



● Overview of Regional Programs for Local Resource Development

Summary

This report provides background on the Metropolitan Water District of Southern California's (Metropolitan) historical approaches to encourage the development of local resources in its service area. Local water resources, which are primarily developed by local water agencies, face several hurdles including costs, permitting, regulatory, water quality, and public acceptance. Metropolitan's approaches to encouraging the development of local resources include incentive and non-incentive based programs, legislative efforts, research and development, and regional coordination aimed at addressing these hurdles. In addition, this report also provides a basis for the development of future programs and approaches to meet Integrated Resources Plan targets for local resources.

Purpose

Informational

Detailed Report

The Regional Benefits of Local Resources Development

Metropolitan's role in developing programs and approaches for encouraging the development of local resources has a long history. Decades ago, it was recognized that demand management, which includes both local resources development and conservation, would be an important part of balancing regional supplies and demands. By reducing the demand for imported water, local resources development efforts were seen as a way to reduce the need to increase imported supplies and offset the need to transport or store additional water into or within the Metropolitan service area.

The actual production and use of local resources has occurred at the retail level. Regional investments in demand management programs, of which local resources development is a key part along with conservation programs, benefit all member agencies regardless of project location. These programs help to increase regional water supply reliability, reduce demands for imported water supplies, decrease the burden on Metropolitan's infrastructure and reduce system costs, and free up conveyance capacity to the benefit of all system users. Thus, local resource development, as a demand management program, contributes to transportation infrastructure savings for all users of the regional water system. In addition, these programs advance the legislative intent, stated in Senate Bill 60 passed in 1999, that Metropolitan "expand water conservation, water recycling, and groundwater recovery efforts" and "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures."

Metropolitan's 1996 Integrated Water Resources Plan (IRP) included an analysis of future demand scenarios and their effect on infrastructure requirements. A comparison of future capital infrastructure costs with and without demand management programs showed a difference of about \$2 billion. In other words, the ability to meet demand through local demand management programs resulted in an anticipated \$2 billion in capital cost savings. A sensitivity analysis further showed that a five percent increase or decrease in demand had a correlative effect on when Metropolitan would need to incur capital infrastructure costs. Since then, Metropolitan has seen the benefits materialize. Metropolitan has been able to defer the need to build additional infrastructure such as the Central Pool Augmentation Project tunnel and pipeline, completion of San Diego Pipeline No. 6, the West Valley Interconnection and the completion of the State Water Project East Branch Expansion. Overall, the decrease in water demand, which is due in part to the effect of demand management programs, was estimated in 2016 to have deferred the need for these projects between four and twenty five years at an estimated cost savings of \$2.7 billion (in 2015 dollars).

Board Report (Overview of Regional Programs for Local Resource Development)

Integrated Water Resources Plan 2015 Update

The Integrated Water Resources Plan is the region’s long-term strategy to adapt to changing conditions in southern California. The fundamental goal of the IRP is for southern California to have a reliable water supply in the future. A key to the IRP is the diversification of water supplies, which includes a balanced mix of imported supplies delivered from the Colorado River and the State Water Project and the maintenance and further development of the region’s base of local supplies and conservation. Local supplies that have been and continue to be developed include:

- Groundwater
- Local surface water
- Recycled water
- Stormwater
- Seawater desalination
- Los Angeles Aqueduct

Local supplies can provide over half of the region’s water in some years, and the IRP recognizes the importance to maintain and increase these supplies. The 2015 IRP Update includes targets identified for local supplies to ensure future reliability. The 2015 Update set a target of 2.43 million ace-feet of total local supply production to be reached by 2040. In order to reach the IRP target, not only do new local resources need to be identified and developed, but also existing local supplies must be maintained. In the area of recycled water, projects participating in the Local Resources Program have, on average, produced less water than their projected capacities. Other local supplies have also experienced declines in production from water quality, regulatory, and other environmental challenges. Developing effective approaches to address and overcome these challenges is critical to meeting the IRP targets.

Below is a summary of the identified local supplies by category – projected to meet the IRP target.

