



- Board of Directors  
*Water Planning and Stewardship Committee*

4/9/2019 Board Meeting

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8-4

## Subject

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Authorize the General Manager to provide a credit to offset increased costs associated with surplus deliveries to cyclic accounts; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

## Executive Summary

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At times, available imported water quantities exceed Metropolitan's ability to capture supplies for the region. The use of cyclic agreements helps manage this condition by pre-delivering imported water while surplus conditions exist and allowing member agencies to pay for this water over a period of up to five years. However, some member agencies could take additional steps to capture more surplus imported supplies, resulting in increased costs above their normal operating conditions. This action item would authorize the General Manager to provide credits of up to \$225/acre-foot to offset the increased costs member agencies incur to capture additional imported supplies above their base deliveries. The cost-offset credit would only be made available in conditions that the General Manager determines may result in loss of available supplies to the region. The General Manager would be required to bring an item to the next board meeting following a decision to make cost-offset credits available to help manage surplus conditions.

## Details

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### *Background*

Last month, staff presented information item 9-3 for discussion (**Attachment 1**). Information item 9-3 described the General Manager's existing authority to enter into cyclic agreements to assist in capturing surplus imported water. Cyclic agreements allow Metropolitan to pre-deliver water to member agencies, allowing them to pay for these deliveries over a period of up to five years. These agreements help Metropolitan capture surplus imported water supplies when Metropolitan may not be able to capture all available supplies in other storage facilities or programs. Item 9-3 also described that cyclic agreements do not include a mechanism to offset the higher cost of some actions that agencies might take to capture increased volumes of imported water. As a result, opportunities to capture surplus imported water may be limited without a credit for member agencies to offset these higher costs.

This action item builds off of the March Information Item 9-3 and includes adjustments based on feedback from the Water Planning & Stewardship Committee and member agency managers. Staff recommends the Board authorize the General Manager to offer a credit to offset the cost of extraordinary actions member agencies take to capture surplus imported water in cyclic accounts. The terms defining how these cost-offset credits would work are included in this letter and its attachments.

### **Proposed Authorization for the General Manager**

This action seeks authority for the General Manager to issue cost-offset credits related to member agency actions to capture water in cyclic accounts. Cost-offset credits would only be given to a member agency in the following conditions:

- The General Manager has determined that supply conditions warrant making cost-offset credits available due to a risk of not capturing all available imported supplies; and

- The member agency takes an action to increase capture of surplus imported water supplies at Metropolitan's request; and
- The capture of surplus imported water supplies in a cyclic account is certified by Metropolitan staff as above the baseline operations that otherwise would have occurred; and
- The member agency incurs costs to capture these surplus supplies that are above the normal cost that would be paid for imported water supplies from Metropolitan.

The conditions above ensure that Metropolitan only pays cost-offset credits for deliveries that have increased the capture of surplus imported supplies. It also clarifies that credits are only made available to offset the increased costs to a member agency above the normal rates they would pay for Metropolitan's imported water. The credits do not reduce the costs to participating member agencies below their normal cost of purchasing water from Metropolitan. General terms for the cost-offset credits are included in **Attachment 2**.

Like all other billings from cyclic accounts, the purchase by the agency would not incur a Capacity Charge because the delivery would be at Metropolitan's discretion. Metropolitan would charge the member agency all other components of Metropolitan's full-service water rate, including the Readiness-to-Serve Charge at the time the water is sold.

### **Cost-Offset Credits**

If made available in a given year, cost-offset credits would be limited to up to \$225/acre-foot captured in cyclic accounts. The upper limit of \$225/acre-foot would be indexed to inflation to allow for adjustment over time. All certification and reconciliation procedures associated with cyclic agreements would remain in effect. These procedures allow staff to ensure that only imported water captured above the normal deliveries of a given agency would qualify for any cost-offset credits. These procedures also allow staff to review the costs a given agency incurs (including potential avoided costs) in order to calculate whether the operations to capture additional imported water actually lead to a cost, above what they would normally pay for imported deliveries. This forms the basis for whether an agency can receive a cost-offset credit or not.

