



**DUBLIN SAN RAMON SERVICES DISTRICT
Board of Directors**

NOTICE OF SPECIAL MEETING

TIME: 6:00 p.m.
PLACE: Regular Meeting Place
7051 Dublin Boulevard, Dublin, CA

DATE: Tuesday, April 22, 2014

AGENDA

(NEXT RESOLUTION NO. 20-14)

(NEXT ORDINANCE NO. 333)

Our mission is to provide reliable water and wastewater services to the communities we serve in a safe, efficient and environmentally responsible manner.

BUSINESS:

REFERENCE

Recommended Action **Anticipated Time**

1. CALL TO ORDER
2. PLEDGE TO THE FLAG
3. ROLL CALL – Members: Benson, Duarte, Halket, Howard, Vonheeder-Leopold
4. SPECIAL ANNOUNCEMENTS/ACTIVITIES
5. PUBLIC COMMENT (MEETING OPEN TO THE PUBLIC)

At this time those in the audience are encouraged to address the Board on any item of interest that is within the subject matter jurisdiction of the Board and not already included on tonight’s agenda. Comments should not exceed five minutes. Speakers’ cards are available from the District Secretary and should be completed and returned to the Secretary prior to addressing the Board. The President of the Board will recognize each speaker, at which time the speaker should proceed to the lectern, introduce him/herself, and then proceed with his/her comment.

6. REPORTS
 - A. Reports by General Manager and Staff
 - Event Calendar
 - Correspondence to and from the Board
 - B. Agenda Management (consider order of items)
 - C. Committee Reports
 - Finance
 - Water

April 16, 2014
April 17, 2014

7. APPROVAL OF MINUTES - Regular Meeting of
April 1, 2014 District Secretary Approve by Motion

BUSINESS:

REFERENCE

		<u>Recommended Action</u>	<u>Anticipated Time</u>
8.	<u>CONSENT CALENDAR</u>		
<p>Matters listed under this item are considered routine and will be enacted by one Motion, in the form listed below. There will be no separate discussion of these items unless requested by a Member of the Board of Directors or the public prior to the time the Board votes on the Motion to adopt.</p>			
A.	Upcoming Board Calendar	General Manager	Accept by Motion
9.	<u>BOARD BUSINESS</u>		
A.	Adopt the San Francisco Bay Area Integrated Regional Water Management Plan Update	Engineering Services Manager	Approve by Resolution 5 min
B.	Approve Water System Master Plan & Capacity Reserve Fee Study (CIP 14-W007): Approval of a Master Agreement for Consulting Services and Task Order No. 1 with West Yost Associates	Engineering Services Manager	Approve by Resolution & by Motion 10 min
C.	Accept Water Supply Report through April 1, 2014 and Receive Briefing on Programmatic Actions Needed in Response to the Drought	General Manager	Accept by Motion 5 min
D.	Discuss Updated Declaration of a Community Drought Emergency and Budget Adjustment	General Manager	Discuss & Provide Direction 5 min
E.	Discuss Mandatory Water Use Prohibitions and Restrictions	Operations Manager	Discuss & Provide Direction 15 min
F.	Discuss Enforcement Provisions and Penalties for Violations of Mandatory Potable Water Use Prohibitions and Restrictions	Operations Manager	Discuss & Provide Direction 15 min
G.	Discuss Adopting Stage 3 Water Supply Shortage Rates	Financial Services Manager	Discuss & Provide Direction 15 min
H.	Discuss Adoption of 2014 Drought Affordability Program – Low Usage Credit	Financial Services Manager	Discuss & Provide Direction 5 min

BUSINESS:

REFERENCE

			<u>Recommended Action</u>	<u>Anticipated Time</u>
I.	Discuss Enhanced Rebate Program for Water Efficient Devices and Appliances and Lawn Replacements	Financial Services Manager	Discuss & Provide Direction	5 min
J.	Discuss Updated District Drought Response Action Plan	Operations Manager	Discuss & Provide Direction	5 min

10. **BOARDMEMBER ITEMS**

- Submittal of Written Reports from Travel and Training Attended by Directors

11. **ADJOURNMENT**

BOARD CALENDAR*

<u>Committee & Board Meetings</u>	<u>Date</u>	<u>Time</u>	<u>Location</u>
DERWA	April 28, 2014	6:00 p.m.	District Office
Special External Affairs	May 5, 2014	5:30 p.m.	District Office
Special Board Meeting	May 5, 2014	6:00 p.m.	District Office

*Note: Agendas for regular meetings of District Committees are posted not less than 72 hours prior to each Committee meeting at the District Administrative Offices, 7051 Dublin Boulevard, Dublin, California

All materials made available or distributed in open session at Board or Board Committee meetings are public information and are available for inspection at the front desk of the District Office at 7051 Dublin Blvd., Dublin, during business hours, or by calling the District Secretary at (925) 828-0515. A fee may be charged for copies. District facilities and meetings comply with the Americans with Disabilities Act. If special accommodations are needed, please contact the District Secretary as soon as possible, but at least two days prior to the meeting.

**DUBLIN SAN RAMON SERVICES DISTRICT
MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS**

April 1, 2014

A regular meeting of the Board of Directors was called to order at 6:01 p.m. by President Georgan M. Vonheeder-Leopold. Boardmembers present: President Georgan M. Vonheeder-Leopold, Vice President Edward R. Duarte, Director D.L. (Pat) Howard, and Director Dawn L. Benson. Director Richard M. Halket was absent. District staff present: Bert Michalczyk, General Manager; Carl P.A. Nelson, General Counsel; and Nancy Gamble Hatfield, District Secretary.

1. CALL TO ORDER
2. PLEDGE TO THE FLAG
3. ROLL CALL - Members: Benson, Duarte, Halket, Howard, Vonheeder-Leopold
4. SPECIAL ANNOUNCEMENTS/ACTIVITIES
5. PUBLIC COMMENT (MEETING OPEN TO THE PUBLIC) – 6:02 p.m.
6. REPORTS
 - A. Reports by General Manager and Staff
 - Event Calendar – General Manager Michalczyk reported on the following:
 - o None of the Senior Managers are attending tonight’s meeting because the General Manager gave them permission to be absent. Mr. Michalczyk noted that the managers have been very busy working on the District’s planning and response to the drought situation.
 - o Associate Engineer-SME Jaclyn Yee was featured on the cover of the February 2014 issue of Plumbing Mechanical Engineer (PME) publication. The article highlighted Ms. Yee’s project management work on the Central Dublin Recycled Water project that brought recycled water to several local parks and schools in Dublin.
 - o ACWA will hold their 2014 Spring Conference and Exhibition in Monterey May 6-9, 2014. If Directors are interested in attending, they should contact District Secretary Hatfield or General Manager Michalczyk for registration and reservations.
 - o CASA will hold a Public Policy Forum in Sacramento April 28-29, 2014. If Directors are interested in attending, they should contact District Secretary Hatfield or General Manager Michalczyk for registration and reservations.
 - o Staff suggests cancelling the April 15, 2014 Regular Board meeting and holding a Special Board meeting April 22, 2014 instead so the most updated information is available for the Board’s decision making related to the

DRAFT

District’s drought response. The Board agreed to cancel the regular meeting and hold a Special Board meeting April 22, 2014.

- o As the ACWA conference conflicts with the May 6, 2014 Board meeting and Mr. Michalczyk must attend, he asked the Board if they would be agreeable to holding a Special Board meeting on Monday, May 5, 2014 instead and canceling the regular Board meeting of May 6, 2014. The Board agreed to do so.
- o Mr. Michalczyk gave an updated water supply report. Essentially, the water picture has not significantly improved even with the recent rainfall and snow. The Board will be asked to approve several drought-related actions at their Special Board meeting April 22, 2014.

- Correspondence to and from the Board

Date	Format	From	To	Subject
3/22/14	Letter - USPS	David Requa	Board of Directors	WateReuse Award

B. Agenda Management (consider order of items) – No Changes were made.

C. Committee Reports

Water	March 20, 2014
External Affairs	March 25, 2014
Personnel	March 25, 2014
Tri-Valley Water Liaison	March 26, 2014

President Vonheeder-Leopold invited comments on recent committee activities. Directors felt the available staff reports adequately covered the many matters considered at committee meetings and made a few comments about some of the committee activities.

The Tri-Valley Water Liaison notes will be presented to the Board once they are finalized by all of the member agencies.

7. APPROVAL OF MINUTES – Regular Meeting of *March 18, 2014*

Director Howard MOVED for the approval of the March 18, 2014 minutes. V.P. Duarte SECONDED the MOTION, which CARRIED with FOUR AYES, and ONE ABSENT (Halket).

8. CONSENT CALENDAR

V.P. Duarte MOVED for approval of the items on the Consent Calendar. Director Benson SECONDED the MOTION, which CARRIED with FOUR AYES, ONE ABSENT (Halket).

- A. Approve Amendment No. 2 to Personal Services Agreement between Rhodora N. Biagtan and Dublin San Ramon Services District – Approved – Resolution No. 17-14
- B. Approve Amendment No. 3 to Personal Services Agreement between John J. Archer and Dublin San Ramon Services District – Approved – Resolution No. 18-14
- C. Approve Amendment No. 3 to Personal Services Agreement between Michelle L. Gallardo and Dublin San Ramon Services District – Approved – Resolution No. 19-14
- D. Upcoming Board Calendar – Approved
- E. Report of Checks and Electronic Disbursements Made – Approved

Date Range	Amount
02/25/14 – 03/238/14	\$6,298,208.06

9. BOARD BUSINESS

None.

10. BOARDMEMBER ITEMS

Director Howard commented that in anticipation of the drought, he purchased a swimming pool cover to reduce evaporation in the warm season.

Director Benson commented she recently attended and distributed awards at the Contra Costa County science fair for middle school and high school students. She was very impressed with the great projects.

President Vonheeder-Leopold reported she attended the March 27, 2014 Alameda County Special Districts Annual Dinner. She mentioned interesting highlights presented by speaker Kish Rajan from the Director of the Governor’s Office of Business and Economic Development. President Vonheeder-Leopold also noted on March 31, 2014 she attended the dedication of the new Pete Snyder Plaza located at the Dublin/Pleasanton BART station.

11. CLOSED SESSION

At 6:22 p.m. the Board went into Closed Session.

- A. Public Employee Performance Evaluation – Pursuant to Government Code Section 54957
Title: General Manager

12. REPORT FROM CLOSED SESSION

At 6:42 p.m. the Board came out of Closed Session. President Vonheeder-Leopold announced that there was no reportable action.

13. ADJOURNMENT

President Vonheeder-Leopold adjourned the meeting at 6:43 p.m.

Submitted by,

Nancy Gamble Hatfield
District Secretary



Reference General Manager	Type of Action Accept Report	Board Meeting of April 22, 2014
Subject Upcoming Board Calendar		
<input checked="" type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
<input checked="" type="checkbox"/> Staff	B. Michalczyk	<input type="checkbox"/> Board Member

Recommendation:

The General Manager recommends that the Board of Directors accept, by Motion, the attached upcoming Board calendar.

Summary:

The attached Board calendar presents items anticipated by staff to be presented to the Board at the next two Board meetings. This report represents the most current information available to staff as of the preparation of this agenda. Items that are listed may be deferred or eliminated for various reasons including but not limited to staff work not being fully complete, the need for further management, Committee and/or legal review, needed material or information not being received by the District in a timely fashion, etc. Furthermore, matters not listed may be placed on the Board agenda.

This report should be used only as a general guide of what business the District Board will be considering in the near future. The District Secretary should be contacted to confirm the contents of specific agendas. Agendas will be finalized in accordance with the requirements of the Brown Act (generally 72 hours for regular meetings and 24 hours for special meetings).

Committee Review			Legal Review	Staff Review		
COMMITTEE ---	DATE ---	RECOMMENDATION ---	Not Required	ORIGINATOR BLM	DEPARTMENT Executive	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$0	<input type="checkbox"/> Funding Source A. B.	Attachments to S&R 1. Upcoming Board Calendar 2. 3.				

TENTATIVE BOARD ITEMS

4/18/2014 8:43:23 AM

Board Mtg	Agenda Item	Water	WWC	Finance	Personnel	Ext. Aff.
	5/5/2014					
	2014 Water Supply Outlook and Conservation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Change Emergency Declaration from 20% to ___%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Adopt Stage 3 Water Supply Shortage Rates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Adopt 2014 Drought Affordability Program - Low Usage Credit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Endorse Updated District Drought Response Action Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Water Supply and Conservation: Adopt Mandatory Action	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Water Supply and Conservation: Enforcement Provisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Approved Enhanced Rebate Program for Water Efficient Devices and Appliances and Turf Grass Conversions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Approve Agreement with _____ for Large Diameter CCTV Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Approve Mid-Cycle Budget Adjustments to the Operating Budget and Capital Improvement Program (CIP) 2-Year Budget for FYEs 2014 and 2015	<input type="checkbox"/>	<input type="checkbox"/>	4/16/2014	<input type="checkbox"/>	<input type="checkbox"/>
	Alameda LAFCo: Special District Seat Election	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5/5/2014
	5/20/2014					
	Rescind Joint Water Quality Resolution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Closed Session - Annual Security Briefing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	TV UCI Discussion Workshop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Nielsen Out of Area Services Agreement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Closed Session - Conf with Labor Negotiators - Pursuant to Gov Code Section 54957.6 Agency Designated Rep: GM Unrepresented Employees: Sr Managers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Board Mtg	Agenda Item	Water	WWC	Finance	Personnel	Ext. Aff.
5/20/2014	6th Supplemental Agreement w/City of Pleasanton		5/14/2014			
	Strategic Work Plan Update Acceptance (All Committees)	4/17/2014		4/16/2014		



Reference Engineering Services Manager	Type of Action Adopt Updated Plan	Board Meeting of April 22, 2014
Subject Adopt the San Francisco Bay Area Integrated Regional Water Management Plan Update		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input checked="" type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	R. Biagtan
		<input type="checkbox"/> Board Member

Recommendation:

The Engineering Services Manager recommends the Board adopt, by Resolution, the San Francisco Bay Area Integrated Regional Water Management Plan Update.

Summary:

The San Francisco Bay Area Integrated Regional Water Management Plan (BAIRWMP), originally adopted in 2006, is a planning document that identifies Bay Area water challenges and opportunities and how water resources management agencies and communities can work together to manage water resources for the benefit of the region’s residents, its ecosystem and its wildlife. The plan was a requirement of Proposition 84, The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006. The plan was cooperatively updated in 2013 by cities and agencies in nine Bay Area counties, including the District, to meet revised plan standards set forth in the State’s *Proposition 84 Integrated Regional Water Management Program Guidelines* published by the Department of Water Resources in August of 2010. Adoption of the BAIRWMP Update is required to obtain State grant funds.

The District’s Central Dublin Recycled Water Distribution and Retrofit Project (CIP 620C620) is part of the BAIRWMP and the District was awarded \$1.13 million in Proposition 84 Round 1 Implementation Grant in August 2011. The District has completed the project and submitted an invoice to the State to obtain the grant funds. Funds are expected to be distributed to the District before the end of June 2014.

The BAIRWMP Update includes other District recycled water projects, including the Stage 2 expansion of the recycled water treatment facilities and the expansion of recycled water distribution systems to western Dublin and the Federal and County facilities. These projects are being proposed for inclusion in the Proposition 84 Round 3 Implementation Grant. Phases of the recycled water distribution system expansion are also being proposed for inclusion in the expedited 2014 Drought Grant Solicitation funded by Proposition 84.

Staff recommends that the Board adopt the BAIRWMP Update so that it may receive its Proposition 84 Round 1 Implementation Grant funds of \$1.13 million and for the District to qualify for future grant funds for its future recycled water projects.

Committee Review			Legal Review	Staff Review		
COMMITTEE ---	DATE ---	RECOMMENDATION ---	Not Required	ORIGINATOR R. Biagtan	DEPARTMENT Engineering	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input checked="" type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$0	<input type="checkbox"/> Funding Source A. B.		Attachments to S&R 1. BAIRWMP September 2013 Report - Executive Summary 2. 3.			

RESOLUTION NO. _____

RESOLUTION OF THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT ADOPTING THE SAN FRANCISCO BAY AREA INTEGRATED REGIONAL WATER MANAGEMENT PLAN UPDATE

WHEREAS, the State electorate approved multiple statewide bond measures since 2000, including Propositions 50 and 84, to fund water and natural resource projects and programs, including Integrated Regional Water Management (IRWM); and

WHEREAS, the benefits of integrated planning for water resources management activities include increased efficiency or effectiveness, enhanced collaboration across agencies and stakeholders, and improved responsiveness to regional needs and priorities; and

WHEREAS, state statute and guidelines required that an IRWM Plan be adopted by the governing boards of participating agencies before IRWM grant funds would be provided for water resources management projects that are part of the IRWM Plan; and

WHEREAS, several of the participating agencies in the Bay Area jointly submitted an IRWM grant application for state consideration where a condition for funding required the San Francisco Bay Area IRWM Plan (BAIRWMP) to be adopted by January 1, 2007; and

WHEREAS, the Bay Area agencies that received funding in previous grant rounds did adopt the BAIRWMP before such funds were received; and

WHEREAS, more recent state statutes and guidelines require that the BAIRWMP be updated before agencies may receive future IRWM grant funding; and

WHEREAS, a grant was received to update the BAIRWMP, that Plan Update having been completed in January 2014 and the Department of Water Resources has completed its review and required no changes; and

WHEREAS, a series of workshops were held on the initial BAIRWMP and recently the

Res. No. _____

Plan Update to provide stakeholders, including Bay Area local governments, an opportunity to ask questions, provide comments and make recommendations; and

WHEREAS, the Draft BAIRWMP Update was posted on the BAIRWMP website (<http://bairwmp.org/>) and made available for public comment; and

WHEREAS, the BAIRWMP Update incorporates changes based on comments received during the public review period in the areas of environmental justice, technical project data, and other elements of the Plan; and

WHEREAS, the BAIRWMP Update provides an implementation framework that calls for tracking accomplishments, developing lists of prioritized projects and periodically updating the BAIRWMP as conditions warrant, providing funding and resources are available to carry out these activities; and

WHEREAS, adoption of the BAIRWMP Update does not entail a direct commitment of resources and implementation of each project, as such will be the responsibility of the project proponent and any applicable project partners, and there is no joint commitment or responsibility by the BAIRWMP Update participants to implement any or all of the projects; and

WHEREAS, the District has reviewed the BAIRWMP Update and determined that it is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines §15262 and §15306 because the BAIRWMP Update consists of basic data collection that would not result in the disturbance of any environmental resource and involves planning studies for possible actions that the participating agencies have not yet approved; and

WHEREAS, the BAIRWMP Update is meant to be complementary to participating agencies' individual plans and programs and does not supersede such plans and programs, and adoption of the BAIRWMP Update does not prohibit or effect in any way a participating

Res. No. _____

agencies' planning efforts separate from the BAIRWMP.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT, a public agency located in the counties of Alameda and Contra Costa, California as follows:

The San Francisco Bay Area Integrated Regional Water Management Plan Update is hereby adopted.

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, counties of Alameda and Contra Costa, at its special meeting held on the 22nd day of April 2014, and passed by the following vote:

AYES:

NOES:

ABSENT:

Georgan M. Vonheeder-Leopold, President

ATTEST: _____
Nancy G. Hatfield, District Secretary

\\DO\DataVol\Board\2014\04-22-14Spe\BAIRWMP Adoption\BAIRWMP Adotpion RES.doc



San Francisco Bay Area *Integrated Regional Water Management Plan*

September 2013





The full 963-page report can be downloaded from <http://bairwmp.org> website

San Francisco Bay Area Integrated Regional Water Management Plan

September 2013

Prepared by:

Kennedy/Jenks Consultants

in association with

Environmental Science Associates
Kearns & West
Zentraal



Table of Contents

<i>List of Tables</i>	<i>i</i>
<i>List of Figures</i>	<i>ii</i>
Executive Summary	I
1.1 Introduction and Background.....	I
1.2 Governance (Chapter 1).....	II
1.2.1 Coordinating Committee.....	IV
1.2.2 Stakeholders	V
1.3 Region Description (Chapter 2)	V
1.3.1 Demographics.....	VII
1.3.2 Biologic Resources and Water Quality	VII
1.3.3 Reliability: Water Supply - Water Quality - Wastewater Integration	VIII
1.3.4 Regional Challenges	IX
1.4 Objectives (Chapter 3)	X
1.5 Resource Management Strategies (Chapter 4)	XII
1.6 Integration of Supporting Activities (Chapter 5)	XIII
1.7 Regional Priorities (Chapter 6)	XIV
1.8 Impacts and Benefits (Chapter 7).....	XV
1.9 Performance and Monitoring (Chapter 8)	XXII
1.10 Data Management (Chapter 9).....	XXIV
1.11 Financing (Chapter 10).....	XXIV
1.12 Technical Analysis (Chapter 11).....	XXV
1.13 Relation to Local Water Planning (Chapter 12)	XXVI
1.14 Relation to Local Land Use Planning (Chapter 13).....	XXVIII
1.15 Stakeholder Involvement (Chapter 14).....	XXX
1.16 Coordination (Chapter 15).....	XXXI
1.17 Climate Change (Chapter 16).....	XXXIII
1.18 Conclusion	XXXIV

List of Tables

Table ES-1: Threatened and Endangered Species in the Bay-Delta	VIII
Table ES-2: Selected 2013 Bay Area IRWMP Resource Management Strategies ^(a)	XIII
Table ES-3: Potential IRWMP Environmental Impacts by Project Type	XVI
Table ES-4: Potential IRWMP Benefits by Project Type	XVIII
Table ES-5: Bay Area Water Resource Plan types by Water Management Activity and Functional Area.....	XXVII

Table of Contents (cont'd)

Table ES-6: Changes in Regional Boundaries since 2006 Plan XXXII
 Table ES-7: Relative Sea-Level Rise Projections for San Francisco Bay XXXIII

List of Figures

Figure ES-1: Bay Area IRWM Region III
 Figure ES-2: IRWMP Governance Structure IV
 Figure ES-3: Major Cities of the Bay Area VI
 Figure ES-4: Development of Regional Goals, Objectives and Suggested Measures..... XII
 Figure ES-5: Bay Area IRWMP Implementation and Performance Assessment XXIII
 Figure ES-6: Water Resources Policies Contained In Bay Area General Plans..... XXIX
 Figure ES-7: Stakeholder-based Plan Development..... XXX

Executive Summary

1.1 Introduction and Background

The San Francisco Bay Area Integrated Regional Water Management Plan (IRWMP or Plan) represents a significant accomplishment in regional water resources planning. The collective vision presented in this Plan aims to address the major challenges and opportunities related to managing water and associated natural resources within the Bay Area IRWM region (Region). It outlines the Region's water resources management needs and objectives, and presents innovative strategies and important actions to help achieve these objectives.

The IRWMP was first completed and adopted in 2006 (2006 IRWMP). This Plan updates and expands upon the 2006 IRWMP, documents progress towards meeting IRWMP objectives, and identifies ongoing regional needs and issues.

This IRWMP is not intended to duplicate existing and ongoing plans, but to better integrate these efforts, and utilize the results and findings of existing plans to put forward the projects needed to address IRWMP goals and objectives. This Plan provides a framework to improve collective understanding and to take actions to collaboratively address the many major water-related challenges, needs and conflicts within the Region through the 20-year planning horizon (2013-2033). The array of goals, objectives, selected resource management strategies, and prioritized projects of this Plan represents a collective view of how to improve integrated water resources management throughout the Region. As regional goals, objectives, and priorities evolve over time, this IRWMP will be adapted to meet the changing needs of the region.

The Bay Area IRWMP:

- Provides a valuable venue for regional collaboration across agencies
- Improves responsiveness to regional needs and priorities
- Helps to effectively integrate water resources management activities
- Serves as a platform to secure state and federal funding

The IRWMP complies with the 2012 Integrated Regional Water Management Guidelines for Proposition 84 and 1E (DWR Guidelines) published by the California Department of Water Resources (DWR) in November 2012. Financial assistance from DWR and contributions from the participating Bay Area groups and entities funded the development of this Plan. Proposition 84 identified 11 funding areas throughout the state, including the Bay Area Region. Each Funding Area is allocated, based on population, a portion of the \$1 billion approved by the voters under Proposition 84 in 2006. Predecessor bonds, including Propositions 13 and 50, also provided incentives for development of IRWM Plans. DWR designed the IRWM planning process to be consistent with the California Water Plan, a statewide water resources planning document which is updated periodically, and intends that IRWM Plans and future updates of the California Water Plan, be integrated further in the future.

1.2 Governance (Chapter 1)

Developing an Integrated Regional Water Management Plan that covers all aspects of water resources management across a geographic region as large as the Bay Area poses many institutional challenges. Chapter 1 describes the Bay Area’s IRWMP governance structure, including participating agencies and organizations and their management responsibilities related to water. This chapter also covers the evolution of the governance structure and function since 2004 through to the current update process.

During the 2006 IRWMP process, the participants developed and organized themselves into four Functional Areas (FA):

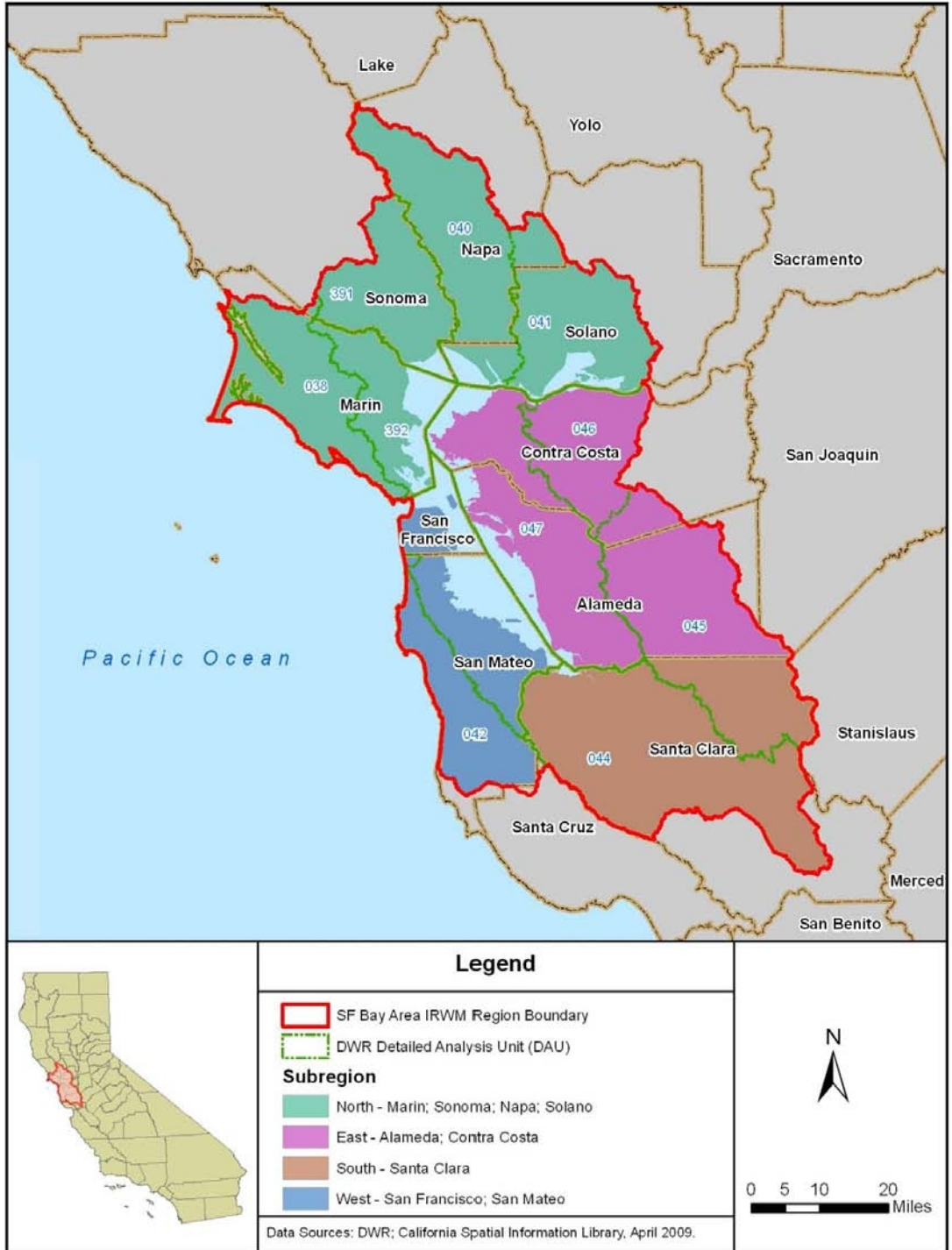
1. Water Supply & Water Quality
2. Wastewater & Recycled Water
3. Flood Protection & Stormwater Management
4. Watershed Management & Habitat Protection and Restoration

During the formation of the Bay Area IRWM region, a 2004 Letter of Mutual Understanding (LOMU) was created to allow groups to join the planning effort. Signatories included state and regional organizations, cities, counties, local agencies, special districts, and non-governmental organizations. A full list of organizations can be found in Section 1.2.3.

