STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
DF-46 (REV 10/20)

Fiscal Year	Business Unit	Department	Priority No.
2023-24	3940	State Water Resources Control Board	

Budget Request Name	Program	Subprogram
3940-030-BCP-2023-GB	3560 – Water Quality & 3565 – Drinking Water Quality	

Budget Request Description
Water Supply Strategy Implementation

Budget Request Summary
The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (collectively, Water Boards) requests:

- Nineteen (19.0) permanent positions and $4,730,000 ($4,230,000 and 19 positions and $500,000 in one-time contract funding from the Waste Discharge Permit Fund), in fiscal year 2023-24.
- Starting fiscal Year 2024-25, an additional nine (9.0) permanent positions and $2,333,000 ($1,425,000 and 7.0 positions and $500,000 in one-time contract funding from the Waste Discharge Permit Fund, and $408,000 and 2.0 positions from the Safe Drinking Water Account). This will provide total resources for fiscal year 2024-25 in the amount of 28.0 positions and $6,563,000 ($5,655,000 and 26.0 positions and $500,000 one-time contract funding from the Waste Discharge Permit Fund, and 2.0 positions and $408,000 from the Safe Drinking Water Account).
- Starting fiscal year 2025-26, an ongoing spending authority of $6,063,000 ($5,655,000 Waste Discharge Permit Fund and $408,000 Safe Drinking Water Account) to continue the support of 28.0 permanent positions.

This request will allow the Water Boards to address critical statewide water supply needs through planning and permitting for new water supplies.

This proposal includes Trailer Bill language to modify Water Code sections 13260 and 13523 to authorize the Water Boards to assess fees for recycled water permits, allowing the Water Boards to effectively carry out recycled water permitting responsibilities.

Requires Legislation	Code Section(s) to be Added/Amended/Repealed
☒ Yes ☐ No	*Amend Water Code sections 13260 and 13523*

Does this BCP contain information technology (IT) components? ☒ Yes ☐ No *If yes, departmental Chief Information Officer must sign.*	Department CIO	Date

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date.

Project No. Project Approval Document:

Approval Date:

If proposal affects another department, does other department concur with proposal? ☐ Yes ☐ No

Analysis of Problem

Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Trina Nguyen	**Date** 1/10/2023	**Reviewed By** Ryan Wilson	**Date** 1/10/2023
Department Director Eileen Sobeck	**Date** 1/10/2023	**Agency Secretary** Yana Garcia	**Date** 1/10/2023

Department of Finance Use Only

Additional Review: ☐ Capital Outlay ☐ ITCU ☐ FSCU ☐ OSAE ☐ Dept. of Technology

PPBA Krystal Acierto	**Date submitted to the Legislature** 1/10/2023

Analysis of Problem

A. Budget Request Summary

The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (collectively, Water Boards) requests

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- Starting fiscal year 2025-26, an ongoing spending authority of $6,063,000 ($5,655,000 Waste Discharge Permit Fund and $408,000 Safe Drinking Water Account) to continue the support of 28.0 permanent positions.

This request will allow the Water Boards to address critical statewide water supply needs through planning and permitting for new water supplies.

Resources will be used to:

1. Permit new recycled water projects, including potable reuse[1];
2. Develop plans and permits to increase the supply and number of brackish groundwater and seawater desalination facilities; and
3. Identify incentives to increase stormwater capture and use.

This proposal includes trailer bill language to modify Water Code sections 13260 and 13523 to address a gap in regulatory authority and the structural deficit of one of the Water Boards' main operating funds by extending the fee authority to enable the Water Boards to assess fees for recycled water permits, allowing the Water Boards to effectively carry out recycled water permitting responsibilities.

Addressing these staffing resource and funding needs is necessary to support planning and permitting for new water supplies and storage to mitigate aridification in California in accordance with *California's Water Supply Strategy, Adapting to a Hotter, Drier Future*.

B. Background/History

Climate science points to the reality of a hotter world. Increasing temperatures create a new demand for water from plants, soil, and the atmosphere, which must consume more water to offset increasing evaporation. Even as environmental demand for water is increasing, traditional water supplies for humans and the environment are decreasing due to recurring drought, decreased snowpack, and depleted reservoirs and groundwater basins.

Anticipating a future with reduced snowpack and more frequent and longer duration droughts, California developed the Water Resilience Portfolio in 2020 providing guidance and direction to state agencies to prioritize actions to increase California's water resilience. To meet increasing demand and diversify local water supplies, California is investing heavily in new and underutilized water supplies and storage, including recycled water, brackish groundwater and seawater desalination, and stormwater capture and use.

[1] Current regulations enable communities to use recycled water for drinking via a reservoir or aquifer, and in 2023, the State Water Board will consider adopting direct potable reuse regulations that will allow suppliers to distribute recycled water directly to homes and businesses without first putting it in a reservoir or aquifer.

Within the last five years, the State Water Board has financed $1.8 billion in water recycling loans for projects that are anticipated to produce 124,000 acre-feet per year. However, a 2019 WateReuse California survey indicated that a total of 1.3 million acre-feet per year of potable and non-potable water recycling is being planned for by local water districts by 2030-35. The State Water Board is also drafting regulations for direct potable reuse as required by Chapter 528, Statutes of 2017 (Assembly Bill 574, which will require the implementation of enhanced source control and advanced treatment technologies to produce high-quality potable water.

In addition to recycled water, the Pacific Institute and Natural Resources Defense Council estimate that stormwater capture in urbanized Southern California and the San Francisco Bay region has the potential to increase water supplies by 420,000 to 630,000 acre-feet per year; and according to a study published in the journal of Water Research, brackish groundwater is a largely overlooked resource that has great potential to relieve the mounting pressure on fresh water supplies with relatively low amounts of energy required. Cumulatively, and with smart planning and coordination, these new water resources have the potential to be instrumental in fulfilling California's future water resource needs.

While significant progress has been made over the last two years, scientists and water managers have continued to be alarmed by the accelerating impacts of the warming climate on our water supply. *California's Water Supply Strategy, Adapting to a Hotter, Drier Future* (Water Supply Strategy) published in August 2022 by the Administration to provide focused updates to the state's Water Resilience Portfolio priorities based on new data and the effects of accelerating climate change. The Administration established new 2030 and 2040 goals for water conservation and the production and use of recycled water, brackish groundwater and seawater desalination, and stormwater capture and use, which will drive further investment and industry planning in these sectors in the coming months and years (Table 1).

Table 1. New 2030 and 2040 Goals for New Water and Conservation

	2030 (acre-feet)		2040 (acre-feet)	
Increase Recycled Water	800,000		1,819,000	
Increase Desal Production	44,000		84,000	
Increase Stormwater Capture	250,000		500,000	
Increase Water Conservation	500,000	About 5,000,000	500,000	About 7,000,000
Subtotal for Recycled, Desal, Stormwater and Water Conservation	1,100,000		2,900,000	
Expand Storage Above and Below Ground*	3,700,000		4,000,000	
Total	4,800,000		6,900,000	

*Additional storage capacity does not equate to a similar volume of new water supply.

To achieve these new goals, the Water Supply Strategy sets forth several implementation steps that the State Water Board is tasked with leading in partnership with the Department of Water Resources and the local agencies implementing the projects for the development of new water sources. The Water Supply Strategy builds on the significant investments in planning and construction to support new water sources currently in progress and sets forth several implementation steps to identify and develop additional projects that will help achieve these goals. Implementation of this Strategy will require decisive state action and expanded coordination across multiple stakeholders, and the Water Supply Strategy commits the state to prioritizing its funds and human resources to support local projects that satisfy state planning and permitting requirements to protect natural resources and help reach the targets above.

