



DRAFT

CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: February 9, 2021

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Approval of the Enhanced Urban Water Management Plan Policy Recommendations

RECOMMENDATION: That Council:

- A. Receive an update on the Enhanced Urban Water Management Plan project; and
- B. Approve of the water supply policies described in this staff report.

EXECUTIVE SUMMARY:

The Enhanced Urban Water Management Plan (EUWMP) will replace the City's 2011 Long Term Water Supply Plan, and meet California Department of Water Resources (DWR) requirements for the City's 2020 Urban Water Management Plan. The goal of the EUWMP is to evaluate the City's water supply for adequacy and reliability, and to provide a long-term view of the City's water supply management for over the next 30 years. The State-mandated deadline for submitting the EUWMP to DWR is July 1, 2021.

Development of an EUWMP and adoption of the proposed EUWMP policies will allow for better management of the City's water supplies, and will provide significant sustainability benefits for the community. This report and the accompanying presentation describe the EUWMP planning and development process, as well as the final proposed EUWMP's water supply management policy recommendations, which are:

1. Implementing EUWMP recommended actions for existing water supplies
2. Executing the EUWMP Adaptive Implementation Plan
3. Continuing ocean desalination as part of Santa Barbara's water supply portfolio to support drought preparedness, response, and recovery

Upon approval of these EUWMP policy recommendations, staff will work to develop an EUWMP based on the supply planning analysis and recommended policies described in this report, and that satisfies the requirements for Urban Water Management Plans under the California Water Code. Staff will return to Council in May to present the public draft EUWMP. After a mandated public review period, staff will return to Council at the end of June for adoption of the final EUWMP.

DRAFT

DISCUSSION:Background

The Enhanced Urban Water Management Plan (EUWMP) will replace the City's 2011 Long Term Water Supply Plan, and meet California Department of Water Resources (DWR) requirements for the City's 2020 Urban Water Management Plan. The goal of the EUWMP is to evaluate the City's water supply for adequacy and reliability, and to provide a long-term view of the City's water supply management for over the next 30 years. The State-mandated deadline for submitting the EUWMP to DWR is July 1, 2021.

Staff first presented the EUWMP planning effort to Council in February 2020, when a contract was awarded to Water Systems Consulting (WSC) to assist staff in the planning process and development of the EUWMP. Staff returned to Council in April 2020 to provide an update on the project, including the Stakeholder Communication and Engagement Plan, branded "Water Vision Santa Barbara," which outlined the robust efforts to engage community members in the planning process. In November, Council received a presentation on the Water Conservation Strategic Plan, which is a foundational document to the EUWMP. It established baseline water demands for the next 30 years, and recommended conservation measures for the City moving forward.

Most recently, in December 2020, staff returned to Council to provide a summary of the results of both the EUWMP existing water supply portfolio analysis and the future water supply portfolio analysis; and to receive initial policy recommendations on draft water supply recommendations. The existing portfolio analysis evaluated the ability of the City's current water supplies to meet future demands under an uncertain future. The analysis found that the City's current water supplies adequately meet demands under current supply/demand conditions. However, the analysis concluded the City's ability to meet demands becomes increasingly challenging when demands increase and/or supplies are reduced because of threats or risks, such as an extended drought.

Using a triple bottom line analytical approach, the future portfolio analysis measured the performance of a diverse range of possible water supply portfolios against social, environmental, and financial criteria. Results of this analysis indicate expanding the City's Charles E. Meyer Desalination facility from a production capacity of 3,125 acre-feet per year (AFY) to 5,000 AFY is the City's best performing new supply when balancing social, environmental, and financial criteria as part of an adaptive water management approach. The timing of expanding the desalination plant will depend on the pace of demand growth and the ongoing availability and reliability of existing supplies. The EUWMP outlines an Adaptive Implementation Plan that prioritizes water conservation, leverages the City's current supplies, identifies supply and demand triggers, and corresponding next steps to guide the City in adapting to future changes in water supply and demand conditions.

DRAFT

Stakeholder Engagement

Development of the EUWMP included a deliberate and inclusive approach to community involvement and transparency that aligns with the City's One Water approach to water management. The primary goal of the stakeholder engagement process, branded "Water Vision Santa Barbara" (WVSB), was to engage a diverse group of water users and uses within the community in the planning process. In addition to the four public presentations to City Council described above, staff facilitated four technical presentations/workshops with Water Commission, five stakeholder workshops with the WVSB stakeholder group, and Water Vision Month during the month of October 2020 to engage members of the public in the EUWMP planning process. Additionally, staff has developed a detailed project website, which archives all analytic work, including seven detailed technical memorandums, and outreach work performed to date for easy public access and review: www.SantaBarbaraCA.gov/watervision

Results of these stakeholder engagement efforts have directly informed the EUWMP. For example, The Five Pillars of Water Vision Santa Barbara, developed by the WVSB stakeholder group, directly inspired future water supply portfolio themes for evaluation, as well as the evaluation criteria for the future portfolio analysis. The stakeholders rated local control, water supply resilience and reliability, minimizing environmental impacts, and affordability as top concerns, which were folded into the evaluation criteria.

The stakeholder engagement activities helped forge new relationships with key constituencies who have been underrepresented in earlier planning efforts, including Persons of Color, Disadvantaged Communities, and Human Rights to Water. A detailed list of all stakeholder engagement activities performed to date is included in the supplemental attachment.

Policy Recommendations

Three distinct policy recommendations arise from the EUWMP:

1. Implementing EUWMP recommended actions for existing water supplies
2. Executing the EUWMP Adaptive Implementation Plan
3. Continuing ocean desalination as part of Santa Barbara's water supply portfolio to support drought preparedness, response, and recovery

Each policy recommendation is described in detail below.

1. Implementing EUWMP Recommended Actions for Existing Water Supplies

This policy proposes the following recommendations to protect and better manage the City's existing water supplies:

- **Water Demand and Conservation:** Implement the recommendations from the City's [Water Conservation Strategic Plan](#) (Program B). Program B includes the City's current water conservation measures, plus rebates for ultra-high efficiency toilets and urinals, leak detection devices, pressure reduction valves and dipper

DRAFT

wells; full implementation of the City's AMI program; a free sprinkler nozzle program; and a pre-rinse spray nozzle giveaway program.

- **Cachuma Project:** Preserve the ability to store carryover water and non-Project water in Lake Cachuma, which is the City's largest storage option.
- **Gibraltar Reservoir:** Obtain a Warren Act contract from the US Bureau of Reclamation to store Gibraltar water in Lake Cachuma.
- **Groundwater:** Update the City's sustainable groundwater basin yield and drought storage estimates. Consider making a Groundwater Sustainability Plan.
- **State Water Project (SWP):** Identify methods to increase the certainty of SWP or supplemental water availability during extended drought conditions, including groundwater banking or long-term purchase agreements (CCWA study).
- **Non-Potable Recycled Water:** Update the recycled water market assessment and update the cost/benefit analysis for further recycled water system expansion.
- **Potable Reuse:** Once the State issues raw water augmentation regulations, revisit the feasibility of Potable Reuse in the next planned EUWMP update.

A more detailed description of the existing water supply portfolio analysis and these recommendations can be found in Sections 4 and 5 of the [Draft WWSB Future Portfolio Analysis TM](#).

2. Executing the EUWMP Adaptive Implementation Plan

Executing the EUWMP Adaptive Implementation Plan as policy would provide the City's Water Resources Manager with the flexibility to manage the City's water resources in real time based on current water supply conditions. This adaptive management approach includes a continued emphasis on water conservation, and making conservation a way of life, as outlined in the Water Conservation Strategic Plan.

