THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Committee Item
INFORMATION

One Water and Adaptation Committee

10/12/2026 Committee Meeting

6a

Subject

2026 Annual Local Supply Survey

Executive Summary

This report presents the results of the Local Supply Survey for the 2025 calendar year, which tracks local agency production and the status of existing and planned projects that supply water to Metropolitan's service area. These projects may be located within or outside the service area and are controlled by Metropolitan's member agencies and other local water agencies. The survey is a collaborative effort with the member agencies and informs Metropolitan's resource planning. Through this process, Metropolitan gains essential insights into how member agencies manage and develop their local supplies.

Total local production in calendar year 2025 was 1.92 million acre-feet, about 40 thousand acre-feet less than in 2024 and generally consistent with the long-term average since 1980. The decline reflected dry conditions in 2025 that reduced surface water and Los Angeles Aqueduct production after exceptionally wet years in 2023 and 2024. Despite this slight decrease, the region met 60 percent or more of its demand with local supplies for the third consecutive year. While long-term production trends have remained relatively flat, declining regional demand over the past decade has increased the share of demand met by local supplies.

The survey identified approximately 2.66 million acre-feet per year of potential future yield from existing and planned local supply projects, assuming all identified projects are completed and operate at their reported capacities. Of this total, approximately 2.1 million acre-feet per year represents the potential yield of projects already in operation. As projects currently under construction are completed and begin operation, this amount could increase to approximately 2.3 million acre-feet per year by 2030.

Fiscal Impact

None

Related Board Action(s)/Future Action(s)

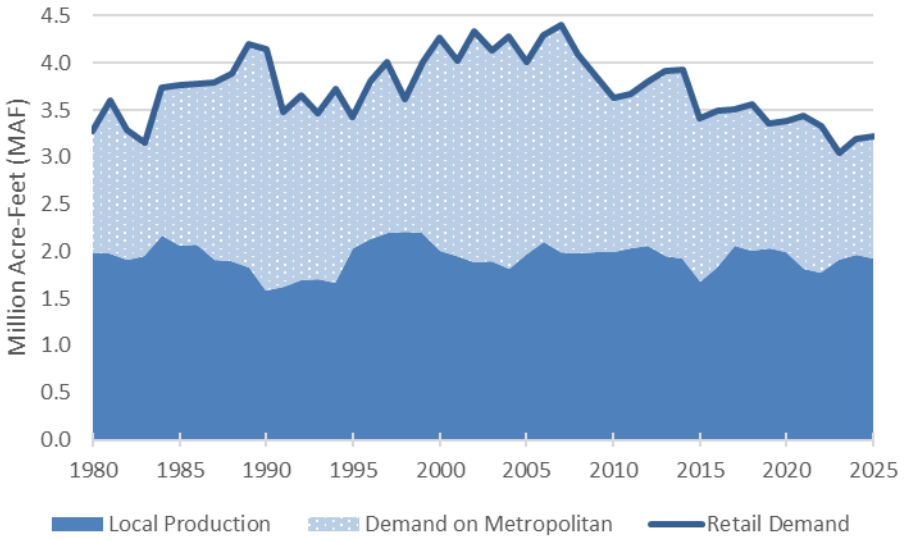
Not applicable

Details and Background

Metropolitan's Annual Local Supply Survey

Local supplies are developed, controlled, and delivered independently of Metropolitan by the member agencies and other local water agencies serving the region. Information on local supplies is a key factor in determining how much Metropolitan water may be needed to meet regional demands. As shown in Figure 1, local supplies can meet more than half of the region's retail water demand, with the remainder supplied by Metropolitan.

Figure 1: Breakdown of Retail Demands met by Local Production vs Metropolitan



To coordinate regional planning and align with member agency plans, Metropolitan conducts the Local Supply Survey on an annual basis. The survey collects data on local supply production and the status of existing and planned projects. The results inform Metropolitan's resource planning reliability assessments, annual reports, and other planning documents.

Types of Local Supply

For this survey, local supplies are water produced, controlled, and delivered independently of Metropolitan and used within a member agency's service area. These local supplies include:

- Groundwater: Water extracted from local groundwater basins.
- Los Angeles Aqueduct: Water imported from the Eastern Sierra by the City of Los Angeles Department of Water and Power.
- Surface Water: Water obtained through stream diversions and precipitation captured in rivers and reservoirs.
- Recycled Water: Wastewater treated for non-potable or indirect potable reuse through groundwater replenishment or reservoir augmentation.
- Groundwater Recovery: Water produced by treating groundwater degraded by pollutants or naturally occurring salinity to restore it to potable standards.
- Seawater Desalination: Seawater treated to potable standards through advanced desalination processes.

Local Project Status Categories

Over the years, the survey has shown that future local supply development faces a range of uncertainties that can affect feasibility, timing, and yield. Projects tracked in previous surveys have been delayed, downsized, or canceled. Project viability may depend on funding availability, public acceptance, permitting requirements, regulatory approvals, and shifting priorities.

To reflect these uncertainties, Metropolitan classifies local supply projects into four development stages as shown in Table 1.

Table 1 – Development Stages

Development Stage	Status	Description	Relative Certainty
EXISTING	Operational	Project is complete, operational, and producing water. Projected increases in yield generally reflect the anticipated ramp up of completed facilities.	Highest
UNDER CONSTRUCTION	Construction underway	Project is funded and fully permitted, and construction has begun. Future production is expected, although schedule delays or changes in anticipated yield remain possible.	High
CEQA	Certified	Environmental review is complete, but additional steps such as securing funding, completing final design, and bidding may be required before construction begins.	Moderate
	In Progress	Environmental review is underway. The project is being actively pursued, but its schedule, final configuration, and anticipated yield remain uncertain.	Lower
CONCEPTUAL	Early planning	Project has been identified as a potential future supply but has not begun CEQA review. Feasibility, funding, schedule, and potential yield remain highly uncertain.	Lowest

2026 Survey Results

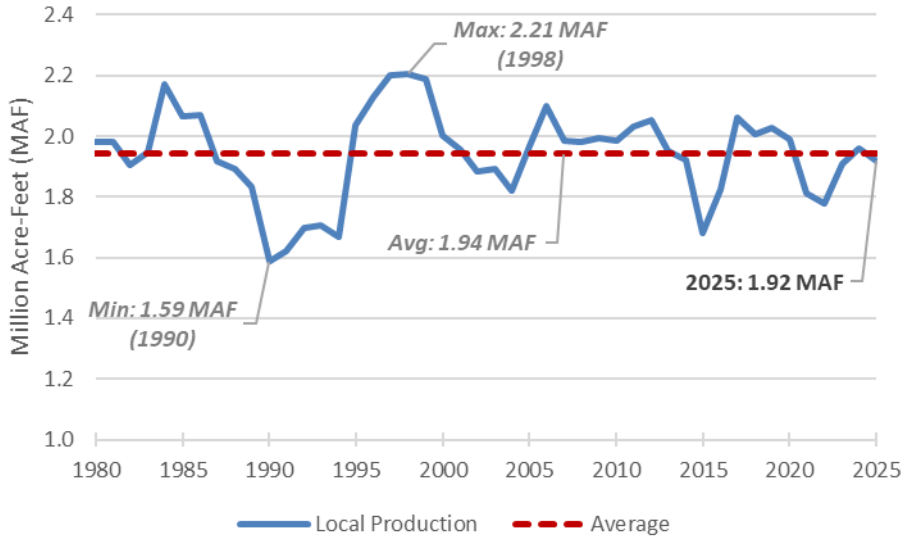
The 2026 Local Supply Survey was sent to member agencies on February 26, 2026, and included two components:

- **Production**: Monthly production data for calendar year 2025 and updates to prior-year data.
- **Project Inventory**: Information on existing and planned local supply projects, including forecasted yield, anticipated online date, development status, and other relevant details on future production.

Responses were requested by the end of May 2026, and Metropolitan completed its review in August 2026. The information provided by member agencies represents the best available estimates at the time of reporting and is subject to future updates and reconciliation.

