

December 16, 2025

Wade Crowfoot, Secretary
California Natural Resources Agency
715 P Street, 20th Floor
Sacramento, CA 95814

Dear Secretary Wade Crowfoot,

In accordance with the State Leadership Accountability Act (Leadership Accountability), the Department of Water Resources submits this report on the review of our internal control and monitoring systems for the biennial period ending December 31, 2025.

Should you have any questions please contact Stephanie Varrelman, Deputy Director, Business Operations, at (916) 882-2998, stephanie.varrelman@water.ca.gov.

GOVERNANCE

Mission and Strategic Plan

Mission:

To sustainably manage the water resources of California, in cooperation with other agencies, to benefit the state's people and protect, restore, and enhance the natural and human environments.

Strategic Plan:

Be an Employer of Choice: The Department of Water Resources (DWR) seeks to create a culture of excellence that is welcoming, challenging, rewarding, and fun. DWR dedicates resources that empower employees to innovate, collaborate, and advance within and beyond the organization.

Build Community Capacity: DWR is entrusted to support safe and sustainable management of water for all Californians. The Department also seeks to build authentic and trusting relationships with the communities we serve through improved outreach and engagement and expanding technical and financial assistance.

Pursue Innovative Infrastructure Solutions: Much of California's water infrastructure is reaching the end of its lifecycle in an era that demands innovative infrastructure solutions.

Acknowledging the interconnectedness of managing natural and built infrastructure, the Department will work with local, federal, and other partners to advance more integrated, flexible, and reliable water management systems.

Respond to Public Safety Emergencies: Natural disasters are striking with more frequency and devastation. In response, DWR is working to optimize the management of water resources for the improved protection of lives, infrastructure, and the environment. The Department plays a significant role in preparing for, responding to, and recovering from emergencies that stem not only from drought and flood, but also earthquakes, energy shortages, and wildfires.

Integrate and Transform California Water Management: Passage of the Sustainable Groundwater Management Act (SGMA) in 2014 was nearly a century in the making. To fulfill the promise of SGMA, integration of groundwater with surface water must take place—alongside dam safety, reservoir operations, flood management, and ecosystem restoration.

To meet these challenges, DWR will establish innovation teams of emerging leaders across the Department.

The California Water Commission (CWC) consists of nine members appointed by the Governor and confirmed by the State Senate. Seven members are chosen for their general expertise related to the control, storage, and beneficial use of water. The other two are chosen for their knowledge of the environment. The CWC provides a public forum for discussing water issues, advises DWR, and takes appropriate statutory actions to further the development of policies that support integrated and sustainable water resource management and a healthy environment. Statutory duties include advising the Director of DWR, approving rules and regulations, and monitoring and reporting on the construction and operation of the State Water Project (SWP).

Control Environment

DWR resides organizationally under the California Natural Resources Agency (CNRA). CNRA and various control agencies including the Department of Finance, Department of General Services, State Controller's Office, State Treasurer's Office, Legislature, and DWR's stakeholders provide oversight of DWR's operations and policy decisions. These entities and many others use audits, inquiry, and policies and procedures to manage their oversight of DWR.

DWR's financial health, processes, activities, programs, and internal controls are continuously monitored by DWR management. This is accomplished through various management meetings at all levels of the organization, including the Directorate. DWR management advocates for and supports open communication throughout the Department so as concerns are identified, they can be elevated and appropriately addressed at any time. Continuous monitoring also occurs through constant reporting and analysis of data. DWR's internal and external auditors also provide monitoring and feedback to DWR management.

Additionally, DWR's financial health, processes, activities, programs, and internal controls are continuously monitored by DWR management. This is accomplished through various management meetings at all levels of the organization, including the Directorate. Internally, DWR has a Governance Board comprised of senior management and executive-level staff. The Board's charge is to set priorities, establish programmatic direction, and develop policies, and procedures. The Board also makes recommendations to the Director, Lead Deputy Directors, and Deputy Directors on various internal operational matters that involve policy implications.

DWR's Division of Human Resources oversees and implements DWR's recruitment, training, workforce, and succession planning activities Department-wide. DWR utilizes annual appraisals to evaluate staff performance which provides written and documented analysis of staff performance. Individual supervisors utilize various controls such as one-on-one meetings to discuss staff performance and to perform assignment oversight to ensure performance. Written status reports are commonly used to evaluate progress and performance, as well. Status reports are routinely forwarded through the chain of command culminating in reporting to CNRA. DWR adheres to the State's progressive discipline model and utilizes counseling memos, corrective memos, and adverse actions.