Potential Local Supplies in Support of IRP Target (acre-feet)						
	2016	2020	2025	2030	2035	2040
Groundwater Production	1,277,000	1,290,000	1,288,000	1,288,000	1,288,000	1,289,000
Surface Production	105,000	110,000	110,000	110,000	110,000	110,000
Los Angeles Aqueduct	243,000	261,000	264,000	264,000	266,000	268,000
Seawater Desalination	51,000	51,000	51,000	51,000	51,000	51,000
Groundwater Recovery	125,000	143,000	157,000	163,000	165,000	167,000
Recycling	387,000	436,000	466,000	486,000	499,000	509,000
Other Non-Metropolitan Imports	13,000	13,000	13,000	13,000	13,000	13,000
Additional New Local Supply	0	3,000	8,000	12,000	16,000	20,000
Total IRP Target	2,199,000	2,307,000	2,356,000	2,386,000	2,408,000	2,426,000

Programs to Encourage Local Resources Development

Metropolitan is committed to assisting member agencies in developing local resources including water recycling, groundwater recovery, seawater desalination, stormwater capture, and groundwater recharge. Metropolitan has created several incentive programs throughout the years to assist in the development of local resources. These programs include the Local Resources Program, Public Sector Program, On-Site Retrofit Program, and Seawater Desalination Program. A brief summary and history of the evolution of these programs are further discussed below.

Local Resources Program

Board Report (Overview of Regional Programs for Local Resource Development)

Since 1982, Metropolitan has provided financial incentives to encourage the development of water recycling and groundwater recovery projects through what is now known as the Local Resources Program (LRP). The LRP was designed to accelerate the development of local projects in an effort to reduce the demands for imported water supplies and increase water supply reliability in the region. Today, nearly one-half of the total recycled water and groundwater recovery production in the region is developed by LRP supported projects (Figure 1).

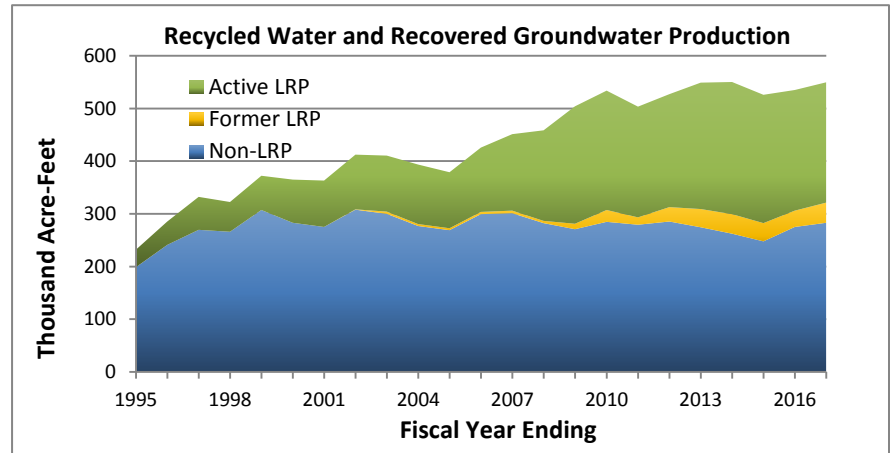


Figure 1. Recycled Water and Recovered Groundwater Production

Modifications to LRP occurred over the years incorporating member agencies' feedback to reflect Metropolitan's service area's water supply conditions and economics landscape. The LRP evolved with respect to both project selection and incentive amount (Figure 2).

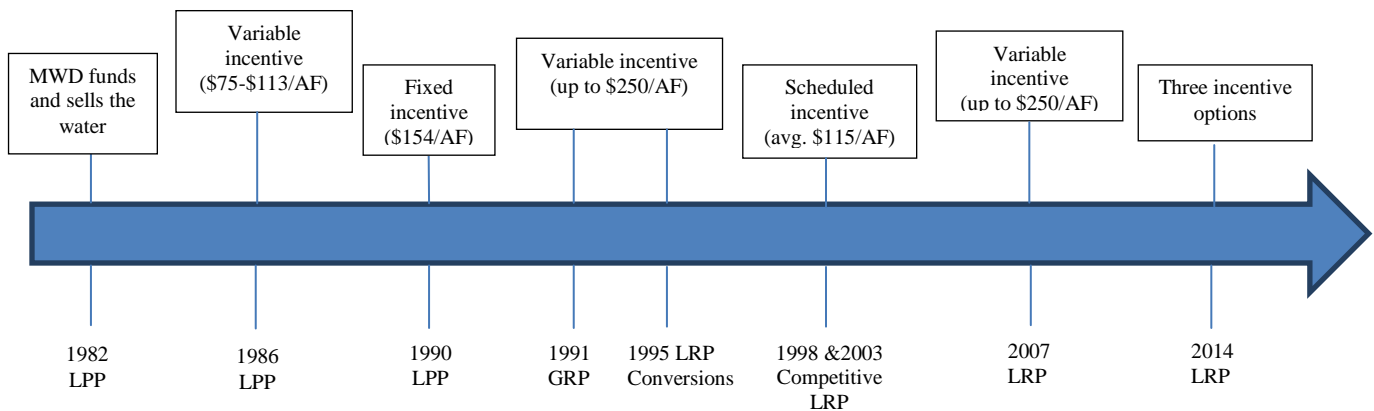


Figure 2. Evolution of the LRP

History

In 1981, Metropolitan, along with Los Angeles County Sanitation District and other agencies, conducted a joint study: the Orange and Los Angeles Counties Reuse Study. The study identified potential for increasing the use of recycled water, as well as a list of about 60 potential local development projects. The study resulted in the development of the Local Projects Program.

