



OCTOBER 2024



WATER & POWER ASSOCIATES, INC.

# NEWSLETTER

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For a Sustainable Los Angeles



# Update on IPP Renewed

By Saif Mogri

Over the last few years, the Water and Power Associates has published articles on the future of the Intermountain Power Project (IPP). This update is intended to also give a brief history of IPP to see how we have arrived at where we are today. Photos courtesy of LADWP Photography.

## History of IPP

The Intermountain Power Project Corporation (ICPA) was formed as a non-profit corporation under the laws of the State of Utah on January 18, 1974, for the purpose of investigating the feasibility of constructing and operating a thermal powered generating resource. Shortly thereafter, in July 1974, ICPA and the California Purchasers (Cities of Anaheim, Burbank, Glendale, Los Angeles, Pasadena and Riverside) entered into the IPP Membership and Study Agreement.



The Intermountain Power Agency (IPA), a separate legal entity and a political subdivision of the State of Utah, was established in June 1977, pursuant to The Utah Interlocal Co-operation Act of 1953, as amended (the "Act"), and under the Intermountain Power Agency Organization Agreement, dated May 10, 1977. IPA was established for the purposes of undertaking and financing a facility, known as the Intermountain Power Project (IPP), to generate electricity.

IPA and the Los Angeles Department of Water and Power (LADWP) entered into an agreement known as the Construction Management and Operating Agreement for the purpose of delegating to LADWP the design, construction and operation responsibilities for IPP. At that time IPP was to consist of four coal-fired generating units, each to be 750 MW but later downsized to two generating units. IPP was constructed near Delta, Utah between 1981 and 1987, and Unit 1 officially came online in July 1986 and Unit 2 in May 1987. Presently the two coal fired units are rated at 900 MW net each.

For more than three decades, the IPP has served as a model of regional energy cooperation, generating and transmitting coal-fueled electricity to a diverse group of municipal utilities and rural electric cooperatives with operations across six U.S. states. As these entities' current power purchase agreements near expiration, IPA is expanding its role as a regional energy

(Continued on page 2)



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hub, including utilizing renewable energy resources to produce and store hydrogen that can be drawn upon to generate carbon-free electricity.

IPP Renewed

Dubbed “IPP Renewed,” this transformational project includes the retirement of the existing coal-fueled units at the IPP site; installation of new natural gas-fueled electricity generating units capable of utilizing hydrogen for 840 megawatts net generation output; modernization of IPP’s Southern Transmission System linking IPP to Southern California; and the development of hydrogen production and long-term storage capabilities. Upon buildout of these facilities, IPP will use renewable energy-powered electrolysis to split water into oxygen and hydrogen, storing the latter in underground salt caverns for use as fuel to drive electricity-generating turbines. The new natural gas generating units will be designed to utilize 30 percent hydrogen fuel at start-up.

There are several solar interconnection requests to connect to the IPP switchyard. Those requests total approximately 3,000-4,000 MW. Most of the solar interconnections also provide for a battery in parallel. There is one wind energy transmission interconnection request for 1,500 MW. This interconnection would bring wind energy from Wyoming. A key element of the renewal project is the modernization of the 2,400-megawatt-capacity Southern Transmission System (STS). That high-voltage transmission system provides a direct-current link from the IPP site to Southern California and represents a critical element in the delivery of renewable electricity to California. Some of the equipment being purchased will allow for the STS rating to be increased to 3,000 MW in the future to allow for more renewable and clean energy to be delivered to California. That possibility will require further expansion of the IPP switchyard. As a result of the above-mentioned projects, the IPP switchyard in Delta, Utah has the potential to expand its presence as an energy hub for renewable resources. As a renewable energy hub, it is foreseeable that IPP may become carbon free by the year 2045.



# President's Column

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The Water and Power Associates (WPA) welcomes the new General Manager of LA DWP, **Janisse Quiñones**, and looks forward to supporting her in facing the many issues she will be confronting in the next year. During that year the Power System will be issuing a new Long Term Strategic Resources Plan and the Water System will be developing its 2025 Urban Water Resources plan. These plans will establish a direction for the future programs and investments that will need to be made to meet the needs of the City in the future.

