

Sustainability Plan



Adopted: June 27, 2022



A California Joint Powers Authority

This page left blank intentionally

RESOLUTION NO. 753

**RESOLUTION OF THE GOVERNING BOARD OF THE
CACHUMA OPERATION & MAINTENANCE BOARD
APPROVING AND ADOPTING
THE COMB 2022 SUSTAINABILITY PLAN**

WHEREAS, the Cachuma Operation & Maintenance Board (“COMB”) is a joint powers authority and public entity, organized and existing in the County of Santa Barbara in accordance with Government Code Section 6500 et seq., and operating pursuant to the 1996 Amended and Restated Agreement for the Establishment of a Board of Control to Operate and Maintain the Cachuma Project - Cachuma Operation And Maintenance Board, dated May 23, 1996 (“Amended and Restated Agreement”), as amended by an Amendment to the Amended and Restated Agreement made effective September 16, 2003, and a Second Amendment to the Amended and Restated Agreement made effective November 20, 2018 (collectively the “Joint Powers Agreement”); and

WHEREAS, the Member Agencies of COMB are the Goleta Water District, the City of Santa Barbara, the Montecito Water District, and the Carpinteria Valley Water District; and

WHEREAS, COMB operates and maintains Cachuma Project facilities pursuant to a Transfer of Operation and Maintenance Contract with the United States Bureau of Reclamation, including the North Portal Intake Tower, the Tecolote Tunnel, the South Coast Conduit, the Sheffield Tunnel, four regulating reservoirs, flow control valves, meters, instrumentation at control stations, turnouts and appurtenant structures along the entire system (“Cachuma Project Transferred Project Works”); and

WHEREAS, as a steward of valuable natural resources, with a responsibility to protect our present and future assets, COMB is fully committed to providing exemplary services to our Member Agencies that are consistent with our history, mission, and unique composition; and

WHEREAS, COMB staff has developed a Sustainability Plan (“Plan”) describing and highlighting how sustainability practices have historically been practiced, and will continue to be implemented and integrated into the day-to-day operation and maintenance of critical infrastructure necessary to efficiently and effectively manage and operate the Cachuma Project Transferred Project Works; and

WHEREAS, the Plan will be COMB’s guide and commitment to become a more sustainable and efficient governmental organization; and

WHEREAS, the Plan outlines and describes stated initiatives, goals and objectives for improving our organization by reducing consumption and increasing our effectiveness, while preserving the natural resources that we have a responsibility to protect; and

WHEREAS, the Plan was reviewed by the COMB Administrative Committee on March 15, 2022, and after such review and comment, forwarded to the COMB Governing Board with a recommendation to approve and adopt the Plan; and

WHEREAS, comments received from the Board were incorporated into the revised plan and reviewed by the Administrative Committee on June 16, 2022 and forwarded to the COMB Governing Board on June 27, 2022 with a recommendation to approve and adopt the Plan.


NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF COMB AS FOLLOWS:

1. The Governing Board finds and determines that the facts set forth in the above recitals and in the documents referenced herein are true and correct.
2. The Governing Board approves the Sustainability Plan as set forth in the accompanying staff memorandum and Exhibit 2 of the memorandum and hereby adopts Resolution No. 753.
3. This Resolution shall take effect immediately.

PASSED, APPROVED AND ADOPTED by the Governing Board of the Cachuma Operation and Maintenance Board, this 27th day of June 2022, by the following roll call vote:


AYES: Sneddon, Hanson, Holcombe
NOES:
ABSENT: Hayman
ABSTAINED:

APPROVED:



President of the Governing Board

ATTEST:



Secretary of the Governing Board



**Cachuma Operation & Maintenance Board
Santa Barbara, California**

ACKNOWLEDGEMENTS:

Board of Directors

Name	Title	Member Agency
Polly Holcombe	President	Carpinteria Valley Water District
Kristen Sneddon	Vice President	City of Santa Barbara
Lauren Hanson	Director	Goleta Water District
Cori Hayman	Director	Montecito Water District

General Manager

Janet L. Gingras, General Manager

Staff Contributors

Edward Lyons, Administrative Manager, CFO
Joel Degner, Engineer / Operations Division Manager
Tim Robinson, Fisheries Division Manager
Elijah Papen, Program Analyst II
Perri Wolfe, Administrative Analyst
Dorothy Turner, Administrative Assistant II

This page left blank intentionally

Our Mission

*To provide a reliable source of water to our Member Agencies
in an efficient and cost effective manner
for the betterment of our community.*



This page left blank intentionally



COMB AT A GLANCE

Form of government	Joint Powers Authority
Date of organization	January 1, 1957
Number of full-time staff	15
Lake Cachuma maximum storage (acre feet)	193,305
Lake Cachuma spillway elevation (feet)	753
Tecolote Tunnel (miles)	6
South Coast Conduit pipeline (miles)	26
SCC design capacity	45 million gallons per day
Number of reservoirs	4
Number of structures maintained	220
Number of meters maintained	28

COMB MEMBER AGENCIES

COMB Member Agency	COMB Board Representation
Goleta Water District	2 Votes
City of Santa Barbara	2 Votes
Carpinteria Valley Water District	1 Vote
Montecito Water District	1 Vote
Total	6 Votes

CACHUMA PROJECT WATER ENTITLEMENT

Cachuma Project Member Unit	Entitlement (%)	Entitlement (AFY)
Goleta Water District	36.25%	9,322
City of Santa Barbara	32.19%	8,277
Carpinteria Valley Water District	10.94%	2,813
Montecito Water District	10.31%	2,651
SYR Water Conservation District, ID No. 1	10.31%	2,651
Total	100.00%	25,714

This page left blank intentionally

TABLE OF CONTENTS

Introduction

	Page
Sustainability Plan Overview	1-3
Purpose of the Plan	4
The Planning Process	4
Plan Organization	5

Background – A History of Sustainability

Cachuma Project Transferred Project Works	6-7
Imported Water – State Water Project	8
Modified Upper Release Reliability Project	8
Lake Cachuma Water Quality and Sediment Management Study	8
Emergency Pumping Facilities Project	9
Lake Cachuma Secured Pipeline Project	9-10
SCC Blow-Off Nozzle/Valve Replacement Project	10
Isolation Valve Projects	11
COMB Building Replacement Project	11
Biological Opinion and Fish Management Plan	12
Hilton Creek Watering System Project	12
Quiota Creek Fish Passage Projects	13
Lake Cachuma Surcharge Project	14
Oak Tree Restoration Program	14

Sustainability Plan Structure

A Vision for a Sustainable Organization	15
Our Policy Statement and Mission	15
Sustainability Guiding Principles	16-18
Strategy, Initiatives, Goals and Objectives	19-22
Integration of Strategic Initiatives with Mission and Planning Docs	23-24

Implementing Sustainability Initiatives

Sustainability Initiatives	25-27
Initiative 1 – Water Supply Reliability	28-32
Initiative 2 – Distribution Facilities Improvements	33-36
Initiative 3 – Environmental Stewardship and Public Trust Resources	37-40
Initiative 4 – Cost Effectiveness and Value	41-44
Initiative 5 – Organizational Policies and Financial Responsibility	45-47
Initiative 6 – Foster Leadership and Strengthen Workforce Capabilities	48-50
Alignment with Sustainability Pillars	51-54

TABLE OF CONTENTS

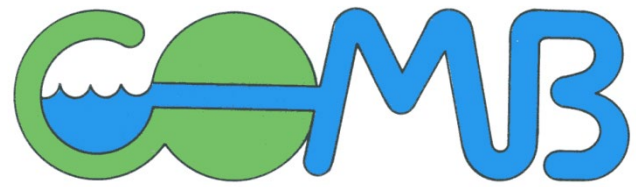
Sustainability Practices in Action

Page

Alignment Between COMB Mission and Sustainability Plan	55
Reduce our Carbon Footprint	55
Implementation	56
Monitoring and Reporting	56
Our Commitment Going Forward	57

Appendices

Appendix 1: Organizational Structure	58
Appendix 2: Cachuma Project Facilities Map	59
Appendix 3: COMB Managed Assets	60-63
Appendix 4: List of Acronyms and Abbreviations	64



INTRODUCTION



This page left blank intentionally

SUSTAINABILITY PLAN OVERVIEW

The Cachuma Operation and Maintenance Board (COMB) is committed to providing exemplary services that are consistent with our history, mission and unique composition. To be successful, we must be sustainable. Sustainability is most often defined as meeting the needs of the present without compromising the ability of future generations to meet theirs. The term is broadly used to indicate the responsibility associated with implementation of programs, initiatives and actions focused on the preservation of vital resources. The principles necessary to preserve those resources can be depicted as three concentric circles: **economic, environmental, and social pillars of sustainability**. These principles overlap and interconnect and, if followed in action, achieve results consistent with operating a sustainable organization.

The development of this Sustainability Plan (Plan) will provide COMB the foundation for promoting and maintaining a sustainable service model that balances economic, environmental, and social principles as a fundamental component of achieving COMB's mission. As a steward of valuable natural resources, it is our inherent responsibility to protect our present and future assets.

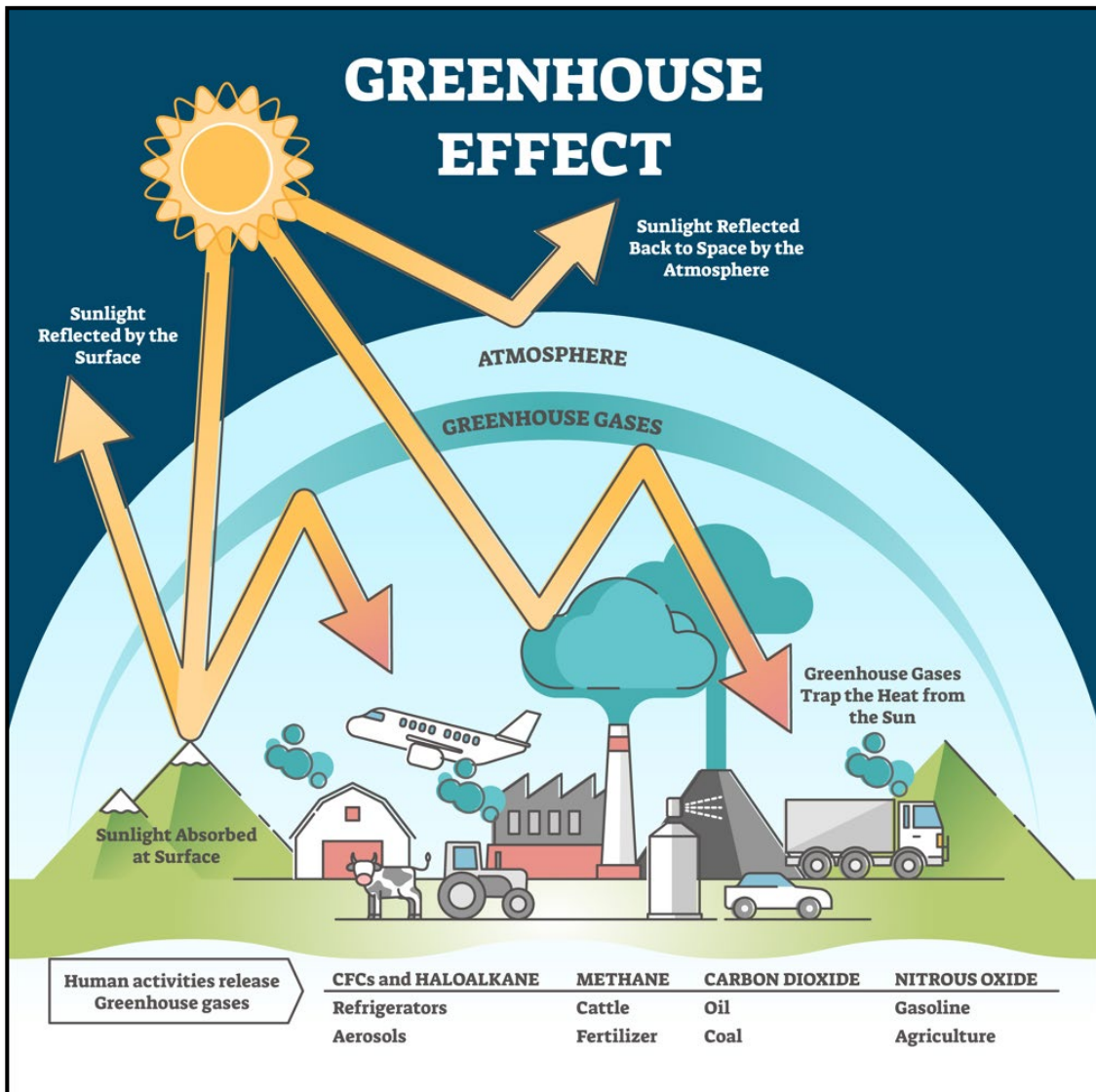
This Plan is intended to illuminate how sustainability practices have historically been, and will continue to be, woven into the daily operation and maintenance of critical infrastructure necessary to manage the Cachuma Transferred Project Works. In addition, the Plan supports the work associated with implementation of the Lower Santa Ynez River Fish Management Plan and the 2000 Cachuma Project Biological Opinion.

Addressing Climate Change

The Plan serves as COMB's guide to addressing climate change while carrying out our mission of providing a reliable source of water to the COMB Member Agencies. Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as variations in the solar cycle. However, studies have shown that human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil and gas.

SUSTAINABILITY PLAN OVERVIEW (Continued)

When fossil fuels are burned, they release large amounts of carbon dioxide, a greenhouse gas, into the air. Greenhouse gases trap heat in our atmosphere, which can lead to global warming. Rising sea levels, extreme weather events (drought, wildfires, flooding etc.), and the degradation of natural resources are a direct result of increased carbon levels which threaten global economies and the health, safety, and welfare of local communities.



Source: Getty Images

SUSTAINABILITY PLAN OVERVIEW (Continued)

Responses to climate change vary and can range from doing nothing to taking urgent action. Action can include activities such as **mitigation** measures (avoiding the unmanageable) which aim to tackle the causes and minimize the possible impacts of climate change, and **adaptation** measures (managing the unavoidable) which are the process of adjusting to the current and future effects of climate change.

Within our sphere of responsibility, COMB will pursue our commitment to sustainability in response to climate change by reducing carbon emissions, exploring alternate sources of renewable energy, and evaluating pathways to adapt our operations to a changing climate. By tackling the sources of climate change, preparing for future impacts, and making our environment adaptable and resilient, COMB is determined and committed to building a better future for all.

Going Forward

This Plan will improve and develop over time and will be our guide and commitment to become a more sustainable governmental organization. The Plan outlines and describes our initiatives, goals and objectives for improving our organization by reducing consumption and increasing our effectiveness while preserving the natural resources, which we have a responsibility to protect. COMB will conduct performance evaluations and report our achievements to the Board of Directors and the stakeholders of the Cachuma Project in an effort to provide insight as to our progress as we travel through the journey of becoming a more sustainable organization.



THE PURPOSE OF THE PLAN

The Plan is our guide and commitment to be a sustainable organization. While COMB has made past efforts towards sustainability, this Plan allows the agency to make a formal commitment to addressing sustainability in our daily operations. Additionally, a focus on climate resilience will prepare our organization for our changing future.