All water delivered into cyclic accounts is billed at Metropolitan's applicable treated or untreated full-service rates over an agreed upon period of time. The potential cost of issuing credits would be included in the Supply Program line item of future biennial budget proposals in a fashion consistent with other storage programs. If cost-offset credits are issued in a given year, they would be accounted for in a fashion similar to other supply programs. These costs would be captured in the Chief Financial Officer's quarterly financial report under supply program costs.

### **Initiating Cost-Offset Credits and Reporting**

Metropolitan regularly reports to the Board on developing supply and demand conditions through Water Surplus and Demand Management Plan reports. These reports are done on a monthly basis through the winter and spring. Staff keeps the Board apprised of developing conditions, including the potential use of storage assets and the likelihood of storing or withdrawing supplies. The potential need to initiate the use of cost-offset credits to capture imported supplies in cyclic accounts would be part of this regular reporting process.

At times, the available imported supplies may exceed Metropolitan's ability to capture within regional storage assets. These periods may be short-term in nature (a few weeks) or long-term (spanning across calendar years). In these circumstances, when the region is at risk of not capturing all available imported supplies, the General Manager may initiate the use of cost-offset credits to increase the amount of imported water captured in cyclic accounts. Authorizing the General Manager to take this action allows for responsive operations based on changing supply conditions. This is particularly important in cases such as the Department of Water Resources' decisions to make Article 21 supplies available on the State Water Project. These decisions can be made in a very short timeframe, often with less than a week of notice.

If the General Manager initiates the use of cost-offset credits, an item would be brought to the next regularly scheduled board meeting. This item would include supporting information that led to the General Manager's decision and would provide an option for the Board to stop the use of cost-offset credits, if desired.

### **Examples of Actions to Increase Capture of Surplus Imported Supplies**

Generally, cost-offset credits would be available for any actions a member agency takes to increase the capture of surplus imported water in cyclic accounts above their baseline deliveries. The following are examples of actions that might apply:

- Increased deliveries to local surface storage
- Increased deliveries to groundwater spreading connections
- Increased deliveries to groundwater basins via injection
- Increased deliveries to meet consumptive demands in-lieu of using groundwater or surface storage (in-lieu storage)

Staff would look at the additional costs an agency incurs in taking the above actions beyond their normal cost for taking imported supplies. The increased costs would be eligible for the credit, up to \$225/acre-foot. Examples of how the cost-offset credit calculation would work are included in **Attachment 3**. Metropolitan retains the sole discretion in determining eligible costs.

In the case of surface storage, staff received feedback regarding the evaporative losses a local agency incurs when using reservoir storage. In recognition of this, staff proposes that a cost-offset credit be available recognizing a five percent loss for each year the water stays in the cyclic account. Evaporative losses would be capped at a maximum of ten percent if an agency takes more than two years to pay for the water. The agency would be billed for all water delivered into the cyclic account on the agreed upon schedule (without accounting for evaporative losses) and the cost-offset credit would apply when the agency is billed.

### **Summary**

Under certain supply conditions, Metropolitan may not be able to manage all supplies and opportunities to store water could be lost to the region for future dry years. By providing a cost-offset credit for surplus deliveries into cyclic accounts under limited conditions, member agencies can increase the amount of water delivered to the region while benefiting all member agencies in the same manner as other local storage programs.

With this delegation of authority to the General Manager to provide cost-offset credits, Metropolitan would have additional operational flexibility to capture surplus imported supplies. This proposal also includes prompt reporting and board oversight, if the General Manager exercises this authority.

### **Policy**

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Metropolitan Water District Administrative Code Section 4209: Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 50793, dated April 10, 2017, the Board authorized the General Manager to enter into cyclic agreements with Metropolitan's member agencies.

By Minute Item 50888, dated July 11, 2017, the Board authorized the General Manager to enter into cyclic agreements providing a credit of up to \$225 per acre-foot for in-lieu deliveries.

### **California Environmental Quality Act (CEQA)**

#### **CEQA determination for Option #1:**

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. In particular, the proposed action consists of entering into agreements for the capture of surplus water at existing public or private facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies as a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines).