A key issue will be how the City will be able to equitably finance these two multi-billion dollar programs in an environmentally sensitive manner, while still providing affordable and reliable water and electric service to the residents of Los Angeles.

The WPA looks forward to providing our experience and expertise to the Department in addressing these vital issues.

This issue of the WPA Newsletter includes a summary of the presentation Dr. Fred Pickel, Executive Director of the Office of Public Accountability, made to our board in August. This article covers the accomplishments of the office during the over ten years of his leadership and the challenges that will face the new director when they take over later in the year.

There is also summary of a presentation Aram Benyamin, Chief Operating Officer made outlining changes that will be made in the way the Department will be doing business in the coming years and the status of the John Ferraro Building Retrofit Project which is scheduled to require full evacuation of the building by the end of 2024.

There are also articles that will keep you to date on current water and energy issues including new water conservation agreements on the Colorado River and historic new electric generating capacity coming on line in 2024.

See how you can do on our ever popular "Mystery History Question".

Enjoy!



*Jerry Gewe, President*

# Colorado River Update

## Short Term Agreements Between US Bureau of Reclamation and California Water Agencies to Save More Than 700,000 AF of Colorado River Water Over the Next Two Years

By Robert Yoshimura

On September 26, 2024, the US Bureau of Reclamation announced a series of short-term agreements with the Imperial Irrigation District (IID), the Bard Water District, and the Metropolitan Water District of Southern California (MWD) that will conserve 717,000 acre-feet (AF) of water over the next two years. A separate long-term agreement between the Bureau and the Gila River Indian Community will conserve an additional 73,000 AF of water over the next 10 years. Most of the savings described above come from the 2024-2026 agreement with IID which represents the largest federal conservation agreement in history and will raise the water level in Lake Mead by 10 to 12 feet. These savings are possible largely because of the adoption of sustainable farming practices by the farmers in the Imperial Valley.



In one of the other short-term agreements, MWD will turn over its seasonal fallowing program with Bard Water District to the Bureau of Reclamation. Under that agreement, the fallowing program will be funded by the Inflation Reduction Act for three years. The program pays farmers in the Bard service area to forgo planting lower-value, water-intensive crops during the spring and summer. Those farmers will then plant more valuable crops, such

as lettuce and vegetables, during the fall and winter months.

These agreements are part of the negotiations underway to ultimately replace the Interim Guidelines for Operation of the Colorado River that will expire in 2026. Significantly more reductions will be needed in order to establish a viable new set of guidelines post 2026 and will require the cooperation of the other Lower Basin states.

# Sites Reservoir Update

By Jerry Gewe

The Sites Reservoir Project, a proposed off-line storage facility to be constructed adjacent to the Sacramento River, north of Sacramento, that is intended to collect excess storm water runoff from wet year storms for use in subsequent dry years is moving towards final approval..

This reservoir, if completed, will be the 8<sup>th</sup> largest reservoir in California with a capacity of 1.5 million acre-feet. The final Environmental Impact Report was approved on November 17, 2023.

The final approval required for this project is the issuance of the Water Right Permit by the California State Water Resources Control Board (State Board). The State Board held its initial hearing on August 19 with input from representatives of agriculture, water districts, and government agencies speaking in support of the permit application. Future hearings, scheduled to conclude by November 12, 2024, will receive input from other agencies including dissenting input from environmental organizations. The final decision on the permit is scheduled to be issued in February of 2025.

The State Board has the obligation to determine if the water for the project is available after other needs are met, including those of senior water rights holders and instream flows needed to protect water quality and fish and wildlife in the Sacramento River and Sacramento-San Joaquin Delta.

If approved, construction is scheduled to start in mid-2026 with operation in 2033.



If this is approved, it will be the first major water storage project in California to be developed since the Metropolitan Water District's Diamond Valley Reservoir in the 1970's.