Figure 2 shows that total local production in calendar year 2025 was 1.92 million acre-feet, about 40 thousand acre-feet less than in 2024 and generally consistent with the long-term average since 1980. The decline primarily reflected dry conditions in 2025 that reduced surface water and Los Angeles Aqueduct production, following exceptionally high statewide precipitation in 2023 and 2024.

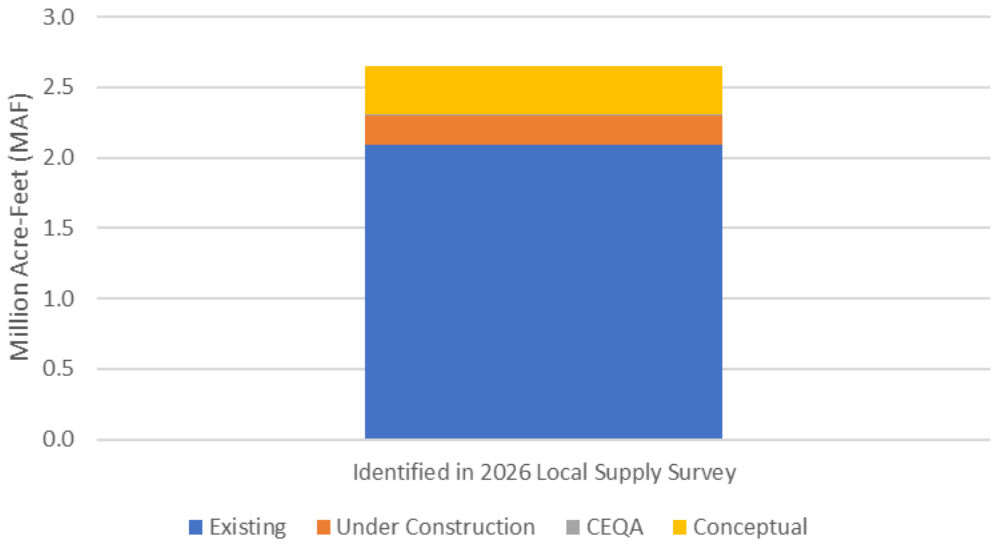
Figure 2: Total Local Production Since 1980



Local production can vary due to hydrologic conditions, water quality challenges, operational constraints, mechanical issues, and shifts in water demand. Member agencies reported that since 2023, lower demand has reduced production, particularly for groundwater. Nevertheless, local supplies have met at least 60 percent of regional retail demand in each of the past three years, compared with the long-term average of about 50 percent.

The survey identified approximately 2.66 million acre-feet per year of potential future annual yield[1] from existing and planned local supply projects, as shown in Figure 3. Of this total, approximately 2.1 million acre-feet per year is associated with existing projects, while approximately 560 thousand acre-feet per year is associated with planned projects at various stages of development.

Figure 3: Potential Future Annual Yield of Local Supply Inventory by Project Status



Projects currently under construction account for approximately 205 thousand acre-feet per year of the planned yield and are anticipated to come online within the next five years. As these projects become operational, the potential annual yield from existing and under-construction projects could reach approximately 2.3 million acre-feet per year by 2030. The remaining approximately 350 thousand acre-feet per year of potential yield is associated with projects in environmental review or the conceptual stage, with most associated with conceptual projects.

Projects in these earlier stages of development have greater uncertainty regarding feasibility, timing, funding, and ultimate implementation and should not be assumed to develop as currently reported. In addition, existing local supply production may decline over time due to changing conditions. As a result, new project yield may partially offset losses in existing supplies rather than represent a net increase in regional local supply production.

[1] Potential future annual yield reflects projects' reported capabilities and does not necessarily indicate the amount of water that will be produced in a given year. Actual production may be lower due to hydrologic conditions, water quality, operational constraints, demand, maintenance, or other factors.

If all identified projects are ultimately completed and operate at their reported capacities, total potential annual yield could reach approximately 2.66 million acre-feet per year through 2050. These estimates will continue to be updated through Metropolitan's annual Local Supply Survey and other regional planning processes.

Additional information on the survey results by local supply type is available in the attached detailed report.

9/22/2026

Brandon J. Goshi *Date*
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9/22/2026

Shivaji Deshmukh *Date*
General Manager

Attachment 1 – 2026 Annual Local Supply Survey Detailed Report

Ref# wrm12711698

Annual Local Supply Survey Report

September 2026

Summary

This report summarizes the results of Metropolitan's annual Local Supply Survey, offering an overview of recent trends, current conditions, and the outlook for local supply production throughout the region.

Purpose

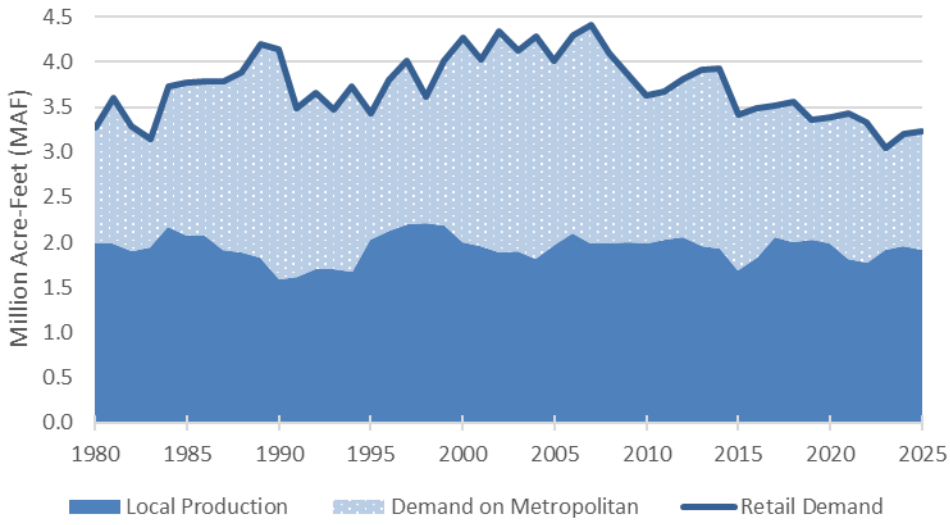
Informational

Detailed Report

Metropolitan's Annual Local Supply Survey

Local supplies are developed, controlled, and delivered independently of Metropolitan by the member agencies and other local water agencies serving the region. Information on local supplies is a key factor in determining how much Metropolitan water may be needed to meet regional demands. As shown in Figure 1, local supplies can meet more than half of the region's retail water demand, with the remainder supplied by Metropolitan.

Figure 1: Breakdown of Retail Demands met by Local Production vs Metropolitan



To coordinate regional planning and align with member agency plans, Metropolitan conducts the Local Supply Survey annually. The survey collects data on local supply production and the status of existing and planned projects. The results inform Metropolitan's resource planning reliability assessments, annual reports, and other planning documents.