Local Projects Program

In 1982, Metropolitan initiated the Local Projects Program (LPP), which provided funding to member agencies to facilitate the development of recycled water projects. Under this approach, Metropolitan contributed a negotiated up-front funding amount to help finance project capital costs. Participating member agencies were obligated to reimburse Metropolitan over time. In 1986, the LPP was revised, changing the up-front funding approach to a rebate-based approach. Metropolitan contributed an amount equal to the avoided State Water Project pumping costs for each acre-foot of recycled water delivered to end-use consumers. This funding incentive was based on the assumption that local projects resulted in the reduction of the pumping cost of imported water. The incentive amount varied from year to year depending on the actual power cost. In 1990, Metropolitan's Board increased the LPP contribution to a fixed rate of \$154 per acre-foot, which was calculated based on Metropolitan's avoided capital and operational costs to convey, treat, and distribute water, and included considerations of reliability and

Board Report (Overview of Regional Programs for Local Resource Development)

service area demands. The goal of LPP was to achieve an additional 150,000 acre-feet of recycled water use by the year 2000.

Groundwater Recovery Program

The drought of the early '90s sparked the need to develop additional local water resources, aside from recycled water, to meet regional demand and increase water supply reliability. In 1991, Metropolitan conducted the Brackish Groundwater Reclamation Study which determined that large amounts of degraded groundwater in the region were not being utilized. Subsequently, the Groundwater Recovery Program (GRP) was established to assist the recovery of otherwise unusable groundwater degraded by minerals and other contaminants, provide access to the storage assets of the degraded groundwater, and maintain the quality of groundwater resources by reducing the spread of degraded plumes. The GRP goal was to implement projects to recover up to 200,000 acre-feet per year of groundwater for domestic use.

The GRP was similar to the LPP in which Metropolitan entered into agreements to pay an incentive for water produced by each individual project for 20-year terms. However, the GRP contribution was paid based on a sliding scale from \$0 to a maximum of \$250 per acre-foot. The incentive rate was calculated annually based on each project's actual per unit cost exceeding Metropolitan's non-interruptible treated water rate. Under this program, agencies were required to submit annual project costs and production data at the conclusion of each fiscal year of operation in order to determine the appropriate incentive.

The main advantage of the GRP over the LPP was that variable rate contributions provided a greater financial incentive in the early years of project operation, when project unit costs were highest. This approach also reduced Metropolitan's contributions if projects became more cost-effective over time, reducing their need for incentives.

Local Resources Program

In 1995, Metropolitan's Board adopted the Local Resources Program (LRP), which combined the LPP and GRP into one program. The Board allowed for existing LPP agreements with a fixed incentive rate to convert to the sliding scale up to \$250 per acre-foot, similar to GRP incentive terms. Those agreements that were converted to LRP are known as "LRP Conversions."

Competitive LRP

In 1998, the Competitive Local Resources Program was established. The competitive program encouraged development of recycled water and recovered groundwater through a process that emphasized cost-efficiency to Metropolitan, timing new production according to regional need while minimizing program administration cost. Under the competitive program, agencies requested an incentive rate up to \$250 per acre-foot of production over 25 years under a Request for Proposals (RFP) for the development of up to 53,000 acre-feet per year of new water recycling and groundwater recovery projects. In 2003, a second RFP was issued for the development of an additional 65,000 acre-feet of new recycled water and recovered groundwater projects through the LRP.

2007 LRP

In 2006, a task force comprised of member agency representatives was formed to identify and recommend program improvements to the LRP. As a result of the task force process the 2007 LRP was established with a goal of 174,000 acre-feet per year of additional local water resource development. The new program allowed for an open application process and eliminated the previous competitive process. This program offered sliding scale incentives of up to \$250 per acre-foot, calculated annually based on actual project costs exceeding Metropolitan's prevailing water rate.

