WATER REPORT FOR SAN DIEGO COUNTY
Reclaimed Water for a Sustainable Future

SUMMARY

The City of San Diego and County of San Diego water agencies are at the brink of implementing programs of reclaimed water use, which have the capability of securing 35% of our future water supply from inside the County of San Diego. The successful use of reclaimed water as drinkable water is predicated on public understanding and acceptance. As water supply sources shrink across the western United States and because San Diego County lies at the end of the water conveyance system, the need for developing local sources of water supply is clear.

The 2021/2022 San Diego County Grand Jury (Grand Jury) encourages city and county water policy leaders, and the San Diego County Water Authority (SDCWA) to consider the recommendations in this report to educate the residents of the region on reclaimed water use, reducing barriers for reclaimed water utilization, bolstering water supplies, and limiting the need for purchased water from outside the San Diego Region.

Acronyms and Glossary

AF – acre-foot; one acre-foot is approximately 325,900 gallons, enough to supply 2.5 single-family households of four for a year
Co-permittees – co-permitting organizations
Conveyance – piping providing for the movement of water from its source to the area of use
DACs – disadvantaged communities
DEHQ—Department of Environmental Health and Quality
DWR – Department of Water Resources
EPA – Environmental Protection Agency
EWA – Encina Wastewater Authority
GSP – Groundwater Sustainability Plan
IRWB – Integrated Regional Water Board
IRWM – Integrated Regional Water Management
JPA – Joint Powers Agreement
LAMP—Local Area Management Plan
MWD – Metropolitan Water District of Southern California
MFRO – Micro-filtration Reverse Osmosis
MOU – Memorandum of Understanding
MGD – Million gallons per day (mgd)
NPDES – National Pollutant Discharge Elimination System
NPR – Non-Potable Reuse
OWTS—Onsite Wastewater Treatment System
PHG – Public Health Goals
Potable – drinkable water
RWQCB – Regional Water Quality Control Board
SDCWA – San Diego County Water Authority

WCSP – Water Conservation Strategic Plan
WWTP – Wastewater Treatment Plant

INTRODUCTION

Each drop of re-used newly treated water is an opportunity that will offset the need for additional fresh water from outside our County. This reclaimed water can be added to the drinking water supply infrastructure, distribution systems, man-made reservoirs, and natural groundwater basins.

BACKGROUND

Past Grand Jury studies have investigated the supply and distribution of water. This report focuses on influencing the acceptance of wastewater and stormwater as reclaimed water to supply 35% of the City of San Diego's drinkable water by 2035.

From the late 1700s, when Spanish missionaries built a dam and aqueduct to stabilize the water supply to the formation of the San Diego County Water Authority (SDCWA), the region has faced challenges to securing its water resources and its water quality. With regional population increases projected at 28.5% by 2035, new sources of water must be ensured.[1]

The SDCWA negotiates the sale and delivery of water from the Coachella Valley Water District, the Department of Interior, and the Imperial Irrigation District through the San Diego Aqueduct in Northeastern San Diego County. The SDCWA also coordinates efforts in San Diego for water conservation, water infrastructure management, sea water desalination and water resource planning.

There are 24 member districts in the SDCWA, including: six cities, five water districts, eight municipal water districts, three irrigation districts, a public utility district, and the U.S. Marine Corps Base Camp Pendleton. (Appendix 1). Through consensus, the policy decisions made by water district representatives affect water access, affordability, equity, safety and resiliency in the county.[2]

Individual water districts must develop or modify strategic/management plans with the water systems in their district to reflect the needs and interests of the communities they serve. These plans identify and contract water sources for equitable water distribution. Some San Diego municipalities have utilized Joint Power Agreements (JPA), separate from SDCWA, to provide municipal services between two or more local smaller agencies.