## July Heat Wave Causes High Natural Gas Consumption

By William Glauz



The US Energy Information Administration (EIA) collects energy data, including fuel use and electricity production. On July 9, 2024, the U.S. experienced temperatures well above average, particularly so on the east and west coasts. This led to very high electricity production. EIA reported that on that day, U.S. power plants generated 6.9 million MWh of electricity from natural gas.

This is believed to be the most natural gas consumption for electricity production ever, and certainly the most since they began collecting data on hourly natural gas generation in 2019. This large amount of natural gas use was because of the high temperatures and the fact that wind generation had dropped significantly from June to July. On July 9 wind generation was one million MWh less than the daily average for June 2024.

Additional information can be found at the Power Engineering website:

<https://www.power-eng.com/gas/with-july-heatwaves-us-probably-saw-highest-natural-gas-generation-in-history-eia-says/>

# Energy Commission Adopts Offshore Wind Energy Plan

By William Glauz

In July the California Energy Commission (CEC) adopted a comprehensive strategic plan (Plan) to guide the development of offshore wind energy along California's central and northern coasts. The Plan has a goal of developing 25,000 MW of floating wind turbine projects by 2045. This would produce enough energy to power 25 million homes.



California's electricity grid is served by nearly 35,000 MW of renewable resources today. This current capacity will have to increase considerably to meet the State's renewable energy goals. Offshore wind has the potential to generate significant amounts of electricity due to the strong consistent winds off of California's coast, including during times when solar power drops off overnight and during the winter.

The CEC will now partner with other agencies to implement the Plan and continue discussions with stakeholders to advance the development of this wind energy resource.

Additional information can be found at the CEC website:

<https://www.energy.ca.gov/news/2024-07/cec-adopts-offshore-wind-energy-strategic-plan-support-californias-100-clean>

# Over 42,000 MW of New Electric Generating Capacity to be Installed in the Second Half of 2024

By William Glauz

According to the Energy Information Administration, 42.6 GW of utility-scale electric generating capacity are expected to come online in the U.S. during the second half of 2024, more than the total added in all of 2023. By comparison, 40.4 GW of capacity was added in 2023, the most in a year since 2003.

Solar continued to be the largest contributor to new generating capacity. Nearly 60%, 25 GW, of the new generating capacity to be added in the second half of 2024 will be solar. The two largest projects



are the 690 MW Gemini solar and storage facility in Nevada and the 653 MW Lumina solar project in Texas.

Battery storage will make up the next most capacity added, 10.8 GW, for the latter half of 2024. Texas and California will account for 81% of new battery storage capacity. Texas also leads in the development of new wind projects including 309 MW Canyon Wind and 266 MW Goodnight that came online earlier in 2024. While these projects represent the future of electricity generation, coal and natural gas units are being retired. In the second half of 2024 it is anticipated that 700 MW of coal and 1,100 MW of natural gas will be retired.

Additional information can be found at the Power Engineering website:

<https://www.power-eng.com/solar/eia-projects-42-6-gw-of-new-capacity-additions-in-the-u-s-during-second-half-of-2024/>

# Mystery History Question

Presented by Jack Feldman



A Department of Water and Power sales representative stands next to an electric range display at the Hollywood DWP Branch office located at 1613 North Cahuenga Boulevard.

Little Known Fact: In the early 20th century, the Los Angeles Department of Water and Power (LADWP), then known as the Bureau of Power and Light, sold electrical appliances as part of a broader strategy to promote electricity use in the city. This practice, common among utility companies at the time, aimed to integrate electricity into the daily lives of residents and businesses, thereby establishing a steady demand for electric power.

Later, the Bureau of Power and Light consolidated with the Bureau of Water Works and Supply to form the Los Angeles Department of Water and Power, as we know it today.

What decade did this occur?

