Assumption:	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
Sales, MAF	1.8 MAF	1.75 MAF	1.75 MAF	1.75 MAF	1.75 MAF	1.7 MAF	1.7 MAF	1.7 MAF	1.7 MAF	1.7 MAF
Sales, Tier 2	0	0	0	0	0	0	0	0	0	0
Inflation,%	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
COLAs,%	.25	1.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Interest income rate,%	1.15	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
New debt interest rate—Fixed %	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
New debt interest rate—variable %	0.20	0.35	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
SWP Allocation, 60%, TAF	~1,170	~1,170	~1,170	~1,170	~1,170	~1,170	~1,170	~1,170	~1,170	~1,170
CRA deliveries,TAF	840	840	840	840	840	840	840	840	840	840
Ad Valorem tax increment use	~14% Supply, 83% Transportation, 3% power; 2.5% escalation on Assessed Valuation.									
CIP,$M	250	250	250	250	250	250	250	250	250	250
PAYGO,$M	150	125+	125+	125+	125+	125+	125+	125+	125+	125+
ENR %, CIP	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77
Rate Incr,%, max	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
OPEB=ARC (%)	20.2%	20.7%	20.7%	20.7%	20.7%	20.7%	20.7%	20.7%	20.7%	20.7%
PERS, estimated employer share only	18.3%	20.0%	21.7%	23.4%	25.1%	25.1%	25.1%	25.1%	25.1%	25.1%

- **Board of Directors**
  Water Planning and Stewardship Committee

9/10/2013 Board Meeting

8-2

Subject

Authorize staff to enter into funding agreements for Foundational Actions Funding Program proposals

Executive Summary

In May 2013, Metropolitan issued a Request for Proposals (RFP) under a pilot Foundational Actions Funding Program (FAF Program) for technical studies and pilot projects that reduce barriers to future production of recycled water, stormwater, seawater desalination, and groundwater resources. Funding these actions will help Metropolitan maintain its reliability goals, as outlined in the Integrated Water Resources Plan 2010 Update (2010 IRP Update).

Metropolitan received 23 proposals, a total matching funding request of $5.1 million, from 17 different member agencies. Metropolitan assembled a technical review panel composed of three Metropolitan staff and two independent experts to compare the proposals for consistency with program objectives and criteria. The review panel compared all of the proposals with the criteria outlined in the RFP, and found that 16 of the proposals matched all of the objectives established by the Board of Directors for the FAF Program. The matching funding for these 16 programs would be $3.3 million. Staff recommends that the Board authorize funding agreements for these 16 proposals.

Details

Foundational Actions Funding Program Background

Metropolitan's 2010 IRP Update established a planning framework, including a core resources program that is designed to ensure the region's reliability into the future. The 2010 IRP Update also recognized that the future is uncertain and under some conditions, additional water resources may need to be developed. Addressing this future uncertainty, the 2010 IRP Update established Foundational Actions, which are low-risk, preliminary actions that can be taken to ensure the region will be ready to implement new water supply programs, should the need arise.

In April 2013, Metropolitan's Board approved a two-year pilot program to begin funding some of these Foundational Actions. Actions proposed under the FAF Program consist of technical studies or pilot projects pertaining to recycled water (including direct and indirect potable reuse), seawater desalination, stormwater, or groundwater. As one component of the overall IRP Foundational Actions strategy, actions funded under the FAF Program help enable effective future resource planning, reduce barriers to future water resource production, and:

- advance the field of knowledge for future water resource production
- provide results that are unique, yet transferable to other areas in the region
- represent a catalytic/critical path to water resource implementation

Foundational Actions Funding Program 2013 RFP

In May 2013, Metropolitan issued an RFP for member agencies to submit proposals for consideration under the FAF Program (**Attachment 1**). Member agencies could request up to $500,000 of funding, which they are required to match dollar-for-dollar with non-Metropolitan funds.

Metropolitan assembled a technical review panel composed of three Metropolitan staff and two independent experts to compare the proposals for consistency with program objectives and criteria. The review panel performed an independent review of each proposal. Once reviews were completed, the panel collectively compared findings and reached a consensus on projects. The panel indicated that 16 of the projects matched all of the program criteria established by the Board. **Attachment 2** contains a list of panel members and an affidavit from the review panel confirming the findings. Each proposal was compared with the following criteria:

- Work Plan/Schedule: Clear that the proposed actions can be implemented successfully; objectives achievable on time and within budget.
- Costs: Cost effective work plan budget; ready to proceed with matching funds.
- Reduces Barriers to Future Production: Critical to resource implementation and planning efforts; advances the field of knowledge for development of future water resources; unique and innovative; increases future local supply potential.
- Regional Benefit/Applicability: Transferable to other areas of the region and may provide other benefits.

Funding Recommendations for the FAF Program 2013 RFP

Based on the technical review panel results, staff recommends that Metropolitan enter into agreements to fund the16 proposals that matched all of the FAF Program criteria established by the Board of Directors, for a total funding level of $3.3 million. Table 1 provides an overview of the results concerning the recommended proposals.

Table 1	
Recommended Proposals	16
Member Agencies Participating	14*
Total Funding Requested	$3.3 Million
Resources Represented	
Groundwater	6
Recycled Water	6
Seawater Desalination	2
Stormwater	2

*Nine member agencies as lead agencies; an additional five member agencies as participating funders.

These proposals would be evaluating new water treatment technologies, developing data to inform regulations, studying options for infrastructural innovation, and identifying future resource potential. Further detail about each recommended proposal may be found in **Attachment 3**.

Through successful completion of the proposals, Metropolitan expects to reduce barriers and enhance regional understanding of the challenges and technical requirements necessary to develop future water supplies.

Next Steps

If the Board authorizes funding agreements for the recommended proposals, staff will enter into agreements with the applicable member agencies for the work outlined in these proposals. All agreements must be signed by the recipient by November 15, 2013; work initiated by January 31, 2014; and final reports are due to Metropolitan staff by February 1, 2016. A final report on the progress of the actions and evaluation of the FAF Program will be submitted to the Board.

Policy

By Minute Item 48449 dated October 12, 2010, the Board adopted the CEQA determination and the 2010 Integrated Resources Plan Update, as set forth in the letter signed by the General Manager on September 29, 2010.

By Minute Item 49381 dated April 9, 2013, the Board adopted the CEQA determination, approved the proposed Foundational Actions Funding Program, and directed staff to issue a Request for Proposals.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action to enter into agreements for the 16 recommended proposals totaling $3.3 million is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. Metropolitan has reviewed and considered the projects proposed for funding. The detailed proposal descriptions are in **Attachment 3**. The proposals consist of basic data collection and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource. These activities may be strictly for information gathering purposes or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Class 6, Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination that the proposed action is categorically exempt and direct staff to enter into funding agreements for the recommended 16 proposals totaling $3.3 million.
Fiscal Impact: A total of $3.3 million would be committed to funding these proposals, with 25 percent withheld contingent on delivery of a final report.
Business Analysis: Implementing the recommended proposals under the Foundational Actions Funding Program would allow the region to better understand and reduce the barriers to future implementation of resources, should they be needed.

Option #2

Do not approve funding recommendations.
Fiscal Impact: None
Business Analysis: Not approving the recommended proposals under the Foundational Actions Funding Program would result in no short-term changes for the region, but may affect potential water supply options in the future.

Staff Recommendation

Option #1

8/21/2013

Deven N. Upadhyay — *Date*
Manager, Water Resource Management

8/28/2013

Jeffrey Kightlinger — *Date*
General Manager

Attachment 1 – 2013 Request for Proposals for Foundational Actions Funding Program

Attachment 2 – Review Panel Members and Panel Affidavit

Attachment 3 – Detailed Proposal Descriptions

Ref# wrm12624392

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
Water Resource Management Group

2013 Request for Proposals for Foundational Actions Funding Program

KEY DATES

Request for Proposals (RFP) Issued……………………………………………………………May 6, 2013
Pre-proposal Workshop…………………………………………………………May 20, 2013 @ 10:00 a.m.
Proposal Due By………………………………………………………………July 3, 2013 @ 11:00 a.m.

NOTICE

A non-mandatory pre-proposal workshop will be held May 20, 2013, from 10:00 a.m. to 12:00 p.m. at Metropolitan Headquarters, Union Station 700 North Alameda Street, Los Angeles, CA 90012, Room US2-145.

All potential applicants are encouraged to attend.

Metropolitan Contact: Stacie N. Takeguchi
E-mail Address: stakeguchi@mwdh2o.com

Table of Contents

SECTION 1: **INFORMATION FOR MEMBER AGENCIES**

This Request for Proposals (RFP) is designed to promote an objective process for distributing funds for technical studies or pilot projects to enable effective future resource planning and potential development of recycled water, seawater desalination, stormwater, and groundwater enhancement. This RFP contains information concerning the 2013 Foundational Actions Funding Program objectives, who can submit, funding, schedule, and review process.
The Metropolitan Water District of Southern California (Metropolitan) invites its Member Agencies to submit a proposal for the program described herein.

1.1 Objective

Metropolitan has proposed a Foundational Action Funding (FAF) Program to help address regional funding needs for actions that reduce barriers to future water resource production, and:

- Advance the field of knowledge for future water resource production.
- Provide results that are unique, yet transferable to other areas in the region.
- Represent a catalytic/critical path to water resource implementation.

Metropolitan's 2010 Integrated Water Resources Plan (2010 IRP Update) established a planning framework, including a core resources program, that is designed to ensure the region's reliability into the future. The 2010 IRP Update also recognized that the future is uncertain and under some conditions, additional water resources may need to be developed. Addressing this future uncertainty, the 2010 IRP Update established Foundational Actions, which are low-risk, preliminary actions that can be taken to ensure the region will be ready to implement new water supply programs, should the need arise. This FAF Program represents one component of the overall IRP Foundational Actions strategy.

1.2 Description

Actions proposed under the FAF Program would consist of technical studies or pilot projects to enable effective future resource planning and potential implementation for the following resources (in no particular order):

- Recycled water (including direct and indirect potable reuse)
- Seawater desalination
- Stormwater
- Groundwater enhancement

These actions are meant to identify and investigate opportunities to develop future water resources. Examples of studies under the FAF Program may include, but are not limited to:

- determination of optimal desalination integration practices or treatment processes
- assessment of the stormwater runoff quantity potential in a region and its effect on groundwater production yields
- analysis of how to maximize opportunities for indirect potable reuse
- study of how to reduce barriers to direct potable reuse

- study to support permitting agencies in establishing policies and regulatory criteria for future regional water resources
- analysis of the ability for reduced brine-discharge approaches to help improve resource availability
- study of basin-wide water quality management programs and their impact on improved groundwater yields.

FAF Program would not include:

- funding CEQA documentation for projects
- existing studies or projects
- acquisition of property
- design of full-scale projects
- construction of full-scale projects

1.3 Who Can Submit?

The RFP is open to Metropolitan Member Agencies (Member Agencies). Member Agencies may partner with other Member Agencies or with other entities, but the proposal must be submitted by one designated lead Member Agency.

1.4 Funding

Member Agencies may submit proposal funding requests up to $500,000 per agency or a given proposal. If a Member Agency submits multiple proposals, that Member Agency must indicate the priority ranking of each proposal. If partnering on a proposal, the Member Agency submitting the proposal shall be responsible for any priority ranking of multiple proposals from that Member Agency. A proposal may only be submitted once. Also, if partnering on a proposal, a breakdown of each member agency's funding request and respective monetary match is required and will be used to track that agency's total funding request (see Section 2.2F). Each proposal requires a non-Metropolitan monetary match of at least 100 percent of the Metropolitan funded amount. Funding will not be provided for any work that will not allow results to be released to the public.

1.5 Anticipated Process Schedule

Date	Milestone
05/06/13	Release of RFP
05/20/13	Non-mandatory Pre-proposal Workshop
05/22/13	Questions for Clarification Closes at 11:00 a.m.
07/03/13	**RFP Proposals Due By 11:00 a.m.**
09/17/13	Proposal Awards (Contingent Upon Board Action)
11/15/13	Agreement Signed by Recipient Due
01/31/14	Work Initiation Deadline
02/01/16	Final Report Deadline

1.6 Non-mandatory Pre-proposal Workshop

1. A pre-proposal workshop will be held from 10:00 a.m. to 12:00 p.m., Monday, May 20, 2013, at Metropolitan's Headquarters at 700 North Alameda Street, Los Angeles, CA 90012, in Room US2-145. Metropolitan will discuss the details of the FAF Program RFP and answer questions. Written questions regarding this RFP may be submitted from the release of the RFP to one week following the pre-proposal workshop (see Questions for Clarification section).
2. While attendance is not mandatory, all interested parties and prospective applicants are encouraged to attend. Attendees are invited to present relevant questions at the pre-proposal workshop.
3. Metropolitan headquarters is located next to the Los Angeles Union Station with many public transportation options. There are also numerous parking lots nearby (http://mwdh2o.com/mwdh2o/pages/about/union_station_parking_map.pdf). Parking will not be validated. Sign in at the front desk for a temporary badge and the location of the workshop. Allow sufficient time to sign in and locate the workshop.