2014 LRP

A series of workgroup meetings with member agencies was held to identify the reasons why there was a lack of new LRP applications coming into the program. The main constraint identified by the member agencies was that the \$250 per acre-foot was not providing enough of an incentive for developing new projects due to higher construction costs to meet water quality requirements and to develop the infrastructure to reach end-use

Board Report (Overview of Regional Programs for Local Resource Development)

consumers located further from treatment plants. As a result, in 2014, the Board authorized the following refinements, which are still in effect today:

- Increase the maximum incentive amount
- Provide alternate incentive payment structure options (see Table)
- Include on-site retrofit costs in LRP
- Provide reimbursable services

The 2014 LRP also included seawater desalination projects which were previously not eligible under the former LRP. Previously, seawater desalination projects had been funded under the 2001 Seawater Desalination Program (SDP), which is discussed later in this report.

Since the changes of the 2014 LRP were implemented, interest and participation have increased. The table below lists eight signed agreements. In addition, to date, three new applications are currently under review, and submission of 11 more applications is anticipated. Looking ahead, member agencies identified over 60 water recycling, groundwater recovery, and seawater desalination projects that may apply for LRP participation.

Payment Structure	Incentive Amount	Agreement Term
Option 1	Sliding scale (up to \$340/AF)	25 years
Option 2	Sliding scale (up to \$475/AF)	15 years
Option 3	Fixed (up to \$305/AF)	25 years

Member Agency	Sub-agency	Project Name	Project Type	Allowable Yield (AFY)
LADWP	None	North Hollywood Water Recycling Project	Recycled Water	300
LADWP	None	Sepulveda Basin Sports Complex Water Recycling Project	Recycled Water	350
Eastern MWD	None	Perris II Brackish Groundwater Desalter	Groundwater Recovery	5,500
Torrance	Water Replenishment District	GRIP Water Recycling Project	Recycled Water	10,000
LADWP	None	Terminal Island Recycled Water Expansion Project	Recycled Water	8,000
LADWP	None	Westside Area Water Recycling Project	Recycled Water	150
MWDOC	Santa Margarita Water District	Lake Mission Viejo Advanced Purification Water Treatment Facility	Recycled Water	300
MWDOC	El Toro Water District	El Toro Phase II Recycled Water Distribution System Expansion Project	Recycled Water	350

Current Status

Since the LRP's inception in 1982, Metropolitan has provided about \$606 million in incentives that resulted in the production of about 3.5 million acre-feet of recycled water and groundwater recovery. During FY2016/17, Metropolitan provided \$35.9 million for production of 228,408 acre-feet under the LRP. To date, the Board has approved 107 projects which are expected to produce about 440,000 acre-feet per year when fully implemented. This information is summarized in Figure 3.

Board Report (Overview of Regional Programs for Local Resource Development)

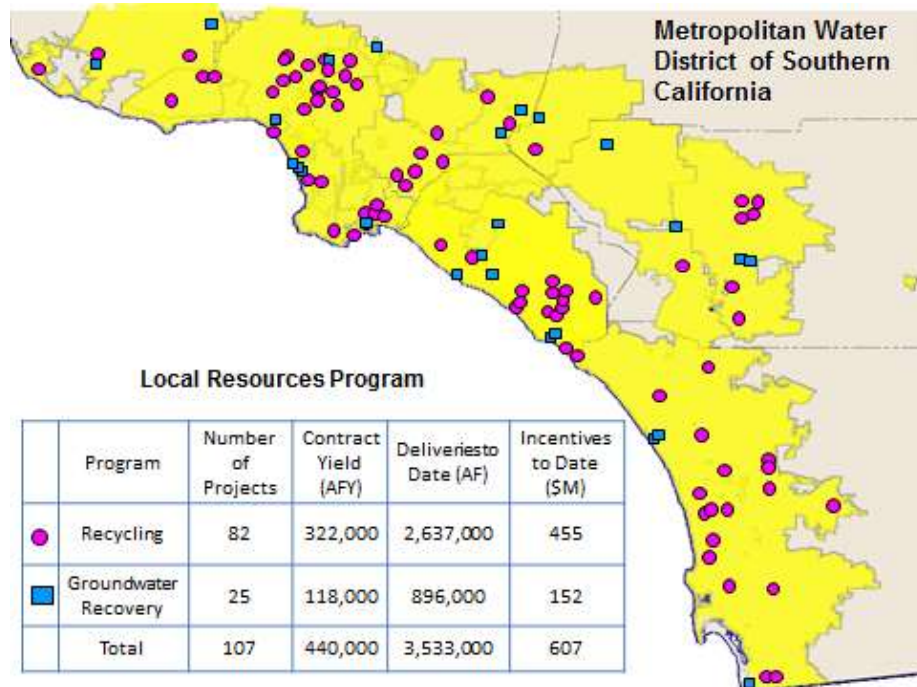


Figure 3. LRP Project Locations and Summary

Additional Local Resource Development Approaches

Although the LRP played a significant role in doubling the local recycled water and groundwater recovery use (Figure 3), the LRP projects collectively produced only about 70 percent of their total design capacity. Member agencies stated that a constraint to maximizing recycled water use was the high costs borne by the end-use consumer to retrofit their potable irrigation and industrial system to use recycled water. Providing financial incentives for consumer site-conversions would catalyze an increase of recycled water use. This sparked the development of the Public Sector Program of 2007 and the On-site Retrofit Program in 2014.

