



Fifty years of service by the Water Quality Section is the story of people – their dedication, skill and accomplishments. The make up of our workforce with their fields of expertise and specialty keep pace with a growing population, environmental challenges, science and technology and additional regulations — all in service or protecting public health.

This legacy of oversight started long before the section was officially formed to coincide with the adoption of the Safe Drinking Water Act in 1974. It dates to the earliest days of Metropolitan - evidenced in the parchment paper reports of treatment options for Metropolitan's first water deliveries from the Colorado River Aqueduct.



"It is almost beyond the vision of the fanciful mind of the biologist to forecast the many changes which may be expected in the aquatic and microscopic world."

⁻ Arthur Taylor, consultant and later Metropolitan Board member, in a 1934 progress report on water treatment.

In Metropolitan's first four decades as a water agency, there was no dedicated laboratory space for water quality or enforceable standards for drinking water. But in Metropolitan's infancy, there were field employees who worked their way through the agency to hold important water quality positions. Some worked as surveyors charting the gravity-flow course of the Colorado River Aqueduct in the early 1930s. They all interacted with the agency's founders, addressed correspondence to William P. Whitsett, Julian Hinds and Joseph Jensen, and wore employee badges signed by Robert B. Diemer. Their extraordinary journeys and untold stories are foundational and as remarkable as the current Water Quality Section today.

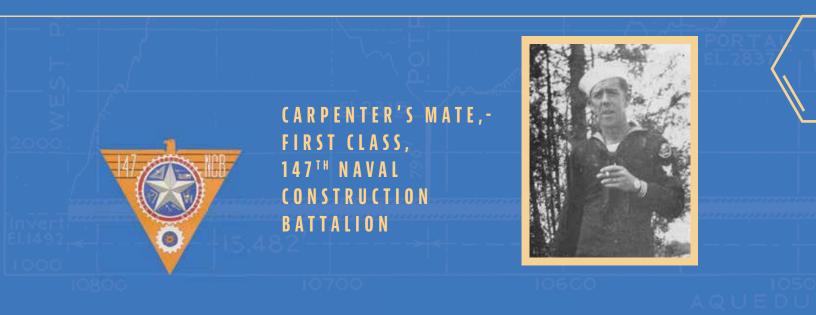
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JOHN W. PEELER



Chainman Surveyor to Chemist Years Active: 1931 - 1944

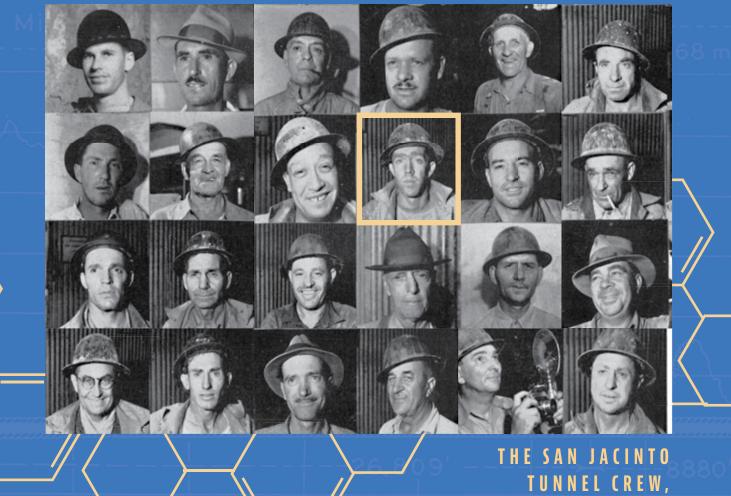
John W. Peeler joined Metropolitan February 23, 1931, as a chainman for the Colorado River Aqueduct survey party. Before the advent of laser and digital technology, Peeler measured the distance between two points with chains. In 1932, Peeler assumed responsibilities as a survey team rodman, relying on tools to collect data for the preparation of maps. Over the next three years, Peeler would remain in the field, resuming work as a chainman and also as an inspector with special instrumentation ratings. In 1939, he worked on the San Jacinto Tunnel. Then in 1941 Peeler appeared on an organizational chart as a laboratory helper reporting to W.W. Aultman, engineer in charge and chief chemist at the Softening and Filtration Plant. By 1943, Peeler had the title of chemist. He resigned from the district in November 1944 and joined the U.S. Navy serving in the Southwest Pacific with the 147th Naval Construction Battallion.