Organizations that adopt the Bay Area IRWMP, similar to the original signatories of the LOMU, are furthering the Region’s efforts to better collaborate and enhance integration of water resources and management. The IRWMP is meant to be complementary to participating agencies’ individual plans and programs and does not supersede such plans and programs, and adoption of the IRWMP is intended to complement participating agencies’ planning efforts.

During the development of the Region Acceptance Process (RAP) initiated by DWR to establish each region in 2009, an additional organizational structure was developed based on demographic and geographic divisions. This “subregional” approach was developed to facilitate truly integrated projects with smaller geographical areas and better address the diversity of needs and ideas across the SF Bay Area Region, and provide better local access to the IRWM process. Four subregions were defined—East, West, South, and North— which have since become the focal points for outreach, project solicitation, and integration in the Plan Update. Figure ES-1 provides a map of the Region and the four Subregions.

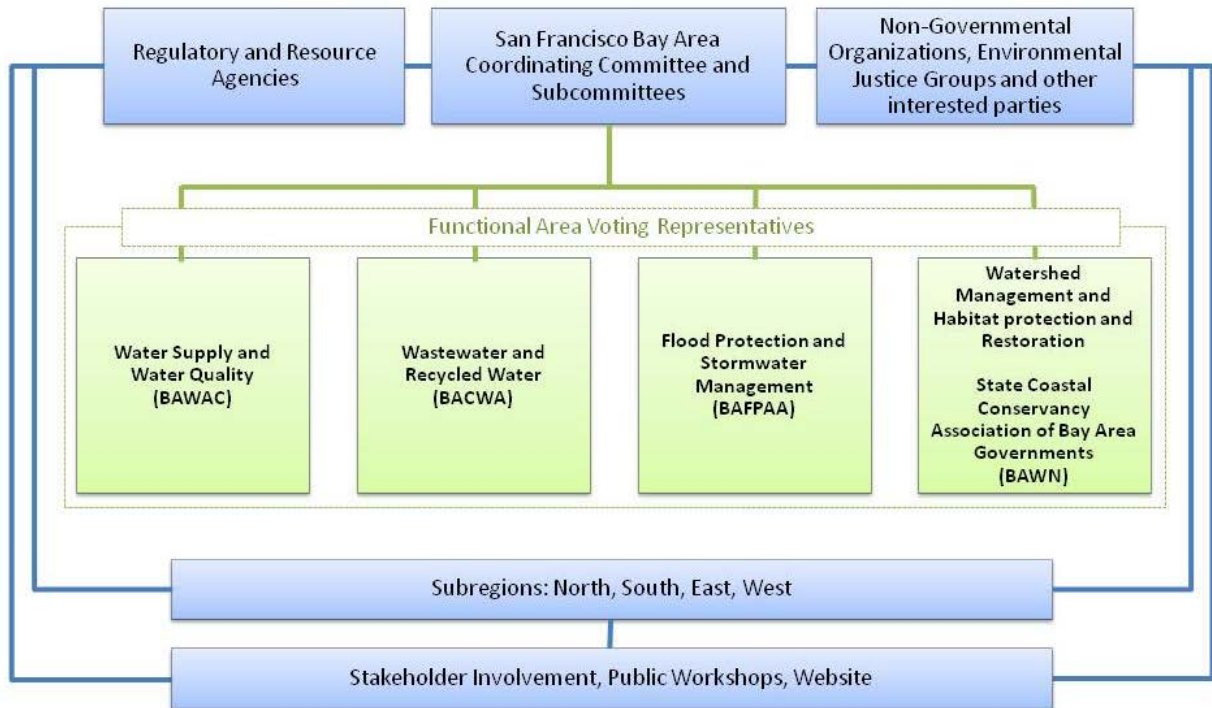
Figure ES-1: Bay Area IRWM Region



1.2.1 Coordinating Committee

The IRWMP Coordinating Committee (CC) serves as the governing body for the Plan, providing oversight of the process, guiding development, and supporting implementation. The CC is composed of representatives from the four FAs—Bay Area water supply agencies, wastewater agencies, flood control agencies, ecosystem management and restoration agencies—regulatory and planning agencies, as well as nongovernmental organizations (NGOs). Meetings are noticed on the IRWMP website (bairwmp.org). Figure ES-2 shows the overall governance structure. The CC operates through consensus-based decision making and has succeeded in reaching consensus on all decisions during the past. If an issue needing a firm decision cannot be resolved via consensus, the Chair or Vice Chair of the CC shall call for a vote (See Appendix A-2: Voting Principles).

Figure ES-2: IRWMP Governance Structure



To date, various subcommittees of the CC have been established to undertake specific tasks and to develop recommendations that are then forwarded to the full CC for discussion and consideration. These include:

1. The Plan Update Team (PUT) is a subset of the CC, committed to day-to-day management of the Plan Update process. The PUT served as the primary “work group” for the Plan Update.

2. The Project Screening Committee (PSC) was established to facilitate the process of incorporating new project ideas and processing/updating existing projects. They also make recommendations to the CC related to the IRWMP and to future funding applications, such as the Round 2 IRWM Implementation Grant.
3. The Website Subcommittee is tasked with ensuring that the website functions as a reasonable communication and information tool, and is appropriately updated.
4. The Planning and Process subcommittee was established to analyze issues, perform specific work tasks as needed, and recommend potential actions to the CC.

1.2.2 Stakeholders

Broad stakeholder involvement is crucial to ensure that the Plan identifies local issues, reflects local needs, promotes the formation of partnerships, and encourages coordination with state and federal agencies. One of the benefits of the IRWM planning process is that it brings a broad array of groups together into a forum to discuss and better understand shared needs and opportunities. A full list of stakeholders that have been a part of the original and updated IRWMP process can be found in Sections 1.2.2.1 and 1.2.6.

1.3 Region Description (Chapter 2)

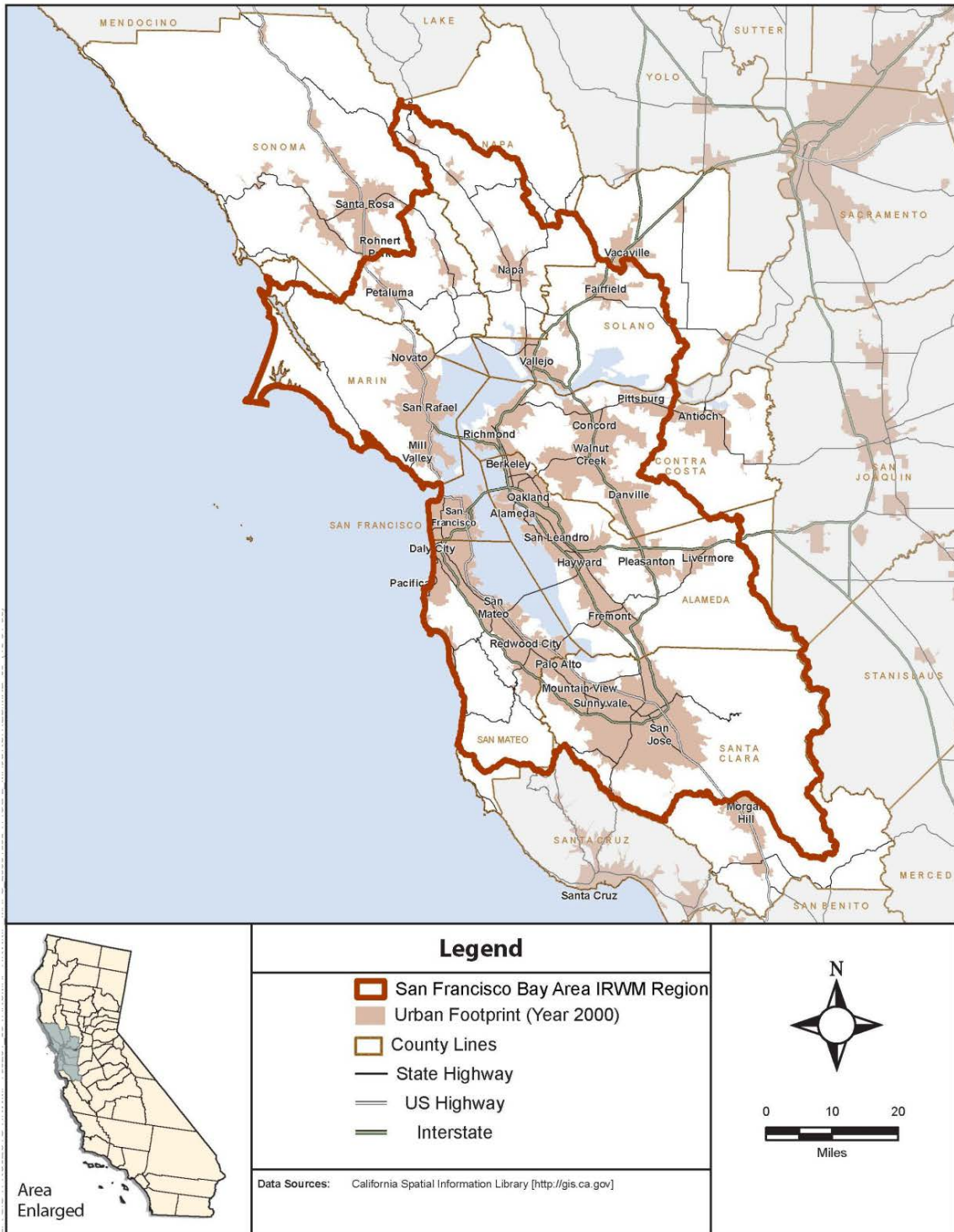
Chapter 2 describes the physical, environmental, social and demographic characteristics of the Region, provides an overview of its water systems, and identifies key issues and challenges facing the Region.

The Region is defined by the jurisdiction of the San Francisco Bay Regional Water Quality Control Board Region 2. The Region is expansive, diverse and complex. It includes all or portions of nine counties (Marin, Sonoma, Napa, Solano, Contra Costa, Alameda, Santa Clara, San Mateo and San Francisco), numerous water, wastewater, flood protection and land use agencies, and many NGO and non-profit organizations. With a population of 7.2 million (in 2010), the San Francisco Bay metropolitan region is the second largest in California, and the fifth largest in the nation. The Region includes three major metropolitan cities and approximately 100 smaller cities and towns (Figure ES-3).

Bay Area Fast Facts:

- Includes 9 counties and 101 cities
- 5th largest metropolitan area in the United States
- Home to 7.2 million people
- 24th largest economy in the world with 3.5 million jobs
- Home to over 105 animal and plant species that have been designated as threatened or endangered

Figure ES-3: Major Cities of the Bay Area



1.3.1 Demographics

The San Francisco Bay Area consists of 9 counties (whole and partial), 101 municipalities, 2.6 million households and a population of 7.15 million (Bay Area Census, 2010), making the metropolitan region the second largest in California (U.S. Census Bureau, 2011). Currently, almost half of the region’s population resides in Santa Clara and Alameda counties. North Bay counties, including Marin, Sonoma, and Napa, have the lowest population densities and are also projected to change the least in the 20-year planning horizon.

During this planning effort, additional research into disadvantaged and environmental justice communities was undertaken. The distribution of such communities was mapped along with the locations of wastewater treatment facilities and flood-prone areas. This effort helped to better identify and understand the environmental burden that these communities may endure. Mapping the locations of environmental justice communities and environmental burdens assists water and flood agencies to identify water resources management projects that may reduce or relieve potential water-related adverse impacts to these communities. Efforts to effectively involve and collaborate with disadvantaged and environmental justice communities are discussed in Chapters 12 and 14.

1.3.2 Biologic Resources and Water Quality

The San Francisco Bay Area is a complex network of watersheds, marshes, rivers, creeks, reservoirs, and bays predominantly draining into the San Francisco Bay and Pacific Ocean. The largest bodies of water in the Bay Area Region are the San Francisco Bay, San Pablo Bay, and Suisun Bay. The largest rivers are the Sacramento and San Joaquin Rivers which drain into the Sacramento-San Joaquin River Delta and then to Suisun Bay. Other major rivers include the Napa River and the Petaluma River in the North Bay and the Guadalupe River in the South Bay.

The Bay estuary is the largest estuary of the West Coast and one of North America’s most important. It is an environmentally sensitive and biologically diverse ecosystem made up of freshwater streams, tidelands, marshlands, wetlands, mudflats, farmland and other unique systems. The estuary has been designated by US EPA as an estuary of national significance, one of 28 in the US. Bay Area watersheds and their associated habitats provide a myriad of water resource and ecological benefits to both humans and wildlife. Watersheds provide freshwater sources for humans and wildlife; floodplains and wetlands can reduce flood impacts and improve water quality and groundwater resources; diverse habitats allow wildlife to flourish; and vegetation can reduce water temperatures and minimize erosion and sedimentation.

The Bay Estuary and its supporting local watersheds, host a distinct natural environment and ecology that includes many important habitats for species of regional, national and international significance. Bay Area watershed habitats include ephemeral and perennial rivers and streams, montane and valley foothill riparian areas, lakes and ponds, freshwater and tidal wetlands, and associated uplands habitats. The Region is an internationally recognized biodiversity hotspot, recognized for its abundance of birds, plants, insects and other species, and known for a high diversity of endemic species which thrive in the Mediterranean-type climate. The Bay Area is home to over 90 animal and plant species that have been designated by state and federal agencies as threatened or endangered (sfbaywildlifeinfo.org 2012, Center for Biological Diversity 2012), including the ones listed in Table ES-1.



Table ES-1: Threatened and Endangered Species in the Bay-Delta

Classification	Species
Mammals	San Joaquin kit fox, Salt-marsh harvest mouse
Birds	California least tern, California clapper rail, Western snowy plover, Marbled Murrelet, Northern spotted owl
Reptiles	Giant garter snake, Alameda whipsnake, Green sea turtle, Leatherback sea turtle, Olive ridley sea turtle
Fish	Chinook salmon, Coho salmon, Steelhead trout, Delta smelt, Tidewater goby
Amphibian	California red-legged frog, California tiger salamander
Crustaceans	California freshwater shrimp, Conservancy fairy shrimp, Longhorn fairy shrimp, Vernal pool tadpole shrimp
Insects	Calippe silverspot butterfly, Delta green ground beetle, Lange’s metalmark butterfly, Mission blue butterfly, Myrtle’s silverspot butterfly, San Bruno elfin butterfly
Plants	Antioch Dunes evening-primrose, Baker’s larkspur, Beach layia, Calistoga allocarya, Clara Hunt’s milk-vetch, Clousa grass, Contra Costa wallflower, Coyote ceanothus, Few-flowered navarretia, Fountain thistle, Keck’s Checker-mallow, Lake County stonecrop, Loch Lomond coyote thistle, Many-flowered navarretia, Marin dwarf-flax, Metcalf Canyon jewelflower, Bapa bluegrass, Pallid Manzanita, Palmate-braced bird’s beak, Pennel’s bird’s beak, Pitkin Marsh lily, Presidio clarkia, Presidio Manzanita, San Francisco lessingia, San Joaquin Orcutt grass, San Mateo thornmint, San Mateo woolly sunflower, Santa Clara Valley dudleya, Sebastapol meadowfoam, Soft bird’s-beak, Solano grass, Sonoma alopecurus, Sonoma spineflower, Sonoma sunshine, Suisun thistle, Tiburon jewelflower, Tiburon mariposa lily, Tiburon paintbrush, Vine Hill clarkia, White sedge, White-rayed pentachaeta, Yellow larkspur

Source: USFWS 2012, sfbaywildlifeinfo.org 2012.

In the Bay Area Region, surface water and groundwater quality is regulated by the SF RWQCB. The SF RWQCB classifies the San Francisco Bay and many of its tributaries as impaired for various water quality constituents. The SF RWQCB staff is currently developing more than 30 water quality improvement plans, known as Total Maximum Daily Loads (TMDL), to address the impaired water bodies. Water bodies in the Region are listed for pollutants including sediment, mercury, pathogens, PCBs, pesticide toxicity, nutrients, selenium, and bacteria.

1.3.3 Reliability: Water Supply - Water Quality - Wastewater Integration

Bay Area water supply agencies manage a diverse portfolio of water sources to meet the needs of the Region:

- Local Supplies: Local groundwater and surface water (31%)
- Sierra Nevada Supplies: Tuolumne and Mokelumne River supplies (38%)

- Delta Supplies: State Water Project, Central Valley Project, and other delta supplies (28%)
- Other: Desalination, recycled water, water transfers, and other supplies (3%)

The quality of water supplies used within the Bay Area Region varies greatly by source. Mokelumne River and Tuolumne River surface water supplies are of very good quality, with low concentrations of total dissolved solids (TDS), total organic carbon (TOC), chloride, bromide, microbial contaminants, and other water quality parameters. Delta supplies exhibit elevated concentrations of several water quality parameters including TDS, chloride, bromide, and TOC. Delta supplies also exhibit significant water quality variability by location, season, and hydrologic year type. TDS and hardness of groundwater supplies, similarly, vary significantly by basin. Bay Area water agencies are continually striving to address drinking water contaminants of concern through source water protection and advanced treatment strategies.

Recycled water, desalination, transfers, interties, groundwater banking, as well as other supply sources are used by many Bay Area agencies to supplement their water supplies. Over 30 agencies in the Bay Area have developed recycled water programs, providing the water for irrigation, commercial, industrial, agricultural, municipal and residential uses. In 2010, the Bay Area recycled almost 10% of the wastewater effluent generated, and supply is expected to more than double over the next 20 years.

Bay Area water agencies continue to seek to protect the reliability and quality of existing supplies through innovative water management strategies and regional cooperation.

1.3.4 Regional Challenges

Bay Area water management agencies and organizations pursue a variety of different resource management objectives to balance the water needs of sensitive habitats with customer water demands, provide a reliable supply of high quality water, protect and improve water quality in creeks and the Bay, provide flood management, restore watershed habitats and natural hydrologic functions, and ensure that natural resources and habitats are shielded from potential adverse impacts associated with land and water management. Meeting multiple objectives comes with challenges. In addition to the water supply quality and reliability challenges mentioned above, the key issues, needs, and priorities for the Bay Area Region with respect to water resource management include:

Regulatory Compliance Challenges: Challenges to achieving and maintaining compliance with applicable regulatory requirements such as stormwater requirements, flood protection permitting and more.

Flood Protection Challenges: The Region includes flat and highly developed valleys and bayside alluvial plains surrounded by steep terrain, a geography conducive to sudden flooding. This natural physical setting, and the increase in impervious surfaces due to urban development, puts many locales in the Bay Area at risk for flooding.

Financial and Funding Challenges: Water resources management entities in the Bay Area face several financial challenges for regional projects including, among other things, competing costs between existing operating costs and improvement projects, lack of funding

to maintain or replace aging infrastructure, and lack of funding to comply with stormwater permit obligations.

Environmental and Watershed Challenges: The Region’s water resource management and environmental stewardship challenges often occur when resources are managed for conflicting uses, such as instream flows and municipal water supplies, or land use development and habitat conservation. Effective management requires ongoing communication and collaboration between land and water resources managers and stewards.

Dependence on the Sacramento-San Joaquin Delta: Many Bay Area water agencies purchase imported water that flows through the Sacramento-San Joaquin Delta, where long-term reliability is impacted by a variety of issues including infrastructure reliability, endangered species, water quality, sea level rise, ecosystem restoration, political interests and more.

Interagency Coordination: Inter-jurisdictional coordination is a major challenge facing water resource management. Municipal boundaries, water supply service areas, and the boundaries of county flood protection agencies rarely coincide with watershed boundaries and can impede implementation of projects.

Expanding Recycled Water Use: Expanding recycling water use is important for meeting future demands in the Bay Area; however, some of the challenges include increasing salinity in recycled water supplies, and the cost per acre-foot of water for expanding non-potable distribution systems. Potable reuse is another option for expanding recycled water, but requires extensive public engagement and regulatory support.

Climate Change: Climate change is driven by increasing concentrations of carbon dioxide and other greenhouse gases that cause an increase in temperature and stress natural systems, such as oceans and the hydrologic cycle, resulting in environmental changes that may include sea level rise, changes in precipitation, and increasingly extreme storm events.

Coordination with Other Regions: Representatives from other regions are invited to participate in the development of the Bay Area’s IRWMP to provide a linkage between the Bay Area and IRWMPs from other areas, enabling information sharing and communication between the planning efforts.

1.4 Objectives (Chapter 3)

Chapter 3 presents the goals and objectives for the Plan, and describes how they were developed. The goals and objectives represent what the stakeholders and the CC have determined they would like the IRWMP to accomplish when its projects are implemented. Formulating meaningful and relevant goals and objectives for the Region required collaboration and collective interaction amongst the PUT, CC and stakeholders.

The process for developing goals and objectives for the Plan included review, confirmation and/or modification of the goals and objectives identified in the 2006 Plan, and development of “new” goals and objectives through a collaborative and iterative process. As a result of the process, the following changes were made to the 2006 IRWM:



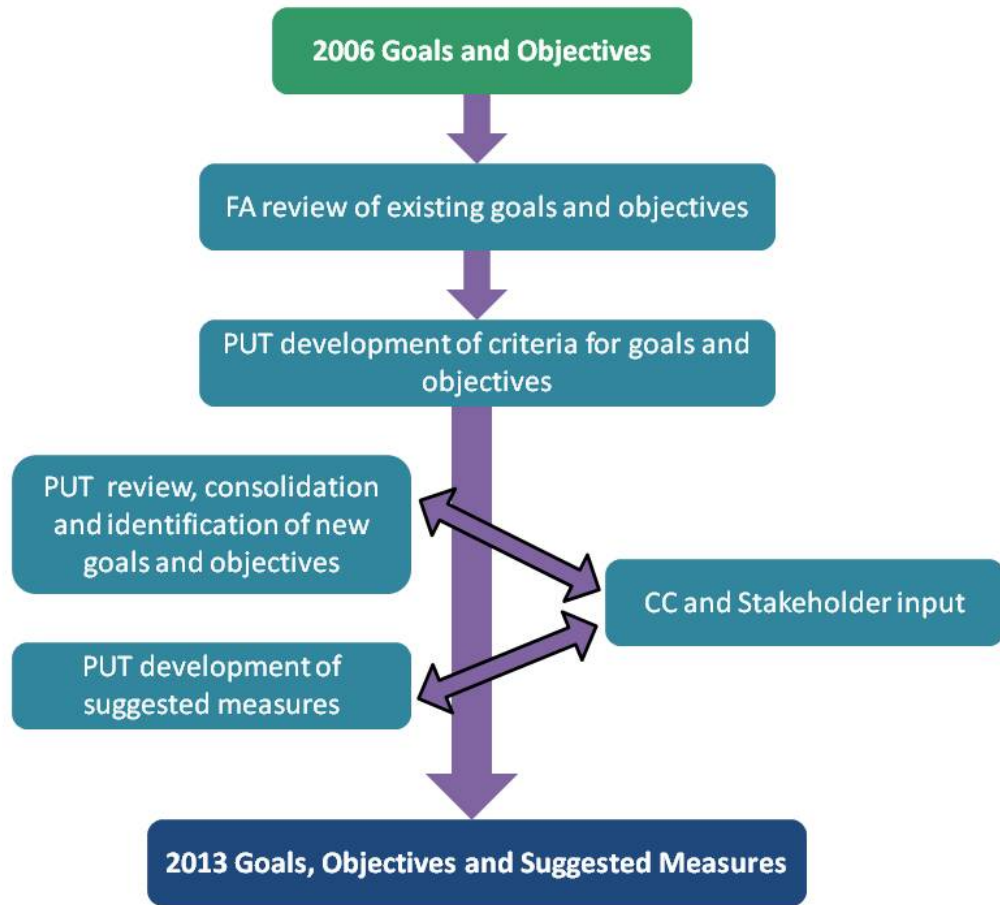
- The number of goals was reduced from six to five.
- The number of objectives was consolidated from 65 to 35.
- Objectives that address climate change and integration were added.

Objectives for the Bay Area Region were developed to support the goals and are categorized accordingly, as is shown in Figure ES-4.

The goals of the Bay Area IRWMP are to:

1. Promote environmental, economic and social sustainability
2. Improve water supply reliability and quality
3. Protect and improve watershed health and function and Bay water quality
4. Improve regional flood management
5. Create, protect, enhance, and maintain environmental resources and habitats

Figure ES-4: Development of Regional Goals, Objectives and Suggested Measures



The objectives generally apply to the Region as a whole and are meant to focus attention on the primary needs of the Region. Once the list of goals was developed, suggested measures for each objective were identified to provide a framework for measuring project outcomes and to gauge successful implementation of the IRWMP projects (See Chapter 3, Table 3-2).

1.5 Resource Management Strategies (Chapter 4)

A resource management strategy (RMS) is a project, program or policy that helps local agencies manage their water and related resources. Chapter 4 describes how the CC and its subcommittees developed an updated set of RMS for the IRWMP based on the strategies included in the 2006 IRWMP and the most recent set of statewide RMS developed by DWR as part of the California Water Plan Update processes for both 2009 and 2013 (now underway). The intent of this chapter is to encourage diversification of water management approaches as a way to mitigate for future uncertainties, including the effects of climate change.