#### **CEQA determination for Option #2**

None required

**Board Options**

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**Option #1**

Authorize the General Manager to enter into agreements to provide a cost-offset credit of up to \$225 per acre-foot for surplus deliveries under limited conditions, consistent with the terms in **Attachment 2**.

**Fiscal Impact:** None. Up to \$225 per acre-foot cost-offset credit to the member agency. The credit will be offset by the treatment surcharge collected at the time of the delivery or the future sale at the full-service rate.

**Business Analysis:** Metropolitan would improve regional reliability through the delivery of water to the region that would have otherwise been lost. The additional cost to manage such water at an amount not to exceed \$225 per acre-foot is less than Metropolitan’s average cost of \$300 per acre-foot to store water in its SWP storage programs. Further, the delivery of the supplies to the region incurs lower power costs in wet years than in dry years because of higher hydroelectric generation on the State Water Project. Metropolitan will also generate additional revenue from an increase in treated water deliveries and the future sale of the delivered water.

**Option #2**

Do not authorize the General Manager to enter into agreements to provide a surplus credit for surplus deliveries with member agencies that have received supplies.

**Fiscal Impact:** Potential loss of a full-service water sale and an increase in costs to acquire additional water for the region.

**Business Analysis:** Not implementing the credit in cyclic agreements could decrease the water supplies available to the region.

**Staff Recommendation**

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Option # 1

  
Brad Coffey  
Manager, Water Resource Management

3/28/2019  
Date

  
Jeffrey Nightlinger  
General Manager

3/29/2019  
Date

**Attachment 1 – March Information Item 9-3**

**Attachment 2 – Term Sheet Member Agency Cost-Offset Credits**

**Attachment 3 – Example Credit Calculations**



- Board of Directors  
*Water Planning and Stewardship Committee*

3/12/2019 Board Meeting

**9-3****Subject**

Information on potential credit to enhance in-lieu deliveries to cyclic storage under limited conditions

**Executive Summary**

This report describes a proposed revision to Metropolitan's cyclic agreements to increase the ability to capture imported supplies in future surplus conditions. Under the proposed modification, Metropolitan would be able to store water within its service area by delivering surplus supply to member agencies during extraordinary conditions, in-lieu of those agencies using their own local supplies. In exchange for agreeing to the in-lieu delivery and performance, Metropolitan would pay member agencies up to \$225 per acre-foot in the form of a credit. The maximum cost of \$225 per acre-foot would be comparable to Metropolitan's costs for other water management programs. For the agencies, the credit would offset some of the increased costs they would incur when taking treated imported deliveries in-lieu of using local supplies during surplus conditions. Metropolitan would credit the participants for their documented increased costs to receive the treated water up to \$225 per acre-foot (indexed by inflation each year). The proposed program would provide the General Manager the authority to execute cyclic agreements and to initiate in-lieu deliveries when water supplies may exceed Metropolitan's ability to capture. Upon authorization of in-lieu deliveries, staff would report the activity and the conditions that warranted this action to the Board at its next regular meeting.

**Details*****Background***

Metropolitan has developed a diverse portfolio of water storage facilities and agreements to help capture imported supplies in surplus conditions. This portfolio includes surface storage facilities, groundwater storage, and pre-delivery accounts that are both inside and outside of the region. Since the 1970's this portfolio has included cyclic agreements.

***Cyclic Accounts***

A cyclic agreement establishes an account between Metropolitan and a member agency with either groundwater or surface storage. Through the account, Metropolitan can deliver water to the member agency at Metropolitan's convenience. Once delivered, the member agency then purchases water out of the account on an agreed upon schedule, not to exceed five years. Unlike some other programs in Metropolitan's storage portfolio, cyclic accounts do not charge Metropolitan any costs for this activity, and there are no loss factors applied to deliveries into cyclic accounts.

At times, Metropolitan may prefer to deliver higher amounts of water than a member agency may have budgeted for in a given time period. Cyclic accounts allow Metropolitan to make larger deliveries when imported water is available while allowing the member agency to purchase the water over a period of time, allowing stable and predictable budgeting.

