

**Metropolitan Water District of Southern  
California**

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***White Paper on:*  
Growth-Related  
Infrastructure Cost  
Recovery For Wholesale  
Water Providers**

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# 1. Executive Summary

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The Metropolitan Water District of Southern California (Metropolitan) and its Member Agencies have been examining the potential role of a capital recovery fee for more than a decade. Metropolitan currently recovers the cost of serving new demand through a combination of its Annexation charge and current rate structure. As such, it does not explicitly recover infrastructure costs associated with new growth through a separate fee or rate.

There are many different options available to develop a financial mechanism to fund growth-related infrastructure. Metropolitan could keep its existing financial mechanisms (i.e., a combination of the Annexation charge and current rates and fees), it could develop a new financial mechanism such as a one-time capital recovery fee, or it could enter into direct payment contracts for new infrastructure with its member agencies.

Since many different types of financial mechanisms are available to pay for growth-related infrastructure, it is recommended that evaluation criteria be developed in order to evaluate or rank each option. The goal is to evaluate different options based on objective criteria as identified and prioritized by the Metropolitan Board.

This white paper contains Red Oak's identification and review of various options for determining, implementing, and administering growth-related cost recovery mechanisms – either as a recurring rate or as a one-time fee – and provides policy options and objective ranking criteria for consideration by Metropolitan's Board.

Based on the criteria developed in Section 5, it is recommended that the Long Range Finance Plan Rate Structure Group (LRFP) evaluate, provide comments and rank these criteria. In addition, it is recommended that the LRFP confirm and provide suggestion on the associated growth-related fee options, as mentioned in Section 6. Based on LRFP comments and suggestions, Red Oak along with Metropolitan staff can determine which growth-related fee should be analyzed and developed for Board consideration.

## 2. Introduction

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The Metropolitan Water District of Southern California (Metropolitan) retained Red Oak Consulting, a division of Malcolm Pirnie, Inc. (Red Oak) to evaluate various funding mechanisms including rates and/or fees to recover Metropolitan’s future infrastructure costs required to serve new development.

In the water utility industry, new facilities or expansions to existing facilities are often funded via a one-time charge imposed at the time of connection to the system (e.g., a system development charge, an impact fee, or a connection fee). These charges are intended to fund all or a portion of the capital investment required to provide sufficient capacity to serve new users or connectors to the utility system. Absent a one-time charge, growth-related infrastructure is typically funded (along with non-growth capital costs and operation and maintenance expenses) via user fees or rates for service.

Metropolitan currently recovers the cost of new demand through a combination of its Annexation charge and current rate structure. As such, it does not explicitly recover infrastructure costs associated with new growth through a separate fee or rate.

This white paper contains Red Oak’s review and evaluation of various financial mechanisms for determining, implementing, and administering growth-related charges – either as a recurring rate or as a one-time fee – and provides policy options for consideration by Metropolitan’s Board of Directors. The purpose of this paper was not to make a recommendation as to the most appropriate means of recovering growth-related infrastructure costs. The information contained in this white paper is expected to be considered by the Long Range Finance Plan Rate Structure Group (LRFP) in developing recommended options for consideration by the Board.

### 3. Background

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Metropolitan and its Member Agencies have considered the potential role of a capital recovery fee for more than a decade. In December 1993, the Board of Directors (Board) approved the rate structure and additional revenue sources described in the Board letter on the Financial Structure Study. Included in the approved rate structure was a New Demand Charge (NDC) intended to recover capital costs associated with meeting new water demands on Metropolitan's system.

The NDC was authorized beginning in fiscal year (FY) 1995-96, but collection of revenues was not to begin until FY 1996-97. A Member Agency would incur the charge if its current four-year water sales average exceeded an established baseline. Although the demand charge was imposed, collection was suspended, pending further analysis (i.e., until an area-wide new development-based fee structure was implemented, or until normal system demands exceeded 2.2 MAF/yr, whichever occurs first.) At that time the first member agency to pay the NDC would have been San Marino, due solely to a reduction in its groundwater supplies and increased reliance on Metropolitan. This circumstance raised questions about the validity of the NDC and the charge was suspended.

