

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

• Board of Directors Water Planning and Stewardship Committee

9/9/2014 Board Meeting

Subject

9-1

Report on Local Resources Program Refinements

Executive Summary

This report provides information on proposed refinements to the Local Resources Program (LRP) to help encourage and expedite local resource production, which would help meet the Integrated Water Resources Plan (IRP) goals and water use efficiency targets, and respond to current drought conditions.

Description

Since 2011, staff has worked with member agencies through a series of LRP process workgroups to identify constraints to project development and explore effective strategies to increase local resource production. Staff continues to work with member agencies to (1) identify program refinements to further support the development of local resources consistent with the goals in Metropolitan's 2010 IRP, (2) support member agency project implementation, and (3) investigate funding approaches that are cost-effective and sustainable based on the net financial impact to Metropolitan.

Background

Since 1982, Metropolitan has assisted local agencies in the development of local water recycling and groundwater recovery projects. Metropolitan currently provides financial incentives up to \$250 per acre-foot (AF) of water production. Since program inception, Metropolitan has provided about \$490 million in incentives for the development of more than 2.0 million AF of recycled water and about 720,000 AF of recovered groundwater. There are currently 99 approved projects under the program, of which 85 are in operation. More than half the recycled water and groundwater recovery supplies produced annually in the region have been developed through this program.

The program was revised in 2007, with an updated goal of incentivizing 174,000 acre-feet per year (AFY) of new annual production. Applications are reviewed on a first-come and first-served basis. The LRP incentive is calculated on a sliding scale, which reflects the project unit costs exceeding Metropolitan's water rate. Under the current approval, the Board has approved 23 projects with a combined contractual yield of about 111,000 AFY. The remaining target is another 63,000 AFY of contractual yield.

In January 2014, Governor Brown declared a drought emergency due to California's historically low precipitation in calendar year 2013. This unprecedented drought condition persists today, and has drastically reduced water deliveries from the State Water Project (SWP). The LRP promotes the development of local supplies to help reduce demand on imported water deliveries to Metropolitan, and increase regional reliability and availability. Projects developed in the near term as part of this program could help alleviate drought impacts should dry conditions continue. However, over the past year, Metropolitan has not received any new recycled water or groundwater recovery project applications for participation in the LRP. As a result, projects may not be developed in time to help alleviate the current drought and meet the IRP and water use efficiency goals. Based on discussions with member agencies, costs to develop and implement projects are a predominant constraint to initiating new projects.

In addition, production records indicate that existing recycled water projects supported by Metropolitan collectively are producing only about 70 percent of their capacity. Important limiting factors in reaching project capacity include: costs to reach customers furthest from projects, on-site retrofit of customers' potable water systems, and required additional treatment to address water quality. Accordingly, Metropolitan developed the following programs which assist agencies in reducing the gap between production and contractual yield:

- 2007 Public Sector Program: incentives for public agencies to convert potable water irrigation and industrial systems to recycled water
- 2013 Foundational Actions Funding Program: matching funds for technical studies and pilot projects to reduce barriers and enhance regional understanding of the challenges and technical requirements necessary to develop future water supplies
- 2014 On-site Retrofit Pilot Program: incentives for landowners to convert potable water irrigation and industrial systems to recycled water

In addition to the above programs, Metropolitan staff is preparing further potential refinements to the LRP to further expedite development of new projects and motivate increased production of existing projects. These proposed refinements include:

1. Increase the maximum incentive amount

High costs remain a significant barrier in developing local water supplies. Staff has reviewed the maximum incentive amount and recommends increasing it to \$340/AF. This increase reflects the rising costs of local project development in recent years. Staff looked at a number of methodologies to determine the incentive amount, including:

- (1) Consumer Price Index (CPI) inflation since 2007 (the last year the LRP was revised), and
- (2) Percent change in LRP project unit costs from 2007 to the present.

Applying the CPI inflation since 2007 would adjust the maximum from \$250/AF to \$280/AF, an increase of \$30/AF. Staff analyzed a number of representative LRP projects and determined that the percent increase in the unit costs for these projects since 2007 was approximately 58 percent, which would adjust the maximum incentive from \$250/AF to \$395/AF, an increase of up to \$145/AF. Staff recommends setting the incentive at \$340/AF, which is the midpoint of the range between \$280/AF and \$395/AF. This would provide an increase of about 35 percent in the maximum incentive level Metropolitan would offer under the LRP in order to spur additional local supply development.

It is recommended that this incentive amount be in place until the remaining LRP target of 63,000 AFY is achieved, at which time staff would review the program and make a recommendation to maintain this incentive amount or change based on needs and conditions at that time.