AWRENCE



PEELER OPERATING OPERATING STERILIZER EQUIPMENT, 5.27.1941



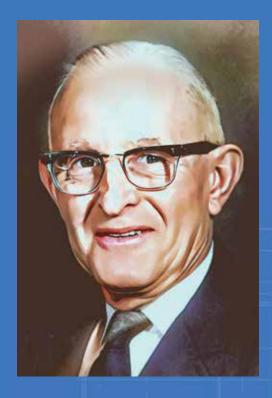
CIRCA 1939

LOUIS A. GILMAN

Chainman Surveyor to Chemist Years Active: 1933 - circa 1970-1973

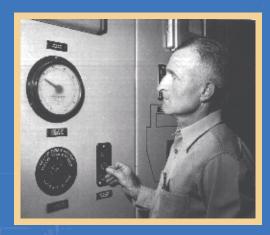


Louis A. Gilman joined Metropolitan on March 1, 1933, and retired with at least 35 years of service (final retirement date unknown). Gilman, like Peeler, began as a chainman on CRA surveys and, during the aqueduct's construction, held various positions including inspector, foreman, and concrete finisher. In August 1941, a few months after the aqueduct began making deliveries to Southern California, he transferred to the Softening and Filtration Plant. Gilman was promoted to system operator and, over the course of nine years in the position of head house operator, acted as shift foreman in charge of plant operations. During this time, he most likely was issued his Civil Defense Emergency Pass in the aftermath of World War II amid growing fears of domestic attack. By July 1957, Gilman was promoted to chemist and concentrated his research on long-term corrosion and its relation to water guality. He was honored for 35 years with the district at a service awards ceremony on June 14, 1960, in the Regency Room of the Sheraton West Hotel, hosted by Joseph Jensen and Robert B. Diemer. The famous Wilshire Boulevard property, near Lafayette Park, opened in 1929 and was the site of Elizabeth Taylor's first marriage in 1950 to Conrad Hilton, Jr. Gilman was honored with a class of employees celebrating 30 years or more of service with Metropolitan. Known as "The Aqueduct Builders," their tenures dated to the beginning of Metropolitan's operations.



HEAD HOUSE OPERATOR, 6.8.1948







10 District employees honored for 25 years of service including Louis Gilman, top row, second from left. 6.15.1959

25 YEARS OF SERVICE LUNCHEON, 6.15.1959

n Laft Floor EL 1185.67

LAB CHEMIST,-CIRCA 1968



Louis Gilman (sitting) with lab staff. 12.20.1967



Louis Gilman and chemist Paul Evans (background) testing water hardness, circa 1968



SECTION C-C

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WILLIAM W. AULTMAN

Junior Engineer to Engineer in Charge and Chief Chemist Years Active: 1930 - 1951

William W. Aultman joined Metropolitan May 1, 1930, as a junior engineer in the hydrographic division. He was promoted to assistant engineer, a position he held from 1932 to 1938, responsible for the study of finance related to transportation and construction, along with other work related to hydrography and office design. In 1933, Aultman served as president of the Metropolitan Water District Employees Association. In 1941, at the direction of F.E. Weymouth, Aultman was reclassified as a water treatment engineer, listed in the organizational chart as engineer in charge and chief chemist. Aultman left Metropolitan in 1942 to accept a commission in the U.S. Navy, but was reinstated to work at Metropolitan on January 1, 1946, at the direction of General Manager and Chief Engineer Julian Hinds. Hinds requested that the Metropolitan board return Aultman to a salary he would have had if he had not left to serve in the military: \$425 per month – a \$75 per month increase from the time he left. From 1946 until 1951, Aultman was a water purification engineer. He resigned August 1951 to become assistant director of water supply for the city of Miami. Of note, Aultman appears in many archival photographs with the Assistant to the General Manager Don J. Kinsey – the first publicist for the Los Angeles Department of Water and Power, and later Metropolitan. A Chicago newsman, Kinsey helped promote the successful 1931 bond issue that funded the construction of the Colorado River Aqueduct and founded Metropolitan's public information office. Several photographs of Aultman feature legendary news anchor Chet Huntley, who worked for local radio station KFI, and TV news stations CBS, ABC and NBC and was one half of the famous Huntley-(David) Brinkley broadcast team.