In October 2001, the Board of Directors approved a new rate structure consisting of unbundled service charges and a two-tiered volumetric rate. These rates addressed the impact of new demands on the cost of water supply operations (through the tiered rate structure); however the impact on growth-related water supply infrastructure was not explicitly addressed. The Board's rate action provided that "a mechanism to recover costs for Metropolitan's infrastructure associated with increasing system demands will be developed and in place by 2006."

## 4. Framework

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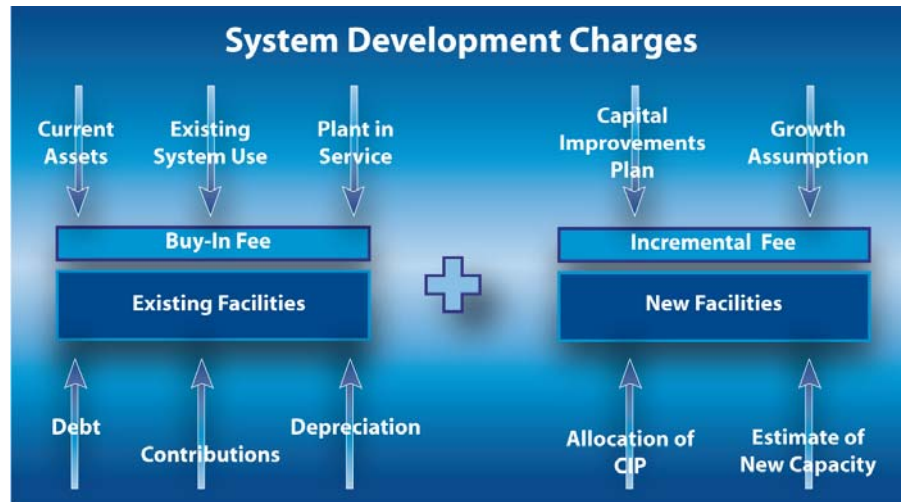
There are many different options available for Metropolitan to develop a financial mechanism to fund growth-related infrastructure. Metropolitan could keep its existing mechanisms (i.e., a combination of Annexation charge and rate fees) or it could develop new “tools” such as a one-time capital recovery fee, which is similar to a connection fee. To ensure that the proposed options are consistent with industry standards, a brief explanation of connection fee methodologies is provided.

Connection fees relate only to capital investments resulting from new development and are not to be utilized for the funding of infrastructure rehabilitation costs or operating expenses. Connection fees must meet the requirements of the AB 1600. Adopted in 1987, AB 1600 (now Government Code Sections 66000 et. seq.) requires local governments and public utilities to establish a rational nexus between the fees being charged and the needs created by the user paying the fees. By its own terms, this “Mitigation Fee Act” applies to development impact fees imposed by public utilities to finance all or part of the cost of public facilities (such as streets, drainage and flood control facilities, water and sewer, and government buildings). While some question exists as to the applicability of AB 1600 to Metropolitan, the rational nexus criterion is a well-founded principle and would govern the determination and assessment of any connection-like fee.

The AB 1600 rational nexus test consists of three requirements:

- 1) Needed capital facilities are a consequence of new development.
- 2) Fees are a reasonably proportionate share of the cost of the needed capital facilities.
- 3) Revenues are managed and expended in such a way that new development receives a benefit from the facilities.

In addition, the American Water Works Association (AWWA) has developed industry standards in calculating connection fees, found in the AWWA M1 Manual of Water Supply Practices. The M1 manual describes two methodologies for calculating a connection fee: the equity buy-in method and the incremental cost method. This manual also acknowledges that a hybrid of both methods may be appropriate. Figure 4-1 illustrates the buy-in and incremental methodologies.