- ◆ 1910s
- ◆ 1920s
- ◆ 1930s
- ◆ 1940s
- ◆ 1950s



**Answers on page 13, OR**

Click [HERE](#) for Answer or go to our website's [Mystery History Section](#)

Bonus points for the exact year:

◆ \_\_\_\_\_

# Study of Microplastics in Drinking Water

By Jerry Gewe

In the final days of the legislative session the State Senate approved a bill by Senator Anthony J. Portantino, of Burbank, requiring a study of the health impacts of microplastics in drinking water. It is now awaiting approval by the Governor.

**“With increased reports and interest on the health risks of microplastics, it is past time we formally study its impacts,” stated Senator Portantino. “My Bill calls for the identification of a level of microplastics in drinking water that do or don’t pose risks to our health and then initiates a strategy to make drinking water safer for consumption. The bill applies to both tap and bottled water, which will ensure that all drinking water is treated consistently to maximize public health.”**

The bill would require the Office of Environmental Health Hazard Assessment (OEHHA) to share biennial studies that explore the health impacts of microplastics in drinking and bottled water to evaluate toxicity characteristics and identify levels of microplastics that are not anticipated to cause or contribute to adverse health effects, or to identify any data gaps that would need to be addressed to establish those levels. After



considering the findings of the report, the State Water Resources Control Board (SWRCB) may request OEHHA to prepare and publish a public health goal for microplastics in drinking water.

Source: <https://lifestraw.com/blogs/news/filtering-microplastics-and-nanoplastics-from-drinking-water>

# Proposed Bond on the November Ballot

By Jerry Gewe



Proposition 4, on the November ballot, will be a measure requesting the approval of a \$10 Billion bond for state climate initiatives. The bond would fund a wide range of the state’s climate efforts. Its main focus areas include state water projects (like those aimed at ensuring safe drinking water for all Californians), reducing wildfire risks, coastal resilience, extreme heat mitigation, sustainable agriculture, protection of biodiversity, air quality and equitable access to outdoor spaces.

Photo by Fred Greaves for CalMatters

While much of the publicity will focus on water issues, supporters say the bond would provide much-needed funds to accomplish California’s ambitious environmental goals, like its commitment to conserving 6 million acres of land by 2030.

The bond would be paid off by California’s general fund, which is supported, for the most part, by tax revenue. The state’s legislative analyst’s office says the estimated cost to repay the bond would be \$400 million a year over the course of 40 years.

The bond will need majority voter approval to succeed.

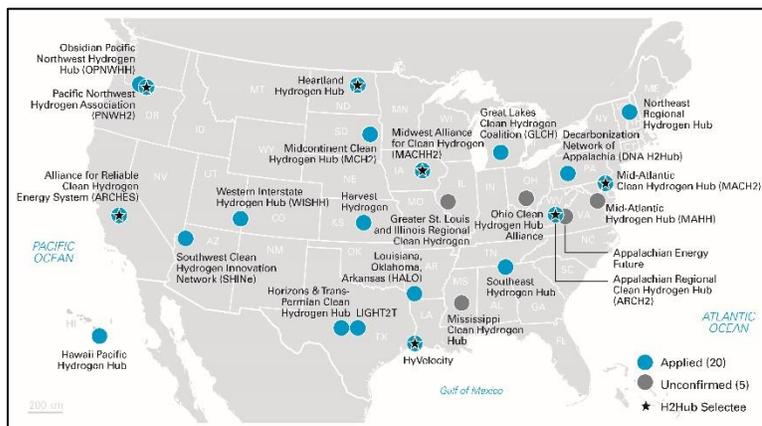
## California First State to Get Federal Funds for Hydrogen Hub

By William Glauz

In July, the U.S. Department of Energy (DOE) announced that California will be the first state to receive federal funds to create regional networks, or “hubs,” that produce hydrogen as an energy source for vehicles, manufacturing and generating electricity.

The California Hydrogen Hub will receive an initial \$30 million to begin its planning and design phase. The state will eventually receive up to \$1.2 billion for the project.

Last October, DOE selected seven regional hubs for the \$7 billion program that will kickstart development and production of hydrogen fuel, with the goal of eventually replacing fossil fuels such as coal and oil with the colorless, odorless gas that already powers some cars and trains.