DWR's Department Administrative Manual (DAM), Enterprise Process Guides (EPGs), and Delegation Orders document DWR's internal controls and responsible parties. In short, the DAM is a policy manual and the EPGs are Departmental procedures. The DAM and EPGs are available to all staff via DWR's intranet - Blue. DWR has multiple Key Policies (such as the Drug-Free Workplace Policy and Nepotism Prevention Policy), which are distributed to all DWR staff on an annual basis. Similarly, when a policy is changed, Department-wide notification is provided. DWR's Management Analysis maintains the DAM and EPGs and DWR's Internal Audit Office also provides input when developing and or amending internal controls.

DWR's core values and codes of conduct are clearly established and presented in many forms to Department staff and the public. For example, they appear in DWR's Strategic Plan. Similarly, DWR's DAM and EPGs include all DWR's policies and procedures related to ethics and codes of conduct. The DAM and EPGs also contain direction for employees on how to report ethical and code of conduct concerns to DWR authorities such as the Office of Civil Rights and the Internal Audit Office for investigation. Furthermore, DWR informs employees annually via email and posts California Whistleblower Protection Act signage as required which provides employees instructions on how to report concerns to the California State Auditor. Lastly, DWR complies with conflict-of-interest statutes and requires staff to complete conflict of interest training and file Form 700s.

DWR's Strategic Plan lists the top goal as Be an Employer of Choice. To achieve this goal, DWR has implemented, or is in the process of implementing a variety of actions. Specifically, in 2025,

DWR released a combined Workforce and Succession Management Plan containing a detailed Action Plan of strategies to support achieving this goal. To name a few, the plan mentions releasing another employee engagement survey, creating a Recruitment Ambassador Program, expanding the wellness and mentorship programs, enhancing leadership development, and updating outdated classification specifications. Further, DWR continues to offer hybrid schedules (where operationally feasible) to optimize the employee experience, support work-life balance, and maintain flexibility. DWR also continues to reach a broad candidate pool to attract quality talent by using a mix of traditional and contemporary recruitment methods, such as attending in-person and virtual career fairs, university, college, and professional organization job boards, and various social media platforms. DWR also identified hard to recruit and retain classifications such as those in the trades and crafts and engineering fields, and targets recruitment for these vacancies.

In addition, DWR provides a substantial training budget to staff so they may complete required and desired training to ensure competencies. DWR also operates a robust apprenticeship program for Utility Craftworkers to ensure an adequate workforce of skilled employees to maintain the State Water Project and California's flood protection levees. Annually, staff utilize Individual Development Plans to identify and request training to enhance their skills and abilities. Further, DWR maintains a comprehensive leadership development program to develop talent and prepare future DWR leaders.

Information and Communication

The Director, Lead Deputy Directors, and Deputy Directors meet on a weekly basis. The Department also has a Governance Board which is made up of its Director, Lead Deputy Directors, Deputy Directors, other Executive staff, and all Division/Office Managers. The Governance Board meets a minimum of once a month. The risks identified in this report are often the subjects of both groups' meetings. Division/Office Managers are responsible for sharing the decisions of the Governance Board with their staff. DWR's Internal Auditor meets regularly with the Executive Monitoring Sponsor and reports any issues of concern that require action by DWR management.

DWR has countless processes to ensure effective and efficient communication with external interested parties and other external parties. Processes are derivative of a myriad controls, policies, procedures, and law. For example, as required, DWR annually produces and distributes Bulletin 132 "Management of the California State Water Project." The Bulletin provides fiscal, operational, construction, water supply, and environmental information for one of the nation's largest infrastructure projects to a world-wide audience.

DWR's internet site passively shares information on many subjects such as the California Water Plan, Well Standards, department organization, and department contacts. In large part, the

information is contained in reports and or publications which include facts, plans, and statistics about DWR programs. The site also informs external parties about other past and future communication opportunities such as upcoming public meetings and gatherings. The site is also the pathway for individuals to access public records. DWR's internet adheres to accessibility requirements as prescribed by law.

DWR constantly avails itself to its external interested parties/partners in person, as well. For example, DWR participates in a multitude of local working groups such as county advisory groups, holds and participates in town-hall meetings related to planned and ongoing projects, meets and confers with State Water Contractors, provides media updates, responds to media and governmental inquiries, and testifies before the Legislature.