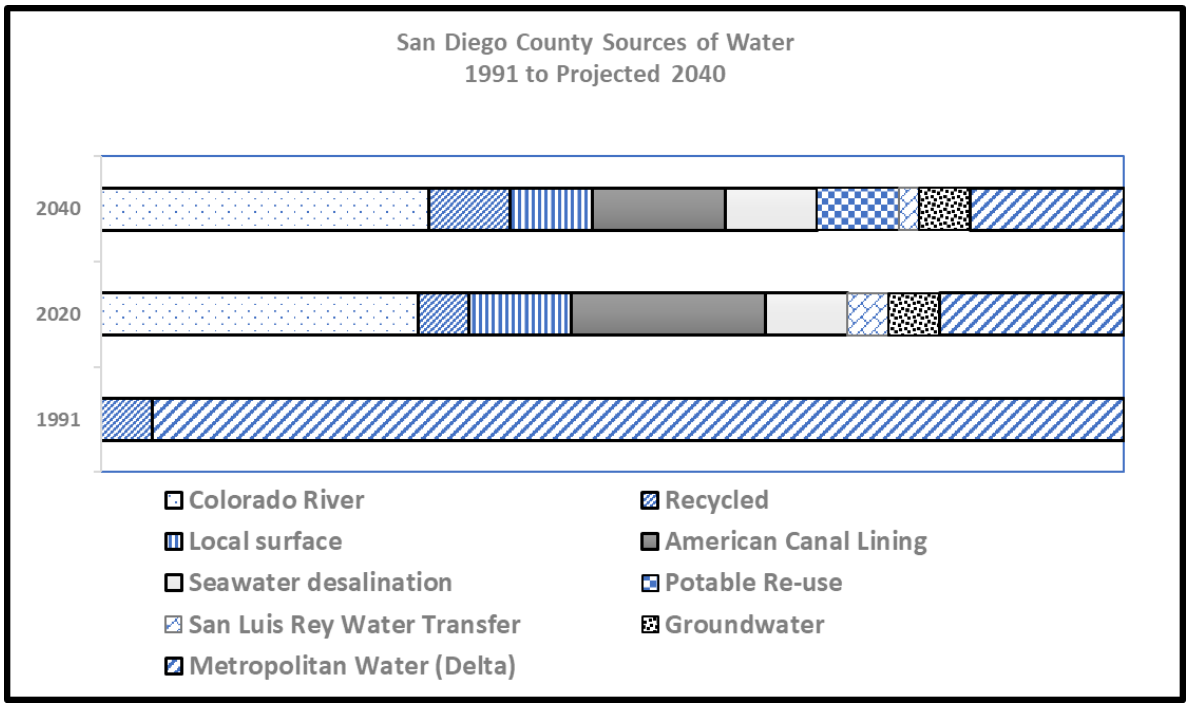
Wastewater is defined as water coming from use in the home, in a business, or as part of an industrial process. Stormwater is surface water resulting from rainfall or snows.

In San Diego County, the quality of storm and wastewater systems are regulated through the California Water Resources Control Board. Out of 85 local public water systems, 13% of rural systems are out of compliance with federal and state level water quality standards for water consumption.[3]

[1] San Diego Association of Governments (SANDAG), 2013. 2050 Regional Transportation Plan. Table TA 2.1
[2] Water resiliency is defined as how water is managed in the face of changing climate and water challenges-such as flooding and periods of drought.
[3] The 13% out of compliance are in rural areas of the county and impact approximately 2,050 users.

Wastewater and stormwater systems in central and south San Diego County are managed by the City of San Diego and County of San Diego and local water agencies. Northern and eastern communities primarily utilize wastewater and stormwater districts for water management. In 2015, efforts were made by the City of San Diego to introduce reclaimed water (wastewater) to the community as a water source. At the time, the public was not convinced that the quality of reclaimed water was acceptable for drinking[4].

In 1991, the region purchased 95% of its water from the Sacramento Delta and the Colorado River through the Metropolitan Water District of Southern California (MWD). Through conservation, in 2020 less *than 18% of the regional water* supply came from the MWD.[5] However, this smart water use is not enough to offset future water needs due to projected population growth.



As the broker of Colorado River water, Delta water and American Canal Lining water, SDCWA is the sole imported water wholesaler in the Region, and its member water agencies serve 98% of the county's population. SDCWA conveyance piping delivers up to 80% of the entire Region's water supply. Water used for drinking is termed "potable." Most potable water delivery comes via SDCWA and is treated by local member water districts/systems before use by the consumer. SDCWA stores and distributes but does not produce or process water.