The Adaptive Implementation Plan includes supply and demand triggers, and corresponding next steps to guide the City in adapting to future changes in water supply and demand conditions over a 30-year planning horizon. The EUWMP recognizes that while a new water supply is currently unneeded, the City's demand and supply sources must be closely tracked to forecast when a new supply source will be needed.

An adaptive management approach is crucial to preserving and optimizing the City's water supplies in an uncertain future. Annual updates on the City's water supplies and demands will be provided to Water Commission and Council at the end of each year; and updates to the City's Urban Water Management Plan will be presented to the Water Commission and Council every five years, as required by the DWR.

3. Continuing Ocean Desalination as Part of Santa Barbara's Water Supply Portfolio to Support Drought Preparedness, Response, and Recovery

The City's most recent policy regarding the use of desalination was established in the 2011 Long Term Water Supply Plan, which defined desalination as a drought supply. In 2015, in response to the recent unprecedented and prolonged drought, Council voted to reactivate the Charles E. Meyers Desalination Plant to provide critical water supplies and

DRAFT

enable the City to meet demands when other supplies were unavailable. Results of the analytical work completed in the EUWMP indicate that adoption of this policy allows the City to better prepare for, respond to, and recover from droughts.

Under this policy, the desalination plant will operate at its current capacity, 3,125 AFY, to protect and optimize the City's other water supplies, and to enhance the City's ability in preparing for and responding to future drought conditions. The Adaptive Implementation Plan does allow the Water Resources Manager to put the desalination plant in standby mode when water supply conditions warrant it. The EUWMP provides some suggested water-reserve thresholds to assist the Water Resources Manager in making this decision.

WATER COMMISSION RECOMMENDATION

This section will summarize Water Commission's findings and recommendations to Council after the January 21, 2021 Water Commission meeting.

Next Steps

Upon approval of these policy recommendations, staff and WSC will work to develop an EUWMP based on the supply planning analysis and recommended policies described in this report, and that satisfies the requirements for Urban Water Management Plans under the California Water Code. Staff will return to Council in May to present the public draft of the EUWMP. After a mandated public review period, staff will return to Council at the end of June for adoption of the final EUWMP.

SUSTAINABILITY IMPACT AND ENVIRONMENTAL REVIEW:

Development of an EUWMP and adoption of the proposed EUWMP policies will allow for better management of the City's water supplies, and will provide significant sustainability benefits for the community. Such plans and policies are exempt from CEQA review.

ATTACHMENT: Supplemental Report: EUWMP Stakeholder Engagement Activities

PREPARED BY: Catherine Taylor, Water Supply and Service Manager/DC/rb

SUBMITTED BY: Joshua Haggmark, Acting Public Works Director

APPROVED BY: City Administrator's Office

Enhanced Urban Water Management Plan (EUWMP) Engagement Summary

DATE	TOPIC
<i>Water Vision SB Stakeholder Group</i>	
May 14, 2020	Workshop 1: Water Supply Planning 101
May 28, 2020	Workshop 2: Community Values and Needs
July 8, 2020	Workshop 3: Future Supply Considerations
September 17, 2020	Workshop 4: Review of Future Portfolio Options
December 10, 2020	Workshop 5: Preview of Recommended Portfolio
January 11, 2021	Special Meeting: The City's Desal Permit
January 13, 2021	Special Meeting: Recycled Water
<i>Water Vision Month (Available in Spanish and English)</i>	
October 5, 2020	Lunch and Learn: Water Conservation Strategic Plan
October 6, 2020	Lunch and Learn: Where Our Water Comes From
October 7, 2020	Lunch and Learn: The Basics of Water Rates
October 8, 2020	Lunch and Learn: Methods to Optimize Water Resilience and Reliability
October 9, 2020	Open House Panel Q and A
All of October	Virtual Community Board Social Pinpoint Site
All of October	8 Videos on Key Water Topics
<i>Water Commission</i>	
April 16, 2020	EUWMP Update and Stakeholder Engagement Plan
July 16, 2020	Demand Analysis and Existing Portfolio Analysis
September 17, 2020	Water Conservation Strategic Plan
November 12, 2020	Future Portfolio Analysis Part 1
November 19, 2020	Future Portfolio Analysis Part 2
Scheduled: January 21, 2021	EUWMP Policy Recommendations
<i>City Council</i>	
February 11, 2020	Professional Services Agreement for EUWMP
April 14, 2020	EUWMP Update and Stakeholder Engagement Plan
November 17, 2020	Water Conservation Strategic Plan
December 15, 2020	EUWMP Update and Draft Water Supply Recommendations
Scheduled: February 9, 2021	EUWMP Policy Recommendations
Scheduled: May 2021	EUWMP Public Draft
Scheduled: June 2021	Adoption of EUWMP

To review video recordings of the Water Vision SB stakeholder group workshops, Water Vision Month videos and recordings, and staff reports for Water Commission and Council presentations, please visit www.SantaBarbaraCA.gov/WaterVision



Water Vision
SANTA BARBARA



Enhanced UWMP Policy Recommendations

WATER COMMISSION

January 21, 2021



Water Vision

SANTA BARBARA



VISION

Provide long-term water security for the City of Santa Barbara by preparing a water supply plan that is equitable, fiscally and environmentally responsible, adaptable to future conditions, and builds on the City's legacy of effective water management.

Recommendation

That Water Commission:

1. Receive an update on the Enhanced Urban Water Management Plan project
2. Provide direction to City Council on the recommended water supply policies



Agenda

- | | |
|--------|--|
| 10 Min | 1. Communications & Engagement Update
Dakota Corey, City of Santa Barbara |
| 10 Min | 2. Existing Supply Recommendations
Catherine Taylor, PE, City of Santa Barbara |
| 5 Min | 3. Adaptive Implementation Plan
Joshua Haggmark, PE, City of Santa Barbara |
| 5 Min | 4. Ocean Desalination Operations
Joshua Haggmark, PE, City of Santa Barbara |



A photograph of two children playing in the ocean surf, with a blue sky and white waves. The image is overlaid with a semi-transparent blue filter. The text "Communications & Engagement Update" is centered in white.

Communications & Engagement Update

Step 1.
Confirm Future
Supply Goals



Confirm and prioritize
plan objectives and
evaluation criteria

MAR '20 - MAY '20

Step 2.
Evaluate Existing
Portfolio



Assess City's existing
water supply options
against future demand
needs to identify future
supply gaps. Identify
potential strategies to
meet the gaps.

MAY '20 - JUL '20

Step 3.
Develop Future
Portfolios



Develop future portfolios
and evaluate their
performance against the
project objectives.

JUL '20 - OCT '20

Step 4.
Finalize Future
Water Supply
Portfolio



Finalize recommended
portfolio and develop an
adaptive implementation
strategy.

OCT '20 - JAN '21

Step 5.
Document
the Plan



Document the portfolio
and implementation
strategy into the Enhance
Urban Water
Management Plan
(EUWMP).

FEB '21 – JUN '21

**Water Vision Santa Barbara
Stakeholder Group**

5 group meetings
2 special meetings

Water Vision Month

5 lunch and learns
8 Videos
Social Pinpoint Site

Water Commission

6 meetings (including today)

City Council

4 completed, 3 remaining

WE ARE HERE

The background of the slide is a photograph of a coastal town, likely Santa Barbara, featuring Spanish-style architecture with red-tiled roofs and white walls. In the foreground, there are several palm trees. In the background, there are mountains and a body of water under a clear blue sky. The entire image is overlaid with a semi-transparent blue filter.

“This was such an open and transparent process, which says a lot because in the marginal community that we represent that’s usually not the case throughout the County. I appreciate the effort of the City of Santa Barbara to continue to connect with all of our marginal communities and the community at large.”