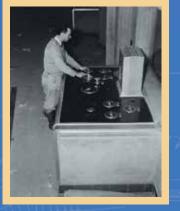
> Assistant Hydrographic Engineer W.W. Aultman, circa 1935.

J.M. Montgomery, B.H. Martin and W.W. Aultman. 4.20.1940





W.W. Aultman at the zeolite softener operating table. 2.18.1941.



W.W. Aultman and J.M. Montgomery at the edge of a clarifying basin. 5.27.1941

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THE METROPOLITAN WATER DISTRICT or southern California Box 38, La Verne, Calif. Aug. 3, 1951

Mr. Joseph Jensen, Chairman Board of Directors Netropolitan Water District of So. Calif. 306 W. Third Street Los Angeles 13, Californis

Dear Hr. Jensen:

Thank you for the letter relative to my move to Florida and for the good wishes in my new work.

It is doubtful if I will ever find another position where I can be any happing than I have been with the District or where I will be associated with a finer group of men than we have in this presentation. Starting with Xr. Weynouth at the top, all of the engineers are outstanding in their field and have contributed to any success I may attain.

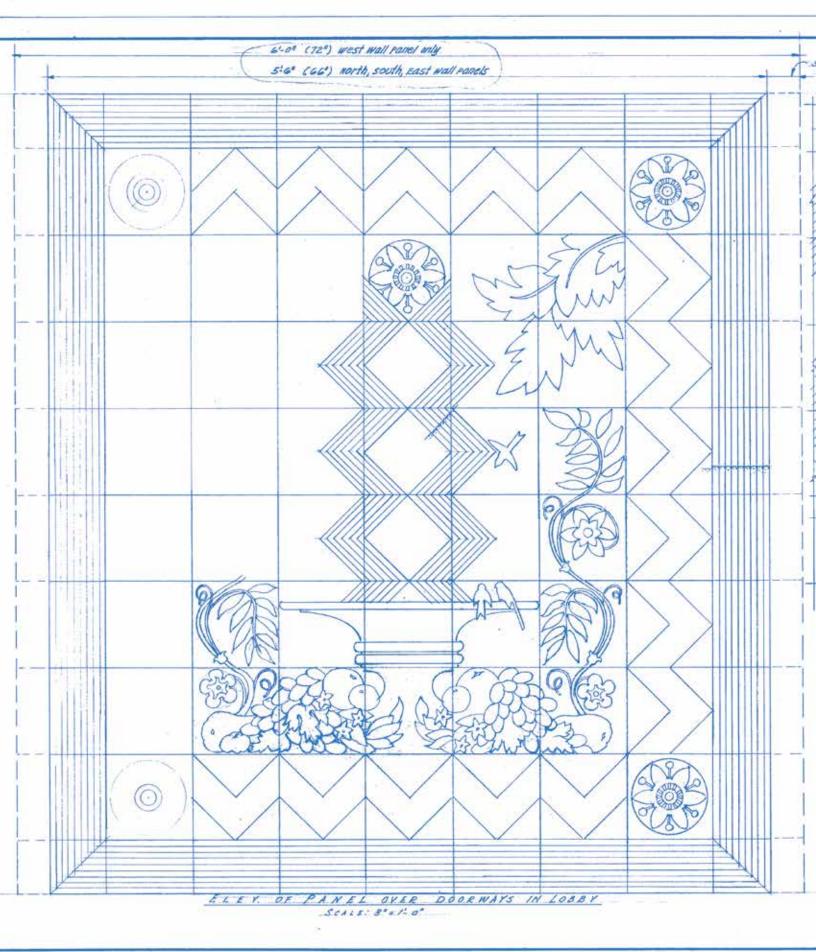
Here at the Weymouth Softening Flant we have an efficient operating force which is well trained and expable of handling any contingency which may arise There is no question but what they will continue to produce a good quality water at all times.

May I again express my appreciation to you and the Board for the kind consideration and opportunities which you have given me during the past 21 years.