Although significant investments have already been made, the state has not invested similarly in permitting and oversight to ensure public health and the environment are protected. There are no staff resources specifically allocated to permit recycled water projects at the regional water boards and recycled water permitting is currently supported by other permitting program staff.

This resulted in Board failures identified by U.S. Environmental Protection Agency (U.S. EPA) in their assessment of California's enforcement of the Clean Water Act (as summarized in the 2019 State Review Framework Report). Similarly, there are insufficient staff resources to permit and oversee new and often highly complex desalination and stormwater capture and use projects. This results in delays in getting these critical new water supplies and storage online and inadequate inspections and compliance monitoring to evaluate and confirm project implementation is protective of human health and the environment.

In addition to regional permitting resources, statewide planning is needed to:

1. Provide consistent technical direction on treatment and use standards, infiltration, and brine disposal,
2. Understand the volumetric potential for these new water supplies and track progress towards statewide goals,
3. Integrate management of upstream pollution sources through pretreatment of source waters and holistic management of emerging contaminants,
4. Assess and manage economic and affordability impacts of permitted projects,
5. Coordinate Water Boards efforts associated with project permits and sea level rise and other intersections with climate change, and
6. Consider potential interactions between new projects and increased water conservation.

This proposal is part of a broad agency-wide response to the influx of new water supply and storage projects, the forthcoming implementation of direct potable reuse regulations as mandated by Assembly Bill 574, the Administration's Water Supply Strategy, and the burgeoning responsibility to support holistic pollution management of emerging contaminants and industrial pollutants upstream and up-gradient of potable water supplies, coordinated with water conservation and affordability efforts. These resources are necessary for the Water Boards to successfully achieve the objectives of the Water Supply Strategy to develop new water supplies and modernize water management to enable California to prepare for the future.

As climate change increasingly stresses conventional water supplies such as groundwater, imported water, and snowpack, Californians (particularly in economically and historically disadvantaged areas) will shoulder the associated increased costs and uncertainties linked with supplies that are decreasing in both quantity and quality. The multi-pronged actions the state is taking to expand potable and non-potable water supplies, address pollution burdens through source control, and promote conservation and water affordability (a challenge for many households) are all actions that empower local communities to manage their water supplies sustainably for the benefit of present and future generations of Californians. Safeguarding water supplies to manage climate impacts requires significant investment. As the state continues to invest heavily in recycled water, stormwater capture, and desalination infrastructure (reducing cost burdens on local communities and mitigating potential rate hikes), the requested resources will provide necessary support to ensure that these supplies are implemented safely.

Program Resource History

Recycled Water Program History

In response to the development of the Water Resilience Portfolio, the State Water Board received a position in 2020-21 to support and track current and future non-potable and potable recycled water use, and issue and update streamlined permits to respond to the rapidly growing number of recycled water projects statewide.

The production and use of recycled water are permitted by the regional Water Boards in multiple ways due to the complexity, diversity, and location of recycled water projects (e.g., potable vs non-potable, location of the discharges), as well as the history of recycled water permitting. Recycling requirements may be:

- Directly incorporated into the discharge permit of a facility (i.e., National Pollutant Discharge Elimination System (NPDES) permits and/or waste discharge requirements (WDRs)),

- Issued as a separate individual permit (i.e., water recycling requirements or master recycling permits), or
- The discharger may choose to enroll under a statewide general permit (i.e., General Order WQ 2016-0068-DDW (General Water Reclamation Requirements)).

There is currently no authority for the Water Boards to assess fees for individual water reclamation requirements permits or for the additional time and complexity associated with including recycling requirements directly in WDRs or NPDES permits. A WDR or NPDES permit takes up to 25% longer to write when recycling requirements are directly incorporated into the permit, and the existing fees are not commensurate with this workload. A recent staff review of recycled water permits indicated there are 34 water recycling requirements that are currently not assessed fees, as well as 136 WDRs and 50 NPDES permits that are not assessed fees commensurate with the added complexity from including water recycling requirements.

Because fees are not assessed for recycled water production, regional water boards' staff time to permit and perform ongoing case management on recycled water projects has been absorbed by existing NPDES and Waste Discharge Requirement program staff. These two programs are already resource-limited given current workload and are unable to meet certain performance measures (e.g., there is a significant and increasing backlog of NPDES permits requiring reissuance and regional boards are not meeting their facility inspection targets). Additionally, most regional water boards lack the staff resources to address the backlog of work required by the Recycled Water Policy to adequately review annual reports for recycled water facilities, perform routine inspections, and keep up with the increasing workload of permitting new recycled water projects. Since there are currently no allocated recycled water staff at the regional water boards despite increased demand for permits, the backlog of outdated recycled water permits continues to grow. Meanwhile, permit reviews will become more complex and time consuming as future direct potable reuse projects are initiated.

Furthermore, volumetric reporting shows that new recycled water supplies are being developed but there is still a need to support increases in flows to wastewater treatment systems to sustain increased growth of recycled water projects. There is a critical minimum volume needed to achieve the water quality standards for recycling. The 2015 American Housing Survey estimates that 6.4 percent of California households are reported as not being connected to sewer systems, resulting in an estimated 1.2 to 2.5 million Onsite Wastewater Treatment Systems in California. Water Boards lack a statewide comprehensive set of data to characterize the volume of water produced from Onsite Wastewater Treatment Systems, and for California's wastewater sanitation systems, including, but not limited to, a statewide system inventory, the geographic area locations or service boundaries, siting and design characteristics, network connections between facilities and upstream/ downstream users, nexus to drinking water sources and associated risks, current population served, infrastructure failures and associated repair costs, and factors that inform technical, managerial, and financial capacity of the system owners or operators to support the development of a statewide wastewater needs assessment. There are currently no dedicated resources to conduct this assessment, but this assessment is critical as it supports the identification of new water sources that could be recycled. Additionally, providing resources to address this assessment would improve access to sanitation in accordance with the human right to water and racial equity.

As described previously, AB 574 requires Division of Drinking Water to develop direct potable reuse regulations by December 2023. To date, existing Division of Drinking Water staff resources have been redirected to establish and administer an expert panel and develop and adopt uniform water recycling criteria for direct potable reuse through raw water augmentation. This included up to ten staff reallocating 50 to 90 percent of their time to meet the AB 574 legislative mandates. This staffing reallocation has resulted in other core workloads being delayed. Once the direct potable reuse regulations are adopted in 2023, permitting, inspections, and engineering report reviews for DPR projects will increase. Existing staff resources cannot absorb the increased workloads without adversely affecting current core tasks. The lack of staff resources at the regional water boards will also negatively impact the volume of recycled water and new drinking

water sources being created from the new regulations, making it difficult to meet the Administration's water recycling goals and the increasing demands for potable water in California during historic droughts.

To successfully meet one of the Governor's directives in the Water Supply Strategy, resources are needed at the State Water Board to convene a strike team to identify and resolve permitting and funding obstacles and track statewide planning, permitting, and funding of new water sources, and support regional permitting activities by providing consistent technical and policy direction.