The Plan provides direction over the next two years to advance sustainability efforts and build capacity to:

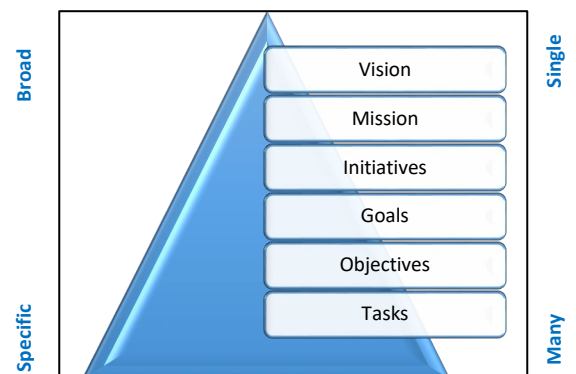
- Implement mitigation and adaptation measures to respond to a changing climate and to ensure COMB operations and employees are resilient in the face of these changes.
- Create goals to measure success and progress toward achieving sustainability and resilience.
- Maximize cost savings opportunities.
- Provide community leadership in sustainability.

THE PLANNING PROCESS

To create this Plan, COMB staff worked to envision a future within the context of two key challenges for our stakeholders: water supply reliability and impact of climate change on our watershed and natural resources. The Plan includes several phases:

- Defining a vision for a sustainable organization.
- Alignment with COMB's mission.
- Establishment of sustainability initiatives and goals.
- Creation of objectives to achieve goals.
- Development and prioritization of tasks.
- Implementation.
- Monitoring and reporting.

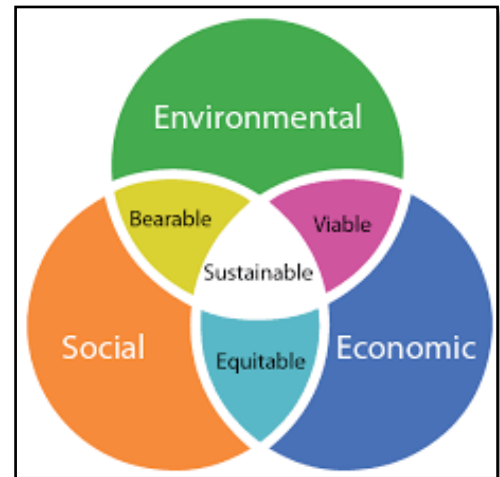
Strategic Pyramid



PLAN ORGANIZATION

The Plan establishes guiding principles that are derived from three organizational sustainability pillars consisting of **environmental, economic, and social** practices. These principles will be integrated into everyday operations within all divisions of COMB. The benefits of integrating these principles into everyday practice includes alignment with six established key strategic initiatives:

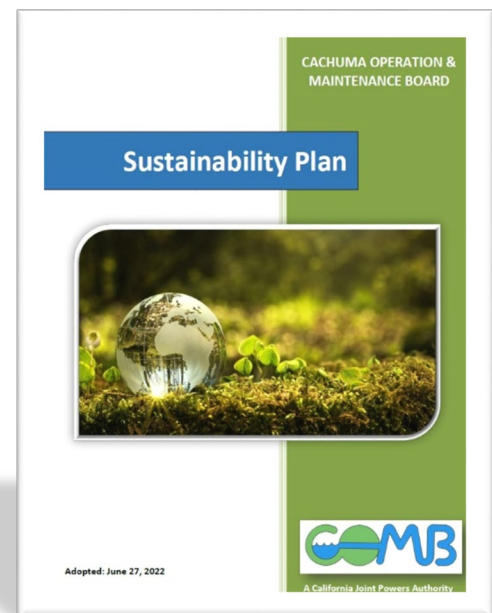
- Water Supply Reliability
- Distribution Facilities Improvements
- Cost-Effectiveness and Value
- Environmental Stewardship and Public Trust Resources
- Organization Policies and Financial Responsibility
- Fostering Leadership and Strengthening Workforce Capabilities



This Plan was developed based on considerable research and established industry methodologies as well as an evaluation of COMB's current structure, organizational practices, assets and operations. The Plan is organized into six sections:

- Introduction and Overview
- Background
- Sustainability Plan Structure
- Implementing Sustainability Initiatives
- Sustainability Practices in Action
- Appendices

Sustainability has always been embedded in the foundation of our agency strategy. Creating value for our stakeholders and more broadly, for our society and employees, is a key to the long-term resilience and inherent value of COMB. The sustainability framework, which underpins our strategy, puts our purpose into action. We must continue to integrate sustainability into our governance structure and processes, so that it informs our future strategic and operational decisions.



This page left blank intentionally



BACKGROUND



This page left blank intentionally

A HISTORY OF SUSTAINABILITY

Santa Barbara County has a history of complex water challenges. COMB is focused on identifying approaches to responsibly conserving and enhancing our resources and protecting the environment while meeting our Member Agencies water demand. At COMB, we know that being prepared for a successful water future requires innovation, foresight and collaboration. The following projects and practices provide an overview of how COMB has historically worked collaboratively with our Member Agencies and external stakeholders to solve short and long-term water challenges, protect our natural resources and champion sustainability for the benefit of the region for decades to come.

Cachuma Project Transferred Project Works: The Cachuma Project was constructed in the early 1950s by the United States Department of the Interior, U.S. Bureau of Reclamation (Reclamation) under contract with the Santa Barbara County Water Agency on behalf of the Cachuma Project Member Units. The Cachuma Project Member Units are the Carpinteria Valley Water District, City of Santa Barbara, Goleta Water District, Montecito Water District, and Santa Ynez River Water Conservation District-Improvement District No. 1.



*Tecolote Tunnel Intake Tower,
Lake Cachuma*

The Cachuma Project Member Units entered into contracts with the Santa Barbara County Water Agency for the purpose of receiving water from the Cachuma Project for use and benefit of the Member Units. Over the past sixty years, the Project has been the principal water supply for the Santa Ynez Valley and the South Coast Communities, delivering water to approximately 200,000 people.

COMB is a California Joint Powers Authority formed in 1957 by the Cachuma Member Units pursuant to an agreement with Reclamation. The agreement transferred to COMB the responsibility to repair, replace, operate and maintain all Cachuma Project facilities exclusive of Bradbury Dam. Since 1957, the JPA membership has changed. The current Member Agencies of COMB are the Goleta Water District, the City of Santa Barbara, Montecito Water District and the Carpinteria Valley Water District.

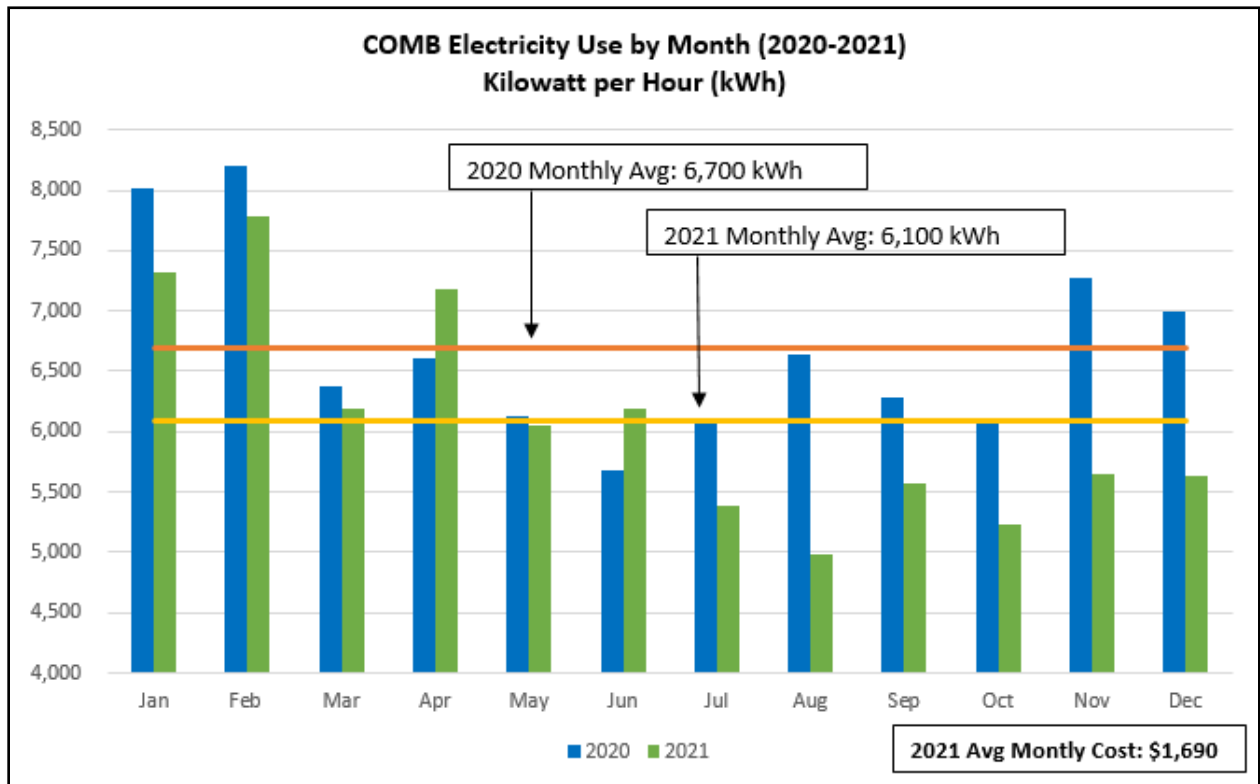
Through the Transferred Project Works contract, COMB is responsible for diversion of water to the South Coast through the Tecolote Tunnel, and operation and maintenance of the South Coast Conduit (SCC) pipeline, flow control valves, meters, and instrumentation at control stations, and turnouts along the SCC and at four regulating reservoirs. COMB coordinates closely with Reclamation and Member Agencies' staff to ensure that water supplies meet daily demands.

A HISTORY OF SUSTAINABILITY (continued)

“The design of the water conveyance system is innately sustainable...”

The design of the water conveyance system is innately sustainable, relying on gravity feed rather than an outside energy source to deliver water through the conduit. The system consists of the Tecolote Tunnel that extends 6.4 miles through the Santa Ynez Mountains from Lake Cachuma to the south portal of

the SCC. The tunnel is a modified horseshoe shaped concrete tunnel with a gradual slope over the 6.4 miles. The SCC is a reinforced concrete lined pipeline that is 26 miles long and designed to enable gravity feed. The conduit allows for delivery of water from the Goleta Water District to the Carpinteria Valley Water District at a fraction of the electricity usage of alternative pumped delivery systems as depicted in the chart below.



In an effort to reduce our carbon emissions, COMB participates in the Central Coast Community Energy (3CE) program through Pacific Gas & Electric and Southern California Edison. 3CE is a Community Choice Energy agency established by local communities to source clean and renewable electricity that is delivered through an existing utility provider’s infrastructure. 3CE promotes long-term rate stability and energy security while reducing reliance on fossil fuels and stimulating the local economy.

A HISTORY OF SUSTAINABILITY (continued)

Imported Water - State Water Project: In 1991, the voters of Santa Barbara County approved participation in the California State Water Project (SWP). The importation and storage of SWP allocation (Table A water), through the Cachuma Project facilities is used to increase the water supply to the Cachuma Project Member Units, beyond what water is naturally available within the Santa Ynez watershed. The Cachuma Project Member Units can also take advantage of purchasing and receiving supplemental water through the SWP exchange to offset any reduction in local and regional water supplies and to meet increasing customer water-demand levels when they occur. During the 2012-2019 drought period, COMB's member agencies relied on the delivery of SWP and imported water for their customers.



State Water Project

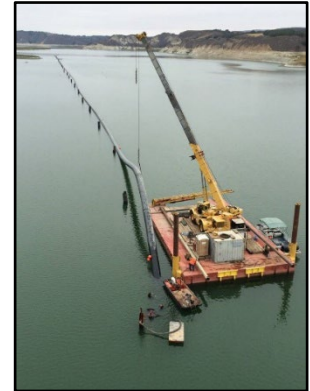
Modified Upper Release Reliability Project (MURRP): Completed in 2012, the MURRP provided a pipeline to convey Cachuma Project or State Water Project Water to the South Coast, should the Goleta Reach of the SCC be out of service due to scheduled and/or unexpected repairs. Further, if the South Portal of the Tecolote Tunnel were to fail, the entire SCC would be out of service, disrupting water service to most residents of the South Coast. Construction of the MURRP ensured the reliability and sustainability of water to all South Coast residents if those situations were to occur.

Lake Cachuma Water Quality and Sediment Management Study: Climate change has resulted in dry weather conditions that, in turn, have triggered a series of wildfires, adversely impacting the Cachuma Project Watershed. These were: the Zaca Fire (2007), White Fire (2010), Rey Fire (2016), Whittier Fire (2017), and Thomas Fire (2017). These five fires burned approximately 180,000 acres, or two-thirds, of the watershed. As an adaptation measure, COMB completed a two-year study on behalf of, and in coordination with, the COMB Member Agencies for addressing raw surface water quality and sedimentation issues at Lake Cachuma. COMB engaged and assisted two separate environmental and water resources engineering firms to complete the study.

The study went beyond identifying fire impacts. It included identification and characterization of issues, development of mitigation and control projects, and management actions that include sampling and data collection, in-lake treatment, erosion control, and watershed management. The study also assessed the impact of drought on fluctuating lake levels, water supply, and water quality. COMB plans to initiate Phase 2 recommended actions during Fiscal Year 2021-22.

A HISTORY OF SUSTAINABILITY (continued)

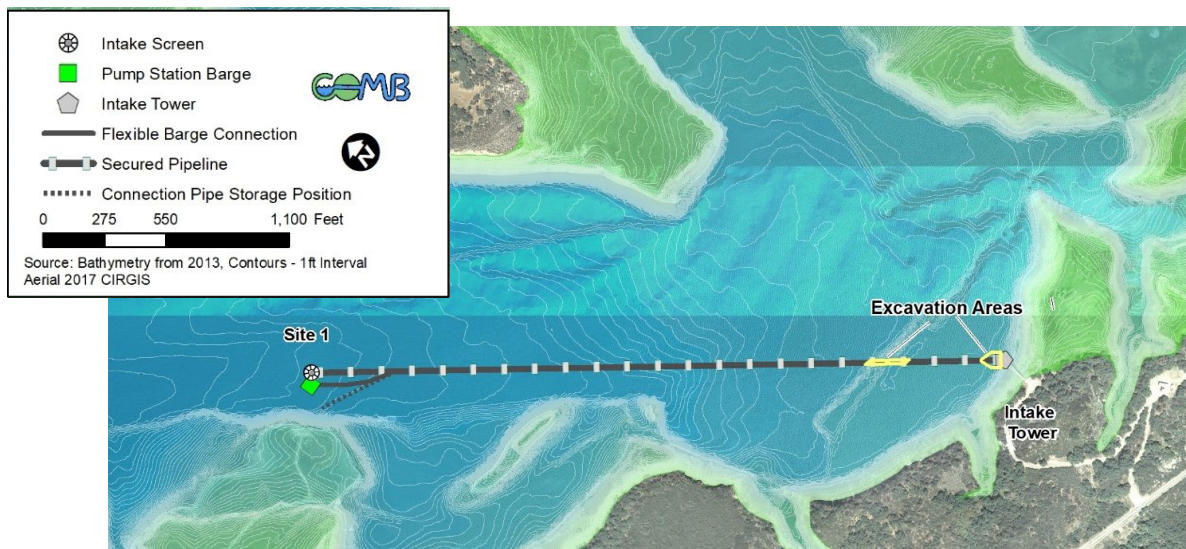
Emergency Pumping Facilities Project: Water purveyors are dependent on local water supplies as a major source of water. Efficient use of water has long been a priority within the Cachuma Project Service Area. The impacts of climate change include more intense heat waves and frequent periods of drought. During a drought period, the COMB Member Agencies dramatically increase their conservation efforts in order to mitigate the impact of water shortages on the community. Drought conditions can last many years. Reductions in Cachuma Project water supplies have a major impact on water supply management for the COMB Member Agencies.