Cordially, Hellion Tt. aceltinan

William W. Aultman Water Eurification Engineer Reinstatement to Metropolitan following service in the U.S. Navy requested by Julian Hinds for W.W. Aultman, 1.3.1946





SPECIFICATIONS No. 3/2

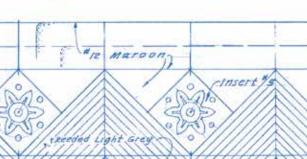
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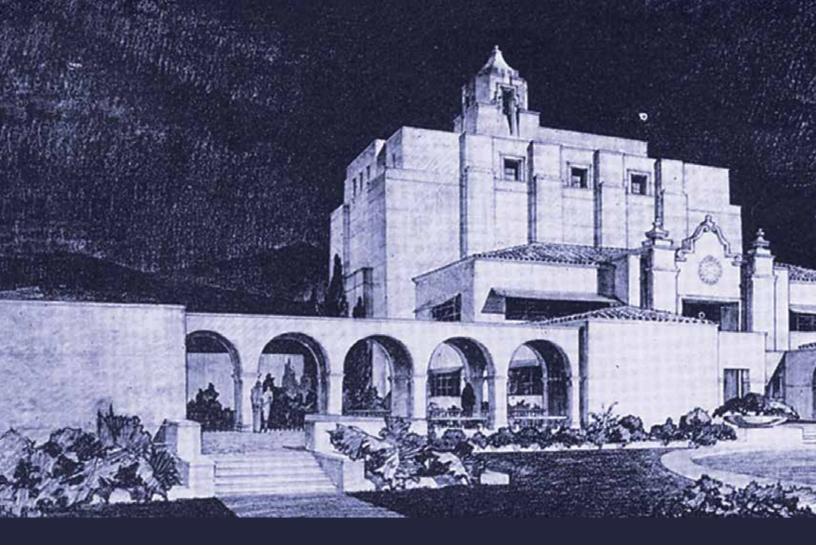
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Maxoon





Metropolitan architect Daniel Elliott designed the showpiece administration building of what is now the F.E. Weymouth Water Treatment Plant. The eclectic architectural style drew inspiration from Spanish missions in California and Moorish Spain. An arched entry court with elaborate tile details and fountain echoes Mediterranean tones. Elliott would design other water buildings, including the Burbank Water and Power office, completed nearly a decade after Weymouth.



 $Through \ the \ Years:$ A photo journey covering the earliest days of the Water Quality Laboratory to today.



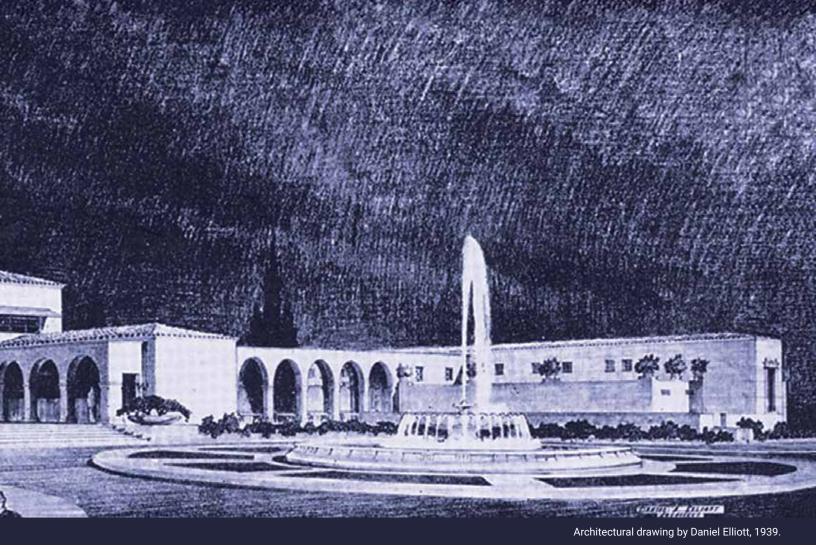
1940

1942

1949

Sideview of the Administration Building, 12.30.1940.

Chemist Paul Bodenhofer working in the chemical laboratory, 2.9.1942. Aerial of the Softening and Filtration Plant surrounded by orange groves. 1.31.1949.