1.7 Questions for Clarification

Address questions for clarification regarding this RFP in writing via e-mail to **Ms. Stacie Takeguchi at stakeguchi@mwdh2o.com** by 11:00 a.m., May 22, 2013. As appropriate, Metropolitan will provide responses to questions, information updates, and RFP addendums through a link near the bottom of the main page of Metropolitan's website, www.mwdh2o.com.

1.8 General Proposal Information

1. Applicants are encouraged to carefully review this RFP in its entirety prior to preparation of the proposal.
2. All proposals submitted will become the property of Metropolitan.
3. Applicants may modify or amend its proposals only if Metropolitan receives the amendment prior to the deadline stated herein for receiving proposals.
4. A proposal may be considered non-responsive if conditional, incomplete, or if it contains alterations of form, additions not called for, or other irregularities that may constitute a material change to the proposal.
5. Additional copies of the RFP may be downloaded through a link near the bottom of the main page of Metropolitan's website at: www.mwdh2o.com.

1.9 Rights Reserved to Metropolitan

Metropolitan reserves the right to:

1. Reject any and all proposals and revise terms and conditions, and elect to not award full program funding.
2. Select the proposal(s) most advantageous to Metropolitan.
3. Verify all information submitted in the proposal.

4. Cancel this solicitation at any time without prior notice and furthermore, makes no representations that any contract will be awarded to any applicant responding to this RFP.
5. Negotiate the final contract with any applicant(s) as necessary to serve the best interests of Metropolitan.
6. Amend the RFP.
7. Amend the final contract to incorporate necessary attachments and exhibits or to reflect negotiations between Metropolitan and the successful recipient(s).

1.10 Validity

Proposals must be valid for a period of at least 12 months from the closing date and time of this RFP. Once submitted, the proposal shall be considered to be property of Metropolitan and may not be physically withdrawn after the submission date. However, the applicant may request for the submitted proposal not to be considered for funding prior to the funding award.

1.11 Confidentiality

1. Metropolitan is subject to the Public Records Act, California Government Code Section 6250 et. seq. As such, all required submittal information is subject to disclosure to the general public. Consequently, unless specifically required by the solicitation, the applicant should not submit personal data such as driver's license information, social security numbers, etc. to avoid the possibility of inadvertent disclosure of this personal information. Please note that Metropolitan cannot consider proposals marked confidential in their entirety.
2. The applicant may provide supplemental information exempt from public disclosure under Gov. Code § 6254, including "trade secrets" under Evidence Code § 1060. Such supplemental information **shall not be material** to the required submittal information and Metropolitan shall be under no obligation to consider such supplemental information in its evaluation.
3. If submitting confidential, supplemental information, such information should be sectioned separately from the rest of the submittal and clearly marked "Confidential." Upon completion of its evaluation, Metropolitan will destroy any confidential, supplemental information submitted, or return such information to the applicant if so requested.

1.12 Evaluation and Selection Process

1. Proposals will be evaluated by an independent review panel comprised of Metropolitan and non-Metropolitan professionals familiar with water resources in Southern California. The review panel will ensure compliance with the FAF Program objectives and eligibility, and evaluate each proposal based on selection criteria as described further in this document. Metropolitan staff will review the panel suggestions and develop a list of recommended proposals and funding levels for Metropolitan's Board of Directors (Board) approval.

2. During the evaluation process, the review panel may request clarification, as necessary, from the applicant. Applicant(s) should not misconstrue a clarification request as negotiations.
3. If similar proposals, or proposals that would provide similar results, are submitted, then only one eligible proposal may be selected for funding. Also, if multiple proposals are submitted that could be collectively part of an overall study/project, then only one eligible proposal may be selected for funding.
4. Review panel may elect to have the applicant interview or give an oral presentation. Applicant(s) must be prepared for the interview or to give their presentation within five business days of the request by review panel. The review panel may ask questions about the applicant's written proposal and other issues regarding the scope of work. The interview may be evaluated as part of the proposal.

1.13 Agreement Process

1. After proposals are selected for program participation, Metropolitan will enter into agreements upon successful contract negotiations. Funding may be withdrawn if agreements are not signed by the recipient within three months of proposal selection.
2. Metropolitan may negotiate proposal scope and funding changes if deemed beneficial.
3. Recipients must submit quarterly progress reports (including invoices), interim study/project documents, and a final report documenting study/project results, other findings, and recommendations for future action. Recipients must also submit a brief update report annually for a period of five years, summarizing related post-grant activities.
4. Performance provisions may be incorporated into the program agreements. These provisions would allow Metropolitan to adjust or withdraw financial commitments to the proposal based on performance.
5. Funding will be provided quarterly based on submitted progress reports, invoices, and appropriate documentation. The non-Metropolitan funding match must equal or exceed the Metropolitan funded amount per quarterly progress payment. A minimum 25 percent withholding is required until a final report is accepted by Metropolitan.
6. Final reports must be completed and submitted no later than **February 1, 2016**, unless extended by Metropolitan. Final payment will be made within 60 days of acceptance of final report.

1.14 Negotiations

Negotiations regarding agreement terms, conditions, work plan, schedule, and funding may or may not be conducted with the applicant. If Metropolitan engages the applicant in negotiations and satisfactory agreement provisions cannot be reached, then negotiations may be terminated.

1.15 Selection Criteria

The review panel will use the criteria provided below to evaluate proposals and make its selection recommendations. In addition, the review panel will identify and weigh each proposal's significant strengths, weaknesses, and miscellaneous issues.

Recommendations will reflect the collective findings of the review panel. To be qualified for funding, proposals must satisfy each criterion category and subcategory listed as follows and in Section 2.2 of this document. The order of the listed criteria is not indicative of their priority, weighting, or importance.

Criteria:

1. Work Plan/Schedule
2. Costs
3. Reduces Barriers to Future Production
4. Regional Benefit/Applicability

The selection criteria are described further in Section 2.2 of this document.

SECTION 2: **PROPOSAL INSTRUCTIONS**

The following format and content requirements shall be adhered to for proposals to be considered responsive. Applicants should use the numbering and lettering system outlined in these guidelines. Concise informative proposals within the page limitations are encouraged.

2.1 Format Guidelines

- The proposal must be on white 8 1/2" x 11" size paper with black text in a 12-point font, and table/graphics with text no smaller than a 10-point font.
- Proposals shall be no more than 20 single-sided pages, including attachments.
- Proposals must be stapled on the upper left hand corner; no other type of binding will be accepted.
- Provide one original and six hard copies of the proposal.
- An electronic copy of the proposal must be submitted on a CD in Microsoft Word format. Do not include video or other additional media.
- Proposals shall be clear, accurate, and comprehensive. Excessive or irrelevant materials will not be favorably received.
- **Proposals that are not in conformance with these formatting requirements and the following content requirements may be deemed non-responsive and rejected.**

2.2 Content Requirements

Proposals shall be organized and lettered in the order presented below:

A. Executive Summary Letter
B. Entities Participating in Proposal
C. Key Individuals
D. Proposal Description
E. Criteria One – Work Plan / Schedule
F. Criteria Two – Costs
G. Criteria Three – Reduces Barriers to Future Production
H. Criteria Four – Regional Benefit / Applicability

A. Executive Summary Letter

This letter shall be a brief, formal signed letter from the applicant Member Agency (and any partnering Member Agency(s)). This letter shall provide a brief description of the proposal, and information regarding the organization and its ability to meet the objectives and requirements of this RFP.

The letter should be signed by an individual(s) authorized to bind the proposing Member Agency and shall identify all materials and enclosures being forwarded in response to this RFP.

An unsigned Executive Summary Letter may be grounds for rejection. The letter must include the following language:

> **"I am informed and believe that the information contained in this proposal is true and that the supporting data is accurate and complete."**

Please include the following information in your letter:

Name of Proposal	
Water Resource Category (Recycled Water, Seawater Desalination, Stormwater, Groundwater)	
Member Agency Name(s) (As it appears on W-9 Tax form)	
Federal ID #	
Address	
City, State & Zip	
Main Telephone	
Contact Name	
Contact Telephone	
Contact E-mail Address	
Website Address (if applicable)	

B. Entities Participating in Proposal

- List other entities participating in proposal.
- Provide support letters from necessary participants (not considered as part of the 20-page limit for proposals).

C. Key Individuals

- Proposal participants / cooperating agencies
- Identify key individuals including program manager and management team
  - Name, title
  - Title
  - Phone Number
  - Mailing address
  - Fax Number
  - E-mail Address
  - Relevant experience

D. Proposal Description

Provide a concise summary that includes an overall description of the proposal, conveying a clear understanding of the proposal's goals and objectives.

E. Criteria One – Work Plan / Schedule

Provide a detailed work plan describing each proposed task and deliverable, and how proposal success will be measured. If partnering on a proposal with other entities, describe the role/involvement of each partner and their relationship to the proposal. Describe factors that may affect the feasibility of implementing the proposal. Also provide a description of the technical expertise and overall strength of the proposal team.

Cite proposed schedule including start date (no later than January 31, 2014), tasks, deliverables, reports, completion date (no later than February 1, 2016), and other key milestone dates. Identify components and tasks that could be broken out to allow funding to be provided for a particular activity or combination of activities. The description must clearly describe how funds would be used.

The following includes additional information and instruction for evaluation:

- Work plan and schedule needs to include adequate detail and completeness so that it is clear that the proposed actions can be implemented and proposal success can be measured. Identify potential challenges, issues, and prerequisites related to proposal implementation, and describe how they will be addressed.
- Describe how the proposal objectives can be achieved in the stated time period with the allotted personnel and budget.

F. Criteria Two – Costs

Provide a cost breakdown of the work plan consistent with the schedule. This should be itemized in tabular form (see following tables). Each work plan task should include a breakdown of the applicant's monetary funding match, source of the funding match (e.g., name of the Member Agency, outside grant agency, etc.), and requested Metropolitan funds. Do not include any in-kind services. If partnering with other Member Agencies, provide separate cost tables for each Member Agency and a proposal total cost table. For each cost table, the grand total non-Metropolitan funding match must equal or exceed the Metropolitan funded amount requested. Also provide a list summarizing all sources of the funding match, their respective monetary contribution, and status of the funding match (e.g., funding budgeted and approved by the Member Agency's Board of Directors, grant received, applying for grant, etc.). Include supporting information for the budget (such as labor categories, hourly rates, labor time estimates, materials and supplies, and subcontractor/consultant quotes) and also for the status of the matching funds.

Cost Table Example – Member Agency 1					
Cost Category		Non-Metropolitan Share (Funding Match)		Requested Funding	Total
		Source	Amount		
(a)	List proposed tasks on separate lines				
(b)	Proposed Task				
(c)	…				
	Grand Total	--			

Cost Table Example – Member Agency 2					
Cost Category		Non-Metropolitan Share (Funding Match)		Requested Funding	Total
		Source	Amount		
(a)	List proposed tasks on separate lines				
(b)	Proposed Task				
(c)	…				
	Grand Total	--			

Cost Table Example – Proposal Total				
Cost Category		Non-Metropolitan Share (Funding Match)	Requested Funding	Total
(a)	List proposed tasks on separate lines			
(b)	Proposed Task			
(c)	…			
	Grand Total			

The following includes additional information and instruction for evaluation:

- Describe the cost effectiveness of the proposed work plan budget.
- Describe the readiness to proceed with the matching funds, and how the matching funds will be committed by the Member Agency before the Member Agency signs the FAF Program agreement.

G. Criteria Three – Reduces Barriers to Future Production

In this section, applicant shall describe in narrative form the following:

- Describe how the proposed actions are critical to resource implementation and planning efforts. If applicable, include how the proposed actions expedite future permitting or facilitate beneficial regulations for future water resources.
- Describe how these actions will advance the field of knowledge for development of future water resources. Include how the results of the proposed actions could be used in future research.

- Describe how these actions are unique and innovative. Describe the current state of technology, and include any completed or ongoing similar studies and how proposed actions differ (include a literature search summary).
- Describe how the proposed actions increase future local supply potential.

H. Criteria Four – Regional Benefit / Applicability

In this section, applicant shall describe in narrative form the following:

- Describe how the results of this proposal would apply to Metropolitan's member agencies, retail agencies, and regional stakeholders (transferable to other areas of the region). If applicable, describe other benefits, such as environmental, water quality, energy, wastewater, infrastructure, etc.

2.3 Submittal Instructions

Proposals for this RFP will be accepted at the following address:

By Mail	In Person or by Courier
The Metropolitan Water District of Southern California Water Resource Management Group P.O. Box 54153 Los Angeles, CA 90054-0153 Attn.: Business Resource Center Desk, US 5-113 RFP for Foundational Actions Funding Program	The Metropolitan Water District of Southern California Water Resource Management Group 700 North Alameda Street Los Angeles, CA 90012 Attn.: Business Resource Center Desk, US 5-113 – Telephone (213) 217-6000 RFP for Foundational Actions Funding Program

Proposals received after the stated time and date will be considered late and will be automatically rejected by Metropolitan. The applicant **is solely responsible to ensure that its proposal is submitted correctly both in form and content and within the stipulated deadline.** Proposals that are late will be deemed non-responsive and not considered during the evaluation process.