Desalination Program History

In 2015, State Water Board adopted an amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) that provides a consistent statewide regulatory framework for permitting new or expanded seawater desalination facilities (Desalination Requirements). Since then, State Water Board staff have worked closely with the regional water boards to assist with implementation of these requirements for new or expanded seawater desalination projects. The Desalination Requirements set forth a very specific approach for the regional water boards to ensure that all new or expanded seawater desalination facilities utilize the best available site, design, technology, and mitigation measures feasible to minimize intake and mortality of all forms of marine life, as required by Water Code section 13142.5(b). The regional water board staff, in consultation with the State Water Board staff and subject matter experts, must conduct complex project-specific analyses as required in the Ocean Plan and issue a 13142.5(b) determination and NPDES permit. Significant staff resources are required to review the complex analyses to ensure that proposed seawater desalination facilities meet the statutory and regulatory requirements. Desalination projects are subject to federal, state, and local laws, and over 20 permitting authorities have been identified for the planning, management, and operation of desalination facilities. The Water Boards staff also consult with these other permitting agencies throughout this process to assist in streamlining the state and, if applicable, federal reviews. This coordination is vital to successful project delivery and requires additional staff time. There is a need for State Water Board staff to work in collaboration with regional water boards and other permitting agencies to develop proposed amendments to the Desalination Requirements in the Ocean Plan to streamline the permitting process for environmentally appropriate seawater desalination facilities.

Aside from seawater desalination projects, brackish groundwater projects may also provide opportunities to increase water supplies in coastal communities or inland communities whose freshwater aquifers are in overdraft, subject to seawater intrusion, or otherwise compromised. Brackish water is less salty than seawater and therefore less energy intensive to desalinate. Unlike brackish surface water, brackish groundwater resources may be accessed without posing the same threat to critical coastal habitats. However, brine disposal has the potential to contaminate surface water or groundwater basins that serve as water supplies or harm wildlife if not disposed correctly. Consequently, brine disposal is one of the primary impediments to inland brackish groundwater desalination.

Currently, regional water boards issue waste discharge permits (either Waste Discharge Requirement permits or NPDES with Waste Discharge Requirement permits) for brackish groundwater desalination facilities on a case-by-case basis as there are no streamlined statewide requirements for permitting these facilities. Many brackish groundwater desalination projects are within basins subject to groundwater management or adjudication. The permitting process can be complex and time consuming as the regional water boards must consider site-specific conditions as well as existing requirements in Regional Water Quality Control Plans, Salt and Nutrient Plans, and Groundwater Management Plans to ensure water quality protection standards are incorporated into permit requirements. There is the need for State Board staff to develop consistent statewide treatment and discharge requirements for brackish groundwater desalination facilities to streamline permitting.

The Administration's Water Supply Strategy identified desalination as a key component to water security in California and set volumetric goals to expand brackish groundwater desalination

production by 28,000 acre-feet per year by 2030 and 84,000 acre-feet per year by 2040 and help guide location of seawater desalination projects where they are cost effective and environmentally appropriate. The Department of Water Resources (Department) estimates 23 brackish groundwater desalination facilities are in operation in California with a combined capacity of approximately 140,000 acre-feet per year, primarily for potable use. In addition, the Department estimates another three plants are in design/construction with another 17 facilities proposed. However, the Water Boards do not have the data infrastructure to track the number of desalination facilities or volume of potable water produced from brackish or seawater facilities. There is a need to establish baseline numbers for these facilities to provide accurate reporting on progress towards the Governor's Water Supply Strategy desalination goals. Further, there is a need to identify groundwater basins impaired by salts and nutrients and determine the volume of water available for brackish groundwater desalination and provide this information in a public dashboard, so it is available for decision-makers.

With increasing aridification, it is anticipated the number of permit applications for seawater and brackish groundwater desalination facilities will increase. Streamlining the regulatory requirements for seawater desalination, developing streamlined requirements for brackish groundwater desalination, and assisting the regional water boards with the permitting workload will prevent delays in these water supplies coming online. Currently, there are no regional water boards staff allocated to permit desalination facilities; this workload has historically been absorbed by existing NPDES and Waste Discharge Requirement program staff. As stated previously, these programs are already resource limited and challenged to meet workload metrics. The State Water Board has 2.0 positions to assist the regional water boards in implementing the Ocean Plan's seawater desalination requirements. State Water Board staff are the state's technical experts and are heavily relied upon for planning, oversight, and technical review of proposed seawater desalination projects. The State Water Board staff are also responsible for updating the desalination regulations, which is crucial to streamline permitting. However, additional State Water Board staff will be needed to support the regional boards in permitting facilities and developing proposed amendments concurrently. Further, there are currently no resources at the State Water Board to conduct assessment of the potential for brackish groundwater desalination facilities or to develop statewide requirements to streamline permitting for brackish groundwater desalination facilities.

Stormwater Capture and Use and Strategy to Optimize Resource Management of Stormwater (STORMS) Program History

Between 2012 and 2016, California experienced one of its worst droughts in modern history. In response, the State Water Board amended the Recycled Water Policy (Resolution No. 2013-003). One mandate in the Recycled Water Policy was to enhance stormwater capture and use, and to maximize the multiple benefits of stormwater capture. In 2016, the State Water Board approved the Strategy to Optimize Resource Management of Stormwater (STORMS) and created a Stormwater Planning Unit (Resolution 2016-003) comprised of 4.0 full-term positions and 2.0 limited-term positions to implement the strategies' key objectives of increasing stormwater capture and use through regulatory and non-regulatory approaches, increasing stakeholder collaboration on a watershed scale, evaluating stormwater programs to identify alternative compliance pathways for watershed scale permitting, identifying costs of stormwater program compliance and potential funding opportunities, improving monitoring efforts, and increasing stormwater source control and pollution prevention. Policies enhancing stormwater capture and use are also found in grant funding requirements, NPDES permits, and Total Maximum Daily Load implementation plans.

Since inception, the Stormwater Planning Unit has produced several products which have been first steps towards advancing stormwater capture in the state. This includes projects to promote stormwater capture and use, identify and eliminate barriers to capture and use (including funding barriers), and improve stormwater program data and information management through an 'Open Data' initiative.

Regional water boards' staff time has historically focused on issuing large municipal stormwater permits, implementation of the Statewide Construction and Industrial General Stormwater Permits, compliance oversight of existing permits, and inspections. The regional water boards do not have the capacity to pursue the implementation of stormwater capture and use plans, permit updates, or policies within their regions to support stormwater capture for increased water storage. Additional staff resources are needed to support the Administration's Water Supply Strategy goals to increase groundwater recharge and expand water storage by supporting permitting efforts for stormwater capture and use projects, and tracking implementation of capture and use projects and volume captured each year.

Resource History Summary

To support permitting needs for new water supplies, resources are currently split or redirected from other core regional water board programs such as the NPDES and Waste Discharge Requirement permitting programs. These two programs are already challenged to meet performance measures as evidenced by a significant backlog in issuing permits and conducting inspections. Additionally, the 1.0 position to coordinate the Water Resilience Portfolio workload does not have the capacity to absorb additional recycled water program workload. Given other program needs, the additional workload needed to support the Water Supply Strategy for recycled water, seawater and brackish groundwater desalination, and stormwater capture and use planning and permitting cannot be absorbed by current resources.