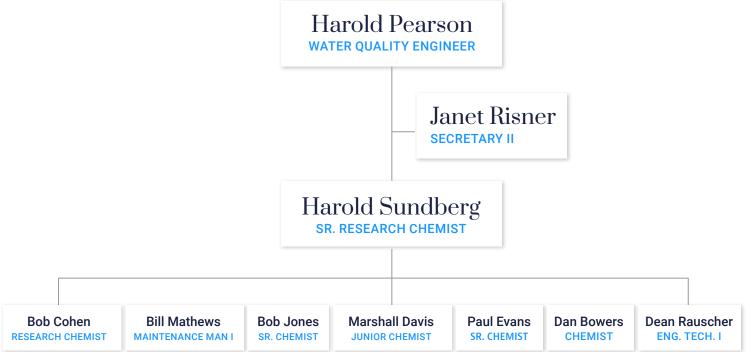




Construction of the new Water Quality laboratory. West end of building looking easterly. 5. 23.1984. Construction of the expanded laboratory building begins in 1995 and is completed in 1998.

Water Quality Laboratory front entrance, 5.24.2018.





notes:

- The Water Quality & Research Branch was formed by action of Metropolitan's Board of Directors in July 1974. It would later be named the Water Quality Section.
- The 10 employees listed in the 1974 table of organization were previously assigned to the Water Purification Branch of the Operations Division.
- Available time sheets indicate that even though the new branch was created in July 1974, the time keeping system was not finalized until September 1974.
- Harold Pearson (Dr. Pearson) was reclassified from Chief Chemist to Water Quality Engineer on July 1, 1974; he was previously the supervisor of the Water Purification Branch.
- The Water Quality & Research Branch was located in the head house of the F. E. Weymouth Treatment Filtration Plant.
- *This organizational chart was reconstructed based on time sheets, employee service records and interviews with retired employees. While there may have been minor organizational changes during the year, the chart represents the structure for the majority of the calendar year.

Typically, an organizational chart will show the hierarchy structure for management. With an historical lens, they tell many stories. From an original team of nine men and one woman, the year-by-year updates to the Water Quality Section organizational charts mark a change in staff numbers, but also in disciplines, diversity and expertise. Today's organizational chart of more than 100 finds a far greater representation of women, a diversity of educational and experiential backgrounds and staff fluent in dozens of languages reflective of cultural diversity.



PICTURED LEFT, A VIEW OF THE NEW LABORATORY SITE LOOKING SOUTHWESTERLY FROM THE TOP OF THE ADMINISTRATION BUILDING, 2.24.1983.

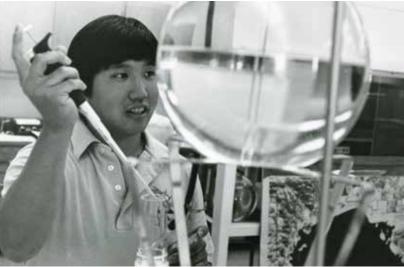
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If these zeolite building walls could talk, they would tell the stories of the people over many decades who walked the tiled floors. Their accomplishments were illuminated by the people who came before them.

Interior of Operating Floor, Zeolite Control Room, 6.27.1941.



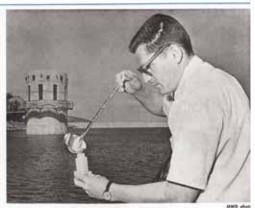


CONSTANT PROGRAM Water Sample Tests Safeguard Supply

A constant program of laboratory ex-aminatios and boting of water samples safeguards the purity and quality of wa-ter delivered to the Dustriat's member agencies and their customers. Chemical control of the quality of sca-ter maintained throughout the treatment process at the District's two treatment plants required the collection and analysis of more than 45,000 samples during the focal year 1967-66. In addition, nearly 19,200 samples were taken at the plants for bacteriologi-cal examisation.

seere taken at the plants for bacteriologi-cal examination. More than 1216 samples of Colorado River water were also taken at the service connections along the District's vast distribution system where water is delivered to member agencies and sent o laboratories at either the Weymouth Plant or the Diemer Plant for exami-nation.