Proposals will be received until 11:00 a.m., July 3, 2013.

Review Panel Members and Panel Affidavit

Paul R. Brown
President, Paul Redvers Brown Inc.

Heather L. Collins
Section Manager, Metropolitan Water District

Robert L. Harding
Unit Manager, Metropolitan Water District

Michael J. McGuire, PhD, PE
President, Michael J. McGuire, Inc.

Brent M. Yamasaki
Section Manager, Metropolitan Water District

Affidavit for Review Panelists

The undersigned members of the Review Panel for the Foundational Actions Funding Program 2013 RFP objectively reviewed the proposals to ensure compliance with the FAF Program objectives and eligibility requirements, and confirm the collective findings of the Review Panel.

Paul R. Brown
Consultant

Heather L. Collins
Section Manager

Robert L. Harding
Unit Manager

Michael J. McGuire
Consultant

Brent M. Yamasaki
Section Manager

Proposal Descriptions

Water Resource	Proposal Name	Lead Agency (*Participating Agencies*)	Amount Requested	Brief Proposal Description
Recommended Projects				
Groundwater	Pilot Scale Groundwater Desalter Brine Concentrator Study	Eastern Municipal Water District	$ 192,214	• Evaluate the performance of AquaSel Technology in concentrating brine from groundwater desalters • Demonstrate AquaSel as a cost-effective approach to increase the recovery of potable water from brackish groundwater
Groundwater	Enhanced Research Using Reduction-Coagulation-Filtration (RCF) for Hexavalent Chromium Removal	City of Glendale	$ 180,000	• Assess the impact of reduction time and iron dose on the reduction/coagulation/filtration (RCF) process for chromium 6 removal • Evaluate the cost competitiveness of enhanced RCF compared to other chromium 6 treatment technologies
Groundwater	Pilot Scale Biological Treatment Process (BIOTTTA) for the Removal of TCE, TCP, DBCP, Nitrates	Inland Empire Utilities Agency *Western Municipal Water District*	$ 239,600 $ 175,600	• Conduct a Pilot Scale Biological Treatment Process (BIOTTTA) to evaluate groundwater contaminant removal using indigenous bacteria • Develop final design criteria for a full-scale BIOTTTA system
Groundwater	San Juan Basin Groundwater and Desalination Optimization Program	Municipal Water District of Orange County	$ 200,000	• Evaluate potential conjunctive use of stormwater, recycled water, and desalination in small basins with impaired groundwater quality • Model groundwater extraction barriers, identify issues related to program elements • Develop design and operations criteria and alternatives
Groundwater	Study to Evaluate Indirect Potable and Pathogen Removal	San Diego County Water Authority	$ 125,000	• Evaluate the feasibility of IPR through a technical study of pathogen removal in water reclamation facilities, focusing on the first phase of treatment • Reduce barriers and overall costs to IPR implementation
Groundwater	Tracer Alternative Research Project	West Basin Municipal Water District	$ 85,250	• Study potential alternative groundwater tracers to SF_6 that would be functional, easy to trace, safe for groundwater and the environment • Potential tracers include xenon, krypton, and isotopically-enriched tracers
Recycled Water	Pilot Scale 3-D Fluorescence Excitation-Emission Matrix to Enhance Recycled Water	Inland Empire Utilities Agency *Western Municipal Water District*	$ 25,000 $ 25,000	• Further the development of 3D-EMM technology by illustrating its usefulness in characterizing the reduction of residual trace bulk organics in groundwater having a recycled water component • Develop a monitoring method to allow additional recycled water recharge and update blending requirements
Recycled Water	Recycled Water Intertie Study	Inland Empire Utilities Agency *Western Municipal Water District*	$ 12,500 $ 12,500	• Address permitting, political, and economic issues associated with a recycled water intertie from two separate wastewater treatment systems

Proposal Descriptions

Water Resource	Proposal Name	Lead Agency (*Participating Agencies*)	Amount Requested	Brief Proposal Description
Recycled Water	RMWD San Vicente Water Reclamation Plant Recycled Water Brine Reduction Study and Pilot Project	San Diego County Water Authority	$ 75,000	• Analyze available technologies to minimize brine volumes and concentrate brine flows • Define analysis of brine minimization in RMWD's storage pond and provide a system with highest cost to benefit ratio
	Validating Monitoring Technologies to Ensure Integrity in Potable Reuse	San Diego County Water Authority	$ 150,000	• Evaluate various on-line monitoring tools for application to potable reuse and assess the effectiveness of monitoring on a Full Advanced Treatment process • Develop a regulatory framework for implementing DPR
	Development of an Innovative IPR Treatment Train to Maximize Recycled Water Recharge and Minimize Blending Requirements	Upper San Gabriel Valley Municipal Water District	$ 150,000	• Investigate and optimize TOC attenuation through ozone and biologically activated carbon (BAC) followed by soil aquifer treatment for IPR • Evaluate efficacy of using O_3/BAC to increase recycled water contribution
	Direct Potable Reuse (DPR) Research Initiative	West Basin Municipal Water District	$ 100,000	• Develop a smart water system that integrates diverse sensors for immediate feedback • Establish a framework communication plan for achieving DPR acceptance for California • Conduct hazard assessment for key unit operations and evaluate upstream wastewater treatment impacts
		Burbank Water and Power	$ 20,000	
		City of Torrance	$ 30,000	
		Eastern Municipal Water District	$ 50,000	
		Las Virgenes Municipal Water District	$ 50,000	
		Municipal Water District of Orange County	$ 100,000	
		Three Valleys Municipal Water District	$ 50,000	
		Upper San Gabriel Valley Municipal Water District	$ 50,000	
		Western Municipal Water District	$ 50,000	
Seawater Desalination	Overcoming Barriers to Slant Well Seawater Desalination - Siting, Groundwater, Water Quality and Treatment	Municipal Water District of Orange County	$ 200,000	• Assess current slant well technology and address coastal geotechnical and environmental risks • Model groundwater flow/water quality, study well site options and analyze slant well impacts

Proposal Descriptions

Water Resource	Proposal Name	Lead Agency (*Participating Agencies*)	Amount Requested	Brief Proposal Description
	Ocean-Water Desalination Intake Corrosion and Biofouling Control Study	West Basin Municipal Water District	$ 125,000	• Understand corrosion and biofouling rates of several wedge wire screen materials in ocean environment • Determine effectiveness of biogrowth control strategies for intake piping and assess multiple piping material • Develop findings for application to future design, implementation, and operation of intake facilities
Stormwater	Los Angeles Stormwater Capture Master Planning Project	Los Angeles Department of Water and Power	$ 414,034	• Identify opportunities to increase beneficial use of stormwater and quantify total potential stormwater capture • Identify, assess, and recommend projects, programs, and/or policies that will enable successful stormwater capture and use
	Ozone Park Stormwater Harvesting and Direct Use Demonstration Project	City of Santa Monica	$ 400,000	• Demonstrate feasibility of harvesting stormwater as future water production strategy • Analyze influent/effluent/harvested water quality
Total			**$3,286,698**	

- **Board of Directors**
  Finance and Insurance Committee

6/11/2013 Board Meeting

8-2

Subject

Suspend the tax rate limitations in Section 124.5 of the Metropolitan Water District Act to maintain the ad valorem tax rate for fiscal year 2013/14

Executive Summary

On May 13, 2013, Metropolitan's Board set a public hearing pursuant to Section 124.5 of the Metropolitan Water District Act (MWD Act) for the June board meeting to hear comments and consider whether to suspend the tax rate restriction in Section 124.5. A proposed resolution is included as **Attachment 1**. If adopted by the Board, the resolution formally determines that maintaining Metropolitan's property tax rate at current levels is reasonable and necessary to preserve Metropolitan's overall financial health and thus is essential to the fiscal integrity of Metropolitan, as provided in Section 124.5 of the MWD Act. Adoption of the resolution maintains the tax rate for fiscal year (FY) 2013/14.

Details

The Metropolitan Water District has assessed ad valorem taxes in its service area since its inception. Metropolitan has constitutional and statutory authority, as well as voter authorization, to collect revenues through ad valorem taxes assessed on real property within its service territory. Generally, Metropolitan may collect ad valorem taxes to cover its general obligation bonds and its State Water Contract (SWC) payments, as described below. Since fiscal year 1990/91, Section 124.5 of the MWD Act has limited property tax collections to the amount necessary to pay the total of annual debt service on Metropolitan's general obligation bonds plus a small portion of its SWC payment obligation, limited to the debt service on state general obligation bonds (Burns Porter bonds) for facilities benefitting Metropolitan as of 1990/91. Under this approach, ad valorem property tax revenue has been decreasing, and will continue to decrease, as the bonds are paid off. In the meantime, Metropolitan's SWC obligations are increasing. For example, the State is expecting substantial costs associated with repair and replacement of the 50-year-old State Water Project (SWP) infrastructure. Further, implementation of the Delta Habitat Conservation and Conveyance Program (DHCCP) and Bay Delta Conservation Plan (BDCP) would lead to increased SWC payments.

Section 124.5 permits Metropolitan to suspend the restriction discussed above if, following a public hearing, the Board finds that such revenue is essential to the fiscal integrity of the District. At its May 2013 meeting, the Board set a public hearing to occur at its June 11, 2013 meeting. Notice of the public hearing was filed with the offices of the Speaker of the California Assembly and the President pro Tempore of the Senate on May 29, 2013. At the public hearing, the Board will hear information regarding the action under Section 124.5, and thereafter will determine whether to adopt a resolution to maintain the current ad valorem tax rate. Adoption of the resolution will take some pressure off water rates and provide the Board with flexibility as it funds Metropolitan's SWC obligations.

Historical Revenue Sources

Metropolitan assesses ad valorem taxes pursuant to authority to "levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district." (MWD Act, Section 124.) Prior to 1942, Metropolitan was constructing the Colorado River Aqueduct and had no water to sell so all of its revenues came from ad valorem taxes. In FY 1941/42, Metropolitan began to sell water, but the majority of Metropolitan's revenues were still derived from ad valorem taxes. Not until 1974 did 50 percent of Metropolitan's revenues come from water sales, with the remainder derived from ad valorem taxes.

Metropolitan executed its State Water Contract in 1960. The ability to levy property taxes to provide for payments under the SWC is expressly provided for in the contract. (See "State Water Contract Obligations" below.) Indeed, under certain circumstances, upon written notice from the state, Metropolitan *must* levy a property tax sufficient to provide for SWC payments then due or coming due.

In 1984, the Legislature adopted SB 1445, amending the MWD Act to add section 124.5. Section 124.5 sets Metropolitan's annual property tax levy at the amount needed to pay the total of annual debt service on Metropolitan's general obligation bonds and the portion of the SWC payment for debt service on State Burns Porter bonds for facilities benefitting Metropolitan as of FY 1990/91, unless after notice and hearing the Board finds that it should not reduce the tax rate in order to protect the District's fiscal integrity. SB 1445 also authorized alternative sources of fixed revenue, including standby or readiness-to-serve charges and benefit assessments. It was not until FY 1992/93, when standby charges were initially adopted, that Metropolitan had any fixed revenue other than property tax. Due to the formula to decrease tax rates as bonds are paid off, Section 124.5 accelerated the shift to revenue from the sale of water so that today over 80 percent of Metropolitan's revenue is derived from volumetric water sales.

State Water Contract Obligations

Metropolitan is one of 29 agencies that contract with the State of California for service from the SWP. Metropolitan's SWC was the first contract executed and the prototype for the state water contracts that followed; its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159.

Under the SWC, Metropolitan is obligated to pay allocable portions of the cost of construction of the system and ongoing operating and maintenance costs. Metropolitan is obligated to pay fixed costs regardless of quantities of water available from the project. Other payments are based on deliveries requested and actual deliveries received, costs of power required for actual deliveries of water, and offsets for credits received. Metropolitan is the largest agency in terms of the number of people it serves, the share of the SWP water that it has contracted to receive, and the percentage of total annual payments made to the Department of Water Resources by agencies with State Water Contracts.

The ability of state water contractors to levy property taxes sufficient to provide for payments under their state water contracts, if they determine to do so, was a foundation of the Burns-Porter Act and a factor relied on by California voters in approving it. *Goodman v. County of Riverside* (1983) 140 Cal.App.3d 900, 905-06; *see also, Alameda County Flood Control v. Department of Water Resources, Antelope Valley-East Kern Water Agency* (2013) 213 Cal. App. 4th 1163. In approving the Burns-Porter Act, California's voters approved "an indebtedness in the amount necessary for building, operating, maintaining, and replacing the [State Water] Project, and they intended that the costs were to be met by payments from local agencies with water contracts. Further, … the voters necessarily approved the use of local property taxes whenever the boards of directors of the agencies determined such use to be necessary to fund their water contract obligations…" *Goodman,* 140 Cal.App.3d 900, 910. Thus, SWC obligations are voter-approved indebtedness that may be funded by override property taxes (taxes above Article XIIIA's one percent general tax limit).