Resource History
(Dollars in thousands)

Program Budget	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**
Authorized Expenditures	1,800	1,350	1,350	1,350	1,599	1,599
Actual Expenditures	1,800	1,350	1,350	1,350	1,374	1,599
Revenues	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Authorized Positions	8	6	6	6	7	7
Filled Positions	8	6	6	6	6	7
Vacancies	0	0	0	0	1	0

Workload History

Workload Measure	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Non-potable recycled water permits issued or renewed	15	11	14	19	17	22
Potable recycled water permits issued or renewed	1	1	--	1	1	--
Enrollees under Statewide Water Reclamation Requirements for Recycled Water Use	11	6	8	6	11	1
Seawater desalination 13142.5(b) determinations and NPDES permits issued or renewed	0	0	0	1	1	1

C. State Level Consideration

This proposal is consistent with the Administration's policy and priority of creating a resilient water portfolio for California, including several implementation steps from *California's Water Supply Strategy (2022)*. The Water Supply Strategy increases efforts of certain Water Resilience Portfolio actions including:

1. Developing new water through recycling and desalination;
2. Capturing and saving more stormwater, above ground and below ground;
3. Reducing use of water in cities and on farms; and
4. Improving all water management actions with better data, forecasting, conveyance, and administration of water rights.

As stated in the Water Supply Strategy, the last three years of record-breaking drought has made painfully real the hotter, drier pressures on our water systems. These four major sets of actions would use water that would otherwise be unusable, stretch supplies with efficiency, and expand our capacity to bank water from big storms for dry times. California water systems work for our communities, our economy, and our environment and these targeted actions will help to prioritize regional supply diversification that achieves multiple benefits, including the use of recycled water to meet diversification goals. If approved, the outcomes from this proposal will support the implementation of effective and efficient actions to increase resilience of local and regional water supplies, support sustainable management of California's groundwater resources, and better position the state to respond to water supply and quality challenges.

The proposal is also consistent with the primary mission of the State and regional water boards, which is to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations. The Water Board's *2022 Strategic Work Plan* sets forth high priority actions to help increase statewide water resilience in the face of climate change and other threats by expanding and integrating California's water supply portfolio including:

- Preparing for, responding to, and learning from drought;

- Increasing resilience of local and regional water supplies;
- Supporting sustainable management of California's groundwater resources;
- Managing natural and working lands and soils so they provide water-related benefits;
- Using stormwater more fully and efficiently to provide multiple benefits; and
- Managing the Bay-Delta to balance water supply reliability and a healthy ecosystem.

D. Justification

As stated in the Water Supply Strategy, to deliver the pace and scale of projects necessary to meet this unprecedented climate challenge, we must modernize regulatory structures and expand staff capacity so the State Water Board can assess, permit, fund, and implement projects at the pace this climate emergency warrants. These vital investments will enable Californians to rely less on increasingly unreliable traditional water supplies, such as imported water, groundwater, and snowpack. However, these investments require additional staff resources to support the process. Staff resources are needed for forward-looking planning to support the rapid expansion of these water supplies in a manner that protects public health and the environment. In addition, resources for permitting are needed to develop and oversee the influx of new and expanded permits for recycled water, brackish groundwater and seawater desalination, and stormwater capture to ensure these new water supplies & storage are implemented safely. Planning and permitting cannot be siloed to focus only on permitting individual recycled water, desalination, and stormwater capture and use projects. To effectively prepare for a future of aridification and recurring drought, resources are needed to integrate management of upstream pollution sources through pretreatment of source waters and holistic management of emerging contaminants. To match the investment in new potable recycled water projects, staff resources are needed to review and approve enhanced pretreatment programs, identify, and map significant industrial users in sewersheds, conduct audits and inspections, and modernize data and physical infrastructure to increase compliance to ensure these vital new potable water supplies are protected.

The Water Boards do not have adequate resources to be proactive about planning for new water supplies, taking necessary actions to get supplies online to address the water deficit, achieve water conservation, or ensuring these new and novel water supplies are safe from emerging contaminants. Under current conditions, with already limited staff resources available to support existing recycled water, brackish groundwater and seawater desalination, stormwater permitting, and source control program updates, there will be delays in permitting of proposed projects that would help achieve California's new water needs. The requested resources will support effective and efficient recycled water, brackish groundwater and seawater desalination, and stormwater project permitting for an environmentally responsible development of future water supplies, while protecting existing supply, public health and the environment. Specifically, the requested resources would enable the Water Boards to:

1. Support each of the state's regions to develop and execute integrated water resilience strategies, assist local and regional projects to maintain and diversify water supplies, and achieve the goal to recycle or reuse at least 2.5 million acre-feet a year in the next decade;
2. Assess the current and potential volumes of water supplies from brackish groundwater desalination projects, and plan and permit projects to increase the production capacity;
3. Following development of the June 2023 siting criteria, streamline the seawater desalination permitting process through an amendment to the Desalination Requirements in the Ocean Plan and support multi-agency coordination to efficiently permit seawater desalination facilities; and
4. Support each of the state's regions in tracking stormwater capture estimates and project implementation to achieve California's stormwater capture goals, helping municipalities in better achieving their local stormwater capture targets.

The requested resources will ensure that the California Water Boards continue to make progress on our Strategic Plan priority to promote sustainable local water supplies. The requested resources will

also work to remove long-standing barriers to develop new water resources for communities in need of potable and non-potable water resources. Communities most impacted by drought and climate change are most in need of additional water sources, and these communities are often disproportionately impacted by other environmental pollution burdens. The requested resources will engage with marginalized communities to identify septic systems that could be connected to wastewater treatment plants, providing further sources of wastewater for future water recycling projects. The requested resources will allow for coordination with local stakeholders, researchers, and state agencies to ensure desalination facilities are sited in locations that do not disproportionately impact low-income coastal communities. Requested stormwater resources will continue to promote the placement of stormwater capture devices and low-impact development in majority-minority communities most in need of pervious surfaces. Taken together, these efforts align with agency-wide efforts to address racial inequities in Water Boards programs as directed by the State Water Board in Resolution No. 2021-050, Condemning Racism, Xenophobia, Bigotry, and Racial Injustice and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-Racism.

Staff and program requests for the Division of Water Quality, regional water boards, and Division of Drinking Water, are included in the following subsections. In addition to the necessary increase in staff resources, additional external contract funds are needed to support the State Water Board's effort to achieve the new goals set forth in the Water Supply Strategy (Table 1). The following proposed research services will support the State Water Board in addressing critical statewide water supply needs through planning and permitting for new water supplies and storage (Table 2).

Table 2. Proposed contract services to support implementation of the Water Supply Strategy.

Contract Services	**2023-24**	**2024-25**
Estimate current stormwater capture and use statewide, evaluate stormwater capture options and incentives, and evaluate progress every five years towards the 2030 and 2040 Water Supply Strategy goals.	$500,000	$500,000
Total Amount	**$500,000**	**$500,000**

Approval of this proposal will provide necessary resources for the Water Boards to protect, plan, and permit new water supplies and stormwater capture projects. These resources will enable the Water Boards to:

- Expedite new water production and storage through planning, permitting of new recycled water, brackish groundwater and seawater desalination, and stormwater capture projects;
- Set policy targets and continue to develop and implement adaptable regulations that meet the diverse water supply needs of local water and sanitation agencies;
- Identify and address technical, financial, and legal barriers to the expansion of new water supplies and stormwater capture;
- Coordinate with local, state, and federal agencies to permit and manage critically needed new locally sourced water supplies for California communities;
- Enable staff to effectively implement plans and policies to support the growth of new water supplies, storage, and protection from pollution while also ensuring that aridification and the state's response to aridification are equitable and do not disproportionately harm disadvantaged communities and communities that have experienced environmental injustices.