Plant or the Diemer Plant for exami-nation. Also during the past year, 1163 sam-ples from Lake Mathews, terminal stor-age reservoir for the Colorado River Aqueduct, and from other District reser-voies were taken for the observation and control of plankhon growth, occurring naturally in water, and for hardness. Samples from Lake Mathews are col-fected Item seven locations on the reser-voir twice a week from a District bust. The samples, in plastic bottles, are taken



ART KNOOP, ENGINEERING AIDE, COLLECTS SAMPLE FROM BOAT. Outlet tower and dike at Lake Mathews are visible in the background.

Gutter tower and dike at take Mer directly to the laboratory for examina-tion and besting. The program is under the overall direction of Harold E. Pearson, chief elsenist for the District. Pearson and his staff are also doing research work on methods and proce-dures for the treatment of Northern

California water that will begin to arriv in the Southland in the early 1970. The District must construct farce ac treatment plants as part of its billion dollar expansion program currently m der way to distribute more than to million accedent of northern water an unally.



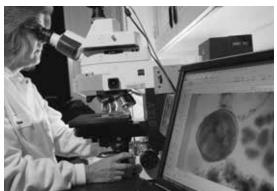
MWD CHEMIST LOUIS GUMAN RUNS WATER HARDNESS TEST IN LAB Paul Evans, chemint, (background) checks sample for manganese content Poul Evo



GAYLON RODIN FILTERS A SAMPLE le's checking for presence of bacteric He's checking for prese



































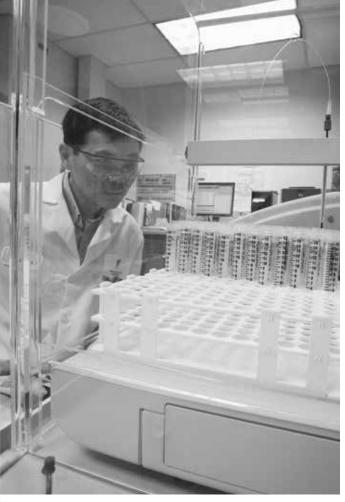


microbiology development

Source and finished waters have been monitored for protozoa since 1994. MWD's source waters are very low in protozoa. Each analysis using an indirect immunofluorescent assay requires filtering 100 liters of raw water or 1000 liters of finished water.

















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of Directors of offan Water District them California

MWD METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

- 9 1996

June 18, 1996

8-3

(Engineering and Operations Committee -- Action) Board of Directors (Finance and Insurance Comm e--Action)

From: General Manager

To:

Submitted by: Gary M. Snyder Chief Engineer - Wille Hane And Value

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JUL

Subject: Authorization No. 2 to Increase Appropriation No. 635 From \$1,840,000 to \$15,000,000 to Expend Budgeted Funds for the Construction of the Expansion of the Water Quality Laboratory at La Verne and to August a Construction Contract.

RECOMMENDATIONS

It is recommended that your Board award a contrac \$10,530,000, to the S. J. Amoroso Construction Company, Inc. (A the expansion of the Water Quality Laboratory (WQL) at La Vern Specifications No. 1279A, as amended, and that all other bids be r execution of the contract.

It is recommended that your Board authorize an in Appropriation No. 635 from \$1,840,000 to a total of \$15,000,000 to finance all costs of construction for the expansion of the WQL

EXECUTIVE SUMMARY

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Approval of the recommendations will authorize th

Invitation for

dedication

1998 expansion

IDO FUNCT AN

RIVERSIDE

RIKING IT PRESIBLE

The Metropolitan Water District of Southern California Water Quality Laboratory Expansion

You are cordially invited to the Dedication of

PROJECT

LOCATION

CHON FREIMERICA ANA

PONDER DUNCE SAV

RSIDE DIEGO COUNTY COUNTY

on Thursday, July 23, 1998 at 10 a.m.

Refreshments will be served at 9:30 a.m.