EPF Pumping Facility

During the drought that began in 2012, COMB was responsible for the implementation of the Emergency Pumping Facility Project (EPFP), which allowed water to be pumped and conveyed when lake levels were extremely low and unable to flow via gravity into the Tecolote Tunnel. A similar pumping facility was temporarily installed and operated in the 1957-1958 and 1990-1991 droughts, and the occasional need for such a facility was envisioned when the reservoir was originally designed and constructed in 1953 by Reclamation. After a series of rain events in 2017, the lake elevation increased and the EPFP was demobilized. The COMB Board authorized the General Manager to enter into an agreement with an external contractor to store key components of the barge. The change order agreement also included an approved amount to re-establish a fully functioning EPFP if conditions require it.

Lake Cachuma Secured Pipeline Project: To better prepare for and adapt to future drought events, COMB hired a contractor to perform a preliminary engineering design for the secured pipeline project. The Lake Cachuma Secured Pipeline Project is a more permanent version of the previous EPFP, having a bottom-mounted permanent pipeline component to the Site 1 location.



A HISTORY OF SUSTAINABILITY (continued)

Lake Cachuma Secured Pipeline Project (continued): The Secured Pipeline Project will make available the use of additional reservoir water and imported water until sufficient inflow to the lake occurs and the reservoir level returns to a normal operating condition for gravity feed. If dry conditions continue, the Secured Pipeline Project could be installed in the summer of 2022. In 2019, the COMB was selected under the Reclamation Drought Resiliency Program for a WaterSMART Drought Resiliency Project grant for \$750,000. In addition, COMB was recently awarded a grant from the Department of Water Resources Urban and Multi Benefit Drought Relief Program for \$2,250,000. Funds from these two grants will be applied toward the Secured Pipeline Project.

SCC Blow-Off Nozzle/Valve Replacement Project: Rehabilitation of existing valves and addition of secondary valves outside of each blow-off structure is part of this project. The project supports water conservation goals by 1) ensuring that existing valves are in good working order, limiting leaks and water losses during an emergency, and 2) adding secondary valves that limit water losses during normal maintenance procedures, providing redundancy in case of primary valve failure. A secondary valve allows full exercise of inside and outside valves, with minimal water losses discharged into creeks or storm drains. Previously, with only one inside valve available, valve exercising was either limited or water losses were greater when annual valve exercising occurred.



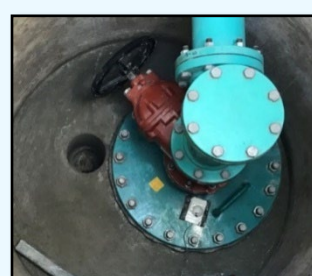
Air Vent 352+07 Before



Air Vent 352+07 After



Blowoff 388+10 Before



Blowoff 388+10 After

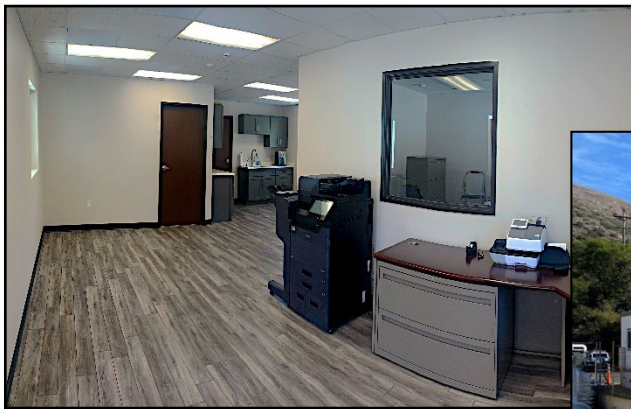
A HISTORY OF SUSTAINABILITY (continued)

Isolation Valve Projects: Installation of isolation valves at strategic locations allows water to be conserved during scheduled maintenance or during an emergency pipeline failure. These projects generally include the installation of a temporary bypass line and a new pipeline segment with a large butterfly valve into the SCC. Several laterals, blow-offs, and air vacuum air release structures along the SCC undergo periodic rehabilitation requiring drainage of portions of the SCC. The installed isolation valves divide the pipeline, limiting water losses during rehabilitation preparation. Likewise, in an emergency scenario such as an earthquake, flood, or other event, the isolation valves limit water losses to the downstream environment.



*La Mira Isolation Line Valve
(Installed 2022)*

COMB Office Building Replacement Project: In Fiscal Years 2021 and 2022, COMB replaced three aging mobile office buildings (circa 1974 - 1993) with newly manufactured mobile offices. These new buildings are built with state of the art sustainable components including environmentally preferred building materials, LED lighting, insulated walls and flooring, automated energy efficient electrical lighting fixtures and switches, automated electrical outlets, efficient heating cooling and ventilation systems, water saving plumbing fixtures, dual paned windows, hardi-backer exterior siding, and drywall interiors. In addition to the cost saving features, these energy efficient buildings provide an environmentally friendly, sustainable office setting for employees to conduct business.



COMB Office Building



A HISTORY OF SUSTAINABILITY (continued)

Biological Opinion and Fish Management Plan: On behalf of Reclamation, COMB is responsible for the implementation of the 2000 Biological Opinion (BiOp) and Fish Management Plan (FMP) related to the Cachuma Project on the Santa Ynez River. The BiOp addresses the effects of the proposed Cachuma Project operations on steelhead and its designated critical habitat in accordance with Section 7 of the Endangered Species Act of 1973.

The purpose of these guidance documents is to implement physical projects and management strategies that will protect, enhance, restore and create new habitat for spawning and rearing of endangered steelhead, while keeping a balance between fish management, other ecological needs, and the delivery of adequate water supplies to customers of local water agencies and groundwater recharge. These activities include ongoing scientific studies along the river, monitoring and recording changing conditions, and implementation of fish passage improvements as outlined in the 2000 BiOp.



Oncorhynchus mykiss (*O. mykiss*)

In addition, a consensus based, long-term FMP was developed which provides protection for steelhead/rainbow trout downstream of Bradbury Dam through a combination of water releases from Bradbury Dam through the Hilton Creek watering system, and the removal or modification of numerous fish passage barriers to steelhead on tributaries of the Santa Ynez River. By implementing these actions, stakeholders in the Cachuma Project have created significant additional habitat for steelhead within the Santa Ynez River watershed.

Hilton Creek Watering System Project: Natural streamflow in Hilton Creek below Bradbury Dam is intermittent. The Hilton Creek Watering System is a supplemental water system, the objective of which is to provide a dependable year-round source of cool well-oxygenated water to allow fish to survive the summer months until natural flow resumes in the winter. Construction of the watering system was completed in the fall of 1999, operating by gravity flow when flow targets and lake surface elevation allow, or by local electricity (pumped) when necessary. An Emergency Backup System (EBS) was installed in 2016. The EBS now provides a wider and more sustainable range of gravity flow.



Hilton Creek

A HISTORY OF SUSTAINABILITY (continued)

Quiota Creek Fish Passage Projects: Quiota Creek is a tributary of the Lower Santa Ynez River located approximately 8.4 miles downstream of Bradbury Dam and was designated by the National Marine Fisheries Service in 2005 as critical habitat for *Oncorhynchus mykiss* (*O. mykiss*). This critical habitat also contained a number of fish passage barriers preventing the migration of *O. mykiss*.

Beginning with Crossing 6 in 2008, COMB has replaced ten (10) identified passage barriers (Crossings 0B, and 1 through 9) along Quiota Creek with bottomless arched culverts to allow migrating *O. mykiss* access to critical habitat in the upper watershed. COMB completed all crossings in 2020, with Crossing 8 being the last and final crossing along the stretch. Hydro-mulch and hydro-seed was spread throughout the project footprint upon completion of each project to prevent erosion and return the sites to a native and natural condition. Native trees were planted to restore the riparian corridor. After completion, each site is monitored by the affiliated engineer on the project, to ensure the habitats are stable and mitigated.



Quiota Creek Crossing No. 3 (Completed 2015)

A HISTORY OF SUSTAINABILITY (continued)

Lake Cachuma Surcharge Project: Completed in 2004, the Surcharge Project was a critical component to provide additional water needed to maintain summer fish-rearing flows and enhance winter migration for steelhead in the Lower Santa Ynez River and Hilton Creek. Four 4-foot flashboards were installed on the Bradbury Dam spillway radial gates, allowing for Lake Cachuma elevation to increase by an additional three (3) feet before it fills to capacity and spills. This surcharge substantially increases the amount of water available in wet years to enhance and maintain downstream fishery flows, and minimizes impacts to water supply.



Bradbury Dam, Lake Cachuma

Oak Tree Restoration Program: An Oak Tree Restoration Program was developed to mitigate for projected oak tree losses resulting from periodic rise in lake levels by the surcharging affect. The implementation of the Plan is incremental and spread over several years. This allows for a phased restoration program so that adaptive management can be taken to refine and improve restoration methods over time to increase the success rate. Through Fiscal Year 2020-21, COMB has planted 5,350 oak trees near Lake Cachuma.



Lake Cachuma Oak Tree Restoration Program

This page left blank intentionally



SUSTAINABILITY PLAN STRUCTURE



This page left blank intentionally

A VISION FOR A SUSTAINABLE ORGANIZATION

To be a sustainable organization, COMB will adhere to our core values and guiding principles which means:

- We lead by example.
- We are a resilient organization.
- We evaluate success through a triple bottom line lens – people, planet and prosperity.
- We steward our natural resources for present and future generations.
- We are mindful of the carbon footprint caused by our operations.


Triple Bottom Line is a concept that takes into account the full cost of providing services: people (social responsibility), planet (environmental responsibility), and prosperity (monetary responsibility).

OUR POLICY STATEMENT AND MISSION

COMB is committed to sustainable practices and the stewardship of the environment to exemplify how local government can support and enhance our natural resources, while continuing to nourish a vibrant, diverse, and healthy economy for the people of Santa Barbara County. COMB will implement this Plan by modifying its internal operations to incorporate sustainable practices in all aspects of its ventures, including operation and maintenance of the Cachuma Project facilities, watershed and habitat protection, fleet management, procurement and recycling practices. COMB will also incorporate the Plan framework into strategic planning documents.

As we move towards a sustainable society, we will need to ensure that the ecological, economic, and social aspects of our lives no longer compete with each other. Rather, it will be necessary for these elements to function as complementary pieces of a tightly integrated union.

COMB is committed to providing its core services while maintaining a balanced approach to human and environmental needs. Our actions are guided by the COMB mission:



“To provide a reliable source of water to our Member Agencies in an efficient and cost effective manner for the betterment of our community.”

SUSTAINABILITY GUIDING PRINCIPLES

COMB is dedicated to protecting, preserving, and restoring the natural, social and economic environment for which we are responsible while performing the challenges of everyday operations. To that end, COMB is committed to integrating sustainability practices into ordinary operations and long-term resource management. We will depend on established guiding principles, well thought-out initiatives, and the integration of those principles with other planning documents to achieve our goals.

Sustainability can be divided into three main pillars for an organization: **economic, environmental, and social** practices. If any one of the pillars are undermined, then the system as a whole is unsustainable. It is important that COMB is working on sustainability components as a whole, which means taking all three pillars into consideration when making decisions and effecting policy.

The guiding principles included in this Plan are derived from the pillars of sustainability. Each guiding principle will be interwoven into our daily activities and are described below.

❖ Environmental Sustainability: Stewards of Natural Resources

Environmental Sustainability means that natural resources such as land, water, and timber are finite and need to be consumed carefully in order to maintain a sustainable planet. Conserving our natural resources and protecting our global ecosystem will support health and wellbeing now and in the future.



Protecting the environment while providing reliable water conveyance, meeting critical compliance measures and providing valuable service to our Member Agencies takes commitment supported by effective processes, leading technologies, and dedicated staff. Diminishing our dependence on resources such as electricity and fossil fuels will position COMB for greater autonomy in the future. In addition, environmental sustainability actions will assist COMB in adapting to impacts related to climate change such as drought, wildfires, and natural disasters.

SUSTAINABILITY GUIDING PRINCIPLES (continued)**❖ Economic Sustainability: Efficiency, Value and Financial Responsibility**

Economic Sustainability. In an environmental framework, "sustainability" generally means finding a way to use resources in a manner that prevents their depletion. In an economic context, the phrase "sustainability" is commonly used to describe an organization that is able to sustain itself over the long term, perpetuating its ability to fulfill its mission. Economic sustainability includes the concepts of financial stability, as well as leadership succession planning, adaptability, and strategic planning.

COMB's revenues are equal to the expenditures approved in the annual operating budget. COMB's primary fiscal objective is to provide the highest possible level of service to our Member Agencies and stakeholders without impairing COMB's financial condition. COMB will make every effort to keep current expenditures less than current assessments and revenues. Current expenditures are defined as operating expenses, debt payment and infrastructure and habitat improvement projects. COMB operates within the approved budgetary amounts to avoid subsequent assessments to our Member Agencies.

The COMB Infrastructure Improvement Plan (IIP) is a primary tool that COMB uses to plan for economic sustainability. Efficiently managed and maintained infrastructure reduces the frequency of more serious and costly repairs in the future. IIP projects impacting the SCC are assessed and evaluated for criticality. Projects are then planned for the current fiscal year as appropriate and projected over the next five years, to address the most critical infrastructure needs so that water loss and capital costs are reduced.



Operating in a productive, cost-effective and efficient manner will ensure sound financial stability and provide value to our Member Agencies and stakeholders. Integrating long-range planning documents such as our comprehensive budget document into our sustainability practices provides for safeguards against uncertain periods of volatility such as natural disasters, climate change impacts, and regulatory changes in the environment. COMB is dependent on our Member Agencies to support our financial existence and in turn, we strive to provide them with value in achieving our mission.

SUSTAINABILITY GUIDING PRINCIPLES (continued)**❖ Social Sustainability: Promote Well-being for Employees and Community**

Social Sustainability is the ability of an organization to make provision for the social wellbeing of current and future generations.