**Figure 4-1: Growth-Related Infrastructure Fee Methodologies**

In charging new customers the cost of past and/or future capacity, a connection fee promotes a concept in utility rate making called intergenerational equity. Intergenerational equity, in this instance, means that use of a connection fee eliminates or mitigates subsidies of new customers by existing customers, and vice versa. In many communities, this is often referred to as the concept of “having growth pay for growth.”

These methodologies are discussed in the balance of this section.

### **Equity Buy-In Method**

The equity buy-in method is most appropriate in situations where new customers can be served by the existing system. Under this method new customers pay a proportionate share of the value of the existing facilities. The equity approach determines the value of the existing system assets and divides it by the current or design, total equivalent capacity served by the system. The result is a connection fee per equivalent capacity. AWWA states that the buy-in method is best employed in systems that have adequate capacity to serve both existing and future customers without major system expansions and where existing facilities are not scheduled for replacement in the short-term.

Equity, as defined by generally accepted accounting principles, is equal to total assets minus total liabilities of the system. However, because the accounting convention typically depreciates the system’s long-term assets (i.e. utility plant in service) under various depreciation techniques, and because those techniques sometimes have little bearing on the actual condition or value of the utility’s assets, questions may arise as to what is a fair valuation of the system’s existing assets. Several approaches exist to estimate the value of the utility’s assets, as described below.

- Original Cost Approach – The original cost is the price paid for the asset at the time it was acquired and placed into service.
- Book Value Approach – The value of the asset that remains once it has been adjusted for accumulated depreciation.
- Replacement Cost New Approach – Revalues the original cost of the asset at today’s value, thus taking into account inflation and market forces.
- Replacement Cost New Less Depreciation Approach – Uses the replacement cost new, as described above, and adjusts for accumulated depreciation.

The most common approach used in the industry is Replacement Cost New Less Depreciation since this approach reflects the current cost of the assets and is adjusted for age and condition.

The next step is determining the amount of excess capacity in the system. For a retail agency this is simply the current capacity of the system minus peak day delivery plus fire service. However, this is not the case for Metropolitan, which is a wholesale water agency that has two major sources of supplies, a large service area and the operational need and ability to move large amounts of water based on supply and storage conditions. In this case Metropolitan has three types of a capacity:

- Member Agency Capacity – Member Agency peak delivery in a year.
- Reliability and Operational Capacity– Operational needs of Metropolitan system to provide reliable supply of water based on supply and storage conditions.
- Excess Capacity – Amount available for growth.

The total of all three capacities would be the current capacity of Metropolitan system. The current capacity of the Member Agencies (peak delivery and average) are known. However, the required reliability and operational capacity is more difficult to determine. Therefore, the level of excess capacity available for growth is currently indeterminable.

### **Incremental Cost Method**

The incremental cost method is most appropriate when the existing system is at or near its maximum capacity and new customers must be accommodated with significant development of new facilities. Under the incremental cost method, new customers pay a proportionate share of the expansion-related costs of new, capacity-producing facilities. The connection fee is calculated using the projected capital improvement program (CIP) for a 5, 10, or 20 year period. To calculate the connection fee per equivalent capacity, total CIP dollars for growth are divided by total new equivalent unit of capacity to be added via the planned growth CIP.

Determining the level of new excess capacity would have the same problematic nature with determining the current available capacity within the Metropolitan system. Each



CIP project would need to be allocated into three categories: 1) deficiencies, 2) reliability and operational capacity and 3) growth-related capacity. Using the incremental approach, only the growth-related capacity would be funded by a connection fee.

### **Combined or Hybrid Method**

The combined or hybrid method may be the most appropriate method when new customers will use capacity available in the existing facilities (equity buy-in) as well as new capacity required to accommodate the additional units of service (incremental cost). The combined connection fee per equivalent unit of capacity would be a weighted average of the fee calculated under both the equity buy-in and the incremental cost approach.

