

APPROVED BY THE BOARD OF DIRECTORS
NOVEMBER 19, 2014



2020 BUSINESS PLAN

TOGETHER, WE ARE A MODEL OF EXCELLENCE AND INNOVATION

ENCINA WASTEWATER AUTHORITY
6200 AVENIDA ENCINAS, CARLSBAD, CALIFORNIA 92011

2020 BUSINESS PLAN

ENCINA WASTEWATER AUTHORITY

The Encina Wastewater Authority (EWA) is a public agency serving an alliance of governments that work cooperatively to provide wastewater services in northwest San Diego County. Founded in 1961, EWA operates, maintains, and administers the Encina Joint Sewerage System (Encina System) on behalf of its six (6) member agencies: the City of Vista, the City of Carlsbad, the Buena Sanitation District, the Vallecitos Water District, the Leucadia Wastewater District, and the City of Encinitas. EWA and the Encina System serve 358,000 people in a 123 square mile service area.

- The Encina System includes the Encina Water Pollution Control Facility (EWPCF), the Encina Ocean Outfall (Outfall), and the Agua Hedionda (AHPS) and Buena Vista (BVPS) pump stations.
- EWA is a contract operator of other regional clean water infrastructure facilities for their respective owner members including the Carlsbad Water Reclamation Facility, the Buena Sanitation District Facilities, and the Raceway Basin Pump Station.
- Since 1980, Encina Member Agencies have invested over \$600 million in the Encina System – its replacement value is currently estimated at nearly \$370 million.

The EWA alliance is a model of excellence and innovation. EWA has received over 40 awards for organizational excellence and innovation over the past decade. These accolades reflect the competence of EWA's highly qualified, trained, and certified workforce.

- The Environmental Protection Agency (EPA) has recognized EWA as a national leader in green power production in 2011, 2012, 2013, and 2014.
- The California Water Environment Association named the EWPCF California's "Plant of the Year" in 2005, 2011 and 2013.
- EPA also recognized EWA's Biosolids Management Program as the nation's best in 2006.

EWA is currently well-positioned to provide reliable services, meeting both regulatory and internal standards through January 2020.

PURPOSE OF THIS PLAN

The Encina 2020 Business Plan (Plan) is focused on the future, addressing risks and opportunities likely to arise within the Plan's "planning horizon" which is January 2015 through January 2020. Specifically, EWA's 2020 Business Plan is designed to meet the following objectives:

1. Ratify a 5 year planning horizon for addressing the future performance of EWA.
2. Support the planning activities of Encina's member agencies.
3. Identify the Key Policy Issues and related investments likely to come before EWA's Board of Directors from January 2015 through January 2020.
4. Estimate capital and operating budget trends for the planning horizon.
5. Establish a frequency and process for reviewing and updating the plan.
6. Create confidence among the Board of Directors, member agency staff, and community leaders that EWA's staff understands future risks, opportunities, and investment alternatives.

NAVIGATING THIS PLAN

Strategic Direction - The 2013 Business Plan formally established EWA’s strategic direction that includes the organization’s Vision, Mission, and Behavioral Values. Each of these strategic elements, with minor adjustments presented below, has continuing relevance through the planning horizon.

Business Values - The overall context for addressing EWA’s future is its Vision, Mission, and Business Values. Business Values describe EWA’s commitments to provide compelling value to its member agencies and communities.

Standards - In order to provide compelling value consistent with its Business Values, it is critical that EWA develop and comply with standards. *A standard is simply a rule, a level of quality, or an achievement that is considered acceptable or desirable.* EWA’s standards drive its activities, decisions, and proposed investments. Some of these standards are legal or regulatory, for example complying with the Clean Water Act, and others are developed by EWA in collaboration with member agencies.

Key Policy Issues (KPI’s) - Key Policy Issues in EWA’s 2020 Business Plan outline a significant challenge, opportunity, or proposed investment likely to come before the Board of Directors within the planning horizon. The Key Policy Issues describe EWA’s view of the future. The information provided in each Policy Issue creates a context for future decision-making, therefore, KPIs do not address every issue facing EWA, nor do they provide all the pertinent technical details. Rather, they create a context for future collaborations with the Board of Directors, member agencies and the public, ultimately leading to a Board of Directors policy decision that resolves the issue. This resolution could be a decision to invest, modify a standard, or change the timeframe for addressing the issue.

Financial Projections – Projections look at EWA operating and capital expenditures since 1980 and project expenses during the planning horizon.

STRATEGIC DIRECTION

VISION

Together, we are a model of excellence and innovation.

MISSION

As an environmental leader, EWA provides reliable and fiscally responsible water resource recovery services to the communities of Northwest San Diego County.

BEHAVIORAL VALUES

We are guided in our daily decisions and activities by these values:

Integrity

We are open, honest, and ethical in all our communications and our actions.

Respect

We give thoughtful consideration to each other’s differences and opinions.

Valuing People

We are committed to communications and supportive teamwork in our effort to remain an employer of choice.

Commitment

We give our individual best to get the job done right.

Responsibility

We are accountable for our behaviors, actions, and use of the public resources entrusted to our stewardship.

Leadership

Leadership opportunities exist for every employee.

BUSINESS VALUES

CO-EQUAL BUSINESS VALUES

Our “Business Values” describe EWA’s co-equal commitments to provide compelling value to its member agencies and the communities it serves. Our Business Values establish a consistent framework for identifying issues, evaluating and implementing solutions, and providing context for the development of all of EWA’s standards. These Business Values also enable EWA to categorize its activities for consistency and clarity in all communications. EWA’s co-equal commitments to its members and the communities it serves are:



CO-EQUAL BUSINESS VALUES - THE FRAMEWORK FOR A STANDARDS DRIVEN ORGANIZATION

The following descriptions address the relevance of our Business Values and introduce the most critical standards that define EWA’s organizational effectiveness and efficiency and therefore its value to the community. EWA’s primary standard is expressed in its Vision: Together, we are a model of excellence and innovation. This standard is aspirational. Future challenges and opportunities, including more specific and evolving standards, changing environmental and asset conditions, and shifting community needs are objective questions of public policy addressed in the Key Policy Issues (KPI’s) that follow.