While the first two pillars of the sustainability focus on environmental resources and economics, social sustainability is concerned with how an organization's employees and internal / external stakeholders are affected and treated by the entity. A socially sustainable organization cares about its employees' welfare and maintains a connection

with its workforce and stakeholders through fostering an equitable, culturally and socially diverse atmosphere.

Socially-oriented organizations achieve sustainability by providing security, individual development and fostering overall healthy relationships with employees, suppliers and partners. COMB maintains updated personnel policies and procedures to promote a safe, healthy working environment that places emphasis on acknowledging and rewarding staff's work efforts in order to create a long term loyal workforce. By operating in an open and transparent manner, COMB staff continues to foster and build valuable relationships with our external partners within the Cachuma Project and our surrounding communities.

These three pillars of sustainability, environment, economic and social, will become increasingly important to ethical agency practices as environmental pressures increase, and especially so in fragile areas prone to sea-level rise, drought, and fire hazards. Every COMB decision and project will require thought and perhaps some level of innovation to act in ways that will benefit as many of these sustainability principles as possible. To that end, COMB will have a positive impact on the stakeholders we serve by making strategic decisions and promoting public policies that support sustainability. The Plan is designed to assist staff in decision making now and in years to come.

SUSTAINABILITY INITIATIVES, GOALS AND OBJECTIVES

As COMB moves forward, staff is committed to upholding the core values that have shaped its standard of excellence while adapting to changing conditions and environment. As part of the planning process, COMB focused on the following six strategic initiatives in the development of this Plan.



SUSTAINABILITY INITIATIVES, GOALS AND OBJECTIVES (continued)

Initiative 1 Water Supply Reliability

Goal: Sustain a safe, reliable water supply for our Member Agencies by:

Objectives:

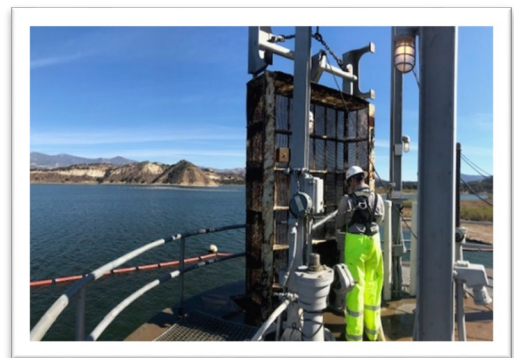
- Protecting and maintaining the water conveyance system.
- Analyzing watershed conditions - watershed stewardship.
- Implementing drought response and resiliency measures.
- Storing and conveying state water imports.
- Monitoring / defending against natural and human-made disasters.

**Initiative 2** Distribution Facilities Improvements

Goal: Identify, prioritize and implement projects necessary to protect, improve, and sustain the Cachuma Project conveyance system and appurtenant structures by:

Objectives:

- Continuing infrastructure improvement planning.
- Developing and updating asset management plan.
- Updating the risk and resiliency plan.
- Improving facilities security and emergency preparedness plans.
- Continuing technology improvements toward operation and maintenance activities.



SUSTAINABILITY INITIATIVES, GOALS AND OBJECTIVES (continued)

Initiative 3

Environmental Stewardship and Public Trust Resources

Goal: Continue to monitor and mitigate for changing climate conditions, develop and implement strategies to increase sustainability of the steelhead trout population and improve fish passages along the Santa Ynez River by:

Objectives:

- Implementing the provisions of the 2000 BiOp.
- Protecting and enhancing steelhead habitats in accordance with the FMP.
- Adhering to environmental regulatory requirements.
- Improving watershed protection.
- Working to mitigate climate crisis effects of COMB operations.



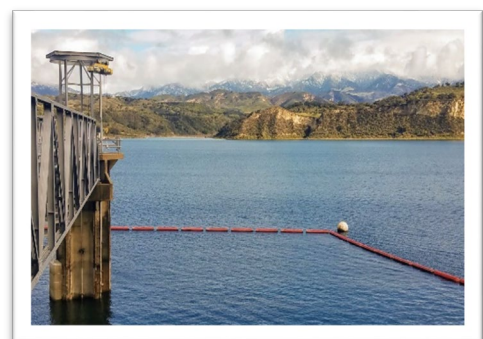
Initiative 4

Cost-Effectiveness and Value

Goal: Maintain and improve the cost effectiveness and value of COMB services to our Member Agencies by:

Objectives:

- Managing and maintaining infrastructure efficiently.
- Continuing to review and prioritize IIP.
- Investing in system improvements and sustainably efficient equipment for better, more economical results and climate change resiliency.
- Enhancing asset management program.
- Leveraging technology to improve system.



SUSTAINABILITY INITIATIVES, GOALS AND OBJECTIVES (continued)

Initiative 5**Organizational Policies and Financial Responsibility**

Goal: Operate within approved policies in a productive, transparent and efficient manner to ensure sound financial stability by:

Objectives:

- Advancing the development of policies and procedures in an ever-changing legal and regulatory environment.
- Enhancing the annual financial audit practices and budget document formulation.
- Developing short and long-term financial plans.
- Adhering to risk transfer practices.
- Leveraging advances in technology.

**Initiative 6****Foster Leadership and Strengthen Workforce Capabilities**

Goal: Continue to promote a safe and positive work environment and provide equal opportunities for employees to use their diverse talents to grow professionally and prepare for challenges of the future by:

Objectives:

- Promoting a safe and socially equitable working environment.
- Providing training and continuing education.
- Advancing licensing and certification for staff members.
- Investing in professional growth opportunities.
- Reinforcing employee retention through workplace / leadership practices.



INTEGRATION OF SUSTAINABILITY INITIATIVES WITH MISSION AND PLANNING DOCUMENTS

The Plan seeks to coordinate the many existing COMB plans, policies, programs and actions that encompass and support sustainability initiatives. The Plan allows COMB to articulate where we are now, where we should be, and establishes goals and implementable actions that puts the agency on a clear path to achieve sustainability for future generations to come.

ASSOCIATED PLANNING DOCUMENTS

Integrated Regional Water Management (IRWMP) Plan:

The IRWMP is a collaborative effort created by a group of cooperating partners with mutual interest who have identified and implemented water management solutions to achieve social, environmental, and economic objectives throughout the Central Coast region. COMB has been a part of the group's formation since 2007, participating in monthly discussions to implement sustainable water projects in the area.



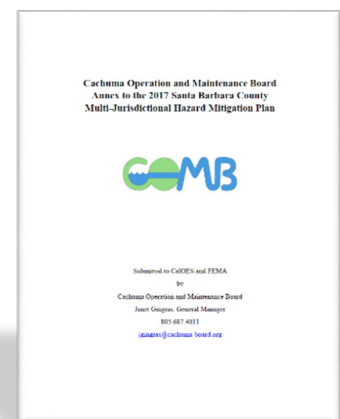
COMB's affiliation with IRWMP made it possible to apply for and receive grant monies with funding applied to the much needed MURRP and EPFP. Participation in IRWMP continues to allow COMB to be aware of various funding opportunities which may contribute to improvement and sustainability of the SCC infrastructure.

COMB Hazard Mitigation Plan:

The purpose of a Hazard Mitigation Plan (HMP) is to identify policies and actions that can be implemented to reduce risk and future losses from disasters. HMPs create a framework for risk-based decision-making to reduce damage to lives, property and local economies by focusing resources on the greatest risks and vulnerabilities

State, local and tribal governments benefit from HMP adoption in the following ways:

- Hazard mitigation planning creates a more disaster-resistant and resilient community.
- HMP adoption allows access to hazard mitigation assistance programs and funding, including Hazard Mitigation Grant Programs, Pre-Disaster Mitigation, Flood Mitigation Assistance and Severe Repetitive Loss Grant Programs.

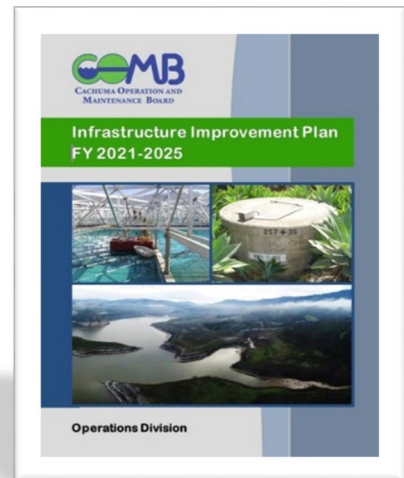


ASSOCIATED PLANNING DOCUMENTS (continued)

COMB Infrastructure Improvement Plan (IIP):

The IIP formalizes the strategy for implementation of capital projects and programs needed to carry out the goals and policy objectives of the COMB Board. The IIP is organized and structured to identify and prioritize rehabilitation projects necessary to protect, improve, and sustain a reliable source of water conveyed from the Cachuma Project to the COMB Member Agencies.

Projects outlined in the IIP have been identified based on Reclamation inspection recommendations, COMB asset inventory analysis, and other staff observations and recommendations. The identification of a project within the five-year plan does not guarantee construction. The initiation of any project requires Board approval for a project to advance to design and ultimately construction. Additionally, the Board of Directors has the ongoing ability to review and revise projects based upon unforeseen conditions, priorities, and financial resources.



Injury & Illness Prevention Program (IIPP):

The purpose of the COMB IIPP is to create an organized approach to accident prevention that meets California regulatory compliance. In line with OSHA safety regulation, our IIPP aims to provide employees with the training, communication and knowledge necessary to reduce employee injuries and perform operating procedures safely, at all times.

Valuing safety and operations knowledge within the workforce leads to retention of experienced employees who are far less prone to accidents and can save organizations thousands of dollars in workers compensation, both of which impact the social and economic aspects of sustainability.





IMPLEMENTING SUSTAINABILITY INITIATIVES



This page left blank intentionally

IMPLEMENTING SUSTAINABILITY INITIATIVES

COMB has identified thirty-six tasks that demonstrate our commitment to become a more sustainable organization. Several of these tasks focus on actions necessary to address the current climate crisis with the intent of moving towards carbon neutrality. These tasks are further aligned with COMB's mission and therefore puts our purpose into action. Tasks were selected after considerable research as well as an evaluation of COMB's current structure, organizational practices, assets and operations. Tasks have been systematized into the six initiatives discussed in the previous section that supports a balanced approach to our success.

COMB acknowledges that many of these tasks exist in our ongoing management practices and planning documents such as the IIP. The Plan intentionally combines these efforts into one document that will be used as tool for informed decision-making going forward. The document will be used to monitor and measure the benefits of our actions to the COMB Board, our Member Agencies and stakeholders.



SUSTAINABILITY INITIATIVES

Table 4.1 provides a summary of the thirty-six sustainability tasks within the six initiatives and their expected completion date as determined by COMB staff.

Table 4.1 - Sustainability Tasks FY 2022 – 2027

Ref	Project Name	Expected Completion
1.0	Water Supply Reliability	
1.1	Task - EPF Secured Pipeline	Summer 2022
1.2	Task - EPF Pump Station (if needed)	Summer 2023
1.3	Task - North Portal Intake Tower Seismic Assessment	FY 2026
1.4	Task - Continue to monitor the impact of changing climate conditions and disastrous events on watershed	FY 2022
1.5	Task - Water Quality Buoy / Sampling program	Ongoing
1.6	Task - Jet Flow Valve Replacement	FY 2026
2.0	Distribution Facilities Improvements	
2.1	Task - Rehabilitate SCC Lateral Structures	FY 2024
2.2	Task - SCADA Upgrades	FY 2022
2.3	Task - AVAR/BO Rehabilitation Program	FY 2023
2.4	Task - SCC Isolation Valve installation	FY 2022
2.5	Task - Critical Control Valve Replacement	FY 2030
2.6	Task - Meter Replacement Program	FY 2030
3.0	Environmental Stewardship and Public Trust Resources	
3.1	Task - Implement regulatory requirements per current and future BiOp	Ongoing
3.2	Task – Inspect and maintain completed fish passage projects	Ongoing
3.3	Task - Maintain Oak Tree program throughout required period	FY 2025
3.4	Task – Manage USGS Stream Gauge Program	Ongoing
3.5	Task – Install and maintain riparian corridor exclusionary fencing	Ongoing
3.6	Task - Monitor habitat through technology based methodologies	FY 2022

SUSTAINABILITY INITIATIVES (continued)

Table 4.1 - Sustainability Tasks FY 2022 – 2027 (Continued)

Ref	Project Name	Expected Completion
4.0	Cost-Effectiveness and Value	
4.1	Task – Identify and prioritize Infrastructure Improvement Projects	Ongoing
4.2	Task - Research grant funding opportunities for infrastructure and habitat improvements projects	Ongoing
4.3	Task – Perform COMB Operations Annual Work Plan	Ongoing
4.4	Task - Investigate and implement new technologies to advance operational efficiencies	Ongoing
4.5	Task – Explore alternate sources of renewable energy	FY 2025
4.6	Task – Develop a Green Fleet Policy	FY 2024
5.0	Organizational Policies and Financial Responsibility	
5.1	Task – Create an organizational culture of sustainability	Ongoing
5.2	Task – Uphold transparency principles	Ongoing
5.3	Task – Operate within approved financial resources	Ongoing
5.4	Task – Invest in “Commitment to Excellence” Program through ACWA JPIA	FY 2023
5.5	Task – Participate in the GFOA Award Programs	Ongoing
5.6	Task – Explore new technologies to be more productive and reduce disposable waste	Ongoing
6.0	Foster Leadership and Strengthen Workforce Capabilities	
6.1	Task - Annual Personnel Policy and Employee Handbook updates	Ongoing
6.2	Task – Promote social well-being within the organization	FY 2023
6.3	Task - Enroll Management in Leadership program through ACWA JPIA	FY 2023 / 2024
6.4	Task - Provide pathway to D3 certifications for operations personnel	FY 2022 / 2023
6.5	Task – Develop Employee Retention plan to promote longevity	FY 2023 / 2024
6.6	Task – Participate in the ACWA JPIA Vector Solutions Training Program	Ongoing

SUSTAINABILITY INITIATIVES (continued)**Initiative 1 - Water Supply Reliability**

Goal: Sustain a safe, reliable water supply for our Member Agencies.

Task 1.1**• Emergency Pumping Facility Secured Pipeline**

Water is conveyed from Lake Cachuma to the South Coast of Santa Barbara County through the Tecolote Tunnel Intake Tower via gravity flow. If the lake elevation drops below the sill of Gate 4 (678') of the tower, water has to be pumped from the lake through the use of the EPFP. The previous installations of the EPFP were temporary facilities with a floating pipeline and floating pump station.



*Tecolote Tunnel Intake Tower,
Lake Cachuma*

The EPF Secured Pipeline Project includes the installation of a 3,600-ft long HDPE pipeline that will be anchored to the bottom using pre-cast concrete anchor weights. The pipeline will connect to Gate 5 of the tower and extend to the site one location. During times of drought, the pipeline would connect to a floating pumping barge to ensure continued water deliveries to the COMB Member Agencies.