Drought is California's new normal. Increasing temperatures, aridification, and droughts of unprecedented severity and duration will continue as climate change alters California's water landscape. These actions will help all Californians rely less on increasingly unreliable year-to-year precipitation and imported water by transitioning to alternative sources of water that are more

reliable and resilient, as well as increasing stormwater capture to make more wet-year water available in dry years. These resources will also ensure the Water Boards can take a proactive approach to expedite planning, permitting, and implementation of new water projects to address the water deficit.

The following tables provide a summary of the proposed fiscal year for on-boarding staff to the proposed positions and for one-time contract funding.

Table 3. Summary of Proposed Phased Funding Approach for Requested Resources

Position(s)	FY 23/24	FY 24/25
Water Supply Strategy Specialists		
Senior Environmental Scientist (Specialist) (DWQ)	1.0	
Senior Engineering Geologist (Specialist) (DWQ)	1.0	
Water Supply Strategy, Drinking Water		
Water Resource Control Engineer (DDW)		1.0
Water Resource Control Engineer (DDW)		1.0
Water Supply Strategy, Recycled Water		
Engineering Geologist (DWQ)	1.0	
Senior Water Resource Control Engineer (Specialist) (DWQ)	1.0	
Water Resource Control Engineer (R1)	1.0	
Water Resource Control Engineer (R2)	2.0	
Senior Water Resource Control Engineer (Supervisory) (R3)	1.0	
Water Resource Control Engineer (R3)	1.0	
Water Resource Control Engineer (R4)	2.0	
Water Resource Control Engineer (R5)	2.0	
Senior Water Resource Control Engineer (Supervisory) (R8)	1.0	
Water Resource Control Engineer (R8)	1.0	1.0
Water Resource Control Engineer (R9)	2.0	1.0
Water Supply Strategy, Desalination		
Senior Environmental Scientist (Supervisory) (DWQ)	1.0	
Engineering Geologist (DWQ)	1.0	
Water Supply Strategy, Stormwater		
Water Resource Control Engineer (R2)		1.0
Water Resource Control Engineer (R3)		1.0
Water Resource Control Engineer (R4)		1.0
Water Resource Control Engineer (R5)		1.0
Water Resource Control Engineer (R9)		1.0
Total	**19.0**	**9.0**

Contract Services	FY 23/24	FY 24/25
Estimate current stormwater capture and use statewide, evaluate stormwater capture options and incentives, and evaluate progress every five years towards the 2030 and 2040 Water Supply Strategy goals.	$500,000	$500,000
Total Amount	**$500,000**	**$500,000**

Recycled Water Justification

As a result of existing significant investment and infrastructure, and due to ongoing drought and increased recycled water use, there has been a 150 percent increase in annual recycled water permit applications and renewals since 2014. To incentivize increased recycled water production, the State Water Board adopted new groundwater recharge and reservoir water augmentation regulations for potable recycled water and streamlined permitting pathways for non-potable recycled water projects. With pending direct potable reuse regulations on the horizon, many utilities and water resource agencies are developing plans and infrastructure to support potable reuse projects for the near future. These new or modified recycled water projects have the potential to provide significant new water resources but will require new or updated pretreatment programs to manage pollution from sources of recycled water that will include changes to municipal codes, local limits, and associated public participation requirements, all of which the Water Boards will need to review and approve.

As episodic drought conditions persist in California and the State Water Board develops regulations for direct potable reuse as required by AB 574, more potable reuse facilities will emerge as new water supply options. Potable reuse projects rely on a combination of treatment technologies, blending, storage, and enhanced source control programs to prevent pass-through of potentially toxic chemicals from domestic, commercial, and industrial wastewater sources to drinking water supplies. Permitting these projects includes review of engineering reports, review of test plans, review of operations plans, and development of permits. These projects are large and complex, with source water derived from municipal wastewater, thus requiring extensive staff time. Without additional resources, the permitting process for these new water sources will be delayed. Additional staff resources are essential to review and permit the dozens of new proposed potable reuse projects to supply new water for California.

Recent findings based on volumetric reporting in accordance with the Recycled Water Policy indicate reduced flows to publicly owned treatment works throughout the state that are likely due to passive conservation and drought. As water recycling increases, so does the need for sources of wastewater to recycle. There are an estimated 3,000 sanitation systems with Water Board waste discharge permits and 1.2-2.5 million onsite septic systems covered by the Water Board's Onsite Wastewater Treatment System Policy conditional waiver authorizing local oversight and permitting for waste discharges to land. The Water Boards have undertaken a statewide assessment to determine if these aging systems are providing adequate sanitation to California's communities with a focus on effectively utilizing infrastructure investments, taking advantage of funding opportunities, and supporting equitable access to safe drinking water and sanitation. Leading the implementation of this assessment requires a statewide liaison that currently does not exist to ensure broad coordination with partners, communities, and across Water Board programs. In addition to working towards equitable access to sanitation, these are opportunities to identify septic systems that could be connected to wastewater treatment plants (i.e., septic to sewer) to beneficially use the water through development of future water recycling projects, which could provide new sources of water for communities. There is an ongoing need to assess the potential to connect septic to wastewater systems, identify the condition of the wastewater systems, determine potential volume available, identify if and where systems need treatment and infrastructure upgrades so the water could potentially be beneficially reused.

The 1.0 position allocated to the Division of Water Quality to implement the recycled water actions in the Water Resilience Portfolio is currently working at full capacity. Additionally, Division of Drinking Water does not have existing staff resources to review and approve anticipated direct potable reuse project applications following adoption of regulations as required by AB 574. Without additional resources, the Water Boards will not be able to keep up with the increased workload called for in the Water Supply Strategy.

Additional resources are needed to expedite the following implementation steps to help develop new water supplies to achieve the goal to reuse at least 800,000 acre-feet of water per year by

2030 and 1.8 million acre-feet by 2040, with most of that additional recycling involving direct wastewater discharges that are now going to the ocean:

- By January 1, 2024, the State Water Board will work with local water and sanitation agencies to identify recycled water projects that hold the potential to be operational by 2030 and by no later than 2040
- The State Water Board will formalize a process currently underway by convening a strike team to identify and resolve permitting and funding obstacles.
- The State Water Board will act on direct potable reuse regulations by December 2023.

Requested staff resources would support implementation steps associated with the strategy to expand water storage capacity above and below ground by four million acre-feet. This includes coordination with the Division of Water Rights to continue to provide regulatory and technical assistance to local agencies that have received State funds to ensure that groundwater recharge project proponents can successfully navigate the regulatory processes including outreach activities, technical assistance, and regulatory streamlining of project submittals. The requested staff resources will also work to improve forecasting and management for recycled water projects to the extent feasible.

Desalination Justification

Seawater desalination projects provide drought-resilient water supplies for coastal communities that may otherwise have limited access to surface or groundwater resources. Desalinated seawater requires a significant amount of energy to produce, however, and the operation of intake and outfall structures in its production pose additional threats to the marine and coastal environment. This requires the Water Boards to review and assess numerous, complex studies when issuing permits.