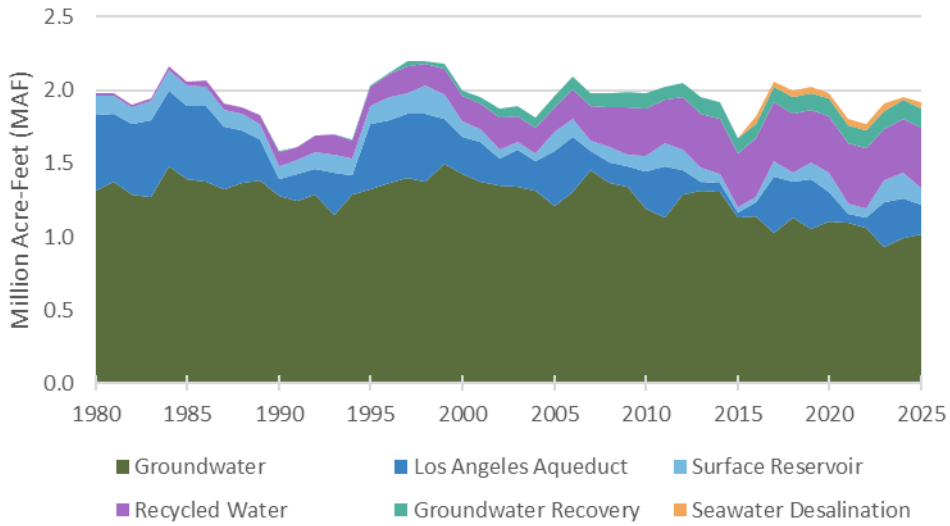
Types of Local Supply

For this survey, local supplies are water produced, controlled, and delivered independently of Metropolitan and used within a member agency's service area. These supplies include:

- Groundwater – Water extracted from local groundwater basins
- Los Angeles Aqueduct[1] – Water imported from the Eastern Sierra by the City of Los Angeles Department of Water and Power.
- Surface Water – Water obtained through stream diversions and precipitation captured in rivers and reservoirs.
- Recycled Water – Wastewater treated for non-potable or indirect potable reuse through groundwater replenishment or reservoir augmentation.
- Groundwater Recovery – Water produced by treating groundwater degraded by pollutants or naturally occurring salinity to restore it to potable standards.
- Seawater Desalination – Seawater treated to potable standards through advanced desalination processes.

Figure 2 shows the breakdown of local production by supply type.

Figure 2: Local Production by Type



Local Project Status Categories

Over the years, the survey has shown that future local supply development faces a range of uncertainties that can affect feasibility, timing, and yield. Projects tracked in previous surveys have been delayed, downsized, or canceled. Project viability may depend on funding availability, public acceptance, permitting requirements, regulatory approvals, and shifting priorities.

To reflect these uncertainties, Metropolitan classifies local supply projects into four development stages:

[1] For Metropolitan's planning purposes, the Los Angeles Aqueduct is classified as a local supply because it is developed, controlled, and delivered independently of Metropolitan by a local agency.

- Existing – The project is operational and producing water. Any projected increase in yield generally reflects the anticipated ramp-up of completed facilities.
- Under Construction – The project is funded and fully permitted, and construction has begun. Future production is expected, though delays or changes in expected yield remain possible.
- CEQA – The project is undergoing environmental review. It could be:
    - Certified – Environmental review complete, but additional steps (e.g., securing funding, final design, bidding) may still be required before construction begins.

    OR

    - In Progress – Undergoing environmental review. Actively pursued, but the timelines and outcomes remain uncertain.
- Conceptual – The project has been identified as a potential future supply, but has not begun CEQA review. Feasibility, funding, schedule, and potential yield are highly uncertain.

2026 Local Supply Survey Results

The 2026 Local Supply Survey was sent to member agencies on February 26, 2026, and included two components:

- A production survey that collected monthly production data for calendar year 2025 and updates to prior-year data.
- An inventory survey that collected information on existing and planned local supply projects, including forecasted yield, anticipated online date, development status, and other relevant details on future production.

Responses were requested by the end of May 2026, and Metropolitan completed its review in August 2026. Data collected via the survey represents the best available estimates and is subject to future reconciliation.

Local Production Survey Results

Figure 3: Total Local Production Since 1980

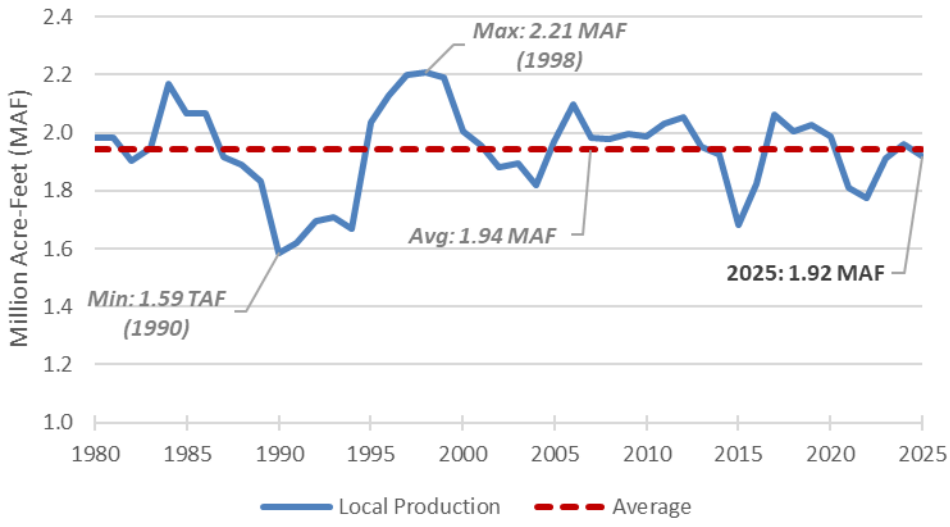
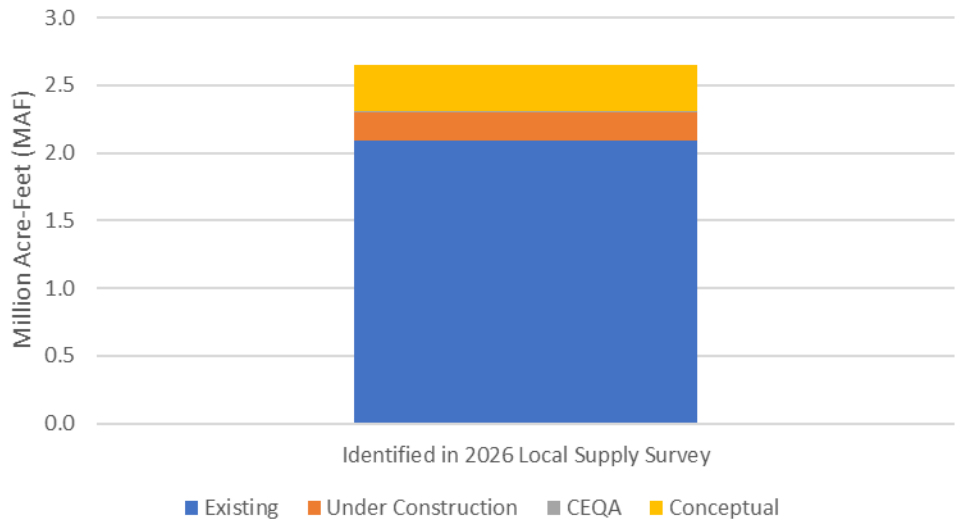


Figure 3 shows that total local production in calendar year 2025 was 1.92 million acre-feet, about 40 thousand acre-feet less than in 2024 and generally consistent with the long-term average since 1980. The decline primarily reflected dry conditions in 2025 that reduced surface water and Los Angeles Aqueduct production, following exceptionally high statewide precipitation in 2023 and 2024.

Local production can vary due to hydrologic conditions, water quality challenges, operational constraints, mechanical issues, and shifts in water demand. Member agencies reported that since 2023, lower demand has reduced production, particularly for groundwater. Nevertheless, local supplies have met at least 60 percent of regional retail demand in each of the past three years, compared with the long-term average of about 50 percent.

Local Supply Inventory Results

Figure 4: Potential Future Annual Yield of Local Supply Inventory by Project Status



The survey identified approximately 2.66 million acre-feet of potential future annual yield[2] from existing and planned local supply projects, as shown in Figure 4. Approximately 2.1 million acre-feet per year is associated with existing projects, while roughly 560 thousand acre-feet per year is associated with planned projects.

Projects currently under construction are expected to add approximately 205 thousand acre-feet per year of potential new yield and are anticipated to come online in the next five years. Most of the remaining potential yield from planned projects is associated with projects in the conceptual stage. These projects face considerable uncertainty regarding feasibility, timing, and implementation, and therefore should not be assumed to develop as currently reported. Additionally, future losses in existing local supply are always possible, meaning new projects may ultimately offset declines rather than increase total regional capacity.

[2] Potential future annual yield reflects projects' reported capabilities and does not necessarily indicate the amount of water that will be produced in a given year. Actual production may be lower due to hydrologic conditions, water quality, operational constraints, demand, maintenance, or other factors.