The laboratory is located on Gladstone Street and

Moreno Avenue in La Verne, adjacent to the

E. E. Weymouth Filtration Plant. (See Map on Back)

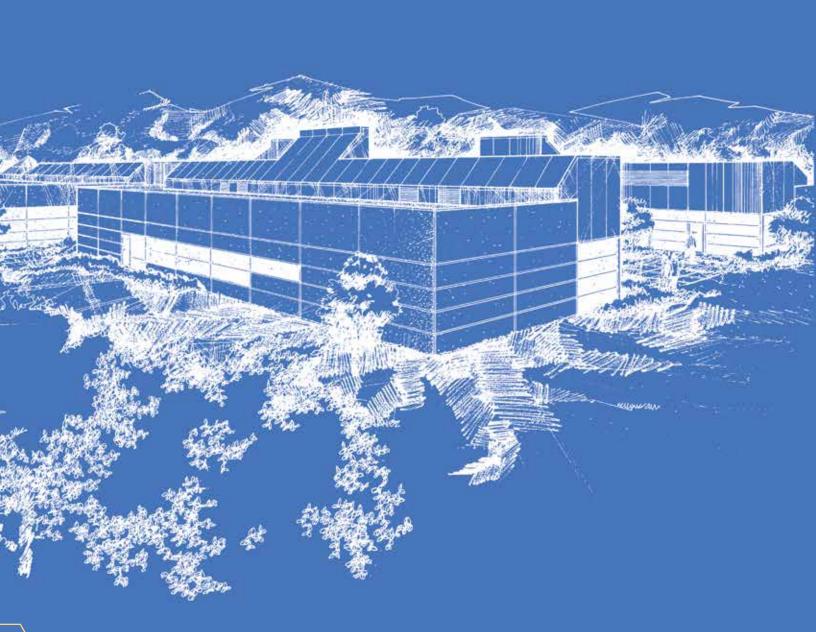
Following the program, laboratory tours will be available.

PLEASE RSVP by July 16, 1998, to Teri Kennard, Public Affairs (213) 217-6456

BERNARDINO

RIVERSIDE

COUNTY



More than 100 people work in the Water Quality Section today with the common purpose of protecting public health and advancing science. As many as 700 people came before them. People with a mix of different backgrounds and disciplines work together to continue a legacy of service to Southern California.

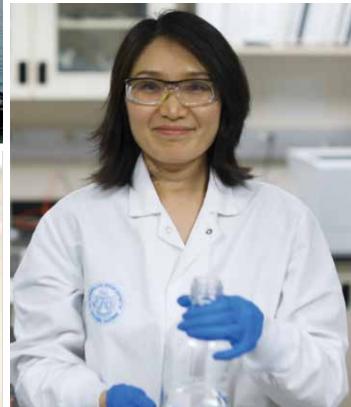








































































PUREWSTER SOUTHERN CALIFORNIA

With the future in mind, Metropolitan has partnered with the Los Angeles County Sanitation Districts to test removal of pathogens and chemical contaminants from wastewater at the Pure Water Southern California demonstration facility at the Grace F. Napolitano Innovation Center. The facility began operation in 2019 and treats up to 500,000 gallons of wastewater per day. Perhaps its most important role is to generate information about the treatment processes that can be used to bring the facility to full scale operation. At full scale, this program could produce as much as 150 million gallons of water every day for up to 1.5 million people. It would be one of the largest water reuse programs in the world. This new water supply would be transported via a 60-mile network of pipes to groundwater basins, industrial sites and potentially two of Metropolitan's water treatment plants.

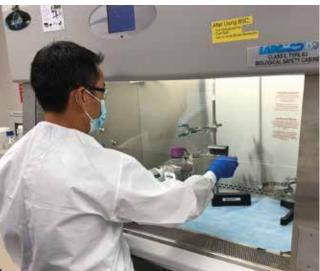
Today, a small group of multi-disciplined staff work at the Pure Water facility. They began as a team of three and expanded to nine and bring expertise in applied research and practical experience. They are able to leverage the exceptional talent of the Water Quality Section staff, working together to analyze and determine how best to optimize the treatment process. They rely on Metropolitan expertise in the Emerging Chemical Constituents Team and Source Water Microbiology Team, for example, to work towards meeting future regulations for both indirect and direct potable water reuse and a new water supply for Southern California.

THE GRACE

CONGRESSWOMAN GRACE F. NAPOLITANO AT THE DEDICATION OF THE PURE WATER SOUTHERN CALIFORNIA INNOVATION CENTER NAMED IN HER HONOR.