2. Offer alternate incentive payment structures

In addition to reviewing the incentive amount, staff also evaluated methods to update the incentive payment structure to bring new projects on-line faster and motivate increased production of projects. Staff recommends three alternative incentive payment structures be made available to the member agencies on a per project basis:

- Alternative 1 Sliding Scale Incentives Over 25 Years (Current Payment Structure)
- Alternative 2 Sliding Scale Incentives Over 15 Years (New Structure)
- Alternative 3 Fixed Incentives Over 25 Years (Previously Approved Structure)

General Program Information is described in Attachment 1.

Alternative 1 – Sliding Scale Incentives over 25 years (Current Payment Structure): Metropolitan would accept LRP applications for proposed projects on a continuous basis until the 63,000 AFY remaining target is reached. Applications would be reviewed for established milestones, such as planning, design, and status of environmental documentation. Incentives of up to \$340/AF would be provided based on actual project unit costs exceeding Metropolitan's water rate calculated over 25 years.

Alternative 2 – Sliding Scale Incentives Over 15 Years (New Structure): This alternative is similar to the current program, but the incentive amount is calculated over a shorter payment period (15 years versus 25 years), allowing for higher incentives earlier in the contract. The adjusted incentive amount includes a present value calculation, resulting in an equivalent maximum obligation to Metropolitan as Alternative 1 (Sliding Scale Incentives Over 25 years). Incentives of up to \$475/AF would be provided based on actual project unit costs exceeding Metropolitan's water rate calculated over 15 years. For both payment structure Alternatives 1 and 2, the overall agreement term would be for 25 years. In addition to the current LRP performance provisions, projects must continue production for 25 years, even if LRP payments are reduced to zero after 15 years. If an agency fails to comply with these provisions for any of its LRP projects, Metropolitan would require the agency to reimburse Metropolitan to ensure that the costs incurred due to non-performance are recovered.

Alternative 3 – Fixed Incentives Over 25 Years (Previously Approved Structure): Compared to sliding scale incentives that are dependent on Metropolitan's water rate, a fixed incentive rate provides agencies with a more stable source of funds to help address financing issues. Agencies use LRP incentives as a means of income when securing financing for their projects. Fixed incentives provide stable income and help project financing. Metropolitan would offer a fixed incentive no greater than \$305/AF, that is project specific over 25 years. This is less than the \$340/AF incentive offered under the sliding scale alternatives to adjust for increased risk in absence of annual cost reconciliations. The fixed incentive rate for each project will be calculated such that Metropolitan's maximum obligation toward that project under this alternative would not exceed its estimated financial obligations under Alternative 1 for the same project. This is similar to the payment structure approved by Metropolitan's Board in May 2011 for the Chino Basin Desalination Program.

Detailed descriptions of the alternate incentive payment structures are included in Attachment 2.

3. Include on-site recycled water retrofit costs in LRP

In order for a site to receive recycled water, the potable water irrigation or industrial water systems must be retrofitted to receive recycled water. Site conversion is an integral part of any recycled water project. Site conversion costs can be another impediment to achieving full project capacity. Currently, on-site retrofit costs are not eligible for incentives in the LRP. Making these costs eligible under the LRP would help bring end users on-line quicker, facilitate deliveries, and encourage increased recycled water project production. Eligible costs would include retrofit design, permitting, construction, and connection fees.

4. Include other water resources in LRP

The IRP calls for the development of a diverse resource portfolio with projects that help meet future demands and increase reliability in the region. The following additional resources could be included in the LRP:

- Seawater Desalination: In 2001, Metropolitan implemented the Seawater Desalination Program (SDP), which provided funding for development of seawater desalination projects similar to the LRP. However, the SDP agreements did not include performance provisions like those included in the LRP. Metropolitan could accept and evaluate new seawater desalination project applications as part of the LRP and its eligibility criteria.
- Stormwater: Metropolitan's Foundational Actions Funding Program currently includes two stormwater studies/projects. The results of these studies, along with additional studies on long term quantity and regional benefits of stormwater development, are needed prior to making recommendations on the eligibility of stormwater projects in the LRP.

5. Provide reimbursable services

The current drought conditions resulted in the lowest allocation in the more than 50-year history of the SWP. To accelerate development of local supplies, Metropolitan would enter into reimbursable agreements with member agencies for the development of ready-to-proceed local projects that reduce future demand on imported water deliveries and on Metropolitan, and increase regional reliability and availability. Metropolitan's participation would help meet member agencies' strategic needs by expediting development of projects. Metropolitan would offer a variety of technical and financial services.

For projects proposed by member agencies, Metropolitan would consider the following:

- Water quantity to ensure that the project makes a meaningful addition to regional reliability,
- Water quality to confirm that project water would 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 (delivered cost of the project),
- The need for Metropolitan's involvement to expedite project completion,
- The availability of Metropolitan resources to expedite project completion, and
- Compliance of the project with all permitting and environmental requirements.