JACQUELINE INDA, HISPANIC CHAMBER OF COMMERCE
City Council Meeting, December 15, 2020



“Water Vision Santa Barbara incorporates aspects important to property owners such as affordable water from diverse and resilient sources while continuing to provide water in a sustainable manner. We applaud the City for listening to all stakeholders and combining the comments into a plan that the entire community can support.”

BRIAN JOHNSON, PRESIDENT, SANTA BARBARA ASSOCIATION OF REALTORS



“The Water Vision Santa Barbara process provided a robust opportunity for local stakeholders to express views and recommendations toward the City’s future water portfolio planning. Channelkeeper appreciates the opportunity to participate both in this process as well as in direct dialogues with City staff about this issue.”

MOLLY TROUP, SANTA BARBARA CHANNELKEEPER

A photograph of two children playing in the ocean surf, with a blue overlay. The children are standing in the shallow water, and waves are breaking around them. The text "Existing Supply Recommendations" is overlaid in white.

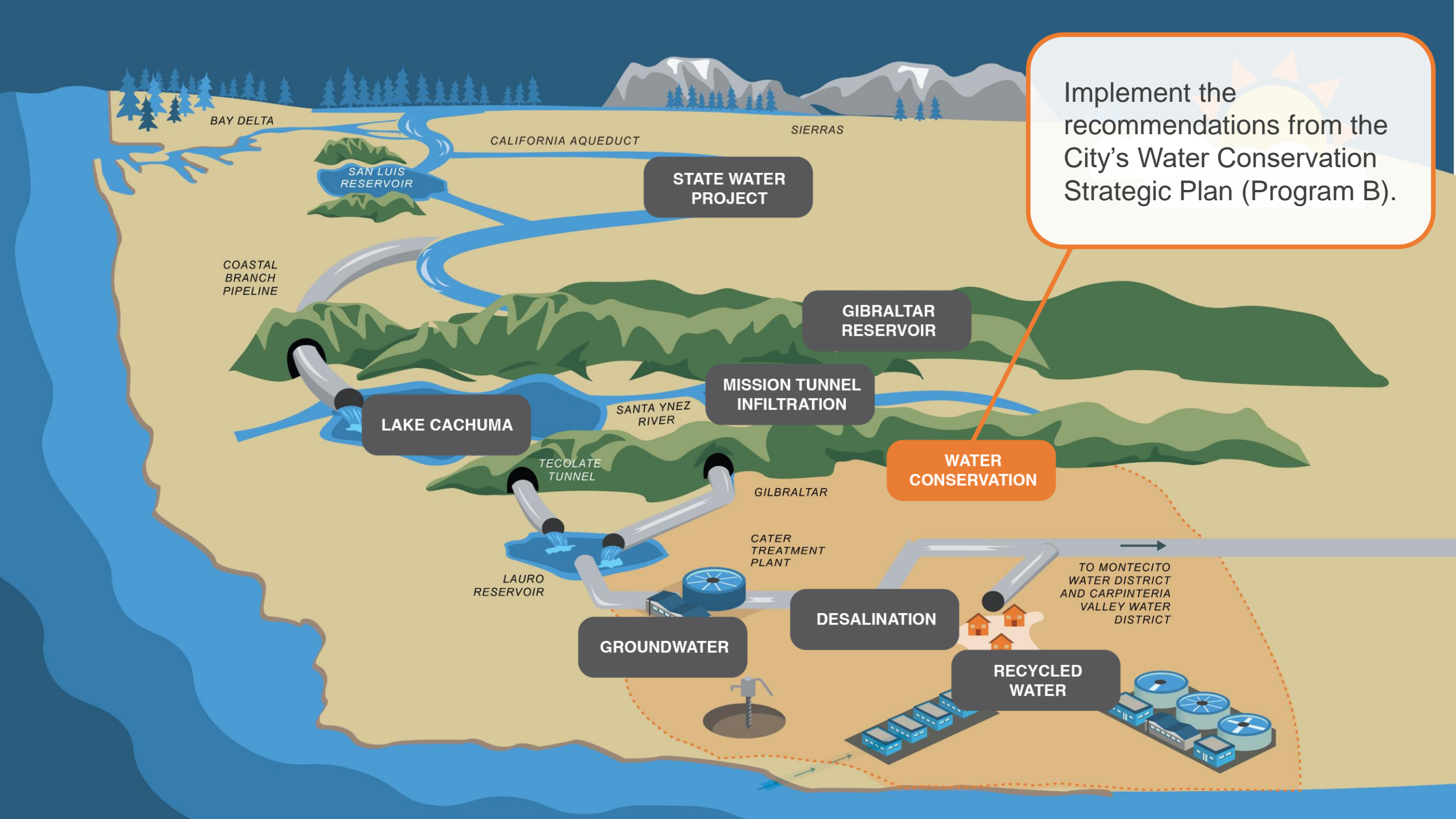
Existing Supply Recommendations

Policy Recommendations

1

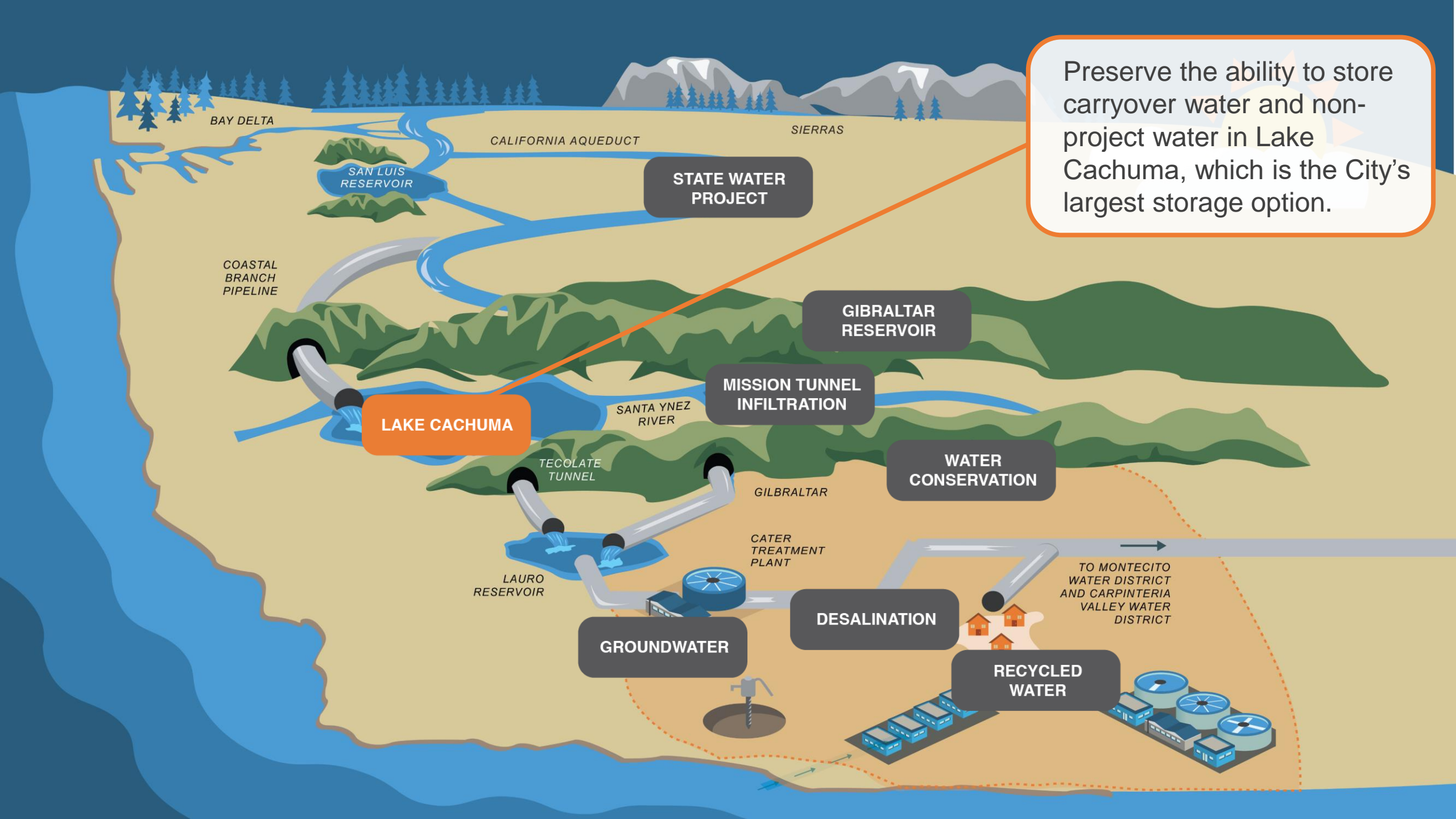
Implement EUWMP
recommended actions for
existing water supplies





Implement the recommendations from the City's Water Conservation Strategic Plan (Program B).