The hubs, which include projects in 16 states, will spur more than \$40 billion in private investment and create tens of thousands of jobs.

Additional information can be found at the Associated Press website:

<https://apnews.com/article/california-hydrogen-hubs-f31544fa1c77dd0dc06f2dbd5117a040>

# GUEST SPEAKERS

Summaries by Robert Yoshimura

GUESTS OF THE MONTH  
JULY 2024

## ARAM BENYAMIN, DWP CHIEF OPERATING OFFICER

### ORGANIZATIONAL UPDATE

Aram Benyamin is a long-time DWP employee who recently returned from an eight-year stint as CEO of Colorado Springs Utilities which offers a broad range of public services including water, wastewater, power, and gas. Aram accepted the role of COO at DWP nearly two years ago and has been focused on organizational concepts that will help DWP to navigate its challenging road ahead.

Aram emphasized that his goal is to achieve an organization that is aligned around DWP's mission, with an intense focus on customer service. This is to ensure that every employee and every element of the organization is pulling in the same direction. In an unaligned organization, employees trending in different directions causes inefficiency and requires an internal focus that detracts from the achievement of its mission. Thus, he and the DWP management team have developed a number of specific initiatives to improve the customer experience.



The first of these initiatives that will launch early in 2025 is called LA Connect. A part of this concept will be a joint center staffed with engineers and other employees from both the water and power systems who will answer any questions from customers. It will be a welcoming service center aimed at residential customers, business owners, developers, and anyone with questions for DWP. It is intended to provide answers to questions such as: How do I implement roof-top solar panels on my house? Or how do I get water and power connections for my new shopping mall? Many large developers and other businesses often hire lobbyists, attorneys, or agents to deal with DWP. Such actions show a failure of customer service because dealing with a public agency should not require translators to expedite business transactions. The first center will be established in Eagle Rock with subsequent locations to be added throughout the city.

Another concept under LA Connect is DWP-owned “electric gas stations” or Community E-Hubs where DWP customers can charge their electric vehicles at the same cost as they pay at home. Access will be provided to all customer types. This will enable renters, multifamily residents, out of town commuters, and electric bike users to avoid commercial charging stations that charge upwards of \$1 per kilowatt-hour (kWh). A second element of E-Hubs will be the installation of batteries to enable renewable energy generated at night to be saved for use at times of high

demand rather than curtailing (and wasting) that energy. A third element of E-Hubs will be to provide internet access via fiber optic to the public within an air-conditioned workspace.

The Department is currently working on a fiber optic master plan to better define how it will develop and secure this important resource. DWP currently owns and operates a network consisting of 1,100 miles of fiber optic cable interconnecting its many facilities. One aspect of the master plan will be to determine what to do with any excess capacity in the fiber optic system. It is likely that capacity will be rented to private users who are close enough to connect to the system, but such capacity will not be actively marketed.

DWP has constructed a prototype Telecommuting Hub on the 6<sup>th</sup> floor of the JFB (John Ferraro Building, DWP's headquarters) to showcase a new concept in workplace effectiveness. This prototype provides a glimpse into the future of workplaces at DWP and elsewhere. Twelve or thirteen such telecommuting hubs will be built throughout the city for use during the retrofitting of the JFB and in the foreseeable future. Each hub will provide individual workstations, conference rooms, collaborative workspaces, and convertible training rooms for telecommuters as an alternative to working from home and as a meeting place when necessary. Telecommuting employees will not have permanent offices but will use lockers to keep items they need when working at the hub. Ultimately, telecommuting employees will have a choice of working from home or at one of the nearby hubs.

Post retrofit, the JFB will consist of offices and conference rooms in an open concept for a small portion of the 3,000 employees now stationed there. The rest of the employees will work from home and utilize the telecommuting hubs as needed or return to the JFB later as needs dictate. Work schedules and locations will evolve and likely be hybridized as a combination of work-from-home, work at JFB, and work from a hub. Public counters for retirees (such as the retirement plan and health plans offices) will be centralized at the 3<sup>rd</sup> Street Building.