Project Completion Date: Summer 2022

Sustainability Impacts:

The Secured Pipeline Project will allow COMB and our Member Agencies to better prepare for and adapt to future drought events. The Project will make available the use of additional reservoir water and imported water until sufficient inflow to the lake occurs and the reservoir level returns to a normal operating condition. By securing the transmission pipeline portion of the EPF to the intake tower, COMB and its Member Agencies will realize a cost savings by avoiding the installation of a temporary pipeline each time the lake elevation drops below gravity feed. The pipeline will also reduce the frequency that the floating pump station would be deployed and then subsequently removed, potentially without being placed into operation.

SUSTAINABILITY INITIATIVES (continued)**Task 1.1 Secured Pipeline Project (continued)**

In addition, during non-drought times an intake screen at the Gate 5 elevation would allow access to colder, deeper water that typically has less organic carbon. The ability to draft colder deeper water allows the reduction in disinfection byproducts and reduced treatment costs.

Task 1.2

- **Emergency Pumping Facility (EPF) Pump Station (if needed)**

The EPF Pump Station Project would be required to be installed when the lake levels are projected to fall below the intake gates at the tower. The pumping facility provides a lifeline delivery of Cachuma Project water and imported SWP water to 200,000 residents on the South Coast of Santa Barbara County during times of drought. This project would be installed 120 days before the lake level recedes to 685' elevation.



EPF Pumping Facility

Project Completion Date: Summer 2023 (if needed)

Sustainability Impacts:

The EPF is powered by a temporary electrical connection through Pacific Gas & Electric (PG&E) which is contracted with the Central Coast Community Energy (3CE) program to provide clean and renewable energy to PG&E customers. The EPF will improve emergency preparedness by delivering critical water supplies during persistent drought. The system provides conveyance for both Cachuma and State Water imports at a fraction of the cost of purchased water on the open market. Without the drought-period operation of an emergency pump station, water service would be interrupted, causing a widespread immediate threat to public health and safety to the South Coast of Santa Barbara County.

Task 1.3

- **North Portal Intake Tower Seismic Assessment**

The North Portal Intake Tower was constructed by Reclamation in the 1950's, at which time, the standards for structural design requirements were not as stringent as today's compliance requirements. Structural elements of the intake structure would be examined to determine the general reliability of the tower, and recommendations for upgrades and refurbishments would be provided if needed. This project is scheduled to be performed when the lake level exposes a large portion of the intake tower.

SUSTAINABILITY INITIATIVES (continued)**Task 1.3 – North Portal Intake Tower Seismic Assessment** (continued)

Project Completion Date: FY 2026

Sustainability Impacts:

The uncertainty in structure reliability during a seismic event could result in losing the ability to deliver water to the South Coast while emergency repairs are being made.

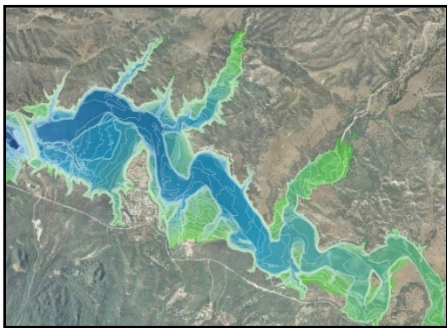


*Tecolote Tunnel Intake Tower,
Lake Cachuma*

Task 1.4

- **Continue to monitor the impact of changing climate conditions and disastrous events on watershed**

To better understand and mitigate the impact of climate change and disastrous events, such as wildfires and drought, COMB recently completed a two-year study on behalf of, and in coordination with, the COMB Member Agencies for addressing raw surface water quality and sedimentation issues at Lake Cachuma. The report identified Total Organic Carbon (TOC) and algal blooms as priority issues. The consultant also recommended a suite of management actions designed to increase understanding of water quality challenges.



COMB plans to engage a qualified consultant to provide professional services to complete the Lake Cachuma Organic Carbon / Phosphorous Sampling and Source Investigation project. The Project will, at a minimum, establish the primary source of TOC in Lake Cachuma, and will take sediment cores from the lake to characterize phosphorous (P) mass and quantify the rate of dissolved P flux under oxic and anoxic conditions.

Project Completion Date: FY 2022

Sustainability Impacts:

The project is aimed to increase the understanding of lake dynamics and provide a pathway for effective treatment solutions to the Member Agencies' water treatment facilities and to be better prepared for changing climate conditions and future disasters.

SUSTAINABILITY INITIATIVES (continued)**Task 1.5****• Water Quality Buoy / Sampling program**

The Lake Cachuma Evaporation and Water Quality Buoy is a buoy-based weather station for improved water quality and environmental monitoring, including an estimation of evaporative losses from the reservoir.

This project addresses a critical deficiency for water quality management, specifically, continuous and more granular water quality data needed from Lake Cachuma to inform critical decision making at member unit treatment facilities, including toxic algal bloom detection monitoring for early warning and proactive treatment and total organic carbon for management of trihalomethane formation.

Water quality samples are taken bi-weekly at the lake for data recording and quality indicators of source water. The Buoy was installed in Fiscal Year 2019.

Project Completion Date: Ongoing

Sustainability Impacts:

The Lake Cachuma Evaporation and Water Quality Buoy will increase environmental monitoring accuracy and through advance notification, provide financial savings to the treatment facilities.



Water Quality Buoy, Lake Cachuma



Cachuma Lake Water Quality Monitoring

SUSTAINABILITY INITIATIVES (continued)**Task 1.6****• Jet Flow Valve Replacement**

Located at the base of the Tecolote Tunnel, the Jet Flow Control Valve is the primary control for flow from Lake Cachuma into the South Coast Conduit. The project consists of producing designs and specifications to manufacture a new valve body and to rebuild using new and previously purchased internal components.

Project Completion Date: FY 2026

Sustainability Impacts:

Because the North Portal Jet Flow Control Valve controls the flow into the Tecolote Tunnel, failure could prevent or impact water deliveries to the cities of Goleta, Santa Barbara, Montecito, Summerland and Carpinteria which would cause social, financial and environmental impacts to the communities our Member Agencies serve. The current valve, after being removed, would be rebuilt using new components and would be kept on side and used as a redundant valve in case of failure.



*Tecolote Tunnel Intake Tower,
Lake Cachuma*



North Portal Jet Flow Control Valve

SUSTAINABILITY INITIATIVES (continued)

Initiative 2 - Distribution Facilities Improvements

Goal: Identify, prioritize and implement projects necessary to protect, improve, and sustain the Cachuma Project conveyance system and appurtenant structures.

Task 2.1

• Rehabilitate SCC Lateral Structures

There are forty-four lateral connections housed in concrete cylinder structures on the Lower Reach of the South Coast Conduit. The function of these connections is to provide water to sections of the Montecito Water District and Carpinteria Valley Water District.

Twenty-six of the existing lateral appurtenances in the lower reach pose an operational risk due to age, corrosion, and unreliable valve operating conditions. This project would replace corroded pipe and inoperable valves and air vents on SCC lateral connections.

Project Completion Date: FY 2024

Sustainability Impacts:

The dependability of these valves is necessary to provide reliable water service to customers served in sections of the Montecito and Carpinteria Water District Boundary areas. Without rehabilitation, a major facility failure in multiple locations could occur with potential water contamination which could affect the environment, cause substantial financial and social impacts and lead to an unsustainable conveyance system.



Lateral Structure Vault



Structure Maintenance

SUSTAINABILITY INITIATIVES (continued)

Task 2.2

• SCADA Upgrades

The “Supervisory Control and Data Acquisition” system (SCADA) serves to collect important monitoring data on flows, reservoir elevations, alarms and communication, turbidity, pH, temperature, and valve positions. This project involves the replacement of all legacy PLCs in their existing control panels, installation of new PLC processors, software, and I/O modules.

Project Completion Date: FY 2022

Sustainability Impacts:

The SCADA system increases the efficiency of COMB staff by providing notification alarms for operational staff to investigate, which enhances system reliability and sustainability.



SCADA Control Panel

Task 2.3

• AVAR/BO Rehabilitation Program



Combination air vacuum air release valves (AVARs) are located at high points along the pipeline and act to expel air automatically and relieve vacuum accumulation in pipes. Blow-off (BO) structures exist on all low points of a water distribution system. This project proposes to rehabilitate these aging components and bring them up to standards.

Project Completion Date: FY 2023

Sustainability Impacts:

If AVAR vaults become flooded or if a negative pressure is experienced within the pipeline, the AVAR valves could allow contaminated water to enter the pipeline. The dependability of these components is necessary to allow the system to be dewatered for maintenance and response to an emergency break in the pipe. Without rehabilitation, a major facility failure in multiple locations could occur with potential water contamination that could affect the environment, cause substantial financial and social impacts and lead to an unsustainable conveyance system.

SUSTAINABILITY INITIATIVES (continued)**Task 2.4****• SCC Isolation Valve installation**

To allow for shutdown repairs and continued water delivery in the event of disruption of service in the South Coast Conduit, additional in-line isolation valves are needed in the South Coast Conduit. A pipeline break due to natural disaster could result in escaping flows. In an emergency scenario such as this, a line valve would divide the conduit, limiting outflow. In addition, several AVAR/BO structures on the South Coast Conduit are in disrepair and need periodic rehabilitation requiring a shutdown of the SCC. A line valve would allow COMB to rehabilitate these important structures with less disruption to customers.

Project Completion Date: FY 2022

Sustainability Impacts:

The installation of the isolation valve would enable the conveyance system to be shutdown in times of emergency or for routine maintenance on the system. The sustainability benefit of the project would bring economic and social value to the customers our Member Agencies serve by protecting the life of the pipeline while ensuring water reliability.

Task 2.5**• Critical Control Valve replacement**

A majority of the valves located at control stations along the South Coast Conduit are original and were installed in the 1950s. There are over 50 large diameter valves in the system, ranging in size from 24" to 48". Several of these valves are critical for operations, but many of the valves are obsolete and are not utilized for operations. During previous maintenance work and shutdowns, key valves in the system have been characterized as exhibiting excessive leak-by. This program would replace critical valves in the system at key control station locations.

Project Completion Date: FY 2030



Sheffield Control Station Valve

SUSTAINABILITY INITIATIVES (continued)**Task 2.5 - Critical Control Valve Replacement** (Continued)*Sustainability Impacts:*

This project would involve the systematic replacement of key control valves in the system with known operational deficiencies. Control station piping would be streamlined to reflect current operations and obsolete valving would be removed from the control stations thus making the system both economically and environmentally sustainable by improving system resiliency and providing water reliability.

Task 2.6**• Meter Replacement Program**

COMB's water meters are critical to the water accounting and system operations. Several meters in the system have reached limited-life cycle phase and are in need of replacement during the next five years.

Project Completion Date: FY 2030

Sustainability Impacts:

This project, if not completed, could impact system operations and water accounting accuracy and jeopardize compliance with Section 64561 of Titles 17 and 22 California Code of Regulations. This project addresses a critical deficiency and will have economic and environmental long-term sustainability impacts by locating and preventing water loss and improved water accounting through accurate reading of usage.



Ortega Inflow Mag Meter

SUSTAINABILITY INITIATIVES (continued)

Initiative 3 - Environmental Stewardship and Public Trust Resources

Goal: Continue to monitor and mitigate for changing climate conditions, develop and implement strategies to protect our natural resources, increase the sustainability of the steelhead trout population and improve fish passages along the Santa Ynez River.

Task 3.1

- Implement regulatory requirements per current and future BiOp

In compliance with the 2000 BiOp, State Water Board Order and as described in the FMP and the monitoring program in the 2000 Revised Biological Assessment, the COMB Fisheries Division staff will continue to conduct routine monitoring of steelhead/rainbow trout population and their habitat on the Lower Santa Ynez River (LSYR) below Bradbury Dam. These activities include lake profiles, snorkel surveys, beaver dam surveys, redd surveys, migrant trapping and target flow monitoring. The results of these activities are reported in the Annual Monitoring Summary.

Project Completion Date: Ongoing

Sustainability Impacts:

By implementing these actions, stakeholders in the Cachuma Project have created significant additional habitat for steelhead within the Santa Ynez River watershed.



SUSTAINABILITY INITIATIVES (continued)

Task 3.2

- Inspect and maintain completed fish passage projects

COMB staff has completed ten (10) fish passage projects on Quiota Creek. All projects are bottomless arched culverts, some with in-stream elements such as rock weirs for grade control and root wads to create fish habitats. COMB contracts with an external consultant to perform an annual survey of each project, which includes a hydraulic review of the grade control structures and instream elements. In addition, after high stormflow events, COMB inspects all project sites to assure each crossing and instream elements are functioning as designed and that any protective measures remain properly in place.



Quiota Creek Fish Passage

Estimated Completion Date: Ongoing

Sustainability Impacts:

Routine inspection and maintenance ensures that any adjustments necessitated by changes to the site can be made quickly so that fish habitat is not negatively impacted.

Task 3.3

- Maintain Oak Tree program throughout required period

COMB will continue its efforts of planting and maintaining oak trees as part of the Lake Cachuma Oak Tree Program in order to meet its mitigation objective of 4,721 alive and self-sustaining trees by 2025. The results of the most recent 2020 annual tree inventory reported that 5,350 oak trees have been planted to-date and 57 trees have been adopted for a total of 5,407 trees. Of that amount, 4,341 oak trees are alive which represents a survival rate of 80.28%. The number still to be planted to meet the program objective is 380 trees.



Lake Cachuma County Park

Project Completion Date: 2025

Sustainability Impacts:

Forest regrowth is a form of carbon sequestration, which is the process of capturing and storing atmospheric carbon dioxide. It is one method of reducing carbon dioxide in the atmosphere with the goal of reducing global climate change.

SUSTAINABILITY INITIATIVES (continued)

Task 3.4

• Manage USGS Stream Gauge Program

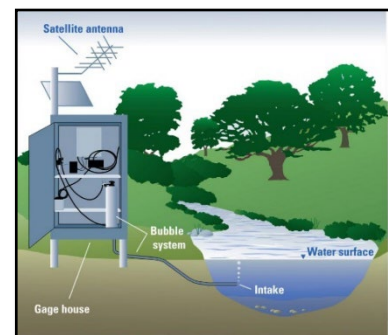
The USGS stream-gauging program provides hydrologic information needed to help define, use, and manage water resources in the Santa Ynez River system. The program provides a continuous, well-documented, well-archived, unbiased, and broad-based source of reliable and consistent water data. Because of the consistent, prescribed standards by which the data are collected and processed, the data from individual stations are commonly used for purposes beyond the original purpose for an individual station.

Project Completion Date: Ongoing

Sustainability Impacts:

Benefits of the program include the following:

- Characterizing current water-quality conditions.
- Monitoring BiOp compliance with minimum target flow requirements.
- Enhancing the public safety by providing data for forecasting and managing floods.



Stream Gauge Station

Task 3.5

• Install and maintain riparian corridor exclusionary fencing

Cattle can negatively impact the riparian corridor and instream habitat for native *O. mykiss* by denuding vegetation causing erosion, increasing turbidity, trampling spawning sites, and reducing habitat complexity. This project involves the ongoing maintenance and improvement of the already successful exclusionary cattle-fencing project along the LSYR tributaries.

Project Completion Date: Ongoing

Sustainability Impacts:

COMB's efforts will improve and protect critical habitat for native *O. mykiss*, improve water quality, maintain riparian growth, decrease mass wasting/siltation and assist local ranchers.