WATER CONSERVATION



BAY DELTA

CALIFORNIA AQUEDUCT

SIERRAS

SAN LUIS
RESERVOIR

STATE WATER
PROJECT

COASTAL
BRANCH
PIPELINE

GIBRALTAR
RESERVOIR

MISSION TUNNEL
INFILTRATION

LAKE CACHUMA

SANTA YNEZ
RIVER

TECOLATE
TUNNEL

WATER
CONSERVATION

GILBRALTAR

LAURO
RESERVOIR

CATER
TREATMENT
PLANT

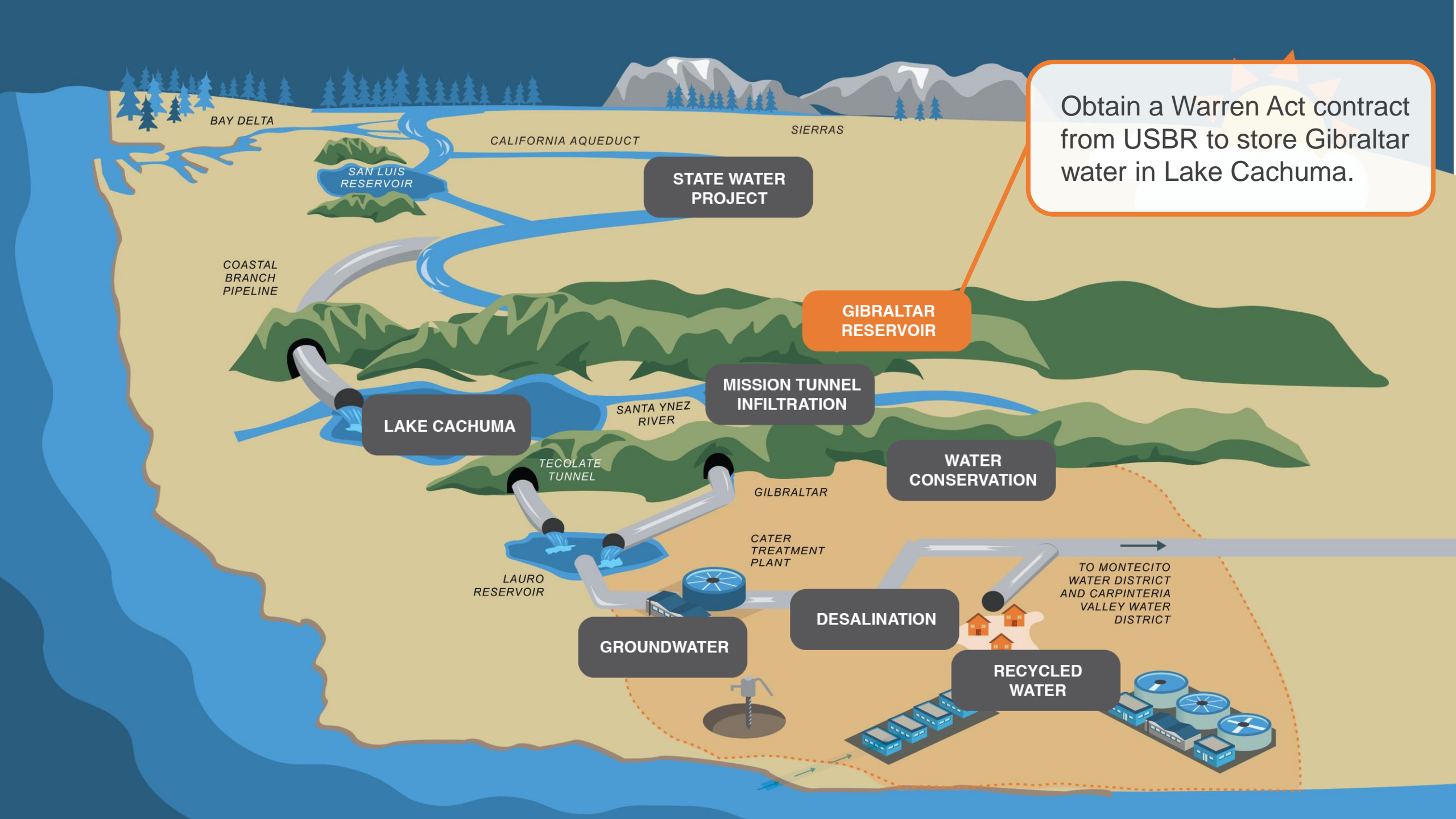
GROUNDWATER

DESALINATION

TO MONTECITO
WATER DISTRICT
AND CARPINTERIA
VALLEY WATER
DISTRICT

RECYCLED
WATER

Preserve the ability to store
carryover water and non-
project water in Lake
Cachuma, which is the City's
largest storage option.



Obtain a Warren Act contract from USBR to store Gibraltar water in Lake Cachuma.