[4] https://www.publicceo.com/2015/06/toilet-to-tap-is-coming-to-san-diego-sooner-than-you-think/
[5] San Diego County Water Authority – San Diego Regional Water Management Group (RWMG); 2019 San Diego Integrated Regional Water Management (IRWM) Plan, https://www.sdirwmp.org.

Summary of Water Management Responsibilities
Regional Water Management Groups

Water Management Category	San Diego County Water Authority	City of San Diego	County of San Diego
Imported Water Delivery	●		
Water Supply Infrastructure	●	●	●
Water Supply Planning	●	●	○
Storing Raw Imported Water	●	●	
Capturing and Storing Local Runoff	○	●	●
Groundwater Supply	○	●	●
Wastewater Treatment		●	●
Recycled Water Supply	○	●	
Water and Recycled Water Regulation	○	○	●
Public Health Regulation			●
Municipal Stormwater NPDES Management		●	●
Flood Management and Control		●	●
Watershed Protection	○	●	●
Land Use Control and Management		●	●
Natural Community Conservation Planning	●	●	●
Parks and Recreation		●	●

● Direct water management involvement
○ Provides planning support

Role of the City of San Diego (METRO) in Wastewater and Stormwater Management

The City of San Diego METRO System has the greater responsibility for distribution of water to San Diego City residents and businesses. The City of San Diego manages its own wastewater collection, stormwater collection, and sewage treatment programs through the City of San Diego Public Utilities Department. The METRO System includes approximately 2,900 miles of sewer line servicing a 330-square mile area (Appendix 2). The METRO System provides wastewater services to 2.2 million residents of the City of San Diego and 15 other cities and districts within a 450-square mile area.

Approximately 75% of the County's population discharges their wastewater to the Metro System. The METRO system treats approximately 160 million gallons of wastewater per day. The City of San Diego has two operating reclamation facilities with a combined treatment capacity of 45 million gallons per day of non-potable recycled water.

The City of San Diego maintains storm drain structures, pipelines, and channels that are regulated by San Diego Regional Water Quality Control Board. A March 2021 City of San Diego Audit noted that industrial wastewater management piping systems were outdated and inefficient.[6]

[6] The audit report required updating the program's policies, procedures, and methods for identifying potential industrial users within the Metropolitan Wastewater Area. OCA-21-010 PERFORMANCE AUDIT OF THE PUBLIC UTILITIES DEPARTMENTS INDUSTRIAL WASTEWATER CONTROL PROGRAM.

The County of San Diego's Role in Wastewater and Stormwater Management

Urban and rural runoff is the channeling of water flows from impervious surfaces such as highways, parking lots and driveways, into storm drains, streams, and rivers leading to the ocean. The County Department of Public Works administers the regional stormwater management program.
The federal Environmental Protection Agency EPA determines national water quality indicators for the nation.

The County Department of Environmental Health and Quality (DEHQ) regulates the use of recycled water in the region through a delegation agreement with the State Department of Public Health. DEHQ reviews recycled water use plans and conducts site inspections to ensure drinking water supplies are not contaminated with recycled water.

DEHQ implements a Local Area Management Plan (LAMP) based on local ordinance and approved by the Regional Water Quality Control Board (RWQCB) in the unincorporated areas of the county. The purpose of the LAMP is to permit the use of onsite wastewater treatment systems (OTWS) within the unincorporated jurisdictions and to protect groundwater sources and surface water bodies from contamination through the proper design, placement, installation, maintenance, and assessment of individual OWTS.

Each water treatment facility is required to comply with a variety of primary, secondary and tertiary standards applicable to the water authorities and municipalities that they provide services to. There are no uniform standards for wastewater processing due to a variety of unique water supply and water jurisdiction factors.[7]

The County's Department of Public Works provides limited water and wastewater services for unincorporated areas, services including stormwater conveyance and system maintenance, erosion control and flood management services, and stormwater and watershed planning and protection.