SUSTAINABILITY INITIATIVES (continued)

Task 3.6

• Monitor habitat through technology based methodologies



PIT Tag Reader

The California Department of Fish and Wildlife (CDFW), under permit from the National Marine Fisheries Service (NMFS), has PIT (Passive Integrated Transponders) tagged multiple fish (*Oncorhynchus mykiss*, *O. mykiss*) in the LSJR basin in association with fish rescues conducted in the late spring of 2021.

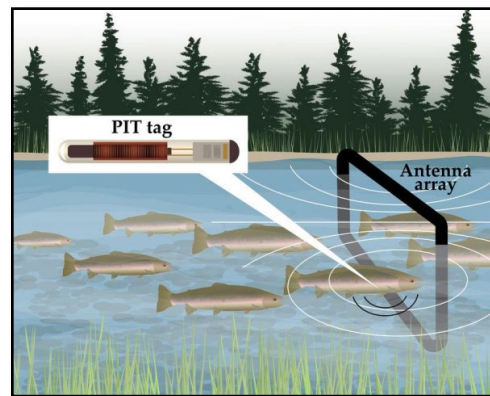
The COMB Fisheries Division will initiate a PIT tag-monitoring program starting with a feasibility study to learn about the technology including methods for data analysis.

Project Completion Date: FY 2022

Sustainability Impacts:

The objectives of the monitoring effort include:

- To monitor movement of *O. mykiss* within the LSJR basin which would include anadromous fish from the ocean and resident fish within the watershed to document migration timing, abundance, survival rate, and age distribution.
- Estimate *O. mykiss* outmigrant smolt and returning adult migration rates that could be correlated with environmental factors.
- Evaluate and document the effectiveness of required regulatory target flow releases from Lake Cachuma to the LSJR to benefit the downstream fishery by facilitating fish movement and survival.



PIT Tag Antenna Array

SUSTAINABILITY INITIATIVES (continued)**Initiative 4 - Cost-Effectiveness and Value**

Goal: Maintain and improve the cost effectiveness and value of COMB services to our Member Agencies.

Task 4.1**• Identify and Prioritize Infrastructure Improvement Projects**

Staff, in coordination with COMB Member Agency technical staff, developed a Five-Year Infrastructure Improvement Plan (IIP) for purposes of planning and forecasting essential capital improvements within the South Coast Conduit system. The IIP formalizes the strategy for implementation of capital projects and programs needed to carry out the goals and policy objectives of the Board.

The IIP is updated prior to the annual budget presentation and submitted to the Operations Committee for review and comment. Following Committee review and recommendations, the IIP and its annual amendments are presented to the Board of Directors for final approval.

Project Completion Date: Ongoing

Sustainability Benefits:

The IIP is organized and structured to identify and prioritize rehabilitation projects necessary to protect, improve, and sustain a reliable source of water conveyed from the Cachuma Project to the South Coast communities of Santa Barbara County.



SUSTAINABILITY INITIATIVES (continued)

Task 4.2

- Research grant funding opportunities for infrastructure and habitat improvements projects

COMB will continue to research grant funding opportunities for infrastructure and habitat improvements projects in an effort to offset project costs otherwise funded through member assessments. COMB has developed a grant program by utilizing a team of staff members to write proposals, administer grants and carry out grant contracts. COMB has applied for and received various federal and state contracts for habitat enhancement, fisheries projects within the Lower Santa Ynez River drainage and South Coast pipeline improvement projects. In the last ten years, COMB has collected \$12.4M in grant funds, as shown in the following table.

Table 4.2 - Grant Revenues - Previous Ten Fiscal Years

Fiscal Year	Grantor	Project	Amount
2011-12	CA Department of Water Resources	Modified Upper Reach Reliability Project	\$ 2,886,072
2011-12	California Department of Fish and Wildlife	Quiota Creek Crossing No. 2	700,528
2011-12	Pacific States Marine Fisheries Commission	Cross Creek Ranch Weir Repairs	8,940
2012-13	CA Department of Water Resources	Modified Upper Reach Reliability Project	313,928
2012-13	California Wildlife Conservation Board	Quiota Creek Crossing No. 7	358,103
2012-13	California Department of Fish and Wildlife	Quiota Creek Crossing No. 7	400,108
2013-14	Fish America Foundation	Cattle Exclusionary Fencing Project	17,935
2013-14	California Department of Fish and Wildlife	Quiota Creek Crossing No. 1	521,141
2013-14	California Wildlife Conservation Board	Quiota Creek Crossing No. 1	150,000
2014-15	IRWMP Proposition 84 Drought Round	Emergency Pumping Facilities Project	1,037,828
2015-16	California Department of Fish and Wildlife	Quiota Creek Crossing No. 3	705,205
2016-17	California Department of Fish and Wildlife	Quiota Creek Crossing No. 0A	604,638
2016-17	California Department of Fish and Wildlife	Quiota Creek Crossing No. 4	937,838
2017-18	FEMA/CalOES	Thomas Debris Flow	121,266
2017-18	Reclamation	North Portal Debris Boom	35,000
2017-18	County of Santa Barbara	North Portal Debris Boom	30,000
2018-19	California Department of Fish and Wildlife	Quiota Creek Crossing No. 5	893,287
2018-19	California Department of Fish and Wildlife	Quiota Creek Crossing No. 9	993,121
2019-20	California Department of Fish and Wildlife	Quiota Creek Crossing No. 8	1,010,700
2019-20	FEMA/CalOES	Sycamore Canyon Slope Stabilization	562,024
2019-20	ACWA JPIA	Wellness Grant	448
2020-21	FEMA/CalOES	Sycamore Canyon Slope Stabilization	3,737
2020-21	National Fish and Wildlife Foundation	Quiota Creek Crossing No. 8	43,280
Total			\$ 12,335,127

Project Completion Date: Ongoing

Sustainability Benefits:

The utilization of these grants has assisted COMB in accomplishing required fisheries restoration and habitat improvement projects as well as vital infrastructure improvement projects while avoiding subsequent assessments to the COMB Member Agencies.

SUSTAINABILITY INITIATIVES (continued)

Task 4.3

• Perform COMB Operations Annual Work Plan

The COMB Operations Division has the responsibility to operate, repair and maintain all Cachuma Project facilities from the Intake Tower at Lake Cachuma to the Carpinteria Reservoir. Under the Annual Work Plan, Operation and Maintenance staff performs routine maintenance on the distribution and storage system.

Project Completion Date: Ongoing

Sustainability Benefits:

The Annual Work Plan sets forth all activities necessary to ensure system reliability, address deficiencies and identify projects to be included in the Infrastructure Improvement Program of work.



COMB Lauro Control Station

Task 4.4

• Investigate and implement new technologies to advance operational efficiencies and reduce impacts of climate change

COMB recognizes the importance of technology to increase operational efficiencies and reduce impacts of climate change. For example, the use of GIS technologies for the mapping of the SCC pipeline and appurtenances have been essential to facilitate accurate locations for repair and maintenance of the conveyance system. Those same technology enhanced field operations in the fisheries program of work for the implementation of restoration projects and to understand better the changes in the watershed and the surrounding tributaries.

Under this task, COMB will assess existing practices and systems, and explore and promote new technology to streamline our processes and integrate our systems better. Additionally, as equipment is replaced, COMB will seek and evaluate environmentally friendly, carbon neutral replacement options.

Project Completion Date: Ongoing

Sustainability Impacts:

Access to new technology will provide staff with the ability to better serve our stakeholders, increase productivity, better adapt to climate change and lower overhead costs.

SUSTAINABILITY INITIATIVES (continued)**Task 4.5****• Explore alternate sources of renewable energy**

COMB staff will explore opportunities for alternate sources of renewable energy such as solar or hydro-electric power to be installed at the COMB office and/or outlying facilities. The goal of the project is to increase efficiency of COMB's energy system and sourcing of renewable energy.

Project Completion Date: FY 2025

Sustainability Impacts:

The benefits of renewable energy include cleaner air, lower carbon emissions, the conservation of natural resources, and substantial long-term savings.



COMB Office Building

Task 4.6**• Develop a Green Fleet Policy**

To demonstrate our commitment to sustainability, COMB will develop a Green Fleet Policy that addresses ways to reduce fuel use and emissions through actions and technologies such as electric vehicles and charging stations, carpooling, vehicle “right sizing”, driver education programs, and fuel and vehicle management programs that enable detailed tracking use and expenditures.

Project Completion Date: FY 2024

Sustainability Impacts:

Transportation is a significant source of air pollution and the largest contributor of greenhouse gas emissions in California. Air pollution is linked to increased rates of cancer, heart and lung disease, asthma and allergies. Carbon dioxide pollution, a greenhouse gas, causes climate change. In addition, by improving efficiency, a greener fleet can significantly reduce lifecycle costs and vulnerability to volatile fuel prices.

SUSTAINABILITY INITIATIVES (continued)

Initiative 5 - Organizational Policies and Financial Responsibility

Goal: Operate within approved policies in a productive, transparent and efficient manner to ensure sound financial stability.

Task 5.1

- Create an organizational culture of sustainability

To be a sustainable organization requires a continuous commitment by COMB management and staff. COMB will create a sustainability welcome packet for new employees that describes our vision and our commitment to sustainability practices. COMB will foster an environment that encourages existing staff to identify and recommend new sustainable concepts and projects with an emphasis on addressing climate change and its impacts. Finally, COMB will review progress made in the Plan with staff on a biennial basis.



Project Completion Date: Ongoing

Sustainability Benefits:

Developing sustainable practices will streamline operations, make COMB more efficient, and conserve resources while decreasing our agency's operational costs.

Task 5.2

- Uphold transparency principles

COMB recognizes that transparency is key to effective governance. COMB ensures compliance with these principles through Board and staff ethics training, open and transparent public meetings and the posting of governance policies and documents on our website.



Project Completion Date: Ongoing

Sustainability Impacts:

Transparency promotes integrity and ensures accountability of a government by making information easily available, which can be used to measure an agency's performance and to guard against any possible misuse of power or misallocation of resources.

SUSTAINABILITY INITIATIVES (continued)

Task 5.3

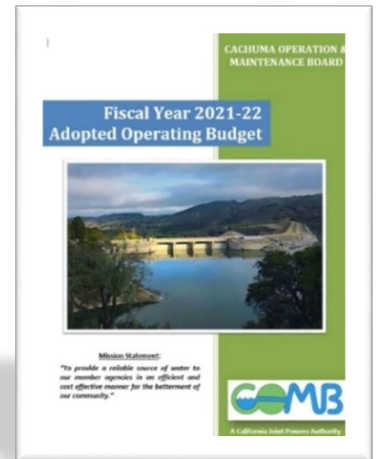
- Operate within approved financial resources

COMB will make every effort to keep current expenditures less than current assessments and revenues to avoid subsequent assessments to its Member Agencies. Additionally, COMB will continue to evaluate both current activities and proposals for future projects to ensure long-term financial and operational stability.

Completion Date: Ongoing

Sustainability Impacts:

COMB's primary budget objective is to provide the highest possible level of service to COMB's stakeholders and members of the public without impairing COMB's financial condition.



Task 5.4

- Invest in "Commitment to Excellence" Program through ACWA JPIA

It is COMB's intention to participate in the ACWA JPIA Commitment to Excellence Program. The program incorporates best practice concepts related to vehicle, infrastructure, construction, employment practices, ergonomics, accident claims, and wildfires.

Project Completion Date: FY 2023

Sustainability Impacts:

The Commitment to Excellence program is intended to promote the health and safety of COMB staff while reducing the frequency and severity of liability, workers' compensation, and property loss claims.



SUSTAINABILITY INITIATIVES (continued)

Task 5.5

- Participate in the GFOA Award Programs

COMB participates in the Government Finance Officers Association (GFOA) Award Programs including the Certificate of Achievement for Excellence in Financial Reporting Program and the Distinguished Budget Presentation Awards Program.



Completion Date: Ongoing

The goal of the GFOA Award Programs is to encourage and assist state and local governments to go beyond the minimum requirements of generally accepted accounting principles to prepare annual comprehensive financial reports and budget documents of the very highest quality, promote transparency and full disclosure, and demonstrate a commitment to long term financial planning.

Task 5.6

- Explore new technologies to be more productive and reduce disposable waste

COMB adopted an electronic signature policy to increase productivity and ensure convenient, timely, and appropriate access to District information by using electronic signature technology to collect and preserve signatures on documents quickly, securely, and efficiently.

COMB will continue to explore new technologies in an effort to move to a paperless workplace that has minimal paper-based processes and relies on digitized documents instead. This will involve transitioning to an electronic document managing system that digitizes files and stores them in a central repository as determined by COMB policy.

Project Completion Date: Ongoing

Sustainability Impacts:

COMB is committed to responsible production, consumption and reuse of products, thereby preventing waste materials from entering landfills, water and air to preserve both human and environmental health.



SUSTAINABILITY INITIATIVES (continued)

Initiative 6 - Foster Leadership and Strengthen Workforce Capabilities

Goal: Continue to promote a safe and positive work environment and provide equal opportunities for employees to use their diverse talents to grow professionally and prepare for challenges of the future.

Task 6.1

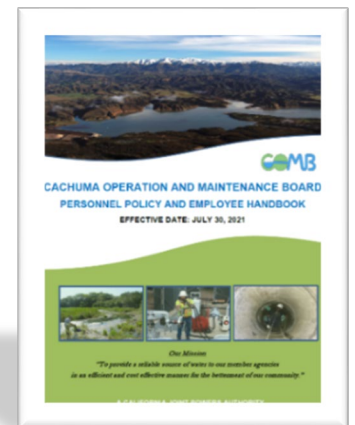
- Annual Personnel Policy and Employee Handbook updates

It is COMB's policy to update the handbook annually to ensure compliance with new employment laws and changes to personnel policies.

Project Completion Date: Ongoing

Sustainability Impacts:

The document serves as a reference manual for new and current employees and contains useful information concerning responsibilities and expectations, employee benefits as well as state and federal employment regulations. In addition, a thorough and compliant handbook will assist an organization defend against an employee labor or discrimination claim.



Task 6.2

- Promote social well-being within the organization

COMB will develop an Employee Health and Wellness Plan to engage employees on a voluntary basis, increase awareness of positive health behaviors, and provide opportunities through a supportive work environment to foster positive lifestyle changes.

Project Completion Date: FY 2022

Sustainability Impacts:

The program will seek to increase employee morale and productivity while reducing absenteeism, and improve employee health care costs through preventative measures.



SUSTAINABILITY INITIATIVES (Continued)

Task 6.3

- Enroll Management in Leadership program through ACWA JPIA

COMB is committed to enrolling its management staff in the Leadership Essentials for the Water Industry program offered through ACWA JPIA. The year-long leadership program consists of 50 academic hours of learning divided into four in-classroom sessions along with monthly webinars and back-at-work assignments.



Project Completion Date: FY 2023 / 2024

Sustainability Impacts:

The curriculum is specifically formulated to assist participants to lead effectively across three leadership spectrums: self-leadership, team leadership, and agency leadership. The program is an excellent opportunity to collaborate with other leaders in the water industry throughout the state.