PUREWOTER SOUTHERN CALIFORNIA

INNOVATION CENTER







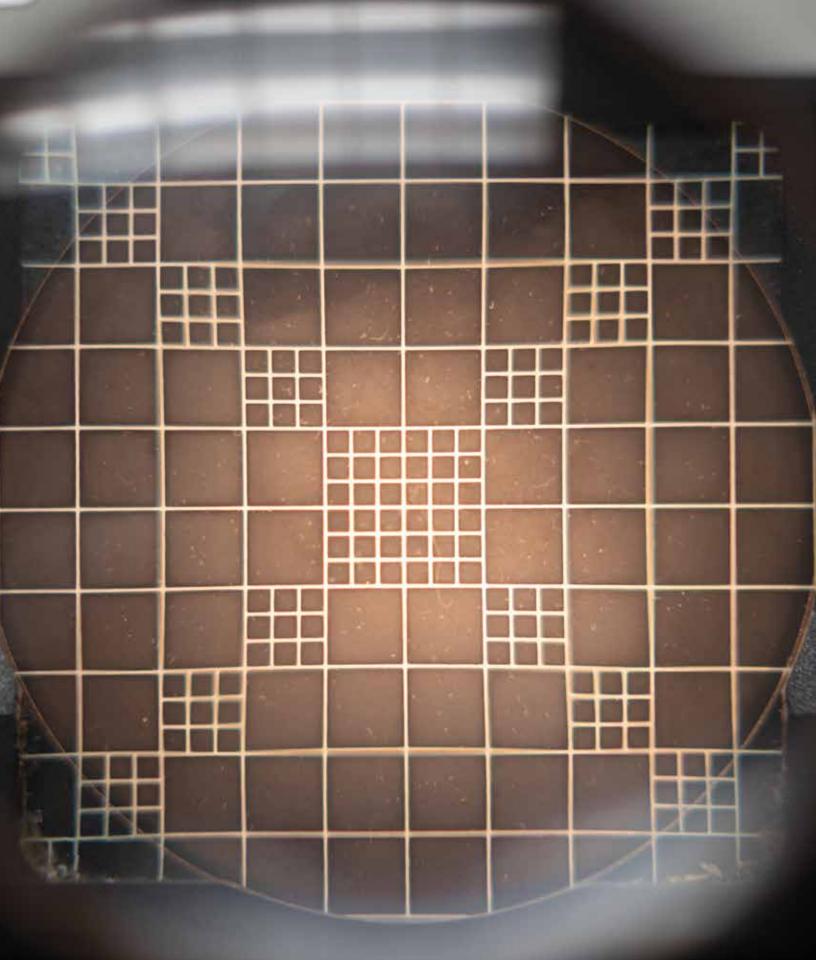
The Next Chapter

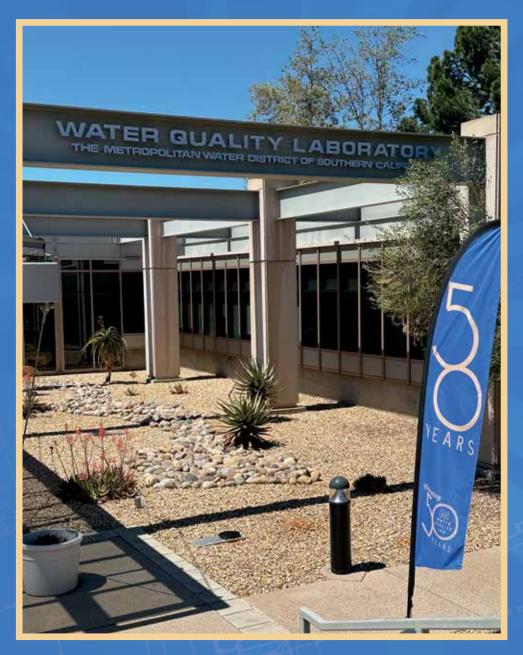


The footprint for Metropolitan's Water Quality Laboratory is anticipated to grow again. A new space will bring new capabilities and workflow improvements. It will house new rooms for specialized instruments and equipment, better storage areas for records and documents and sampling and allow for staffing to increase as new regulations are developed and science advances. The new facility is expected to be operational by the end of this decade. Current and future luminaries in the water industry will work together to maintain our legacy of service and ensure that the water leaving Metropolitan water treatment plants meets or surpasses all drinking water requirements. We can only look forward to more extraordinary journeys.



CONCEPTUAL RENDERINGS OF THE FUTURE WATER QUALITY LABORATORY





M W D H 2 O . C O M

JULY 2024