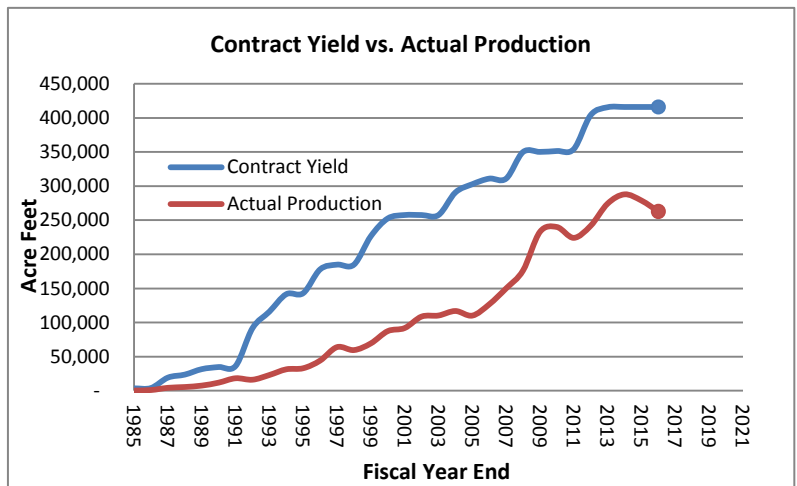


Figure 3. LRP Contract Yield vs. Actual Production

Public Sector Program



In August 2007, the Board authorized \$15 million for the Accelerated Public Sector Water Efficiency Partnership Program. The goal of this program was to provide incentives to public agencies to implement water conservation measures and/or use recycled water. The idea behind the program was that the use of recycled water by a public agency such as Caltrans, which irrigates freeway medians and has high public visibility, would send out a positive message on the importance of recycled water use and conservation of potable water. Under this program, Metropolitan provided incentives of \$250 per acre-foot, up to actual on-site retrofit costs, for an estimated two years of water use. Metropolitan provided \$1.1 million for converting 85 sites, including

Board Report (Overview of Regional Programs for Local Resource Development)

public parks and schools, providing an increase in recycled water use of about 3,000 acre-feet per year.

On-site Retrofit Program

In February 2014, the Board approved the On-site Retrofit Pilot Program which provided financial incentives to public or private entities toward the cost of small-scale improvements to their existing irrigation and industrial systems to allow connection to existing recycled water pipelines. The Board approved a budget of \$7.5 million. In addition, Metropolitan received a grant from the United States Bureau of Reclamation (USBR) in the amount of \$700,000.

Similar to the Public Sector Program, the On-site Retrofit Pilot Program helped reduce recycled water retrofit costs to the end-use consumer which is a key constraint that limited recycled water LRP projects from reaching full production capacity. In addition, the program provided information to help evaluate the impacts of conversion costs of recycled water use.

The program incentive is equal to the actual eligible costs of the on-site retrofit, or \$975 per acre-foot of up-front cost which equates to \$195 per acre-foot for an estimated five years of water savings (\$195/AF x 5 years) multiplied by the average annual water use in previous three years, whichever is less.

The Pilot Program lasted two years and was successful in meeting its goal of accelerating the use of recycled water. Its success, coupled with its high support from member agencies and sub-agencies, led to staff recommending a continued incentive program.

In April of 2016 the Board authorized the On-site Retrofit Program (ORP), with an additional budget of \$10 million. This program encompassed lessons learned from the Pilot Program and feedback from member agencies to make