BAY DELTA

CALIFORNIA AQUEDUCT

SIERRAS

SAN LUIS
RESERVOIR

STATE WATER
PROJECT

COASTAL
BRANCH
PIPELINE

GIBRALTAR
RESERVOIR

MISSION TUNNEL
INFILTRATION

LAKE CACHUMA

SANTA YNEZ
RIVER

TECOLATE
TUNNEL

WATER
CONSERVATION

GILBRALTAR

LAURO
RESERVOIR

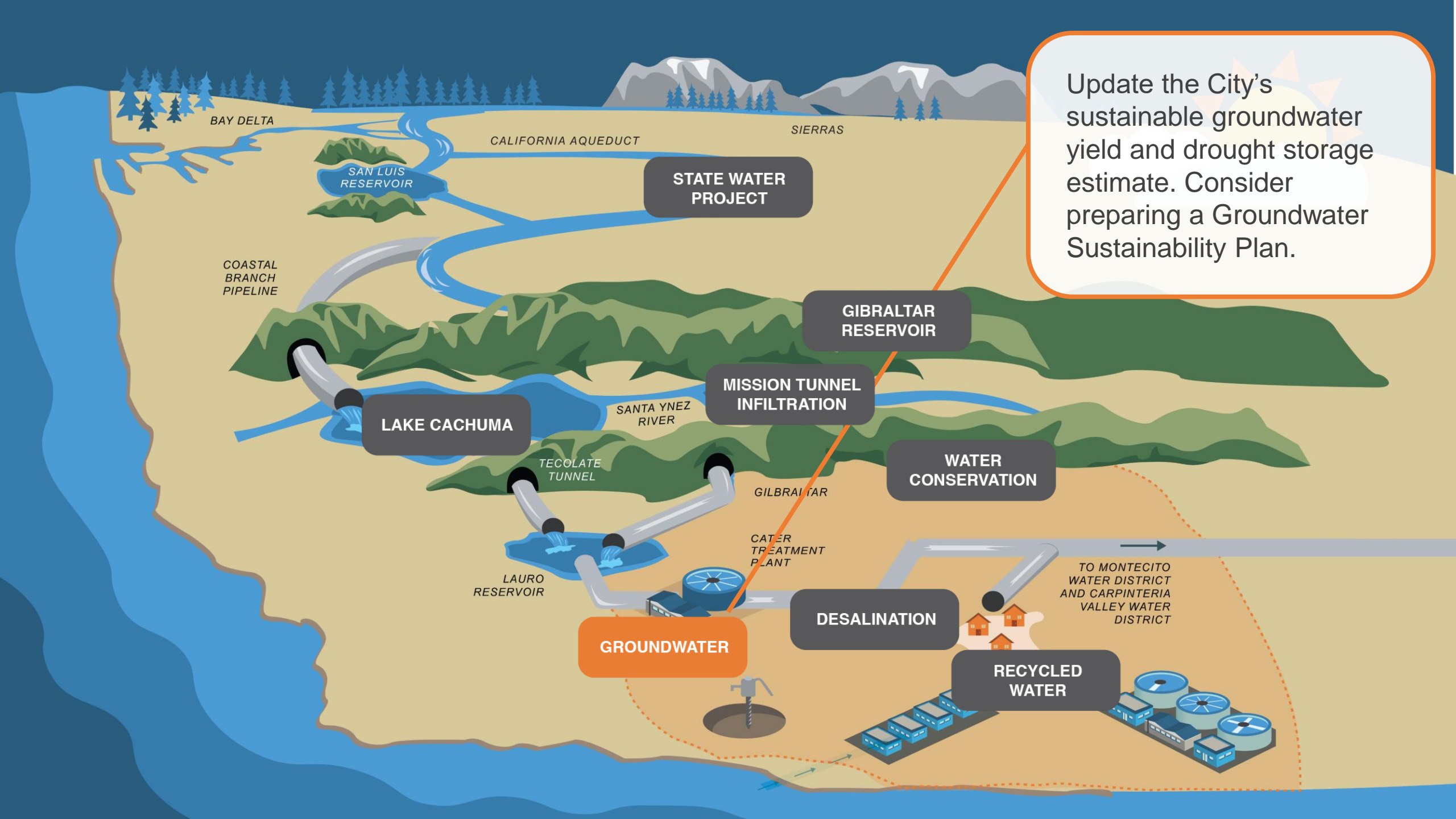
CATER
TREATMENT
PLANT

GROUNDWATER

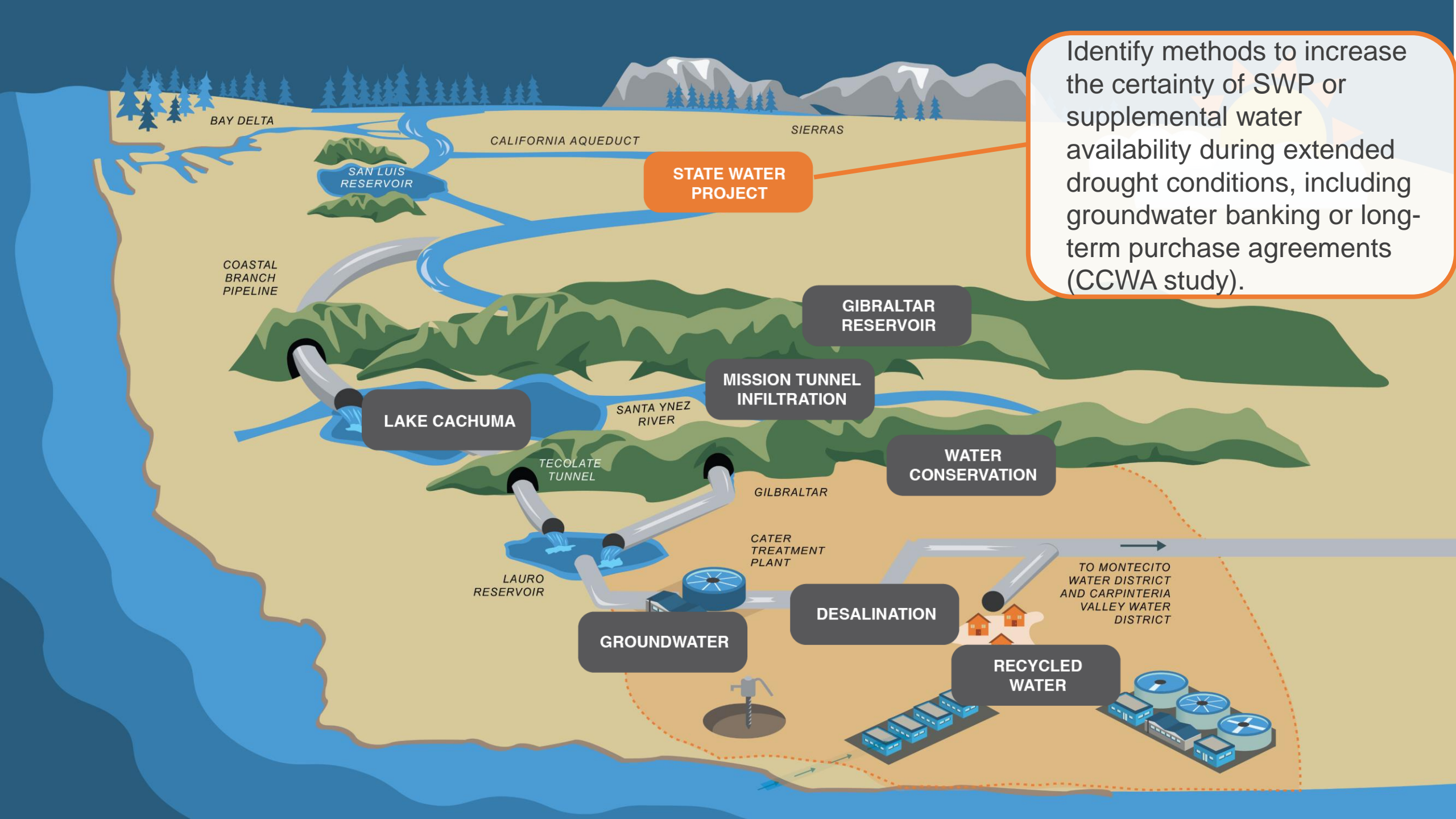
DESALINATION

TO MONTECITO
WATER DISTRICT
AND CARPINTERIA
VALLEY WATER
DISTRICT

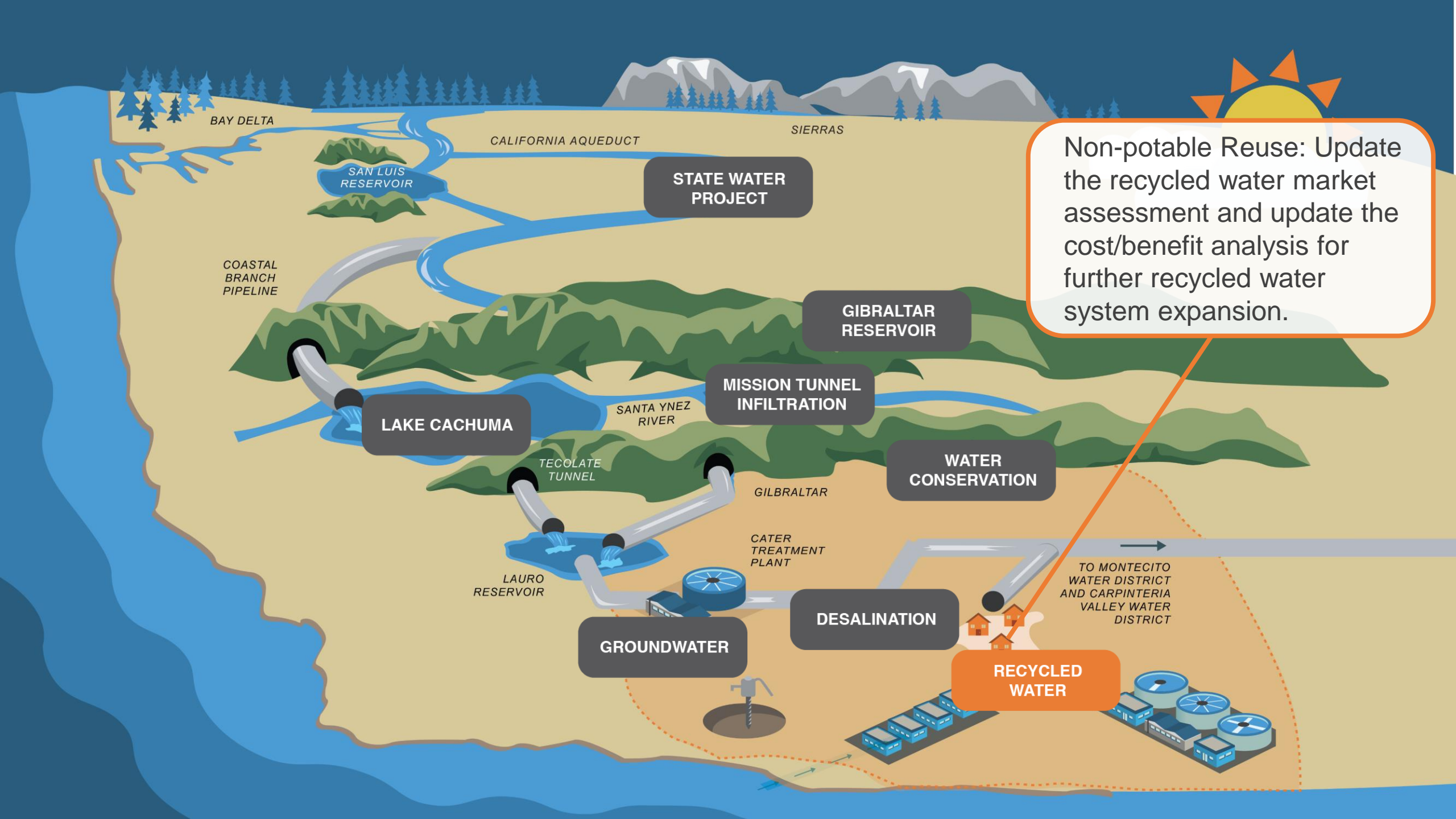
RECYCLED
WATER

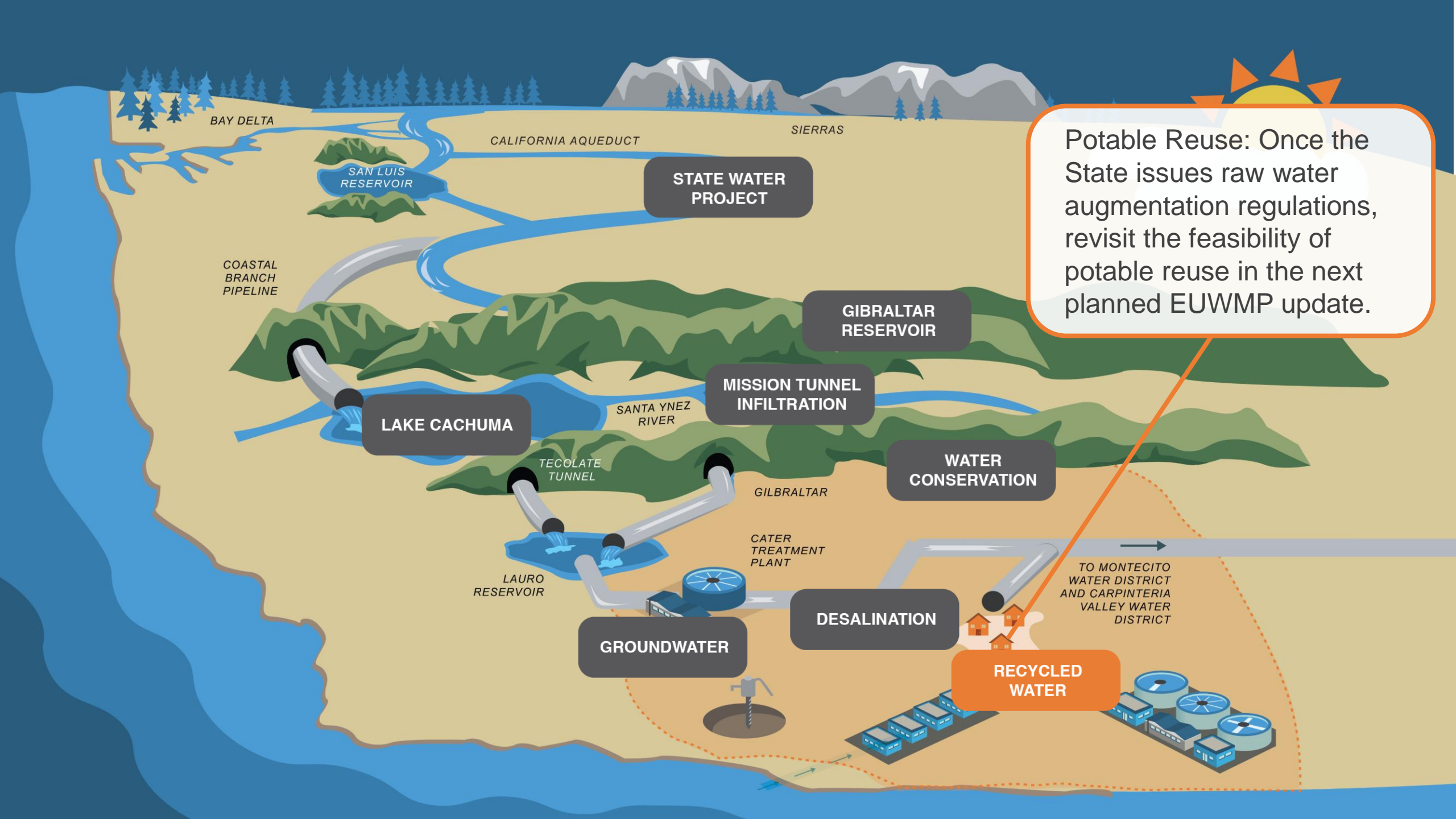


Update the City's sustainable groundwater yield and drought storage estimate. Consider preparing a Groundwater Sustainability Plan.



Identify methods to increase the certainty of SWP or supplemental water availability during extended drought conditions, including groundwater banking or long-term purchase agreements (CCWA study).





Feedback



**1. Implement EUWMP
recommended actions for
existing water supplies**

A photograph of two children playing in the ocean surf, with a blue overlay. The children are standing in the shallow water, facing away from the camera, and are splashing water. The sky is blue with some clouds. The text "Adaptive Management Plan" is overlaid in white.