The Role of Other Communities in Wastewater and Stormwater Management

There are four wastewater treatment programs developed through JPAs in areas not served by the City or County: Encina Water Authority, North San Diego County Regional Recycled Water Project, Padre Dam Municipal Water District, East County Advanced Water Purifications Joint Powers Agreement, and the City of Escondido Advanced Treatment Facility. These facilities purify wastewater for re-use through advanced recycling systems. These JPAs aim to increase the potable water supply through indirect potable reuse methods by injecting treated water in aquifers and placing treated recycled water in reservoirs mixed with imported and surface waters.

METHODOLOGY

The Grand Jury analyzed publications from local media, California Urban Water Agencies, the Integrated Regional Water Management Board, San Diego County Water Authority Board, the City of San Diego water reclamation plans, the PURE water program, the Urban Water Management Plan, and the Water Resources Plan.

[7] State Water Resources Control Board Groundwater Information Sheet (2017) WRRF Project 10-0 AWWA 2017.

The Grand Jury interviewed representatives from the City of San Diego Pure Water program, the SDCWA, the City of San Diego and County of San Diego. Due to COVID public restrictions, grand jury representatives toured only the Encina Reclamation plant and viewed the San Vicente and Sweetwater Reservoirs. The Grand Jury reviewed minutes from the SDCWA, IRWM and local water district board meetings.

Questionnaires regarding wastewater management practices were sent to seventeen local water districts – thirteen responses were received.[8] Six of the thirteen are performing their community's sewage treatment, four water districts contract out their wastewater treatment.

DISCUSSION

The Metropolitan Wastewater JPA collects wastewater and stormwater from eight South County and East County communities plus the south San Diego County U.S. Navy installations. Wastewater is treated at the Pt. Loma Wastewater Treatment Plant and the North City Wastewater Treatment Plant. Most stormwater is released into San Diego Bay and the Pacific Ocean.

To reduce the demand for imported water, METRO and the City of San Diego are developing a large-scale, advanced treatment, wastewater reuse project called Pure Water San Diego.[9] Pure Water is projected to provide up to 33% of METRO and City potable water by 2035. Pure Water's NPDES permitted process will produce a reliable, drought-proof, local water supply.

There are limitations to the capacity and capability of City of San Diego and County of San Diego wastewater and stormwater systems. System management is dependent on sewer and storm piping laid between 1920 and 1980. Population growth and sprawl are stressing pumping systems and pipelines substantiating the need for system upgrades.

Existing water treatment is largely funded through state and federal grants to minimize costs for treatment programs and to stabilize user fees. Lack of this form of funding can delay improvement projects and systems enhancement.

[8] Questionnaire (selected questions):

- Please comment how on your water district addresses the San Diego County initiatives to reuse water?
- Does the water district operate a recycling or reclamation plant (for drinking water use)?
- How many acre feet of water were processed in 2020?
- Does your water district operate a water treatment plant (preparing water for reservoir storage or purple water use)?
- Does the water district operate a sewage treatment plant?
- Does the water district contract for recycling, water treatment or sewage treatment services from other water districts? Which one(s)?

[9] Pure Water San Diego is the City of San Diego's phased, multi-year program that will provide more than 40% of San Diego's water supply locally by the end of 2035. The Pure Water San Diego Program will use proven water purification technology to clean recycled water to produce safe, high-quality drinking water. The program offers a cost-effective investment for San Diego's water needs and will provide a reliable, sustainable water supply.

Integrated planning of process improvement, design improvement, and the streamlining wastewater and stormwater conveyance is reviewed with the IRWM Planning group,[10] the San Diego Regional Quality Board[11] and the SDCWA. These are often voluntary efforts. Not all San Diego water agencies and JPA's consider the needs of rural dis-advantaged communities DACs and urban DACs in the planning process.

Key proposed major capital projects that will impact future water delivery and wastewater and stormwater management may include a second desalination plant in South County and a second Pure Water treatment facility in Mission Valley.
The California Water Resiliency Portfolio provides direction to State of California water authorities and districts and supports reporting of key quality and operational data.[12]

Encina Wastewater Authority (EWA)

EWA is composed of six public agencies, the cities of Carlsbad, Encinitas, and Vista and Vallecitos Water, Buena Sanitation and Leucadia Wastewater districts. Wastewater processing produces biosolid pellets that are resold as a biofuel or organic fertilizer. EWA is testing options for the potable re-use and recycling of water discharged to the ocean as part of a critical plant upgrade project and financial sustainability model.