Protect the Pacific Ocean - EWA protects the Pacific Ocean by ensuring highly reliable water treatment and ocean delivery infrastructure. The local marine environment is essential to maintaining the standard of living and economic health of the region. Our primary standard for this commitment is to meet or exceed all requirements of the EWPCF ocean discharge permit 24-hours-a-day, 365 days-a-year. EWA currently meets this standard as evidenced by over 2,000 consecutive compliance days.

Preserve Public Health - EWA preserves public health by ensuring highly reliable wastewater pumping, water and solids recycling, air emissions, and odor control infrastructure. Keeping wastewater in the pipe, supporting member agency water recycling efforts, producing organic nitrogen fertilizer, managing greenhouse gas emissions, and minimizing EWPCF odors all impact the quality of life in north county. Our primary standards for these commitments is to meet or exceed all requirements of the EWPCF air emissions permit and each remote facility’s waste discharge requirements 24-hours-a-day, 365 days-a-year. EWA currently meets this standard as evidenced by a single air permit violation during the past 5 years.

Develop Encina's Water Resources - With drought, increased stress on water supplies and the uncertainties arising from climate change and related research, the value of EWA's water resources will inevitably increase in value. Although EWA is not a water purveyor, the region would benefit from EWA facilitating a collaborative dialogue with member agencies and other stakeholders on regional water supply reliability and the timing and methods for beneficially reusing EWA's remaining water resources. Our primary standard for this commitment is to collaborate on regional water supply reliability.

Conduct Sound Planning – The effective and efficient operation, maintenance, and administration of Encina System requires sound planning. Managing public infrastructure for the foreseeable future is an intensive process, as evidenced by the Comprehensive Asset management Plan's (CAMP) 1, 5, and 20 year capital improvement program. A key aspect of EWA's planning is its ability to identify future risks and opportunities within the context of regulatory and internal standards. Many of these risks and opportunities are identified in existing and still relevant planning documents including: CAMP; the 2040 Master Plan (2014), the EWPCF Facilities Operation Plan (2014); the Community Engagement Plan (2013); the Energy and Emissions Strategic Plan (2012); and, the Biosolids Management Plan (2008).

Remain Efficient, Fiscally Responsible and Innovative - Staff is committed to continuously increasing efficiency and demonstrating fiscal responsibility across the enterprise through innovation. Our efficiency commitment is complemented by strong internal financial controls that are focused on meeting the financial and budgeting needs of member agencies, complying with accepted accounting standards, maintaining appropriate financial reserves, and ensuring proper allocation of costs. While EWA very like meets this standard currently, staff has not yet developed a consistent framework for communicating the value of efficiency, fiscal responsibility and innovation to member agencies. In the future, staff expects the Business Value Framework in this Plan to create a compelling and shared sense of EWA's value to the community.

Provide Meaningful Transparency – This is a fundamental requirement of public agencies. Transparency depends on two important parameters: 1) ensuring that the public has easy access to important information; and, 2) ensuring that EWA shares information that is meaningful and encourages sound policy decisions. What is most meaningful to the Board of Directors, the boards and councils of the member agencies, member agency staff, community leaders, and the public is information that clearly articulates why EWA is taking action and staff's motivations in proposing a specific investment. EWA's primary transparency commitments are timely and accurate response to public records requests, emphasizing standards and motivations in all communications, and to work openly and cooperatively with the member agencies in making investment proposals.

Invest Appropriately - The ability of EWA to provide compelling value depends on its ability to secure investment in necessary and appropriate resources and infrastructure. Neither over-investment nor under-investment serves the public interest, and thus both are antithetical to EWA's business values and standards. Achieving appropriate investment is the product of excellence and innovation in planning, setting standards, efficiency, fiscal responsibility, transparency, and communications. EWA's primary standards for this commitment are embedded within the Comprehensive Asset Management Plan (Physical Assets) and the Effective & Motivated Workforce Initiative (Personnel Assets).

STANDARDS

This Plan facilitates EWA's transition to an even more disciplined, standards driven organization. In the future, standards will drive all EWA activities, decisions, and proposed investments. The value EWA

provides to the communities it serves depends on developing and complying with standards. These organizational standards will continuously evolve throughout the planning horizon and provide a substantive basis for meaningful public policy deliberation. Each Business Value has dozens of evolving and progressively more detailed standards - some relevant and some irrelevant in terms of public policy.

Future investment proposals will typically express multiple business values. The table below illustrates how standards are linked to one or more Business Values, and selectively lists new or future standards that may be relevant to public policy within the planning horizon.

EWA Business Value	Current Standard	Potential Future Standard
Protect the Pacific Ocean	Meet ocean discharge permit standards 24/7/365	Capture and treat dry weather urban runoff
Preserve Public Health	Meet air emission permit standards 24/7/365	Reduce Green House Gas Emissions
Develop Encina’s Water Resources	Collaborate regionally on water reliability	Achieve beneficial reuse of 100% of EWPCF influent
Conduct Sound Planning	Develop 1, 5, and 20 Year Capital Improvement Plans	Study and mitigate reduced ocean discharges
Remain Efficient, Fiscally Responsible and Innovative	Prepare Accurate budgeting & cost allocation	Continuously improve efficiency, report results
Provide Meaningful Transparency	Provide timely response to public records requests	Encourage public dialogue about EWA’s standards
Invest Appropriately	Collaborate with members on needed investment	Make compelling cases for investment

KEY POLICY ISSUES

This Plan employs several important criteria for addressing future challenges and opportunities. These criteria include the following:

- Making sure that EWA remains compliant with current standards, which means responding to changes in the environment, service demands, or aging of assets.
- Anticipating and planning for changes in standards, including both regulations and internal standards.
- Responding to evolving community needs and changing roles of the organization.
- Taking advantage of opportunities to increase efficiency.