MONITORING

The information included here discusses the entity-wide, continuous process to ensure internal control systems are working as intended. The role of the executive monitoring sponsor includes facilitating and verifying that the Department of Water Resources monitoring practices are implemented and functioning. The responsibilities as the executive monitoring sponsor(s) have been given to: Stephanie Varrelman, Deputy Director, Business Operations.

DWR's Executive management team is notified when vulnerabilities are identified. A task force of Department subject matter experts is typically convened to assess the magnitude of the vulnerability to operations and identify solutions and resource costs (both financial and personnel) to address the issue. Vulnerabilities are validated and assessed using data this is available through DWR's enterprise resource planning (ERP) program, SAP, and business analytics and reporting. DWR also uses a document management system to house business records. These systems aid management in identifying gaps and possible solutions. Executive management, including DWR's Governance Board, is continually briefed so that informed policy decisions can be made in a timely manner. Issues and decisions are documented via formal memorandums, policy documents, water resources engineering memorandums, white papers, meeting minutes, reports, spreadsheets and forms, as appropriate. Once remedies are in place, DWR management monitors results to ensure the selected action is effective.

RISK ASSESSMENT PROCESS

The following personnel were involved in the Department of Water Resources risk assessment process: executive management.

The following methods were used to identify risks: ongoing monitoring activities, audit/review results, other/prior risk assessments, questionnaires, and consideration of potential fraud.

The following criteria were used to rank risks: likelihood of occurrence, potential impact to mission/goals/objectives, timing of potential event, potential impact of remediation efforts, and tolerance level for the type of risk.

RISKS AND CONTROLS

Risk: Aging Infrastructure

The State's water infrastructure, including the aqueducts, canals, pipelines, dams, spillways, reservoirs, levees, flood bypasses, and pumping plants is aging and needs to be modernized or reconstructed to dependably continue providing water to millions of Californians and hundreds of thousands of acres of farmland, along with ensuring public safety. Moreover, persistent land subsidence and evolving climate conditions have exacerbated the vulnerabilities associated with aging infrastructure. The sheer scope, complexity and multi-billion dollar price tag associated with upgrading the infrastructure create extraordinary and monumental challenges for the Department. There is significant risk with the age of the State's water infrastructure and facilities, with increasing natural variability and uncertainty, to meet water needs, which will also jeopardize efforts to improve public safety, ecosystem conditions, and economic stability.

Control: Active Infrastructure Improvement Projects

The Department of Water Resources (DWR) constructs, operates, and maintains several infrastructure projects as part of its mission to sustainably manage the water resources of California. Some of the larger infrastructure projects include, but are not limited to, the following: Delta Conveyance Project, Lower Elkhorn Basin Levee Setback Project, Lookout Slough Tidal Habitat Restoration and Flood Improvement Project, Sacramento Weir Widening Project, Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project, Salton Sea Species Conservation Habitat Project, Oroville Dam River Valve Outlet Modernization, Subsidence

Remediation, Castaic Dam Modernization, and Perris Dam Remediation Program.

Control: SWP Asset Management Program

DWR is actively engaged in an ongoing effort to upgrade California's aging water delivery system. DWR has multiple programs which are tasked with addressing the state's aging infrastructure. One such program is DWR's SWP Division of Operations and Maintenance's Asset Management Program, which is responsible for providing a unified framework for the condition assessment, risk management, and strategic planning of capital investments in SWP electrical, mechanical, and civil infrastructure. Specifically, the Asset Management Program is charged with improving the plant and civil condition assessment programs, applying new analytical tools to prioritize long-term investments, and implementing maintenance management strategies to optimize the lifecycle of the SWP assets.

Control: Division of Safety of Dams

The California Water Code (Water Code) entrusts dam safety regulatory power to DWR, who delegates the authority to the Division of Safety of Dams (DSOD). DSOD provides oversight to the design, construction, and maintenance of over 1,200 non-federally owned jurisdictional sized dams in California. DSOD ensures dam safety by reviewing and approving of new dam construction and the enlargement, repair, alteration, and removal of existing dams; performing independent analyses and risk studies to understand the performance of existing dams and appurtenant structures under varying load conditions; overseeing construction to ensure work is being performed in accordance with the approved plans and specifications; inspecting each dam and ensuring its gates and valves are cycled by dam owners at the frequency required in the Water Code to ensure they are performing as intended and are not developing issues; reviewing and approving of dam owner's inundation maps for emergency

preparedness for all dams except those related with a low downstream hazard potential; and engaging in enforcement for dams that are not in compliance with legal authorities provided by the water code or actions needed to maintain dam safety.