The IRWMP incorporates an extensive range of RMS that includes most of the RMS on DWR's most recent list, along with some additional Bay Area-specific RMS. The chapter provides a

brief description of each RMS, along with examples of how these strategies are being implemented in the Bay Area. Table ES-2 shows the RMS that were selected for inclusion in the IRWMP.

Table ES-2: Selected 2013 Bay Area IRWMP Resource Management Strategies^(a)

<p>Reduce Water Demand</p> <ul style="list-style-type: none"> • Agricultural Water Use Efficiency • Urban Water Use Efficiency <p>Improve Operational Efficiency</p> <ul style="list-style-type: none"> • Conveyance – Delta • Conveyance – Regional/Local • Imported Water* • Infrastructure Reliability* • System Reoperation <p>Increase Water Supply</p> <ul style="list-style-type: none"> • Conjunctive Use and Groundwater Management • Water Recycling • Desalination – Brackish and Seawater • Surface Storage – CALFED • Surface Storage – Regional / Local • Water Transfers • Stormwater Capture and Management* <p>Improve Water Quality</p> <ul style="list-style-type: none"> • Pollution Prevention • Urban Runoff Management • Water Quality Protection and Improvement* • Salt and Salinity Management • Groundwater and Aquifer Remediation • Monitoring and Modeling • Drinking Water Treatment/Distribution • Matching Water Quality to Use • Wastewater Treatment* 	<p>Improve Flood Management</p> <ul style="list-style-type: none"> • Integrated Flood Management <p>Practice Resources Stewardship</p> <ul style="list-style-type: none"> • Environmental and Habitat Protection and Improvement* • Ecosystem Restoration • Sediment Management • Recharge Areas Protection • Agricultural Lands Stewardship • Watershed Management and Planning • Land Use Planning and Management <p>People and Water</p> <ul style="list-style-type: none"> • Economic Incentives • Outreach and Education • Regional Cooperation* • Recreation and Public Access* • Water-dependent Recreation • Water-dependent Cultural Resources
---	--

Note: (a) The Selected RMS are from DWR draft California Water Plan Update 2013, except those marked by the “*”, which were carried forward from the 2006 Bay Area IRWMP.

1.6 Integration of Supporting Activities (Chapter 5)

Chapter 5 presents potential activities, including planning efforts and efforts to establish policies, that may be undertaken to support integrated water resources management in the Bay Area.

An example of a planning activity includes Salt and Nutrient Management Plans (SNMP) developed by stakeholders to manage salts and nutrients on a basin- or watershed-wide basis,

as stipulated in the Recycled Water Policy (2009). An example of a SNMP preparation process is described in this section of the IRWMP, with the final SNMP and Guidance documents provided in Appendices B-1 and B-2.

In addition, policies adopted or implemented by individual organizations throughout the Region can support integrated water resources management by focusing attention on specific important elements. This section of the Plan describes policies supporting integration and development of integrated, multi-benefit projects, and various policy approaches that agencies throughout the Region have undertaken. Example documents which may be useful to organizations in the Region are Sample Integration Policies provided in Appendix B-3, Climate Change Adaptation Resources for Policy Development in Appendix B-4.

1.7 Regional Priorities (Chapter 6)

Chapter 6 describes the project solicitation, development, and review process that was used to select and prioritize projects for inclusion in the Plan, and provides the ranked project list.

During a “Call for Projects,” stakeholders were invited to submit any projects, programs, and action ideas they thought could help contribute to fulfilling the Plan goals and objectives irrespective of the project’s current funding, level of development, or readiness to proceed. The process to decide which projects to include in the Plan, and how to score them, relied on information submitted by the proponents that addressed a standard list of project criteria based on DWR guidelines.

The solicitation yielded 332 projects, which included some projects from the 2006 IRWMP and its appendices, and “new” projects that were submitted and subsequently added to the list by the CC. Of this list of projects, 30 were regional and 123 indicated DAC benefits. A total of 315 projects were ranked and 17 did not comply with IRWM goals and guidelines and were not considered eligible for ranking and evaluation.

The scoring criteria include:

- Addressing Multiple Goals
- Integrating Multiple Resource Management Strategies
- Strategic Considerations for IRWM Plan implementation (regionalism, partnerships and integration)
- Project Status
- Technical Feasibility
- Benefits to DAC Water Issues
- Benefits to Native American Tribal Community Water Issues
- Environmental Justice Considerations
- Project Costs and Financing
- Economic Feasibility
- Climate Change Adaptation
- Reducing GHG Emissions
- Reducing Dependence on the Delta

The CC developed a scoring methodology that assigned projects into three tiers. The review and ranking process was developed to reflect DWR guidelines, limit ambiguity, and be consistent and transparent to participants and stakeholders. The prioritization of projects was based on a detailed two-phase screening process consisting of an initial screening by the sub-region leads, followed by project evaluation and ranking. The process encouraged subregional integration while ranking at a regional level. The review and scoring process was available on the website so that project proponents could be informed about the process and how the

projects would be ranked as they completed their templates for project submittal. All projects that were submitted are included on a list that will be updated as projects are developed, or modified over time and re-prioritized. The ranked list is presented in Chapter 6, Table 6-2 or can be found at:

http://bairwmp.org/docs/2013-bairwm-plan-update/Active%20Project%20List_scored_2012.pdf

1.8 Impacts and Benefits (Chapter 7)

Chapter 7 describes the potential impacts and benefits of IRWMP implementation. This includes impacts and benefits within and between regions, and those potentially affecting disadvantaged and Native American Tribal communities. The chapter provides a screening-level analysis of the impacts and benefits of implementing the IRWMP, which will serve as a benchmark to help IRWM planners assess whether the anticipated benefits of the IRWMP have been realized, and/or unanticipated impacts have occurred.

For the purposes of characterizing potential impacts and benefits of IRWMP implementation, a list of project categories and types (based in part on RMS identified in Chapter 4 and projects submitted for consideration as part of the IRWMP update process) was developed. Potential impacts, benefits, and interregional effects were identified for each project type within each category. Table ES-3 and Table ES-4 list the impacts and benefits identified by the Region and associated with the project types identified in Chapter 7. Impacts and benefits will be analyzed in more detail prior to implementation of specific projects. As project concepts are further developed and advanced for approval, detailed environmental impact assessments will be conducted in accordance with the California Environmental Quality Act (CEQA) and, if applicable, the National Environmental Policy Act (NEPA).

Table ES-3: Potential IRWMP Environmental Impacts by Project Type

Project Categories and Type	Impact Category															
	Land Use					Water Resources				Biological Resources		Air and Energy			Delta water and biological resources	
	Agriculture	Land Use Compatibility	Recreation	Hazardous Materials	Cultural Resources	Growth Inducement Potential	Surface Water	Groundwater	Water Quality	Flooding	Aquatic Resources	Terrestrial Resources	Pollutant Emissions	Greenhouse Gas Emissions		Energy Use
Water Conservation and Demand Management																
Agricultural and Urban Water Use Efficiency						✓	✓	✓	✓		✓					
Water Supply Enhancement																
Infrastructure Reliability		✓				✓	✓		✓					✓	✓	✓
Surface Water Supply	✓	✓	✓		✓	✓		✓			✓	✓	✓	✓	✓	✓
Groundwater Management	✓	✓				✓	✓	✓	✓	✓	✓			✓	✓	
Water Reuse		✓				✓	✓	✓	✓		✓	✓	✓	✓	✓	
Stormwater Capture		✓					✓	✓	✓	✓	✓	✓				
Desalination		✓				✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Water Quality Protection and Improvement																
Water, Wastewater Treatment Facilities		✓		✓		✓	✓		✓		✓		✓	✓	✓	
Pollution Prevention and Runoff Management	✓	✓					✓		✓	✓	✓	✓				
Aquifer Remediation				✓		✓	✓	✓	✓		✓		✓	✓	✓	
Salt and Salinity Management		✓					✓	✓	✓		✓		✓	✓	✓	
Watershed Management																
Watershed Erosion Control, Land Stewardship		✓	✓				✓		✓		✓	✓				
Habitat Protection and Restoration																
Habitat Protection and Improvement		✓	✓		✓		✓	✓	✓	✓	✓	✓				
Ecosystem Restoration and Wetland Creation	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓				

Project Categories and Type	Impact Category															
	Land Use					Water Resources				Biological Resources		Air and Energy			Delta water and biological resources	
	Agriculture	Land Use Compatibility	Recreation	Hazardous Materials	Cultural Resources	Growth Inducement Potential	Surface Water	Groundwater	Water Quality	Flooding	Aquatic Resources	Terrestrial Resources	Pollutant Emissions	Greenhouse Gas Emissions		Energy Use
Flood and SLR Hazard Management																
Flood Hazard Management		✓	✓		✓		✓	✓	✓	✓	✓	✓				
SLR Hazard Management	✓	✓	✓		✓		✓	✓	✓	✓	✓					✓
Public Access, Recreation and Uses																
Water Dependant Recreation, Trails, etc.	✓	✓	✓		✓		✓		✓		✓	✓				

Table ES-4: Potential IRWMP Benefits by Project Type

Project Categories and Type	Benefit Category																																			
	Water Supply Reliability				Water Quality						Integrated Flood Management			Climate Change Response			Environmental Stewardship				Community Involvement and Public Use															
	Reduce total water demand through water use efficiency	Reduce potable water demand	Expand use of recycled water	Expand stormwater reuse	Diversify regional water mgmt portfolio	Increase storage or conveyance capacity	Increase aquifer recharge	Protect or improve surface water quality	Protect or improve groundwater quality	Improve drinking water quality	Improve wastewater treatment	Improve stormwater quality	Respond to salinity issues	Prevent nutrient loading	Reduce risk of flooding	Restore floodplains	Improve flood ctrl through wetland restoration, protection	Reduce stormwater runoff through improved infiltration	Reduce energy consumption and GHG emissions	Prepare for sea level rise, higher tidal surges	Prepare for extreme climate events, and drought	Contribute to carbon sequestration	Protect existing high quality habitat	Restore impaired habitat	Promote recovery of threatened and endangered species	Provide water for aquatic habitat	Manage pests and invasive species	Promote energy efficiency, use of renewable energy	Potential to benefit a disadvantaged community	Protect cultural resources	Promote community outreach, education and stewardship	Promote public access, water-oriented recreation				
Water Conservation and Demand Management																																				
Agricultural and urban use efficiency	✓	✓						✓	✓											✓		✓							✓	✓					✓	
Water Supply Enhancement																																				
Infrastructure Reliability	✓					✓			✓											✓	✓								✓							
Surface Water Supply					✓	✓																✓														
Groundwater Management	✓		✓	✓	✓	✓		✓	✓						✓			✓		✓				✓	✓	✓	✓			✓						
Water Reuse		✓	✓		✓	✓		✓											✓		✓		✓	✓	✓	✓				✓	✓					
Stormwater Capture	✓			✓	✓	✓	✓	✓			✓	✓		✓	✓			✓		✓			✓	✓	✓	✓			✓			✓	✓		✓	
Desalination					✓				✓			✓									✓									✓						

Project Categories and Type	Benefit Category																																
	Water Supply Reliability						Water Quality						Integrated Flood Management				Climate Change Response				Environmental Stewardship				Community Involvement and Public Use								
	Reduce total water demand through water use efficiency	Reduce potable water demand	Expand use of recycled water	Expand stormwater reuse	Diversify regional water mgmt portfolio	Increase storage or conveyance capacity	Increase aquifer recharge	Protect or improve surface water quality	Protect or improve groundwater quality	Improve drinking water quality	Improve wastewater treatment	Improve stormwater quality	Respond to salinity issues	Prevent nutrient loading	Reduce risk of flooding	Restore floodplains	Improve flood ctrl through wetland restoration, protection	Reduce stormwater runoff through improved infiltration	Reduce energy consumption and GHG emissions	Prepare for sea level rise, higher tidal surges	Prepare for extreme climate events, and drought	Contribute to carbon sequestration	Protect existing high quality habitat	Restore impaired habitat	Promote recovery of threatened and endangered species	Provide water for aquatic habitat	Manage pests and invasive species	Promote energy efficiency, use of renewable energy	Potential to benefit a disadvantaged community	Protect cultural resources	Promote community outreach, education and stewardship	Promote public access, water-oriented recreation	
Water Quality Protection and Improvement																																	
Water, Wastewater Treatment Facilities							✓	✓	✓	✓	✓	✓		✓					✓	✓	✓				✓	✓	✓		✓	✓		✓	✓
Pollution Prevention and Runoff Management			✓			✓	✓	✓		✓	✓		✓	✓			✓	✓					✓	✓						✓			✓
Aquifer remediation				✓	✓	✓	✓	✓				✓	✓											✓		✓							
Salt and salinity management			✓				✓		✓															✓		✓							
Watershed Management																																	
Watershed protection, sediment management, erosion control, land stewardship				✓		✓	✓	✓	✓		✓		✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	

Disadvantaged and Environmental Justice Communities

Section 7.11 provides an overview of IRWMP projects potentially benefitting disadvantaged communities, impacts resulting from implementation of disadvantaged community based projects, and effects on Native American Tribal communities. The IRWMP currently includes 123 projects that were identified by project proponents as providing DAC benefits. A majority of projects identified as providing DAC benefits are aimed at implementing low impact design features to control stormwater, improving levees and other flood control facilities, developing climate change adaptation strategies, restoring habitat or providing education and outreach to involve the community (including DACs) in watershed stewardship and protection efforts. In addition, a considerable number of wastewater treatment and recycled water projects were identified during the review process as providing DAC benefits.

Examples of projects that would provide environmental justice and DAC benefits include:

- Retrofit streets in DACs with low impact development features to control stormwater
- Conduct outreach to involve DAC communities in watershed stewardship activities
- Install stormwater retention and groundwater recharge facilities to improve flood protection
- Fund trash capture infrastructure and tracking tools for DACs
- Create seasonal wetlands to provide habitat and flood control benefits to a DAC
- Improve water supply reliability through the development of local groundwater and recycled water supplies

1.9 Performance and Monitoring (Chapter 8)

Chapter 8 documents the institutional structure and parties responsible for plan implementation and monitoring, ongoing data management, and how performance data will be used to improve future versions of the Plan.

The IRWMP is a dynamic document and its success is related to how well its goals and objectives are accomplished, at both the Plan and project levels. IRWMP objectives and regional priorities will continue to be reviewed for relevance and modified as needed to ensure the Plan reflects changing regional needs and continues to be effective. The list of projects will be reviewed and evaluated every five years, or as needed, to ensure that Plan objectives will be met, that the Plan projects offer the greatest benefit possible, and that the list of Plan projects continues to

Plan Performance and Monitoring is designed to ensure that:

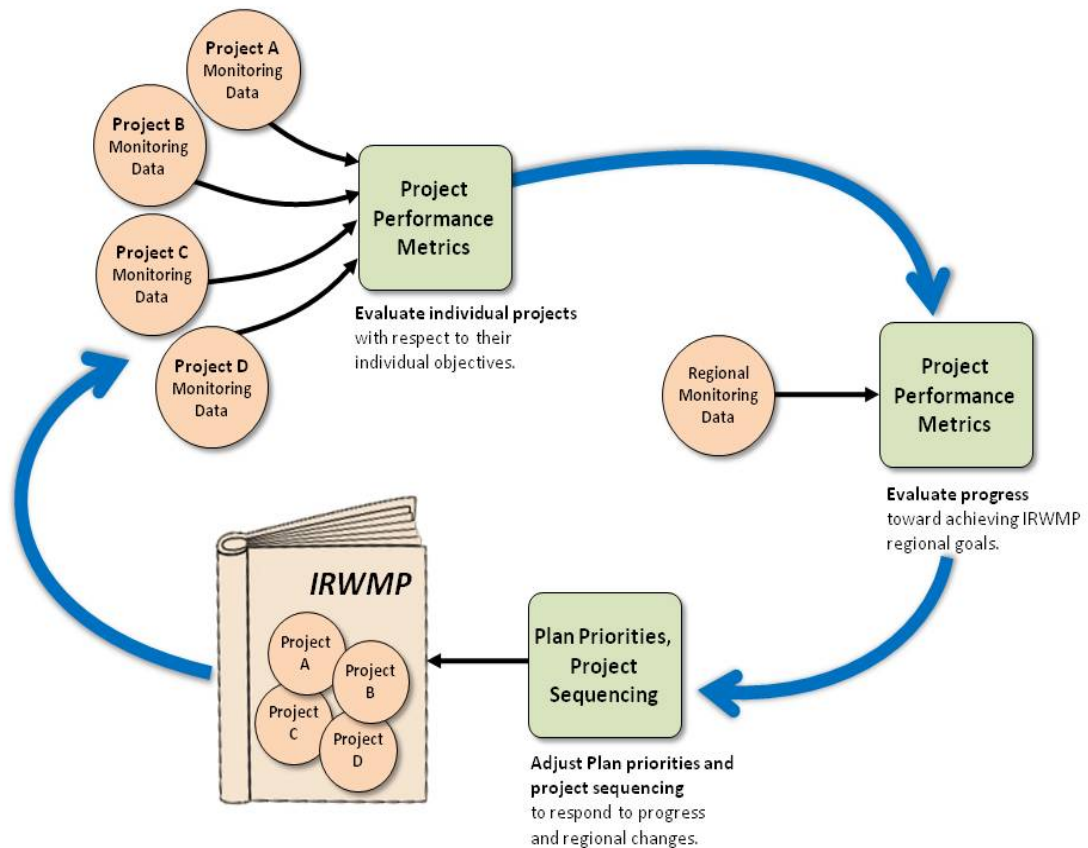
- Progress is being made towards meeting the objectives in the Plan.
- Projects listed in the Plan are being implemented.
- Projects are monitored to comply with all applicable rules, laws, and permit requirements.

address IRWMP objectives as well as state and regional priorities. Ongoing review and update will allow the plan to evolve in response to changing conditions and as better data is developed.

As noted above, the institutional structure for overseeing IRWMP development and implementation is the CC, which will continue to be responsible for Plan management and oversight. Once the Plan is adopted, the focus of the CC will shift toward implementation and tracking of progress. Each project identified in the Plan has a lead project proponent that has agreed to oversee project implementation. Therefore, implementation of the Plan will rely on actions taken by existing agencies and organizations within the Region. The project proponent will be responsible for ensuring that project operations are adjusted as appropriate based on the changing needs of the Region.

As work is completed and the Plan is implemented, the CC will recommend whether changes to the Region's goals, objectives, and needs should be considered. In response to the CC assessment, and considering the project's performance with respect to its performance measures, project proponents will be responsible for identifying and adjusting project operations as appropriate and feasible. The relationships between project performance, Plan performance, and adjustments to the regional goals are illustrated in Figure ES-5.

Figure ES-5: Bay Area IRWMP Implementation and Performance Assessment



1.10 Data Management (Chapter 9)

Chapter 9 discusses data management needs associated with the IRWMP. This section provides an overview of data needs in the Region, discusses data collection techniques, and the approach to data management and dissemination. Existing data collection and monitoring efforts are described, and data gaps with potential new data collection programs are identified. This section also discusses supporting statewide data needs via the abundance of information collected by Bay Area agencies and water resource programs.

As part of IRWMP implementation, data will be collected and compiled at several levels: the project level, the functional area and sub-region level, and the Regional, or Plan level. At each of these levels, effective data management and dissemination is critical to successful implementation of the IRWMP, and the Region's approach to managing this data is described in Chapter 9.

A wealth of information is collected by individual Bay Area agencies and water resource programs. While a limited number of programs compile and assess water resources data for the Bay Area region, it is not clear whether new regional assessments versus more efficient coordination of existing efforts would lead to more useful regional information. As future work is completed, the Bay Area's data library of relevant water resources information and data that have been collected by projects funded through IRWM grants will grow. Whether the library can become a more comprehensive resource throughout the region has yet to be determined. As such, the process represents an important first step toward developing a regional perspective on water resources management information.

The data and conclusions developed through the Bay Area IRWMP assessment process may be used by state agencies for developing regional fact sheets and determining regional funding priorities. In addition, DWR may use the information developed through future work to support updates to the California Water Plan. In addition to compiling water resources data and information about Bay Area IRWM Projects, the Bay Area data will support statewide data activities by retaining data collected to support project performance assessment in a manner consistent with continuing statewide data collection programs. Consistency with statewide monitoring programs is critical to ensure that regional projects contribute to efficient, uniform, and comprehensive study design and data collection.

1.11 Financing (Chapter 10)

Chapter 10 identifies various funding sources, including their associated requirements and guidelines, which may be available to assist with implementation of Plan projects. The chapter also provides a summary of funding opportunities by local, state, and federal funding sources.

The 332 projects identified in this Plan have total capital costs of approximately \$4.1 billion, with individual project costs ranging from \$27,500 to \$292 million, and averaging \$13.9 million. Securing adequate funding for program planning and implementation is one of the biggest challenges facing integrated regional planning efforts. Successful IRWMP implementation requires capital and planning expenditures associated with project implementation, as well as ongoing funding to support operation, maintenance and administration costs.

The Bay Area Region looked beyond state and federal funding sources to find examples of Innovative Local Funding Mechanisms. These included such efforts as setting up watershed trusts, enacting drainage fees, local voter initiatives, public-private partnerships, local grant programs, spending-offset projects, as well as private sources such as foundations and educational institutions.

1.12 Technical Analysis (Chapter 11)

Chapter 11 documents that the IRWMP is based on sound technical information, analyses, and methods, and provides a description of studies, models, or other methodologies used to analyze the technical information and data sets, and how they have shaped the CC and stakeholders' understanding of water management in the Region.

The Bay Area IRWMP builds on the data and technical analysis completed as part of other planning efforts. A wide variety of technical studies have been developed at the local level and the subregional level, and used in development and support of the IRWMP. Table 11-1 provides examples of studies and analyses completed by local agencies, including some developed in conjunction with state and/or federal agencies. Many studies are also being conducted in parallel with IRWMP development. The Plan was prepared using information and guidance provided by agencies representing all four FAs, and to varying degrees, municipalities, town councils, regulatory, environmental and land use planning entities that represent the CC and stakeholders. The IRWMP, in turn, will be used by these same entities to guide and support their future regional water resources management efforts.

During the course of preparing this IRWMP, data needs were identified by stakeholders and resource specialists working on the plan. Data needs identified for the Region include:

- Updated climate change projections to reflect new data, methods, and improved understanding of climate change
- Regional hydroclimate (hydrology and weather), including projections of microclimatic change and fog
- Statewide hydroclimate data on imported water supplies that show influence of climate change
- Data on sea level rise
- Weather variability (e.g., monthly averages of maximum and minimum daily air temperatures monthly precipitation and ET, etc.) in the Region and subregions
- Market saturation of water efficient fixtures
- Projections of future habitat change
- Improved projections of wetland response to sea level rise

1.13 Relation to Local Water Planning (Chapter 12)

Chapter 12 discusses the relationship between the IRWMP and local water planning efforts, and documents the local water plans on which the Plan Update is based. The intent of coordinating the IRWMP with local water planning efforts is: to ensure that the IRWMP is consistent with local water plans and reflects current, relevant elements of local water planning; to describe how the IRWMP relates to local planning efforts (including how regional planning feeds back into local planning, and how any inconsistencies between local and regional plans are identified and resolved), and; to incorporate climate mitigation and adaptation strategies from local plans into the IRWMP.

The IRWMP coordinates with local planning efforts by using local water plans as a basis for developing a regional view of water supply, water quality, wastewater, recycled water, flood protection, stormwater management, watershed management, habitat protection/restoration and climate change mitigation and adaptation strategies. The CC relied on local and regional plans, and information provided by local water managers, as a basis for developing all aspects of the IRWMP. To facilitate future coordination with local planning efforts, a comprehensive inventory containing over 100 local and regional water resource plans was developed and will be used for future IRWMP updates. Any inconsistencies that arise between the IRWMP and local water plans will be resolved on a case-by-case basis through consultation with the agency that prepared the plan. Chapter 12 also incorporates climate change mitigation and adaptation strategies from regional plans and local planning efforts.

Table ES-5 shows the Resource Plan types used within the Region for water management planning.