North San Diego County Regional Recycled Water Project

North San Diego County water, wastewater and stormwater agencies are collaborating to improve the region's recycled water infrastructure. This includes taking an inventory of available supplies of wastewater and surveying demands for recycled water for irrigation or industrial use. The North San Diego Water Reuse Coalition consists of the cities of Escondido, Oceanside, Carlsbad Municipal Water, Leucadia Wastewater, Olivenhain Municipal Water, Rincon del Diablo Municipal Water, Santa Fe Irrigation, Vallecitos Water, and Vista Irrigation Districts, plus San Elijio Joint Powers Authority and Marine Corps Camp Pendleton. The Water Reuse Coalition's project will maximize recycled water use by distributing recycled water more efficiently, constructing new water reclamation facilities to increase supply, providing a drought-proof source of water, and reducing discharge to the ocean.

San Diego County Regional Airport Authority

The San Diego County Regional Airport Authority has developed an innovative stormwater capture and reuse system. The Airport 's program of reduction in the volume of their potable water use has changed stormwater from a problem to an asset. All stormwater is captured from runways, roadways, roofs, and parking lots and stored in large tanks and re-claimed. Water is re-used at the airport for

[10] San Diego County Water Authority – San Diego Regional Water Management Group (RWMG); 2019 San Diego Integrated Regional Water Management (IRWM) Plan, https://www.sdirwmp.org.
[11] San Diego Regional Water Quality Control Board (San Diego RWQCB). 1994, as amended though May 2016. Water Quality Control Plan for the San Diego Basin. Available: https://www.waterboards. ca.gov/sandiego/water issues/programs/basin plan/.
[12] Governor's Water Resiliency Portfolio addresses overlapping authorities on water reuse in the State of California. https://resources.ca.gov/Initiatives/Building-Water-Resilience/portfolio.

cooling fuels, flushing toilets, washing cars and irrigation. All stormwater is treated for reuse at the airport.[13]

Padre Dam Municipal Water District

Phase IA Expansion Padre Dam Municipal Water District's Treatment project (MWDs) is a key component of the East County Regional Water Reuse Program (a water reuse partnership with Helix Water District, County of San Diego, and City of El Cajon). The project will expand the Ray Stoyer Water Reclamation Facility up to 15.0 million gallons per day (mgd) to deliver recycled water for irrigation, and to deliver tertiary effluent to the Advanced Water Purification Facility, allowing for future potable reuse supporting the Region's goal of supply reliability and sustainability.

The City of Escondido

The City of Escondido will construct a new microfiltration/reverse osmosis (MFRO) treatment facility with a production capacity of 2.0 mgd. Water treated at the MFRO will be blended with tertiary (3rd cycle) treated water from an existing recycled water plant and distributed to agricultural customers in the northern and eastern areas of the City of Escondido. The City of Escondido has partnered with Escondido Growers for Agricultural Preservation, Vista Irrigation District, City of San Diego, and Rincon del Diablo Municipal Water District to implement this project. This project supports the Region's goals for supply reliability while supporting local resident and agricultural needs.

Rural Situation and Disadvantaged Communities (DACs)

Californians dependent upon small water systems or private wells are vulnerable to water supply shortages. These concerns are addressed by the recently passed State of California Senate Bill 552[14]

In backcountry areas of the San Diego region, communities face groundwater quantity and quality challenges. These communities are outside of the Water Authority service area and rely on groundwater as their primary source of water supply. Backcountry groundwater issues are exacerbated by poor economic conditions and lack of local community expertise. Rural DACs in the Region have documented issues with water shortages, as well as high water contamination levels of uranium, nitrate, and bacteria in available groundwater resources.