Based on survey responses, local supply capability, comprising existing and under-construction projects, could provide approximately 2.3 million acre-feet per year by 2030. Projects in the environmental review and conceptual stages could provide up to an additional 350 thousand acre-feet per year through 2050 if they advance as currently reported. These estimates will continue to be updated through Metropolitan's annual survey and other regional planning processes.

Groundwater

Groundwater is the region's largest source of local water supply, accounting for up to two-thirds of the region's local production. Approximately 88 groundwater basins lie within Metropolitan's service area, with 96 percent of production coming from adjudicated or actively managed basins under an approved Sustainable Groundwater Management Act (SGMA) Groundwater Sustainability Plan (GSP). More than half of the region's groundwater is produced from the Central, Chino, Main San Gabriel, and Orange County Basins. Local basins are recharged both passively, through natural percolation of precipitation, and actively, through the spreading of stormwater and the injection or spreading of imported and recycled water. Imported and recycled water is also used to prevent seawater intrusion through four active seawater barrier projects: the Alamitos Gap Barrier, the Dominguez Gap Barrier, the Talbert Gap Barrier, and the West Coast Basin Gap Barrier. While a key local resource, groundwater production is partially reliant on imported water, not only for replenishment but also, in some instances, for blending.

Recent Production and Current Conditions

Figure 5: Groundwater Production Since 1980

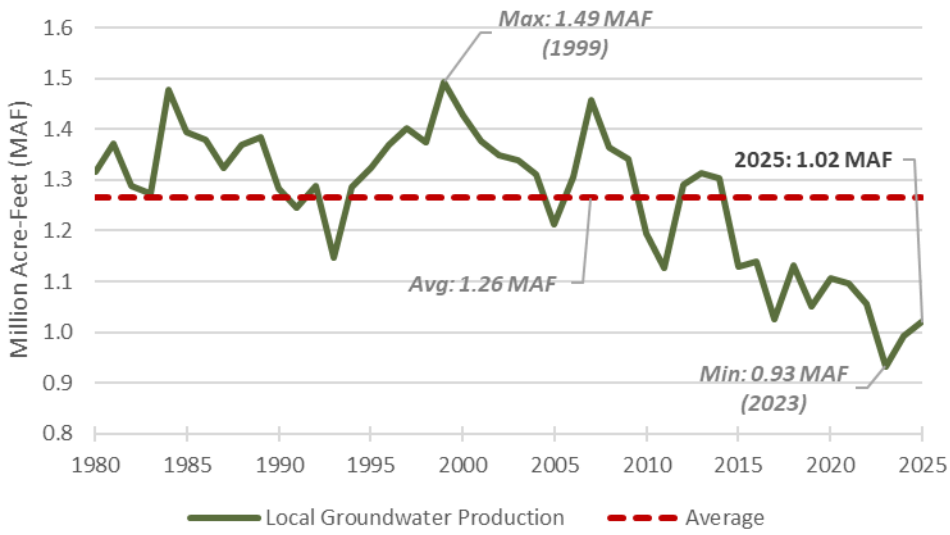
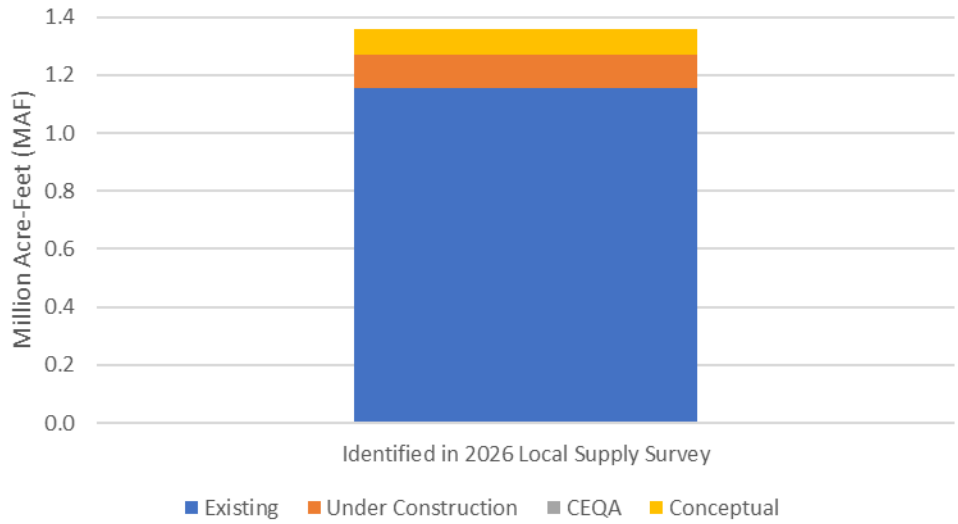


Figure 5 shows that groundwater production in 2025 was 1.02 million acre-feet, well below the long-term average. However, this also represents an increase compared to 2024, as demand slowly begins to rebound and PFAS treatment facilities restore production in the Orange County Basin. According to member agencies, production has been low since 2023 because retail water demand was unusually low. These low demands were driven by continued emergency water conservation efforts, cool and wet weather that reduced outdoor irrigation needs, and increased availability of less expensive surface water. Since groundwater can be stored in the basin, local agencies opted to reduce pumping.

While the low production from 2023 to 2025 appears to be an anomaly, there has been a long-term decline in groundwater production. Several factors have contributed to this trend. Overdraft conditions in many basins, exacerbated by multiple severe droughts in the last decade, prompted managers to reduce pumping to better align with declining natural replenishment. Water quality issues have also taken wells offline. For example, Los Angeles lost up to 70 percent of its well capacity in the San Fernando Basin due to volatile organic compounds from legacy industrial pollution. The city has been working since the 1980s to rehabilitate lost production. Since 2020, PFAS-related shutdowns in the Orange County Basin have prompted the construction of treatment facilities to restore capacity. Lastly, declining retail demand over the past decade has reduced the need for groundwater pumping, contributing to the overall decline in groundwater production.

Production Outlook

Figure 6: Potential Future Annual Yield of Groundwater Projects by Status



The survey identified approximately 1.36 million acre-feet of potential future annual yield from existing and planned groundwater projects, as shown in Figure 6. Of this total, about 1.15 million acre-feet per year comes from existing projects, while roughly 210 thousand acre-feet per year is tied to planned projects. Groundwater capability is expected to be approximately 1.27 million acre-feet per year by 2030 from existing and planned projects, with up to an additional 53 thousand acre-feet per year possible through 2050 if CEQA and conceptual projects ultimately advance as currently reported.

In the near term, treatment facilities in the Orange County and San Fernando Basins are expected to come online, restoring capacity lost to contamination and likely increasing production under all hydrologic conditions.

While demand-side factors explain recent low production levels, several supply-side risks could affect future groundwater reliability. Climate change may lead to less frequent but more intense precipitation events, reducing natural replenishment and increasing reliance on imported and recycled water for recharge. These conditions will also heighten the need for improved stormwater capture to make use of changing runoff patterns. In addition, future discoveries of contamination or changes in water quality regulations introduce further uncertainty. Although the timing and extent of these impacts cannot be

predicted, investments in treatment infrastructure, such as those built in response to PFAS, may prevent future production losses from emerging contaminants of concern.

Lastly, the success of well maintenance and replacement efforts, long-term restoration initiatives, proactive basin management, the implementation of large-scale indirect potable reuse projects, and the reliability of imported water for recharge and blending will all play critical roles in sustaining groundwater production over the long term.

Los Angeles Aqueduct

The Los Angeles Aqueduct imports water from the Eastern Sierra Nevada to the City of Los Angeles and is its largest source of water outside of Metropolitan. It was originally constructed in 1913 to convey water from the Owens Valley, later extended to the Mono Basin in 1940, and then augmented with a second barrel in 1970. The aqueduct extends approximately 340 miles and operates entirely by gravity. Key infrastructure includes nine reservoirs with a combined capacity of 311,000 acre-feet, as well as the Los Angeles Aqueduct Filtration Plant. Although the aqueduct's supply source is outside the service area, it is treated as a local supply for Metropolitan's planning purposes because it influences the city's demand for Metropolitan supplies.

