Criteria](#)**: Issued by the California Department of Water Resources February 28, 2013, pursuant to Executive Order B-18-12. Each applicable agency was required to take actions to reduce water use in facilities and landscapes that are operated by the state, including owned, funded, or leased facilities. State-operated facilities are defined as facilities where the agency has direct control of the buildings' function, maintenance, and repair. For leased facilities, the Green Building Action Plan directed at that time that new and renegotiated leases include provisions for water conservation, reporting water use, and installation of sub-meters to the extent possible and economically feasible.
- **[Strategic Growth Council \(SGC\) Resolution on Location Efficiency](#)**: Location efficiency refers to the greenhouse gas emissions arising from the transportation choices of employees and visitors to a building as determined by the Smart Location Calculator. Adopted on December 6, 2016, the resolution directs members of the SGC to achieve a 10 percent improvement in the Smart Location Score of new leases compared to the average score of leased facilities in 2016.

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