### **Financing Cost and Carrying Cost of Capital**

Under either the equity or incremental approaches, water agencies may choose to recoup the time-value of money when developing their connection fee. Under the equity buy-in method, the carrying cost of capital is the opportunity cost of having financial resources committed to its infrastructure. By having excess capacity for growth, an agency has forgone an opportunity cost of investing its financial resources in other assets that produce a rate of return. Under the incremental method, the cost of financing future infrastructure may be included in the fee calculation.

### **Defining Growth**

Defining “growth,” for purposes of determining a connection fee and how it could be assessed is an important consideration. Metropolitan’s Member Agencies each have a different level of dependence and peaking factors due to the wide range of hydrological and climate conditions that exist in Metropolitan’s service area. For instance, Upper San Gabriel is only 10% dependent on Metropolitan to meet its demand, while Beverly Hills is 100% dependent. Thus growth in Upper San Gabriel may not have the same level of demand on Metropolitan as growth in Beverly Hills. Therefore, growth may be defined in different ways, including:

- Increased Demands on Metropolitan – Once a Member Agency has gone over a certain level of historical demand, any new addition in water sales is due to growth. For instance, any Tier 2 water sales will be used to determine the growth-related infrastructure fee and when it might be assessed to a Member Agency.
- Increase in Population – Metropolitan is responsible for providing water supply to its service area, so any population increase could “trigger” assessment of the fee.
- New Building Permits – Issuance of a building permit in a Member Agency’s service area could result in a higher demand on Metropolitan.

- Building Permit based on Capacity Charge – Similar to the above, except it would take into account each Member Agency’s percentage of summer time peaking, which is used in the current Metropolitan Capacity Charge.

## 5. Evaluation Criteria

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Since many different types of funding mechanisms can be developed to pay for growth-related infrastructure, it is recommended that predetermined evaluation criteria be developed in order to evaluate each option. The goal is to objectively evaluate different options based on the criteria that are most important for the Metropolitan Board. Red Oak has identified the following criteria, which are based on prior studies conducted by Metropolitan staff, discussions with Member Agencies at the Long Range Finance Plan Group meetings and our own experience. Note that each criterion is not equally weighted and may conflict with other criteria. The growth-related cost recovery mechanism criteria include:

- Encourages Local Stewardship – Encourage Member Agencies to meet their needs with local resources and infrastructure to the greatest extent practical.
- Local Agency Choice – Recognize the unique physical and political characteristics of each Member Agency and allow Agency choice in how it recovers the cost of growth-related infrastructure.
- Rate Equity and Price Signal – Improve rate equity by allocating a proportionate share of additional system capacity costs to those agencies requiring additional system capacity and provide an appropriate signal for local decision making.
- Metropolitan Administrative Burden – The mechanism should not cause excess burden on Metropolitan staff.
- Member Agency Administrative Burden – The mechanism should not cause excess burden on Member Agency staff.
- Cost of the Fee – The cost (as reflected in the mechanism) should not be less economical to the Member Agency than if the Member Agency constructed the facilities needed to provide additional capacity itself.
- Ease of Update – The mechanism should be simple, predictable and not overly complicated to update.
- Public Understanding – The mechanism should be easily understood by Member Agencies, retail agencies and the public.
- Legal Authority – Metropolitan should have the legal authority to assess the growth-related cost recovery mechanism.

In addition Red Oak has identified two other criteria that may be appropriate in evaluating potential cost-recovery mechanisms; these include:

- Revenue Stability – Any new capital funding mechanism should not create more instability in Metropolitan’s revenue stream and help produce stable and predictable rates for Member Agencies.
- Consistent with Metropolitan Philosophy – Consistent with prior principles, such as being a regional provider and encouraging projects that have regional benefits.

Lastly, this paper will not be able to assess the criteria for “Cost of the Fee”, since Red Oak does not have information on the Member Agencies’ cost of developing growth-related infrastructure.