Assessing EWA’s operations and capital programs using the criteria above has led the EWA staff to consider and develop the following Key Policy Issues (KPI’s) that address future performance to standards or opportunities to increase overall enterprise efficiency or effectiveness.

KEY POLICY ISSUES

The following Key Policy Issues describe the discussions and decisions likely to come before the EWA Board of Directors during this Plan’s planning horizon: January 2015 to December 2019.

Key Policy Issue No. 1: Modernize Liquid Treatment Infrastructure

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Protect the Pacific Ocean • Preserve Public Health • Remain Efficient, Fiscally Responsible and Innovative
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Meet ocean discharge permit standards 24/7/365 • Highly reliable and predictable water treatment system • Data driven and life-cycle cost driven asset intervention
<i>Background</i>	EWPCF’s liquid treatment infrastructure (LTI) is a critical element of the wastewater treatment process and essential to complying with EWA’s ocean discharge permit.
<i>Challenge/ Opportunity</i>	<p>Aging of the LTI assets is causing the system to be more expensive to operate and less reliable. Specifically, this is due to the following issues:</p> <ul style="list-style-type: none"> • Other than routine planned maintenance, the most recent LTI improvements were made in 1992. • More than 50% of the LTI has been in service since 1983 or earlier; and, • The Secondary LTI requires a volume of pressurized air that accounts for over 50% of all the electrical energy used at the EWPCF - reducing this energy demand is a major opportunity.
<i>Solution</i>	<p>Construct the designed rehabilitation projects.</p> <p style="text-align: right;">Fiscal Impacts: CAMP estimate of Capital Costs: \$14.3M</p>
<i>Timing Concerns</i>	Action within the planning horizon is critical because the age of these assets is already causing operational efficiency declines or more difficulty in maintaining efficiency. Costs of ownership and operational risks are already increasing.
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. The work required to rehabilitate the existing assets is well understood, however, it may make sense to assess other proven and emerging LTI technologies, specifically conducting comparative life-cycle cost analysis and evaluating alternative delivery methods. 2. “Sweat” current asset i.e., make only those investments required to keep the asset operational during this planning horizon.



Key Policy Issue No. 2: Develop Technical Assessment of the Local Ocean Environment

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Protect the Pacific Ocean • Develop Encina’s Water Resources 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Fishable, swimmable local ocean environment • Comprehensive or credible knowledge of the environmental impacts of operations • Proactively address changes in environmental conditions 	
<i>Background</i>	<p>The Encina Ocean Outfall (Outfall) is arguably EWA’s most important asset for the following reasons:</p> <ul style="list-style-type: none"> • Although entirely invisible, EWA depends upon the Outfall to comply with the discharge permit • It is extremely unlikely that another ocean outfall will ever be constructed in north county or California; and, • Access to an ocean outfall would be extraordinarily valuable in assessing regional water reliability projects. 	
<i>Challenge/ Opportunity</i>	<p>Current information and data collection only address whether the Outfall is structurally sound. Therefore, at this time, EWA has no credible technical assessment of the environmental impacts in and around the Outfall arising from current operations or alternative future effluent scenarios.</p>	
<i>Proposed Solution</i>	<p>Seek a long-term research partnership with a university, private foundation, non-governmental organization or combination thereof to produce needed information on current Outfall environmental impacts and in various other effluent scenarios.</p>	<p>Fiscal Impacts: Negligible operating costs; dependent on partnership and funding approach.</p>
<i>Timing Concerns</i>	<p>Action during the planning horizon is critical, primarily to ensure that EWA possesses needed information related to changing effluent scenarios brought on by proposals to increase water reuse.</p>	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Develop a scope of work and issue a Request for Proposals to conduct the research. 2. Take no action unless and until required by a specific project or regulation. 	



Key Policy Issue No. 3: Remain Engaged in Industry Associations and Advocacy

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Remain Efficient, Fiscally Responsible and Innovative • Conduct Sound Planning • Invest Appropriately 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Anticipate future regulations and legal requirements • Maintain a highly qualified, trained, certified, and environmentally oriented workforce • Apply sound engineering and accounting practices • Sustain a safe and healthy working environment • Be active in industry associations 	
<i>Background</i>	<p>EWA operates highly regulated infrastructure subject to permits issued by the State Water Board, Air Pollution Control District and various other local authorities. Permit conditions impact Encina’s financial performance. Participation in industry advocacy organizations helps ensure EWA staff can help shape regulatory requirements imposed on the Encina System and gain technical insights relevant to current and future investments. Participation ensures EWA’s business values are relevant across the clean water community and helps to position EWA as an industry leader.</p>	
<i>Challenge/Opportunity</i>	<p>No major challenges as long as staff remains engaged in industry associations and advocacy.</p>	
<i>Proposed Solution</i>	<p>EWA Staff remains active in the following organizations: National Association of Clean Water Agencies, Clean Water America Alliance, Water Environment Federation, California Association of Sanitation Agencies, California Water Environment Association, WateReuse, California Special Districts Association, and CleanTech San Diego.</p>	<p>Fiscal Impacts: Operating costs of approximately \$75,000 annually for dues and participation.</p>
<i>Timing Concerns</i>	<p>Action during the planning period is critical to support both ocean discharge and air emissions permit renewals and other initiatives identified in this Plan.</p>	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Participate in fewer technical, professional, and advocacy groups. 2. Act as a “free rider” in the work of these organizations. 	