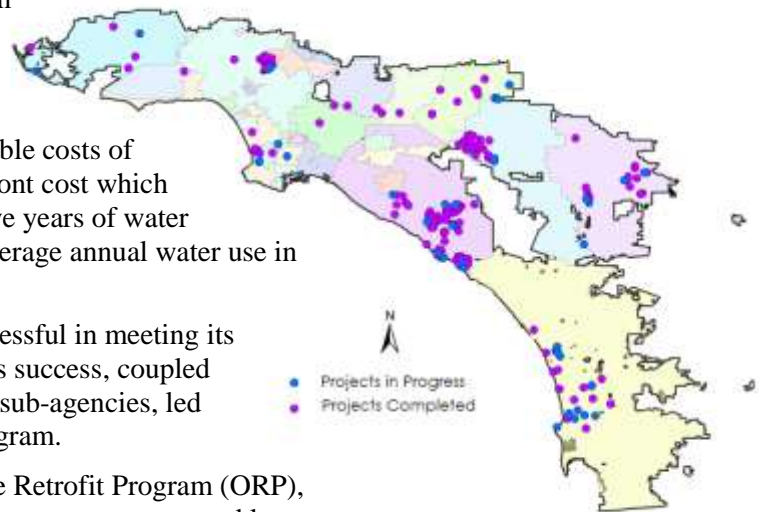


Figure 4. ORP Project Locations

Status	No. of Sites	Amount	AFY
Completed	293	\$ 8,041,251	9,368
In-Progress	48	\$ 1,577,488	1,264
TOTAL	341	\$9,618,739	10,632

the program more streamlined and improve its efficiency. Since the inception of the Pilot Program in 2014, the ORP has successfully converted 283 sites increasing the use of recycled water by 8,947 acre-feet per year. Figure 4 is a map of the project locations showing sites distributed throughout Metropolitan's service area. The program has converted a variety of parks, schools, HOAs, golf courses, cemeteries, and industrial facilities. Overall, incentives provided by the program cover approximately 58 percent of eligible project costs. Progress under this program continues with an additional

38 projects under way as of the writing of this report.

Seawater Desalination Program

Metropolitan's IRP recognizes seawater desalination as a potential local resource and supports foundational actions to lay the groundwork for accelerating seawater desalination development as needed in the future. Metropolitan established the Seawater Desalination Program (SDP) in August 2001 to provide financial incentives to member agencies for the development of seawater desalination projects. Metropolitan signed agreements with City of Long Beach, Municipal Water District of Orange County, and West Basin Municipal Water District to provide incentives for projects over a 25-year term. Under each of the signed agreements, the contract expires if the project does not begin operating by 2020. To date, none of the projects included under the SDP have begun operations. With the 2014 LRP refinements, seawater desalination projects became eligible for funding under the LRP, thus replacing the SDP.

Board Report (Overview of Regional Programs for Local Resource Development)

Non-Incentive Programs and Achievements

In addition to the incentive programs discussed above, Metropolitan helps develop local resources by providing reimbursable services, funding research projects, and participating in joint ventures with other agencies.

Reimbursable Services Program

Metropolitan established the Reimbursable Services Program (RSP) to provide an additional approach to help accelerate development of local resources. Under the RSP, Metropolitan can enter into a reimbursable agreement when a requesting member agency has a need for the development of local resource projects that help manage demand on Metropolitan's system, while increasing regional reliability and availability. Metropolitan's participation helps meet the member agencies' needs by expediting the development of projects. The participation of Metropolitan depends on the need to meet resource needs or to improve reliability. Metropolitan considers the following when receiving proposed projects from member agencies:

- Water quantity to ensure that the project makes a meaningful addition to regional supply reliability,
- Water quality to confirm that project water will meet all water quality objectives,
- Ensure that the project helps meet the IRP resource needs,
- Ability to help address current and future drought conditions,
- Impacts to Metropolitan's cash flow (delivery cost of the project),
- Need for Metropolitan's involvement to expedite project completion,
- Availability of Metropolitan resources to expedite project completion, and
- Compliance of the project with all permitting and environmental requirements.

Upon assessment of the proposals received, Metropolitan staff requests Board authorization for a reimbursable agreement for the proposed projects by member agencies. The amount of the agreement is determined on a case-by-case basis, and the agency reimburses Metropolitan for all direct and indirect costs incurred, including the cost of capital and the fully burdened cost of Metropolitan's staff.

This program has been available to all member agencies and has been successfully utilized by the City of Los Angeles for a few of their projects in the past. One example is the reimbursable agreement between Metropolitan and Los Angeles Department of Water and Power (LADWP) which was entered into in 2008, and for which the Board approved \$12 million for a groundwater recovery project at the Tujunga Well Field. The project was completed with full reimbursement to Metropolitan and is in operation today. The project successfully recovers groundwater to help manage demands on Metropolitan's system, while increasing regional reliability and availability. A more recent example is a \$20 million reimbursable agreement Metropolitan entered with LADWP and was approved by the Board in 2014. The purpose of this project is for future potential groundwater recovery to further enhance water supplies within the Metropolitan service area. This program was incorporated as part of the LRP in 2014 with the approval of the 2014 LRP Refinements.