### ***Two Methods of Delivery into Cyclic Accounts***

Metropolitan can deliver water into cyclic accounts through either direct or in-lieu methods. Direct deliveries are made when Metropolitan provides untreated supplies directly to a surface reservoir or groundwater spreading connection. Direct deliveries are common, although operational conditions can constrain when direct deliveries can be made. Sometimes the capacity of local spreading basins, water quality issues, and/or the potential presence of invasive species can impact the ability to make direct deliveries.

In-lieu deliveries can be made if the member agency reduces groundwater pumping or reduces the use of local surface storage in order to increase deliveries from Metropolitan's treated water system. In this operation, Metropolitan provides treated drinking water to meet consumptive demands in-lieu of the member agency using its groundwater or surface water to meet demands. This increases Metropolitan's imported deliveries when they are available and preserves the local supplies to be used at a later date. By virtue of using Metropolitan's many treated water connections, Metropolitan has a higher degree of operational flexibility in making in-lieu deliveries.

### ***In-lieu Deliveries Are an Economical Form of Water Management for Metropolitan, but Come at a Higher Cost for the Local Agency***

In-lieu deliveries can significantly increase the amount of water maintained in local cyclic accounts. However, member agencies typically plan to replenish groundwater and surface water storage using untreated deliveries over time. When taking in-lieu deliveries, the member agency must also pay Metropolitan's treatment surcharge. This higher cost serves as a disincentive to the member agency to use more imported water, particularly when it can simply wait to purchase untreated water at a later date. When a member agency takes treated in-lieu deliveries, the member agency avoids costs associated with pumping and delivering the local supplies. These avoided costs, however, are outweighed by the higher cost of Metropolitan's treatment surcharge.

### ***2017 In-Lieu Credit Program***

In 2017, Metropolitan experienced extraordinary conditions with a high amount of available imported supplies and low member agency demands. Metropolitan's ability to manage water in available storage accounts was maximized. In July of 2017, to increase deliveries of treated supplies, Metropolitan's Board authorized a credit of up to \$225 per acre-foot for in-lieu deliveries of treated water to member agency cyclic accounts. The \$225 per acre-foot cost to Metropolitan was competitive compared to other storage alternatives and reduced the cost impact to a member agency for taking in-lieu deliveries. The credit payable to a member agency was determined using the costs incurred by the agency as a result of taking additional treated water at Metropolitan's request in-lieu of using their own local supply, minus the costs that the agency would have incurred without the in-lieu delivery, not to exceed \$225 per acre-foot. Member agencies submitted their estimates of avoided cost to Metropolitan, which Metropolitan reviewed based on documented records. Agencies entered into purchase agreements to purchase the water within five years. Metropolitan entered into agreements for treated in-lieu deliveries with Municipal Water District of Orange County, City of Anaheim, City of Fullerton and City of Santa Ana. Other agencies voiced interest in taking in-lieu deliveries, but the approval of the program came too late in the year for their operations to accommodate the water.

The 2017 in-lieu credit program was approved only for the duration of the 2017/18 fiscal year. During the brief program, about 65,200 acre-feet were captured in cyclic accounts through in-lieu deliveries. This water would have otherwise been lost if the program were not in place.

### ***Potential Modification to Cyclic Program***

Staff is proposing a modification to the current Cyclic Program similar to the in-lieu credit program authorized by Metropolitan's Board in July 2017. Whereas the previous cyclic program was limited in both scope and duration, the modification would not be limited in that manner. The General Manager would have the authority to enter into cyclic agreements with member agencies and to initiate a credit for in-lieu deliveries based on water supply conditions in real time. This delegation of authority would provide flexibility in the operation of the Cyclic Program to allow for timely deliveries of surplus supplies.

The window to capture surplus supplies is often limited. For example, Article 21 supplies on the State Water Project can become available with little notice and only be available for a few weeks. If agreements and authority to initiate deliveries were in place beforehand, the amount of captured supplies would be maximized. These deliveries would increase water delivered and stored in the region, thus improving reliability for all member agencies and providing a regional benefit in the same manner as other water management programs. Further, these programs collect Metropolitan's full-service rate on a pre-determined schedule.