The implementation of SB-552 is important for small water suppliers in rural areas. This recently approved legislation encourages the development of water shortage contingency plans and provides some funding to mitigate the impact of drought and to promote water resiliency.[15]

Urban DACs are disadvantaged neighborhoods. In these areas, the location of homes and schools adjacent to old industrial facilities has resulted in situations where communities are threatened by the past and present impacts of industrial pollution. Stormwater runoff and wastewater is impacted by leeching of historically deposited toxins and slowly dissipating industrial chemicals.

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[13] Stormwater Management Raises the Bar on Sustainability, 0ctober 22, 202https://www.san.org/blog/blog-detail/san diego-.

[14]https://trackbill.com/bill/california-senate-bill-552-drought-planning-small-water-suppliers-nontransient-noncommunity-water-systems/2040150/

[15] Between 2008 and 2020, DWR has awarded 111.7 million dollars to the San Diego IRWM program for water resiliency planning.

FACTS AND FINDINGS

Fact: As of 2021, San Diego County no longer receives water transfers from the Southern California Metropolitan Water District using water sourced in the Sacramento Delta or San Joaquin Valley.

Fact: Executive Order N-10-19 directed state agencies to develop a Water Resilience Portfolio to meet California water needs in the 21st Century.

Fact: The preparation of Consumer Confidence Reports is required by Health & Safety Code Section 116470 and California Code of Regulations, Title 22, Article 20. Health & Safety Code Section 116470(b) also requires public water systems with more than 10,000 service connections that detect contaminants above their public health goals (PHGs) to provide PHG exceedance reports every three years and to hold public hearings regarding their reports.

Fact: The Pure Water pilot program is currently underway in the City of San Diego, at the North City Reclamation Plant.

Fact: Public tours of water treatment plants were discontinued in response to San Diego Public Health restrictions for COVID.

Fact: In the mid to late 1990s, the City of San Diego initiated a potable reuse project that was not implemented due to public opinion. The public's misperception of the project among the public was worsened by the introduction of the phrase "toilet to tap" in local media. Additional media reports about contaminants in drinking water began to surface nationally and the reclamation project was used as a wedge issue in local and state political races.

Fact: All stormwater and wastewater is public water and must be of acceptable quality and available for a variety of uses.

Finding 1: Traditional public relations and/or educational outreach is not improving public and political support for wastewater and stormwater reuse as potable water. The Public awareness of the Pure Water Program is limited.

Fact: There are no current federal regulations specifically governing potable water reuse in the United States. State regulations, policies and federal guidance addressing aspects of the reclamation process exist, including requirements for wastewater treatment, and drinking water treatment.

Fact: The EPA sets national enforceable drinking water standards and retains oversight authority over tribal and federal and state, water programs.

Fact: State agencies collect large amounts of information regarding water use that could support improved local and regional water system resilience.

Fact: Comprehensive regulations do not exist for some of the direct potable reuse projects, making permitting and public acceptance a challenge.

Finding 2: The California State Water Resources Control Board is developing regulations for potable reuse. In 2014, Board's Division of Drinking Water finalized groundwater replenishment regulations, which were incorporated in the recycled water-related regulations. In 2017, Assembly Bill 574 was signed into law and established a deadline of December 2023 for initial State Direct Potable Reuse regulations.

Fact: 9.4 million people in California urban service areas (35% of those served) live in low income, rural, or underserved regions with limitations to their water access.

Fact: The IRWM Water Needs Assessment seeks to engage, or increase engagement of, disadvantaged communities with the Integrated Regional Water Management Program.

Fact: Californians dependent upon small water systems or private wells are vulnerable to groundwater contamination. As the water table drops, larger suppliers balance the potential threat of emerging contaminants against their ability to supply water. These concerns are addressed by the recently passed State of California Senate Bill 552.

Fact: SDCWA and the San Diego Regional Water Quality Control Board supports the capacity, participation, and full integration of tribal governments and DACs in regional planning processes.

Finding 3: The implementation of SB-552 is important for small water suppliers in rural areas. Recently approved State of California legislation encourages the development of water shortage strategic plans and encourages administrative funding to mitigate the impact of drought and to promote water resiliency and water re-use.