Recent Production and Current Conditions

Figure 7: Los Angeles Aqueduct Production Since 1980

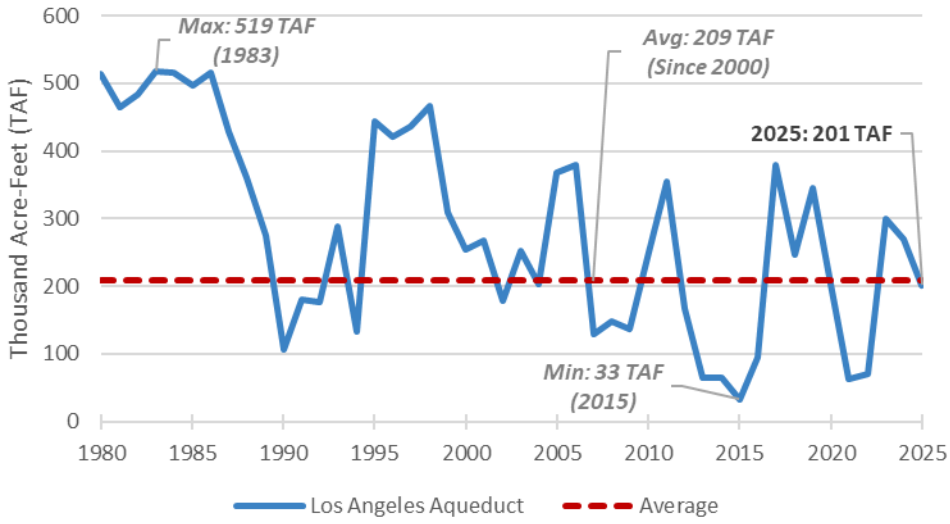


Figure 7 shows that the aqueduct delivered approximately 201,000 acre-feet in 2025, consistent with the post-2000 average. This is a decrease from 2024, driven by reduced precipitation in the Eastern Sierra watershed.

Over the long term, average aqueduct deliveries, though still highly variable, have declined, particularly in wet years. At its peak in the 1980s, the aqueduct delivered more than 500,000 acre-feet per year. However, environmental regulations have since required the city to reallocate about half of the aqueduct's available supply to mitigation projects throughout the Eastern Sierra. These include releases to maintain Mono Lake levels and dust mitigation projects at Owens Lake. As a result, recent wet-year deliveries have been around 300 thousand acre-feet.

Production Outlook

The local supply survey does not track future projects related to the Los Angeles Aqueduct. Precipitation variability and environmental constraints will likely continue to drive large year-to-year fluctuations. Recent history reflects this volatility, with deliveries ranging from 33,000 acre-feet in 2015 to 380,000 acre-feet in 2017. LADWP estimates the aqueduct will deliver an average of about 193,000 acre-feet per year. However, wet-year deliveries from the aqueduct are expected to be lower than in the past.

Surface Water

Surface water consists of runoff from local watersheds, either diverted directly into potable systems or stored for later use. Many surface water sources are small local creeks or seepage from mountain tunnels. Most of the region's surface water production occurs in San Diego County, primarily from the Otay, San Diego, San Dieguito, San Luis Rey, Sweetwater, and Tijuana River watersheds.

Recent Production and Current Conditions

Figure 8: Surface Water Production Since 1980

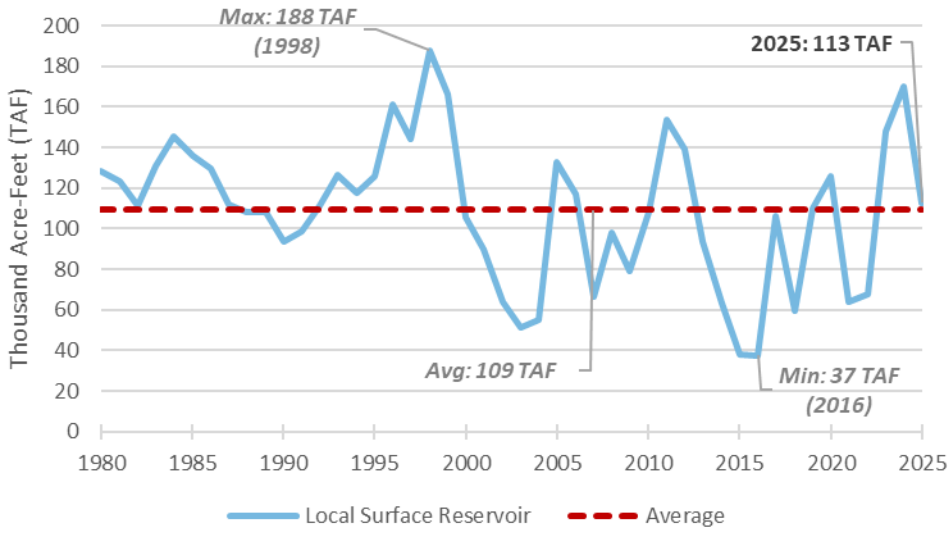
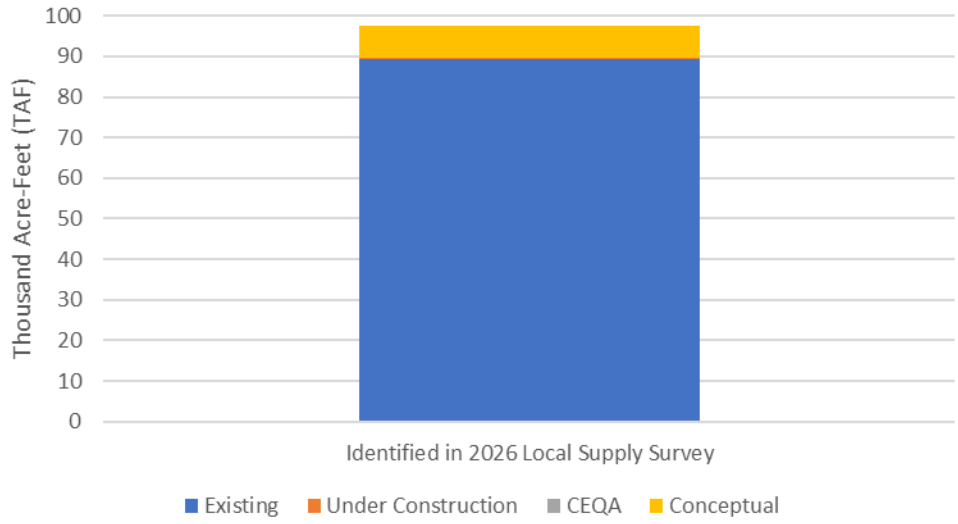


Figure 8 shows that surface water production was 113 thousand acre-feet in 2025, consistent with the long-term average. This is a decrease from 2024, due to less precipitation in local watersheds in 2025. In February 2023, the State Division of Safety of Dams ordered that Lake Hodges be kept at a reduced elevation until its dam is repaired or replaced—a process that may take a decade. Because the required water levels are below the primary intakes, the San Dieguito Water District and Santa Fe Irrigation District currently have limited access to their supplies stored in Lake Hodges.

Production Outlook

Figure 9: Potential Future Annual Yield of Surface Water Projects by Status



The survey identified approximately 97 thousand acre-feet of potential future annual yield from existing and planned surface water projects under average hydrology, as shown in Figure 9. Of this total, about 89 thousand acre-feet per year comes from existing projects, while roughly 8 thousand acre-feet per year is tied to planned projects. Surface water capability is expected to be approximately 90 thousand acre-feet per year by 2030 from existing and planned projects, with up to an additional 7 thousand acre-feet per year possible through 2050 if CEQA and conceptual projects ultimately advance as currently reported.