The JFB retrofit project is scheduled to be completed in two years after full evacuation of the building at the end of 2024. That relatively short construction schedule is possible because only 5 floors of the building are needed after completion due to the decentralizing of the work force. Decentralization will also spill over into the field offices where central warehouses will be replaced with smaller distributed facilities and trucks to provide needed supplies to crews where they work and to minimize their travel time.

In response to concerns expressed by W&PA Board members regarding the preservation of historical documents, images, and artifacts, Aram provided assurance that a process will be used to prevent the loss of such resources. All items will be tagged and stored temporarily at the record center and later screened to determine their fate.

The concepts described by Aram represent a new way of doing business and address the practical limitations of commuting and traveling in a highly congested city. Many details have yet to be worked out and will require input from the experience of employees working from the hubs. Ultimately, the new structure of the workforce will result in a more effective organization and a better experience for both customers and employees.

**FRED PICKEL, PhD, EXECUTIVE DIRECTOR – OFFICE OF PUBLIC ACCOUNTABILITY**  
**REVIEW OF ACCOMPLISHMENTS AND STATUS OF SEARCH FOR NEW DIRECTOR**



The Office of Public Accountability (OPA) was established by a charter amendment in 2011, and Dr Pickel was appointed in early 2012 to fill the position of Executive Director, otherwise known as the “Ratepayer Advocate” for the Los Angeles Department of Water & Power. He served an initial six-year term and was reappointed to a second 5-year term in 2018. The second term expired in December 2023, when he also announced his retirement. However, he has agreed to stay on as the Acting Director pending completion of the search for his replacement. Dr Pickel described some of the findings and successes of the office during his two terms and pointed out the ongoing

challenges facing his office and the DWP in the upcoming years.

Among the nation’s 3,000 local utilities, DWP ranks number eight in terms of the number of employees, value of net property, plant and equipment (PP&E) and customer count. It is bigger than many investor-owned utilities (IOU) and most, if not all, publicly owned utilities (POU). It is thus a major player among the nation’s water and power providers. DWP’s annual revenue totals almost \$7 billion and its annual capital and operating budget exceeds \$9 billion. DWP’s assets total more than \$20 billion, and it serves a total of 1.6 million customers.

Regarding the regulation of utilities, IOUs fall under state regulation of retail rates in every state, and federal regulation of wholesale activities and transmission access. Non-investor-owned utilities, which include cooperatives, municipals, and special entities such as irrigation districts, fall under limited state regulation. As reported by the American Public Power Association in 2007, six states have full regulation of the rates of municipal utilities, while fifteen states have limited regulation. In California, the state’s Public Utilities Commission has regulatory authority over only the safety activities of municipal utilities.

Dr. Pickel and the OPA tackled numerous issues and achieved many accomplishments during his two terms in office. Initially, he focused on establishing the OPA and getting enabling legislation passed that defined the responsibilities, limitations, and procedures of the new office. The OPA then provided regular reporting to the Board, Council, Mayor, and Neighborhood Councils regarding DWP operations. In 2014, billing issues became apparent in the new computer system developed to modernize the billing system, that resulted in large and erroneous bills for some customers. The ensuing litigation with the developers of the system has been largely resolved, but parts of it continue to this day.

Some other examples of issues the OPA dealt with and guided to conclusion include:

- Three water and power rate reviews in 2012, 2015/16, and 2020, although the 2020 review was cut short and never completed due to the

Covid crisis.

- Compensation benchmarking study in 2015-2017, that concluded that DWP compensation falls within the average range for nation-wide utilities when the high cost of living in Los Angeles is factored in.
- That benchmarking study also found that the DWP's number of employees per meter was higher than any other utility. However, when outsourcing through contracts (by other utilities) was factored in, DWP again fell within the average range.
- Such benchmarking established much needed transparency on employee compensation and DWP's functional costs.
- A review of the cost impact of the DeltaFix (tunnel project in the Sacramento Delta) on DWP rates. The per household monthly cost was \$1 to \$4 for a significant improvement in water availability and reliability.
- A review of the cost of the transition to 100% renewable energy by 2035, which resulted in the conclusion that the accelerated goal is extremely costly compared to the SB 100 goal of 2045. The average cost penalty would be \$250 per month per household!
- Reviews of other major capital programs such as Operation NEXT (wastewater recycling), Once-thru-Cooling for coastal power plants, and Intermountain Power Project's transition away from coal.