Adaptive Management Plan

Policy Recommendations

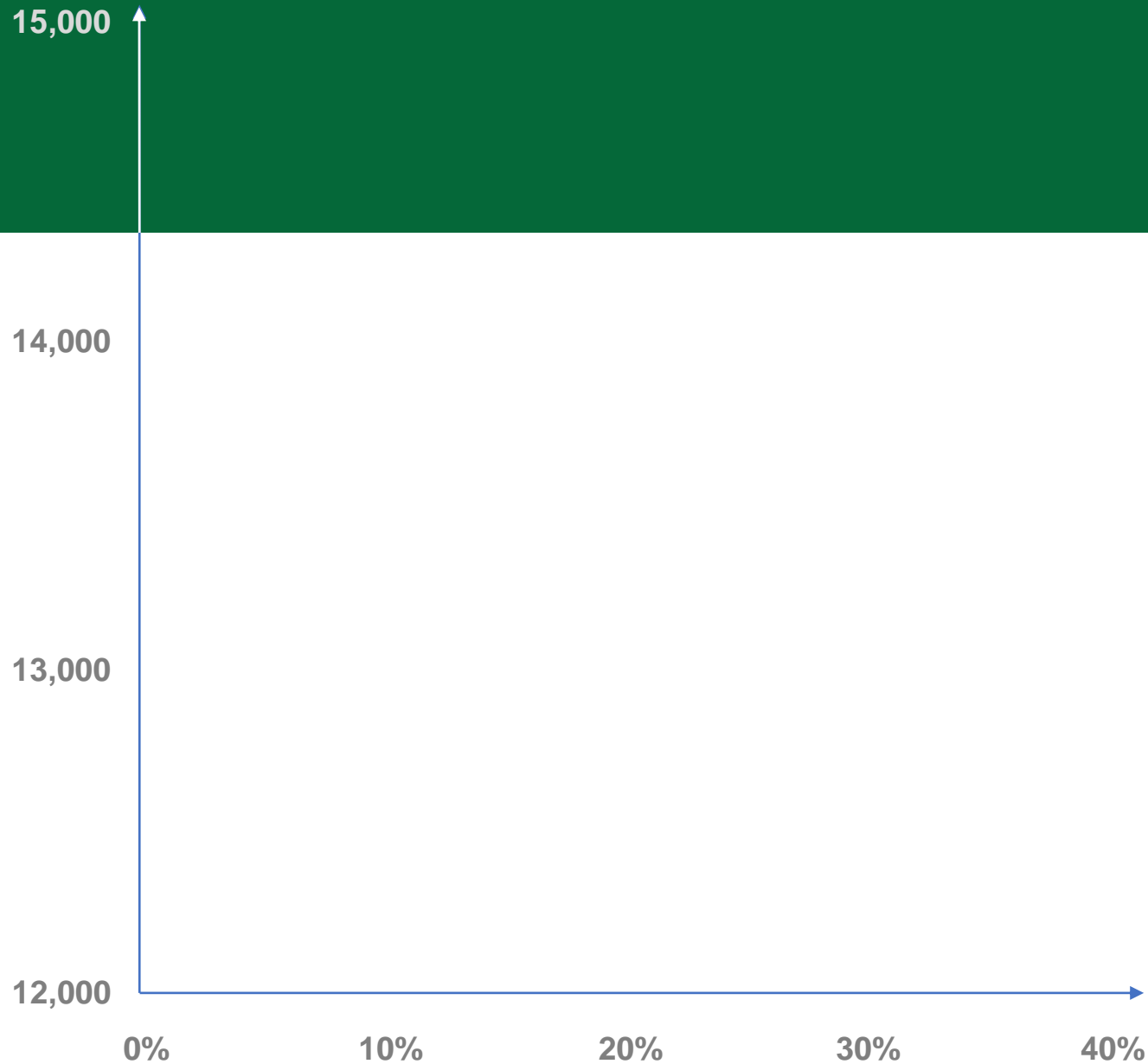
2

Execute the EUWMP
**Adaptive
Implementation Plan**



2 Execute the EUWMP Adaptive Management Plan

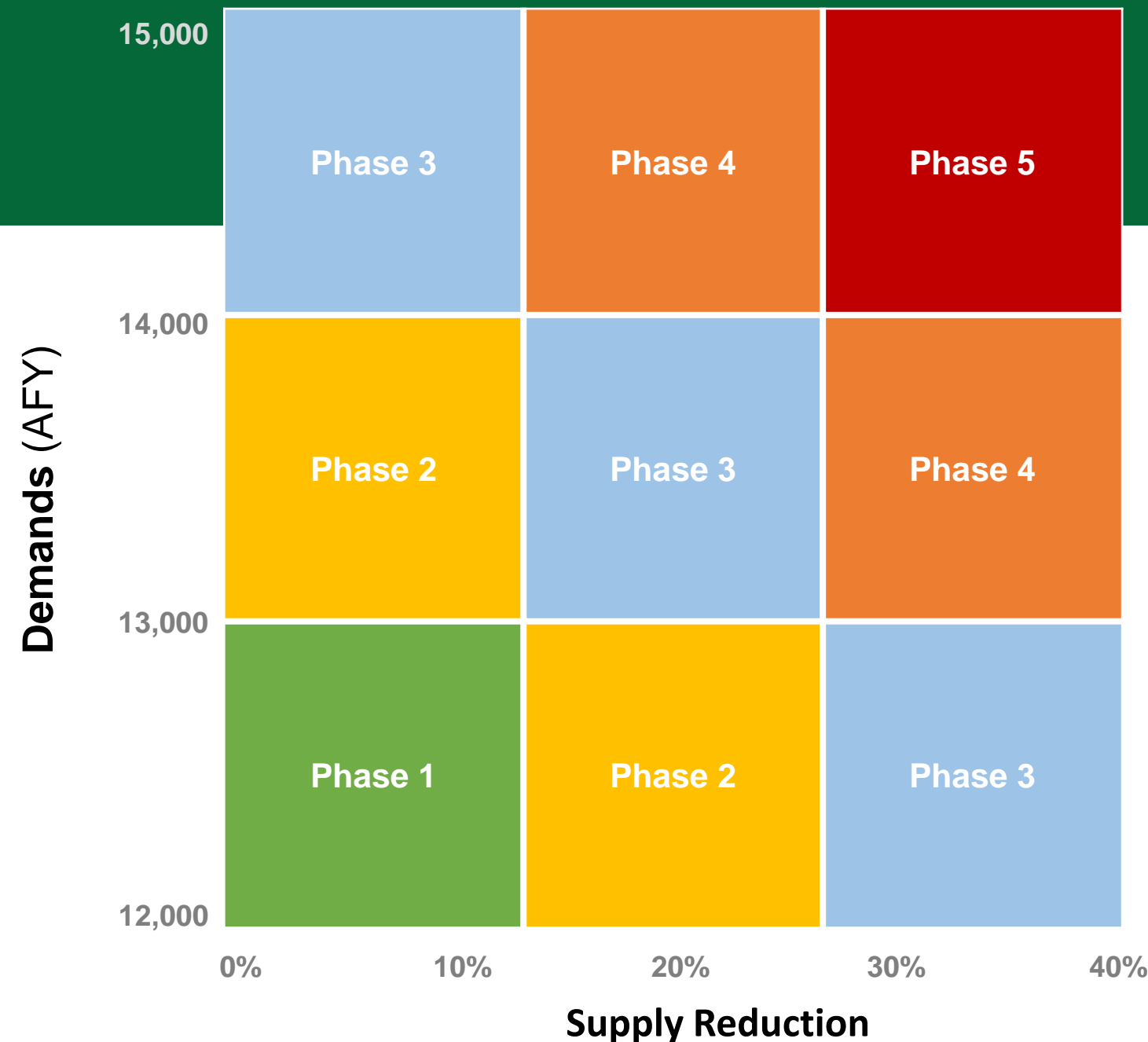
Demands (AFY)