Most of the other state water contractors substantially rely on ad valorem taxes to satisfy their SWC payment obligations. Metropolitan is unique in that it collects only a declining portion of the state general obligation bond debt service (the Burns Porter Bonds)—which is a small portion of its SWC payment obligation—through its ad valorem tax rate.

Maintaining the Ad Valorem Tax Rate

As noted above, Section 124.5 provides Metropolitan's Board with the flexibility to maintain the ad valorem tax rate "…if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district…."

SB 1445 did not define "essential" or "fiscal integrity" but the legislative history provides some guidance to their intended meaning. Overall, SB 1445 and Section 124.5 were meant to increase Metropolitan's financial flexibility. Section 124.5 permits the Board to find that it should maintain current tax rates as "essential to the fiscal integrity of the district" if the record demonstrates that such action is reasonably necessary to preserve Metropolitan's overall financial health.

Fundamental to Metropolitan's fiscal health is consideration of current and anticipated SWC payment obligations and a balancing of proper mechanisms for funding the obligations. SWC obligations have steadily increased since Section 124.5 was added to the MWD Act, and they are expected to continue to increase. In FY 2012/13, budgeted SWC costs are $595 million, and comprise approximately 37 percent of Metropolitan's annual expenditures and are Metropolitan's single largest cost category. SWC obligations are expected to increase to $625 million by fiscal year 2016/17. If taxes continue to be reduced, in FY 2013/14, the amount of property taxes available to satisfy SWC obligations will be approximately $40 million and the proportion of SWC obligations that would be covered are approximately 7 percent. The amount of property taxes available to satisfy SWC obligations will continue to decline and by 2016/17, the portion of SWC obligations that would be paid with tax revenues will be less than 4 percent.

Also important to fiscal health is a fair and appropriate balance between fixed costs and fixed revenues (charges, such as property taxes and Metropolitan's standby and readiness-to-serve (RTS) charges and capacity charges, that do not vary directly depending on the amount of water purchased). For fiscal year 2012/13, Metropolitan anticipates that fixed costs will make up 80 percent of total expenditures, whereas fixed revenue sources will provide only 17 percent of revenues. The RTS and capacity charges combined represent about 12 percent of total revenues. The ad valorem tax contributes approximately 5 percent. By fiscal year 2016/17, the RTS and capacity charges will still contribute about 12 percent to Metropolitan's forecasted total revenues, but ad valorem taxes will decline to 3.5 percent. Absent maintenance of the tax rate or other changes, fixed revenues as a percentage of total revenues will decline from 17 percent to 15.5 percent, and this decline will continue.

A diverse portfolio of revenue sources preserves equity across member agencies. Metropolitan ensures a reliable supplemental water supply to a broad service area. Although its member agencies rely on Metropolitan's supplemental supplies to varying degrees, the entire region and its substantial economy benefit from the availability of Metropolitan water. An agency that normally purchases small amounts of Metropolitan water may need to substantially increase its reliance on Metropolitan in the event of a local source interruption or other emergency. A mix of fixed and volumetric revenues balances the burdens so that each member agency bears a fair share of costs.

Ad valorem taxes are an important and unique tool for ensuring that the cost of Metropolitan's services are shared by all residents and businesses within Metropolitan's area, because all benefit from Metropolitan's infrastructure and capacity. Unlike volumetric charges, ad valorem property taxes ensure that those who benefit from the availability of Metropolitan's services bear some costs related to that availability. And unlike charges upon member agencies, charges upon real property within Metropolitan's service area help ensure that all residents and businesses bear a share of the costs for availability of Metropolitan's services.

Holding the ad valorem tax rate at .0035 percent simply would maintain a modest portion of Metropolitan's revenues, about 5 percent, on the tax roll. For example, a house with a $300,000 assessed valuation in Metropolitan's service area currently pays about $10 a year in taxes towards Metropolitan's costs. Importantly, maintaining the ad valorem tax revenues helps mitigate future rate hikes that would be needed to make up for the loss of tax revenues. By helping mitigate future rate hikes, this action provides Metropolitan's Board with flexibility as it considers funding for programs such as a potential BDCP solution; ongoing needed repair and replacement work; conservation, recycling and reclamation projects; groundwater clean-up efforts; environmental mitigation work; and the many other costs associated with ensuring a safe and reliable supply of water for Southern California.

Staff Recommendation

Staff proposes that the Board adopt the attached resolution to suspend the restriction in Section 124.5 of the MWD Act, and maintain the ad valorem tax rate in effect for FY 2012/13 of .0035 percent of assessed valuations. This would maintain tax revenues which are voter-approved indebtedness. Staff recommends that this tax rate remain in effect for FY 2013/14.

Policy

MWD Act Section 124.5

Metropolitan Water District Administrative Code Section 4301: Cost of Service and Revenue Requirement

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #2: None required

Board Options

Option #1

Adopt the CEQA determination and the Resolution Finding that Maintaining the Ad Valorem Tax Rate for Fiscal Year 2013/14 is Essential to the Fiscal Integrity of the District.
Fiscal Impact: Additional revenue compared to the current forecast, projected to be approximately $4.4 million in FY 2013/14, if property tax rates are fixed at .0035 percent of assessed valuation
Business Analysis: Not applicable

Option #2

Take no action
Fiscal Impact: Ad valorem tax revenues in FY 2013/14 based on Section 124.5
Business Analysis: Not applicable

Staff Recommendation

Option #1

5/31/2013
Gary Breaux *Date*
Chief Financial Officer

5/31/2013
Jeffrey Kightlinger *Date*
General Manager

Attachment 1 – Resolution Finding that Maintaining the Ad Valorem Tax Rate for Fiscal Year 2013/14 is Essential to the Fiscal Integrity of the District

Ref# cfo12623912

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION ____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FINDING THAT MAINTAINING THE AD VALOREM TAX RATE FOR FISCAL YEAR 2013-14 IS ESSENTIAL TO THE FISCAL INTEGRITY OF THE DISTRICT

WHEREAS, The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Section 124 of the Metropolitan Water District Act (the "Act"), is authorized to levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district; and

WHEREAS, since its inception Metropolitan has levied and collected property taxes for such purposes; and

WHEREAS, the Board of Directors ("Board"), pursuant to Section 307 of the Act, is authorized to determine the amount of money necessary to be raised by taxation for district purposes each fiscal year, to fix rates of taxation upon the assessed valuation of property taxable by the district and to levy a tax accordingly; and

WHEREAS, before 1942, all revenues to pay for operations, construction of the Colorado River Aqueduct and other facilities and payment of obligations came from *ad valorem* taxes. After deliveries of Metropolitan water began in fiscal year 1941/42, water sales were an additional source of revenues, but not until 1974 did revenues from water sales equal revenues from *ad valorem* taxes; and

WHEREAS, on November 4, 1960, Metropolitan entered into its contract with the California Department of Water Resources (the "State Water Contract") for water service from the State Water Project. Metropolitan's was the first contract executed and the prototype for the 28 state water contracts that followed; its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159; and

WHEREAS, Metropolitan is obligated to pay allocable portions of the cost of construction of the State Water Project system and ongoing operating and maintenance costs, regardless of quantities of water available from the project and regardless of the amounts of water it sells to its member agencies. Approximately 75 percent of Metropolitan's State Water Project expenditures are fixed, or do not vary with the quantity of water delivered; and

WHEREAS, Metropolitan is authorized to collect property taxes to pay its State Water Contract obligations. Under circumstances provided in the State Water Contract, if other funds are not sufficient, it must levy a tax or assessment sufficient to provide for all payments under the State Water Contract then due and becoming due; and

WHEREAS, Metropolitan currently utilizes tax revenues solely to pay debt service on its general obligation bonds, approved by the voters in 1966 and presently outstanding in the amount of $196,085,000, and a portion of its State Water Contract obligations; and

WHEREAS, Metropolitan's outstanding general obligation bonds and State Water Contract obligations are indebtedness approved by the California voters before Article XIII A of the California Constitution (Proposition 13) was adopted; and

WHEREAS, the Board and Metropolitan's member agencies periodically have evaluated the appropriate mix of property taxes and water rates and charges to enhance Metropolitan's fiscal stability and ability to ensure the region's long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies; and

WHEREAS, on May 8, 1984, the Board approved proposed amendments to the Act, set forth in Board Letter 6-2 dated April 30, 1984; and

WHEREAS, such amendments were incorporated into Assembly Bill 1445, which was approved by the Legislature and filed with the California Secretary of State on July 3, 1984, and added to the Act as Section 124.5; and

WHEREAS, in Board Letter 9-9 dated December 20, 1990, General Manager Carl Boronkay transmitted additional information on the water revenues/tax compromise that led to inclusion of Section 124.5 in the Act; and

WHEREAS, commencing with fiscal year 1990/91, Section 124.5 has limited Metropolitan's property tax revenues (and thereby the tax levy rate), to the total of annual debt service on Metropolitan's general obligation bonds and the portion of the State Water Contract payment for debt service on State general obligation bonds for facilities benefitting Metropolitan as of 1990/91; and

WHEREAS, Metropolitan's tax levies have complied and continue to comply with the requirements ofSection 124.5; and

WHEREAS, Metropolitan's tax levy rate has declined from .0089% in fiscal year 1999/2000 to .0035% in fiscal year 2012/13; and

WHEREAS, at the time SB 1445 was passed, 33 percent of Metropolitan's revenues were from property taxes, while in fiscal year 2012/13 property taxes account for about only 5 percent of total estimated revenues, with the remainder of Metropolitan's revenues primarily derived from water sales and charges; and

WHEREAS, Metropolitan's State Water Contract costs are projected to increase, because existing facilities of the State Water Project are over 50 years old and in need of repair and replacement, and payments are expected to further increase with the implementation of the Delta Habitat Conservation and Conveyance Program and Bay Delta Conservation Plan; while property tax collections linked to the State Water Contract are decreasing; and

WHEREAS, consideration of current and anticipated State Water Contract payment obligations and a balancing of proper mechanisms for funding the obligations is fundamental to Metropolitan's fiscal health; and

WHEREAS, maintaining the existing ad valorem tax rate for fiscal year 2013/14 will take pressure off Metropolitan's water rates and allow the Board flexibility as it funds Metropolitan's State Water Contract obligations fully and fairly; and

WHEREAS, Section 124.5 affirms the Board's discretion to determine the amount of money necessary to be raised by taxation for district purposes each fiscal year, providing that the restriction contained in such Section do not apply if the Board, following a hearing held to consider that issue, finds that a tax in excess of this restriction is essential to the fiscal integrity of the district, and written notice of the hearing is filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate at least 10 days prior to the date of the hearing; and

WHEREAS, on May 13, 2013, the Finance and Insurance Committee of the Board reviewed Board Letter 8-1, executed by the Chief Financial Officer and General Manager on May 3, 2013, and recommended that the Board set a public hearing for the June 2013 Board meeting to consider suspending the tax restriction clause of Section 124.5 to maintain the ad valorem tax at current levels, and instruct the Board Executive Secretary to provide notice of the public hearing, as required by Section 124.5; and

WHEREAS, the Board approved such recommendation on May 14, 2013; and

WHEREAS, notices of the public hearing were filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate on May 29, 2013; and

WHEREAS, the Board conducted a public hearing at its regular meeting on June 11, 2013, at which interested parties were given the opportunity to present their views regarding the recommendation to suspend the tax restriction clause of Section 124.5 to maintain the ad valorem tax at current levels; and

WHEREAS, each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating public comments and evidence and all material factors pertaining thereto, including the financial and operating information summarized in Board Letter 8-2 executed by the Chief Financial Officer and General Manager on May 31, 2013, hereby finds that a tax rate in excess of the restriction set out in Section 124.5 of the Act is essential to the fiscal integrity of Metropolitan. Therefore, the Board resolves and determines that the tax rate restriction in Section 124.5 of the Act is hereby suspended for fiscal year 2013/14 and the Board in its discretion may levy taxes at the tax rate levied for fiscal year 2012/13 (.0035% of assessed valuation, excluding annexation levies).

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution of the Board of Directors of The Metropolitan Water District of Southern California, adopted at its meeting held June 11, 2013.