## 6. Growth-Related Cost Recovery Options

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The purpose of this section is to illustrate the different approaches Metropolitan might consider to fund growth-related infrastructure costs. Capital costs associated with growth can be funded in a variety of ways, five of which include:

- **Status Quo** – Retain the current Annexation Charge and rate mechanisms to fund growth-related infrastructure.
- **Negotiated Contracts** – New infrastructure needs could be negotiated with Member Agencies that directly benefit from the infrastructure. This would be similar to “in-kind” contributions from developers.
- **New Water Demands** – Similar to the prior New Demand Charge developed by Metropolitan, a one-time connection fee could be assessed when a Member Agency’s demand exceeds a predetermined level; a historic baseline level of deliveries or demands. To be consistent with Metropolitan rate methodology, the fee could be tied to Tier 2 deliveries.
- **Connection Fee Assessed at the Member Agency** – A one-time fee could be assessed to each Member Agency based on new connections at the retail level as they occur in the Agency’s service area.
- **Connection Fee Assessed at the Retail Level** – A one-time fee could be assessed at the retail level. This would be similar to the current financial mechanism that San Diego County Water Authority is implementing. For example, at the time when a building permit is issued, the retail agency would assess and collect a Metropolitan connection fee that would be remitted to Metropolitan.

### **Status Quo**

Metropolitan has two broad financial mechanisms currently used to fund growth-related infrastructure: its Annexation Charge and current rate structure.

The Annexation Charge is based on the equity buy-in methodology. It is equal to the replacement cost of Metropolitan facilities and participation rights, less accumulated depreciation, less debt outstanding, divided by the total service area acreage. Based on this method, the estimated 2008 Annexation charge is \$3,671 per acre. The Charge is assessed as areas are annexed into Metropolitan’s service area.

There are three key elements included in the determination of the Annexation Charge are:

- 1) The use of replacement cost less accumulated depreciation to value assets.
- 2) The subtraction of outstanding debt.
- 3) The division of the resulting net asset value (1 and 2), by total service area acreage.

As noted, valuing of Metropolitan’s assets using the replacement cost less accumulated depreciation method is the standard approach employed when using the equity buy-in method.

Excluding existing debt is also consistent with industry standards. This exclusion assumes that Metropolitan’s rates will be used to repay outstanding debt obligations. However, the methodology does not reflect the carrying cost of capital associated with Metropolitan’s investment in capacity available to serve new demands.

A consideration that needs to be addressed is the “rights” associated with the current Annexation Fee. Under a scenario where a one-time connection fee were implemented, if a Member Agency (that previously paid an Annexation Fee) has growth due to infill or due to redevelopment to higher water use and no additional infrastructure is needed, should this Member Agency pay for the additional capacity it is utilizing? Or has the payment via the Annexation Fee and Capacity Fee directly paid for this service? Is there a certain threshold where a Member Agency exceeds its water allotment that should result in a charge for additional capacity?

Metropolitan’s current rate structure (in addition to the Annexation Fee) provides for the funding of future growth-related infrastructure needs. The matrix below shows how the current rate structure components are used to fund growth-related infrastructure.

Based on this matrix, the Capacity Charge, Treatment Charge, Readiness to Serve Charge, System Access Rate and Tier 1/2 rate may contribute to the funding of growth-related infrastructure. Note this matrix also shows which rates and service functions will likely be impacted if a new growth-related infrastructure fee mechanism were adopted.