Key Policy Issue No. 4: Local Energy Reliability Initiative

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Remain Efficient, Fiscally Responsible and Innovative • Conduct Sound Planning • Invest Appropriately 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Continuously increase efficiency in all aspects of EWA operations • Achieve functional energy independence by 2016 • Pursue private partnerships when beneficial to EWA 	
<i>Background</i>	Renewable energy produced at the EWPCF is valuable to EWA, its member agencies, the community at large, and consumers.	
<i>Challenge/ Opportunity</i>	Projects currently underway and planned improvements at EWPCF will likely result in the production of renewable power that is not required to operate the EWPCF. This power may be available for other uses. Sale of this power could take many forms including an offset for energy demands related to local water reuse. Renewable energy projects attract private capital and performance contracting manages risk.	
<i>Proposed Solution</i>	Develop Local Energy Reliability Management Plan aimed at soliciting a public-private partnership that will transmit renewable power from EWPCF to an investor owned utility or consumers.	Fiscal Impacts: Costs of approximately \$150,000 for consultants to develop strategy and solicitation.
<i>Timing Concerns</i>	Action during the planning period is critical to ensure that EWA’s other facilities and maintenance plans take into account the value of the energy to the community, its role in achieving energy independence for EWA, and its potential to improve EWA’s financial position.	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Proceed directly to solicitation, allow private partners to propose strategies. 2. Flare any additional power not required for EWPCF operations during the planning period. 	



Key Policy Issue No. 5: Collaborate to Optimize Biosolids Program Performance

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Remain Efficient, Fiscally Responsible and Innovative • Preserve Public Health 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Compliance with CFR 503 Class “A” Exceptional Quality Biosolids regulations • Maintain stable costs and risk-managed biosolids management program • Continuously improve efficiency, report results 	
<i>Background</i>	<p>Excellence in biosolids management is a matter of EWA’s record and is among the primary reasons the Encina alliance exists. PureGreen Organic Nitrogen Fertilizer achieved the Biosolids Management Plan’s Diversified Portfolio Standard in 2013.</p>	
<i>Challenge/ Opportunity</i>	<p>At this writing, EWA is collaborating with Irvine Ranch Water District and Anaergia Services Inc., to realize the full value potential embedded in biosolids. Key issues are to increase production capacity, leverage marketing momentum, and make the choice between biosolids as a soil nutrient or biosolids as a renewable energy source. Collaboration is absolutely required for EWA operate effectively in fertilizer or energy markets.</p>	
<i>Solution:</i>	<p>Complete the Pyrolysis Demonstration Project with Anaergia Services Inc., report results and make policy recommendations to Board of Directors.</p>	<p>Fiscal Impact: \$100,000 in operating costs to complete the Pyrolysis Demonstration Project.</p>
<i>Timing Concerns</i>	<p>Action during the planning horizon is critical to control biosolids management costs and to execute opportunities presented by the Pyrolysis Demonstration.</p>	
<i>Alternatives:</i>	<ol style="list-style-type: none"> 1. Pyrolysis Demonstration – to be determined at the conclusion of the demonstration. 2. Execute a competitive process to award third-party performance contract to operate the heat dryer system and market PureGreen. 3. Execute a competitive process to award a contract for the sale of organic nitrogen fertilizer to partner(s) via a solicitation. 	



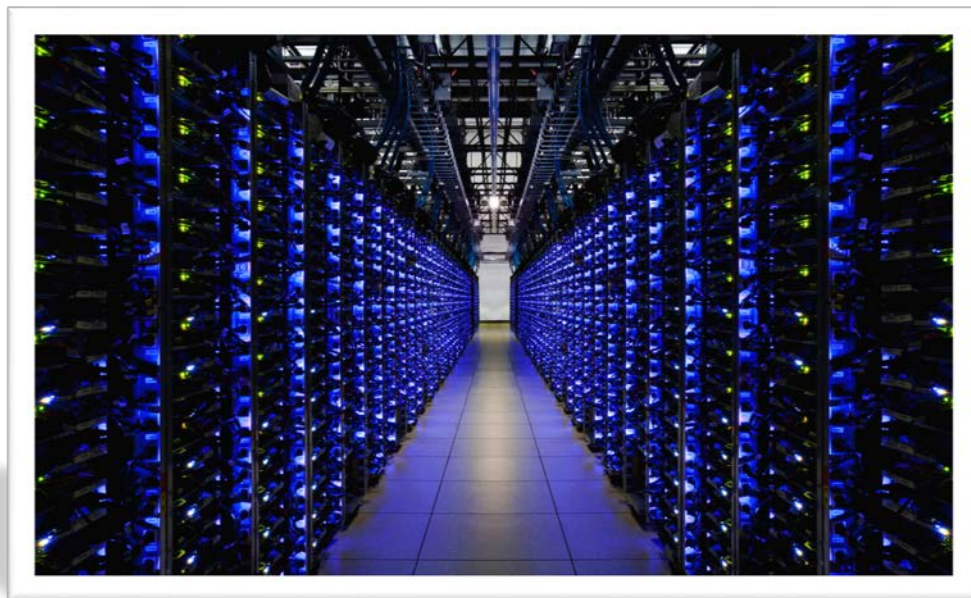
Key Policy Issue No. 6: Actively Support Member Agency Water Recycling Programs

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Develop Encina’s Water Resources • Preserve Public Health • Remain Efficient, Fiscally Responsible, and Innovative
<i>Most Relevant Standards:</i>	<ul style="list-style-type: none"> • Support member agency planning activities • Collaborate with member agencies on potable water reliability risks and needs • Operate the Encina System on a cooperative basis for the management of recycled water
<i>Background</i>	<p>EWA member agencies have significant investments in “purple pipe” water recycling infrastructure and a commitment to thousands of recycled water customers. EWA supports these investments through facility operations, production of high-quality secondary effluent, and treating solids at EWPCF that are separated at upstream facilities.</p>
<i>Challenge/ Opportunity</i>	<p>As of today, recycled water meets 4% of the total countywide water demand, this figure is expected to increase to 6% by 2020.</p>
<i>Solution</i>	<p>EWA and members coordinate planning efforts to ensure the value of member agency water recycling investments is enhanced through the local water reuse strategic planning process.</p> <p style="text-align: right;">Fiscal Impacts: Planning costs are embedded in the Local Water Reuse Strategic Plan.</p>
<i>Timing Concerns</i>	<p>Action within the planning period is critical to ensure these resources are leveraged to provide even greater value to the member agencies, especially given a growing demand for recycled water and the higher commodity values over planning period.</p>
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Leave member agency action in the local water reuse strategic planning process up to each individual member agency. 2. Ensure a new project stands on its own merit by not considering existing member agency investments in developing the water recycling in the local water reuse strategy.