____

Board Executive Secretary
The Metropolitan Water District
of Southern California

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Finance and Insurance Committee

6/11/2013 Board Meeting

8-1

Subject

Mid-cycle Biennial Budget Review and Recommendations for Use of Reserves over Target

Executive Summary

In April 2012, the Board approved Metropolitan Water District of Southern California's (Metropolitan) biennial budget and associated rates and charges for fiscal years (FY) 2012/13 and 2013/14. The biennial budget was prepared on the modified accrual basis of accounting as approved by the Board in January 2012. At the midpoint of the biennial budget, revenues are expected to exceed budget for FY 2012/13 due to water sales forecasted to be 161 thousand acre-feet (TAF) over the budgeted amount of 1.7 million acre-feet (MAF). Expenses are expected to come in under budget primarily due to a number of unforecasted cost reductions. The result is that modified accrual reserve balances are anticipated to end the year approximately $75 million above the maximum reserve target established in Administrative Code 5202(e). This provides the Board with the opportunity to address other financial priorities such as increased funding of capital costs from current operating revenues (PAYGO), decreasing the liability for other post employment benefits (OPEB), and setting aside monies in the Water Transfer Fund for future water management actions.

Details

FY 2012/13 Review

As reported at the April 2013 Finance & Insurance (F&I) Committee meeting, and more recently updated at the May F&I Committee meeting, water sales revenues are expected to be higher than budget by about $108 million. Expenditures are forecasted to be $137 million below budget.

Water sales revenues are expected to be higher due to the current dry hydrologic conditions. The dry hydrology has both reduced local supplies, which are being replaced by deliveries from Metropolitan, and increased demands.

Expenditures are forecasted to be below budget due to careful management of costs and expenses, lower power costs as a result of lower than expected deliveries of State Water Project (SWP) water, and a number of one-time cost reductions. Specifically:

- A credit of $22.5 million for SWP costs, which resulted from the Department of Water Resources (DWR) amending provisions of its General Bond Resolution relating to its Debt Service Reserve Account (the "Springing Amendment"), reducing the amount of reserves DWR is required to maintain.
- A credit of $14.3 million for full SWP rate management credits. Rate management credits result from a provision of the State Water Contract that provides for the reduction of capital charges based on differences between DWR's collections from the SWP contractors and the actual amounts paid for capital related charges. These credits are allocated to each SWP contractor in proportion to their total repayment of capital charges to DWR. These credits are unpredictable; the last prior year that full rate management credits were available was FY 2002/03.
- A reduction of $9.6 million to SWP Off Aqueduct Power Costs due to reduced operating costs for Reid Gardner Unit 4 (RG4) in calendar year 2013. DWR's participation in RG4 expires in July 2013.

- A reduction in Colorado River Aqueduct (CRA) power costs of $16.3 million due to maximizing the use of Benefit Energy from Southern California Edison, and lower charges for Hoover and Parker energy.
- Lower debt service costs of approximately $7.8 million due to refinancing of Water Revenue Bonds, lower debt administration costs, and lower interest rates on variable rate debt obligations.
- Departmental Operations and Maintenance (O&M) expenditures forecasted to be $10 million under budget due to careful management of advertising expenses, professional services, chemical costs, and labor costs.

Metropolitan's financial picture and outlook is much improved from prior years. Higher revenues and lower costs are anticipated to increase unrestricted reserves by approximately $217 million to $549 million, after consideration for the change in Required Reserves. Coverage ratios at fiscal year-end are forecasted to be 2.4 times for Revenue Bond Debt Service coverage and 1.8 times for Fixed Charge coverage, above the target levels of 2.0 times and 1.2 times, respectively.

FY 2013/14 Outlook

Key planning assumptions for FY 2013/14 were sales of 1.7 MAF, an increase in operating revenues to fund capital (PAYGO) to $125 million from $55 million in FY 2012/13, and an increase in OPEB funding to $10 million from $5 million in FY 2012/13. The FY 2013/14 Budget also assumed a SWP allocation of 55 percent for calendar year 2013 and 50 percent for calendar year 2014, and CRA deliveries in the fiscal year of 890 TAF. With the adopted 5 percent rate increase in FY 2013/14, future rate increases were forecasted to moderate to the 3 to 5 percent range.

The budget assumptions and the 5 percent rate increases effective January 1, 2013 and January 1, 2014 resulted in the rates and charges shown in Table 1 below:

Table 1: Summary of Rates and Charges, Effective January 1 (per AF)

Rates and charges:	**2012**	**2013**	**2014**
Tier 1 Full Service, Untreated	$560	$593	$593
Tier 1 Full Service, Treated	$794	$847	$890
Readiness-to-Serve Charge, millions	$146	$142	$166
Capacity Charge, per cfs	$7,400	$6,400	$8,600

The rates and charges adopted by the Board in April 2012 effective January 1, 2014 recover the full costs to serve in FY 2013/14 based on budgeted costs and 1.7 MAF of sales. In particular, the January 1, 2014 increase provides revenues to meet increased investments in water treatment facilities, including the oxidation retrofit program at Weymouth and improvements at Jensen, Diemer and Weymouth, as well as to fund the PAYGO increase of $70 million, which is reflected in the Readiness-to-Serve Charge and Capacity Charge increases, and is incorporated in the System Access Rate.

Due to the current dry hydrologic conditions, demands could increase over budget for the first half of FY 2013/14. However, the outcome of the second half of the fiscal year is unknown. Metropolitan's demands can vary by $\pm$30 percent, so sales could quickly decline under different local hydrological conditions.

On the expenditure side, at this time there is nothing that would indicate that expenditures as forecasted will be substantially below budget. A significant portion of the expenditure increase identified for FY 2013/14 is directed towards meeting Metropolitan's Board guidelines for PAYGO.

It is too early to know if the calendar year 2014 SWP allocation assumption of 50 percent will be achieved. The SWP allocation for calendar year 2013 is holding at 35 percent, down from the budget assumption of 55 percent. Supply management actions are expected in late 2013 to manage the difference between demands and supplies, currently estimated to be between 195 TAF and 595 TAF. These actions could place upward pressure on the

FY 2013/14 Budget, which only includes $37 million for Supply Programs, to refill storage or implement transfers.

SWP variable energy costs can vary significantly from one fiscal year to the next depending on supply conditions, water management actions taken by Metropolitan or other State Water Contractors, and energy market conditions. SWP variable energy costs could be higher, depending on which supply management actions are taken to meet the increased demands in FY 2012/13 and FY 2013/14.

For CRA power, no supplemental power purchases were budgeted in FY 2013/14. If Colorado River supply programs are activated to meet supply shortfalls, additional market power purchases will likely be required. Regardless of whether power is purchased for the SWP or the CRA, California power markets are experiencing upward price pressures. San Onofre Nuclear Generating Station, a 2,250 MW nuclear power plant south of San Clemente, will be off-line for the second summer in a row. The dry hydrology in California is resulting in lower hydroelectric generation from Northern and Central California facilities, and runoff in the Pacific Northwest is slightly below normal. California relies heavily on in-state and imported hydroelectricity to meet demands from early spring to mid-summer. Current Southern California forward power prices are 35 percent higher than last year, after adjusting for the cost impact of emissions allowances.

Departmental O&M is expected to be on budget. Labor budgets will be managed to absorb the AFSCME class study cost impacts as well as upward pressures on PERS retirement contribution rates due to changes PERS is making to its amortization and smoothing policies.

Given the continued upward pressures on costs, staff does not recommend any change to the 5 percent increase approved by the Board for January 1, 2014. For rate setting purposes, the 1.7 MAF for FY 2013/14 and 1.75 MAF for FY 2014/15 and beyond are reasonable assumptions given Metropolitan's sales volatility. Metropolitan will be well positioned to maintain reasonable and predictable rate increases while meeting financial policies and maintaining solid reserve levels. Forgoing the approved rate increase for January 2014 would inevitably result in higher rate increases in the future.

Update of Capital Investment Plan

The FY 2012/13 and 2013/14 Biennial Budget included expenditures of $257.3 million and $294.6 million, respectively, for the Capital Investment Plan (CIP). The current projection for FY 2012/13 and FY 2013/14 is $140 million and $214 million, respectively. Total spending for the biennial budget is projected to be $197.9 million under budget. The variance is due primarily to low, highly competitive bids on the Weymouth oxidation retrofit project, reduced costs for solids handling at the Jensen water treatment plant and timing of other projects.

The CIP is funded by a combination of debt and current operating revenues (PAYGO). The two largest areas of expenditures in the biennial CIP are Infrastructure Reliability and Water Quality. It is anticipated that infrastructure reliability will become a larger part of the CIP as more facilities reach the end of their service life and require replacement and refurbishment (R&R). The lower than anticipated capital spending coupled with the increase in PAYGO funding to $125 million in FY 2013/14 will postpone the need to issue $200 million of capital funding during the current FY 2012/13 and FY 2013/14 biennial budget.

Recommendations on Use of Reserves over the Maximum Reserve Target

Metropolitan Administrative Code Section 5202 establishes the minimum and the maximum unrestricted reserve balances as of the end of each fiscal year, which are held in the Revenue Remainder Fund and the Water Rate Stabilization Fund. At the end of FY 2012/13, the anticipated unrestricted reserve balance is $549 million, approximately $75 million above the maximum reserve target of $474 million. Administrative Code Section 5202(e) states that "funds in excess of such targeted amount shall be utilized for capital expenditures of the District in lieu of the issuance of additional debt, or for the redemption, defeasance or purchase of outstanding bonds or commercial paper of the District as determined by the Board. Provided that the District's fixed charge coverage ratio is at or above 1.2 amounts in the Water Rate Stabilization Fund may be expended for any lawful purpose of the District, as determined by the Board of Directors…."

Given that reserves are over the maximum reserve target and that the fixed charge coverage ratio is forecasted to be 1.8 times, the Board has the opportunity to address a number of financial objectives that have been underfunded or deferred over the past several years. Since FY 2007/08, PAYGO has been funded at less than one-half of the board-established policy and instead Metropolitan has relied more heavily on bonds to fund capital projects. In addition, Metropolitan has delayed the funding of an OPEB trust, resulting in a liability for OPEB of approximately $545 million as of the most recent actuarial valuation. Pre-funding OPEB until the annual funding equals the Annual Required Contribution is a prudent fiscal practice that recognizes the cost of OPEB over the active service life of employees and results in a lower unfunded liability in the future. Finally, Metropolitan is forecasting the need to implement water management actions to align water demands and supplies, including potential use of storage supplies. Setting aside monies now will mitigate future costs incurred to replace that use of storage.

Based on the foregoing, staff recommends that the projected approximate $75 million above the reserve target be used to fund these three areas, such that one-third will be transferred to the Replacement and Refurbishment Fund (PAYGO); one-third will be transferred to the OPEB Trust, and one-third will be transferred to the Water Transfer Fund to offset future expenditures associated with FY 2013/14 water management actions, including but not limited to water transfer purchases, energy costs associated with additional pumping requirements, and/or takes of water from Central Valley storage programs. All financial transactions will be made as of June 30, 2013 once the final audit has been completed, and may differ from the estimate of $75 million.

Plans for the Next Biennial Budget, FY 2014/15 and FY 2015/16

Metropolitan will begin work in the fall on its next biennial budget, covering FY 2014/15 and FY 2015/16, and rates and charges effective January 1, 2015 and January 1, 2016. In particular the next biennial budget will focus on:

- Continued close scrutiny and management of costs to keep rate increases reasonable and predictable.
- Careful review of the CIP to ensure system reliability is maintained.
- Review and update of financial reserve targets to ensure they are reasonable and consistent with the modified accrual basis of accounting.
- Development of a ten-year financial forecast that, to the extent possible, will incorporate projected costs and rate impacts of the Bay-Delta Conservation Plan and Delta Habitat Conservation and Conveyance Program.
- Proposals to develop increased fixed revenue sources.
- Proposals to address the expiration of the Purchase Orders on December 31, 2014.

Policy

Metropolitan Administrative Code Section 5200(h): Funds Established

Metropolitan Administrative Code Section 5202(e): Fund Parameters

California Environmental Quality Act (CEQA)

CEQA determination for Options #1 and #2: The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #3: None required

Board Options

Option #1

Adopt the CEQA determination and authorize the use of reserves over the reserve target established in Administrative Code Section 5202, estimated at $75 million, and transfer monies to the Replacement and Refurbishment (PAYGO) Fund, the OPEB Trust and the Water Transfer Fund in FY 2012/13, as specified by the Board.

Fiscal Impact: Reduce reserves by $75 million (approximately) by transferring an equivalent amount in total to the Replacement and Refurbishment (PAYGO) Fund, the OPEB Trust, and the Water Transfer Fund

Business Analysis: Not applicable

Option #2

Adopt the CEQA determination and reduce the approved rate increase effective January 1, 2014 from 5 percent to 3 percent.

Fiscal Impact: Reduction of annual revenues of approximately $28 million, resulting in lower reserves and higher future rate increases

Business Analysis: Not applicable

Option #3

Do not authorize the use of reserves over the target established in Administrative Code Section 5202.

Fiscal Impact: Reserves would remain over the target established in Administrative Code Section 5202.

