

IRVINE RANCH WATER DISTRICT POLICY POSITION
METROPOLITAN WATER DISTRICT’S INTEGRATED WATER RESOURCES PLAN
AND LOCAL RESOURCES PROGRAM

November 27, 2023

Issue Summary:

Metropolitan Water District of Southern California formulates its long-term strategy to provide its customers with cost effective and reliable water supplies through the development and implementation of its Integrated Water Resources Plan (IRP). The last update to Metropolitan’s IRP was in 2015, which focused on a single forecast of supplies and demands. In 2020, Metropolitan initiated a new two-phase IRP process that looks at four different scenarios, each assuming specific forecasts of climate change impacts to imported supplies and different regional water demands. By evaluating these multiple scenarios, Metropolitan can investigate a suite of programs and projects needed to maintain reliable water supplies through the year 2045.

In the first phase of the 2020 IRP process, Metropolitan identified a substantial need for new water supplies and storage to meet the demands of its member agencies. These new requirements will affect updating and implementing of Metropolitan’s Local Resources Program (LRP), which is used to incentivize new local water supplies developed by Metropolitan’s member agencies.

IRP Phase 1 Regional Needs Assessment:

Phase 1 of Metropolitan’s 2020 IRP process concluded with the preparation of a Regional Needs Assessment that was adopted by Metropolitan in April 2022. The assessment identified water supply gaps associated with four future supply and demand scenarios, two of which involved significant impacts to imported supplies due to climate change. The assessment further identified the amount of new core supplies, flexible supplies and storage that would be needed to address the predicted gaps. A core supply is water that would generally be available every year. A flexible supply is implemented on an as-needed basis, such as water banking. The following table summarizes the needs for these resources in 2045 for the two IRP scenarios involving significant climate change induced reductions in imported supplies and uncertainties in future water demands:

*Additional Water Resources Needed in 2045
For Scenarios Assuming Significant Climate Change*

Water Resource	Low Water Demands	High Water Demands
Additional Storage	500,000 acre-feet	1,500,000 acre-feet
New Flexible Supplies	200,000 acre-feet	1,200,000 acre-feet
New Annual Core Supplies	100,000 acre-feet	650,000 acre-feet

The assessment concluded that forecasted shortages to the State Water Project (SWP) dependent areas of Metropolitan’s service area can be severe and that these new resources must be made available to those areas. The Regional Needs Assessment also concluded that maintaining and developing new local supplies will be critical to meeting future demands in Metropolitan’s service area.

IRP Phase 2 CAMP4W Process:

The Regional Needs Assessment developed in Phase 1 of the 2020 IRP process is providing a foundation for Metropolitan’s development of its Climate Adaptation Master Plan for Water (CAMP4W). The development of the master plan is considered Phase 2 of the 2020 IRP process. During this phase, Metropolitan is evaluating the benefits and financial sustainability associated with projects and programs such as Metropolitan’s proposed Pure Water of Southern California Project, Delta Conveyance Project, Sites Reservoir Project, additional land purchases in Palo Verdo Irrigation District, and continuation of the Metropolitan’s LRP.

Metropolitan’s consideration of the financial sustainability of future projects and programs is occurring through the preparation of a Long-Range Financial Plan (LRFP). Currently, the LRFP is considering costs of up to \$3,000 per acre-foot (AF) for new core supplies and \$600 per AF for new flexible supplies.

Changing Conditions:

Metropolitan has historically implemented a regional approach to planning that has ensured its ability to provide reliable and high-quality water to its member agencies. The ability to continue with this approach into the future is being affected by the following changing conditions:

- Metropolitan’s member agencies are collectively using less imported water supplies, which is likely to continue with the implementation of the California Conservation as a Way of Life legislation;
- Climate change continues to impact the SWP and an over-allocated Colorado River;
- Uncertainties surrounding the timing of the implementation of the proposed Delta Conveyance Project implementation;
- Accumulating risks that a major earthquake near the Sacramento-San Joaquin River Delta would dramatically impact water supplies to Southern California. The California Department of Water Resources estimates that there is a 62 percent chance of a magnitude 6.7 or greater earthquake in the Delta region over the next 30 years;
- Emerging contaminants impacting local groundwater basins are creating increased dependence on imported water supplies from Metropolitan;
- Some member agencies are reducing dependence on Metropolitan by implementing local base-loaded supply projects while relying on Metropolitan more as a “back-up supply”. Such shifts could eventually require a change in how Metropolitan charges for its services and how it operates facilities;
- IRWD and other agencies have developed as-needed extraordinary supplies and other projects that can be used during major droughts and emergencies that do not negatively affect Metropolitan financially;
- Metropolitan’s variable revenue structure may not be effective at recovering all of Metropolitan’s costs into the future, creating financial instability; and

- Storage in groundwater basins in Metropolitan’s service area is under-utilized.

Scenario Planning:

IRWD supports Metropolitan’s proposed multi-scenario planning approach to the 2020 IRP. Throughout that process, Metropolitan should: (1) protect existing imported water supply infrastructure and deliveries; (2) minimize potential stranding of conveyance, treatment, and storage assets; (3) carefully evaluate new water supply projects to improve regional water supply reliability; and (4) establish the highest priority for planning for the most likely scenario of reduced imported water supplies and reduced demands.