Key Policy Issue No. 7: Implement Technology Master Plan

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Remain Efficient, Fiscally Responsible and Innovative • Conduct Sound Planning 	
<i>Most Relevant Standards:</i>	<ul style="list-style-type: none"> • Comprehensive planning drives EWA’s decisions • Continuously increase efficiency in all aspects of EWA’s operations 	
<i>Background</i>	Smart infrastructure is the single most important change on the horizon. Pumps and motors that tell mobile devices how they are performing, devices that monitor changes to influent characteristics and adjust unit process and chemical feed regimes, instantaneous fault recognition and correction, and remote operations are realities based on technologies available today.	
<i>Challenge/ Opportunity</i>	Currently, EWA does not have a full and quantitative assessment of the opportunities to increase performance and efficiency through the application of technology. Prudent infrastructure management compels EWA to move forward in a fiscally responsible manner.	
<i>Solution:</i>	Implement the Board of Directors approved Technology Master Plan through the annual CAMP and process.	Fiscal Impacts: CAMP estimate of Capital Costs: \$13.3M.
<i>Timing Concerns</i>	Action within the planning horizon is critical. Without a Technology Master Plan EWA will not fully understand the lost efficiencies associated with the current technology, and therefore the ongoing increased costs to member agencies.	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Presented annually with CAMP and Budget 2. “Sweat” EWA’s communications and SCADA backbone in stalled in 2000 – extended asset sweating in the technology space is usually preceded by suspension of manufacturer support. 	



Key Policy Issue No. 8: CMWD – EWA Local Water Reuse Strategic Plan

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Develop Encina’s Water Resources • Conduct Sound Planning • Remain Efficient, Fiscally Responsible, and Innovative 	
<i>Most Relevant Standards:</i>	<ul style="list-style-type: none"> • Support member agency planning activities • Build trust and support with policy makers and community leaders • Collaborate with member agencies on potable water reliability risks and needs • Operate the Encina System on a cooperative basis for the management of recycled water 	
<i>Background</i>	<p>Water is life – a critical commodity required to maintain all human activity, our economy and quality of life. San Diego County imports 90% of its potable water supply.</p>	
<i>Challenge/ Opportunity</i>	<p>As of this writing, California and the Colorado River Basin are experiencing extreme drought and climate change research indicates a much higher level of uncertainty in the reliability of existing water supplies. Carlsbad and EWA must plan cooperatively to ensure water produced can be delivered to a customers in a manner that leverages existing regional infrastructure.</p>	
<i>Solution</i>	<p>Cooperative development of a EWA coordinated Local Water Reuse Strategic Plan. EWA will coordinate with the member agencies, public entities, and other interested parties to ascertain how EWA may appropriately leverage its resources to sustain and enhance the region’s water environment.</p>	<p>Fiscal Impacts: Planning costs are estimated at \$250,000.</p>
<i>Timing Concerns</i>	<p>Action within the planning horizon is critical to ensure these resources are leveraged to provide enhanced water reliability when it is needed, especially given the water challenges facing the region in the next 5-10 years.</p>	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Do not take a lead role in developing a local water reuse strategy. 2. Defer cooperative activities. 	



Key Policy Issue No. 9: EWPCF Ocean Discharge & Air Emissions Permit Renewal

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Protect the Pacific Ocean • Preserve Public Health 		
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Meet or exceed ocean discharge and air emissions regulations • Meet ocean discharge permit 24/7/365 • Uninterrupted regulatory compliance 		
<i>Background</i>	In some cases EWA’s value is defined by compliance with regulations. This applies to EWA’s ocean discharge of treated wastewater, and EWA’s air emissions.		
<i>Challenge/ Opportunity</i>	EWPCF’s ocean discharge and air emissions permits will renew during the planning horizon, and the process of getting the permits renewed requires significant effort and technical expertise. Also, the requirements of these permits impact financial performance.		
<i>Solution:</i>	<table border="0"> <tr> <td>Initiate a proactive, consultant-led approach to the renewal of both permits.</td> <td style="text-align: right;">Fiscal Impacts: Operating costs estimated at \$250,000 annually for permit fees.</td> </tr> </table>	Initiate a proactive, consultant-led approach to the renewal of both permits.	Fiscal Impacts: Operating costs estimated at \$250,000 annually for permit fees.
Initiate a proactive, consultant-led approach to the renewal of both permits.	Fiscal Impacts: Operating costs estimated at \$250,000 annually for permit fees.		
<i>Timing Concerns</i>	Action is critical during the planning horizon because permit renewals happen on specific dates, and the EWPCF cannot legally operate without these permits.		
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Maintaining active permits is compulsory so options are limited. 2. Using a consultant is an option that reflects past practice. 		