### ***Member Agency Requirements***

Under the proposed revised Cyclic Program when surplus water is available, member agencies would take treated water from Metropolitan in addition to their baseline water purchases for the year, in exchange for a credit of up to \$225 per acre-foot. The credit would be calculated as the difference in costs of the in-lieu delivery compared to their normal groundwater operation. Metropolitan would retain the sole discretion in determining eligible costs. The resulting credit would remove the financial barrier for a member agency to increase in-lieu deliveries from Metropolitan.

Participating member agencies would be purchasing more water than was already projected for delivery. Metropolitan would bill the member agency through a cyclic account at the full-service rate within five years, based on an agreed upon schedule. The schedule would provide certainty to Metropolitan that the water would be sold to generate a future sale. The schedule also provides the member agency certainty as to how the additional water purchases would impact future budgets.

Like all other purchases from cyclic accounts, the purchase by the agency would not incur a Capacity Charge, because the in-lieu delivery would be at Metropolitan's discretion. All other components of Metropolitan's full-service water rate would be charged to the member agency at the time the water is sold, and the delivery would count towards the agency's Readiness-to-Serve Charge. The member agency would be billed the treatment surcharge at the time of delivery, and would also receive the credit in the same year. To ensure credits were given only for deliveries of additional water, Metropolitan would certify that the in-lieu delivery to an agency was in addition to normal deliveries in the fiscal year.

### ***Program Process and Reporting***

Staff would evaluate the supply, demand, and storage availability through the Water Surplus and Drought Management process. If additional supply needs to be managed after other water management actions are potentially exhausted, staff would recommend the General Manager initiate in-lieu deliveries. Staff would report Cyclic Program activity to the Board at the next regular board meeting. The report to the Board would include information about the circumstances that led to the action, estimated surplus supplies and identify the participating member agencies and planned delivery amounts. Through a monthly certification and annual reconciliation process, staff would ensure that deliveries under the Cyclic Program were in addition to their normal deliveries.

### ***Summary***

Under extraordinary supply conditions, there may be an availability of supplies beyond what Metropolitan is able to manage. By providing a credit to member agencies to accept in-lieu deliveries under limited conditions, member agencies would increase the amount of water delivered to the region benefiting all member agencies and the region in the same manner as other water management programs. Increased deliveries into cyclic accounts bring more water into the service area. This enhances Metropolitan's ability to respond to emergency events more than storage outside the service area.

By delegating authority to the General Manager to enter into cyclic agreements to provide in-lieu credits, and to begin in-lieu deliveries, the Cyclic Program would provide operational flexibility to manage and store extraordinary supplies. The draft terms for the Potential In-Lieu Cyclic Program are included in **Attachment 1**.

## Policy

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Metropolitan Water District Administrative Code Section 4209: Contracts

By Minute Item 50793, dated April 10, 2017, the Board approved the General Manager to enter into Cyclic Agreements with Metropolitan's member agencies.

By Minute Item 50888, dated July 11, 2017, the Board approved the General Manager to enter into Cyclic Agreements providing a credit of up to \$225 per acre-foot for in-lieu deliveries in fiscal year 2017/2018.

## Fiscal Impact

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The fiscal impact would be a short term increased cost associated with the maximum credit of \$225 per acre-foot (indexed each year). The credit is competitive with the unit cost of Metropolitan's State Water Project groundwater storage programs. Increased local supplies would reduce demand in dry years when alternative water supply sources are likely to be more expensive and provide more reliability in emergency events, providing a regional benefit to all member agencies.

  
Brad Coffey  
Manager, Water Resource Management

3/1/2019  
Date

  
Jeffrey Kightlinger  
General Manager

3/1/2019  
Date

## Attachment 1 – Term Sheet, Member Agency In-Lieu Agreements

Ref# wrm12660548



Term Sheet  
Member Agency  
In-Lieu Cyclic Agreements

**In-Lieu Credit**

- Metropolitan would provide a credit of up to \$225 per acre-foot, escalated yearly using the Consumer Price Index, for the in-lieu deliveries of Metropolitan supplies.
- The credit payable to a member agency would be based on the estimated additional costs that would be incurred by the member agency as a result of taking delivery of additional treated water supplies at Metropolitan's request. The credit would be equal to the treatment surcharge minus the costs that the agency would have incurred without receiving in-lieu deliveries. Avoided cost estimates would be provided by the member agencies for review.
- Metropolitan would have sole discretion in determining the eligible costs that would be reimbursed.
- Metropolitan would bill the treatment surcharge to the member agency at the time of delivery.
- Transactions would be accounted for at the meter level.
- The credit applied to the member agency meter invoiced amount, and subject to reconciliation of the credit amount and the in-lieu delivery amount.
- Adjustments to in-lieu credits could result from reconciliations.