Table ES-5: Bay Area Water Resource Plan types by Water Management Activity and Functional Area

Water Management Activity (2012 Guidelines) ^a		Corresponding Functional Area	Plans in Bay Area IRWMP Water Plan Inventory ^b Addressing these Topics	
General	Specific			
Multi-Purpose Program Planning	<ul style="list-style-type: none"> • Groundwater Management • Urban Water Management • Water Supply Assessments • Agricultural Water Management • Salt and Salinity Management 	Water Supply & Water Quality	<ul style="list-style-type: none"> • Water Supply Management Programs • Urban Water Management Plans • Clean Water Programs • Groundwater Management Plans • Salt Management Plans • Salt/Nutrient Management Plans 	<ul style="list-style-type: none"> • Water Supply Evaluations • Stormwater Pollution Prevention Program • Integrated Resource Management Plan • Water Supply Strategies Action Plans • Water Supply Infrastructure Master Plan
		Wastewater & Recycled Water	<ul style="list-style-type: none"> • Recycled Water Master and Strategic Plans • Sewer System Master Plans 	<ul style="list-style-type: none"> • Wastewater Treatment Plant Master Plan • Water Reuse Programs
City and County General Planning	<ul style="list-style-type: none"> • Flood Protection • Stormwater Management • Low Impact Development 	Flood Protection & Stormwater Management	<ul style="list-style-type: none"> • Stormwater Management Plans • Flood Management Plans • Sediment Management Studies/Plans 	<ul style="list-style-type: none"> • Stream Management Master Plans • Stormwater Pollution Prevention Program • Stream Maintenance Plans
Emergency Response, Disaster Plans	<ul style="list-style-type: none"> • Watershed Management 	Watershed Management - Habitat Protection & Restoration	<ul style="list-style-type: none"> • Habitat Restoration Plans • Watershed Management and Stewardship Plans • Habitat Conservation Plans • Conservation Strategy Plans • Habitat and Species Recovery Plans • Historical Ecology Studies 	<ul style="list-style-type: none"> • Vegetation Management Plans • Habitat Stewardship Plans • Stream Maintenance Plans • Coastal Waters Management Plans • Watershed Action Plan • Invasive Species Studies/Plans



The Bay Area also benefits from several existing forums that promote regional planning and allow for coordination and collaboration of ideas. These include:

- Association of Bay Area Governments (ABAG)
- Metropolitan Transportation Commission (MTC)
- Joint Policy Committee
- Bay Area Clean Water Agencies (BACWA)
- Bay Area Water Supply and Conservation Agency (BAWSCA)
- Bay Area Water Agencies Coalition (BAWAC)
- Bay Area Flood Protection Agencies Association (BAFPAA)
- Bay Area Watershed Network (BAWN)
- North Bay Watershed Association (NBWA)
- City/county councils of government
- Low Impact Development Leadership Group
- Watershed Information Center & Conservancy (WICC) of Napa County
- Santa Clara County Basin
- Watershed Management Initiative (WMI)
- Bay-Delta Region of Resource Conservation Districts (RCDs)

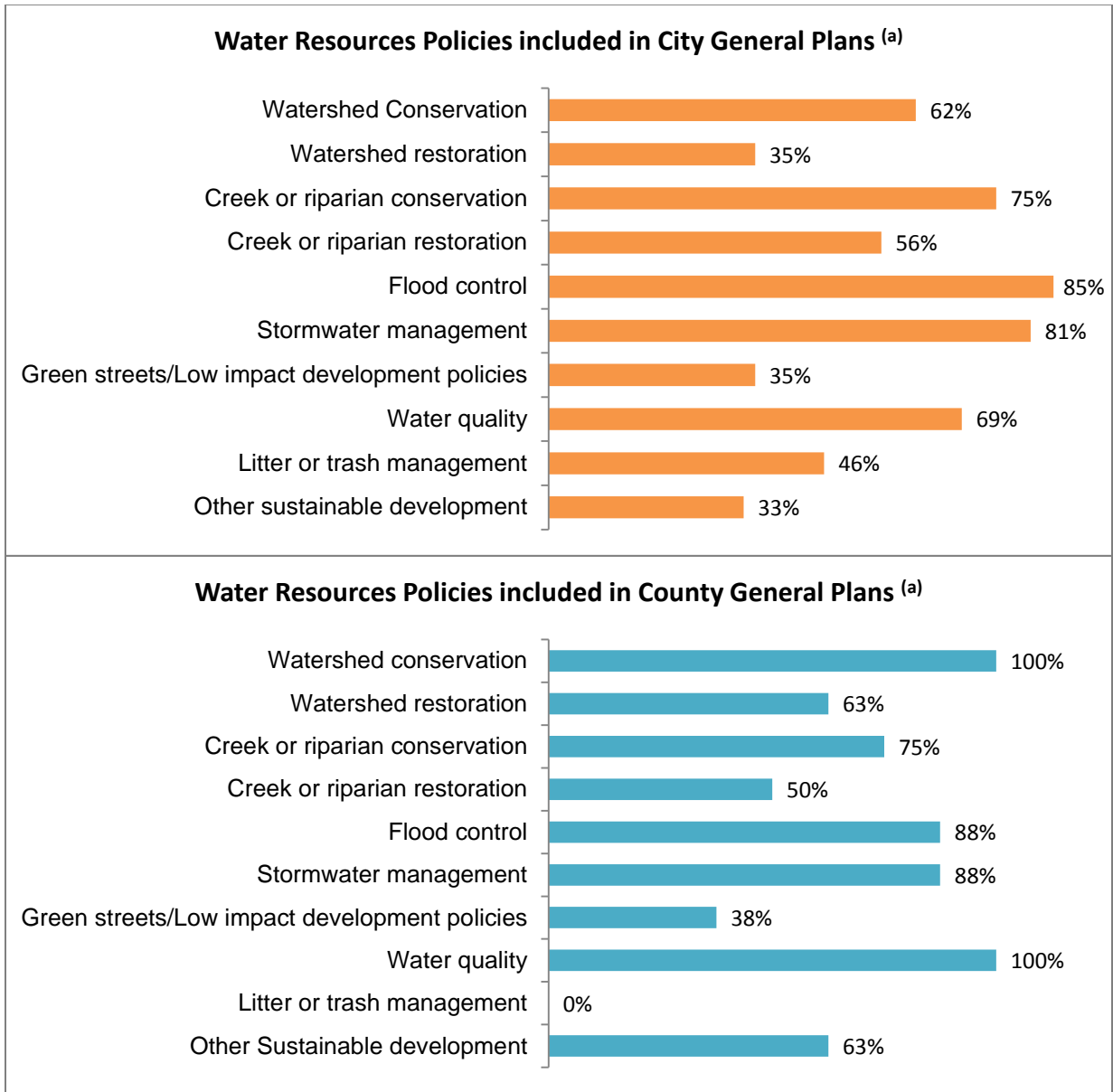
1.14 Relation to Local Land Use Planning (Chapter 13)

Chapter 13 describes the processes that foster communication between land use managers and regional water management groups with the intent of effectively integrating water management and land use planning. The chapter documents land use planning processes currently in place in the Bay Area Region, describes the current relationship between land use and water resources managers (including coordination with land use planning agencies undertaken as part of the IRWMP), and identifies opportunities to facilitate a better working relationship between water resources managers and land use decision makers in the future. Figure ES-6 presents the results of a survey (described in Section 13.2.2) of the prevalence of water resources policies contained in city and county general plans.

Coordination between land use planners and water resources managers in the Bay Area Region occurs during long-term planning, at the project level, and in association with a variety of specific initiatives and regulatory drivers. As part of the development of the IRWMP, the San Francisco Estuary Partnership (SFEP) convened discussions on collaboration between water agencies and land use agencies, and conducted a survey of local governments to establish a baseline inventory of local watershed policies and to assess the current degree of inter-agency collaboration. Telephone surveys with water resources managers also were conducted. These outreach efforts helped to identify constraints that may inhibit opportunities to facilitate improved collaboration among local land use planning and water resources managers. These constraints and opportunities in turn informed development of a draft plan for improving collaboration between land use and water resources managers in the future. The intent of the draft

collaboration plan presented in Chapter 13 is to promote a shared understanding of the effects of climate change on the Region, and to cultivate inter-agency ties to support implementation of integrated land-use and water resources related adaptation strategies.

Figure ES-6: Water Resources Policies Contained In Bay Area General Plans



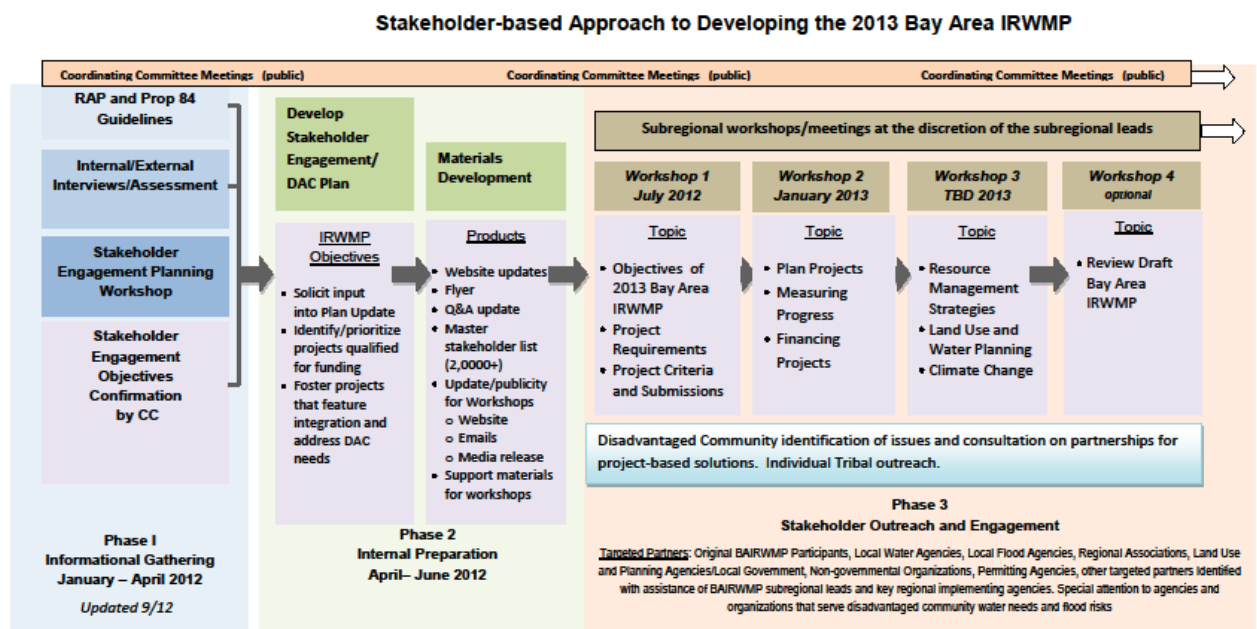
Note: (a) "Other sustainable development" includes green building, density increase, water recycling, greenhouse gas (GHG) emissions, open space conservation, green government, climate change and sea level rise plans, complete streets, transit oriented development, and rainwater and greywater reuse.

Source: San Francisco Estuary Partnership, *Local Governments Watershed Inventory*, September 12, 2012.

1.15 Stakeholder Involvement (Chapter 14)

Chapter 14 identifies the approach to stakeholder engagement and specific activities to involve a range of interests in development of the Plan and submission of proposed projects as shown in Figure ES-7. It also describes next steps to encourage ongoing participation in IRWMP activities, including outreach to Disadvantaged Communities (DACs) and Native American tribes.

Figure ES-7: Stakeholder-based Plan Development



The Plan Update outreach process was augmented by the consolidation of numerous existing IRWMP contact lists, and the addition of potentially interested water-related agencies and organizations, land use agencies, public policy organizations, and NGOs. At 1,500 contacts, this nearly tripled the stakeholder list that existed at the beginning of the planning process.

Particular attention was paid to identifying DAC and tribal representatives and encouraging their participation. This effort included producing one regional, and four subregional 2010 U.S. Census-based maps showing locations of DACs, producing DAC-specific informational materials including information in Spanish, collaborating with the San Francisco Estuary Partnership to help with outreach, and providing guidance to organizations and



Public Workshop #2

agencies interested in submitting DAC-serving projects. The outreach resulted in the submission of numerous DAC-serving projects.

General outreach materials included a flyer, a set of Frequently Asked Questions, CC meeting materials, and website information (<http://bairwmp.org/>). The website features a forum for linking potential project partners and an online project submission form.

Forums for stakeholder outreach included meetings in the four subregions, presentations to 20 local government and land use planning agencies, and two public workshops. These workshops attracted 60 to 80 participants each, a fourth of whom represented environmental, community, environmental justice and agricultural organizations.

1.16 Coordination (Chapter 15)

Chapter 15 describes how the CC has taken steps forward to improve coordination of water resources related matters in the Region. As described in previous sections of this Plan, management of water and other related resources within this Region is complex and has many interdependencies. Furthermore, the authorities and responsibilities for managing water and related resources within the Region are spread across many different agencies, organizations, and other stakeholders. This level of complexity, and the distributed network of shared responsibilities, creates the need for robust and effective coordination. This chapter also outlines how the CC coordinates with neighboring IRWM regions, local, state, and federal agencies and other stakeholders to improve integrated water management throughout the Region and neighboring areas.

Developing this Plan involved a diverse group of water supply, water quality, wastewater, stormwater, flood protection, watershed, municipal, environmental, and regulatory groups whose input played a key role in defining water resources management goals and objectives, identifying and selecting priority projects to help meet those goals and objectives, and coordinating IRWM related activities and efforts. The outreach and coordination process of the IRWMP brings together a broad array of groups into a forum to help ensure that the Plan reflects the water-related needs of the entire Region, promotes the formation of regional partnerships, and encourages increased coordination with local, state and federal agencies.

Coordination efforts within the Bay Area Region are facilitated by the following regional groups: Bay Area Water Agencies Coalition (BAWAC), Bay Area Clean Water Agencies (BACWA), Bay Area Stormwater Management Agencies Association (BASMAA), Bay Area Flood Protection Agencies Association (BAFPAA), Bay Area Water Supply and Conservation District (BAWSCD), and Bay Area Watershed Network (BAWN). Many of these groups also have representatives on the CC and act as representatives to the Functional Areas.

Multiple IRWM planning efforts, as individual regions, were initiated during 2005-2006 creating significant overlap among regions in the Bay Area. Several of the individual regions were consolidated into the Bay Area IRWMP during the plan update process. Since the IRWMP was first adopted in 2006, additional consolidation and clarification has occurred. Table ES-6 summarizes the historic overlaps in the San Francisco Bay Area region that have been consolidated since the 2006 Plan.

Table ES-6: Changes in Regional Boundaries since 2006 Plan

Region	Description of Previous Region Overlap	Boundary Resolution
Tomales Bay Watershed Integrated Coastal Water Management Plan	Complete overlap	The Tomales Bay Watershed Council decided not to pursue its Integrated Coastal Watershed Management Plan independently of the Bay Area IRWMP. IRWM efforts in the Tomales Bay watershed are now included in the San Francisco Bay Area IRWM effort.
East Contra Costa County (ECCC) IRWM Plan	Overlap of northwestern triangular area	Integration of northwestern portion into the Bay Area Region. Efforts with the San Joaquin IRWM region to be coordinated under East Contra Costa County region's governance
Napa-Berryessa IRWM Plan	Overlap of southwestern portion	Complete integration of southwestern portion into the Bay Area Region. The rest of their original region is coordinating with the Westside IRWM Region.
Solano IRWM Plan	Overlap of southwestern portion	Complete integration of southwestern portion into the Bay Area Region. The rest of their original region is coordinating with the Westside IRWM Region.
Sonoma County Agencies	Overlap of southeastern-portion	Integration of southeastern portion into the Bay Area Region through Sonoma County Water Agency. The rest of the county is involved in the North Coast IRWM efforts.

The CC and the leaders from other regions listed in Table ES-6 resolved the overlapping boundaries listed in the table through direct communication in writing, in phone conversations, and through invitations and participation in CC meetings. Through direct communication, individual regions could determine for themselves if partnering and integrating with the Bay Area IRWMP was beneficial to them. Each region reached their decision independently after attending CC meetings and discussing the proposed mergers of the boundaries with their respective organizing committees.

Representatives from neighboring regions are invited to participate and to provide a linkage between the Bay Area and other IRWMPs, enabling information sharing and communication between the regional planning efforts.

1.17 Climate Change (Chapter 16)

The climate change standard is new to the 2012 DWR guidelines, and the topic is addressed throughout the Bay Area IRWMP including in Chapter 3 - Goals and Objectives, and Chapter 12 – Relation to Local Water Planning. Chapter 16 focuses on assessing the potential climate change vulnerability areas of the Region’s water resources and identifying climate change adaptation strategies with the overall goal of making climate change adaptation an overarching theme throughout the Plan.

“Climate change is already affecting California and is projected to continue to do so well into the foreseeable future. Current and projected climate changes include increased temperatures, sea-level rise, a reduced winter snowpack, altered precipitation patterns, and more frequent storm events. These changes have the potential for a wide variety of impacts such as altered agricultural productivity, wildfire risk, water supply, public health, public safety, ecosystem function and economic continuity.”¹

The recent sea-level rise publication from the National Research Council titled *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (NRC 2012) provided estimates of relative sea-level rise for San Francisco Bay and is shown in Table ES-7. The “Projection” represents the mid-range estimate with an estimated accuracy of (i.e., ± 2 inches), and the “Range” represents the high and low estimates from the models.

Table ES-7: Relative Sea-Level Rise Projections for San Francisco Bay

Year	Projection (in)	Range (in)
2030	6 (± 2)	2-12
2050	11 (± 4)	5-24
2100	36 (± 10)	17-66

Source: Table 5.3, NRC (2012).

The climate change assessment is consistent with DWR’s *Climate Change Handbook for Regional Water Planning* and with the climate change requirements in the Proposition 84 IRWMP Guidelines (October 2012). The Vulnerabilities Areas from the Handbook were discussed and prioritized by the IRWMP’s climate change Technical Advisory Committee (TAC) comprised of local agency climate change specialists. The prioritized six vulnerability areas were:

1. Sea-Level Rise
2. Flooding
3. Water Supply and Hydropower
4. Water Quality
5. Ecosystem and Habitat
6. Water Demand

The potential impacts of each vulnerability area were discussed at the Bay Area level, and at each of the four subregional levels (North, East, South and West). Additional information on regional and local mitigation and adaptation strategies can be found in Chapter 12, Tables 12-2

¹ *California Climate Adaptation Planning Guide*, 2012, Executive Summary.

and 12-3. Regional adaptation strategies and performance metrics were identified for each vulnerability area. The next steps for future IRWMP updates were identified, including a discussion of needed research, models, and data. In addition, it is recognized that analysis needs to be done at the project level including: GHG baseline calculations, adaptation strategies, mitigation strategies and performance metrics.

1.18 Conclusion

The Bay Area IRWMP presents information and a water resources management plan for a diverse and complex region with many challenges. However, in the intervening years between the original 2006 Plan and this update, many advances have been made. A new “Subregional” strategy was developed to improve coordination and broaden participation throughout the region. Clarification of boundaries, and the roles of other Regions have been sought, and more communication among these external Regions was facilitated. Plan objectives were scrutinized and reorganized to better reflect the current needs. The Region examined various ways to enhance the resource management strategies, and selected specific strategies for inclusion. For the first time, supporting activities, like an example Salt and Nutrient Management Plan, are provided for others as resources. Projects were considered through Regional priorities that address multiple goals, not only at the Regional level, but also at the Subregional level. This shift allowed for initiation of the Subregional Process. From the new list of projects, impacts and benefits to the Region were assessed, and performance and monitoring criteria were established along with recommendations for data management and improvements to the website. Also, the Region explored options for addressing climate change and identified projects that may provide adaptation options. Innovative local water funding mechanisms were shared among the Region’s participants and discussed as options to augment the state and federal funding for implementing the IRWMP. The CC continued to foster collaboration and coordination of land-use and water planning efforts. Efforts to engage the public included several public workshops and stakeholders were encouraged to participate, review and comment on the IRWM Plan update. New research into local disadvantaged and environmental justice communities added to an already extensive project list and provided additional information on community needs. This IRWMP update addresses the critical needs of the Bay Area IRWM Region and provides a framework for continued collaboration.



Reference Engineering Services Manager	Type of Action Approve Agreement	Board Meeting of April 22, 2014
Subject Approve Water System Master Plan & Capacity Reserve Fee Study (CIP 14-W007): Approval of a Master Agreement for Consulting Services and Task Order No. 1 with West Yost Associates		
<input checked="" type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input checked="" type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	R. Biagtan
		<input type="checkbox"/> Board Member

Recommendation:

The Engineering Services Manager recommends the Board of Directors approve, by Resolution, a Master Agreement for Consulting Services with West Yost Associates and authorize, by Motion, the General Manager to execute Task Order No. 1 for Engineering Services to prepare the *Water System Master Plan & Capacity Reserve Fee Study (CIP 14-W007)*.

Summary:

This project is being conducted in accordance with Strategic Plan Element 1.1 to prepare a foundation for the District’s long term financial Planning and 2.3 to ensure that reliable and safe service is delivered to the District’s current and future customers in a timely manner.

The *Water System Master Plan & Capacity Reserve Fee Study (CIP 14-W007)* (Project) is a comprehensive update of both the District’s *Water System Master Plan Update, December 2005* (2005 Water Master Plan) and *Development of the District’s Water Capacity Reserve Fees, May 2011* (2011 Capacity Reserve Fee Report). The update to the District’s water master plan is essentially overdue. Since the 2005 Water Master Plan and 2011 Water Connection Fee Report, additional development plans have been completed for East Dublin, West Dublin, and Dougherty Valley, in Contra Costa County and the Parks Reserve Forces Training Area (Parks RFTA). The cities and counties that the District serves have adopted amendments to their general plans and specific plans. The District has also experienced operational challenges with its expanded potable water and recycled water system.

Staff conducted a “Quality Based Selection Process” in accordance with District’s Purchasing Procedures and Board Resolution No. 14-06 in selecting the firm to prepare the Project. Staff sent a Request for Proposal for the Project to five (5) firms and three (3) submitted proposals. Staff reviewed the proposals and chose two (2) firms for an informal interview. Based on the proposed approach to work, experience, and responses to interview questions, West Yost Associates was selected. The scope of services provided by West Yost is detailed in the Scope of Services attached to the Task Order. The project is expected to be completed in June 2015.

The Master Agreement for Consulting Services has a three-year term. Services will be authorized by task order. Each task order will include a scope of work and compensation on a time and materials basis with a not-to-exceed amount.

The project is funded 100% through the Water Expansion Fund (620). Adequate funds are available for this project.

This project was reexamined by the Board on February 4, 2014 when, by Motion, it affirmed starting this project in FYE 2014.

Committee Review			Legal Review	Staff Review		
COMMITTEE ---	DATE ---	RECOMMENDATION ---	Not Required	ORIGINATOR S. Delight	DEPARTMENT Engineering	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input checked="" type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$570,700	<input type="checkbox"/> Funding Source A. Water Expansion 100% (Fund 620) B.		Attachments to S&R 1. Task Order No. 1 2. 3.			

RESOLUTION NO. _____

RESOLUTION OF THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT APPROVING A MASTER AGREEMENT FOR CONSULTING SERVICES WITH WEST YOST ASSOCIATES FOR THE WATER SYSTEM MASTER PLAN & CAPACITY RESERVE FEE STUDY (CIP 14-W007) PROFESSIONAL ENGINEERING SERVICES

WHEREAS, the District desires to obtain professional consulting services for the Water System Master Plan & Capacity Reserve Fee Study, and has solicited proposals in accordance with Board Resolution No. 14-06; and

WHEREAS, District staff have evaluated professional engineering services proposals and conducted interviews for said consulting services, and have recommended the selection of West Yost Associates for providing professional engineering services; and

WHEREAS, District staff have evaluated the need for professional engineering consulting services for future District projects.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT, a public agency located in the counties of Alameda and Contra Costa, California, as follows:

That certain “Master Agreement for Consulting Services” (Exhibit A) by and between the Dublin San Ramon Services District and West Yost Associates is hereby approved, and the General Manager and District Secretary are hereby authorized and directed to execute, and to attest thereto, respectively, said agreements for and on behalf of Dublin San Ramon Services District.

Res. No. _____

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, counties of Alameda and Contra Costa, at its special meeting held on the 22nd day of April 2014, and passed by the following vote:

AYES:

NOES:

ABSENT:

Georgean M. Vonheeder-Leopold, President

ATTEST: _____
Nancy G. Hatfield, District Secretary

H:\Board\2014\04-22-14\Award Agreement West Yost\WMP & CRF-Res.docx

MASTER AGREEMENT for CONSULTING SERVICES
WITH
WEST YOST ASSOCIATES

THIS AGREEMENT, made and entered into this _____ day of _____, 20__ by and between DUBLIN SAN RAMON SERVICES DISTRICT, a public agency in the counties of Alameda and Contra Costa, California (“District”) and WEST YOST ASSOCIATES (“Consultant”), 7041 Koll Center Parkway, Suite 110, Pleasanton, CA 94566, (925) 426-2580;

WHEREAS, District requires professional **engineering** consulting services; and

WHEREAS, Consultant’s principals are duly licensed **professional engineers** in the State of California and Consultant represents that it is experienced in performing, and uniquely qualified to perform, the professional **engineering** consulting services; and

WHEREAS, District desires to engage Consultant for such services; and

NOW, THEREFORE, the parties hereto agree as follows:

1. **SERVICES.** Consultant shall perform assignments in accordance with the terms and conditions of this Agreement and written Task Orders issued from time to time by District to Consultant and accepted by Consultant. Each such Task Order shall include, but not be limited to: (i) a description of the services to be performed by Consultant, and the key personnel to be assigned by Consultant to the performance of the specific Task (who shall not be replaced without the prior written approval of the District, which shall not be unreasonably withheld); (ii) the time of performance for providing such services; (iii) maximum compensation payable for providing such services, provided that such compensation shall be payable pursuant to Paragraph 2 hereof unless otherwise expressly provided in the Task Order; (iv) District’s source of funding; and (v) such other provisions as the parties deem appropriate or necessary to accomplish the purpose of the Task Order. To the extent not expressly modified by Task Order, all other terms and conditions of this Agreement shall be deemed incorporated in each Task Order.

Consultant is expressly authorized to continue, complete, and shall be compensated by District for all work authorized, approved and performed, prior to the effective date of this Agreement, under any prior agreement(s) or any Task Orders issued by the District pursuant thereto.

2. **COMPENSATION.** District shall compensate Consultant for all services performed by Consultant pursuant to Paragraph 1 in an amount equal to Consultant’s hourly rates of charge for Consultant’s personnel times the number of hours, or portions thereof, of services correspondingly performed by said personnel. Said rates of charge are set forth in Exhibit “A” hereof, attached hereto, and by reference incorporated herein. Said rates may be adjusted, from time to time, upon written approval of the District.

District shall reimburse Consultant for other expenses directly incurred in performing services hereunder, if any, described in Exhibit "A."

Compensation and reimbursement of expenses shall be payable by District within thirty (30) days upon receipt of billing by Consultant. Billing by Consultant to District shall not be more often than monthly for services corresponding to each Task Order. The billing shall include an itemized statement briefly describing the services rendered and costs incurred and the authorized amount remaining.

3. RECORDS. Consultant shall keep and maintain accurate records of all time expended and costs and expenses incurred relating to services to be performed by Consultant hereunder. Said records shall be available to District for review and copying during regular business hours at Consultant's place of business, or as otherwise agreed upon by the parties.

4. NON-ASSIGNABILITY. Consultant shall not subcontract, assign, sell, mortgage, hypothecate or otherwise transfer its interest or obligations in this agreement or any Task Order issued hereunder in any manner, without the express prior written consent of District, which consent shall not be unreasonably withheld. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Consultant, upon District's written consent, from employing such independent consultants, associates, and subcontractors as may be necessary to assist in the performance of the services hereunder. Nothing herein shall be construed to give any rights or benefits to anyone other than District and Consultant.

5. STATUS. In the performance of services hereunder, Consultant shall be, and is, an independent contractor, and shall not be deemed to be an employee or agent of District. All services provided pursuant to this Agreement shall be authorized by Task Order issued by the District's General Manager or his or her designated representative and signed by the Consultant.

6. PERIOD OF SERVICE. Unless extended by Task Order, this Master Agreement shall expire on [December 31, 2017](#).

7. PERFORMANCE STANDARDS. In performing services hereunder, Consultant shall adhere to the standards generally prevailing for the performance of expert technical and consulting services similar to those to be performed by Consultant hereunder, shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided by a professional under similar circumstances, and shall, at no cost to District, re-perform services which fail to satisfy the foregoing standard of care. All drawings and specifications requiring certification by a Professional Engineer shall bear the stamp and signature of a registered engineer in the State of California.

Any costs incurred by the District (including but not limited to additional design costs, construction costs, and construction management costs, to the extent that any such costs are recoverable under California law) and used to correct deficiencies caused by Consultant's negligent errors and omissions or willful misconduct shall be borne solely by the Consultant. The District is relying

upon the Consultant's qualifications concerning the services furnished hereunder and, therefore, the fact that the District has accepted or approved the Consultant's work shall in no way relieve the Consultant of these responsibilities.

8. TERMINATION. Either party may terminate this Agreement without cause by giving the other party written notice thereof not less than sixty (60) days in advance of the effective date of termination, which date shall be included in said notice.

In the event of such termination, District shall compensate Consultant for services rendered to the date of termination, as the case may be, calculated in accordance with the provisions of Paragraph 2. In ascertaining services actually rendered to the date of termination, consideration shall be given both to work completed and work in process of completion. Nothing herein contained shall be deemed a limitation upon the exercise of the right of District to terminate this Agreement for cause, or otherwise to exercise such legal or equitable rights, and to seek such remedies as may accrue to District, or to authorize Consultant to terminate this Agreement for cause.

9. TITLE TO, POSSESSION OF, AND RELIANCE UPON DOCUMENTS. All documents, work products, plans, specifications, negatives, drawings, computer disks, electronic tapes, renderings, data reports, files, estimates and other such papers, information and materials (collectively, "materials"), or copies thereof (except proprietary computer software purchased or developed by Consultant) obtained or prepared by Consultant pursuant to the terms of this Agreement, shall become the property of District. District and Consultant shall, from time to time pursuant to Task Orders, specify which materials Consultant shall deliver to District ("Deliverables"). Deliverables are intended to, and may, be relied upon by District, or others designated by District, where appropriate, for those purposes for which District requested their preparation, or for use in connection with planning-level activities including, without limitation, the preparation of environmental documentation pursuant to the California Environmental Quality Act ("CEQA") or the National Environmental Policy Act ("NEPA") or similar statutes. Consultant will not be responsible for use of Deliverables, or portions thereof, for any purpose other than those specified in the preceding sentence.