Surface water production is expected to remain highly variable, ranging from 25,000 to 170,000 acre-feet per year, depending on hydrologic conditions. In the near term, the loss of access to Lake Hodges will likely reduce the upper end of this range for at least the next decade.

In the long term, surface water supplies could be affected by climate change, particularly through more intense but less frequent precipitation events. These shifts may complicate reservoir operations, requiring a balance among water supply reliability, flood control, and dam safety. As demonstrated by Lake Hodges, infrastructure maintenance will also be critical to preserving long-term surface water capacity. Additionally, environmental regulations could lead to the decommissioning of some small diversion projects, as seen when the Golden State Water Company ceased diversions from the San Dimas Creek in the 2010s due to impacts on the endangered Santa Ana Sucker fish.

Recycled Water

Recycled water is highly treated wastewater used for non-potable purposes via purple pipe systems or for indirect potable reuse through groundwater replenishment. It is the region's fastest-growing source of local supply, with more than a hundred projects implemented and many more in planning. Metropolitan has supported this growth since the 1980s through programs such as the Local Resources Program and the Onsite Retrofit Program. Major projects include the Orange County Water District's Groundwater Replenishment System, the Water Replenishment District's Montebello Forebay Recharge

Project, West Basin's Edward C. Little Water Recycling Facility, Eastern's Regional Recycled Water System, and Irvine's Michelson-Los Alisos Recycled Water System.

Recent Production and Current Conditions

Figure 10: Total Water Recycling Since 1980

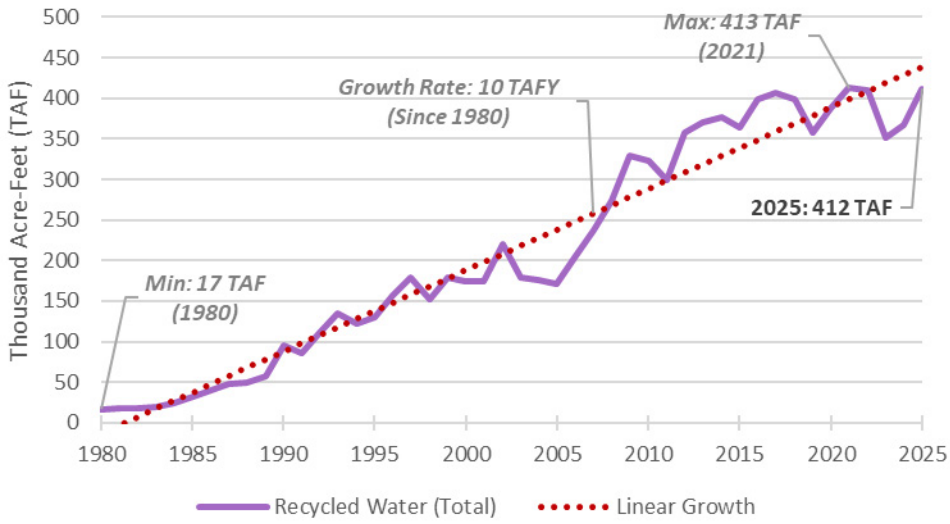
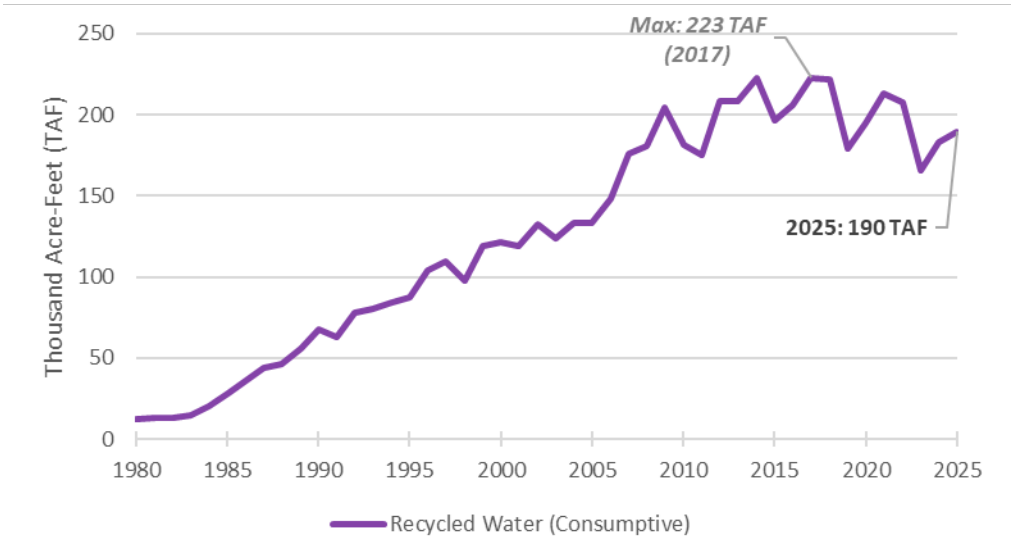


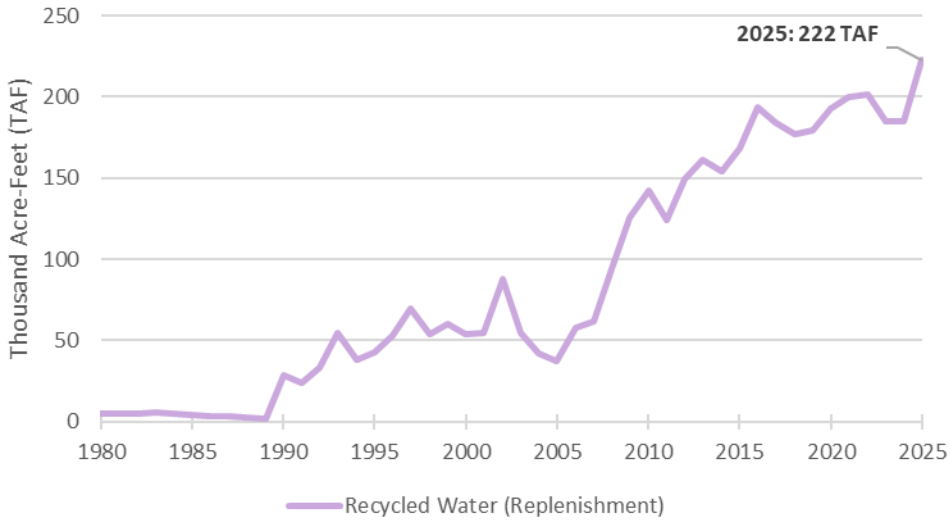
Figure 10 shows that recycled water production in 2025 was 412,000 acre-feet, nearly the highest level observed. Data from the past five years suggest that the linear growth observed since the 1980s may have plateaued after a peak in 2018. This trend is partly due to weather-sensitive demand for purple pipe systems, which are often used for outdoor irrigation. Outdoor demand tends to increase during hot, dry years and decrease during cooler, wetter years. Because no new major purple pipe projects have come online in over a decade, year-to-year changes in recycled water production for consumptive use, shown in Figure 11, have been driven more by weather variability than by growth from new projects.

Figure 11: Consumptive Recycled Water Use Since 1980



As non-potable production levels off, recent growth in total recycled water production has come from indirect potable reuse projects, as shown in Figure 12. The most prominent example is the Groundwater Replenishment System in Orange County, which began operations in 2008 and expanded in 2015 and again in 2023. With its final expansion, GWRS will produce 130,000 acre-feet per year. Unlike purple pipe systems, indirect potable reuse projects deliver water to spreading basins or injection wells, making them less affected by annual weather variability.