Task 6.4

- Provide pathway to D3 certifications for Operations personnel

In February 2022, the State Water Resources Control Board, Division of Drinking Water (DDW) re-activated COMB's Domestic Water Supply Permit for the South Coast Conduit. In doing so, DDW classified the South Coast Conduit as a Distribution 3 (D3) system. This classification, among other things, allows COMB staff to pursue a D3 certification.



Project Completion Date: FY 2022 / 2023

Sustainability Impacts:

The pursuit of D3 certification will allow COMB staff to advance their career path as Water Distribution Operators and at the same time increase staff recruitment and promote longevity. The certification program will also provide assurance to our stakeholders of the depth of experience in our distribution staff.

SUSTAINABILITY INITIATIVES (continued)

Task 6.5

- **Develop Employee Retention plan to promote longevity**



Employee retention is critical to the sustainability and success of an organization. Turnover costs can have a significant negative impact on an organization's performance and employee morale. Providing a challenging and rewarding workplace for a talented and interested staff requires implementing opportunities for growth and engagement. COMB will develop an Employee Retention plan that offers educational and

work experience opportunities to enable staff to continue their professional and personal development. In addition, COMB's management culture fosters a workplace where employee morale is a priority and where innovative ideas and suggestions are nurtured and encouraged.

Project Completion Date: FY 2023 / 2024

Sustainability Impacts:

The financial and time consuming investment in selecting and maintaining COMB's talented workforce offers organizational sustainability through long-term employment and subsequent preservation of historical working knowledge in a complex system.

Task 6.6

- **Participate in the ACWA JPIA Vector Solutions Online Training Program**

Through its membership with ACWA JPIA, COMB staff has access to a web-based training and risk management platform. Training courses cover a wide range of topics including business skills, cybersecurity, human resources, motor vehicle safety, office productivity, OSHA compliance, project management, water and waste water.

Project Completion Date: Ongoing

Sustainability Impacts:

Staff training and development can help COMB gain and retain top talent, increase job satisfaction and morale, and improve productivity and workplace safety.



ALIGNMENT WITH SUSTAINABILITY PILLARS

As described in this Plan, COMB is committed to integrating the three sustainability pillars into our ordinary operations and long-term resource management. If any one of the pillars are undermined, then the system as a whole is unsustainable. These principles provide a basis for evaluating and prioritizing projects undertaken by COMB.

The tasks in this Plan, have been aligned with the three sustainability pillars based on the guidelines below:



Environmental Sustainability

1. Does it serve to protect, conserve, and enhance our natural resources and/or critical habitat?
2. Does it seek ways to mitigate the causes of climate change on our community and watershed?
3. Does it reduce our dependence on resources such as electricity, natural gas, and other fossil fuels?
4. Does it protect or improve the ability for future generations to meet their water supply needs.

Economic Sustainability

1. Does it improve the resiliency of or extend the life of an asset or critical infrastructure?
2. Does it reduce operational costs or maintenance repairs?
3. Does it add value for our stakeholders (financial and/or water supply reliability)?
4. Does it increase productivity or efficiency?

Social Sustainability

1. Does it protect public health and safety of our stakeholders and the community we serve?
2. Does it support a safe and healthy work environment for our employees?
3. Does it foster an equitable, cultural and socially diverse atmosphere?
4. Does it promote personal well-being or professional development of staff?
5. Does it place an emphasis on acknowledging and rewarding staff's work efforts in order to create a long term loyal workforce?

ALIGNMENT WITH SUSTAINABILITY PILLARS (continued)

Table 4.3 – Sustainability Tasks

Ref	Project Name	Sustainability Pillars		
		Environment	Economic	Social
1.0	Water Supply Reliability			
1.1	Task - EPF Secured Pipeline	✓	✓	✓
1.2	Task - EPF Pump Station (if needed)	✓	✓	✓
1.3	Task - North Portal Intake Tower Seismic Assessment		✓	✓
1.4	Task - Continue to monitor the impact of changing climate conditions and disastrous events on watershed	✓	✓	✓
1.5	Task - Water Quality Buoy / Sampling program	✓	✓	✓
1.6	Task - Jet Flow Valve Replacement		✓	✓
2.0	Distribution Facilities Improvements			
2.1	Task - Rehabilitate SCC Lateral Structures	✓	✓	✓
2.2	Task - SCADA Upgrades		✓	
2.3	Task - AVAR/BO Rehabilitation Program	✓	✓	
2.4	Task - SCC Isolation Valve installation	✓	✓	
2.5	Task - Critical Control Valve Replacement	✓	✓	
2.6	Task - Meter Replacement Program	✓	✓	
3.0	Environmental Stewardship and Public Trust Resources			
3.1	Task - Implement regulatory requirements per current and future BiOp	✓	✓	✓
3.2	Task – Inspect and maintain completed fish passage projects	✓	✓	
3.3	Task - Maintain Oak Tree program throughout required period	✓	✓	✓
3.4	Task – Manage USGS Stream Gauge Program	✓	✓	
3.5	Task – Install and maintain riparian corridor exclusionary fencing	✓	✓	✓
3.6	Task - Monitor habitat through technology based methodologies	✓	✓	

ALIGNMENT WITH SUSTAINABILITY PILLARS (continued)

Table 4.3 – Sustainability Tasks (continued)

Ref	Project Name			
		Environment	Economic	Social
4.0	Cost-Effectiveness and Value			
4.1	Task – Identify and prioritize Infrastructure Improvement Projects		✓	✓
4.2	Task - Research grant funding opportunities for infrastructure and habitat improvements projects	✓	✓	✓
4.3	Task – Perform COMB Operations Annual Work Plan		✓	
4.4	Task - Investigate and implement new technologies to advance operational efficiencies	✓	✓	✓
4.5	Task – Explore alternate sources of renewable energy	✓	✓	✓
4.6	Task – Develop a Green Fleet Policy	✓	✓	✓
5.0	Organizational Policies and Financial Responsibility			
5.1	Task – Create an organizational culture of sustainability	✓	✓	✓
5.2	Task – Uphold transparency principles	✓	✓	✓
5.3	Task – Operate within approved financial resources		✓	✓
5.4	Task – Invest in “Commitment to Excellence” Program through ACWA JPIA		✓	✓
5.5	Task – Participate in the GFOA Award Programs		✓	✓
5.6	Task – Explore new technologies to be more productive and reduce disposable waste	✓	✓	✓
6.0	Foster Leadership and Strengthen Workforce Capabilities			
6.1	Task - Annual Personnel Policy and Employee Handbook updates		✓	✓
6.2	Task – Promote social well-being within the organization		✓	✓
6.3	Task - Enroll Management in Leadership program through ACWA JPIA		✓	✓
6.4	Task - Provide pathway to D3 certifications for operations personnel		✓	✓
6.5	Task – Develop Employee Retention plan to promote longevity		✓	✓
6.6	Task – Participate in the ACWA JPIA Vector Solutions Online Training Program	✓	✓	✓

ALIGNMENT WITH SUSTAINABILITY PILLARS (continued)

As previously stated, COMB is committed to providing exemplary services that are consistent with our history, mission and unique composition. To be successful, we must be sustainable. We will evaluate our success through a triple bottom line lens – people, planet and prosperity. Table 4.3 demonstrates how these initial thirty-six tasks overlap and interconnect and, if followed in action, achieve results consistent with operating a sustainable organization.

These tasks further reinforce our purpose which is to operate and maintain the Cachuma Project Transfer Project Works and to coordinate with our Member Agencies to ensure that water supply meet daily demands. To that end, COMB will have a positive impact on the stakeholders we serve by making strategic decisions and promoting public policies that support sustainability.





**SUSTAINABILITY PRACTICES
IN ACTION**



This page left blank intentionally

ALIGNMENT BETWEEN COMB MISSION AND SUSTAINABILITY PLAN

COMB is committed to providing exemplary services that are consistent with our history, mission and unique composition. Our actions are guided by the COMB mission:

*“To provide a reliable source of water to our Member Agencies
in an efficient and cost effective manner
for the betterment of our community.”*

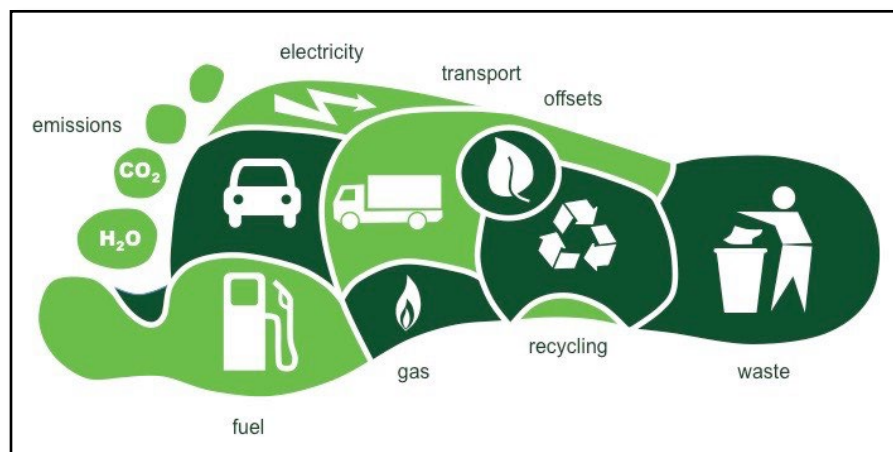
Sustainability has always been embedded in the foundation of our agency strategy. Creating value for our stakeholders and more broadly, for our society and employees, is a key to the long-term resilience and inherent value of COMB. The sustainability framework, which underpins our strategy, puts our purpose into action. We must continue to integrate sustainability into our governance structure and processes, so that, within the scope of COMB’s responsibilities, it informs our future strategic and operational decisions.

REDUCE OUR CARBON FOOTPRINT

COMB is committed to setting targets and implementing a pathway forward to achieve carbon neutrality that includes:

- Investing in energy efficiency measures and renewable onsite power.
- Choosing lower-emitting alternatives when procuring equipment, materials and fuels.
- Considering suppliers with lower Greenhouse Gas Emission supply chains in our evaluation of suppliers.

COMB will apply both adaptation and mitigation measures as part of our efforts to address climate change. The Plan is intended to identify opportunities and solutions to achieve climate resilience and future sustainability.



IMPLEMENTATION

COMB staff will develop implementation plans for each task as well as measure and monitor success. The Plan will be further used as a guiding tool in the development of the annual COMB budget and other short and long-term planning documents.

MONITORING AND REPORTING

The Plan has identified six initiatives that have related goals and objectives. If actions are successfully implemented, objectives will be achieved and goals will be reached. To evaluate whether an objective has been accomplished, COMB will track key performance data and align the data with numerical targets.

Reporting and monitoring progress made in each of the proposed initiative areas is integral to the Plan. Every two years, COMB will produce a short, interim report to evaluate progress toward completion of each project or initiative. COMB will also consider new initiatives or modifications to existing initiatives. Every five years, the agency will provide an in-depth analysis of the current status of all initiatives, progress made toward each and any other sustainability efforts to be incorporated into the Plan for the upcoming five years.

It is important to stress that these proposed initiatives/projects are flexible and contingent on funding. While this is the current Plan, fluctuations in environment, community needs and funding availability may dictate not currently anticipated action or changes to the priority of planned projects.



OUR COMMITMENT GOING FORWARD

Sustainability at COMB isn't a choice but a paramount responsibility. The design of this Plan is only the first step on a long road. Commitment to execute these initiatives will require dedicated, consolidated effort from COMB staff going forward. The Plan is designed to prioritize sustainability within the parameters of all of COMB's operations. Hence, the initiatives outlined in this Plan are consistent with the maintenance of the conduit and structures, fisheries habitat improvements and administrative tasks. The Plan further provides a platform to document efforts and achievements. It may, in turn, assist other agencies realize their own sustainability potential and develop plans to promote a healthier community.

All of these efforts combine to achieve measurable levels of positive environmental impact throughout COMB's continued operations. It is in the best interest of COMB, our Member Agencies and community to make decisions that ensure a dependable and sustainable water source. Intense droughts, rising temperatures, and other imminent environmental hazards resulting from climate change not only affect the water supply but impact the quality of life for the community we live in. These crises will worsen if no action is taken to mitigate their effects. Therefore, COMB implements this Plan as its initial course of action to mitigate and contribute to the reversal of hazards that threaten our valuable resources.



This page left blank intentionally



APPENDICES



This page left blank intentionally



LIST OF APPENDICES

APPENDIX 1: COMB ORGANIZATION STRUCTURE

APPENDIX 2: CACHUMA PROJECT FACILITIES MAP

APPENDIX 3: COMB MANAGED ASSETS

APPENDIX: 4: LIST OF ACRONYMS AND ABBREVIATIONS

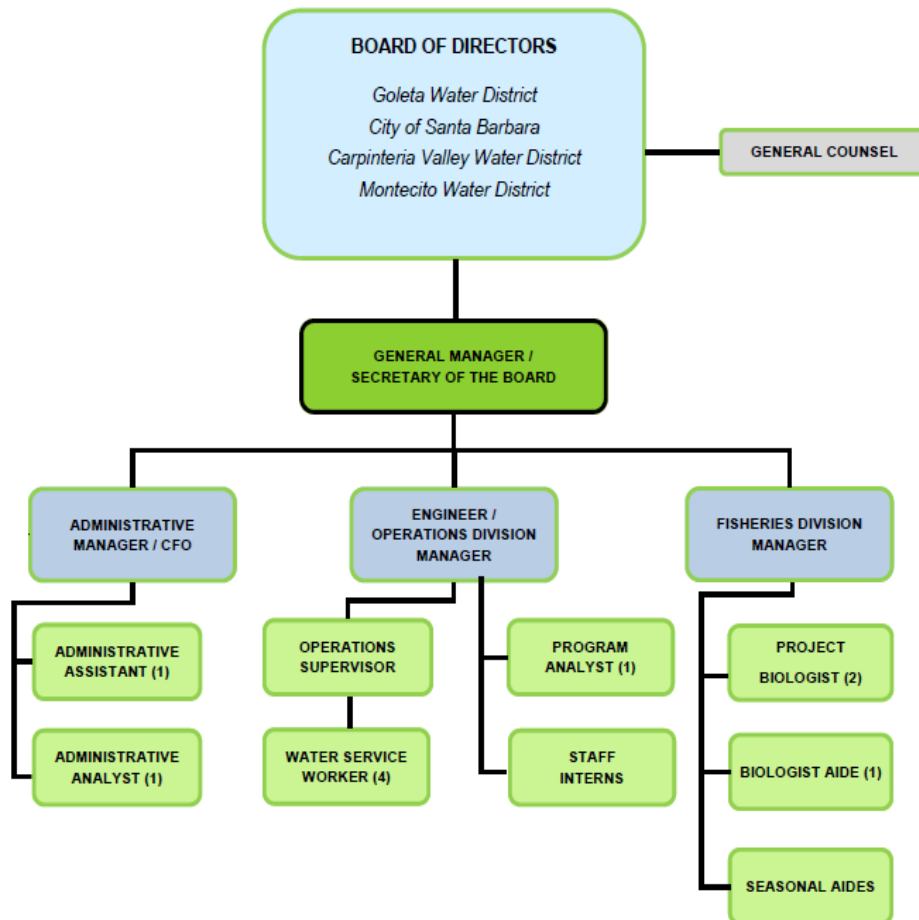
This page left blank intentionally

ORGANIZATIONAL STRUCTURE

The Governing Board is composed of one publicly elected representative member from each of the governing bodies and is appointed by appropriate action of each governing board to serve on the COMB Board. The appointed Board members are authorized to carry out the provisions of the JPA agreement and any other agreement entered into by the Governing Board. The Board of Directors is responsible for setting policy on matters such as fiscal management and financial planning, Board administration, infrastructure improvements, and long-range planning documents.