Control: Levee Maintenance and Inspections

The Flood Maintenance and Operations Branch (FMO), Division of Flood Operations is responsible for operation and maintenance (O&M) of the federally constructed flood control features in the Sacramento Valley as authorized by the California Water Code Sections 8361 and 12878 and cooperates with United States Army Corps of Engineers (USACE) in repairing flood damaged federal flood control projects. FMO's total required O&M consists of about 168,000 acres of floodway (approximately 262 square miles), about 300 miles of levees, channel (~1,200 miles in the Sacramento River Flood Control Project), as well as numerous structures of various types requiring maintenance and inspections. This work is intended to reduce flood risk, protect and enhance ecosystems, promote sustainability, and comply with State/Federal assurances. In addition to operations and maintenance, FMO conducts on-going inspections of levees, channels, and flood control facilities covered under California Water Code 8361 and 12878.

Control: California Aqueduct Subsidence Program

In response to the growing threat of land subsidence to the State Water Project (SWP), particularly in the San Joaquin Valley, DWR established the California Aqueduct Subsidence Program (CASP). This program addresses the significant ground movement that has reduced the Aqueduct's water delivery capacity and compromised infrastructure performance. CASP focuses on monitoring and modeling subsidence trends, assessing infrastructure vulnerabilities, and implementing engineering solutions to restore system capacity and resilience. It also emphasizes collaboration with local agencies and alignment with the

Sustainable Groundwater Management Act and broader climate adaptation goals to ensure long-term water delivery reliability and infrastructure sustainability.

Risk: Climate Change and Natural Hazard Impacts

The impacts of climate change could contribute to more - or more severe - natural disasters, which could affect SWP and State Plan of Flood Control infrastructure. Increases in temperature have already decreased the Sierra snowpack and in turn are changing runoff patterns. The mountain snowpack provides as much as a third of California's water supply by accumulating snow during our wet winters and releasing it slowly during dry springs and summers. Warmer temperatures will melt the snow faster and earlier, making it more challenging to store and use throughout the dry season.

Climate change is also expected to contribute to more variable weather patterns. More weather variability can lead to more prolonged and severe droughts and floods, which present challenges to California's water supply and public safety. As one example, rising sea level will bring more salt water into the Sacramento-San Joaquin Delta. To repel the salinity, more freshwater may need to be released through the Delta, potentially decreasing the amount of water available for people, farms, and the environment.

Control: Climate Action Plan

DWR is implementing a Climate Action Plan (CAP), which includes a Greenhouse Gas (GHG) Emissions Reduction Plan designed to reduce DWR's GHG emissions to 60 percent below 1990 levels by 2030, and achieve carbon neutrality by 2035. The large reduction in GHG emissions is due to changing power supplies to cleaner and renewable sources and increasing the energy efficiency of water pumps and generators. The CAP also includes a Vulnerability Assessment and Adaptation Plan, which addresses the climate changes already here and those that are projected.

In addition to CAP, DWR has developed and is in the process of implementing a Roadmap for a Climate Resilient Forecasting Framework, which adapts the way we observe and forecast weather and hydrologic conditions to better align with the weather regime of a warmer and more dynamic climate. This modernization is essential to the Department's ability to provide reliable water supply and public safety to millions of Californians.

Control: Modernizing SWP Facilities

DWR is modernizing its SWP facilities across the State through a value-based strategic risk management approach. This effort consists of identifying and proactively addressing potential top risks that could impact the functionality of the SWP. To protect and preserve the long-term viability of the SWP, modernization actions may include improvements to existing facilities and potential infrastructure expansion. Some current modernization initiatives include, but are not limited to, Castaic Dam Modernization, California Aqueduct Subsidence Rehabilitation, Fire and Physical Security Modernization Projects, and Delta Conveyance Project. These efforts are at various stages of study, permitting, design, and construction.

Also, to protect the SWP system from climate-related threats such as drought, sea-level rise, and extreme weather, DWR is implementing a comprehensive SWP Climate Adaptation Strategy that combines structural, operational, and nature-based approaches. Of the 17 approaches being pursued, five have been identified as the most impactful. These include the implementation of the Delta Conveyance Project; Maintaining and Restoring Infrastructure, particularly addressing land subsidence; Forecast-Informed Reservoir Operations, which uses advanced weather forecasting to manage water storage more flexibly and enhance both flood protection and drought resilience; South-of-Delta Storage, which introduces new above- or below-ground storage south of the Delta to significantly improve drought resilience; and nature-based and operational approaches, such as Feather River watershed management.