The Ocean Plan desalination requirements provide the regulatory framework for permitting seawater desalination facilities in a manner that considers and attempts to account for its associated impacts. NPDES permits and their component requirements are developed by the regional water boards with significant support from State Water Board staff and subject-area experts, since nearly all such facilities require case-by-case considerations of site, design, technology, and mitigation in making a Water Code 13142.5(b) determination. Since the adoption of the Desalination Amendment in 2015, only 3 proposed seawater desalination facilities have been issued NPDES permits: Doheny Ocean Desalination Plant, Claude "Bud" Lewis Carlsbad Desalination Plant, and Huntington Beach Desalination Plant. Out of these 3 seawater desalination facilities, Carlsbad Desalination Plant is the only facility that has been fully constructed and currently operating, producing up to 54 million gallons per day (or 56,000 acre-feet per year) of potable drinking water for the San Diego County Water Authority. To continue diversifying the state's water portfolio through desalination and ultimately increase the number of seawater desalination projects that receive agency approval, the desalination permitting process will need to be streamlined, with additional staff time spent on interagency coordination Without additional staff, the length of time it takes to permit a project will continue to be prohibitively long.

Brackish groundwater desalination has the potential to help alleviate shortages in areas with limited access at about half the operational cost of seawater desalination per acre-foot. Additionally, brackish groundwater desalination projects provide additional drought-resilient water resources that allow communities to develop local supplies and reduce reliance on imported water. Water suppliers currently operate 23 groundwater desalination plants with a combined capacity of approximately 140,000 acre-feet per year; there are three additional facilities in design/construction with an estimated combined capacity of 9,050 acre-feet per year and another 17 proposed facilities with an additional estimated combined capacity of 74,630 acre-feet per year. However, the desalination process removes salts from the source water and creates a brine waste stream. For coastal facilities there are recommended options to dispose of waste brine in the marine environment, but inland desalination facilities have fewer options to dispose of waste brine in a responsible manner, and limited research is available to inform these efforts. To further realize the potential of brackish groundwater desalination projects, resources are needed at the state level to holistically plan, permit, and provide regulatory oversight of these new water supply projects.

Brackish groundwater desalination projects are complex in that the regulatory framework involves 20-30 permitting authorities charged with groundwater management to prevent overdraft, permitting discharges, as well as brine management and disposal.

Without additional resources, the Water Boards will not be able to keep up with the increased workload called for in the Water Supply Strategy. Additional resources are needed to streamline and expedite permitting of brackish and seawater desalination projects, as well as to complete the following implementation steps to help expand brackish groundwater desalination production by 28,000 acre-feet per year by 2030 and 84,000 acre-feet per year by 2040 and help guide location of seawater desalination projects where they are cost effective and environmentally appropriate:

- By January 1, 2024, Department of Water Resources and the State Water Board, in coordination with local agencies, will identify the brackish desalination projects that have the potential to be operational by 2030 and by no later than 2040 and support the process of issuing grants to local agencies for planning and building desalination projects.
- By January 1, 2024, the State Water Board will review groundwater basins impaired by salts and nutrients and determine the volume of water available for brackish groundwater desalination.
- The State Water Board will consider amendments to the Desalination Requirements in the Ocean Plan to streamline permits that meet the recommended siting and design standards for projects located in the identified priority areas.

Requested staff resources will support the needed improvement in communication and coordination with other relevant agencies to ensure consistency, expeditious project review, and the removal of financial barriers for disadvantaged communities where desalination potential exists.

Stormwater Capture and Use Justification

Historically, stormwater runoff has been managed and regulated as nuisance wastes. Given the state of continuous drought and growing demand for water in California, there is a tremendous need, and opportunity, to capture more stormwater to sustainably increase water supplies.

Technologies and studies in the field of stormwater capture continue to grow but there is a need for regulatory incentives to encourage stormwater projects on a local level which will transition these estimates into actual capture and use and help secure California's future water supply. The Water Boards must also identify where low-impact development and green infrastructure should be implemented using an equity lens. Removal of these barriers will support historically overlooked disadvantaged communities to build water capture opportunities and additional green space in these typically highly impervious neighborhoods.

New stormwater capture incentives will require additional positions at the regional water boards to work with local municipalities and private parties to increase efforts in their respective regions and support implementation steps. Requested staff resources will oversee permitting of stormwater capture projects and ensure proper installation and maintenance and will also coordinate with staff in the Recycled Water Program and other agencies to support implementation steps associated with the strategy to expand water storage capacity above and below ground by four million acre-feet. This includes coordination with the Department of Water Resources for recharge projects receiving grants conducted under the Flood-Managed Aquifer Recharge Program.

Current regional board staff are fully engaged with existing workloads so future stormwater capture projects will be delayed without additional positions allocated to the regions. With California already in dire need of these resources, permitting and inspection delays due to resource limitations at the regional water boards will further prevent the Water Boards from supporting local stormwater capture projects in cities and towns as described in the Water Supply Strategy.

Division of Water Quality and Regional Water Boards

The State Water Board requests 26.0 positions for the Division of Water Quality (DWQ) and regional water boards and $5.655 million for positions from the Waste Discharge Permit Fund; this includes 19.0 positions in fiscal year 2023-24 and 7.0 additional positions in fiscal year 24/25 (see Table 3).

This BCP would fund a total of 18.0 new permanent regional water board positions such that one to four positions are authorized in seven of the nine regional water board with a total of:

- Thirteen (13.0) permanent positions to permit recycled water projects to address the sustained increase in potable and non-potable recycled water permit applications and renewals and ensure compliance with recycled water regulations to adequately protect public health and the environment. This includes:
  - Permit development/enrollment and ongoing case management (i.e., individual and general Water Reclamation Requirements for non-potable reuse, individual Waste Discharge Requirements/Water Reclamation Requirements for advanced water treatment facilities (AWTF), Waste Discharge Requirements for desalination and AWTF brine disposal).
  - Implement other Recycled Water Policy requirements (e.g., Salt and Nutrient Management Plans (SNMPs), Constituent of Emerging Concern (CEC) monitoring, volumetric reporting), and
  - Participate in local and regional water resilience programs/projects.
- Five (5.0) permanent positions for stormwater capture and use to:
  - Support the development a policy for the infiltration of urban stormwater runoff which will promote and encourage stormwater capture through infiltration while maintaining the protection of groundwater resources by establishing a statewide, risk-based, tiered approach for the regulation and management of stormwater infiltration best management practices.
  - Support integration of stormwater capture and infiltration into statewide and regional stormwater capture initiatives.
  - Support the integration of stormwater capture and infiltration into statewide stormwater capture initiatives, including the development of new regulations, oversight of statewide and regional staff stormwater capture work group.

This BCP would fund 6.0 new permanent (ongoing) positions within DWQ including:

- One (1.0) permanent position to act as the DWQ liaison for issues related to new water and stormwater capture and use and serve as the lead coordinator on Water Boards' Water Supply Strategy activities and implementation to:
  - Serve as a liaison to ensure DWQ's new water and stormwater capture and use activities are done in coordination with other facets of the Water Boards to ensure consistent development and implementation water supply policies, such as to:
    - Coordinate recycled water activities with ongoing conservation work
    - Coordinate with Water Rights on issues related to instream flows and increasing recycled water and stormwater capture and use
    - Identify efficiencies for volumetric tracking of new water supplies and stormwater capture and use.
  - Lead collaborative efforts with sister agencies and stakeholders to identify and implement short and long-term projects to permanently strengthen drought resilience consistent with the Water Supply Strategy.
  - Conduct analysis of fit for purpose and consider supply and demand of water and make recommendations for actions that equitably promote new water supplies and stormwater capture and use throughout the state and consider water affordability.
  - Support and serve as the coordinator for the recycled water strike team to identify and resolve permitting obstacles for water recycling.
  - Work with local water and sanitation agencies to identify recycled water projects that hold the potential to be operational by 2040. Support development of a public digital dashboard to track the permitting status of recycled water projects.