X: Reduction in Supply
Y: Growth in Demand

Supply Reduction

2 Execute the EUWMP Adaptive Management Plan



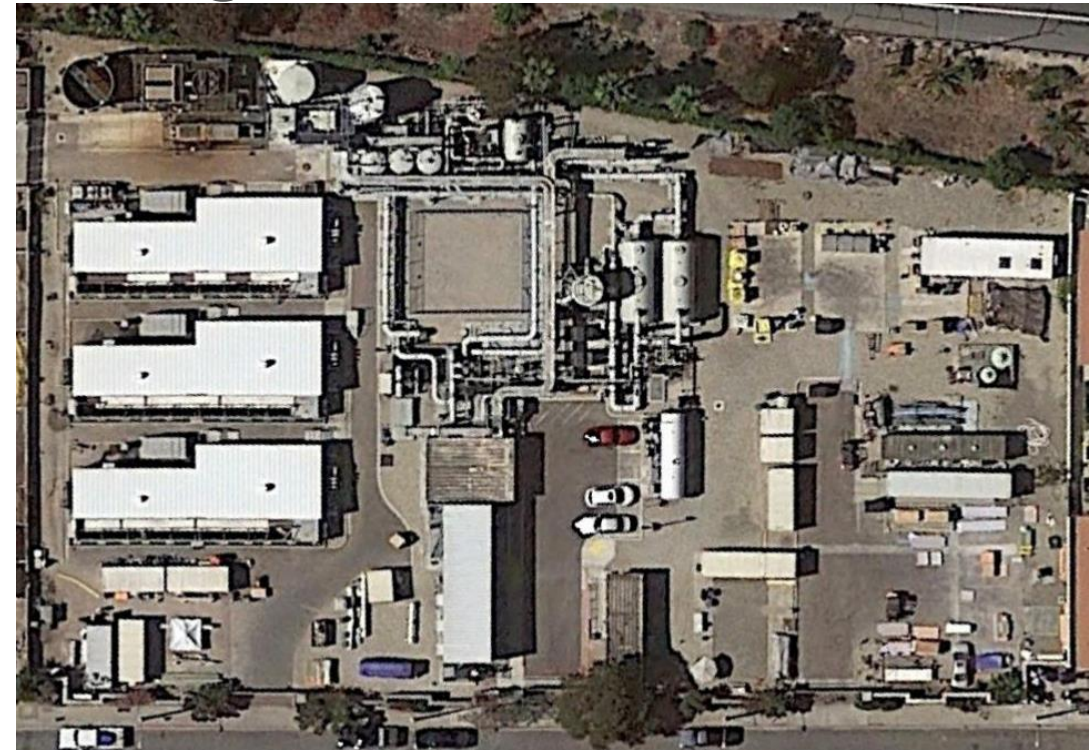
Implementation Phases

- Existing Conditions:
 - Monitor
 - Implement recommendations
 - Operate desalination plant
- Begin planning for a new supply.
- Implement new supply
- Begin planning for additional new supplies
- Implement additional new supplies

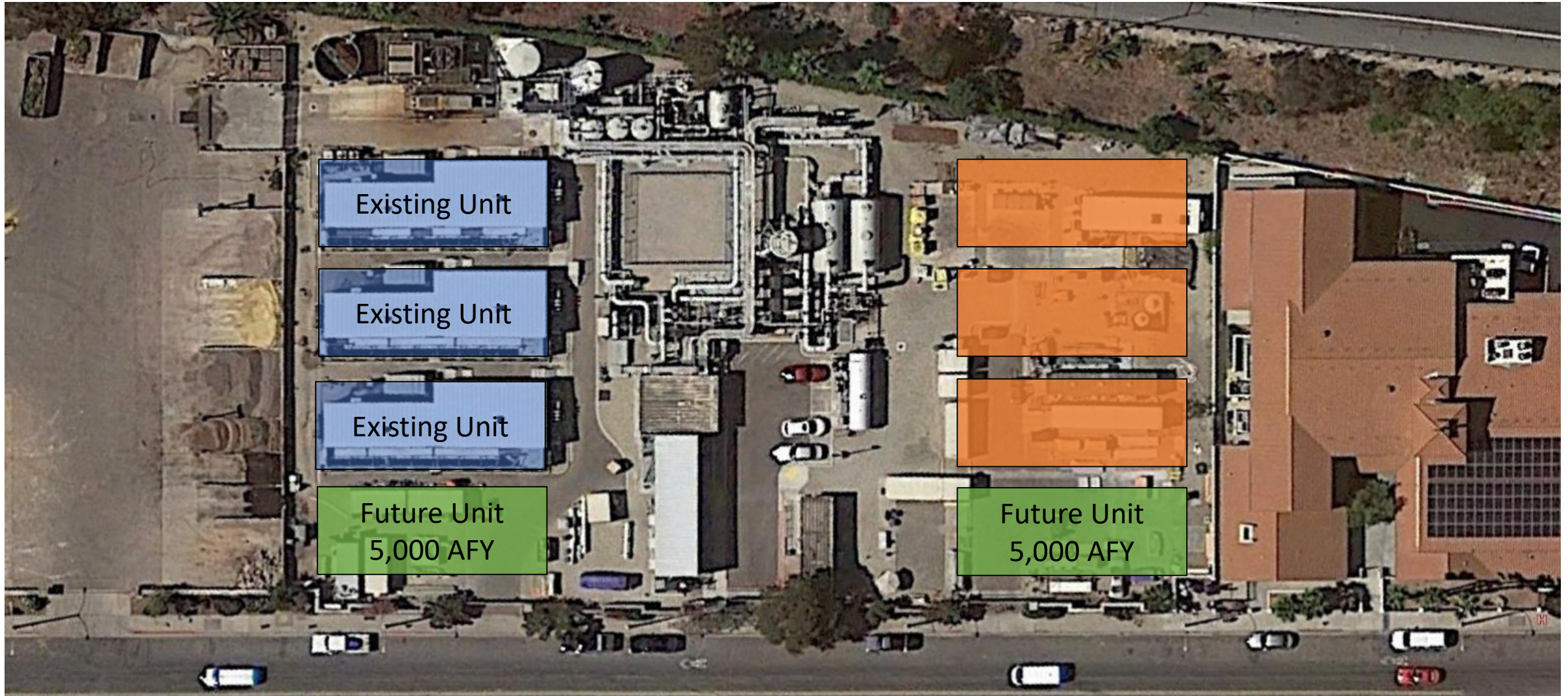
2 Execute the EUWMP **Adaptive Management Plan**

If new supply is needed, **desalination expansion is currently the best performing new supply** to bridge the supply/demand gap during drought conditions.

- Balances social, environmental, and financial criteria as part of an adaptive management approach



2 Execute the EUWMP Adaptive Management Plan



Feedback



2. Execute the EUWMP

Adaptive Implementation Plan

The image is a full-page background with a blue color overlay. It depicts two people standing in the ocean, facing away from the camera and looking out at a large, white, foamy wave that is breaking. The sky is a lighter blue with some wispy clouds. The overall mood is serene and expansive.

Ocean Desalination Operations

Policy Recommendations

3

Continuing ocean desalination as part of Santa Barbara's water supply portfolio to **support drought preparedness, response, and recovery**



3 Continuing ocean desalination as part of Santa Barbara's water supply portfolio to **support drought preparedness, response, and recovery**

The desalination plant will operate at its current capacity, 3,125 AFY, to protect and optimize the City's other water supplies, and to enhance the City's ability in preparing for and responding to future drought conditions.



3 Continuing ocean desalination as part of Santa Barbara's water supply portfolio to **support drought preparedness, response, and recovery**

The Adaptive Implementation Plan allows the Water Resources Manager to put the desalination plant in standby mode when water supply conditions warrant it.



Feedback



**3. Continuing ocean desalination
as part of Santa Barbara's water
supply portfolio to support
drought preparedness, response,
and recovery**

Motion

That Water Commission make a recommendation on the three major policies:

1. Existing supply recommendations
2. Adaptive implementation plan
3. Ocean desalination operations





Water Vision
SANTA BARBARA



Enhanced UWMP Recommendations

WATER COMMISSION

January 21, 2021