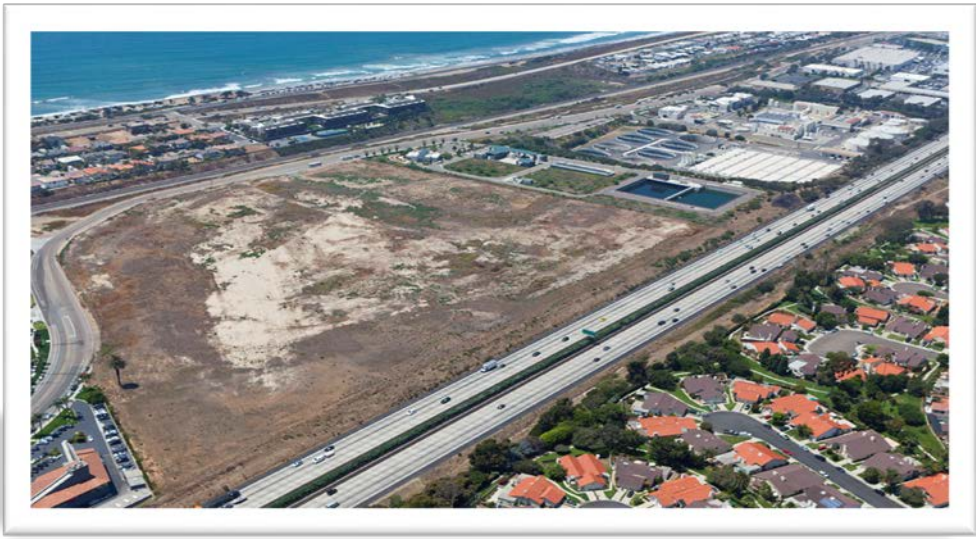
Key Policy Issue No. 10: Develop Nutrient Management Plan

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Conduct Sound Planning • Remain Efficient, Fiscally Responsible and Innovative 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Anticipate future regulations and legal requirements • Comprehensive planning drives EWA’s decisions 	
<i>Background</i>	The nutrients nitrogen and phosphorous are essential for animal and plant life, are present in the water influent to the EWPCF, and at high concentrations are considered pollutants in water.	
<i>Challenge/ Opportunity</i>	Inland water dischargers already have to meet stringent, often arbitrarily imposed, numeric limits on nitrogen and phosphorous that the EWPCF cannot currently meet. It is possible that numeric or other limits will be imposed during the 2021 ocean discharge permit cycle.	
<i>Solution</i>	Develop and implement a EWPCF Nutrient Management Plan to address nitrogen and phosphorous reduction options and plans. Nutrients can be harvested or treated, or can be used on-site.	Fiscal Impacts: Capital planning costs estimated at \$150,000.
<i>Timing Concerns</i>	Action during this planning horizon is critical in order to be prepared for the potential of imposed limits, or take advantage of opportunities to sell or use the nutrients. Developing this management plan will also help EWA pay close attention to the likelihood of limits being imposed in the 2021 ocean discharge permit cycle, and modify its response as needed.	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Defer nutrient management planning unless and until required by a project or regulation. 2. Move forward to develop phosphorous harvesting capabilities in-house and assess more complicated nitrogen technologies only after water regulators confirm nitrogen management will be enacted in 2021. 	



Key Policy Issue No. 11: Manage the South Parcel

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Develop EWA’s Water Resources • Remain Efficient, Fiscally Responsible and Innovative • Conduct Sound Planning 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Minimize member agency costs • Collaborate with member agencies on investment proposals • Build trust and support with policy makers and community leaders 	
<i>Background</i>	<p>The South Parcel is adjacent to and immediately south of the EWPCF. The parcel includes 36 total acres: Carlsbad owns 9 acres that is home to the Carlsbad Water Reclamation Facility, EWA owns the remaining 27 acres, which is currently available for a variety of uses, including options that can be monetized.</p>	
<i>Challenge/ Opportunity</i>	<p>The parcel could be monetized to enhance EWA’s financial position and thus lower costs to member agencies. However, this land may be needed for additional infrastructure, EWA product demonstration, and community engagement activities related to planned water reuse planning. Needs related to the development of EWA’s water resources should be thoroughly understood prior to implementing plans to monetize the land.</p>	
<i>Solution</i>	<p>Identify viable South Parcel land use options to integrate with or provide a compliment to infrastructure development.</p>	<p>Fiscal Impacts: Costs will be determined as planning moves forward.</p>
<i>Timing Concerns</i>	<p>Addressing this issue must be done in coordination with efforts to develop EWA’s water resources in order to maximize the value of the land to member agencies and the region.</p>	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Stay on path to maximize current revenue through long-term lease for multi-family residential. 2. Do not develop the South Parcel. 	



Key Policy Issue No. 12: Create Regional Solutions for our Partners

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Conduct Sound Planning • Invest Appropriately
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Be a regional leader in addressing environmental and management issues • Support member agency planning, helping to enhance their planning capabilities • Collaborate with member agencies on investment proposals • Be proactive in Identifying future risks, and opportunities to enhance performance/efficiency
<i>Background</i>	EWA’s position at the center of the Encina alliance, its regional environmental protection role, and its status as a leader in the clean water community means that EWA enjoys many opportunities to provide solutions for our member agencies and other partners.
<i>Challenge/ Opportunity</i>	The opportunity is for EWA continue to provide member agencies, other public agencies, and EWA’s many partner organizations creative solutions on issues that range from meeting support, to resource sharing, to storm water education.
<i>Solution</i>	<p>Be a strategic and tactical asset for our member agencies, other public entities, and our other partners on an as-needed basis.</p> <p style="text-align: right;">Fiscal Impacts: Operational costs are negligible.</p>
<i>Timing Concerns</i>	Timing is not critical, but it’s important to maintain the momentum that EWA has already established.
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Limit regional solutions during the planning horizon to member agency assistance only. 2. Defer such activities in order to focus on other goals during this planning horizon.



Key Policy Issue No. 13: Hold Annual Performance and Efficiency Summit

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Invest Appropriately • Remain Efficient, Fiscally Responsible and Innovative 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Together, we are a model of excellence and innovation • Address changes in waste stream and operating environment • Build trust and support with policy makers and community leaders 	
<i>Background</i>	<p>EWA’s primary organizational standard is “<i>Together, we are a model of excellence and innovation.</i>” Continuous improvement was a focus area of the 2013 Business Plan and Efficiency and Fiscal Responsibility are underlying Business Values identified in this Plan. Also, EWA’s ability to provide compelling value depends on securing support and investment, and this support depends on EWA’s reputation as a high-performing and efficient organization.</p>	
<i>Challenge/ Opportunity</i>	<p>Community leaders provide support or political cover for EWA Board Members, so these community leaders must identify EWA as a high performing and efficiency model for public utility performance.</p>	
<i>Solution</i>	<p>Hold an annual Performance and Efficiency Summit in cooperation with the member agencies. Invite influential member of the public to attend.</p>	<p>Fiscal Impacts: Operational costs estimated at \$5,000 annually.</p>
<i>Timing Concerns</i>	<p>Action is critical during the planning horizon to inform member agencies and community leaders about EWA’s success in core competencies and to make it easier to understand EWA’s roles and values.</p>	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Take the underlying action, publicize via more traditional communications channels. 2. Take the underlying action but defer promotional aspect. 	