Service Function	Description	Growth-Related Capital	Rates that are Capital Related
Supply	Costs of SWP and CRA for maintaining and developing supplies	Potentially	Tier 1
Conveyance & Aqueduct	Capital, O&M and overhead for SWP and CRA; includes Inland Feeder	Potentially	System Access Rate / Readiness to Serve Charge
Storage	Capital, O&M and overhead for DVL, Lake Mathews, Lake Skinner and 5 regulatory reservoirs	Potentially	Readiness to Serve Charge
Treatment	Capital, O&M and overhead for 5 treatment plants	Potentially	Treatment Rate
Distribution	Capital, O&M and overhead for in-basin feeders, canals, pipelines and laterals	Potentially	Capacity Reservation Charge
Demand Management	Cost of investments in conservation, recycling and desalination	Maybe	
A&G	Overhead costs not directly functionalized	No	
Hydroelectric	Capital, O&M and overhead associated with 16 small hydroelectric plants	No	

Water rates are often seen as the easiest method of paying for water supply and infrastructure projects, and these rate revenues are generally more consistent and therefore appropriate for the repayment of debt incurred to fund growth-related projects. The advantages associated with water rates include the dependability of the revenue stream and the ease of calculation and collection given that rates are already charged to pay for operating and maintenance expenses. The disadvantages of using water rates to pay for new water supplies are that existing users are charged just as much as new users, and that for a time the cost of providing new services can be hidden in water rate calculations and is not easily discernable to decision-makers and customers.

**Negotiated Contracts**

Direct payment for new infrastructure is another approach for infrastructure cost recovery related to growth. In this option, Metropolitan acts as the central planning agency for development, design, construction, operation and ownership of a new water supply development project.

A negotiated contract would typically require Metropolitan to commit to provide a specified capacity. Typically there are two forms of negotiated contracts, including take or pay agreements, and lump sum capacity contracts. This form of cost recovery is also known as “contributions in aid of construction” and is generally considered to be nonoperating revenue.

### ***Take or Pay Agreements***

Customers contracting for a given capacity should agree to pay the fixed costs related to that capacity for a specified period of time. The term “take or pay” has been used to describe this type of contract because it requires the customer to agree to pay for a minimum or scheduled demand during a specified period whether or not the service is used. The customer agrees to pay for its demand in the form of a charge to recover the costs of the dedicated capacity. The charge should consist of a fixed monthly charge to recover capital costs associated with the dedicated capacity. In addition, the costs of operation and maintenance that are somewhat fixed, such as labor, fringe benefits, and maintenance of facilities used by the contract customer, could be included in the fixed charge. A separate volume charge to recover the variable costs of power and chemicals would apply to the monthly metered volume.

The take or pay agreement typically requires the water agency (i.e., Metropolitan) to secure funding, commit capital and operating resources, and guarantee capacity for the customer for a specified number of years. As such, financing terms and the risk of repayment would be borne by Metropolitan.

### ***Lump Sum Allotment Contracts***

In a lump sum allotment contract, the customer agrees to pay for capacity in the form of an upfront, lump sum payment prior to project construction. This approach is best suited for projects that are directly attributable to specific customers, which can either be existing rate payers or new growth. This method becomes problematic as the cost of capacity increases and the ability to provide advance funding decreases.

Metropolitan would prepare financial commitment projections, and prospective Member Agencies are asked to commit to the initial project start-up costs. Once construction bids are received, Member Agencies would sign capacity allotment contracts specifying their capacity allotment and cost for the project, which includes full repayment for their proportionate share of capital costs. Implicit in this type of contract capacity charge is the need for all parties to enter into a long-term agreement that will ensure the customer the availability of the increment of capacity required, and will ensure that the utility recoups the fixed cost associated with that increment of capacity.

The lump sum allotment contract typically requires the Member Agency to secure funding. As such, financing terms and the risk of repayment would be borne by the



Member Agency. This approach is commonly used by regional water districts or authorities. The Northern Colorado Water Conservancy District (NCWCD) and South Metro Water Supply Authority (SMWA) in Colorado are two examples of regional water supply agencies that use lump sum allotment mechanisms to fund major projects.

### **Colorado Example**

Perhaps the best example of an efficient water market is within the fast-growing Northern Colorado Water Conservancy District (NCWCD) – just north of Denver. NCWCD’s free market ownership transfer and rental systems have allowed it to adapt to changing needs over its nearly 50 years of operation.