Business Analysis: Not applicable

Staff Recommendation

Option #1

5/30/2013
Gary Breaux *Date*
Chief Financial Officer

5/30/2013
Jeffrey Kightlinger *Date*
General Manager

Ref# cfo12624596

Budget/ Rates Progress

11-18-2013

Items that have yet to be included:

- Fixed tax rate

Items that need a lot more work:

- Departmental O&M forecast (FY2017 and beyond)
- Other O&M
- Update/create tables and charts for PPT, budget book, COS report, and board letter
    - Includes updating/reworking the following files:
        "Budget Link"
        "Rate Link"
        "O&M Budget Tool"
        "O&M Labor Tool"
    - Includes reports that show modified accrual actuals and forecast
- Supply programs

Items that are close but need to be refined:

- Existing Debt Service
- CIP (FPM includes correct total CIP but not by project)
- Router
- CRA power
- CVWD Revenue
- CIP Financing
- Coverage calculation
- COS allocation check
- Required reserve calculation
- Overhead rate
- Departmental O&M (FY2015 and FY2016)
- Current year (Modified Accrual report)
- Variable treatment costs

Almost all item and calculations need to be checked again for accuracy.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
RETIREE HEALTHCARE PLAN

BARTEL ASSOCIATES, LLC

June 30, 2011 GASB 45 Actuarial Valuation
Final Results

Bartel Associates, LLC
John E. Bartel, President
Catherine Wandro
Adam Zimmerer

September 18, 2013

Contents

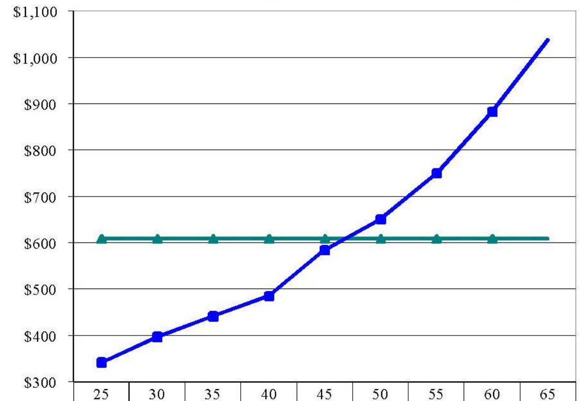
■ Eligibility	■ Full-time employees who service or disability retire directly from the District under CalPERS (50 & 5 years of service)
■ Medical Benefit	■ District pays PEMHCA medical premium for retirees and eligible dependents up to a cap which varies by employee group: • Represented – 100% of Blue Shield HMO Bay Area Basic Premium (Effective 1/1/12) • Unrepresented – 90% of PERSCare LA Basic Premium ■ 2011 and 2012 Monthly Caps:
■ Surviving Spouse	■ Surviving spouse coverage based on retirement plan election ■ Same benefit continues to surviving spouse
■ Dental, Vision, Life	■ None

Medical Coverage	Represented 2011	Represented 2012	Unrepresented 2011	Unrepresented 2012
Single	$ 708.52	$711.10	$ 708.52	$ 815.75
2-Party	1,417.03	1,422.20	1,417.03	1,631.50
Family	1,842.14	1,848.86	1,842.14	2,120.95

■ State Vesting Schedule §22893	■ Applies to employees hired on or after 1/1/12 ■ Vesting schedule applies to the maximum of: • District cap, or • State 100/90 premiums, • But not more than 100% of the premium ■ Vesting % based on CalPERS service, with 5 years District service minimum: ■ 100% vested for disability retirement or 20 years District service
■ Pay-As-You-Go Costs	Fiscal Year / CAFR ■ FY 2012/13 $13,181,000 ■ FY 2011/12 $12,764,000

CalPERS Service	Vesting %	CalPERS Service	Vesting %
< 10	0%	15	75%
10	50%	16	80%
11	55%	17	85%
12	60%	18	90%
13	65%	19	95%
14	70%	20+	100%

- Background
  - For PEMHCA, employer cost for allowing retirees to participate at active rates.



	25	30	35	40	45	50	55	60	65
Blended Premium	$610	$610	$610	$610	$610	$610	$610	$610	$610
Cost by Age	$343	$398	$442	$486	$586	$652	$752	$885	$1,041

  - GASB 45 defers to actuarial standards of practice.
  - Actuarial Standards of Practice No. 6[1] (ASOP 6) allows community rated plans to value their liability using premiums, resulting in no implied subsidy.
  - Valuation does not include an implied subsidy for PEMHCA.

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[1] Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Plan Costs or Contributions.

- In April 2012, Actuarial Standards Board released 2nd Exposure Draft for ASOP 6:
  - Would require implied subsidy valued for community rated plans such as PEMHCA.
  - Timing:
    - First Exposure Draft issued April 2012 (July 15, 2012 comment deadline)
    - Second Exposure Draft issued March 2013 (August 30, 2013 comment deadline)
    - Current draft calls for effective date 1 year after final statement adopted with earlier implementation encouraged
- Implied Subsidy impact depends on a number of factors including:
  - CalPERS provided information
  - Miscellaneous/Safety mix
  - Active/retiree proportions
  - Level of pre-funding
- AAL/ARC increase relative to current plan very large for PEMHCA minimum

Active Participant Statistics

	6/30/07 Valuation	1/1/09 Valuation	1/1/11 Valuation[2]	6/30/11 Valuation[2]
■ Count	1,859	1,923	1,802	1,802
■ Average Age	49.0	48.7	49.5	50.0
■ Average Service:				
• CalPERS	n/a	14.2	15.8	16.3
• District	14.1	13.5	15.1	15.6
■ Pay				
• Average	$87,960	$94,539	$99,469	$99,469
• Total Payroll (000's)	$163,518	$181,799	$179,242	$179,242

[2] 6/30/11 data used for both the 1/1/11 and 6/30/11 valuations.

PARTICIPANT STATISTICS

Retiree Participant Statistics

	6/30/07 Valuation	1/1/09 Valuation	1/1/11 Valuation[3]	6/30/11 Valuation[3]
■ Count				
• Service Retirees	n/a	970	1,044	1,044
• Disabled Retirees	n/a	138	143	143
• Surviving Spouses	n/a	228	256	256
• Total	1,256	1,336	1,443	1,443
■ Average Age				
• Service Retirees	n/a	70.0	69.9	70.4
• Disabled Retirees	n/a	64.2	65.0	65.5
• Surviving Spouses	n/a	75.8	75.4	75.9
• Total	70.5	70.4	70.4	70.9
■ Average Retirement Age				
• Service Retirees	n/a	59.3	59.4	59.4
• Disabled Retirees	n/a	50.8	50.6	50.6
• Total	57.8	58.3	57.6	57.6

[3] 6/30/11 data used for both the 1/1/11 and 6/30/11 valuations.

CERBT INVESTMENT OPTIONS

- Additional CERBT asset allocations and revised discount rate assumption
  - Agency selects one option effective July 1, 2011
- Target asset allocations

Asset Classifications	Option 1	Option 2	Option 3
Global Equity	66%	50%	32%
US Nominal Bonds	18%	24%	42%
REIT's	8%	8%	8%
U.S. Inflation Linked Bonds	5%	15%	15%
Commodities	3%	3%	3%
Total	100%	100%	100%

- CalPERS reported expected returns (20 year period):

	Option 1	Option 2	Option 3
75% Confidence Limit[4]	5.80%	5.60%	5.25%
50% Confidence Limit	**7.61%**	**7.06%**	**6.39%**
25% Confidence Limit	9.43%	8.52%	7.47%
Standard Deviation	11.73%	9.46%	7.27%

4 Confidence Limits – Actual Return will exceed the given rate with indicated probabilities, rates vary by year.

CERBT INVESTMENT OPTIONS

- CalPERS discount rate development:
  - 1st 10 year expected returns – based on asset advisors 10 year projections
  - Significantly higher returns assumed after 10 years
    - based on long term historical returns
    - implies actuarial losses in 1st 10 years
    - achievable?
- Requirement that discount rate cannot be greater than 50% confidence limit rate
- Bartel Associates Recommendation: select rate at 55% or 60% confidence limit

	Option 1	Option 2	Option 3
	55% Confidence Limit		
Discount Rate	**7.25%**	**6.75%**	**6.25%**
Maximum Discount Rate	7.61%	7.06%	6.39%
Margin for Adverse Deviation	(0.36%)	(0.31%)	(0.14%)
	60% Confidence Limit		
Discount Rate	**7.00%**	**6.50%**	**6.00%**
Maximum Discount Rate	7.61%	7.06%	6.39%
Margin for Adverse Deviation	(0.61%)	(0.56%)	(0.39%)

ACTUARIAL METHODS

Method	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Cost Method	■ Entry Age Normal	■ Same
■ Funding Policy	■ Pay-As-You-Go	■ Pre-funding with CERBT: • $40 million in 2013/14 • Full ARC thereafter
■ Amortization Method	■ Level percent of payroll	■ Same
■ Amortization Period	■ 30 years (closed) – 6/30/07 UAAL (26 years left on 6/30/11) ■ 20 years (closed) –method, assumption, or plan changes ■ 15 years (open) –gains/losses	■ 24 year fresh start (closed) amortization of 6/30/13 UAAL
■ Implied Subsidy	■ Employer cost for allowing non-Medicare eligible retirees to participate at active rates ■ Community rated plans are not required to value an implied subsidy ■ PEMHCA is, for most employers, community rated ■ Implied subsidy not valued ■ ASOP #6 Draft – removes community rating exception	

ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Valuation Date	■ January 1, 2011 ■ Fiscal Years 2011/12 & 2012/13	■ June 30, 2011 ■ Fiscal Year 2013/14
■ Discount Rate	■ 4.50% - No pre-funding - Assets invested in District investments	■ 7.25% - pre-fund with CERBT Option 1 ■ Sensitivity: • 6.75% - CERBT Option 2 • 6.25% - CERBT Option 3
■ Aggregate Pay Increases	■ 3.00% ■ Used to amortize UAAL	■ Same
■ Medical Trend	(see table below)	■ Same

Medical Trend – January 1, 2011 Valuation:

Year	Increase from Prior Year: Non-Medicare	Increase from Prior Year: Medicare
	All Plans	
2011	Actual 2011 Premiums	
2012	Actual 2012 Premiums	
2013	9.0%	9.4%
2014	8.5%	8.9%
2015	8.0%	8.3%
↓	↓	↓
2021+	5.0%	5.0%

Actuarial Obligations

(Amounts in 000's)

	1/1/11 Valuation		6/30/11 Valuation	
	1/1/11	Projected 6/30/11	6/30/11	Projected 6/30/13
■ Discount Rate	4.5%	4.5%	7.25%	7.25%
■ PVPB				
• Actives	$471,344		$264,938	
• Retirees	246,208		175,921	
• Total	717,552		440,859	
■ AAL				
• Actives	299,268		191,798	
• Retirees	246,208		175,921	
• Total	545,476	$560,722	367,719	$416,964
■ Assets	-	-	-	-
■ Unfunded AAL	545,476	560,722	367,719	416,964
■ Normal Cost		20,543		11,377
■ Pay-As-You-Go		13,344		16,851

Annual Required Contribution (ARC)

(Amounts in 000's)

■ Valuation Date	1/1/11 Valuation		6/30/11 Val
■ Fiscal Year	2011/12	2012/13	2013/14
■ Discount Rate	4.50%	4.50%	7.25%
■ ARC - $			
• Normal Cost	$ 20,543	$ 21,160	$ 11,377
• UAAL Amortization	28,629	32,297	28,533
• ARC (End of Year)	49,172	53,457	39,910
■ Projected Total Payroll	181,911	187,368	192,989
■ ARC - % Total Payroll			
• Normal Cost	11.3%	11.3%	5.9%
• UAAL Amortization	15.7%	17.2%	14.8%
• ARC	27.0%	28.5%	20.7%

Estimated Net OPEB Obligation (NOO) – 7.25% Discount Rate

$40 Million Pre-Funding Contribution in 2013/14

(Amounts in 000's)

	1/1/09 Val		1/1/11 Val		6/30/11 Val
	CAFR 2009/10	CAFR 2010/11	CAFR 2011/12	Est. 2012/13	Est. 2013/14
■ **Discount Rate**	5.0%	5.0%	4.5%	4.5%	7.25%
■ **NOO Beginning of Year**	$84,108	$106,280	$128,903	$161,222	$196,349
• Annual OPEB Cost					
• ARC	34,096	37,184	49,200	53,457	39,910
• Interest on NOO	4,205	5,254	5,800	7,255	14,235
• Amortization of NOO	(6,290)	(7,888)	(9,917)	(12,404)	(13,436)
• Annual OPEB Cost	32,011	34,550	45,083	48,308	40,709
■ **Contributions**					
• Benefit Payments	(9,839)	(11,927)	(12,764)	(13,181)	(16,851)
• Trust Pre-Funding	-	-	-	-	(40,000)
• Total Contribution	(9,839)	(11,927)	(12,764)	(13,181)	(56,851)
■ **NOO End of Year**	106,280	128,903	161,222	196,349	180,207
■ **Amortization Factor**	13.3715	13.3715	12.9978	12.9978	14.6134

10-Year Projection Illustration – 7.25% Discount Rate

$40 Million Pre-Funding Contribution in 2013/14

(Amounts in 000's)

FYE June 30,	Beginning of Year Net OPEB Obligation	ARC[5]	Annual OPEB Cost (AOC)	Contribution Benefit Pmts	Contribution Pre-Fund	Contribution Total Contrib	Payroll	ARC as % of Payroll	BOY UAAL
2014	$196,349	$39,910	$40,709	$16,851	$40,000	$56,851	$192,989	20.7%	$416,964
2015	180,207	39,918	40,333	19,088	20,830	39,918	198,779	20.1%	401,720
2016	180,622	40,913	40,978	21,435	19,478	40,913	204,742	20.0%	402,645
2017	180,688	42,043	41,722	23,871	18,172	42,043	210,884	19.9%	402,791
2018	180,367	43,205	42,458	26,157	17,048	43,205	217,211	19.9%	402,077
2019	179,621	44,403	43,188	28,375	16,028	44,403	223,727	19.8%	400,413
2020	178,405	45,637	43,906	30,548	15,089	45,637	230,439	19.8%	397,703
2021	176,675	46,909	44,613	32,517	14,392	46,909	237,352	19.8%	393,846
2022	174,379	48,222	45,306	34,468	13,754	48,222	244,473	19.7%	388,728
2023	171,463	49,576	45,982	36,536	13,040	49,576	251,807	19.7%	382,228

[5] ARC projection reflects vesting schedule for new entrants.