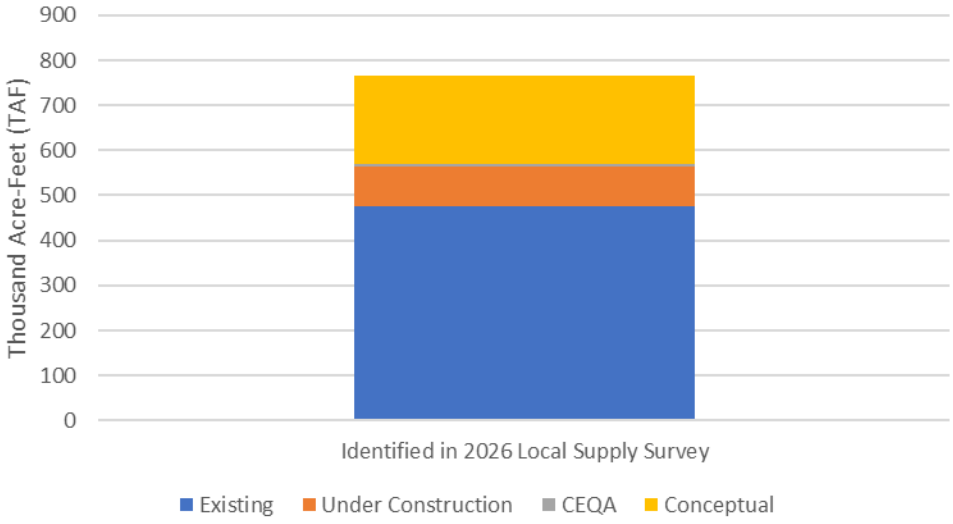
Figure 12: Recycled Water Replenishment Since 1980



Despite recent expansions in indirect potable reuse, year-to-year variability in non-potable production remains the primary driver of recent fluctuations, contributing to the overall plateau in total recycled water production.

Production Outlook

Figure 13: Potential Future Annual Yield of Recycled Water Projects by Status



The survey identified approximately 766 thousand acre-feet of potential future annual yield from existing and planned recycled water projects, as shown in Figure 13. Of this total, about 477 thousand acre-feet per year comes from existing projects, while roughly 289 thousand acre-feet per year is tied to planned projects. Recycled water capability is expected to reach approximately 563 thousand acre-feet per year by 2030 from existing and planned projects, with up to an additional 188 thousand acre-feet per year possible through 2050 if CEQA and conceptual projects ultimately advance as currently reported.

Recycled water production is expected to continue increasing over time, driven by the ramp-up of existing projects and the development of new ones. Many existing projects also have unutilized capacity, as observed production falls short of the ultimate yield reported in the inventory survey. This gap is due to delays in customer connections, operational issues, and overly optimistic estimates of customer demand in the original project reporting.

While further research is needed to understand wastewater availability in Metropolitan's service area, treated wastewater availability does not appear to be a limiting factor for future projects. However, long-term trends in indoor water conservation may reduce both the volume and quality of wastewater available for reuse. Lower indoor water use can lead to higher pollutant concentrations and reduced inflow to treatment plants, which may affect the performance of existing recycled water systems and the feasibility of future projects. These impacts could require adjustments to treatment processes and project designs and may contribute to localized competition for source water among planned projects.

A key regulatory uncertainty was resolved in 2023 with the approval of statewide direct potable reuse regulations, which took effect on October 1, 2024. These regulations establish a permitting framework for future potable reuse projects. For example, San Diego Pure Phase 1, which had already secured a National Pollutant Discharge Elimination System permit for reservoir augmentation, is now positioned to advance under the new rules. As more agencies evaluate potable reuse opportunities, a new planning uncertainty emerges: whether some currently identified non-potable reuse projects will still move forward. With DPR now a viable and permitted option, agencies may reassess the feasibility of pursuing complex and costly purple pipe projects, especially given the relative advantages of potable reuse for infrastructure integration and long-term reliability.

As agencies weigh the costs and implementation challenges of purple pipe systems—including high retrofit expenses, extended permitting timelines, and reliance on individual customer hookups—some may instead favor potable reuse projects that connect to groundwater basins or potable reservoirs already integrated into distribution systems.

If more agencies pursue this path, some conceptual non-potable projects may be deferred, reconfigured, or replaced. Over time, these shifts could alter the composition of the project inventory and affect long-term production projections. Greater reliance on direct and indirect potable reuse may also reduce the weather sensitivity of recycled water production, supporting more consistent yields in the future.

Groundwater Recovery

Many local basins have naturally high salinity or have been degraded by past industrial or agricultural pollution. To recover these impaired resources, agencies have developed treatment projects that bring degraded groundwater up to potable standards. Many of these projects participate in Metropolitan's

Groundwater Recovery Program, a precursor to today's Local Resource Program. Currently, over 30 groundwater recovery projects are tracked in the Local Supply Survey, with the largest being the Chino Basin Desalination Program, which produces approximately 35,000 acre-feet per year.

Recent Production and Current Conditions

Figure 14: Groundwater Recovery Since 1990

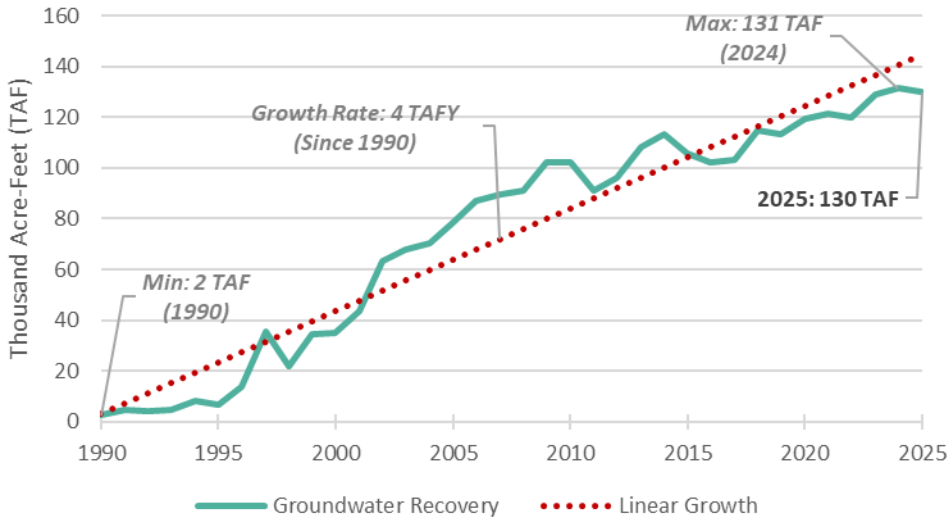
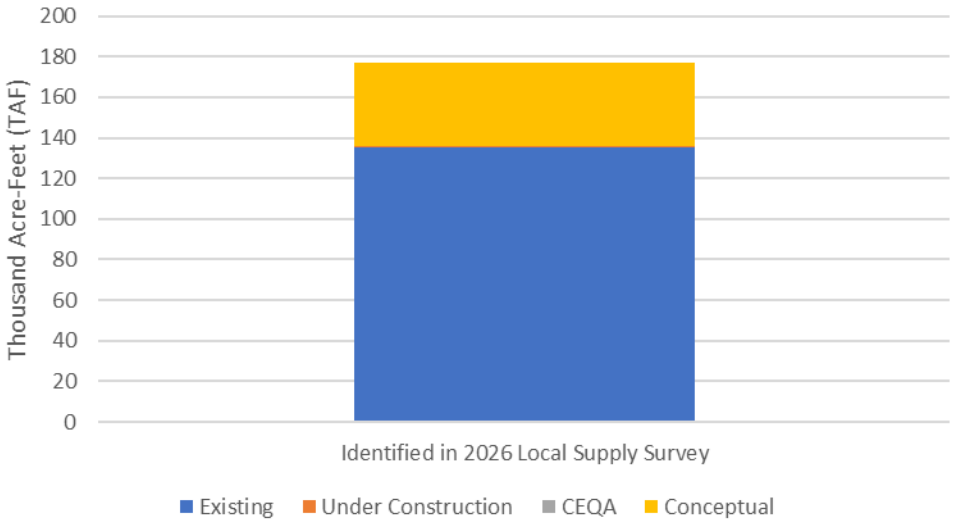


Figure 14 shows that groundwater recovery projects produced 130,000 acre-feet in 2025, just below the highest level observed since the Groundwater Recovery Program's inception in 1990. This growth is attributed to several new facilities coming online. These additions offset earlier production declines from 2014 to 2017 caused by operational shutdowns at the Beverly Hills and Marvin Brewer Desalters.