The NCWCD has anticipated the need for development of additional, growth-related supplies with new projects, including the Windy Gap and the Northern Integrated Supply projects. NCWCD acts as the central planning agency for project development, design, construction, operation and ownership of water supply development projects. NCWCD prepares the financial commitment projections, and prospective Participants are asked to commit to the design phase costs. Once construction bids are received, Participants sign water allotment contracts specifying their water allotment and cost for the project, which includes payment in-full for the remaining capital costs. Water allotment contracts are transferable at the member-agency level, and within the District, at market-based prices for water supply.

### **New Water Demand is Growth**

This financial mechanism would be based on a Member Agency’s demand on Metropolitan. When the predetermined base demand is exceeded, a growth-related infrastructure charge would be assessed. As previously noted, Metropolitan adopted this approach but it was not implemented due to the fact that the first agency slated to pay the fee was San Marino; the fee was assessed due solely to a reduction in San Marino’s own water supply and increased use of the Metropolitan system. Since then Metropolitan has developed a new rate structure, which includes the allocation of demand between Tier 1 and Tier 2. To be consistent with Metropolitan rate policy, it is recommended that this potential fee mechanism could be tied to Tier 2 deliveries; any new demand above the Tier 1 allotment would qualify as growth and “trigger” assessment of the fee.

Some of the advantages of this approach are that the new water demand charge would be easy to administer and would address the concerns of having a fee that is proportional to Member Agency’s dependence on Metropolitan.

However, there are some concerns with this type of fee structure, since increased demands on Metropolitan may not reflect additional requirements from growth, e.g., the San Marino experience. The increased demand might also reflect changes in weather

conditions and/or decreases in local supply – not a “real” or “permanent” increase in demands on the Metropolitan system.

Another consideration is how to address growth during drought conditions. If Metropolitan engages in a water allocation due to drought conditions, can Member Agencies still allow development to occur? If so, how does Metropolitan receive this payment, when deliveries are cut?

In addition there are some challenges associated with the calculation of the fee:

- Should this fee include an equity buy-in and thus replace the Annexation fee?
- How would Metropolitan ensure that the new fee collects the appropriate amount, given that Tier 2 water sales fluctuate each year?

### **Connection Fee Assessed at the Member Agency**

This approach would be similar to the traditional connection fee approach where Metropolitan would assess a growth-related infrastructure fee at the Member Agency level based on the number of building permits issued. The Member Agency would then in turn have the discretion as to how it collected the fee from agencies in its service area.

In calculating this fee, some of the issues that will need to be addressed are the following:

- Does an increase in building permits truly reflect increased demand on Metropolitan’s system?
- Should demand factors be uniform across Metropolitan service area, or should it reflect Member Agencies’ peaking factors? Should the peaking factor be consistent with the Capacity Charge?
- Should the Connection Fee include an equity buy-in approach and replace the Annexation charge?

### **Connection Fee Assessed at the Retail Level**

This financial mechanism would be similar to the above mentioned one, except it would be administered at the retail level. Each time a building permit is issued the issuing agency would assess and collect the Metropolitan connection fee and remit the amounts collected directly to Metropolitan. This approach is used by the San Diego County Water Authority. The Authority assesses through each of its retail agencies, a connection fee based on the meter/service line size of the new connection.

The fee is calculated based on the total replacement value of assets which is added to the present value of planned capital improvements. The resulting value is then divided by total number of meter equivalents estimated to exist when the CIP is completed.

Some concerns regarding this approach include the following:

- Should the connection fee include an equity buy-in approach and replace the Annexation Fee?
- Should demand factors be uniform across Metropolitan service area, or should each Member Agencies' peaking factors be considered? Should the peaking factor be consistent with the Capacity Charge?
- Currently, Metropolitan does not have the legal authority to assess this fee at the retail level. It would require legislation to authorize the fee and put in place a mechanism to collect from the retailer.

## 7. Evaluation of Options

### Evaluation Matrix

Table 7-1 is a matrix that compares the five growth-related infrastructure cost recovery options with the identified criteria.