Some of the future challenges identified by the OPA include:

- Improvement of the Information Technology services, which lag far behind other utilities, and the establishment of Project Management Offices to concentrate expertise in this important function.
- Building middle management.
- Boosting staffing levels in key areas, especially field positions, to meet the needs of the upcoming projects mentioned above.
- Managing the ambitious mega-projects currently in the works.

As mentioned at the outset, Dr. Pickel's term expired at the end of last year and a selection process is in place to find his replacement. A Citizens' Selection Committee is responsible for the search and consists of 2 members appointed by the mayor, two members appointed by the Council President, and one member appointed by the Chair of the Energy and Environment Committee of the City Council. The selection will become final when the Mayor and Council approve the candidate named by the Citizens' Selection Committee.



## Mystery History Answer

Answer: 1937

More information at:

[Mystery History Section](#) OR

Click [HERE](#)

**Raphael Villegas, Project Manager for Pure Water LA  
Los Angeles Department of Water and Power**

**UPDATE ON THE PURE WATER LA PROJECT**

By Robert Yoshimura

Formerly known as Operation NEXT and Hyperion 2035, the project was rebranded in July 2024 under the unified name of Pure Water LA, encompassing all the work by both LADWP and the Bureau of Sanitation (LASan). The project was initiated by a directive in 2019 by former Mayor Eric Garcetti. Since then, LADWP and LASan have been developing plans for each agency's role in the program. The rebranding under a common name reflects the change in focus to a unified planning process and has resulted in unified mission and vision statements.



LADWP is currently working on a Master Plan under the direction of the Board of Commissioners to validate the program strategy and develop a roadmap for implementation. That plan is scheduled for completion in December 2024. Concurrently, LASan has produced a technical memorandum regarding the feasibility of the project, a Program Implementation Plan defining specific capital projects needed at the existing Hyperion Water Reclamation Plant, a Program Management Plan, and is working on a Conceptual Design Report for the first phase of the project.

The two agencies are now jointly working on two active projects. One is a satellite Advanced Water Purification Facility being built in conjunction with the Los Angeles World Airports (LAWA) to provide recycled water to them. The facility is complete and will begin delivering water in early 2025. The second project is a Membrane Bioreactor (MBR) Pilot Plant on Hyperion property to provide research and regulatory acceptance testing and will help develop criteria for the replacement of existing oxygen activated sludge treatment with MBR. The primary benefit of such a conversion is that MBR has half the footprint of conventional processes and produces a better effluent. One scenario for the conversion to MBR will take place in three phases as follows:

- Phase 1 – produce 50 million gallons per day (MGD) for indirect potable reuse (IPR),
- Phase 2 – produce an additional 40 MGD for indirect potable reuse (90 MGD total),
- Phase 3 – produce an additional 120 MGD for direct potable reuse (DPR), (210 MGD total).