**In-Lieu Delivery Requirements**

- The in-lieu delivery of water to a member agency shall not reduce the full-service water sales of Metropolitan. Certification of in-lieu deliveries could be limited if the member agency does not achieve projected full-service deliveries as determined by Metropolitan for that year.
- Metropolitan would agree on a payment schedule for the agencies' purchase of the delivered water.
- Operating plans would be required from the member agency prior to receiving in-lieu deliveries. Operating plans would help certify in-lieu deliveries into cyclic agreements as separate from normal deliveries. Any credits given for water deliveries that are unable to be validated and reconciled by official documentation (i.e., Watermaster report or other official documentation) after certification would be voided by Metropolitan.
- The terms for the agency's purchase of the delivered water, including applicable rates and charges, would be the same as all other purchases from the member agency's cyclic agreement.

**Term**

- The member agency would be required to purchase the delivered water no later than five full calendar years from the in-lieu delivery. Metropolitan and member agencies would agree on a payment schedule for the agencies' purchase of the delivered water under the cyclic agreement.

**Term Sheet**  
**Member Agency Cost-Offset Credits**

**Cost-Offset Credit**

- Metropolitan would provide a maximum credit of up to \$225 per acre-foot, escalated yearly using the Consumer Price Index (CPI), for the capture of Metropolitan surplus supplies.
- The credit payable to a member agency would be based on performance and the estimated additional costs incurred by the member agency as a result of taking delivery of additional water supplies at Metropolitan's request. For in-lieu treated deliveries, the credit would be equal to the treatment surcharge minus the costs that the agency would have incurred without receiving surplus deliveries. Avoided cost estimates would be provided by the member agencies for review.
- Metropolitan would have sole discretion in determining the eligible costs that would be reimbursed.
- For surface water deliveries, evaporative losses would be calculated as five percent each year for up to two years.
- For in-lieu deliveries, Metropolitan would bill the treatment surcharge to the member agency at the time of delivery.
- Transactions would be accounted for at the meter level.
- The credit would be applied to the member agency meter invoiced amount and would be subject to reconciliation of the credit amount and the surplus delivery amount.
- Adjustments to cost-offset credits that could result from reconciliations would be applied at the end of the calendar year or fiscal year (depending on the reconciliation period).

**Surplus Delivery Requirements**

- Cyclic deliveries could be made directly or in-lieu to surface water reservoirs or groundwater basins. The member agency must perform by managing the surplus delivery during the required performance period. A cyclic agreement is required to account for the deliveries.
- The surplus delivery of water to a member agency shall not reduce the full-service water sales of Metropolitan. Certification of surplus deliveries could be limited if the member agency does not achieve projected full-service deliveries as determined by Metropolitan for that year.
- Metropolitan would agree on a payment schedule for the agency purchase of the delivered water.
- Operating plans would be required from the member agency prior to receiving surplus deliveries. Operating plans would help certify surplus deliveries into cyclic accounts as separate from normal deliveries. Any cost-offset credits given for water deliveries that are unable to be validated and reconciled by official documentation (i.e., Watermaster report or other official documentation) after certification would be voided by Metropolitan.
- The terms for the agency's purchase of the delivered water, including applicable rates and charges, would be the same as all other purchases from the member agency's cyclic agreement.

**Term**

- The member agency would be required to purchase the delivered water no later than five full calendar years from the surplus delivery. Metropolitan and member agencies would agree on a payment schedule for the agencies' purchase of the delivered water under the cyclic agreement.