Materials not delivered to District ("Non-Deliverables") shall be retained by Consultant, but Consultant shall provide District access to such Non-Deliverables at all reasonable times upon District's request. District may make and retain copies of all Non-Deliverables, at District's expense, for information and reference. Unless otherwise specified in writing by Consultant, use thereof for any purpose other than the purpose for which the Non-Deliverables were prepared, or for use in connection with planning-level activities including, without limitation, the preparation of environmental documentation pursuant to CEQA or NEPA or similar statutes, shall be at the user's sole risk.

10. COMPLIANCE WITH LAWS. In performance of this Agreement, Consultant shall exercise due professional care in compliance with all applicable federal, state and local laws, rules, regulations, orders, codes, criteria and standards. Consultant shall procure all permits, certificates, and licenses necessary to allow Consultant to perform the Services specified herein. Consultant shall not be responsible for procuring permits, certificates, and licenses

required for any construction unless such responsibilities are specifically assigned to Consultant under a Task Order.

Consultant shall comply at all times with California Occupational Safety and Health Act (“OSHA”) regulations regarding necessary safety equipment or procedures and shall take all necessary precautions for safe operation of its work, and the protection of its personnel and the public from injury and damage from such work.

11. NON-DISCLOSURE OF PROPRIETARY INFORMATION. Consultant shall consider and treat all drawings, reports, studies, design calculations, specifications, and other documents and information provided to Consultant by District in furtherance of this Agreement to be the District’s proprietary information, unless said information is available from public sources other than District. Consultant shall not publish or disclose District’s proprietary information for any purpose other than in the performance of services hereunder without the prior written authorization of District or in response to legal process. Nothing herein contained shall be deemed to abrogate compliance with the California Public Records Act (Government Code Section 6250, et seq.); provided that District shall determine and advise Consultant which documents, if any, are required to be disclosed under said Act.

12. INSURANCE. Consultant shall acquire and maintain for the duration of this Agreement and any Task Orders issued hereunder Workers’ Compensation, Employer’s Liability, Commercial General Liability, Automobile Liability, and Professional Liability (Errors and Omissions) insurance coverage from insurers with a current A.M. Best’s rating of no less than A:VII, unless otherwise acceptable to District, all relating to Consultant’s services to be performed hereunder covering District’s risks. The minimum amounts of coverage, and the breadth of coverage, corresponding to the aforesaid categories of insurance per insurable event, shall be as follows:

<u>Insurance Category</u>	<u>Minimum Limits</u>
Workers’ Compensation	Statutory Minimum
Employer’s Liability.	\$1,000,000 per accident for bodily injury or disease
Commercial General Liability	\$1,000,000 per occurrence for bodily injury, personal injury and property damage, using Insurance Services Office Commercial General Liability coverage (occurrence Form CG 0001) or another form providing equal or greater coverage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to each project/location or the general

	aggregate limit shall be twice the required occurrence limit.
Automobile Liability	\$1,000,000 per accident for bodily injury and property damage (coverage required to the extent applicable to Consultant's vehicle usage in performing services hereunder), using Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code I (any auto) or another form providing equal or greater coverage
Professional Liability (Errors and Omissions).	\$1,000,000 per occurrence or claim, and 2,000,000 aggregate.

Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: (1) the insurer shall either reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, officials, employees and volunteers; or (2) the Consultant shall provide a financial guarantee satisfactory to the District guaranteeing payment of losses and related investigations, claims administration and defense expenses.

Before performing any services under this Agreement, Consultant shall furnish District with, and shall obtain District approval of, original certificates and copies of information or declaration pages of the insurance required hereunder and, with respect to evidence of commercial general liability and automobile liability insurance coverage, original policy endorsements (on forms provided by the District or on other than the District's forms provided those endorsements conform to District requirements):

- a. Precluding cancellation before the expiration of thirty (30) days after District shall have received written notification of such cancellation by mail;
- b. Providing that Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability (cross liability endorsement); and
- c. Naming District, its governing Board of Directors, other boards, commissions, committees, officers, officials, employees, volunteers, and agents, as additional insured as respects to liability arising out of work or operations performed by or on behalf of the Consultant; or automobiles owned, leased, hired or borrowed by Consultant.
- d. Providing that, for any claims relating to Consultant's services hereunder, Consultant's insurance coverage shall be primary insurance with respect to the District, its governing Board of Directors, other boards, commissions, committees, officers, officials, employees, volunteers, and agents, and that any insurance or self-insurance maintained by District for itself, its governing Board of Directors, other boards,

commissions, committees, officers, officials, employees, volunteers, and agents, shall be excess of Consultant's insurance and not contributory with it.

e. Coverage shall not extend to any indemnity coverage for the sole or active negligence of additional insured in any case where an agreement to indemnify the additional insured would be invalid under Section 2782 of the California Civil Code.

Notwithstanding the provisions of subparagraph "a" above, Consultant shall notify District immediately in writing, by certified mail, return receipt requested, of any reduction or cancellation in coverage below the minimums required by this Agreement with respect to commercial general liability and automobile liability, professional errors and omissions liability insurance coverage, and Workers' Compensation coverage. District reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by this Agreement at any time.

13. INDEMNIFICATION. Consultant shall hold harmless, indemnify and defend District, its governing Board of Directors, other boards, commissions, committees, officers, officials, employees, volunteers, and agents (collectively, "Indemnities") from and against all claims for liability, losses, damages, expenses, costs (including, without limitation, costs and fees of litigation) of every nature, kind and description, which may be brought against or suffered or sustained by Indemnities, to the extent caused in whole or in part by the negligence, intentional tortuous acts or omissions, or willful misconduct of Consultant, its officers, employees or agents, in the performance of any services or work pursuant to this Agreement or any Task Order issued hereunder. Consultant's duty to indemnify and save harmless shall include the duty to defend as set forth in California Civil Code Section 2778; provided, that nothing herein contained shall be construed to require Consultant to indemnify Indemnities against any responsibility or liability in contravention of California Civil Code Section 2782.

a. In the event Consultant provides a defense pursuant to this Paragraph and such action or other claim is resolved by a final judicial determination, which includes a finding that there was no negligence on the part of Consultant, its officers, employees or agents, District shall refund to Consultant all defense costs, judgments and/or amounts paid by Consultant on behalf of Indemnities.

b. In the event Consultant provides a defense pursuant to this Paragraph and such action or other claim is resolved by a final judicial determination which includes a finding as to the respective negligence of Consultant, its officers, employees or agents and any Indemnities(s), then District shall be responsible to pay that portion of the judgment attributed to Indemnities(s), and shall refund to Consultant a pro rata share of any defense costs expended on behalf of Indemnities.

c. In the event Consultant provides a defense pursuant to this Paragraph and such action or other claim is finally resolved by any other means than those stated in Paragraphs 13(a) and 13(b), or in the event Consultant fails to provide a defense to Indemnities, Consultant and District shall meet and confer in an attempt to reach a mutual agreement regarding the apportionment of costs (including attorneys' fees), judgments

and/or amounts paid by Consultant and/or Indemnities. In the event Consultant and District are unable to reach agreement regarding such an apportionment, said dispute shall be submitted to arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association in effect on the date a demand for arbitration is submitted. The arbitration panel shall award the prevailing party its costs (including attorneys' fees) incurred in the arbitration.

14. COVENANT AGAINST CONTINGENCY FEES. Consultant hereby warrants that Consultant has not employed or retained any company or person, other than a *bona fide* employee working for Consultant, to solicit or secure this Agreement, and Consultant has not paid or agreed to pay any company or person, other than a *bona fide* employee, any fee, commission, percentage, brokerage fees, gifts or any other consideration, contingent upon or resulting from the award or formation of this Agreement. For breach or violation of this warranty, District shall have the right to annul this Agreement without liability or at District's discretion, to deduct from the Agreement price or consideration or otherwise recover the full amount of such fee, commission, percentage, brokerage fees, gifts or contingent fee.

15. ECONOMIC DISCLOSURE. Upon District's determination that the services provided through this Agreement involve making, or participation in making, decisions which may foreseeably have a material effect on a financial interest, Consultant and/or any of its employees identified by District shall prepare and file an Economic Disclosure Statement(s) consistent with District's local conflict of interest code and the Political Reform Act.

16. PARAGRAPH HEADINGS. Paragraph headings as used herein are for convenience only and shall not be deemed to be a part of any such paragraph and shall not be construed to change the meaning thereof.

17. WAIVER. A waiver by either District or Consultant of any breach of this Agreement shall not be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

18. SURVIVABILITY. The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way affect the validity or enforceability of any other portion or provision of this Agreement. Any void provision shall be deemed severed from this Agreement and the balance of this Agreement shall be construed and enforced as if this Agreement did not contain the particular portion or provision held to be void.

19. INTEGRATION AND MODIFICATION. This Agreement, together with the Compensation Schedule setting forth Consultant's rates and charges and compensable expenses, attached hereto as Exhibit "A," is adopted by District and Consultant as a complete and exclusive statement of the terms of this Agreement between District and Consultant, except to the extent revised and/or implemented through issuance of Task Orders hereunder. This Agreement supersedes all prior agreements, contracts, proposals, representations, negotiations, letters, or other communications between the District and Consultant, whether written or oral; *provided,*

however, that Consultant is expressly authorized to continue, complete, and be fully compensated by District for all work authorized, approved and begun, prior to the effective date of this Agreement, according to the terms of said agreement and/or any Task Orders issued by the District pursuant thereto.

20. AMENDMENTS. This Agreement may be amended or supplemented by the parties by written agreement approved and executed in the same manner as this Agreement.

21. SUCCESSORS AND ASSIGNS. This agreement shall be binding upon the respective successors, executors, administrators, assigns, and legal representatives to the parties.

22. GOVERNING LAW. This Agreement shall be governed by, and construed in accordance with, the laws of the State of California.

23. NOTICES. All notices to be given hereunder shall be written, and shall be sent by certified or registered mail, postage prepaid, addressed as follows:

To District: General Manager
 Dublin San Ramon Services District
 7051 Dublin Boulevard
 Dublin, CA 94568

To Consultant: Elizabeth Drayer
 West Yost Associates
 7041 Koll Center Parkway, Suite 110
 Pleasanton, CA 94566

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date and year first written.

DUBLIN SAN RAMON SERVICES DISTRICT,
a public agency

By _____
Bert Michalczyk, General Manager

Attest:

Nancy G. Hatfield, District Secretary

WEST YOST ASSOCIATES

Steve Dalrymple, Senior Vice President

2014 Billing Rate Schedule

(Effective January 1, 2014 through December 31, 2014)*

POSITION	LABOR CHARGES (DOLLARS PER HR)
Principal/Vice President	240
Engineering Manager	229
Principal Engineer/Scientist	207
Senior Engineer/Scientist/GIS Analyst	186
Associate Engineer/Scientist	169
GIS Analyst	164
Engineer II/Scientist II	147
Engineer I/Scientist I	126
Construction Manager III	186
Construction Manager II	169
Construction Manager I	158
Resident Inspector III	140
Resident Inspector II	129
Resident Inspector I	115
Sr. Designer/Sr. CAD Operator	120
Designer/CAD Operator	107
Technical Specialist III	120
Technical Specialist II	104
Technical Specialist I	87
Engineering Aide	71
Administrative IV	109
Administrative III	98
Administrative II	82
Administrative I	66

Hourly labor rates include Direct Costs such as general computers, system charges, telephone, fax, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.

Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, Travel, etc. will be billed at actual cost plus 15%.

Mileage will be billed at the current Federal Rate.

Subconsultants will be billed at actual cost plus 10%.

Computers are billed at \$25 per hour for specialty models and AutoCAD.

Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates.

Expert witness testimony and depositions billed at 200% of standard hourly rates.

A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

* This schedule is updated annually

January 23, 2014

Printed on 50% Recycled Paper

2014 Billing Rate Schedule (continued)

(Effective January 1, 2014 through December 31, 2014)*

Surveying and Equipment Charges

POSITION	LABOR CHARGES (DOLLARS PER HR)
GPS, 3-Person	366
GPS, 2-Person	317
GPS, 1-Person	246
Survey Crew, 2-Person	268
Survey Crew, 1-Person	202

Equipment Charges

EQUIPMENT	BILLING RATE (DOLLARS PER DAY)	BILLING RATE (DOLLARS PER WEEK)
DO Meter	16	81
pH Meter	5	26
Automatic Sampler	128	698
Transducer/Data Logger	40	202
Hydrant Pressure Gage	11	49
Hydrant Pressure Recorder (HPR)	—	202
Hydrant Wrench	5	32
Pitot Diffuser	29	132
Well Sounder	29	132
Ultrasonic Flow Meter	—	264
Vehicle	87	437
Velocity Meter	11	64
Water Quality Multimeter	173	946
Thickness Gage	—	70

* This schedule is updated annually

January 23, 2014

Printed on 50% recycled paper



West Yost Associates
Task Order No. 1 to Agreement dated April _____, 2014

Date: April 22, 2014

Project Name and Number: Water System Master Plan Update and Capacity Reserve Fee Study
FY 13-14 (CIP 14-W007)

Task Title: Water System Master Plan & Capacity Reserve Fee Study

Project Manager Name & Signature: Steve Delight _____

Source of Funds: Water Expansion Fund (620)

Board Review Committee: Board

Account Number: 14-W007.planni.cip

Authorization Amount: \$570,700

Purchase Order Number: TBD

Return Purchase Order to: Evita Schnupp

Compensation Method: Time and Expense to a maximum per Agreement or Fixed Fee

Completion Date: June 30, 2015

Insurance Requirements: Per Agreement, no special requirements

Work Product: See Attachment "A"

Digital Drawings, if applicable: Digital files shall be in AutoCAD 2000 or higher drawing format. Drawing units shall be decimal with a precision of 0.00. Angles shall be in decimal degrees with a precision of 0. All objects and entities in layers shall be colored by layer. All layers shall be named in English. Abbreviations are acceptable. All submitted map drawings shall use the Global Coordinate system of USA, California, NAD 83 California State Planes, Zone III, U. S. foot.

Scope of Work: See Attachment "A"

Economic Disclosure: Not Required

Recommended by: Rhodora Biagtan (_____)

Accepted by: _____
Steve Dalrymple, Senior Vice President
West Yost Associates
Date _____

Authorized by: _____
Bert Michalczyk, General Manager
Dublin San Ramon Services District
Date _____

EXHIBIT A: SCOPE OF SERVICES WATER SYSTEM MASTER PLAN & CAPACITY RESERVE FEE STUDY



INTRODUCTION

This Scope of Services describes West Yost Associates' (West Yost's) proposed services for the Dublin San Ramon Services District (District) Water System Master Plan & Capacity Reserve Fee Study. The update of the District's Water System Master Plan & Capacity Reserve Fee Study (Master Plan) will guide the District's remaining capital improvement projects and establish appropriate capacity reserve fees to fund projects while recognizing the District's strategic goal of maintaining competitive service rates. The Master Plan will also develop solutions and guidelines for the efficient operation of the existing and future potable and recycled water distribution systems under various demand conditions.

Our approach to the development of the Water System Master Plan & Capacity Reserve Fee Study involves close collaboration with District staff to ensure agreement with the assumptions and criteria used and concurrence and understanding with the findings and recommendations contained in the Master Plan. At the completion of each task, a draft chapter will be prepared and submitted to the District for review and comment. Those individual draft chapters, with the District's comments incorporated, will then be compiled to form the Water System Master Plan. The Water System Master Plan will include the following chapters:

- Executive Summary
- Chapter 1. Introduction
- Chapter 2. Service Area and Existing System Facilities
- Chapter 3. Existing and Projected Potable and Recycled Water Demands
- Chapter 4. System Planning and Performance Criteria
- Chapter 5. Potable and Recycled Water Hydraulic System Models
- Chapter 6. Evaluation of Existing Potable Water System
- Chapter 7. Evaluation of Future Potable Water System
- Chapter 8. Evaluation of Existing Recycled Water System
- Chapter 9. Evaluation of Future Recycled Water System
- Chapter 10. Recommended Capital Improvement Plan

The Capacity Reserve Fee Study will be issued as a separate report, with the basis for the assumptions in the Capacity Reserve Fee directly aligned with the Water System Master Plan findings and recommendations.

West Yost's scope of work includes thirteen (13) tasks, each of which is described below. Each task includes an objective and a summary of anticipated work tasks and task deliverables, and where applicable, task assumptions.

TASK 1. DATA COLLECTION AND REVIEW

The objective of this task is to evaluate and review available information on the existing water system that defines its current capabilities.

West Yost will review available materials and supplement or update these materials, as needed, to gain a better and more complete understanding of the major facilities in the District's water system, the basic operation of the water system, existing facility status, demands, and demand trends. This will include working with District staff to identify and collect additional information, studies, reports, designs and operational data.

West Yost will prepare an inventory that documents the existing potable and recycled water systems, including the service area, pressure zones, key facilities (supply turnouts, pump stations, reservoirs and pressure reducing stations) and distribution system piping.

Task 1 Deliverables:

- Data request list.
- Information collected in this task will be incorporated into a draft master plan chapter describing the DSRSD service area and existing system facilities (see Task 3).

TASK 2. REVIEW AND UPDATE SYSTEM PERFORMANCE CRITERIA

The objective of Task 2 is to confirm the District's standard system performance criteria and re-evaluate and better define specific system performance criteria that establish the foundation of the District's water system planning. Criteria to be reviewed will include, but not be limited to, the following:

- Sizing for transmission mains and distribution pipelines;
- Minimum required fire flows and fire flow durations;
- Maximum allowable head losses and velocities in transmission and distribution pipelines;
- Required storage volumes for reservoirs;
- Sizing of service zones capable of being served from a single reservoir;
- Minimum service pressures for different demand periods; and
- Potable water and recycled water system peaking factors.

West Yost will work with the District to review and confirm standard system performance criteria for use in evaluating the District's potable and recycled water systems. We will review the District's previous facility planning efforts as well as other available documents, including California Code of Regulations (Title 22, Chapter 15), California Fire Code, and EPA's Finished Water Storage Facilities, as well as criteria from other agencies, to compile and summarize a list of industry standards upon which to base/compare to the District's existing water utilities planning and system performance criteria.

West Yost will work with the Alameda County Fire Department, the City of Dublin, the City of San Ramon and District staff to identify required fire flows and durations for existing and projected future development within the District's service area.

We will work with the District staff to establish the quantity of operational, emergency and fire flow storage required in each District reservoir and pressure zone during different seasonal and demand conditions. As part of this task, the evaluation of how large a service area that can be reliably served from each reservoir will be conducted so that required operational, emergency and fire flow storage can be properly accounted for within each pressure zone.

Task 2 Deliverables:

- Draft master plan chapter on the overall water system performance criteria, including recommendations for proposed modifications to the District's existing service standards, if any, and recommendations for revised criteria for reservoir storage requirements for District review and comment. The contents of this draft chapter will provide the basis for the development of the Water System Master Plan and resulting Capital Improvement Plan.

TASK 3. EVALUATE EXISTING AND FUTURE SERVICE AREA CHARACTERISTICS

The objective of this task is to obtain and review the latest general plan and specific plan land use and population and employment information for the District's service area that will be the basis for developing potable and recycled water demand projections (see Tasks 4 and 7).

West Yost will meet with the City of Dublin and City of San Ramon Planning Divisions to obtain and review available growth projection information, including general and specific land use plans, existing and forecasted population and employment for the District's service area, and estimated timing for future development. Once we have reviewed this information, we will update the existing land use inventory and future land use projections within the District's service area, based on input from the City Planning Divisions.

We will use land use information gathered from the City of Dublin and the City of San Ramon to document existing land uses and identify growth areas and trends that will be used to develop potable and recycled water demand projections for 2020, buildout (based on adopted general plans) and ultimate planning horizons (see Tasks 4 and 7).

Task 3 Assumptions:

- The approach will rely on available information from the Cities of Dublin and San Ramon with regard to the timing and type of future development plans within the District's service area.

Task 3 Deliverables:

- Draft master plan chapter summarizing results of the service area evaluation to identify existing land uses and projected land uses for 2020, buildout (based on adopted general plans) and ultimate planning horizons for District review and comment (information from Task 1 will also be incorporated into this draft chapter).

TASK 4. DEVELOP POTABLE WATER DEMAND PROJECTIONS

The objective of this task is to establish existing potable water demands, peaking factors and unit use factors to project future water demands for 2020, buildout (based on adopted general plans) and ultimate planning horizons.

West Yost will summarize historical production and water use data using information provided by the District (including geocoded billing records with service address). We will work with District staff to refine unit use factors by land use type for use in preparing demand projections for future areas. Task assumes that the District will provide available potable water consumption data aggregated by billing class.

West Yost will compare and validate land use-based projections with population-based projections and work with the District to select the most appropriate demand projections for integration into the Master Plan. This task will involve working with the District's current water demand projection Excel spreadsheet and creating a GIS database of existing and projected demands for integration and use in allocating demands in the District's hydraulic water system model (see Task 5). Projected potable water demands, as reviewed and agreed to by the District, will be used in the hydraulic model update and development of the recommended Capital Improvement Plan.

We will then analyze historical and existing system usage to develop maximum demand day and peak hour peaking factors.

Task 4 Assumptions:

- District will provide available metered water use data, geocoded billing records and water production data (deliveries from Zone 7).

Task 4 Deliverables:

- Draft master plan chapter summarizing existing and projected potable water demands for District review and comment (combined chapter to describe potable and recycled water demands—also see Task 7)

TASK 5. POTABLE WATER HYDRAULIC MODEL UPDATE AND VALIDATION

The objective of this task is to update and validate the District's existing InfoWater potable water system hydraulic model to accurately reflect the existing distribution system configuration and current operating conditions, and to be used as an operational and planning tool to evaluate the need for future improvements.

West Yost will review the District's existing InfoWater hydraulic model and GIS water database and update the model as needed to incorporate recent capital improvements. We will confirm key facility information included in the model (turnouts, pump stations, tanks and control valves). Innozye's software tools will be utilized to check that the network is correctly constructed, and to identify and correct any network topology problems (e.g., disconnected nodes) and data flaws (e.g., duplicated pipes or nodes) that may have arisen from the original model development and/or use of the District's GIS files.

Based on our review of the demand allocation in the model, if necessary, West Yost will reallocate existing demands into the hydraulic model. We will use service address to geocode meter/consumption data to a GIS-based street map of the District's water service area, and use the modeling software's allocation module to automatically allocate meter/consumption data to individual junctions in the hydraulic model. We will use future land use designations and unit water use factors developed in Task 3 to allocate future demands to the model.

West Yost will then validate that the hydraulic model generally mimics system pressures and tank fill and draw trends using SCADA data from a recent 24-hour use period.

West Yost will provide the District with a "Modeler's Notebook" which will document details for each of the facilities simulated in the hydraulic model. The notebook will provide the District with a means to evaluate what West Yost has incorporated into the hydraulic model, and also to provide the District with a "living" reference that the District can use both in-house for modeling staff and/or provide to outside parties who will be running the model. One of the key elements is a technical memorandum that describes the existing model and the various data sets and scenarios which are developed in the Task 6 analysis. Another key element of the Modeler's Notebook will be documentation of the future demand allocation for future proposed developments. This technical memorandum will serve as an introduction to the Modeler's Notebook, and will provide the reader with enough information to easily navigate through the existing scenarios and develop additional scenarios with the existing data sets.

At the completion of the Master Plan, West Yost will conduct a training session with District staff to review the "Modeler's Notebook" and discuss protocols for the update and use of the hydraulic model.

Task 5 Assumptions:

- District will provide existing InfoWater water system hydraulic model, GIS files of existing system facilities, and SCADA data in electronic format (such as .csv files or Excel data files) for SCADA validation.

Task 5 Deliverables:

- Draft master plan chapter describing the validation and update of the potable water system hydraulic model (combined chapter to describe potable and recycled water models—also see Task 8).
- Modeler's Notebook including a technical memorandum that describes the existing model, demand allocation and the various data sets and scenarios which are developed and evaluated in the Task 6 analysis.
- At the completion of the project, West Yost will conduct a training session to review the Modeler's Notebook and discuss protocols for the update and use of the hydraulic model.

TASK 6. EVALUATE EXISTING AND FUTURE POTABLE WATER SYSTEM

The objective of this task is to use the updated hydraulic model of the District's potable water distribution system to analyze and identify improvements that provide appropriate capacity, pressures, and storage for the existing system and future system at buildout demands.

West Yost will use the existing demands and the hydraulic simulation model to assess and evaluate the adequacy of the District's existing water system facilities to meet the system performance criteria developed in Task 2. The existing system analysis will include the following:

- Evaluate pump station and storage requirements, comparing pump station and storage sizing with recommended service standards.
- Use the hydraulic model to assess system hydraulic performance for high demand conditions, comparing system performance with established service criteria. Analysis will be performed for maximum demand day plus fire flow and peak hour demand.
- Based on the results of the existing system evaluations, identify which existing facilities lack capacity and/or have insufficient redundancy to reliably meet required flow and pressure goals, while maintaining operational flexibility and system reliability and storage reserves. Based on existing demands, West Yost will prepare a detailed recommendation of improvements, prioritized based on degree of existing system deficiency and/or criticality of facility.

West Yost will evaluate and assess the adequacy of the District's buildout water system facilities to meet the system performance criteria developed in Task 2. The buildout system analysis will include the following:

- Evaluate pump station and storage requirements, comparing pump station and storage sizing with recommended service standards. Storage evaluation will include evaluation of storage needs and the need for, location and timing of new potable water reservoirs, including Reservoirs 1C and 20B.
- Use the hydraulic model to assess system hydraulic performance for high demand conditions, comparing system performance with established service criteria. Analysis will be performed for maximum demand day plus fire flows and peak hour demand.
- Identify which existing facilities lack capacity under buildout conditions. West Yost will then identify system improvements required so that the District can cost-effectively and reliably provide required flows and pressures, while maintaining operational flexibility and system reliability and storage reserves. This evaluation will include an evaluation of the need for, location and timing of a new turnout from Zone 7 (Turnout No. 6). Based on forecasted service growth and demand projections, West Yost will prepare a detailed recommendation of improvements, prioritized based on degree of existing system deficiency and/or criticality of facility.

We will use the updated hydraulic system model to conduct specialty hydraulic evaluations including the following:

- Evaluate various operational strategies and establish corresponding reservoir operational conditions to meet storage requirements and maintain delivered water quality, while minimizing operational issues. We will work with District operations staff to understand current operational issues and develop potential strategies to address and use the hydraulic model to evaluate potential strategies and solutions.
- Perform other water age, water quality, energy management or operational evaluations as requested by the District. These modeling activities are not yet defined but will be discussed with the District when the existing potable water system is being evaluated. For budgeting purposes, 40 hours of senior level modeling time has been assumed.