Estimated Net OPEB Obligation (NOO) – 7.25% Discount Rate

$100 Million Pre-Funding Contribution in 2013/14

(Amounts in 000's)

	1/1/09 Val		1/1/11 Val		6/30/11 Val
	CAFR 2009/10	CAFR 2010/11	CAFR 2011/12	Est. 2012/13	Est. 2013/14
■ Discount Rate	5.0%	5.0%	4.5%	4.5%	7.25%
■ NOO Beginning of Year	$84,108	$106,280	$128,903	$161,222	$196,349
• Annual OPEB Cost					
• ARC	34,096	37,184	49,200	53,457	39,910
• Interest on NOO	4,205	5,254	5,800	7,255	14,235
• Amortization of NOO	(6,290)	(7,888)	(9,917)	(12,404)	(13,436)
• Annual OPEB Cost	32,011	34,550	45,083	48,308	40,709
■ Contributions					
• Benefit Payments	(9,839)	(11,927)	(12,764)	(13,181)	(16,851)
• Trust Pre-Funding	-	-	-	-	(100,000)
• Total Contribution	(9,839)	(11,927)	(12,764)	(13,181)	(116,851)
■ NOO End of Year	106,280	128,903	161,222	196,349	120,207
■ Amortization Factor	13.3715	13.3715	12.9978	12.9978	14.6134

10-Year Projection Illustration – 7.25% Discount Rate

$100 Million Pre-Funding Contribution in 2013/14

(Amounts in 000's)

FYE June 30,	Beginning of Year Net OPEB Obligation	ARC[6]	Annual OPEB Cost (AOC)	Contribution Benefit Pmts	Contribution Pre-Fund	Contribution Total Contrib	Payroll	ARC as % of Payroll	BOY UAAL
2014	$196,349	$39,910	$40,709	$16,851	$100,000	$116,851	$192,989	20.7%	$416,964
2015	120,207	35,706	35,983	19,088	16,618	35,706	198,779	18.0%	341,720
2016	120,484	36,575	36,618	21,435	15,140	36,575	204,742	17.9%	342,507
2017	120,528	37,574	37,361	23,871	13,703	37,574	210,884	17.8%	342,631
2018	120,314	38,602	38,104	26,157	12,445	38,602	217,211	17.8%	342,023
2019	119,816	39,663	38,852	28,375	11,288	39,663	223,727	17.7%	340,608
2020	119,005	40,754	39,600	30,548	10,206	40,754	230,439	17.7%	338,303
2021	117,851	41,880	40,348	32,517	9,363	41,880	237,352	17.6%	335,022
2022	116,319	43,042	41,097	34,468	8,574	43,042	244,473	17.6%	330,668
2023	114,375	44,241	41,844	36,536	7,705	44,241	251,807	17.6%	325,140

6 ARC projection reflects vesting schedule for new entrants.

Discount Rate Sensitivity

(Amounts in 000's)

	Valuation	Sensitivity	
	CERBT Option #1	CERBT Option #2	CERBT Option #3
■ **Discount Rate**	**7.25%**	**6.75%**	**6.25%**
■ **PVPB on 6/30/11**	$440,859	$477,220	$518,326
■ **Funded Status on 6/30/11**			
● AAL	367,719	392,875	420,695
● Assets	-	-	-
● Unfunded AAL	367,719	392,875	420,695
■ **Projected UAAL on 6/30/13**	416,964	444,342	474,565
■ **2013/14 ARC**			
● Normal Cost	11,377	12,675	14,159
● UAAL Amortization	28,533	28,924	29,347
● Total ARC	39,910	41,599	43,506
● ARC as % of payroll	20.7%	21.6%	22.5%

This report presents the Metropolitan Water District of Southern California Retiree Healthcare Plan ("Plan") June 30, 2011 actuarial valuation. The purpose of this valuation is to:

- Determine the Governmental Accounting Standards Board Statement Nos. 43 and 45 June 30, 2011 Benefit Obligations,
- Determine the Plan's June 30, 2011 Funded Status, and
- Calculate the 2013/14 Annual Required Contribution.

The report provides information intended for reporting under GASB 43 and 45, but may not be appropriate for other purposes. Information provided in this report may be useful to the District for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods, or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions and participant data provided by the District as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASB 43 and 45. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,

John E. Bartel, ASA, MAAA, FCA
President
Bartel Associates, LLC
September 18, 2013

Catherine A. Wandro
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2011 Monthly PEMHCA Premiums
Los Angeles Area

Medical Plan	Non Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	$496.93	$993.86	$1,292.02	$337.88	$675.76	$1,013.64
Blue Shield NetValue	427.58	855.16	1,111.71	337.88	675.76	1,013.64
Kaiser	434.00	868.00	1,128.40	282.30	564.60	846.90
PERS Choice	496.15	992.30	1,289.99	375.88	751.76	1,127.64
PERS Select	433.87	867.74	1,128.06	375.88	751.76	1,127.64
PERSCare	787.24	1,574.48	2,046.82	433.66	867.32	1,300.98
PORAC	527.00	987.00	1,254.00	418.00	833.00	1,331.00

2011 State 100/90 Contribution (Pre/Post Medicare)

- Single $ 542
- 2-Party 1,030
- Family 1,326

2011 Monthly PEMHCA Premiums
Other Southern California

Medical Plan	Non Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	$567.87	$1,135.74	$1,476.46	$337.88	$675.76	$1,013.64
Blue Shield NetValue	488.62	977.24	1,270.41	337.88	675.76	1,013.64
Kaiser	477.95	955.90	1,242.67	282.30	564.60	846.90
PERS Choice	516.28	1,032.56	1,342.33	375.88	751.76	1,127.64
PERS Select	451.48	902.96	1,173.85	375.88	751.76	1,127.64
PERSCare	819.18	1,638.36	2,129.87	433.66	867.32	1,300.98
PORAC	527.00	987.00	1,254.00	418.00	833.00	1,331.00

2012 Monthly PEMHCA Premiums
Los Angeles Area

Medical Plan	Non Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	$510.72	$1,021.44	$1,327.87	$337.99	$675.98	$1,013.97
Blue Shield NetValue	439.25	878.50	1,142.05	337.99	675.98	1,013.97
Kaiser	465.63	931.26	1,210.64	277.81	555.62	833.43
PERS Choice	505.63	1,011.26	1,314.64	383.44	766.88	1,150.32
PERS Select	429.22	858.44	1,115.97	383.44	766.88	1,150.32
PERSCare	906.39	1,812.78	2,356.61	432.43	864.86	1,297.29
PORAC	556.00	1,041.00	1,323.00	418.00	833.00	1,331.00

2012 State 100/90 Contribution (Pre/Post Medicare)

- Single $ 566
- 2-Party 1,074
- Family 1,382

2012 Monthly PEMHCA Premiums
Other Southern California

Medical Plan	Non Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Blue Shield	$583.60	$1,167.20	$1,517.36	$337.99	$675.98	$1,013.97
Blue Shield NetValue	501.93	1,003.86	1,305.02	337.99	675.98	1,013.97
Kaiser	512.76	1,025.52	1,333.18	277.81	555.62	833.43
PERS Choice	526.19	1,052.38	1,368.09	383.44	766.88	1,150.32
PERS Select	446.68	893.36	1,161.37	383.44	766.88	1,150.32
PERSCare	943.26	1,886.52	2,452.48	432.43	864.86	1,297.29
PORAC	556.00	1,041.00	1,323.00	418.00	833.00	1,331.00

Current Active Medical Coverage

Medical Plan	Region	Single	2-Party	Family	Total	Plan Total
Blue Shield	Bay Area	1	-	1	2	
	Los Angeles	48	76	225	349	
	Sacramento	-	-	4	4	
	Southern CA	11	37	114	162	517
Blue Shield NetValue	Los Angeles	1	-	2	3	
	Southern CA	-	-	1	1	4
Kaiser	Bay Area	-	-	1	1	
	Los Angeles	79	104	196	379	
	Sacramento	2	1	2	5	
	Southern CA	18	42	81	141	526
PERS Choice	Los Angeles	68	81	208	357	
	Out of State	16	29	39	84	
	Sacramento	1	-	-	1	
	Southern CA	20	47	60	127	569
PERS Select	Los Angeles	-	-	1	1	1
PERSCare	Bay Area	-	-	1	1	
	Los Angeles	27	37	29	93	
	Out of State	-	1	-	1	
	Southern CA	9	8	11	28	123
Waived		-	-	-	62	62
Total		301	463	976	1,802	1,802

Current Retiree Medical Coverage – Pre 65

Medical Plan	Region	Single	2-Party	Family	Total	Plan Total
Blue Shield	Bay Area	-	1	1	2	
	Los Angeles	5	18	11	34	
	Sacramento	1	-	-	1	
	Southern CA	7	19	8	34	71
Blue Shield NetValue	Los Angeles	1	3	-	4	
	Southern CA	-	4	-	4	8
Kaiser	Bay Area	1	-	1	2	
	Los Angeles	31	35	13	79	
	Out of State	3	2	1	6	
	Sacramento	-	1	2	3	
	Southern CA	11	32	10	53	143
PERS Choice	Bay Area	-	-	1	1	
	Los Angeles	19	14	14	47	
	Northern CA	2	1	1	4	
	Out of State	21	57	17	95	
	Southern CA	5	12	6	23	170
PERS Select	Southern CA	-	2	-	2	2
PERSCare	Los Angeles	13	16	5	34	
	Out of State	10	3	-	13	
	Southern CA	4	5	1	10	57
Waived		-	-	-	16	16
Total		134	225	92	467	467

Current Retiree Medical Coverage – Post 65

Medical Plan	Region	Single	2-Party	Family	Total	Plan Total
Blue Shield	Bay Area	1	1	-	2	
	Los Angeles	12	23	1	36	
	Northern CA	1	-	-	1	
	Sacramento	-	1	-	1	
	Southern CA	10	10	-	20	60
Blue Shield NetValue	Los Angeles	-	2	-	2	
	Southern CA	1	-	1	2	4
Kaiser	Bay Area	1	-	-	1	
	Los Angeles	75	88	4	167	
	Out of State	4	5	-	9	
	Sacramento	1	1	-	2	
	Southern CA	39	60	4	103	282
PERS Choice	Los Angeles	11	18	3	32	
	Out of State	33	50	6	89	
	Southern CA	6	15	3	24	145
PERS Select	Los Angeles	-	1	-	1	
	Southern CA	2	-	-	2	3
PERSCare	Bay Area	4	2	-	6	
	Los Angeles	80	77	2	159	
	Northern CA	2	5	-	7	
	Out of State	90	79	1	170	
	Sacramento	-	3	-	3	
	Southern CA	45	51	1	97	442
Waived		-	-	-	40	40
Total		418	492	26	976	976