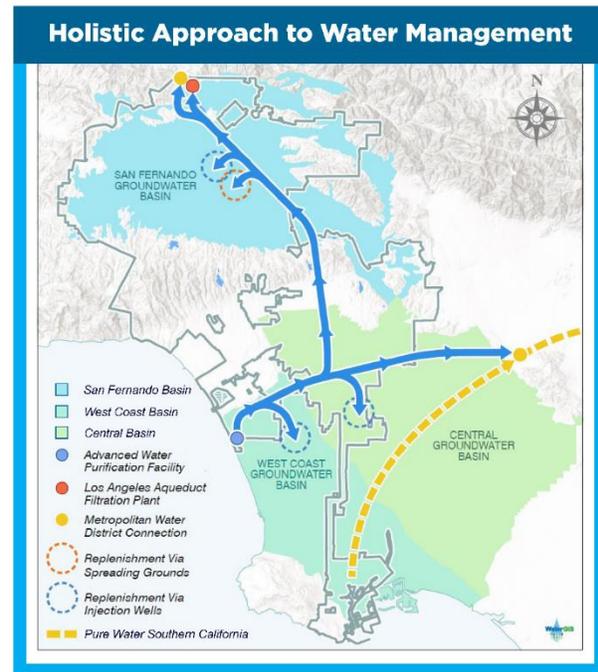
At full build-out, the goal of the Pure Water LA project is to supply IPR water to the Los Angeles Aqueduct Filtration Plant (LAAFP) for treatment to meet drinking water standards. From there, DPR water can be supplied to most areas of the city. Supply pipelines (see figure below) will be built to enable the transmission of IPR water to the far northern part of the San Fernando Valley and to numerous groundwater basins and reservoirs along the way (San Fernando, Central, and

West Basins). Adding IPR water to reservoirs is allowable so long as the ratio of treated drinking water to IPR water is greater than 10:1. Those pipelines will also connect to facilities owned by or to be built by the Metropolitan Water District of Southern California (MWD) to deliver IPR water to the MWD Jensen Filtration Plant next door to LAAFP, and to a backbone pipeline that will deliver water to the eastern portions of the MWD service area.

Preliminary cost estimates of the various alternatives being considered range from less than \$21 billion to more than \$25 billion depending on the degree of DPR developed. The capital improvements program for Pure Water LA has identified the following new facilities needed to complete the project:

- IPR treatment facility at Hyperion Water Reclamation Plant
- One new DPR treatment facility
- Two new groundwater treatment facilities
- Two new production well fields
- Three new 9-million-gallon storage tanks
- Three new pumping stations
- Forty miles of new trunklines
- A variety of new power supply facilities

Community engagement is an essential part of the roll-out of Pure Water LA. During the next few months, LADWP will brief each of the City Council Districts, The Neighborhood Council MOU Oversight Committee, a Stakeholder Engagement Group, and hold a series of community meetings in October and November 2024.



Next steps for the joint program in the next few months include:

- A 90% deliverable on the Detailed Analysis of the Master Plan will be completed in October 2024. Subsequently, cost refinements and input from public outreach efforts will be added with an expected final report in December.
- Shortly thereafter in early 2025, staff will update the LADWP Board.
- The Hyperion Program Implementation Plan will be completed and adopted.
- Decisions will be made regarding Facilities Ownership, Treatment Location, a Program Environmental Impact Report in accordance with CEQA, and other partnering considerations.
- Proceed with Hyperion Phase 1A (IPR delivery to LAWA).

One sticky issue that the City will have to deal with as these next steps are taken is how to integrate with competing water sources such as MWD's Pure Water Southern California water reuse project (150 MGD), reuse projects in Orange County and San Diego, and existing water supplies to determine the rate of progress needed to efficiently meet the water needs of the City and region. Thoughts are also being given to resolving the issues that arose during 2022 when shortages occurred in regions where Colorado River water could not be delivered.

# SAVE THE DATE

2024-25 CALENDAR

## GUEST OF THE MONTH

Meetings in Person  
Room 1471, JFB and Via  
Zoom, Check your WPA  
Emails for the Zoom Link



<b>FIELD TRIP HEADWORKS RESERVOIR SITE</b>	<b>OCTOBER 9, 2024</b>
<b>HAIK MOVSERSIAN SUPERVISOR OF DISTRIBUTION PLANNING</b>	<b>NOVEMBER 13, 2024 Power Distribution System Upgrade Plans</b>
<b>TO BE ANNOUNCED</b>	<b>DECEMBER 11, 2024</b>
<b>TO BE ANNOUNCED</b>	<b>JANUARY 8, 2025</b>
<b>ANNUAL MEETING</b>	<b>FEBRUARY 8, 2025 (SATURDAY)</b>

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