- Support the integration of direct potable reuse regulations into existing and new recycled water projects and corresponding changes to the Recycled Water Policy.
- Identify and lead development of proposed amendments to plans, policies, permits or develop general orders that would advance new water supplies and stormwater capture and use through streamlined regulatory requirements.
- Implement the Water Supply Strategy in ways that advance state interests and complement state efforts, such as those related to racial equity, climate change, public trust obligations, and the state's human right to water policy.

- One (1.0) permanent position to provide hydrogeologic technical expertise for implementation of the Water Supply Strategy to support the expansion of new water supplies, groundwater infiltration, and stormwater capture and use including to:
  - Provide hydrogeologic technical expertise for implementation of the Water Supply Strategy to support the expansion of new water supplies, such as desalination, recycled water, groundwater infiltration, and stormwater capture and use.
  - Serve as a statewide expert on infiltration and geochemical processes and engineering solutions that may impact quality of new water sources.
  - Evaluate and develop groundwater models and conduct analyses of hydrologic processes to compare and identify volumetric potential for new water resources and stormwater capture and use.
  - Identify and map hydrogeologically advantageous areas for increasing local water supplies, including locations where hydrogeologic conditions would result in improved water quality, energy savings, and reduced discharge and costs.
  - Work with local agencies to identify potential locations for new water supplies and stormwater capture and use projects.
  - Develop environmentally protective criteria to expedite permitting for new water supplies and stormwater capture and use projects.
  - Develop plans and policies to streamline permitting for new water supplies and stormwater capture and use.

- One (1.0) permanent position for addressing impediments for recycled water projects such as those related to salt and nutrient management and brine disposal including to:
  - Conduct geological and geophysical exploration investigations to identify and develop plans to address impediments to recycled water projects.
  - Conduct independent technical research work to make, record, and evaluate observations on geological engineering problems with brine disposal.
  - Work with local agencies to identify potential locations for groundwater recharge or opportunities to beneficially reuse wastewater currently discharged to the ocean and identify any barriers and solutions related to brine and nutrient disposal.

- One (1.0) permanent position to identify new sources of wastewater and identify the need for wastewater treatment upgrades to increase opportunities to beneficially reuse wastewater:
  - Identify septic systems that could be connected to increase wastewater flows
  - Identify inadequate and small wastewater systems and the associated upgrades to produce wastewater that could be beneficially reused
  - Lead the coordination with partners and wastewater staff on addressing priority failing, inadequate, and small wastewater systems.
  - Assess the volumetric potential for new wastewater sources that could be beneficially reused.
  - Manage the development and implementation of one or more wastewater needs assessment contract(s).
  - Prepare data analysis, visualizations, presentations, and maps of septic and wastewater systems and related data.
  - Provide consistent technical and policy direction on treatment and use standards, water quality criteria for assessing wastewater needs, system prioritization, and implementation of the statewide wastewater needs assessment and prioritized small wastewater systems.

    - Assess and manage economic and affordability impacts of permitted projects and priority community needs for access to sanitation and recycled water.

- Two (2.0) permanent positions to plan for brackish groundwater desalination and streamline permitting for seawater desalination
    - Conducting activities in the Water Supply Strategy such as:
        - Work with the Department of Water Resources to identify the brackish desalination projects that are operational and those that have the potential to be operational by 2030 and by no later than 2040
        - Identify groundwater basins impaired by salts and nutrients and determine the volume of water available for brackish groundwater desalination
        - Provide additional guidance to implement criteria for siting of desalination facilities and recommending new standards to facilitate approval
        - Identify potential available mitigation sites to facilitate the expedited approval of desalination facilities.
    - Address planning and policy development for desalination projects such as streamlining seawater desalination permitting and evaluating and developing consistent technical direction on treatment, use standards, and discharge requirements to facilitate the increase in brackish groundwater desalination.

Each of the above-requested positions would support the initial work outlined in the Water Supply Strategy and the anticipated work to continue to increase water security for Californians.

Division of Drinking Water

The State Water Board requests two (2.0) positions for the Division of Drinking Water from the Safe Drinking Water Account starting in 2024-25 (see Table 3). These positions will implement regulations for direct potable reuse and process permit applications for raw water and treated water augmentation including to review, comment on, and approve Title 22 engineering reports to ensure projects comply with California Waterworks Standards, and Direct Potable Reuse Responsible Agency plans and agreements (e.g., Joint Plans, Technical, Managerial, Financial Capacity demonstration, Operation and Maintenance Plans, etc.) to ensure the continuous safe drinking water production of proposed potable reuse projects. In addition, as direct potable reuse projects are brought online, these two positions will conduct ongoing periodic review of facilities

through audits and inspections and review of water safety plans and compliance with incidence response plans.

E. Outcomes and Accountability

See Projected Outcomes table below.

Workload Measure	**BY**	**BY+1**	**BY+2**	**BY+3**	**BY+4**
Non-potable recycled water permits issued or renewed	15	20	25	25	25
Potable recycled water permits issued	1	2	2	3	3
Brackish groundwater and seawater desalination program Water Supply Strategy activities	Volumetric assessment of brackish groundwater available for desalination.	Identified potential mitigation sites to facilitate the expedited approval of facilities.	Proposed statewide brackish groundwater criteria and guidelines.	Proposed statewide criteria for siting seawater desalination facilities.	Implementation of statewide criteria for siting desalination facilities.
Increased volume of stormwater captured	20,000 acre-feet per year (AFY)	50,000 AFY	80,000 AFY	110,000 AFY	150,000 AFY

Requested resources will analyze and re-evaluate the state's recycled water goals considering multiple years of volumetric data, funded recycled water project information, anticipated decreases in wastewater influent due to successful conservation practices, and ongoing drought conditions to develop new accurate and achievable targets to increase resilience. The requested resources will also explore the spatial relationship between recycled water and communities that have experienced environmental injustices to evaluate equity in access to recycled water, desalination, and stormwater capture and use. The requested resources will also ensure equitable implementation of any identified incentives. Taken together, these data tracking efforts combined with concerted community engagement and stakeholder outreach to help the Water Boards ensure its recycled water, desalination, and stormwater capture programs are implemented equitably across impacted California.

F. Analysis of All Feasible Alternatives

Alternative #1: Approve the request as proposed above, including the associated Trailer Bill Language.

Advantages: Provides the Water Boards the necessary resources to expedite the planning, permitting, and implementation of new water projects and address the water deficit in accordance with the implementation steps in the Administration's Water Supply Strategy. Proposed Trailer Bill language allows the Water Boards to assess fees to more efficiently permit and manage recycled water projects. Allows the Water Boards to provide an equitable suite of permitting options and fund recycled water programs to ensure water quality and public health are protected.

Disadvantages: Fees will need to be raised on fee payers for the WDPF. However, the Trailer Bill language expands the number of fee payers by including fees for water recycling requirement permits, thereby reducing the fee burden on existing fee payers to the WDPF.

Alternative #2: Approve the request as proposed above, without the proposed Trailer Bill Language.