Foundational Actions Funding Program/ Future Supply Actions

In 2013, the Foundation Action Funding (FAF) Program was created to help address regional funding needs for actions that reduce barriers to future water resource production. The planning framework of this program was established in Metropolitan's 2010 IRP Update. Because of the uncertainty of the future, the 2010 IRP Update established Foundational Actions (renamed as Future Supply Actions in the 2015 IRP Update), which are low-risk, preliminary actions designed to better prepare the region for unforeseen water supply challenges. Collectively, the projects funded by this program are intended to enhance regional understanding of the challenges and technical requirements necessary to develop future water supplies. The purpose of the FAF Program was to identify and advance development of potential future water supplies. The program was approved by the Board as a two-year pilot program to provide funding for Metropolitan's member agencies for technical studies and pilot projects that reduce barriers to future water resource production of recycled water, stormwater, seawater desalination, and groundwater. Under the FAF Program, Metropolitan funded up to 50 percent of the

Board Report (Overview of Regional Programs for Local Resource Development)

total cost of the study or pilot project, up to \$500,000 per project, per member agency. The member agency was required to match the funding dollar-per-dollar with non-Metropolitan funds. Metropolitan provided approximately \$3 million in funding for thirteen technical studies and pilot projects, all but one of which were completed by 2017. These projects evaluated new water treatment technologies, developed data to inform regulations, studied options for infrastructure innovation, and identified future resource potential. Through successful completion of the projects, Metropolitan reduced barriers and enhanced regional understanding of the challenges and technical requirements necessary to develop future water supplies.

Type of Project:	No.
Groundwater	4
Recycled Water	5
Seawater Desalination	2
Stormwater	2

In February of 2017, Metropolitan hosted a technical conference on the findings of the FAF projects. More than 300 people attended in person or via webinar, and each of the participating agencies represented their research findings and took part in panel discussions. Final reports and conference presentations are available on the program website. Next steps for the program are under consideration and could include additional funding to the member agencies for projects in these areas.

Coordination with Other Agencies

Metropolitan collaborates with its member agencies, various local, state, and federal agencies, and trade organizations to help overcome obstacles that challenge local projects development.

Southern California Water Committee Stormwater Task Force

In 2012, the Southern California Water Committee (SCWC), at the request of Metropolitan, Los Angeles County Department of Public Works, and other agencies, developed a whitepaper which presented stormwater capture and costs estimated for future projects. Since the development of the 2012 whitepaper, multiple stormwater projects have been implemented and performance measures have been monitored. The SCWC is preparing an additional whitepaper on the results of a study comprised of 50 stormwater projects currently in operation to assess actual stormwater capture volumes and cost data. The purpose of this whitepaper is to gain a better understanding of actual stormwater and urban water runoff capture, costs, benefits, and performance across the region to inform future discussions and decisions. The data collection effort focuses on stormwater capture and costs based on actual performance measures monitored from existing projects, versus estimates from preliminary design reports/design documents for a more refined data set. To date, stormwater capture and costs have been received from nine agencies and cities which will be documented and analyzed in the whitepaper.

In addition, Metropolitan hosted the SCWC Stormwater Task Force Annual Workshop on September 29, 2016. This annual workshop brings together local agencies, regional planners, and non-government agencies to discuss stormwater issues in the region.

Recycled Water GIS Efforts

In the 1990s, USBR, along with the Department of Water Resources (DWR), Metropolitan and their member agencies, and sub-agencies, conducted a comprehensive study on water reclamation and reuse. In 2002, this study helped develop the first regional Geographic Information System (GIS) map with locations and pertinent information about all wastewater treatment plants and existing recycled water distribution systems. It also identified several recycled water projects in the region. Since then, Metropolitan, in collaboration with member agencies and sub-agencies, has updated the GIS map several times to reflect new information and numerous recycled water projects that have been developed. In 2016, Metropolitan and its member agencies initiated an effort to further update the GIS map. The purpose of this effort is to capture existing recycled water geographic data to create a more comprehensive GIS map of existing recycled water projects/infrastructures within Metropolitan's service area. By utilizing the ArcGIS online tool, the GIS map will be available for Metropolitan's member agencies to access and use as an instrument to help increase recycled water use within the service area. In addition, the map will help increase collaboration among member agencies. The map will be able to identify existing recycled water infrastructure such as: plants, facilities, pipelines, connections, service points,

Board Report (Overview of Regional Programs for Local Resource Development)

and storage, and can be used as a tool to analyze areas using recycled water and to identify potential recycled water end-user consumers. The existing data source comes from direct communication with agencies, online data, and published reports. While the effort should provide advantages in recycled water expansion within the service area, it also comes with multiple challenges such as agencies having different data formats (digital, hard copy, PDF, GIS, etc.), and some agencies lacking readily available data. Today, collaboration between Metropolitan and member agencies to complete the database is still ongoing.