Risk: Workforce Management

DWR could be facing a lack of qualified staff resources to accomplish its mission. DWR, like all State agencies, is facing difficulties recruiting new employees, as well as the loss of years of experience and expertise as large numbers of Department employees reach retirement age. The State's lengthy and complicated hiring practices and compensation often makes it difficult for DWR to hire personnel in specialized fields, which presents a risk in carrying out critical operations. Additionally, many candidate pools for highly technical vacancies are small and often require multiple advertisements.

The Department regularly loses employees with highly specialized skills, training, and institutional knowledge through retirement and to other employers. The retirement eligibility for Department employees indicates that the Department is faced with a critical challenge to ensure the right staff with the right qualifications are prepared to assume leadership positions at the right time to achieve our mission. In just 5 years, nearly 40 percent of the Department's leadership employees will be eligible to retire.

Control: Workforce Planning

DWR developed a combined Workforce and Succession Management Plan in accordance with the guidance from the California Department of Human Resources. The plan contains a comprehensive Action Plan with multiple strategies to implement in 2026 and 2027 to attract, develop, and retain the quality workforce essential to accomplishing the goals and mission of the Department. Specifically, as noted in the Action Plan, DWR conducted another Employee Engagement Survey in 2025 and issued a subsequent Report and Action Plan based on the data. Additionally, in 2025, DWR developed and implemented a Recruitment Ambassador Program which gather and trained interested volunteers from program areas to represent the Department in recruitment activities. In 2026, DWR will develop and implement a formal onboarding program and improve and broaden recruitment and outreach efforts to include brand development and increased social media and job board

usage. Further, the Department plans to develop an internship program, enhance the recognition program, and revise the exit survey.

In addition, DWR continues to offer hybrid work as a work option (where operationally feasible) and provides ongoing resources to management to help support and engaging and fulfilling experience for employees when at the work site or working remotely. Also, DWR is continuing its Emerging Leaders Community and Emerging Leaders Cohort where emerging leaders can connect, share information, and receive training. Participants also have the opportunity to engage with and learn from existing leaders.

Control: Resource Management

DWR is currently taking the following steps to manage vacancies:

1. Provides monthly vacancy reports to DWR supervisors and managers for monitoring. Divisions and Offices conduct reviews of their vacancies to best align existing resources with organizational needs on a continuous basis.
2. Conducts regular Executive management review of vacancies to ensure program priorities are addressed with available positions. Executive management manages program resources in alignment with program and Department priorities.
3. Reconciles internal position database with the State Controller's Office (SCO) position roster.
4. Reconciles Schedule 8 every year in coordination with the Department of Finance.
5. Continues to be an active participant on various civil service improvement task forces and working groups to improve recruitment and retention.

Control: Succession Planning

DWR developed a combined Workforce and Succession Management Plan in accordance with the guidance from the California Department of Human Resources. The plan contains a comprehensive Action Plan with multiple strategies to implement in 2026 and 2027 to further develop potential leaders and expand the pipeline of candidates who can move into leadership roles when they become vacant. Specifically, DWR is currently and will continue to provide guidance to divisions and offices for the development of individual succession plans and strategies. Further, DWR plans to expand its supervisor resources including launching an online supervisor toolkit with resources and information to support succession management.

Additionally, the Department is expanding the existing Mentorship Program to all employees – including rank-and-file staff. DWR is also developing job shadow, job rotation, and formal knowledge transfer programs, as well as enhancing existing leadership development training and creating skill-building workshops. Moreover, DWR is continuing its Emerging Leaders Community and Emerging Leaders Cohort. The Emerging Leaders Community offers opportunities for all employees to learn more about leadership skills and competencies. Participants are provided various resources, learning prompts, and engagement opportunities throughout each month. The Emerging Leaders Cohort is a six-month program designed to provide opportunities for a small group of exceptional rank-and-file staff to develop their leadership skills, connect with other emerging leaders throughout the Department, and prepare to promote to their first leadership position.

CONCLUSION

The Department of Water Resources strives to reduce the risks inherent in our work and accepts the responsibility to continuously improve by addressing newly recognized risks and revising risk mitigation strategies as appropriate. I certify our internal control and monitoring systems are adequate to identify and address current and potential risks facing the organization.

Karla A. Nemeth, Director

CC: California Legislature [Senate, Assembly]
California State Auditor
California State Library
California State Controller
Director of California Department of Finance
Secretary of California Government Operations Agency