Based on a favorable assessment, Metropolitan staff would request board authorization for reimbursable projects proposed by member agencies.

Metropolitan and the Los Angeles Department of Water and Power (LADWP) successfully entered into a similar reimbursable project agreement when SWP deliveries were restricted in 2008 (35 percent allocation) and 2009 (40 percent allocation). In December 2008, Metropolitan's Board approved a \$12 million reimbursable agreement for a groundwater recovery project at the Tujunga well field. This project was completed with full reimbursement to Metropolitan and it is operated today by LADWP, successfully producing groundwater recovery supplies that help to reduce reliance on imported deliveries and demand on Metropolitan, and increase regional reliability and availability.

A detailed description of the reimbursable services is included in Attachment 3.

Next Steps

Staff will incorporate board comments and continue to work with member agencies to develop recommendations for refinements to the Local Resources Program. Staff will produce recommendations for board consideration in October 2014. These LRP refinements will help reach the 2007 LRP target. Staff will evaluate the need to increase the LRP target as part of the 2015 IRP Update process.

Policy

By Minute Item 48449, dated October 12, 2010, the Board adopted the 2010 Integrated Water Resources Plan.

By Minute Item 47049, dated April 10, 2007, the Board adopted the Local Resources Program Provisions including a goal of 174,000 acre-feet per year of new production.

Fiscal Impact

None

9/2/2014 Deven N. Upadhyay Manager, Water Resource Management Date (9/3/2014 Jeffrey Kightlinger General Manager Date

Attachment 1 – General Program Information Attachment 2 – Alternate Incentive Payment Structures Attachment 3 – Reimbursable Services

Ref# wrm12632686

Local Resources Program General Program Information

General Requirements

The Local Resources Program (LRP) provides incentives for development of new water recycling and groundwater recovery projects in Metropolitan's service area. Unless otherwise approved by Metropolitan, proposed projects must comply with the following general requirements:

- 1. Project must replace an existing demand or prevent a new demand on Metropolitan's imported water deliveries either through direct replacement of potable water or increased regional groundwater production.
- 2. Project must not exist or be under construction prior to application submittal. Projects that commence construction after application submittal and prior to executing an agreement with Metropolitan would be subject to agency's sole financial risk.
- 3. Project must include construction of new substantive treatment or distribution facilities.
- 4. Proposals must be supported by a Metropolitan member agency.
- 5. Project must be owned and operated by the agency, and Metropolitan has no ownership or operational obligations toward the project.
- 6. Project must comply with the Metropolitan Water District Act and applicable laws.
- 7. Project must comply with CEQA and/or NEPA provisions prior to Metropolitan board approval.
- 8. Metropolitan's Board must approve each project prior to incentive agreement execution.
- 9. Project must have obtained all required Regional and State permits prior to receiving Metropolitan board approval.

Project Phasing

Metropolitan would only consider new projects that are ready for construction and capable of achieving stated production capacities in the near future. To that end, Metropolitan would consider phasing of projects with long ramp-up schedules. LRP funding would be provided to only initial phases that are well positioned to produce water. Future phases would be considered for inclusion at later dates when production is more imminent.

Some existing LRP projects are not fully developed and need more time beyond the term of current agreements to reach full capacity. To help advance expansion of those projects, Metropolitan would apply the project phasing principle. Existing agreements would be truncated at current production levels and new agreements would be negotiated for remaining phases.

The existing LRP agreements and new project proposals shall not be subdivided into more than three phases.

General Performance Provisions

The following performance provisions would apply to new and amended agreements to ensure timely and responsive project development and production. These provisions would allow Metropolitan to adjust or withdraw financial commitments to projects that fail to meet development and production milestones outlined in the following table.

| Timeline (full fiscal year) | Milestone | Consequence if target is not achieved |
|---|--------------------------------|--|
| Two years after agreement execution | Start construction | Agreement may be terminated* |
| Four years after agreement execution | Start operation | Agreement may be terminated* |
| Four-Seven years after agreement execution | 50 percent of contract yield | Contract yield may be reduced |
| 8-11 years after agreement execution | 75 percent of contract yield** | Same as above |
| 12-15 years and every four years thereafter | 75 percent of contract yield** | Same as above |

- * Entities may appeal termination to Metropolitan's Board of Directors.
- ** Ultimate yield or revised ultimate yield due to project's performance in previous years (if applicable)

Program Target

The current program was adopted in 2007 with a goal of incentivizing 174,000 AFY of new annual production. Under the current program, the Board has approved 23 projects with a combined contractual yield of about 111,000 AFY, resulting in a remaining target of 63,000 AFY.