Regulatory Advancement

Metropolitan has been a leader and strong advocate for the safe expansion of recycled water as part of a diverse water supply portfolio. Metropolitan in collaboration with its member agencies and trade organizations such as WaterReuse, CalDesal, California Urban Water Agencies (CUWA), and Association of California Water Agencies (ACWA), have continued to push for streamlined and consistent implementation of recycled water projects. In June 2014, regulations for groundwater replenishment using recycled water were adopted to facilitate the planned use of municipal wastewater as a source of groundwater supply. In June of 2016, the State Water Resources Control Board (SWRCB) adopted a revised statewide general order (permit) for non-potable recycled water use. The purpose of the general order is to help streamline issuance of new non-potable recycled water permits and maintain statewide consistency.

As new regulations are proposed, Metropolitan continues to play a key role in their advancements. Most recently, staff provided comments on the Draft Surface Water Augmentation Regulations (SWA) proposed for indirect potable reuse. Under SWA, the SWRCB plans to adopt regulations to govern the planned placement of recycled water into a surface water reservoir that is used as a source of domestic drinking water supply. In addition, Metropolitan staff helped educate member agencies and coordinate comments on the SWRCB Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse report. Staff also participated in the California Building Standards Commission effort to help develop requirements for new developments to use recycled water while maintaining local control.

The Future of Local Resources Approaches

Moving forward, the IRP calls for Metropolitan to continue to encourage the development of local resources to increase supply reliability and diversify its water resource portfolio through the implementation of current programs and efforts, development of new programs and services, and continued research.

Program Development

Financial incentive programs like the LRP and ORP will likely continue as a core approach to encouraging the development of local resources. These programs will continue to evolve to improve efficiency and better meet the needs of member agencies. The incentive programs have been very successful in encouraging or accelerating local resource development among member agencies; however, Metropolitan is aware that these programs are not suitable for all projects. There are many unique, but potentially important, projects that may not qualify for funding under the current incentive programs and thus may have difficulty achieving implementation. The objectives of future programs may include eligibility of stormwater capture projects, joint or sole development of local projects, or different incentive methods for those projects in certain areas of Metropolitan's interest. Staff will evaluate incentive and non-incentive based approaches to meet the IRP goal. The key to successful design and implementation of Metropolitan's programs is to seek input from member agencies as the programs are designed to provide a regional benefit for all member agencies.

Continuation of GIS Efforts

Moving forward, Metropolitan plans to continue working with member agencies on a comprehensive regional recycled water map. As new data becomes available and new infrastructure is built, the map will be updated to reflect these changes, and the map will be an instrumental tool in identifying available recycled water and planning for the future.

Board Report (Overview of Regional Programs for Local Resource Development)

Legislation

Metropolitan will continue to be actively involved with the development and support of legislation in order to streamline regulations for project permitting and operation, while protecting public health. Metropolitan foresees the development of regulations for Direct Potable Reuse of recycled water in the near future. As new regulations develop, Metropolitan will continue to play a key role in their approval and support member agencies with development of new projects which implement the new regulations.

Research and Development

Although the incentive programs discussed above will help with project costs, more research and development is needed to advance technology to address public health concerns and environmental impact while reducing project costs. Metropolitan has a history of conducting joint studies with member agencies and other entities to advance development of local resources. Metropolitan plans to continue exploring new strategies to increase local supply by continuing its support of research and by collaborating with local entities to increase local supply and overall regional benefit.

For several years, Metropolitan has participated, supported, and funded the research done by the Water Environment and Reuse Foundation to advance the use of recycled water and address regulatory and public concern. Metropolitan plans to partner with other agencies and trade organizations to fund studies that address local resource development barriers. In addition, staff will bring recommendations regarding a subsequent program to fund Future Supply Actions identified in the 2015 IRP Update, similar to the FAF Program approved by the Board in 2013.

Member Agency Service Development

Metropolitan continues to seek new strategies to assist its member agencies. Staff is exploring the idea of providing more support to member agencies that apply for grant funding and low interest loans. By helping agencies qualify for more grants, Metropolitan is able to offset the incentives provided through the LRP and other incentive programs. In addition, staff is considering other services such as hiring consultants on behalf of member agencies to help with design of new local resource projects. This service would differ from the Reimbursable Services Program in that agencies will not need to reimburse Metropolitan for the incurred costs.

Next Steps

Moving forward, staff will incorporate comments received from the Conservation and Local Resources Committee regarding this report and factor them into future programs. In addition, staff will continue to work with member agencies to improve the efficiency of current programs and develop future programs and services to assist in increasing local resources development to further diversify the region's water resource portfolio.