Task 6 Deliverables:

- Draft master plan chapter which summarizes the existing system evaluation and recommended system improvements to meet the established performance criteria for District review and comment.
- Draft master plan chapter which summarizes the buildout system evaluation and recommended system improvements to meet the established performance criteria for District review and comment.

TASK 7. DEVELOP RECYCLED WATER DEMAND PROJECTIONS

The objective of this task is to establish existing recycled water demands, peaking factors and unit use factors to project future water demands 2020, buildout (based on adopted general plans) and ultimate planning horizons.

West Yost will summarize historical production and water use data using information provided by the District and available in the District's 2005 and 2010 Urban Water Management Plans. We will work with District staff to refine unit use factors for use in preparing demand projections for future areas. It is assumed that the District will provide available recycled water consumption data.

The potential increased use of recycled water within the District's service area (particularly in the Parks RFTA service area, Santa Rita Jail and Federal Corrections Institution) and its ability to offset potable demands will be evaluated. This task will include creating a GIS database of existing and projected recycled water demands for integration and use in allocating demands in the District's hydraulic recycled water system model (see Task 8). Projected recycled water demands, as reviewed and agreed to by the District, will be used in the hydraulic model development and development of the recommended Capital Improvement Plan.

We will analyze and update, as needed, historical and existing system usage to develop maximum day demand and peak hour peaking factors.

Task 7 Assumptions:

- District will provide available metered recycled water use data.

Task 7 Deliverables:

- Draft master plan chapter summarizing existing and projected recycled water demands for District review and comment (combined chapter to describe potable and recycled water demands--see also Task 4).

TASK 8. RECYCLED WATER HYDRAULIC MODEL CONVERSION, UPDATE AND VALIDATION

The objective of this task is to convert the District's existing H₂OMap recycled water system hydraulic model to InfoWater and update and validate the hydraulic model to accurately reflect the existing recycled water system configuration and current operating conditions, and to be used as an operational and planning tool to evaluate the need for future improvements.

The District's existing H₂OMap recycled water model will be converted to InfoWater. Once the model is converted to InfoWater, West Yost will review and update the model as needed to incorporate recent capital improvements. We will confirm key facility information included in the model (pump stations, tanks and control valves). Innovyze's software tools will be utilized to check that the network is correctly constructed, and to identify and correct any network topology problems (e.g., disconnected nodes) and data flaws (e.g., duplicated pipes or nodes) that may have arisen from the original model development and/or use of the District's GIS files.

Based on the available water usage data that the District can provide to West Yost, we will develop and allocate existing demands into the hydraulic model. We will use service address to geocode meter/consumption data to a GIS-based street map of the District's water service area, and use the modeling software's allocation module to allocate meter/consumption data to individual junctions in the hydraulic model. Future land use designations and unit water use factors developed in Task 7 to allocate future demands to the model will be used.

West Yost will then validate that the hydraulic model generally mimics system pressures and tank fill and draw trends using SCADA data from a recent 24-hour use period.

West Yost will provide the District with a "Modeler's Notebook" which will document details for each of the facilities simulated in the hydraulic model. The notebook will provide the District with a means to evaluate what West Yost has incorporated into the hydraulic model, and also to provide the District with a "living" reference that the District can use both in-house for modeling staff and/or provide to outside parties who will be running the model. One of the key elements is a technical memorandum that describes the existing model and the various data sets and scenarios which are developed in the Task 9 analysis. Another key element of the Modeler's Notebook will be documentation of the future demand allocation for future proposed developments. This technical memorandum will serve as an introduction to the Modeler's Notebook, and will provide the reader with enough information to easily navigate through the existing scenarios and develop additional scenarios with the existing data sets.

At the completion of the Master Plan, West Yost will conduct a training session with District staff to review the “Modeler’s Notebook” and discuss protocols for the update and use of the hydraulic model.

Task 8 Assumptions:

- District will provide existing H₂OMap recycled water system hydraulic model and existing GIS files of system facilities.
- District will provide SCADA data in electronic format (such as .csv files or Excel data files) for SCADA validation.
- District will provide recycled water use data in electronic format by address and/or geocoded meter data.

Task 8 Deliverables:

- Draft master plan chapter describing the conversion, validation and update of the recycled water system hydraulic model (combined chapter to describe potable and recycled water models—also see Task 5).
- Modeler’s Notebook including technical memorandum that describes the existing model, demand allocation and the various data sets and scenarios which are developed and evaluated in the Task 9 analysis.
- At the completion of the project, West Yost will conduct a training session to review the Modeler’s Notebook and discuss protocols for the update and use of the hydraulic model.

TASK 9. EVALUATE EXISTING AND FUTURE RECYCLED WATER SYSTEM

The objective of this task is to use the updated hydraulic model of the District’s recycled water distribution system to analyze and identify improvements that provide appropriate capacity, pressures, and storage for the existing system and future system at buildout demands.

West Yost will use the existing demands and the hydraulic simulation model to assess the adequacy of the District’s existing recycled water system facilities to meet the system performance criteria developed in Task 2. The existing system analysis will include the following:

- Evaluate pump station and storage requirements, comparing pump station and storage sizing with recommended service standards.
- Use the hydraulic model to assess system hydraulic performance for high demand conditions, comparing system performance with established service criteria. Analysis will be performed for maximum day demand and peak hour demand.
- Based on the results of the existing system evaluations, identify which existing facilities lack capacity and/or have insufficient redundancy to reliably meet required flow and pressure goals, while maintaining operational flexibility and system reliability and storage reserves. Based on existing demands, West Yost will prepare a detailed recommendation of improvements, prioritized based on degree of existing system deficiency and/or criticality of facility.

West Yost will assess the adequacy of the District's buildout water system facilities to meet the system performance criteria developed in Task 2. The buildout system analysis will include the following:

- Evaluate pump station and storage requirements, comparing pump station and storage sizing with recommended service standards.
- Use the hydraulic model to assess system hydraulic performance for high demand conditions, comparing system performance with established level of service criteria. Analysis will be performed for maximum day demand and peak hour demand.
- Identify which existing facilities lack capacity under buildout conditions. West Yost will then identify system improvements required so that the District can cost-effectively and reliably provide required flows and pressures, while maintaining operational flexibility and system reliability and storage reserves. Based on forecasted service growth and demand projections, West Yost will prepare a detailed recommendation of improvements, prioritized based on degree of existing system deficiency and/or criticality of facility.

West Yost will use the updated hydraulic system model to conduct specialty hydraulic evaluations including the following:

- Work with District operations staff to develop operational scenarios and use the hydraulic model to evaluate coordinated use of Tassajara Reservoir with the City of Pleasanton.
- Perform other water age, water quality, energy management or operational evaluations as requested by the District. These modeling activities are not yet defined but will be discussed with the District when the existing potable water system is being evaluated. For budgeting purposes, 40 hours of senior modeling time has been assumed.

Task 9 Deliverables:

- Draft master plan chapter which summarizes the existing system evaluation and recommended system improvements to meet the established performance criteria for District review and comment.
- Draft master plan chapter which summarizes the buildout system evaluation and recommended system improvements to meet the established performance criteria for District review and comment.

TASK 10. DEVELOP CAPITAL IMPROVEMENT PLAN

The objective of this task is to develop a Capital Improvement Plan (CIP) that identifies and prioritizes required water system improvements using the results of the previous tasks.

West Yost will use the various technical evaluations, develop a list of capital improvement projects, including project description, location, size and costs, developed from conceptual-level cost data and recent bid results, where available. Cost estimates will be conceptual, planning level costs consistent with order of magnitude cost guidelines as defined by the Association of Cost Estimating Engineers.



EXHIBIT A: SCOPE OF SERVICES WATER SYSTEM MASTER PLAN & CAPACITY RESERVE FEE STUDY

Projects will be prioritized for near-term (5- to 10-year) and long-term (buildout) conditions. The recommended timing for future system improvements will be linked to the proposed development timelines identified in Task 3.

Task 10 Deliverables:

- Draft master plan chapter which summarizes the recommended CIP for District review and comment.

TASK 11. PREPARE WATER SYSTEM MASTER PLAN

The objective of this task is to prepare a draft and final Master Plan Report.

West Yost will integrate District comments into the previously submitted chapters that have been prepared in the above tasks into the appropriate chapters of the Water System Master Plan to develop the draft report. Following District review of the draft report, we will meet with District to discuss review comments and questions.

We will then update the draft report to integrate appropriate comments, and submit to the District.

Task 11 Deliverables:

- Five (5) hard copies of the Draft Report will be submitted to the District for review and comment.
- Five (5) hard copies and one (1) electronic copy in PDF format of the Final Report will be submitted to the District.

TASK 12. CONDUCT WATER SYSTEM CAPACITY RESERVE FEE STUDY

The objective of this task is to calculate cost-based capacity reserve fees for new customers connecting to the District's system which are aligned with the Capital Improvement Plan developed in the Water System Master Plan.

The first step of determining the system planning criteria, involves calculating the amount of water required by a single-family residential customer. The Water System Master Plan will provide the planning basis for the definition of a Dwelling Unit Equivalent (DUE) which provides a clear linkage between customer growth, total customer demands and the infrastructure needed to serve the new demands.

Once the system planning criteria are determined, the number of DUEs can be determined. For a water distribution system, one reasonable and rational method to determine the number of DUEs is to divide the future land use based water demand by the average day usage per DUE. This provides the linkage between the amounts of infrastructure necessary to provide service to a set number of customers. In the 2011 study, the projection of the number of new DUEs through 2035 was prepared by the District, and documented in the Analysis of Current and Projected Water System Capacity Utilization Memorandum. For this study, the number of DUEs will be updated based on future demand projections prepared for the Water System Master Plan (Tasks 3 and 5).

Given the number of DUE's, a component by component analysis is undertaken to determine the portion of the capacity reserve fee attributable to each component in dollars per DUE. The calculation of the component capacity reserve fee includes existing assets, planned future assets from the Master Plan, and the debt issued to pay for historical assets. Once the total costs of the existing and future infrastructure and debt service are determined, they are divided by the respective number of dwelling unit equivalents the infrastructure will serve to develop the cost per DUE for the specific infrastructure component. This methodology provides for both a "buy-in" and "expansion" component for the District's capacity reserve fee.

A determination of credits is done to assure that customers are not paying twice – once through capacity reserve fees and again within their rates. In the prior study, this aspect of the study was addressed, along with the District's Temporary Infrastructure Charge (TIC), which was levied to address the absence of connections sufficient to meet the debt service during fiscal years 2009 and 2010. This study will review the need for any debt service credits or special issues similar to the TIC adjustment. After any credits are applied, the result is a cost-based capacity reserve fee which is linked to the Master Plan.

The District has noted the change in the method (timing) used to collect these fees and the potential cash flow issues. It is important to note that the determination of these fees are not based upon, nor impacted by, cash flow projections. However, at the conclusion of the development of the fees, and working closely with District staff, a simple cash-flow model will be developed for the Water Expansion fund. This will allow the District to better understand the flow of funds as it relates to the projected development (as determined in Task 3) and projected capacity fees to be received in any year in relation to the potential (anticipated) debt service obligations of the fund. This simple cash-flow model will aid the District in determining whether new connections are projected to meet the annual obligations of the fund. Historically, when the annual obligations of the fund have exceeded the revenue derived from fees, the District has established a temporary infrastructure charge (TIC) to address these cash-flow issues.

Upon completion of the study, a report will be developed which summarizes the study's findings, conclusions and recommendations. As a part of this task, it is assumed that two public meetings will be included. These will be a meeting with the District's Finance Committee and a presentation to the District's Board of Directors.

Task 12 Deliverables:

- Draft Capacity Reserve Fee Study Report which summarizes the study's findings, conclusions and recommendations will be prepared and submitted to the District for review and comment.
- Following receipt of comments, a Final Report will be prepared and submitted to the District. Public Meetings.
- It is assumed that two public meetings will be included. These will be a meeting with the District's Finance Committee and a presentation to the District's Board of Directors.
- A copy of all Excel models developed as a part of this study, along with an electronic (Word file) User Manual, will be provided to the District at the completion of the study.
- A training session on the use of the financial model will also be provided to District staff.

TASK 13. PROJECT MANAGEMENT

The objective of this task is to use project management tools, including systems for tracking work progress and expenditures, proactive communications, and quality assurance and quality control to keep project on schedule and budget.

A Project Management Plan that defines the formal procedures for communications and the scope and objectives, deliverables, budget and schedule for the project, and basic information on the anticipated work product will be prepared.

A kickoff workshop will be conducted with District staff to review initial goals and priorities of the Project. We will present an up-to-date project schedule with key milestones identified for the project, and conduct an in-depth review of the water system with engineering and operations staff to collect information on system operation, adequacy, areas of concern, and known deficiencies.

Bi-weekly conference calls will be held, as well as as-needed face-to-face meetings (up to 6 assumed), to review project status, including work completed during the latest report period, work anticipated to be completed during the next reporting period, identified problems/issues that could affect Project budget/expenditures and/or schedule, outstanding issues to be resolved, and action items.

Monthly invoices and progress reports will be prepared.

Internal quality assurance and quality control for each of the project deliverables prior to submission to the District will be held. These reviews are budgeted as part of the technical tasks described above.

Task 13 Deliverables:

- Meeting agendas and minutes from meetings and conference calls will be submitted.
- Monthly status reports, monthly invoices and project schedule will be submitted.
- Kickoff meeting presentation materials will be presented.

EXHIBIT B: FEE ESTIMATE WATER SYSTEM MASTER PLAN & CAPACITY RESERVE FEE STUDY



FEE ESTIMATE

The estimated fee for completing the DSRSD Water System Master Plan & Capacity Reserve Fee Study is summarized in Table 1.

Task No.	Task Name	West Yost Hours	HDR Hours	Fee ^(a)
1	Data Collection and Review	52		\$9,400
2	Review and Update System Performance Criteria	136		26,200
3	Evaluate Existing and Future Service Area Characteristics	118		20,300
4	Develop Potable Water Demand Projections	248		42,500
5	Potable Water Hydraulic Model Update and Validation	264		44,600
6	Evaluate Existing and Future Potable Water System	854		153,800
7	Develop Recycled Water Demand Projections	116		19,300
8	Recycled Water Hydraulic Model Conversion, Update and Validation	166		29,000
9	Evaluate Existing and Future Recycled Water System	322		60,700
10	Develop Capital Improvement Plan	146		26,300
11	Prepare Water System Master Plan	162		35,100
12	Conduct Water System Capacity Reserve Fee Study	58	219	64,400
13	Project Management	177		39,100
TOTALS		2,819	219	\$570,700

^(a) Fee includes West Yost labor and direct costs, HDR labor and directs and subconsultant markup of 10 percent.

EXHIBIT C: PROPOSED SCHEDULE WATER SYSTEM MASTER PLAN & CAPACITY RESERVE FEE STUDY



PROPOSED SCHEDULE

The proposed schedule for preparing the DSRSD Water System Master Plan & Capacity Reserve Fee Study is shown on the following page.

**DSRSD Water System Master Plan & Capacity Reserve Fee Study
Proposed Project Schedule**

	2014										2015						
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Task 1: Data Collection and Review																	
Task 2: Review and Update System Performance Criteria																	
<i>District Review Period</i>																	
<i>Workshop with District Engineering and Operations Staff</i>																	
Task 3: Evaluate Existing and Future Service Area Characteristics																	
<i>District Review Period</i>																	
Task 4: Develop Potable Water Demand Projections																	
<i>District Review Period</i>																	
Task 5: Potable Water Hydraulic Model Update and Validation																	
<i>District Review Period</i>																	
Task 6: Evaluate Existing and Future Potable Water System																	
<i>District Review Period</i>																	
Task 7: Develop Recycled Water Demand Projections																	
<i>District Review Period</i>																	
Task 8: Recycled Water Hydraulic Model Conversion, Update and Validation																	
<i>District Review Period</i>																	
Task 9: Evaluate Existing and Future Recycled Water System																	
<i>District Review Period</i>																	
Task 10: Develop Capital Improvement Plan																	
Capital Improvement Recommendations																	
Optimization Recommendations and O&M Guidelines																	
<i>District Review Period</i>																	
<i>Workshop with District Engineering and Operations Staff</i>																	
Task 11: Prepare Water System Master Plan																	
Draft Report																	
<i>District Review Period</i>																	
Final Report																	
Modeler's Notebooks for Potable and Recycled Water Models																	
<i>Training Session for Use of Hydraulic Models</i>																	
Task 12: Conduct Water System Capacity Reserve Fee Study																	
Task 1: Determination of System Planning Criteria																	
Task 2: Determination of Dwelling Unit Equivalents (DUEs)																	
Task 3: Calculation of System Components																	
Task 4: Determination of Credits / Special Issues																	
Task 5: Prepare Water System Capacity Reserve Fee Study Report																	
Draft Report																	
<i>District Review Period</i>																	
Final Report																	
Training Manual for Financial Model																	
<i>Presentation to District Finance Committee</i>																	
<i>Presentation to District Board of Directors</i>																	
<i>Training Session for Use of Financial Model</i>																	
Task 13: Project Management																	
Kickoff Meeting																	
Bi-Weekly Conference Calls																	
Monthly Progress Reports																	



Reference General Manager	Type of Action Accept Report	Board Meeting of April 22, 2014
Subject Accept Water Supply Report through April 1, 2014 and Receive Briefing on Programmatic Actions Needed in Response to the Drought		
<input checked="" type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input type="checkbox"/> Verbal	<input checked="" type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	B. Michalczyk
		<input type="checkbox"/> Board Member

Recommendation:

The General Manager recommends that the Board of Directors accept, by Motion, the April 1, 2014 Water Supply Report.

Summary:

The attached Water Supply Report has traditionally been presented to the Water Committee each month through the winter season. Given the seriousness of the water supply issues facing the State, the Livermore-Amador Valley and the District in 2014, this year these reports are being presented to the full Board. The Water Supply Report documents the conditions and situations of various aspects of the Water Supply situation as of April 1, 2014; the Board will be verbally briefed on current conditions and situations at the Board meeting. As directed by the Board, the Water Supply Report includes a status report of activities related to the Drought Action Plan endorsed by the Board in February 2014.

The Water Supply Report sets the stage for a sequential discussion of the following future actions that will need to be considered by the Board in response to the drought:

- Declaration of a Community Drought Emergency including an update of specific water use curtailment goals;
- Mandatory water use restrictions and water use prohibitions;
- Penalties for and enforcement of water use restrictions and water use prohibitions;
- Water shortage rate stage;
- Affordability program for low water using customers;
- Enhanced rebate program for water saving retrofits and replacements; and
- Updated Drought Response Action Plan.

Committee Review			Legal Review	Staff Review		
COMMITTEE ---	DATE ---	RECOMMENDATION ---	Not Required	ORIGINATOR B. Michalczyk	DEPARTMENT Executive	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$0	<input type="checkbox"/> Funding Source A. B.	Attachments to S&R 1. Monthly Water Supply Report through April 1, 2014 2. 3.				

WATER SUPPLY OUTLOOK AND CONSERVATION REPORT

April 1, 2014

Each year various agencies closely monitor precipitation, snow water content, reservoir levels and runoff to project the water supply situation for California for the irrigation season (summer and fall). The projections are made on a “Water Year” basis that runs from October 1 through September 30 of the following year. The District monitors this information throughout the wet season to be prepared for action if needed in the Spring of the year once the water supply picture becomes clear. In normal years, reports are made to the Water Committee on a monthly basis. In critical years such as this reports are made on a biweekly basis to the full Board.

Legal and Regulatory Uncertainties

As Water Year 2014 progresses, there remains a great deal of legal and regulatory uncertainty about the reliability of water supplies from the Sacramento-San Joaquin Delta. This uncertainty develops due to interwoven legislation, regulation, legal actions and basic hydrology of the Delta. This situation has existed in some form for several decades but has become particularly critical in recent years. It is very likely that the uncertainties will continue for at least several years into the future. Attachment A provides specific information about what is driving the various legislative, regulatory and legal uncertainties related to the Delta water supply. The remainder of this memorandum addresses the hydrology of the Delta and the water supply as it is developing in WY 2014.

Meteorological and Hydrological Conditions - Water Year to Date

April Preliminary The month of April started off with a brief wet period but the second week turned markedly warm and dry. As of the mid-April (the deadline for preparation of the Board agenda for April 22, 2014) precipitation levels are 47% of normal and snowpack levels to 19% of normal. Storage at Oroville has only improved from 39% of capacity to 40% of capacity which is to be expected because the storms deposited snow in the mountains which is yet to melt. However, as of the date of this report there have been no updates to delivery allocation schedules as a result of the storms and none are anticipated for reasons as discussed above under “Key Drought Related Factors”.

As of March 31

Precipitation As of March 31, Northern Sierra precipitation remains significantly below normal levels for this time of the year (51%) in the Sacramento, Feather, American and Yuba River basins where our water supply physically originates. This remains very low and is significant because now the traditional wet season is essentially over.

Precipitation Outlook The National Oceanic and Atmospheric Administration (NOAA) issues long-range weather outlooks. The current 30 day forecast (through the end of April, 2014) calls for an equal chance of below normal, normal and above normal precipitation. However, the current 90 day outlook remains poor. It predicts a significant chance of below normal precipitation for Northern California for the period April through

June in total. The NOAA 30 and 90-Ninety Day Precipitation Outlook Maps are presented in Attachment B.

Snowpack Snow pack survey data through April 1 in the northern Sierra snowpack (really snow water content) shows the snowpack at only 23% of normal for this time of the year; traditionally snowpack is at its maximum for the year on or about April 1.

Reservoir Storage The key reservoir that affects water deliveries to DSRSD is Lake Oroville. As of April 1 Oroville is filled to 49% capacity and is 64% of what it would normally be at this time of the year.

Unimpaired Runoff Attachment C is developed from data produced by DWR and is a summary of 2014 Northern California unimpaired runoff projections. The DWR data represents the maximum amount of water that **could** be pumped (but which will be limited further due to legal restrictions on pumping). As of March 31 the data indicates that 2014 will see about 40% of normal unimpaired runoff and that statistically there is virtually no chance that average or greater than average unimpaired runoff would occur.

Water Year Type As of March 31 and based on criteria that included rainfall, snow pack, reservoir storage and runoff, DWR is projecting that the Northern California Regional Water Supply Index would classify 2014 as a “Critical” year in terms of post-winter runoff.

Agency Situations and Positions

State of California Situation The following summarizes the short and long term policy of the State. When those are coupled with the current Water Supply Conditions leads to the resultant DWR Water Allocation.

California Situation – Long Term Senate Bill 7X7 passed as part of the comprehensive water reform package in November 2009 calls for a permanent 10% reduction in per capita water usage by 2015 and 20% by 2020.

California Situation - Short Term On January 17, 2014, Governor Brown proclaimed a State of Emergency throughout California due to current drought conditions and called on Californians to reduce their water usage by 20%.

DWR Allocation On January 31, 2014 DWR updated its water delivery allocations for Water Year 2014 to its contractors based on then-current conditions. As of that date, they are projecting deliveries of 0% for the year. This action is unprecedented in the history of the State Water Project. A copy of that allocation is included as Attachment D.

Zone 7 Situation (As of April 1, 2014)

On December 17, 2013, Zone 7 approved full delivery requests from DSRSD (and the other Retailers) for 2014.

However, on January 29, the Zone 7 Board of Directors declared a drought emergency within its service area and approved a number of projects and activities to minimize the impact of the

drought The Zone 7 declaration was focused on streamlining the process for implementing various capital projects that will give the Zone better capabilities to manage the supply that is available to them. Zone 7 has not altered or rescinded its December 17, 2013 approval.

On the demand side, the Zone 7 declaration did not call for a specific level of conservation, but rather authorized and directed their General Manager to "...establish appropriate levels of conservation consistent with the California State of Drought Emergency and local conditions". That level has now been established at 20%. Additionally, , the basis for Zone 7's drought response planning are demand reductions of 5% indoor and 40% outdoor which translate to the 20% overall system wide curtailments.

The District is discussing with Zone 7 what this operationally translates to for deliveries in the upcoming months.

District Situation and Position

Current District Situation On February 18, 2014 the District Board took the following actions:

- Declared a State of Emergency;
- Established a system-wide target of 20% water curtailment (consisting of 5% indoor and 40% outside water use); and
- Endorsed the District's Drought Response Action Plan.

In May 2013 for water rate purposes, the Board placed the District into a "Baseline" water shortage condition where it officially remains at the present time. A Baseline water shortage conditions essentially means that the District is seeking to maintain or slightly improve upon 2013 per capita water usage of 131 gpcpd. This usage level meets the State mandate of 20% water use reduction by 2020. The water shortage stage (which affects rates) will be formally considered by the Board in approximately late April 2014 once clearer and near final hydrological information is available.

Actual District Conservation (SB7x7 Basis) Senate Bill 7x7 of 2009 requires the District to measure conservation on a per capita basis as compared to a ten-year baseline period that the District was allowed to select using a number of allowable approaches. The District, in adopting its most recent Urban Water Management Plan, selected a Baseline period of 1997 through 2006 and also projected per capita water use during each year of the five year UWMP. The District conservation targets and the actual conservation in the District are as follows:

- | | | |
|---|----------------------------------|--------------------------|
| • Baseline | 1997-2006 per capita usage | 204 gpcpd |
| • Interim Target | 10% per capita reduction by 2015 | 183 gpcpd; |
| • Final Mandate | 20% per capita reduction by 2020 | 163 gpcpd; |
| • Urban Water Management Plan projection for 2014 | | 143 gpcpd |
| • District conservation levels as of March 31 | | 134 gpcpd ¹ . |

District conservation trends on a per person basis are shown in Attachment E.

¹ Twelve month moving average

Actual District Conservation (2013 vs. 2014 Comparison) The table immediately below summarizes conservation levels achieved by the District in each full month in 2014 as compared to those months in 2013. For simplicity sake, this data is presented on a total volume basis. This understates actual per-account conservation due to the approximate 4.9% growth in the number of customer accounts in calendar year 2013. As can be seen, through the first three months of 2014, and on a total volume basis, District conservation has not approached the targeted 20% (soon to be 25%) level. To interpret the data below, it should be noted that Zone 7 declared a State of Emergency at the end of January and the District did so in the third week of February; also Jan 2014 was the driest January on record.

Water Usage (Million Gallons)			
	CY 2013	CY 2014	Curtailement
January	188.4	238.6	-26.7%
February	191.1	180.5	5.6%
March	245.7	206.5	15.9%
Total (Year to Date)	625.2	625.6	-0.1%

What it Might Take to Increase Allocations

It is extremely unlikely that the water supply situation will return to normal in 2014. There remains only a very scant hope that the Department of Water Resources to ease up on the 0% delivery allocation. Even very minimal deliveries (for example 5 % would improve the Tri-Valley’s water supply situation significantly. This is because if the Harvey O. Banks Pumping Plant is operating then Zone 7 will have access to water it has stored in Semi-Tropic and Cawelo and can partake in other potential water transfers. DWR will make its final allocation announcement in early May.