Key Policy Issue No. 14: Business Values and Standards Based Communications

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Invest Appropriately • Develop EWA’s Water Resources • Provide Meaningful Transparency 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Build trust/support with policy makers, member agencies, and community leaders • Make it easy for people to understand EWA’s roles and values • Deliver meaningful content that highlights EWA’s motivations and standards • Make compelling cases for investment 	
<i>Background</i>	EWA’s ability to provide compelling value to its member agencies and the communities it serves is directly related to securing appropriate investment in resources and infrastructure. EWA’s value to the communities it serves is communicated through its Business Values (our desired categorizations) and Standards (our motivations ... the ‘why’).	
<i>Challenge/ Opportunity</i>	It is currently difficult to easily understand EWA’s values and roles. To get and keep consumer attention, messaging must be consistent, succinct, clear, and convey value – not typically skills attributed to government agencies. Public utilities are already competing for limited consumer dollars, so EWA should be communicating as if it were competing for its existence. Also, clarity of communications will become more important as EWA leads a dialogue about cooperatively developing EWA’s water resources, and potentially implementing some form of potable water reuse.	
<i>Solution</i>	Reformat key written communications to focus on business values and standards. Strive to make arguments for investment more value-centric, clear, and more compelling.	Fiscal Impacts: Negligible operating and capital costs.
<i>Timing Concerns</i>	Action is required during the planning horizon to improve and standardize communication strategies. Reaching specific audiences is critical for this planning horizon due to costs and challenges embedded in water resources and environmental initiatives.	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Do not reformat key written communications. 2. Reformat key written communications according to a plan approved by the Board of Directors 	



Key Policy Issue No. 15: Communications Integration

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Invest Appropriately • Provide Meaningful Transparency
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Build trust/support with policy makers, member agencies, and community leaders • Make it easy for people to understand EWA’s roles and values • Deliver meaningful content that highlights EWA’s motivations and standards
<i>Background</i>	The Community Engagement Plan adopted by the Board of Directors in 2013 has created valuable awareness about EWA and its products. Social and traditional media efforts work best when well integrated with business strategy and activities.
<i>Challenge/ Opportunity</i>	Both traditional and social media efforts need to be integrated with efforts to emphasize Business Values, standards, and motivations.
<i>Solution:</i>	<p>Integrate messaging across all media and web-based communications platforms, including www.encinajpa.com, to the standards-based approach recommended by this Plan.</p> <p style="text-align: right;">Fiscal Impacts: Negligible operating and capital costs.</p>
<i>Timing Concerns</i>	Pursuing this issue within the planning horizon makes sense due the emergence of the internet and social media platforms, and the need to address the development of EWA’s water resources
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Do not integrate media communications with investment and policy communications. 2. Defer further implementation of Community Engagement Plan.



Key Policy Issue No. 16: Co-Brand with Member Agencies

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Invest Appropriately • Remain Efficient, Fiscally Responsible and Innovative • Provide Meaningful Transparency 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Build trust and support with policy makers and community leaders • Make investments based on clearly defined standards • Engage communities in planning process 	
<i>Background</i>	The Business Planning Session held in September 2014 produced consensus that EWA’s effort to reach the “influential public” has compelling value where there is a specific EWA investment proposal likely to significantly impact member agency rates.	
<i>Challenge/ Opportunity</i>	During the recent EWA Board of Directors retreat it was suggested that EWA’s communication activities should be closely coordinated with member agencies. The co-branding process will ensure that this close coordination occurs.	
<i>Solution</i>	Co-brand with participating member agencies where Member Agency Managers determine there is value.	Fiscal Impacts: Operational costs less than \$10,000 per investment.
<i>Timing Concerns</i>	Action during the planning horizon is critical to support such investment proposals that could include: developing EWA’s water resources, liquid treatment infrastructure improvements, and implementation of the Technology Master Plan.	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Board of Directors makes the co-branding determination as part of project authorization. 2. Defer co-branding of any project during the planning horizon. 	



Key Policy Issue No. 17: Expand Use of EWA’s Comprehensive Asset Management Planning Process

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Sound Planning • Invest Appropriately • Remain Efficient, Fiscally Responsible and Innovative 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Support member agency planning needs • Data-driven asset intervention • Consider life-cycle costs in all decisions • 1, 5, and 20 year planning horizons 	
<i>Background</i>	<p>The Comprehensive Asset Management Plan (CAMP) is an evolving, annually updated, condition and consequence of failure based tool developed by EWA staff to prioritize asset management activities. These activities include: studies, infrastructure condition assessments, process and system engineering, and process rehabilitation and replacement. The 2040 Master Plan, prior year CAMP documents, staff, and this Business Plan provide the objective “engineering” inputs to the CAMP. Unit process depreciation calculations provide the “accounting” inputs to CAMP.</p>	
<i>Challenge/ Opportunity</i>	<p>Since the CAMP and MAM processes are central to sound planning and management of EWA, these processes should be better used and communicated with selected member agency technical staff. This improved coordination will also help to improve member agency planning.</p>	
<i>Solution</i>	<ol style="list-style-type: none"> 1. Use the CAMP to drive 1, 5, and 20 year Capital Budgeting 2. Ensure MAM selected member agency staff understand how to use CAMP for internal member agency purposes. 	<p>Fiscal Impacts: Negligible operating costs.</p>
<i>Timing Concerns</i>	<p>Action during this planning horizon is critical because CAMP is the process that yields engineering and accounting based capital investment budgets for the member agencies on a 1, 5, and 20 year basis as required by the Revised Basic Agreement.</p>	
<i>Alternatives</i>	<ol style="list-style-type: none"> 1. Defer presentation to member agencies until requested. 2. Present only to Member Agency Managers. 	