Local Resources Program Overview:

In the 1990s, Metropolitan developed the LRP out of concern that its member agencies were overly reliant on imported water supplies and that supply diversification would benefit all of Metropolitan’s service area. The intent of the program was to incentivize new local water supplies to be developed by Metropolitan’s member agencies. This program has provided incentives to water agencies to develop water recycling, groundwater recovery, and desalination projects that offset a demand or prevent adding a new demand on Metropolitan for imported water supplies. The incentive program has also indirectly increased regional water supply reliability, decreased use of Metropolitan’s infrastructure, reduced costs, and freed up conveyance capacity in Metropolitan’s system. Currently, Metropolitan offers LRP subsidies for local projects in the amount of up to \$475 per AF.

Importance of Recycled Water Projects:

Recycled water projects such as IRWD’s have resulted in reduced demands for water supplies from Metropolitan, resulting in more water that Metropolitan can use for potable purposes. Further investments by Metropolitan in recycled water projects would significantly reduce the need to secure the 650,000 acre-feet per year of additional core supplies identified in the Regional Needs Assessment described above. Such projects would result in increased potable supplies throughout the rest of Metropolitan’s service area at a cost of up to \$475 per AF, versus the \$3,000 per AF currently being considered in the LRFP.

Some water supplies within the Metropolitan service that could be recycled are lost to the ocean because of the lack of demand and/or storage available in winter periods. Incentivizing the design and construction of cost-effective recycled water storage in Metropolitan’s service area should be a priority for Metropolitan. Such storage projects would maximize the use of existing recycled water supplies while increasing the availability of Metropolitan’s water supplies for potable sales – especially during the high-demand summer months.

Ongoing Policy Discussions:

Currently, Metropolitan and its member agencies are engaged in policy discussions related to how the changing conditions described above will affect completing the 2020 IRP and refining

the LRP. The Municipal Water District of Orange County is involved in the discussions and seeking input from its member agencies on the issues. To help guide IRWD’s advocacy efforts related to the ongoing policy discussions on Metropolitan’s IRP and LRP, staff has prepared the following policy principles.

Integrated Resources Plan Policy Principles:

1. Metropolitan should continue its regional approach to water resources planning and work to ensure its financial stability while maintaining the ability to provide reliable, cost effective and high-quality water supplies to its member agencies.
2. Metropolitan should consider member agencies’ plans for implementation of local supply projects when evaluating regional water supply reliability.
3. Metropolitan should work with its member agencies to maximize use of groundwater storage in its service area prior to making additional investments in new storage facilities.
4. Metropolitan and its IRP should recognize the importance of reducing the loss of potentially recyclable water to the ocean.
5. Metropolitan should support member agencies implementing as-needed projects that augment Metropolitan supplies during major droughts and supply interruptions.
6. Metropolitan should actively support efforts to ensure that state mandates do not discourage the use of as-needed supply projects.
7. Metropolitan should reduce risks to its imported supplies by investing in the Delta Conveyance and Sites Reservoir Projects as well as supporting subsidence related repairs to the California Aqueduct and developing new innovative programs on the Colorado River.
8. To avoid rate and financial instability, Metropolitan should consider enhancing its variable revenue structure with a fixed rate component that ensures it can cover its full cost of regional service.
9. Metropolitan should plan for the most likely scenario of reduced future imported water supplies and reduced demands by establishing a suite of policies, programs and projects that will maintain regional water supply reliability through the year 2045.
10. Metropolitan should use the results of its evaluation of the less than likely scenarios to inform creation of an adaptive management strategy to deal with future uncertainties.
11. In preparing its IRP, Metropolitan should consider the likelihood and effectiveness of implementing local supply projects when accounting for regional benefits.

Metropolitan’s Local Resources Program Policy Principles:

1. Metropolitan should give priority to incentivizing local drought resilient recycled water production and storage projects that increase the availability of water supplies for potable uses by Metropolitan member agencies.
2. Metropolitan should incentivize extraordinary supply projects and other as-needed supplies that augment Metropolitan supplies during major droughts and supply interruptions.
3. Metropolitan should consider prioritizing LRP incentives for local as-needed supply projects, rather than base-loaded supplies, in the SWP dependent areas.
4. Metropolitan should balance providing LRP incentives with the development of Metropolitan-owned supply and storage projects in a way that supports Metropolitan’s rate and financial stability.
5. Metropolitan should consider potential risks to its rate and financial stability before incentivizing base-loaded local projects and other supplies that strand capacity in Metropolitan’s water treatment facilities.
6. Metropolitan should not provide incentives for local projects that obligate the local communities in one part of Metropolitan’s service area to subsidize other communities in Metropolitan’s service area.
7. Metropolitan should consider reallocating Local Resource Program funds to incentivize purchases of imported water from Metropolitan to reduce overdraft in groundwater basins within Metropolitan’s service area.
8. Metropolitan should only consider providing incentives to local groundwater treatment projects up to the lowest cost and effective treatment of regulated constituents impacting the supplies.