Process Overview

Metropolitan would accept project applications on an open and continuous basis until the LRP target is achieved. Staff would review project applications to ensure compliance with general program requirements. Project proposals that have met the General Requirements (previously described) and secured approval of draft agreement terms by the respective governing bodies would be forwarded to Metropolitan's Board for approval of LRP participation though an agreement. Upon Board approval, staff would meet with project sponsors and respective member agencies to negotiate terms and execute agreements.

Local Resources Program Alternate Incentive Payment Structures

Incentive Payment Structures

Agencies can choose from one of the following three alternative incentive payment structures for each of their eligible projects to participate in LRP:

- Alternative 1 Sliding Scale Incentives Over 25 Years (Current Payment Structure)
- Alternative 2 Sliding Scale Incentives Over 15 Years
- Alternative 3 Fixed Incentives Over 25 Years

Alternative 1 - Sliding Scale Incentives Over 25 Years (Current Payment Structure)

Metropolitan would provide member or retail agencies a sliding scale incentive up to \$340/AF over 25 years, calculated annually based on actual project unit costs exceeding Metropolitan's prevailing water rate, for project water produced and used.

Eligible project costs include an agency's out of pocket costs normally associated with developing local resource projects including design, capital, operations, maintenance, and replacement costs. Incentive payments are subject to a follow-up cost reconciliation process with adjustments for under- or over-payment to be included in subsequent water service invoices from Metropolitan.

Alternative 2 - Sliding Scale Incentives Over 15 Years

This alternative is similar to the current program, but the incentive amount is calculated over a shorter payment period (15 years versus 25 years), allowing for higher incentives earlier in the contract. The adjusted incentive amount includes a present value calculation, resulting in an equivalent maximum obligation to Metropolitan as Alternative 1 (Sliding Scale Incentives Over 25 years). Metropolitan would provide member or retail agencies a sliding scale incentive up to \$475/AF over 15 years, calculated annually based on actual project unit costs exceeding Metropolitan's prevailing water rate, for project water produced and used. Eligible project costs are the same as Alternative 1. Incentive payments are subject to a follow-up cost reconciliation process with adjustments for under- or over-payment to be included in subsequent water service invoices from Metropolitan. In addition to the current LRP performance provisions, projects must continue production for 25 years, even if LRP payments are reduced to zero after 15 years. This provision ensures that Metropolitan does not pay more than \$340/AF of production over the 25-year term. If an agency fails to comply with these provisions, Metropolitan may require reimbursement for a percentage of the previous LRP payments toward that project. The reimbursement would be determined for each year remaining in the agreement considering the following:

- The previous LRP payments
- The previous project yield
- Project yield in the year in which a reimbursement is required

Alternative 3 - Fixed Incentive Over 25 Years

Compared to sliding scale incentives that are dependent on Metropolitan's water rate, a fixed incentive rate provides agencies with a more stable source of funds to help address financing issues. Agencies use LRP incentives as a means of income when securing financing for their projects. Fixed incentives provide stable income and help agencies with securing capital funds. Metropolitan would offer a project specific fixed incentive rate, not to exceed \$305/AF, over 25 years. The fixed incentive amount for each project would be negotiated so that Metropolitan's maximum obligation toward that project under this alternative would not exceed the projected financial obligations under Alternative 1 for the same project.

In addition to the general requirements and performance provisions, the following provision would apply to this alternative: Total LRP payments under the agreement term would be limited to total estimated project yield presented by the agency at the time of agreement negotiation.

Reimbursable Services

Metropolitan would enter into a reimbursable agreement with requesting member agencies for the development of local resource projects that reduce future demands for imported water deliveries and increase regional reliability. Metropolitan's participation would help meet the member agencies' strategic needs by expediting development of projects. Metropolitan's participation in a reimbursable service agreement would depend on the need to accelerate delivery of the projects in order to meet resource needs or improve reliability.

For projects proposed by member agencies, Metropolitan would consider the following:

- 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 (delivered cost of the project),
- The need for Metropolitan's involvement to expedite project completion,
- The availability of Metropolitan resources to expedite project completion, and
- Compliance of the project with all permitting and environmental requirements.

Metropolitan's obligations may include:

- Conduct feasibility studies as needed,
- Perform technical and water quality analyses as needed,
- Perform project management, procurement, installation/construction, and start-up/operations,
- Perform engineering design including drawings and performance specifications,
- Develop construction and operating cost estimates, and
- Contract with vendor.

Agency obligations would include:

- To serve as the Lead Agency under the California Environmental Quality Act,
- Obtain all necessary permits,
- Meet all applicable standards (e.g., water quality),
- Operate project upon termination of agreement, and
- Reimburse Metropolitan for all its actual costs, including labor, equipment, materials, and other services.

The amount of the reimbursable agreement would be determined on a case-by-case basis. The agency would reimburse Metropolitan for all direct and indirect costs incurred, including the cost of capital and the fully burdened cost of Metropolitan's staff.