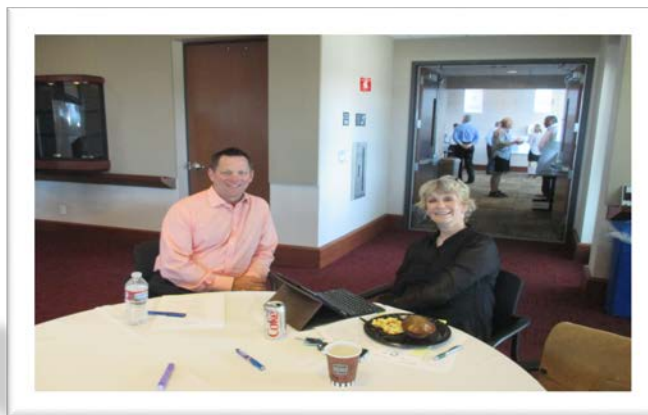
Key Policy Issue No. 18: Employer of Choice Initiative

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Invest Appropriately • Remain Efficient, Fiscally Responsible and Innovative 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Highly trained, qualified, certified, and environmentally oriented workforce • Safe work environment • Structure multi-year labor agreements • Investment based on clearly defined standards 	
<i>Background</i>	<p>Reliable operation, maintenance, and administration of regulated infrastructure requires a skilled and highly trained personnel. EWA’s current staffing level of 67.0 full-time equivalent positions is the same staffing level as authorized in FY 1998 (15 years ago) – an excellent record enabled by adaptive tactics implemented by staff in response to the economic downturn in 2009.</p>	
<i>Challenge/ Opportunity</i>	<p>The challenge for EWA is to continue to critically analyze staffing concepts and levels, maintain a safe environment for all employees, ensure a continuing labor relations partnership between EWA and its employees, and provide for implementation of the Employee Recognition Program.</p>	
<i>Solutions</i>	<ol style="list-style-type: none"> 1. Consistently improve safety and employee quality of work life. 2. Prepare 2020 Staffing & Succession Plan (BLAST). 3. Negotiate Multi-Year Labor Contract for FY 2016 and beyond. 	<p>Fiscal Impacts:</p> <ol style="list-style-type: none"> 1. Negligible operating and capital costs. 2. Fiscal impact to be determined through implementation planning. 3. To be determined, each 1% of personnel expense is over \$90,000 annually.
<i>Timing Concerns</i>	<p>Action during the planning horizon is critical because employees are EWA’s most valuable asset. Recruitment and retention, employee safety and health, and professional development and training are perpetually relevant.</p>	
<i>Alternatives</i>	<p>Issue specific, to be determined.</p>	



Key Policy Issue No. 19: Continue Board of Directors Culture and Orientation Process

<i>Applicable Business Values</i>	<ul style="list-style-type: none"> • Invest Appropriately • Conduct Sound Planning • Provide Meaningful Transparency 	
<i>Most Relevant Standards</i>	<ul style="list-style-type: none"> • Board centric strategic planning • Meaningful communications content that highlights motivations and standards • Easy to understand EWA’s roles and value to the community • Collaborate with member agencies on needed investment 	
<i>Background</i>	<p>The EWA Board of Directors’ culture is an embodiment of the cooperative spirit envisioned in the Revised Basic Agreement. The Board of Directors and staff have worked diligently over the past decade building a “region first” culture supported by robust planning and governance systems designed to anticipate future challenges and opportunities, support the member agencies planning needs, and to collaborate with members on needed investment.</p>	
<i>Challenge/ Opportunity</i>	<p>The opportunity is to continue this Board culture and cooperative spirit through more meaningful communications, more compelling arguments for investment, and the continuation of the orientation process for new board members.</p>	
<i>Solution</i>	<ol style="list-style-type: none"> 1. Execute the 2020 Business Plan 2. Ensure Board of Directors orientations include a perspective on the value collegiality to EWA. 	<p>Fiscal Impacts:</p> <ol style="list-style-type: none"> 1. Estimated fiscal impacts are described above, actual costs will be reported appropriately. 2. Board orientation costs are minimal.
<i>Timing Concerns</i>	<p>Taking action within the planning horizon is critical to complete the transition to a standards based organization that encourages public dialogue about our Business Values and standards, and do so in a manner that does not interfere with the Board of Directors culture.</p>	
<i>Alternatives</i>	<p>This Key Policy Issue reflects execution of the 2020 Business Plan and how the Board of Directors perpetuates its culture.</p>	



FINANCIAL PROJECTIONS

Since 1980, EWA Operating Expenses have increased at an annualized rate of approximately 2.9%. This includes impacts arising from the implementation of Secondary Treatment in 1983, expansion of Secondary Facilities through the Phase IV Expansion Project in 1993, contracting to operate and maintain the Buena Sanitation District and Raceway Basin pumping stations, the Carlsbad Water Recycling Facility in 2005, the Building Program in 2007, and the Phase V Expansion Project in 2009. While Operating expenses are essentially flat over the past five (5) years, in staff’s best professional judgment, an assumption that EWA Operating Expenses will increase at the historic annualized average is a more likely scenario during this Plan’s Planning Horizon.



Between 1980 and 2010, EWA Capital Expenses reflected a growing community – intermittent capital investments timed to meet the communities’ need for sufficient treatment and disposal capacity. The EWA Board of Directors and staff have expressed a clear preference for a more predictable and consistent level of investment driven by a well-developed and annually revised Comprehensive Asset Management Program (CAMP) during this planning period.