Production Outlook

Figure 15: Potential Future Annual Yield of Groundwater Recovery Projects by Status



The survey identified approximately 177 thousand acre-feet per year of potential yield from existing and planned groundwater recovery projects, as shown in Figure 15. Of this total, about 136 thousand acre-feet per year comes from existing projects, while roughly 41 thousand acre-feet per year is tied to planned projects. Groundwater recovery capability is expected to be approximately 136 thousand acre-feet per year by 2030 from existing and planned projects, with up to an additional 41 thousand acre-feet per year possible through 2050 if CEQA and conceptual projects ultimately advance as currently reported.

Future growth will depend on ramping up existing projects to their reported ultimate yields and on a limited number of future projects. Unlike recycled water projects, groundwater recovery projects do not require customer connections to reach their ultimate yield. However, production can still fall short of projected yields due to operational constraints such as unplanned treatment facility outages or poor well performance. In some cases, reported ultimate yields do not account for brine losses and instead reflect pumping and treatment capacity rather than net potable output. As a result, many existing projects may be unlikely to reach the full yields reported in the inventory survey.

Like traditional groundwater supplies, groundwater recovery is vulnerable to climate change and water-quality impacts. Declining basin levels from drought or insufficient recharge can impair well performance. Although recovery projects use advanced treatment, they are not immune to emerging contaminants. For example, Burbank's Lake Street GAC facility was taken offline in 2001 after elevated levels of hexavalent chromium were detected.

Seawater Desalination

Seawater desalination—the advanced treatment of seawater to potable standards—is the newest local supply in the region. The Claude "Bud" Lewis Carlsbad Desalination Plant, which began operations in 2015, remains the only seawater desalination facility in Metropolitan's service area. The plant can produce up to 56,000 acre-feet per year and was developed by Channelside (formerly Poseidon Resources) to serve the Carlsbad Municipal Water District, Vallecitos Water District, and the San Diego County Water Authority.

To ensure revenue stability, SDCWA entered into a 30-year water purchase agreement that commits it to purchasing a minimum of 48,000 acre-feet per year, with the option to purchase an additional 8,000 acre-feet. The agreement includes a 1,630-acre-foot unscheduled outage allowance, providing a buffer against production shortfalls.

Recent Production and Current Conditions

Figure 16: Seawater Desalination Since 2015

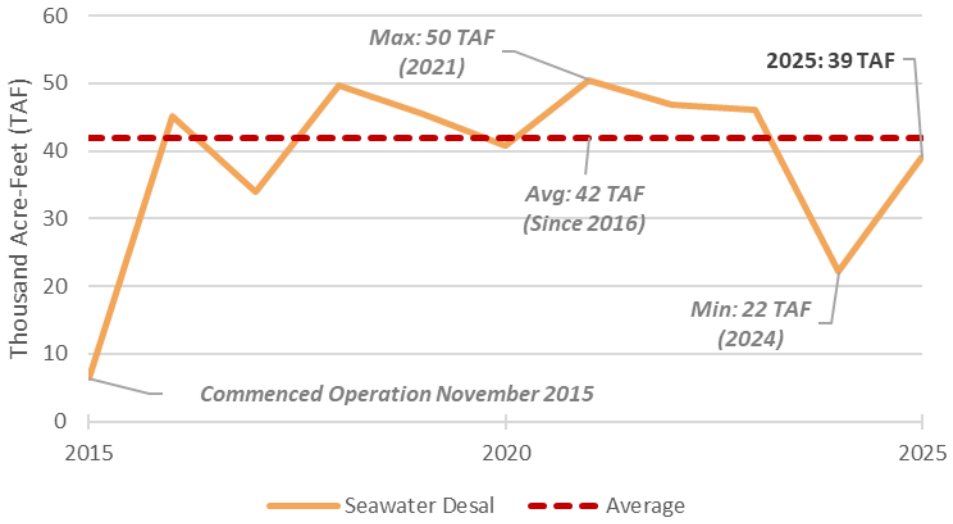
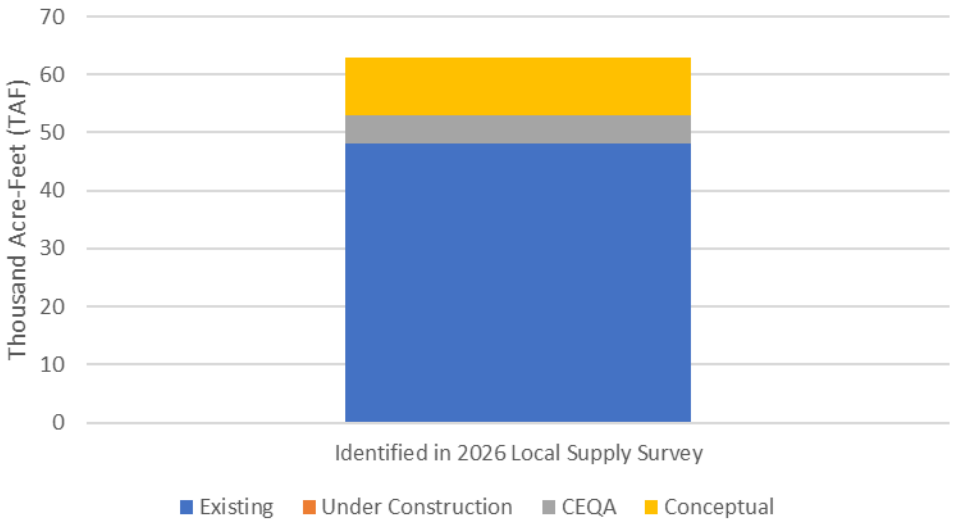


Figure 16 shows that in 2025, the plant produced 39,000 acre-feet, slightly below the average since 2016 and short of the minimum contractual volume. Historically, unplanned outages have contributed to underproduction. One of the most significant risks is algal blooms, which can foul membranes and force shutdowns. A notable example occurred in 2017, when a bloom forced a nearly monthlong shutdown.

According to SDCWA, low retail demand has led to an overabundance of local supplies, prompting the agency to explore opportunities to sell or exchange excess supplies, potentially including water from Carlsbad.

Production Outlook

Figure 17: Potential Yield of Seawater Desalination Projects by Status



With Carlsbad the only operational facility, seawater desalination production is expected to remain stable in the near term. Figure 17 shows that no new plants are under construction.

During the development of the 2020 IRP, the Huntington Beach Seawater Desalination Plant was projected to come online by 2026. However, the project was officially abandoned in 2022 after it was denied a Coastal Development Permit. Similarly, West Basin's proposed plant in El Segundo was terminated in 2021. The only planned project reported in the survey was the Doheny Ocean Desalination Project proposed by the South Coast Water District. It received a Conditional Coastal Development Permit in 2022 and is currently in the design phase. It is expected to produce up to 5,000 acre-feet per year starting in 2030, with the potential to expand to 15,000 acre-feet per year. However, there is no timeline for these additional initiatives.

While seawater desalination is considered a drought-proof supply, several factors introduce uncertainty about long-term production. Desalination plants, like all coastal facilities, are vulnerable to sea-level rise and coastal flooding. The Carlsbad plant has undergone studies and implemented near-term measures to mitigate these risks, but the long-term impacts of climate change, such as more intense storms, could increase future exposure.

Algal blooms also pose a significant risk. Warming ocean temperatures, increased nutrient loading from storm runoff, and altered ocean currents may make blooms more frequent, longer-lasting, and more disruptive. Addressing these challenges may require further investment in pre-treatment and monitoring systems.

High capital costs and energy-intensive operations remain significant barriers to future desalination projects. Long-term financial commitments, such as SDCWA's purchase agreement, may be necessary to make projects viable. Additionally, permitting hurdles and strong opposition from environmental groups have significantly delayed or halted past proposals and are likely to remain a major factor shaping future development.