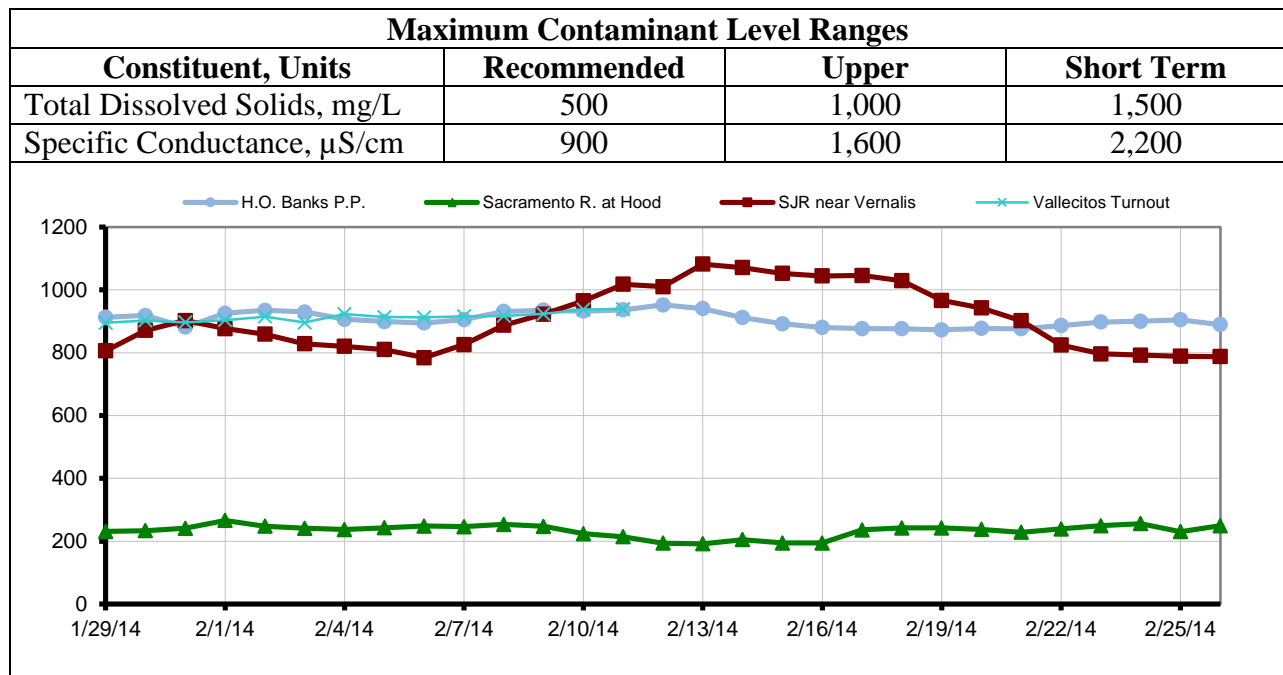
There is no official guidance from DWR as to how much or which conditions would have to improve to allow them to allocate something other than zero deliveries. However, water managers feel that decision will most strongly be affected by accessible storage in Lake Oroville provided salinity levels of the water seen at the Harvey O. Banks Pumping Plant do not degrade to unacceptable levels. This is most affected by runoff projections.

Lake Oroville Storage As noted above, storage levels in Oroville remain extremely low. Worsening that picture is the fact that there exist facility problems at Lake Oroville such that 800,000 AF of water stored in the lake cannot be accessed until certain repairs are made which may take until 2015. Given that, and the reality that the lake is now serving significantly more demand than it did in 1976-77, it is felt that it is very unlikely that DWR will increase the allocation above 0% until storage in Oroville has recovered to some level comfortably above 1976-77 levels.

Salinity Due to the lack of runoff from the Sacramento and San Joaquin Rivers and their tributaries, the salinity in the Delta at the Harvey O. Banks Pumping Plant is at unusually high levels. The various secondary² drinking water standards for salinity are shown in the following table along with the recent salinity trend which has been relatively stable over the past 60 days. It is felt that the “Upper” standard is a “yellow line” and the “Short Term” standard is likely a “red line” beyond which the 0% allocation will not be relaxed. Currently salinity levels at Harvey O.

² A secondary standard is for taste, odor or aesthetic conditions; not public health related.

Banks pumping plant are at Recommended levels but below the Upper standard³. Runoff projections (as summarized below) are projected to be well below normal this year meaning that without significant additional runoff there is real concern that turning the pumps on would draw saline water into the Delta.



Summary

The following pages summarize the data discussed above in a tabular fashion for the past seven water years as well as month by month for the current water year.

District Actions Needed

1. Staff is moving forward with the actions in Drought Response Action Plan – Attachment F summarizes actions taken to date.
2. At this meeting the Board will be separately asked to provide direction on various future actions listed in the Summary and Recommendation which will then be agendized for formal consideration on May 5, 2014:

³ For reference the salinity data identified as “Sacramento R. at Hood” are felt to be the salinity levels that would be delivered to Harvey O. Banks if the BDCP tunnels as currently proposed were in place.

TABULAR SUMMARY OF HISTORIC HYDROLOGICAL AND WATER SUPPLY CONDITIONS⁴							
	WY2007	WY2008	WY2009	WY 2010	WY 2011	WY 2012	WY 2013
Precipitation ⁵	75%	73%	93%	107%	145%	80%	85%
Snowpack ⁶	52%	101%	89%	126%	165%	74%	49%
Oroville Storage (% of Normal)	101%	90%	59%	78%	135%	115%	92%
Oroville Storage (% of Capacity)	62%	55%	38%	50%	86%	99%	79%
Unimpaired Runoff							
Percent of Normal Year ⁷	53%	58%	64%	84%	138%	63%	64%
Water Supply Index	Critical	Critical	Dry	Below Normal	Wet	Below Normal	Dry
Water Delivery Allocation							
DWR to State Water Cont.	60%	35%	40%	50%	80%	65%	35%
Statewide and Regional Conservation							
State of California Short Term	----		20%		Strongly encourage conservation and minimal water use		
State of California Long Term	---			10% per capita reduction target by 2015 20% per capita reduction mandate by 2020			
Zone 7	Voluntary 10%						
DSRSD CONSERVATION SUMMARY⁸							
Pre SB 7X7 Methodology							
Target	Voluntary 10%		Stage I- Vol. 20%				
% Achieved	2.4%	4.5%	13.8%	21.1%	21.5%	26.8%	
Post SB 7X7 Methodology							
SB 7x7 Baseline							204
2015 Target							183
2020 Mandate							163
UWMP Prediction							138
Actual							126

⁴ Unless noted, data shown is for June of the Water Year shown.

⁵ Percent of Normal; 8 Station Northern Sierra for the water year

⁶ Percent of Normal; Northern Sierra Average as of April 1 which is historically peak snowpack for the year

⁷ Runoff in percent of average year for Sacramento River watershed

⁸ Expressed on a per account basis with the baseline year (July 06 to June 07 for WY 2007 through 2012).

TABULAR SUMMARY OF HYDROLOGICAL AND WATER SUPPLY CONDITIONS FOR WY 2014⁹								
	Nov 2013	Dec 2013	Jan 2014	Feb 2014	Mar 2014	Apr 2014	May 2014	June 2014
Precipitation ¹⁰	27%	26%	19%	17%	38%	51%		
Snowpack ¹¹	NA	NA	11%	5%	11%	23%		
Oroville Storage (% of Normal)	67%	72%	58%	54%	57%	64%		
Oroville Storage (% of Capacity)	41%	43%	36%	36%	39%	49%		
Projected Unimpaired Runoff								
Chance of Normal Year ¹²	NA	65%	45%	33%	33	40		
Chance of Average Year	NA	20%	Nil	Nil	Nil	Nil		
Projected Type of Water Year								
Water Year Classification	NA	Dry	Critical	Critical	Critical	Critical		
Water Delivery Allocation								
DWR to State Water Cont.	NA	5%	5%	0%	0%	0%		
Adopted Statewide and Regional Conservation Targets								
California Short Term Policy	<u>January 17, 2014:</u> Governor Brown proclaimed that a state of emergency exists due to current drought conditions and called on Californians to curtail water usage by 20%							
California Long Term Policy	10% per capita reduction interim target by 2015 and 20% per capita reduction mandated by 2020							
Zone 7	<u>January 29, 2014:</u> Zone 7 declared a drought emergency within its service area and authorized and directed its General Manager to "...establish appropriate levels of conservation consistent with the California State of Drought Emergency and local conditions" which has been established at 20% system-wide and is based on 5% indoor curtailment and 40% outside curtailment							
DSRSD CONSERVATION SUMMARY¹³								
DSRSD Stage	<u>May, 2013:</u> For rate purposes - Baseline water shortage condition (i.e. maintain current per person water use); and <u>Feb. 18, 2014:</u> declared State of Drought Emergency and set target curtailment consistent with Zone 7							
SB 7x7 Baseline	204							
2015 Target	183							
2020 Mandate	163							
UWMP Prediction	138 for CY 2013				143 for CY 2014			
Current	132	134	135	136	135	134		

⁹ Data shown is current as of the beginning of month shown

¹⁰ Percent of Normal at this time of year; 8 Station Northern Sierra

¹¹ Percent of Normal at this time of year; Northern Sierra Average

¹² Projected water year runoff in percent of average year for Sacramento River watershed

¹³ Values shown are in gallons per person per day

ATTACHMENT A WATER SUPPLY UNCERTAINTIES

Significant changes from prior report highlighted in yellow

DELTA PLANNING

Bay Delta Conservation Plan: The Bay Delta Conservation Plan (BDCP) is designed to be a planning process for meeting the requirements of endangered species laws and achieving the co-equal goals of (1) conservation and management of the Delta's ecological functions and (2) improving current water supplies and the reliability of Central Valley Project (CVP) and State Water Project (SWP) water deliveries. Significant opposition to the Plan and the process has been voiced by residents and entities from Delta and Central Valley communities, and by some state and federal water contractors which question who will pay for water for wildlife refuges and for environmental uses under the BDCP, as well as who will pay for construction and operations costs of any conveyance facilities. The end of the BDCP process cannot now be predicted with any degree of confidence. In July 2012, the state and federal governments announced their joint commitment to a proposed BDCP that would include two gravity-fed tunnels with a diversion capacity of 9,000 cubic feet of water per second (cfs), each of which would be 40 feet in diameter and 35 miles long, plus restoration of 113,000 acres of freshwater marsh, 50,000 of which would be restored in the next 15 years. Current estimates say the tunnels will take at least 10 years to build, will result in excavation and the need to dispose of 7 million cubic yards of "tunnel muck," and will cost an estimated \$24.5 - 28 Billion to construct and operate the conveyance facility as well as fund the mitigation and adaptive management for the 50-year implementation period. Current estimates indicate that 60 - 70% of that cost would be paid by water users (and approximately 60% of that amount would be paid by SWP contractors), with the balance coming from a variety of state and federal sources. Construction costs for the 9,000 cfs dual-bore tunnel are now estimated at \$14.5 Billion, but since that estimate is based on a 10% design, the draft BDCP says that the actual construction costs could be 50% higher or 25% lower than that number.

The draft BDCP and draft EIR/EIS were released for 124 days of public comment on December 9, 2013; on February 21, 2014, the comment period was extended by 120 days, so comments are now due by June 13, 2014. The draft documents are more than 41,000 pages. DWR's current schedule is vague, but apparently calls for the Certification of the EIR, Plan approval and the federal Record of Decision no earlier than the winter of 2014. Intended beneficiaries do not yet fully know what benefits they can anticipate, and federal agencies have given no indication if or when they will do a feasibility analysis that is required before federal funds for the implementation of the BDCP could be appropriated. Current estimates are that only about 25% of CVP contractors would actually receive any water supply benefits if the project is fully implemented. The principal unknown is how the new system would be operated, which will determine water supply, water quality, and fisheries impacts. Fisheries agencies have suggested that current science requires high flows through the Delta and to the sea; such flow requirements would mean that future exports would be less than what contractors currently receive. Export contractors – especially irrigation entities -- are hoping to see far lower flows for fish and water quality protection so that farmers and ranchers can avoid having to pay large amounts of money for less water. Operations criteria will have to take into account the recent hydrology, which indicates that between 1949 and 2009, Sacramento River flow conditions in 47% of all years were below normal, dry, or critically dry. **Complex negotiations are underway on an Implementation Agreement concerning how the BDCP will be operated, including the governance structure, but not including the cost split between federal and state contractors or other financial components. A 60-day public review process for that Agreement is anticipated.** In July 2013, federal agencies submitted comments on the administrative draft

EIR/EIS which raised numerous difficult issues; some commentators have suggested that the federal fisheries agencies may believe that the proposed project may not be “permissible” under the Federal Endangered Species Act (FESA). The interplay between state and federal fisheries agencies and the CVP and SWP will be critical to ultimate governmental determinations concerning the proposed BDCP.

Some stakeholders (including ACWD, CCWD, EBMUD, SFPUC, San Diego and the San Diego County Water Authority, numerous environmental groups, Contra Costa County, and the Contra Costa Council, plus 22 Democratic members of the State Senate or Assembly) urged DWR to add a “Portfolio Alternative” that would include, among other things, a smaller conveyance facility because their studies to date indicate a 3,000 cfs conveyance could meet the BDCP’s and Delta Plan’s water supply and ecosystem restoration goals. DWR now estimates that the capital construction cost for a single-bore 3,000 cfs tunnel would be \$8.56 Billion (down from the previously estimated \$11.5 billion). DWR did not analyze this alternative (or the suite of proposed actions making up the Portfolio Alternative) in the EIR. Zone 7 signed a multi-agency letter favoring the BDCP proposal and opposing the Portfolio Alternative. A number of environmental groups have announced opposition to the BDCP, but agricultural interests that joined them in opposing the proposed Peripheral Canal in 1982 support the current proposal. The key question for many water agencies will be their share of the costs burdens for the proposed project. DWR has indicated that up to \$1.2 billion will be needed for completion of planning and environmental work over the next 3 years – apparently CVP and SWP contractors are each being asked to put up at least \$250 Million for those purposes. If the project is ultimately approved and implemented, the earliest construction could begin is 2017 (engineering work to date is only at the 10% level), and the earliest date for operation of the new conveyance would be 2027. Largely because there is not yet an approved project, to date there are no firm funding commitments for the costs of construction or operation of the proposed facilities.

Delta Stewardship Council’s Delta Plan and EIR: The 2009 legislative package that included the Delta Reform Act tried to address long-standing issues about Delta planning and the possibility of insuring water supply reliability and simultaneously reaching the co-equal goal of restoring/enhancing the Delta ecosystem. At the heart of this measure was establishment of the Delta Stewardship Council and a mandate that it develop a Delta Plan and the necessary environmental analysis by December 31, 2011. The goal of the Plan was to provide guidance to state and local agency actions to meet the coequal goals. (That statutory deadline was not met.) On May 16-17, 2013, the Council adopted the Delta Plan, certified the completion of the EIR, and approved the process for implementing the regulations. The adopted Plan contains 14 policies, which the Council has attempted to turn into legally enforceable state regulations. No substantial action based on the Plan will happen very quickly, and the EIR has been the subject of substantial criticism from all sides. Numerous parties filed suit in Sacramento Superior Court challenging the Plan and arguing that it is not consistent with the 2009 legislation because it does not achieve the co-equal goals of Delta ecosystem restoration and water supply reliability, and challenging the regulations. Those cases are all pending.

The Delta Plan calls for adoption of Delta flow objectives by June 2014; implementation measures to reach those objectives would then be analyzed and recommended to the SWRCB in approximately one year after that. The SWRCB has started the process for setting those objectives, in conjunction with its triennial review of the Water Quality Control Plan for the Delta (WQCP), and has indicated that it will seek to set flow objectives for “primary tributaries to the Bay-Delta” by June, 2018. The State Water Contractors (SWC) asked the SWRCB to delay setting the objectives until completion of the BDCP, but the SWRCB said it will try to adopt the new objectives more quickly; however, it postponed a planned November 12 – 14 workshop on the science of Delta flow criteria until March 19, 2014. This effort will inevitably be controversial, since an earlier and non-precedential SWRCB decision related to flow objectives established criteria that would dedicate between 50% and 75% of the available flows in the Delta to in-stream uses, which would result in drastic cutbacks in water available for export.

On December 31, 2012, the SWRCB released its proposed revisions to flow requirements (plus a 2000-page environmental analysis) for the San Joaquin River and 3 tributaries (Merced, Stanislaus, and Tuolumne Rivers), which featured establishment of a threshold of 35% of the unimpaired flow of the tributaries to be set aside for Delta protection. Historically about 20% of unimpaired flow in those rivers reached the Delta. Water users and water rights holders on those rivers are vigorously resisting implementation of that threshold, arguing that it would result in a supply cut of 15% in average water years, and up to 50% in dry years. The SWRCB began a hearing on San Joaquin flows on March 20, 2013. A “final” version of the WQCP objectives and environmental impact analysis was issued in May, but the SWRCB has now postponed any action on this still-controversial subject until an as-yet unknown date in 2014.

California Water Action Plan: On October 31, 2013, CalEPA, the Department of Food & Agriculture, and the Natural Resources Agency issued a draft Water Action Plan for the State, in response to direction from the Governor to identify key actions for the next one to five years to address urgent needs and “provide the foundation for sustainable management of California’s water resources.” The final plan was issued in conjunction with the Governor’s “State of the State” address on January 22, 2014. The 22-page plan is broad and general, and does not call for any specific actions; it is intended to be a broad-brush guide for state efforts to enhance water supply reliability, restore damaged and destroyed ecosystems, and improve the resilience of infrastructure. Part of the scientific backdrop for this Plan is a recent study, based on satellite data collected by NASA, which indicates that the Sacramento and San Joaquin basins contained about 24 million acre-feet (AF) less water in March 2010 than in October 2003, with about 2/3 of the decline due to groundwater depletion.

LEGISLATION

2014 Water Bond: The November 2009 water legislation package passed on to the voters the question of whether to authorize issuance of \$11.14 billion in General Obligation bonds, for which debt service payments of about \$700 million per year would have to come from the State’s General Fund. The bond issue was to be on the November 2010 ballot, but the Legislature subsequently passed a bill delaying the election to 2012, largely because of the state’s precarious financial situation. Unless the Legislature takes action by June 26 (by a 2/3 vote in both Houses), the 2009 bond issue will be on the ballot. The Legislature and the Brown administration may wish to make changes in the components of the bond. Twelve proposals for a down-sized bond package have been discussed this year, ranging from \$6.3 billion (Senator Gagiani) to \$9.2 billion (Senators Canella and Vidak). AB 1331 (Rendon) is widely viewed as the most likely bill to pass by the necessary 2/3 vote and thereby replace the 2009 bond proposal on the November ballot with a new proposal for \$8 Billion in general obligation bonds.

DELTA ECOSYSTEM ISSUES

Delta Smelt and Salmonid Species: Federal litigation concerning the interaction of the Federal Endangered Species Act (FESA) and NEPA with the operations of the Bureau of Reclamation’s Central Valley Project (CVP) and the Department of Water Resources’ (DWR) State Water Project (SWP) has dominated all considerations of Delta water export operations in the last few years. Most of that litigation has concerned the balance between water exports and the need to restrict or limit exports in an effort to protect Delta smelt and a variety of salmonid species. For salmonids, litigation challenging the Biological Opinion is on appeal to the 9th Circuit US Court of Appeal; oral argument is set for September. For Delta smelt, a trial court decision overturning the BiOp was reversed by the 9th Circuit on March 13, but the Court held that Reclamation must complete additional NEPA documentation on certain actions before accepting the smelt BiOp. There is still some uncertainty as to the practical effect of that aspect of the ruling, but in the meantime, Delta operations are being managed in accordance with both BiOps, while

the federal fisheries agencies are working on new ones under court-established deadlines (12/1/14 for smelt and 4/30/16 for salmon). The 2013 fall mid-water trawl, one of the key scientific indicators of the abundance of critical fish species, showed that the four species of greatest concern were at near-record lows; in particular, Delta smelt were at the 2nd-lowest year on record. Since the decline of pelagic organisms (i.e., aquatic species that feed in the middle of the water column) such as Delta smelt, began in the Delta in 2002, the smelt index has ranged from a high of 151 to a low of 4 (it was 7 in 2008 and 2013), as compared to values that were occasionally greater than 1000 in prior years). The population indices used to track 4 key fish species have declined by 95.6% to 99.8% since the trawl began in 1967. The combination of record low precipitation and fish-related operations restrictions is making export operations particularly difficult for the 2013-2014 water year, and is limiting the use of cross-Delta water transfers and recovery of water in groundwater banks that might otherwise have been available to assist in areas dependent on Delta export pumping.

Ammonia in Wastewater Discharges: On December 9, 2010, the Central Valley Regional Water Quality Control Board (RWQCB) unanimously adopted a new NPDES discharge permit for the large regional wastewater treatment plant operated by the Sacramento Regional Sanitation District (SacReg). Zone 7, Alameda County Water District, and Santa Clara Valley Water District (SCVWD), plus a number of other water agencies, had for 10 years sought to have the RWQCB order SacReg to significantly reduce the volume of pathogens and certain chemical contaminants in its effluent – particularly ammonium, which is believed to have a substantial adverse impact on Delta smelt. A partial settlement was reached late in April 2013, and SacReg is commencing implementation of remedial measures. Remaining issues in the litigation concern the NPDES permit requirement for tertiary treatment to remove pathogens and other pollutants from the discharge; settlement discussions are underway, and trial on the merits is scheduled to begin July 18, 2014.

LOCAL WATER SUPPLY CONTRACTS

State Water Project Contract: On May 1, DWR began what was originally planned to be three months of public negotiations with the SWC on contract amendments to the contract term and on certain financial provisions of the current basic water supply contract between DWR and each member of the SWC. DWR wants to issue 30-year bonds for its debt financing, but there are only 21 years left on the present contract. DWR has urged a 40-year extension, but some of the SWC have argued that it should be 75 years. DWR uses revenue bond financing for capital improvements and upgrades of existing systems; in recent years it has sold as much as \$200 Million in such bonds per year, and it estimates that it needs \$2.5 Billion to repair, restore, and strengthen existing infrastructure. DWR also estimates that the BDCP improvements would require the SWC to pay another \$10 Billion, and the current contract negotiations would put the necessary financial accounting and oversight mechanisms in place for that as well. Negotiations over an 11-month period culminated in Agreements in Principle (AIP) that were reached on March 8; one or more agreements to express the AIP are being drafted, and the parties' target is to complete them by July 1. DWR will then conduct an environmental review process for an amendment to the SWP Contract, which will be publicly negotiated beginning in late 2014 and hopefully completed in mid-2015. The proposed amendment needs to be reviewed in the Legislature, but does not need legislative approval. Two Sacramento Valley SWP contractors (Butte and Plumas Counties) want the new contract to expressly provide for them to opt out of the costs associated with the BDCP's conveyance facilities. SWP North Bay Aqueduct (NBA) contractors (in Napa and Solano Counties) are also concerned about those facilities because the Draft EIR/EIS for the BDCP indicates that it would have an unavoidable significant adverse impact on water quality in the NBA.

BBID transfer to Zone 7: Since 1995, an important part of Zone 7's water supply portfolio has been an annual transfer of up to 5,000 AF of Delta water to Zone 7 from Byron Bethany Irrigation District (BBID). On December 14, 2012, DWR told BBID that the transfer was being made without DWR's

consent, and that the water had to be “repaid” to DWR. Both BBID and Zone 7 are vigorously objecting to DWR’s position and resisting the demand that Zone 7 “repay” any previously transferred water.

PERTINENT WATER RELATED LITIGATION

Area of Origin Litigation: The Tehama-Colusa Canal Authority (TCCA), a joint powers authority located in the northern part of the Sacramento Valley, filed suit on February 11, 2010 in federal district court in Sacramento against the United States, alleging that the Bureau of Reclamation illegally failed to deliver full contract amounts of water to TCCA members before exporting water from the Delta. Their argument was based on “area of origin” protections contained in the California Water Code, with which Reclamation is required to comply. The case was significant because of its potential to deepen the split between water users in areas where the water arises and water users in dry areas served primarily by exports, particularly because the plaintiffs asserted that their location and the protective statute gave them a higher priority claim to CVP water, including stored water. If the Plaintiffs had ultimately prevailed, that would have further limited the amount of water that can be exported from the Delta by the CVP. A federal trial court judge and the 9th Circuit ruled for the federal defendants on July 29, 2011 and July 1, 2013, respectively; on October 15, 2013 the 9th Circuit denied TCCA’s petition for rehearing, and on March 24 the U.S. Supreme Court denied TCCA’s petition for *certiorari* seeking further appellate review. 4 SWP contractors (Butte Co., Solano Co. Water Agency, Napa Co. Flood Control and Water Conserv. District, and Yuba City) sued DWR in 2008 alleging that DWR sends water to export contractors (like Zone 7) without fulfilling its obligations to protect the rights of contractors who benefit from area of origin laws. In October 2013, DWR and these 4 contractors reached a settlement which will result in preferential deliveries to the 4 plaintiff SWP contractors (all north of the Delta and with relatively small water entitlements), and have a small adverse impact on all south of Delta contractors in some years. Current estimates are that the reductions will probably be in the range of 1 – 2% of south-of-Delta SWP contractors’ entitlements in dry years.

WATER SUPPLY RELIABILITY IMPROVEMENT EFFORTS

Regional Activities: Contra Costa Water District’s Los Vaqueros Expansion Project (LVE) is complete, and the Reservoir is filled to about 125,000 AF. Federal and state agencies are leading a study effort to consider a further expansion of the Reservoir, and numerous water agencies have signed a Memorandum of Understanding concerning those studies, including Zone 7, the other South Bay Aqueduct agencies (ACWD and SCVWD), EBMUD, and the San Luis and Delta Mendota Water Authority. Federal legislation was recently introduced by Congressmen Costa and Miller which would expedite expansion of the Reservoir; it calls for a phased approach, including near-term agreements to lease storage space in the existing 160,000 AF Reservoir, construction of a pipeline to Bethany Reservoir to provide water to the South Bay Aqueduct, and further expansion of the storage capacity to 275,000 AF (for which environmental documentation and endangered species coverage has already been completed). Federal and state studies dating back to the 1960’s indicated that the Los Vaqueros site could accommodate a reservoir with as much as 1 million AF of storage capacity. In January, 2013 the Boards of Directors of EBMUD and CCWD accepted principles of agreement for a new partnership arrangement concerning LVE, and a demonstration project under which 5,000 AF of EBMUD water would be stored in the reservoir for up to 5 years is under way. CCWD reached a similar understanding with ACWD on April 3, 2013 for a 1,000 AF pilot project, which is now being expanded to 5,000 AF. On February 25, the EBMUD Board agreed to exercise an option to buy up to 20,000 AF of water from the Placer County Water Agency in 2014, and is beginning preparations for the possible purchase of up to 66,500 AF from the CVP. EBMUD’s Freeport facilities can be used to convey CVP water or water made available by Yuba or Placer, but which cannot be delivered south of the Delta due to export restrictions at the DWR pumps; arrangements of this nature, especially if implemented jointly with CCWD, could provide supply and reliability benefits to numerous Bay Area water agencies. EBMUD’s Mokelumne River facilities

were also used in 2013 to successfully convey 2,000 AF of transfer water from the Woodbridge Irrigation District (near Lodi) to CCWD. EBMUD has also renewed consideration of a conjunctive use idea with a number of entities in San Joaquin County.