Day-to-day operations are executed by the General Manager who serves at the pleasure of the Board. The General Manager oversees a staff of fifteen full-time employees and two fulltime equivalent (FTE) seasonal employees.

COMB Organizational Structure

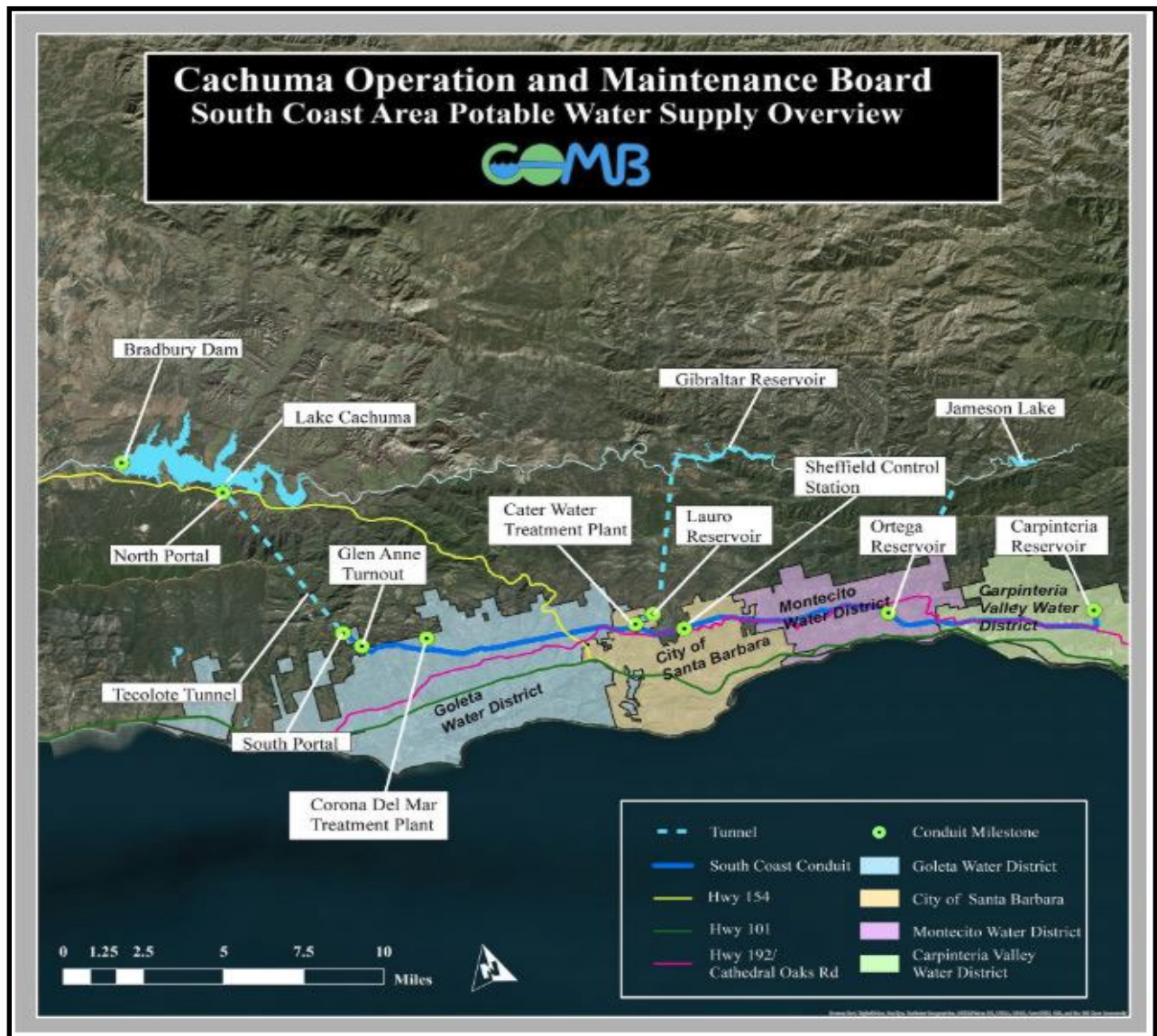


CACHUMA PROJECT FACILITIES MAP

Lake Cachuma and Bradbury Dam are located on the Santa Ynez River approximately 25 miles northwest of Santa Barbara. Water from Lake Cachuma is conveyed to the COMB Member Agencies through the Tecolote Tunnel intake tower at the east end of the reservoir. The Tecolote Tunnel extends 6.4 miles through the Santa Ynez Mountains from Lake Cachuma to the headworks of the SCC.

The SCC system is a high-pressure concrete pipeline that extends over 26 miles from the Tecolote Tunnel outlet to the Carpinteria area and includes four regulating reservoirs and various appurtenant structures.

Cachuma Project Facilities Map

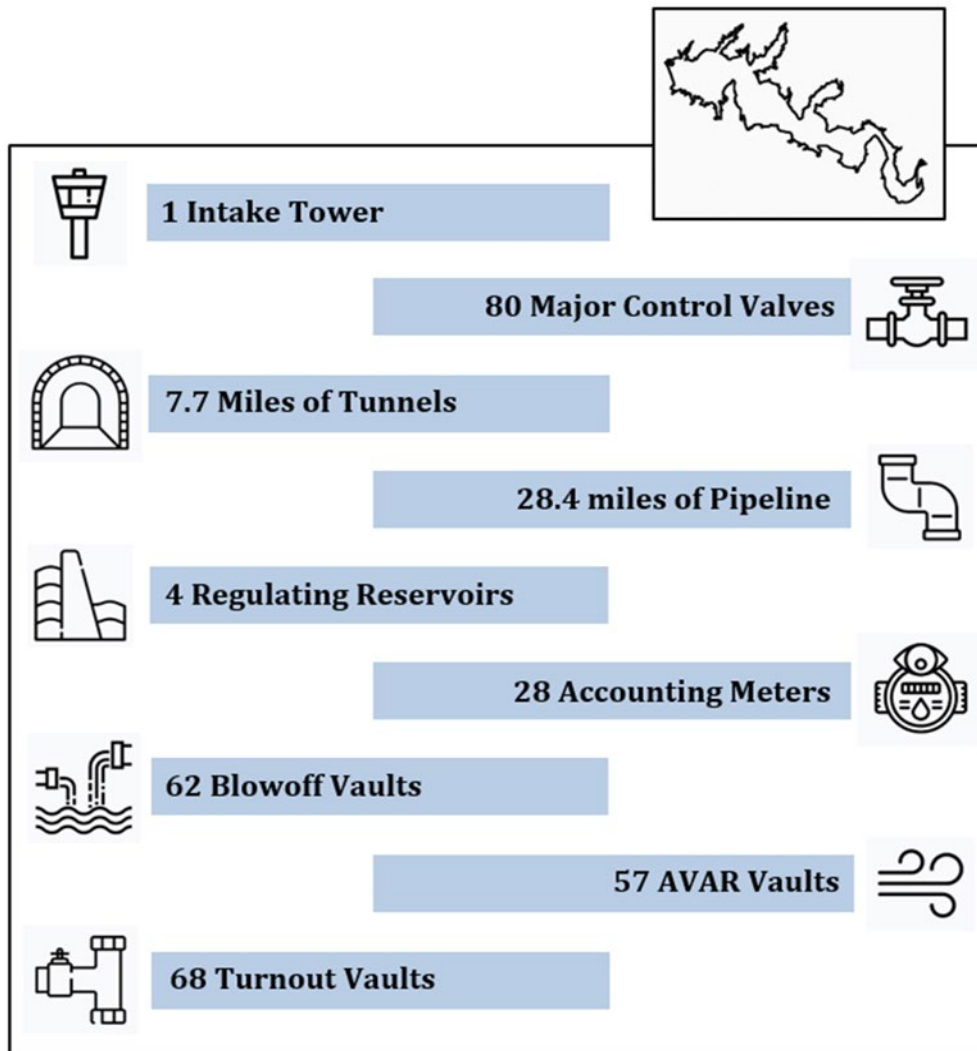


COMB MANAGED ASSETS

COMB, through a Transferred Project Works contract, is responsible for operating and maintaining the USBR facilities. COMB operates and maintains the Cachuma Project critical infrastructure assets, which include the North Portal, Tecolote Tunnel, SCC, Sheffield Tunnel, and Glen Anne, Lauro, Ortega, and Carpinteria Reservoir locations.

A comprehensive asset management tool was assembled by COMB staff for organizing a hierarchy of assets, which can be characterized by asset class, original cost, replacement cost, effective life, probability of failure, and renewal strategy (abandon, maintain, repair, replace), among other inputs. It is useful for viewing assets and their current conditions in a single location, while identifying assets or categories of assets that will need near or long-term work.

COMB Managed Assets



COMB MANAGED ASSETS (continued)**Intake Tower**

COMB operates and maintains the North Portal Intake Tower, which diverts water from Lake Cachuma into the Tecolote Tunnel and through the SCC for delivery to COMB Member Agencies. The vertical intake tower was built by Reclamation during construction of the Cachuma Project and stands 120 feet tall. The intake tower is located approximately mid-reservoir and contains five slide gates, each at varying levels on the pentagonal-shaped tower. The slide gates are used to manage the conveyance of water from the lake at various elevations depending on lake conditions.



*Tecolote Tunnel Intake Tower,
Lake Cachuma*

Valves

COMB operates and maintains over 80 large control valves and slide gates located within gate chambers, control stations, and dam inlet-outlet works. Most of the large control valves measure 30 inches or more in diameter. The large control valves are located throughout the system and allow distribution or service area isolation when maintenance on the system is required. COMB performs annual maintenance to ensure their operability.



Lauro Control Station Valve

Tunnels

COMB maintains four separate tunnels covering over 7.7 miles throughout the Cachuma Project system. The tunnels vary in length, with the most significant being the 6.4-mile Tecolote Tunnel, which provides water conveyance from Lake Cachuma through the Santa Ynez Mountains to the SCC where it is delivered to the water districts. The horseshoe shaped, concrete walled tunnels were built by Reclamation during the construction of the Cachuma Project.



Tecolote Tunnel

COMB MANAGED ASSETS (continued)

Pipeline

COMB operates and maintains over 28.4 miles of concrete conveyance pipeline throughout the system. The primary pipeline is referred to as the SCC and is composed of over 9.5 miles of 48-inch diameter reinforced concrete cylinder pipe in the upper reach of the system, and 17.0 miles of 27 to 36-inch bar-wrapped concrete cylinder pipe within the lower reach.

The SCC is original except for 330 feet installed as part of a Highway 154 realignment project in 1970, 2,900 feet of welded steel pipe installed in 1980, and approximately 2,000 feet of welded steel pipe installed in the upper reach as part of the MURRP in 2012.



Modified Upper Reach Reliability Project (MURRP) completed 2012

Reservoirs



Carpinteria Reservoir

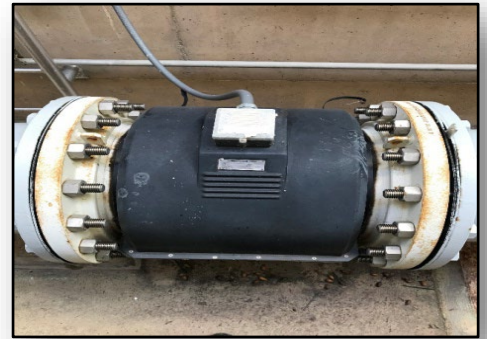
COMB operates and maintains four regulating reservoirs, which balance conveyance operations within the south coast area of the Cachuma Project system.

Two of the reservoirs are zoned earth-filled embankment dams originally designed and installed by Reclamation. Lauro Dam has a structural height of 137 feet, a crest length of 540 feet, and a storage capacity of 518 acre-feet. Seismic safety modifications were completed in 2006, which brought the facility into seismic compliance. Glen Anne Dam located in the upper reach is currently non-operational. The two reservoirs

located in the lower reach of the system are Ortega Reservoir and Carpinteria Reservoir. They are homogenous earth-filled structures and provide for over 100 acre-feet of storage capacity combined. Both Ortega and Carpinteria Reservoirs have two separate bays divided by a center wall and were covered with aluminum roofs in 2007 and 2005, respectively.

COMB MANAGED ASSETS (continued)**Meters**

COMB reads and maintains 28 accounting meters throughout the system. Of the 28 meters, 11 are integrated with SCADA to allow remote tracking and historical logging of flow measurements. COMB also tracks pressure and water quality parameters such as turbidity, specific conductance, pH, and temperature, using sensors located at the North Portal.



Ortega Inflow Mag Meter

Structures

COMB operates and maintains approximately 200 SCC structures throughout the system. This includes 62 blow-off vaults, 57 air-vacuum air-release vaults, and 68 turnouts through the peaks and valleys of SCC system. The purpose of these appurtenant structures is to allow staff access to system components, in order to release/admit air for pipeline protection, release water for maintenance purposes or emergencies, and to service internal assembly and/or valve



Structure Maintenance

LIST OF ACRONYMS AND ABBREVIATIONS

ACWA	Association of California Water Agencies
AFY	Acre Foot per Year
AVAR/BO	Air Vacuum Air Release / Blow Off
BiOp	Biological Opinion
CDFW	California Department of Fish and Wildlife
COMB	Cachuma Operation and Maintenance Board
D3	Distribution 3
DDW	Division of Drinking Water
EPF	Emergency Pumping Facility
EPFP	Emergency Pumping Facilities Project
FY	Fiscal Year
FMP	Fish Management Plan
GIS	Geographic Information System
IIP	Infrastructure Improvement Plan
IIPP	Injury and Illness Prevention Plan
IRWMP	Integrated Regional Water Management Program
JPA	Joint Powers Authority
JPIA	Joint Power Insurance Authority
LYSR	Lower Santa Ynez River
MURRP	Modified Upper Release Reliability Project
NMFS	National Marine Fisheries Service
P	Phosphorous
PIT	Passive Integrated Transponders
PLAN	COMB Sustainability Plan
Reclamation	United States Bureau of Reclamation
SCADA	Supervisory Control and Data Acquisition
SCC	South Coast Conduit
SWP	State Water Project
SYR	Santa Ynez River
TOC	Total Organic Compound

This page left blank intentionally

This page left blank intentionally



Cachuma Operation and Maintenance Board
3301 Laurel Canyon Road
Santa Barbara, CA 93105
www.cachuma-board.org