Advantages: Provides the Water Boards the necessary resources to take a proactive approach to expedite the planning, permitting, and implementation of new water projects and address the water deficit in accordance with the implementation steps in the Administration's Water Supply Strategy.

Disadvantages: Fees will need to be raised on fee payers for the WDPF, and fee increases will be borne by existing fee payers to the WDPF.

Alternative #3: No action.

Advantages: This alternative does not require additional funding from the WDPF and Safe Drinking Water Account or increase fees to the associated fee payers.

Disadvantages: This alternative would prevent the Water Boards from fully implementing the plans, permits, and policies that would support development of new water resources and prepare for future aridification impacts. California communities would be less prepared for future volatility in water supply reliability. The Water Boards would be unable to adequately assist communities in sufficient advance planning for the next drought to ensure the availability and quality of drinking water for all Californians, including processing an increased volume of recycled water, desalination, and stormwater capture and use permits.

G. Implementation Plan

Fiscal Year 2023-24

- Hire identified fiscal year 2023-24 staff (see Table 3) to support planning and permitting for new water supplies and storage to mitigate aridification in California in accordance with the Administration's Water Supply Strategy.
- Execute contracts to support planning and permitting of new water by estimating statewide stormwater capture and use.

Fiscal Year 2024-25

- Hire identified fiscal year 2024-25 staff (see Table 3) to support planning and permitting for new water supplies and storage to mitigate aridification in California in accordance with the Administration's Water Supply Strategy.
- Execute contracts to support planning and permitting of new water by estimating statewide stormwater capture and use.

Ongoing

- Coordinate with Department of Water Resources and other state agencies on efforts to support the Water Supply Strategy.
- Continue recycled water permitting activities to support water supply resilience.
- Continue issuing permits to allow communities to develop potable recycled water supplies.
- Review, comment on, and approve direct potable reuse project applications and submittals.
- Conduct periodic inspections and audits in accordance with direct potable reuse permit schedules.
- Review periodic reports and data submittals from facilities to confirm compliance with recycled water rules and regulations.
- Manage the development and implementation of wastewater needs assessment contract(s).
- Lead the coordination with partners and wastewater staff on addressing priority failing, inadequate, and small wastewater systems.
- Prepare data analysis, visualizations, presentations, and maps of wastewater systems and related data.
- Assess the volumetric potential for new water supplies and track implementation toward statewide water supply goals.
- Provide consistent technical and policy direction on treatment and use standards, infiltration, and brine disposal.
- Assess and manage economic and affordability impacts of permitted projects and prioritize community needs for access to sanitation.
- Evaluate volumes of brackish groundwater produced and assess potential for future increases in volume.
- Address planning and policy development for brackish desalination projects.
- Evaluate and develop consistent technical direction on treatment and use standards for seawater desalination.
- Support integration of stormwater capture and infiltration into regional stormwater capture initiatives.
- Develop incentives within regional municipal stormwater permits to stormwater capture and use.
- Engage with stakeholders and educate the public on stormwater capture and use strategies.

H. Supplemental Information

See associated trailer bill language on the Department of Finance's website.

I. Recommendation

Approve alternative #1.

BCP Fiscal Detail Sheet

BCP Title: Water Supply Strategy Implementation

BR Name: 3940-030-BCP-2023-GB

Budget Request Summary

Personal Services

Personal Services	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
Positions - Permanent	0.0	19.0	28.0	28.0	28.0	28.0
Total Positions	**0.0**	**19.0**	**28.0**	**28.0**	**28.0**	**28.0**
Earnings - Permanent	0	2,100	3,009	3,009	3,009	3,009
Total Salaries and Wages	**$0**	**$2,100**	**$3,009**	**$3,009**	**$3,009**	**$3,009**
Total Staff Benefits	0	1,012	1,451	1,451	1,451	1,451
Total Personal Services	**$0**	**$3,112**	**$4,460**	**$4,460**	**$4,460**	**$4,460**

Operating Expenses and Equipment

Operating Expenses and Equipment	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
5301 - General Expense	0	29	42	42	42	42
5302 - Printing	0	62	89	89	89	89
5304 - Communications	0	156	223	223	223	223
5306 - Postage	0	31	45	45	45	45
5320 - Travel: In-State	0	280	401	401	401	401
5322 - Training	0	249	357	357	357	357
5324 - Facilities Operation	0	311	446	446	446	446
5340 - Consulting and Professional Services - External	0	500	500	0	0	0
Total Operating Expenses and Equipment	**$0**	**$1,618**	**$2,103**	**$1,603**	**$1,603**	**$1,603**

Total Budget Request

Total Budget Request	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
Total Budget Request	**$0**	**$4,730**	**$6,563**	**$6,063**	**$6,063**	**$6,063**

Fund Summary

Fund Source

Fund Source	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
State Operations - 0193 - Waste Discharge Permit Fund	0	4,730	6,155	5,655	5,655	5,655
State Operations - 0306 - Safe Drinking Water Account	0	0	408	408	408	408
Total State Operations Expenditures	**$0**	**$4,730**	**$6,563**	**$6,063**	**$6,063**	**$6,063**
Total All Funds	**$0**	**$4,730**	**$6,563**	**$6,063**	**$6,063**	**$6,063**

Program Summary

Program Funding

Program Funding	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
3560 - Water Quality	0	4,730	6,155	5,655	5,655	5,655
3565 - Drinking Water Quality	0	0	408	408	408	408
Total All Programs	**$0**	**$4,730**	**$6,563**	**$6,063**	**$6,063**	**$6,063**

Personal Services Details

Positions

Positions	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
0764 - Sr Envirnal Scientist (Supvry)	0.0	1.0	1.0	1.0	1.0	1.0
0765 - Sr Envirnal Scientist (Spec)	0.0	1.0	1.0	1.0	1.0	1.0
3751 - Sr Engring Geologist	0.0	1.0	1.0	1.0	1.0	1.0
3756 - Engring Geologist	0.0	2.0	2.0	2.0	2.0	2.0
3844 - Sr Cntrl Engr	0.0	3.0	3.0	3.0	3.0	3.0
3846 - Cntrl Engr	0.0	11.0	20.0	20.0	20.0	20.0
Total Positions	**0.0**	**19.0**	**28.0**	**28.0**	**28.0**	**28.0**

Salaries and Wages

Salaries and Wages	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
0764 - Sr Envirnal Scientist (Supvry)	0	132	132	132	132	132
0765 - Sr Envirnal Scientist (Spec)	0	99	99	99	99	99
3751 - Sr Engring Geologist	0	139	139	139	139	139
3756 - Engring Geologist	0	202	202	202	202	202
3844 - Sr Cntrl Engr	0	417	417	417	417	417
3846 - Cntrl Engr	0	1,111	2,020	2,020	2,020	2,020
Total Salaries and Wages	**$0**	**$2,100**	**$3,009**	**$3,009**	**$3,009**	**$3,009**

Staff Benefits

Staff Benefits	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
5150350 - Health Insurance	0	516	740	740	740	740
5150600 - Retirement - General	0	496	711	711	711	711
Total Staff Benefits	**$0**	**$1,012**	**$1,451**	**$1,451**	**$1,451**	**$1,451**

Total Personal Services

Total Personal Services	FY23 Current Year	FY23 Budget Year	FY23 BY+1	FY23 BY+2	FY23 BY+3	FY23 BY+4
Total Personal Services	**$0**	**$3,112**	**$4,460**	**$4,460**	**$4,460**	**$4,460**