Medical Plan Participation
Non-Waived Participants
June 30, 2011

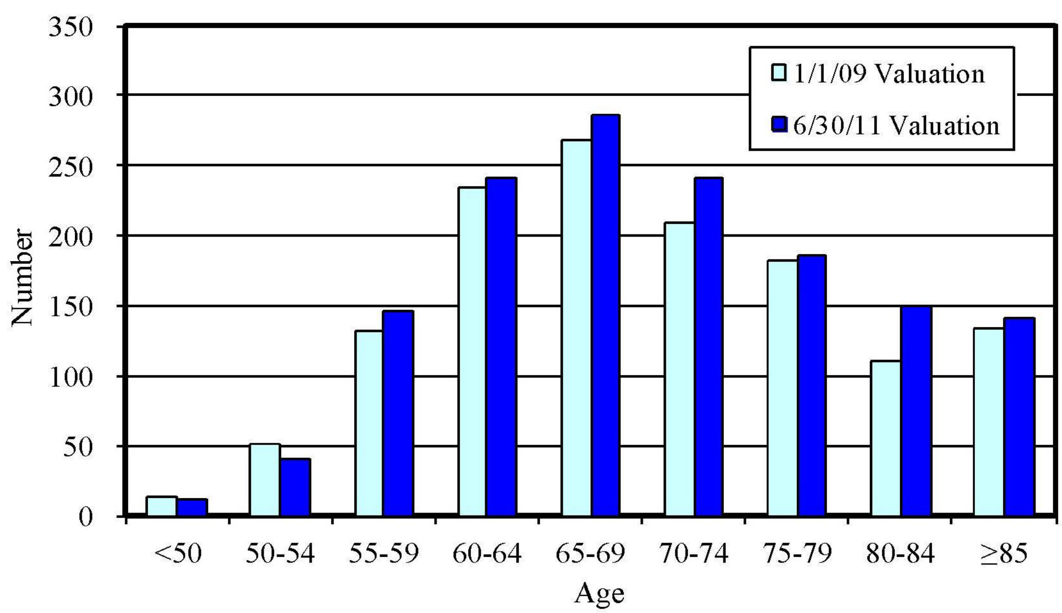
Medical Plan	Actives	Retirees < 65	Retirees ≥ 65	Retirees Total
Blue Shield	30%	16%	6%	9%
Blue Shield NetValue	0%	2%	1%	1%
Kaiser	30%	32%	30%	31%
PERS Choice	33%	37%	16%	23%
PERS Select	0%	0%	0%	0%
PERSCare	7%	13%	47%	36%
Total	100%	100%	100%	100%

Retiree Medical Plan Coverage by Age

June 30, 2011

Age	Single	2-Party	Family	Waived	Total
Under 50	3	2	7	-	12
50-54	9	16	11	5	41
55-59	39	60	43	4	146
60-64	73	132	30	6	241
65-69	90	171	16	9	286
70-74	88	134	10	9	241
75-80	78	99	1	7	185
80-85	83	59	0	8	150
85 & Over	89	44	0	8	141
Total	552	717	118	56	1,443
Average Age	73.9	70.2	60.2	72.3	70.9

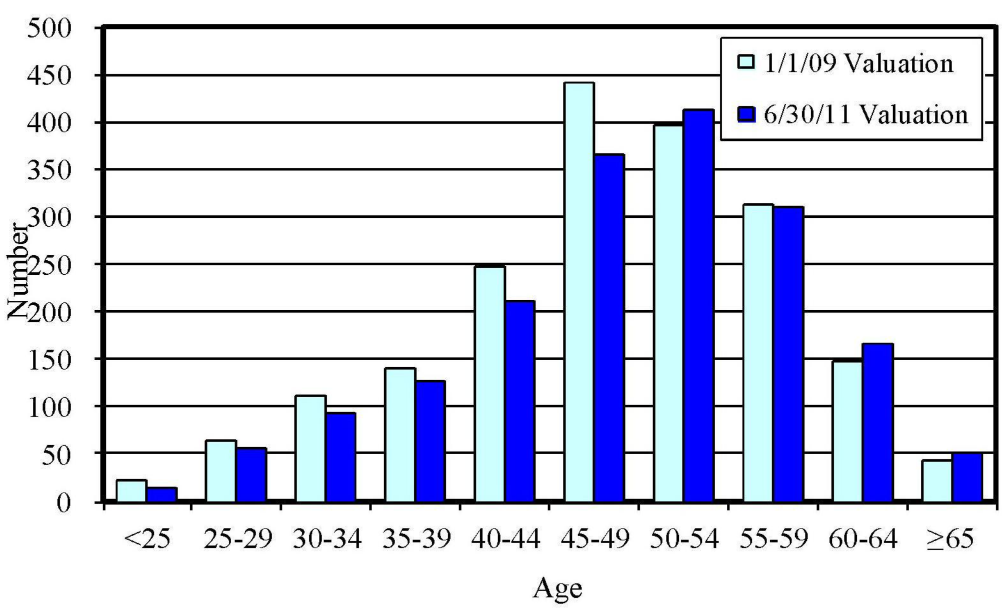
Retiree Age Distribution



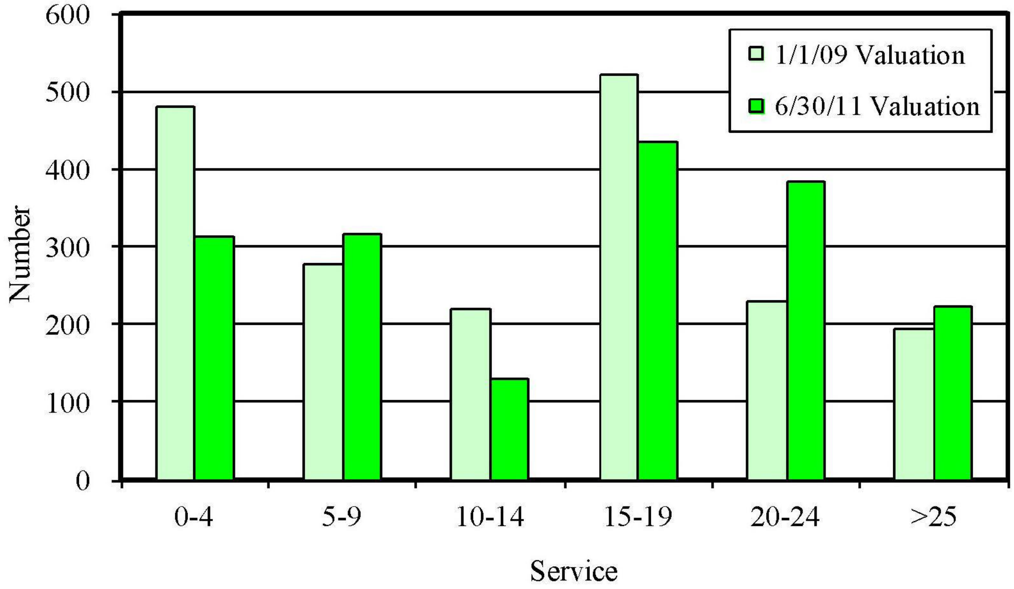
Actives by Age and Service
June 30, 2011

Age	City Service							
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total
< 25	5	10	-	-	-	-	-	15
25-29	9	35	11	1	-	-	-	56
30-34	8	50	27	6	2	-	-	93
35-39	7	45	38	12	25	-	-	127
40-44	5	43	58	18	52	34	-	210
45-49	3	37	66	35	99	102	22	364
50-54	4	31	53	25	104	116	80	413
55-59	-	16	32	19	85	83	74	309
60-64	-	6	27	11	56	36	29	165
≥ 65	-	-	5	4	11	11	19	50
Total	41	273	317	131	434	382	224	1,802

Active Age Distribution



Active Service Distribution



	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Valuation Date	■ January 1, 2011 ■ Fiscal Years 2011/12 & 2012/13	■ June 30, 2011 ■ Fiscal Year 2013/14
■ Discount Rate	■ 4.50% - No pre-funding - Assets invested in District investments	■ 7.25% - pre-fund with CERBT Option 1 ■ Sensitivity: • 6.75% - CERBT Option 2 • 6.25% - CERBT Option 3
■ General Inflation	■ 3.00%	■ Same
■ Aggregate Payroll Increases	■ 3.00% ■ Used to amortize UAAL	■ Same
■ Merit & Longevity Pay Increases	■ CalPERS 1997-2007 Experience Study	■ Same

ACTUARIAL ASSUMPTIONS

	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Liability Load	■ Liabilities increase by 1/3 of medical premium gain	■ Same
■ Mortality, Termination, Disability	■ CalPERS 1997-2007 Experience Study ■ Mortality Improvement Projection Table AA	■ Same
■ Retirement	■ CalPERS 1997-2007 Experience Study Misc Level 2%@55 ERA 59.5	■ Same

ACTUARIAL ASSUMPTIONS

	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Medical Trend	Increase from Prior Year (see below)	■ Same

Year	Non-Medicare All Plans	Medicare All Plans
2011	Actual 2011 Premiums	
2012	Actual 2012 Premiums	
2013	9.0%	9.4%
2014	8.5%	8.9%
2015	8.0%	8.3%
2016	7.5%	7.8%
2017	7.0%	7.2%
2018	6.5%	6.7%
2019	6.0%	6.1%
2020	5.5%	5.6%
2021+	5.0%	5.0%

ACTUARIAL ASSUMPTIONS

	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Medical Plan at Retirement	■ Based on current experience • Current retirees > 65 – no change to medical plan • Current retirees < 65 – use post 65 assumption below when retiree attains age 65 • Current Actives:	■ Same

Plan	Pre 65	Post 65
Blue Shield	15%	5%
BS NetValue	5%	0%
Kaiser	30%	30%
PERS Choice	35%	15%
PERSCare	15%	50%

With region assumption:

Region	HMO	PPO
Los Angeles	60%	35%
South	40%	20%
Out of State	0%	45%

ACTUARIAL ASSUMPTIONS

	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Participation at Retirement	■ Currently covered: 100% ■ Currently waived: 90%	■ Same
■ Medicare Eligible Rate	■ Pre 4/1/86 hires: 90% ■ Post 4/1/86 hires: 100% ■ Everyone eligible for Medicare will elect Part B coverage	■ Same
■ Marital Status at Retirement	■ Actives: • Currently covered: current marital status • Not currently covered: 80% married ■ Retirees: current marital status	■ Same
■ Dependents at Retirement	■ 20% elect family coverage at retirement until age 65	■ Same

ACTUARIAL ASSUMPTIONS

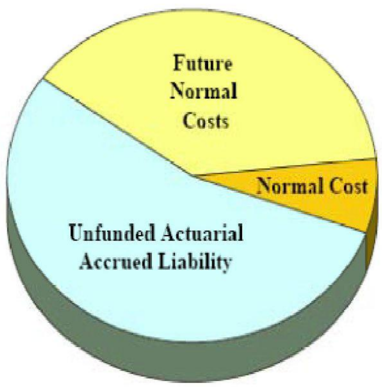
	January 1, 2011 Valuation	June 30, 2011 Valuation
■ Spouse Age	■ Actives – Males 3 years older than females ■ Retirees – Males 3 years older than females if spouse birth date not available	■ Same
■ Surviving Spouse Participation	■ 100%	■ Same
■ Waived Retiree Re-Election	■ Pre 65: 20% re-elect at age 65 ■ Post 65: 0%	■ Same
■ Future New Participants	■ None – Closed Group	■ Same

DEFINITIONS

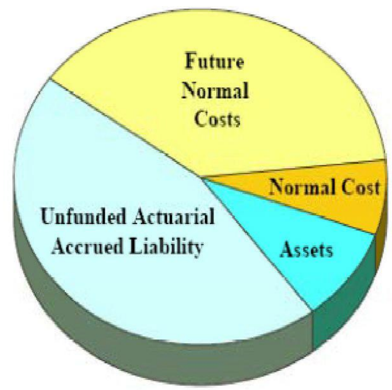
■ GASB 45 Accrual Accounting	• Project future employer-provided benefit cash flow for current active employees and current retirees • Discount projected cash flow to valuation date using discount rate and actuarial assumptions to determine present value of benefits (PVB) • Discount rate is expected long-term return on plan assets • Allocate PVB to past, current, and future periods • Normal Cost is portion of PVB allocated to current fiscal year • Actuarial cost method used for valuation is Entry Age Normal Cost method which determines Normal Cost as a level percent of payroll • Actuarial Accrued Liability (AAL) is portion of PVB allocated to prior service with the employer • Unfunded AAL (UAAL) is AAL less Plan Assets • Assets must be in segregated and restricted trust to be considered Plan Assets for GASB 45
■ PayGo Cost	• Cash subsidy is employer pay-as-you-go benefit payments for retirees • Implied subsidy is difference between actual cost of retiree benefits and retiree premiums subsidized by active employee premiums

Present Value of Benefits

Present Value of Benefits
(Without Plan Assets)



Present Value of Benefits
(With Plan Assets)



■ Annual Required Contribution (ARC)	• GASB 45 contribution is Normal Cost plus amortization of: ➢ Initial UAAL and AAL for plan, assumption, and method changes ➢ Experience gains and losses (difference between actual experience and that expected from assumptions) ➢ Contribution gains and losses (difference between ARC and actual contributions)
■ Net OPEB Obligation (NOO)	• NOO is accumulated amounts expensed but not funded • Net OPEB Asset if amounts funded exceed those expensed
■ Annual OPEB Cost (AOC)	• Expense for current period including: ➢ ARC ➢ Interest on NOO ➢ Adjustment of NOO • Adjustment of NOO prevents double counting of expense since ARCs include amortization of prior contribution gains and losses previously expensed