**Table 7-1  
Growth-Related Cost Recovery Options**

CRITERION	COST RECOVERY OPTION				
	Status Quo	Negotiated Contracts	New Water Demands	Connection Fee Assessed at the Member Agency	Connection Fee Assessed at the Retail Level
Encourages Local Stewardship	+	+	+	--	--
Local Agency Choice	--	+	--	+	--
Rate Equity and Price Signal	--	+	+	+	+
Metropolitan Administrative Burden	+	--	+	--	--
Member Agency Administrative Burden	+	--	+	+	--
Ease of Update	+	--	+	+	+
Legal Authority	+	?	?	?	--
Public Understanding	+	?	--	+	+
Consistent with Metropolitan Philosophy	+	--	+	+	+
Revenue Stability	+	+	--	--	--
<b>+ Positive                      -- Negative                      ? Unknown</b>					

As previously noted the criteria listed may conflict with each other, are not to be assumed to have the same weight and may require further adjustments.

### **Discussion**

The criterion for “Encourage Local Stewardship” is positive for Status Quo, Negotiated Contracts, and New Water Demand, since a Member Agency can reduce their infrastructure growth charge by developing local supplies for growth.

For “Local Agency Choice”, only Negotiated Contracts and Connection Fee assessed at the Member Agency Level allows a Member Agency to know the total amount of the growth-related fee they paid, the amount of capacity purchased and the flexibility to assesses this fee or not.

For “Rate Equity and Price Signal” all the proposed financial mechanisms, except for the Status Quo, will allocate a proportionate share of additional system capacity costs to growth and provide the appropriate signal for local decision making.

For “Metropolitan Administrative Burden” only the Negotiated Contracts and the two types of Connection Fee mechanisms would cause excess burden, since they would require additional Metropolitan staff requirements. Metropolitan would need to conduct random audits on the Connection Fee mechanism to determine the building permits are consistent with record information.

For “Member Agency Administrative Burden” only Negotiated Contracts and Connection Fee assessed at the Retail Level would be a concern for Member Agency staff, since they would to either negotiated with Metropolitan on each construction project or need to ensure the appropriate amount of transfer occur based on building permits issued.

For “Ease of Update” all the funding mechanisms, except the Negotiated Contracts, would meet this criterion. Each large construction project would likely require negotiation between Metropolitan and the associated Member Agency.

For “Legal Authority” only the Status Quo is known to meet this criterion. Based on a legal opinion by Metropolitan Legal Council, Metropolitan does not have legal authority to access retail agencies a growth related charge. The other financial mechanism will need to be reviewed by Metropolitan Legal Council.

For “Public Understanding” only New Water Demand would not meet this criterion, since it is not common for growth-related infrastructure to be paid via a surcharge. In addition there may be some confusion associated with Negotiated Contracts.

For “Consistent with Metropolitan Philosophy” only Negotiated Contact does not meet this criterion, since in the past Metropolitan has promoted regional benefit projects and this approach could “balkanize” the region.

For “Revenue Stability”, only the Status Quo and Negotiated Contracts would not increase volatility of revenue. The other financial mechanism can increase volatility due to fluctuations in water demand and the real estate market; the number of building permits issued.

## 8. Recommendation

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This white paper contains Red Oak’s review of various financial mechanisms for determining, implementing, and administering growth-related charges – either as a recurring rate or as a one-time fee – and provides policy options and objective ranking criteria for consideration by Metropolitan’s Board.

Based on the criteria developed in Section 5, it is recommended that the Long Range Finance Plan Rate Structure Group (LRFP) evaluate, provide comments and rank these criteria. In addition it is recommended that the LRFP confirm and provide suggestions on the associated growth-related fee options, as mentioned in Section 6. Based on LRFP comments and suggestions, Red Oak, along with Metropolitan staff, can determine which growth-related fee should be analyzed and developed for Board consideration.