RECOMMENDATIONS

The 2021/2022 Grand Jury recommends that the San Diego County Water Authority:

22-31: Support regional water reclamation efforts by improving public trust in the safety and benefits of reclaimed water through educating elected officials, media representatives, and the public about the goal for 35% reclaimed potable use water by 2035.

22-32: Support small water agencies in their efforts to comply with new laws for agency water operations and wastewater management practices above and beyond what are current regulatory requirements.

22-33: Solicit the participation of small water suppliers and DACs in water re-use policy and practice development.

The 2021/2022 Grand Jury recommends that the City of San Diego, Public Utilities Department:

22-34: Support water reclamation efforts by improving public trust in the safety and benefits of reclaimed water through educating elected officials, media representatives, and the public about the community goal for 35% reclaimed potable use water by 2035.

22-35: Incorporate new current state regulatory standards for potable water reuse into their operational management.

22-36: Support small water agencies in their efforts to comply with new laws for agency water operations and wastewater management practices above and beyond what are current regulatory requirements.

22-37: Solicit the participation of small water suppliers and DACs in water re-use policy and practice development.

The 2021/2022 Grand Jury recommends that the County of San Diego Department of Public Works:

22-38: Support the City of San Diego water reclamation efforts by improving public trust in the safety and benefits of reclaimed water through continually educating County of San Diego elected officials, media representatives, and the public about the community goal of 35% reclaimed potable use water by 2035.

22-39: Incorporate new current state regulatory standards for potable water reuse into their operational management.

22-40: Support small water agencies in their efforts to comply with new laws for agency water operations and wastewater management practices above and beyond what are current regulatory requirements.

22-41: Solicit the participation of small water suppliers and DACs in water re-use policy and practice development.

REQUIREMENTS AND INSTRUCTIONS

The California Penal Code §933(c) requires any public agency which the Grand Jury has reviewed, and about which it has issued a final report, to comment to the Presiding Judge of the Superior Court on the findings and recommendations pertaining to matters under the control of the agency. Such comment shall be made *no later than 90 days* after the Grand Jury publishes its report (filed with the Clerk of the Court); except that in the case of a report containing findings and recommendations pertaining to a department or agency headed by an elected County official (e.g., District Attorney, Sheriff, etc.), such comment shall be made *within 60 days* to the Presiding Judge with an information copy sent to the Board of Supervisors.

Furthermore, California Penal Code §933.05(a), (b), (c), details, as follows, the manner in which such comment(s) are to be made:

(a) As to each grand jury finding, the responding person or entity shall indicate one of the following:
    (1) The respondent agrees with the finding
    (2) The respondent disagrees wholly or partially with the finding; in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.

(b) As to each grand jury recommendation, the responding person or entity shall report one of the following actions:
    (1) The recommendation has been implemented, with a summary regarding the implemented action.
    (2) The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
    (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the grand jury report.
    (4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.

(c) If a finding or recommendation of the grand jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the Board of Supervisors shall respond if requested by the grand jury, but the response of the Board of Supervisors shall address only those budgetary or personnel matters over which it has some decision-making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.

Comments to the Presiding Judge of the Superior Court in compliance with the Penal Code §933.05 are required from the:

Responding Agency	Recommendations	Date
San Diego County Water Authority	**22-31 through 22-33**	**9/21/22**
City of San Diego, Public Utilities Dept.	**22-34 through 22-37**	**9/21/22**
County of San Diego, Department of Public Works	**22-38 through 22-41**	**9/21/22**

Appendix 1

San Diego County Water Authority Members

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Carlsbad MWD
City of Del Mar
City of Escondido
Fallbrook Public Utility District
Helix Water District
Lakeside Water District
City of National City
City of Oceanside
Olivenhain MWD
Otay Water District
Padre Dam MWD
Camp Pendleton Marine Corps Base
City of Poway
Rainbow MWD
Ramona MWD
Rincon del Diablo MWD
City of San Diego
San Dieguito Water District
Santa Fe Irrigation District
South Bay Irrigation District
Vallecitos Water District
Valley Center MWD
Vista Irrigation District

Appendix 2

Pipelines Map

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