### **Example Cost-Offset Credit Calculations**

#### Example 1 - Metropolitan delivers 10,000 acre-feet of treated water in-lieu of the member agency using 10,000 acre-feet of groundwater to meet demands

Scenario: Member agency normally takes untreated deliveries from Metropolitan to replenish its groundwater basin. To increase capture of surplus imported supplies, Metropolitan requests the agency to take increased delivery of treated water and reduce groundwater pumping. Without an offsetting credit, the member agency would incur the higher cost of Metropolitan's treatment surcharge compared to its own pumping and disinfection costs.

As an example, the agency's cost to pump and disinfect its local supply is assumed to be \$100 per acre-foot. By accepting additional treated water from Metropolitan in-lieu of pumping the groundwater, the agency incurs the treatment surcharge of \$319 per acre-foot in addition to the normal untreated water rates it would pay to Metropolitan. Under the proposed program, Metropolitan bills the treatment surcharge when water is delivered and credits the agency up to \$225 per acre-foot to offset its additional costs to accept treated supplies. In this example, the credit would be \$219 per acre-foot (\$319 for the treatment surcharge less \$100 in avoided pumping and disinfection costs). The credit ensures the member agency does not incur an additional cost for accepting additional treated supplies. The deferred groundwater pumping remains in the basin for future use. The member agency's cyclic account balance increases in this example by 10,000 acre-feet. Metropolitan later bills the member agency at the untreated rates based on an agreed upon schedule, not to exceed five years.

#### Example 2 - Metropolitan delivers 10,000 acre-feet of untreated water to member agency for storage in a local surface reservoir

Scenario: In this example, the member agency normally purchases untreated water supplies from Metropolitan and treats the water at its treatment plant. The member agency also has available capacity in a local surface water reservoir. To increase capture of imported supplies, Metropolitan requests increased delivery of untreated imported supplies into their surface water reservoir. The agency incurs evaporative losses associated with holding these additional supplies in its reservoir. Rather than require a complex evaporative calculation, evaporative loss is estimated at five percent per year for up to two years (i.e. total evaporation is capped at 10 percent). The evaporative loss is credited to the agency on the untreated water rate when billed out of the cyclic account. Without the cost-offset credit, the member agency would incur an added cost of lost water by evaporation for keeping the additional untreated supplies in their reservoir.

In this example, it is assumed the member agency incurs a cost of \$50 per acre-foot to pump imported supplies into the reservoir. The member agency's cyclic account balance in this example increases by 10,000 acre-feet. The agency chooses to buy the water out of the cyclic

account the next year, thus incurring one year of evaporative losses at five percent. The credit for the evaporative loss would be five percent multiplied by the untreated water rate in force when the water is billed (in 2019 the credit would be five percent of \$731 per acre-foot, which is \$37 per acre-foot). Under the proposed program, Metropolitan bills the agency for the untreated water rates less a total credit of \$87 per acre-foot (\$50 per acre-foot in pumping costs and \$37 per acre-foot for evaporative losses).

Example 3 - Metropolitan delivers 10,000 acre-feet of treated water to member agency groundwater basin through injection

Scenario: In this example, member agency normally purchases treated water to meet its demands. This agency is also able to inject treated supplies into their groundwater basin. In order to increase capture of imported supplies, Metropolitan requests increased delivery of treated water supplies into their groundwater basin via injection. Without the cost-offset credit, the member agency would incur costs associated with injection, extraction, and disinfection of the captured water once it is extracted, in addition to the normal cost of Metropolitan's treated supplies.

For this example, it is assumed the member agency incurs a cost of \$50 per acre-foot to inject treated water into the groundwater basin, \$150 per acre-foot to pump water back out of the groundwater basin, and \$35 per acre-foot to disinfect the pumped groundwater. The total of these costs is \$235 per acre-foot in addition to Metropolitan's normal treated water rates. However, the cost-offset credit would be limited to a maximum of \$225 per acre-foot, which is the upper limit under this proposed program (subject to inflationary adjustments). The member agency cyclic account would increase by 10,000 acre-feet and Metropolitan would bill the agency based on an agreed upon schedule for the full treated water rates less the cost-offset credit of \$225 per acre-foot.