San Francisco purchased an option to buy up to 2,240 AF/year of dry year water from Oakdale Irrigation District. If it exercises the option, the reported price for SF would be \$700/AF, in marked contrast to the \$6.50/AF paid by most Oakdale farmers, the \$29.50 now paid by most Modesto farmers, and the \$100 - 125/AF for which Oakdale and SSJID sold water in 2013 to west side CVP contractors and Modesto ID sold water to Turlock ID. Numerous discussions of similar water transfers, interties, and cooperative arrangements are underway, involving water agencies throughout the Bay Area region and in the Central Valley; e.g., Zone 7, CCWD, and EBMUD are discussing a possible link between CCWD facilities (which have a large and robust intertie with EBMUD's Mokelumne Aqueduct) and Bethany Reservoir, the forebay for the South Bay Aqueduct. Numerous transfer arrangements are under discussion or being implemented among irrigation agencies and individual farmers, with published prices ranging as high as \$2,100 per AF (in Madera County).

Federal authorities are also investigating raising the elevation of San Luis Dam by 20 feet, in a \$360 Million project to improve seismic protection and to add 120,000 AF of storage capacity for the benefit of both the CVP and SWP. Congressman Costa's new legislation concerning the San Luis Dam project would also authorize raising Shasta Dam to add 634,000 AF of storage, as a cost of about \$1.1 Billion, and building Temperance Flat Reservoir on the Upper San Joaquin River to create 1.3 Million AF of new storage at a cost of about \$2.5 Billion. As dry conditions persist, large numbers of new deep wells are being installed in the Central Valley, resulting in declining aquifers and land subsidence in an area that may be as large as 1,200 square miles; many of these new wells are needed to irrigate hundreds of thousands of acres of permanent tree and vine crops that have been planted in recent years (in lieu of previous field crops like tomatoes and cotton) despite the lack of reliable and consistent imported water supplies. California now has well over 800,000 acres of almond trees, as compared to about 400,000 acres in 1995, and since such trees need an average of 3 to 4 acre-feet of water per acre to survive, this increase in almond production has "hardened" annual demand for water in areas which used to be annual field/row crops or pasture.

Five local water entities (Zone 7, ACWD, CCWD, EBMUD and the SFPUC) and the WaterReuse Foundation are participating in projects being funded by the Water Research Foundation to study the potential for Direct Potable Reuse (DPR). The projects will begin early in 2014 and support research needs of the California Department of Public Health for compliance with the statutory mandates of SB 918 (2010) to investigate the feasibility of developing regulatory criteria for protection of public health by 2016; as a result of this work, DPR could ultimately be permitted for groundwater recharge and/or for surface water augmentation.

San Diego Desalination: Construction is more than 25% complete, and is on schedule and under budget, on a desalination plant that is expected to produce up to 50,000 AFA in San Diego County; the San Diego County Water Authority views it as a new long-term reliable source of drinking water, and will be paying an estimated \$1900 to \$2200/AF to achieve that reliability and the concurrent reduction in demand for imported water. Operations are expected to begin in 2016. A second such plant, with a production capacity of 50,000 AFA, is nearing the end of the planning and permitting phase; it will be located in Huntington Beach if the planning and permitting processes can be successfully completed. Both of these desalination plants are sponsored by Poseidon Water and utilize engineering and technology techniques that were developed in Israel; the Huntington Beach proposal is being done in cooperation with the Orange County Water District. After adopting a report on the success of the City's 2-year 1 million gallon per day (mgd) demonstration project, San Diego's City Council acted in April 2013 to pursue implementation plans for a "water purification" project to augment City drinking water supplies with up to 15 mgd of purified wastewater that would be conveyed to San Vicente Reservoir to blend with stored

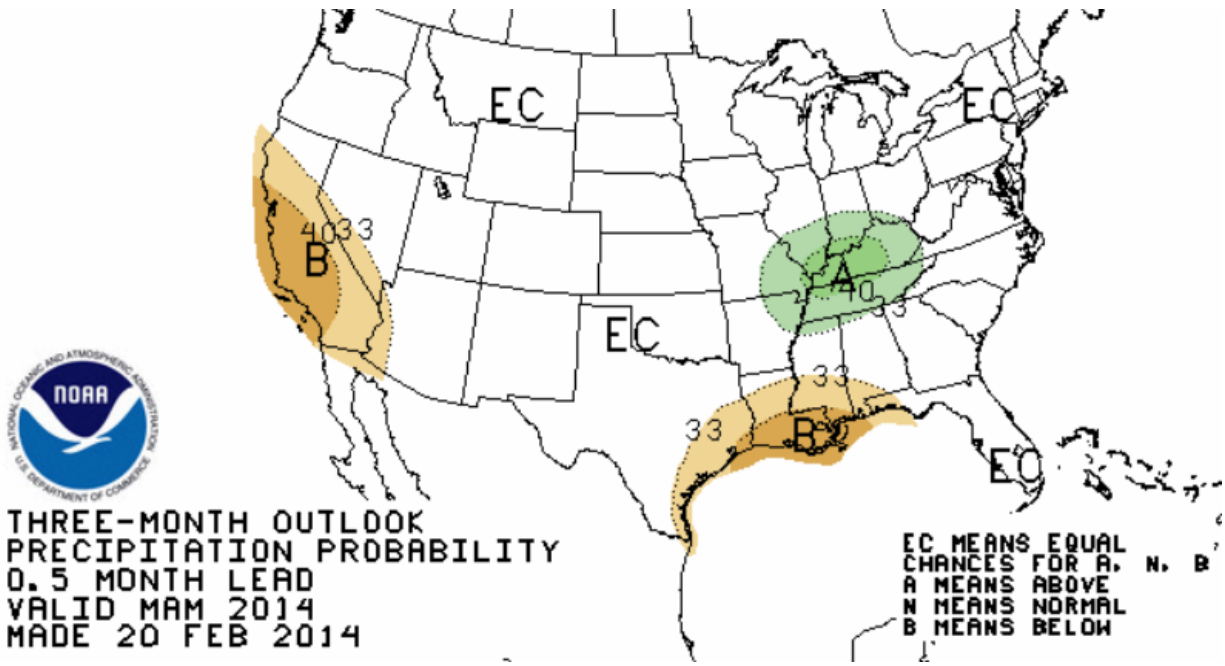
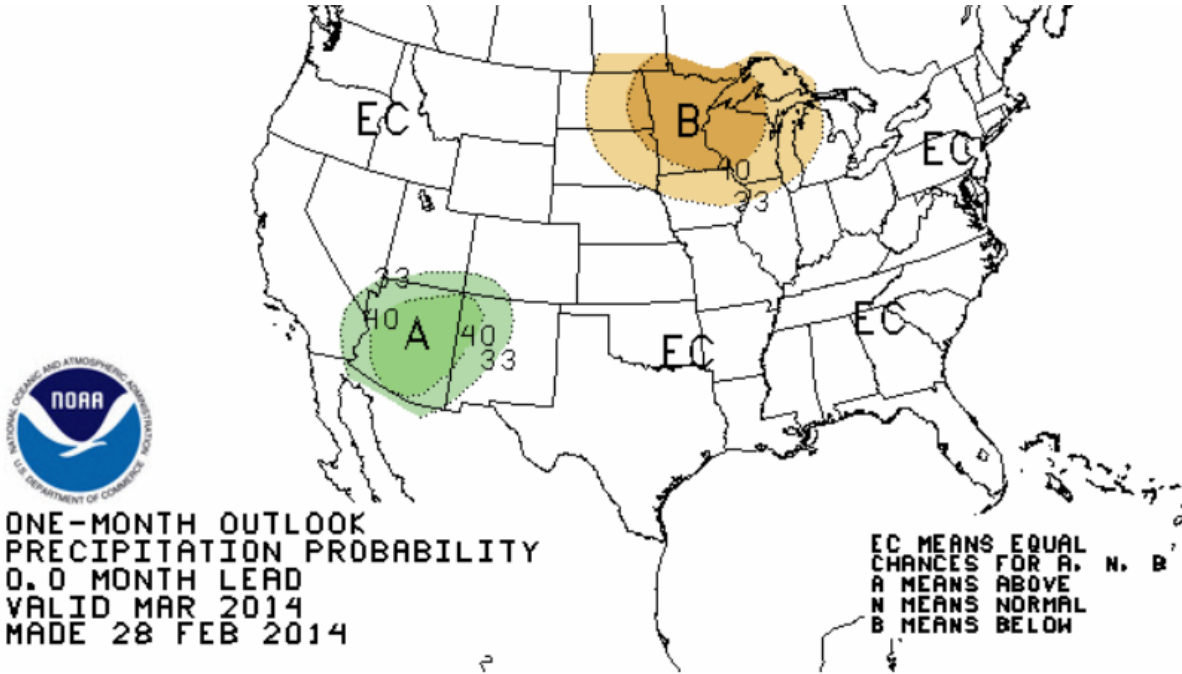
Colorado River water. A 2013 public opinion poll indicated that 73% of the San Diego residents who were surveyed favored the project. Initial estimates are that the project would cost about \$370 Million, and could eventually be expanded to 88 mgd.

Coalition to Support Near Term Delta Projects: Largely because of similar concerns about controversy surrounding the BDCP and the concern that it will be decades before it can come to fruition, a series of water agencies, environmental groups, and others developed a consensus position on a number of projects on which immediate actions could be taken, and for which \$500 million in previously-approved bond funds are potentially available. Projects include specific actions related to water supply, water quality, levees, and ecosystem restoration. Participants include entities which do not always agree on Delta matters, including the Planning and Conservation League, Metropolitan Water District (MWD), Westlands Water District, Central Delta Water Agency, and Contra Costa Water District. These entities are working to get the necessary stakeholder support and a wide-spread consensus; the first projects will probably involve levee work. Several of the near term project ideas, including operable flow gates and temporary flow barriers are among the things being considered during the current drought conditions, and were generally referred to in the legislation introduced by 4 U.S. Senators on February 11, 2014. **Several of the temporary flow barriers could be installed this year.**

OTHER WATER SUPPLY RELIABILITY AND UNCERTAINTY FACTORS:

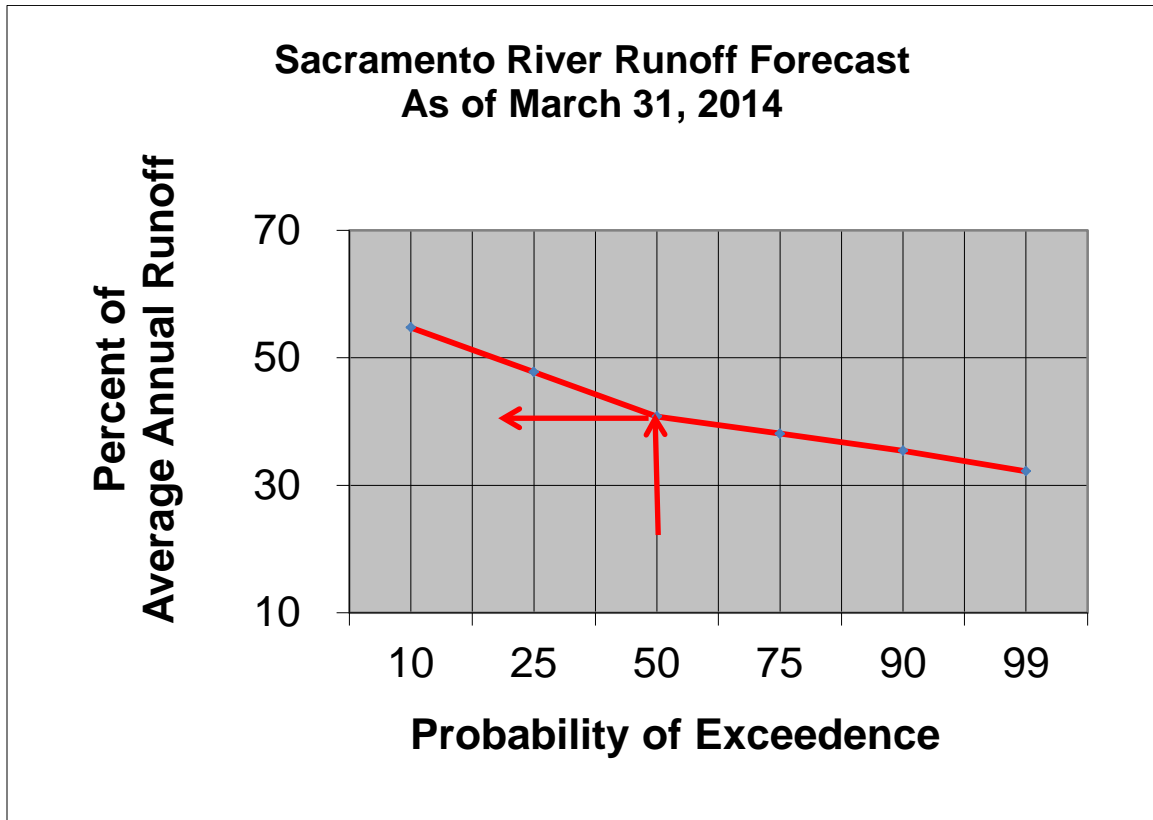
Colorado River: Although it does not directly impact the District or Zone 7, a number of factors suggest that continuing uncertainty about southern California's reliance on the Colorado River will increase. The original 1922 allocation of Colorado River water (among 7 western states) was based on a short period of hydrologic history which was wetter than any period since then. The assumption then was that the River would yield 15 MAFA; the U.S. now believes that the actual yield is closer to 12 MAFA. Snowpack in the watershed is currently more than 114% of average for the end of February, but the impacts of the last 14 years of dry conditions means that storage in Lakes Powell and Mead is still at a point where water deliveries to California are curtailed. Lake Powell is at 39% of capacity and might reach 60% this year; Lake Mead is at 45% of capacity but may drop by another 20 feet this year. As a result, southern California's ability to rely on transfers from Imperial Irrigation District (IID) to San Diego (which gets 33% of its water from these transfers), or on full deliveries from the Colorado to the MWD is now less certain. The complex set of agreements which resulted in transfers of water from IID to San Diego requires IID to meet certain water conservation goals; this has proved to be difficult for IID, and the conservation programs are very controversial among its agricultural water users. MWD has put over 2.7 MAF in storage in southern California, but in the long run a reduction in Colorado River water would tend to put added emphasis (i.e., water demand) on exports from the Delta to southern California. 2013 marked the worst 14 years of hydrologic history on the River since records have been kept; in contrast, in 2000, the combined storage in Lakes Mead and Powell was 95% of capacity. In anticipation of further decline in the reliability of Colorado River supplies, Arizona adopted and refined its comprehensive groundwater management statutes in the 1980's and 1990's, and these laws are the basis for an extensive groundwater banking program. California has no such legislation, and although there is extensive groundwater management planning in many areas (such as the Tri-Valley), there is nothing on a statewide or Central Valley-wide basis that can be used to offset drought conditions.

**ATTACHMENT B
NOAA PRECIPITATION FORECASTS**



**ATTACHMENT C
FORECAST OF UNIMPAIRED RUNOFF**

- Expected unimpaired runoff (50% probability)= 41% of average
- Chance of average (100%) or greater than average runoff = Nil



ATTACHMENT D
CURRENT DWR DELIVERY ALLOCATION

State of California

DEPARTMENT OF WATER RESOURCES
CALIFORNIA STATE WATER PROJECT

California Natural Resources Agency

NOTICE TO STATE WATER PROJECT CONTRACTORS



Date: JAN 31 2014

Number: 14-02

Subject: 2014 State Water Project Allocation – Zero Percent

From:



Carl A. Torgersen
Department of Water Resources

Due to the persistent dry conditions, the Department of Water Resources (DWR) is decreasing the previously approved 2014 Table A Allocation from five percent to zero percent. DWR plans to meet current urgent demands by allowing State Water Project (SWP) contractors to use their existing carryover. Existing carryover amounts (at the end of 2013), and 2014 allocation amounts, for each SWP contractor are shown on the attached table. The total combined carryover amount for all SWP contractors is 463,277 acre-feet.

This decrease is made consistent with the long-term water supply contracts and public policy. DWR considered several factors, including existing storage in SWP conservation reservoirs, SWP operational constraints such as the conditions of the recent Biological Opinions for Delta smelt and salmonids and the longfin smelt incidental take permit, and 2014 contractor demands. DWR may revise allocations if warranted by the year's developing hydrologic and water supply conditions.

If you have any questions or need additional information, please contact Robert Cooke, Chief of DWR's State Water Project Analysis Office, at (916) 653-4313.

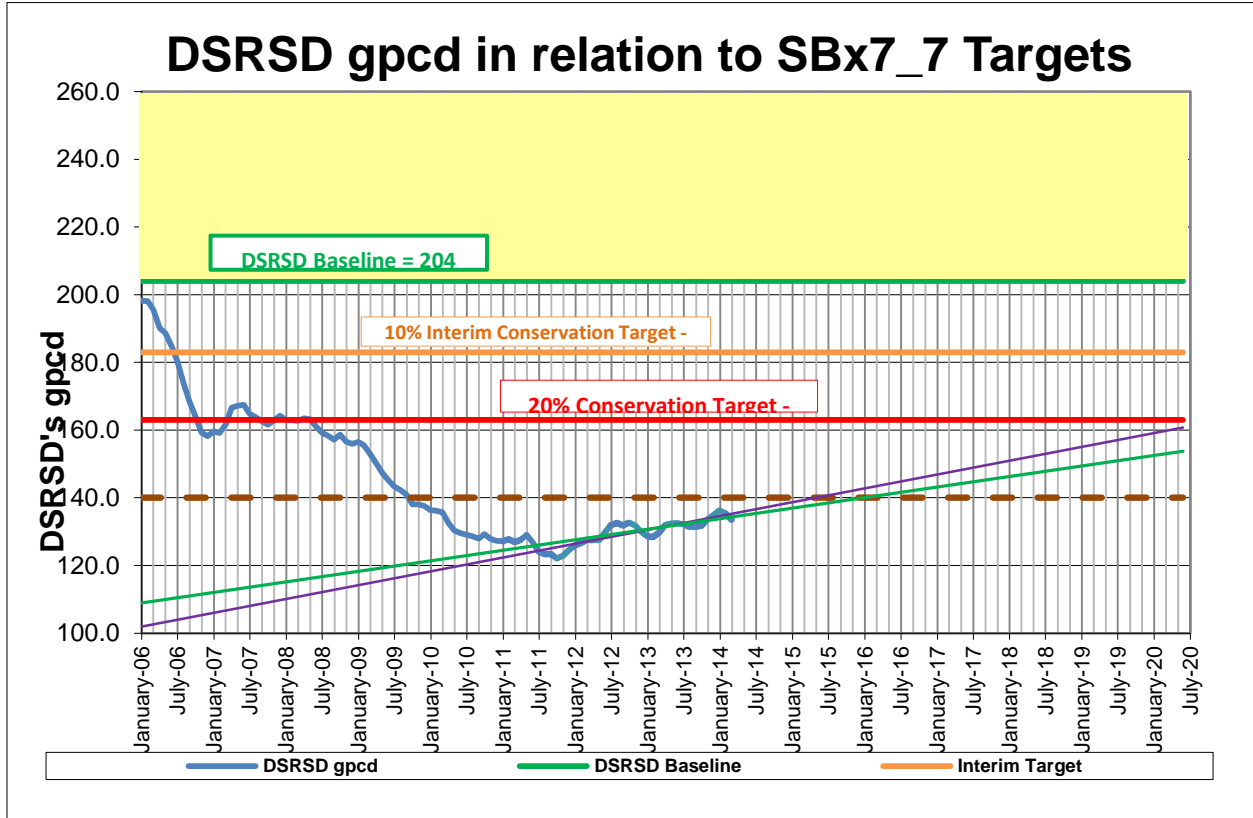
Attachment

2014 STATE WATER PROJECT ALLOCATION
(ACRE-FEET)

SWP CONTRACTORS	TABLE A	INITIAL REQUEST	APPROVED ALLOCATION	2014 CARRYOVER
<u>FEATHER RIVER</u>				
County of Butte	27,500	27,500	0	392
Plumas County FC&WCD	2,500	2,500	0	478
City of Yuba City	9,600	9,600	0	6,855
Subtotal	39,600	39,600	0	7,725
<u>NORTH BAY</u>				
Napa County FC&WCD	29,025	29,025	0	13,407
Solano County WA	47,706	47,706	0	10,730
Subtotal	76,731	76,731	0	24,137
<u>SOUTH BAY</u>				
Alameda County FC&WCD, Zone 7	80,619	80,619	0	18,191
Alameda County WD	42,000	42,000	0	10,459
Santa Clara Valley WD	100,000	100,000	0	37,579
Subtotal	222,619	222,619	0	66,229
<u>SAN JOAQUIN VALLEY</u>				
Oak Flat WD	5,700	5,700	0	1,625
County of Kings	9,305	9,305	0	676
Dudley Ridge WD	48,350	48,350	0	11,093
Empire West Side ID	3,000	3,000	0	349
Kern County WA	982,730	982,730	0	36,166
Tulare Lake Basin WSD	87,471	87,471	0	3,320
Subtotal	1,136,556	1,136,556	0	53,229
<u>CENTRAL COASTAL</u>				
San Luis Obispo County FC&WCD	25,000	25,000	0	7,332
Santa Barbara County FC&WCD	45,486	45,486	0	13,648
Subtotal	70,486	70,486	0	20,980
<u>SOUTHERN CALIFORNIA</u>				
Antelope Valley-East Kern WA	144,844	144,844	0	12,428
Castaic Lake WA	95,200	95,200	0	38,482
Coachella Valley WD	138,350	138,350	0	0
Crestline-Lake Arrowhead WA	5,800	5,800	0	1,882
Desert WA	55,750	55,750	0	0
Littlerock Creek ID	2,300	2,300	0	805
Metropolitan WDSC	1,911,500	1,911,500	0	214,400
Mojave WA	82,800	82,800	0	3,839
Palmdale WD	21,300	21,300	0	3,670
San Bernardino Valley MWD	102,600	102,600	0	10,207
San Gabriel Valley MWD	28,800	28,800	0	0
San Geronio Pass WA	17,300	17,300	0	5,264
Ventura County WPD	20,000	20,000	0	0
Subtotal	2,626,544	2,626,544	0	290,977
TOTAL	4,172,536	4,172,536	0	463,277

SWPAO
1/23/2014

**ATTACHMENT E
DSRSD WATER CONSERVATION TRENDS**



**ATTACHMENT F
STATUS OF DROUGHT ACTION PLAN ACTIVITIES**

<i>IMMEDIATE WATER USE CURTAILMENTS.</i>		
No.	Description	Activities / Status
1	Turning off potable irrigation systems at all District facilities (i.e., primarily remote pump stations)	Complete
2	Only cleaning sewers with recycled water (except for SSO's and emergencies)	Complete
3	Ceasing all hydrant flushing (except for critical areas with identified water quality problems)	Complete
4	Exchanging all potable hydrant meters for purple recycled water hydrant meters for construction use	Essentially complete. All of the potable hydrant meters have been exchanged except for a small number that provide only domestic water to construction trailers, and one newly constructed City of San Ramon park that will be converted to recycled water within a week.
<i>FOCUSED PUBLIC OUTREACH</i>		
No.	Description	Activities / Status
1	Posting a "Save Our Water" campaign on the DSRSD website	Completed - On District home page, created and posted banner linking to Save Our Water (SOW), the statewide campaign managed by ACWA and Department of Water Resources
2	Speaking to groups including Rotary, Lions, HOA's, etc	<ul style="list-style-type: none"> • Amador Valley Lions 2/27 • Hansen Ranch HOA 2/27 • Dublin Chamber Economic Development Committee 3/6 • San Ramon Rotary 3/6 • Sorento West HOA 3/6 • Dublin Rotary 3/11 • Dublin Lions 3/25
3	Making presentations to local City Councils	Dublin City Council - 3/18 San Ramon City Council - 4/8
4	Conducting neighborhood meetings to explain the water situation and tips for conserving water	Currently working to plan and schedule
5	Conducting more landscape water audits	Currently working on a plan to advertise this program
6	Meeting with local fire departments to discuss and review the locations of recycled water hydrants	Alameda County FD – 4/14 San Ramon Valley FD – Scheduled 4/17 Parks RFTA Fire – Working to schedule

7	Developing consistent messages with other Tri-Valley and regional water agencies	Tri-Valley Water Agency Emergency Group: Proposed on 1/30/14 to PIOs that we move forward immediately with joint web page (with links to each retailer's conservation section) to coordinate messaging valley-wide this summer. Meeting held on April 9 with a PR consultant the City of Pleasanton obtained a proposal from, and a second PR consultant will be interviewed on April 16 to discuss broadcasting a consistent message.
8	Publicizing the availability of recycled water for contractors and possibly even the public	Press release issued on April 3 for contractors regarding the availability of recycled water at the WWTP and at purple hydrants. Pleasanton is considering hauling recycled water to irrigate Calippe Golf Course. Public give-away instructions submitted to CDPH for review, program not yet ready for advertising.
9	Making presentations to students in local schools about the importance of conserving water	<ul style="list-style-type: none"> • Reprise Water Hero program for 3rd graders. • Updated materials, printing ordered, will implement in the near future. • Recycled Water for 5th graders. • Oscar the Otter helps to roll out the campaign. • Distribute water conservation booklets to 2nd graders and 5th graders. • SRVUSD – 3/
EXPANDED RECYCLED WATER USE		
No.	Description	Activities / Status
1	Finish converting Dublin High School to use recycled water for irrigation	Meeting/tour for DUSD staff held April 10, visited Dougherty HS and Cal HS to see how recycled water is used to irrigate athletic fields. Dublin HS staff indicated they will begin making preparations to convert to recycled water. Follow-up call planned with DUSD staff for the week of April 14.
2	Convert irrigation customers that are close to the recycled water distribution system	<p>Developing cost estimates and \$/AF saved and will include recommendations as part of staff's update to the Drought Response Plan on April 22:</p> <ul style="list-style-type: none"> • Convert Cottonwood Apartments to RW • Convert Archstone Apartments to RW • Convert Amador Lakes Apartments to RW • Convert various sites in Eastern Dublin to RW
3	Install temporary piping, if feasible, to convey recycled water to areas that currently do not have recycled water service, including Western Dublin and Santa Rita Jail	<p><u>Temp RW pipe to West Dublin</u> - JY/AJ have determined feasibility and routing, reviewed irrigation site plans from COD and DUSD, and prepared estimated costs to run the pipe and convert existing sites to use recycled water. Recommendations will be submitted as part of staff's update to the Drought Response Plan on April 22.</p> <p><u>Temp RW pipe to Santa Rita Jail</u> - JY/AJ have determined feasibility and routing, reviewed irrigation site plans from AC Sherriff's Dept, and prepared estimated costs to run the pipe and convert existing sites to use recycled water. Recommendations will be submitted as part of staff's update to the Drought Response Plan on April 22.</p>
4	Allow residents to pick up recycled water at the WWTP for use at home, if allowed by regulatory authorities	Verbal approval obtained from CDPH, staff prepared procedures and an instruction sheet for using recycled water (i.e. do's and don'ts) which has been submitted to CDPH for review. As soon as CDPH responds staff is ready to kick off a program to offer recycled water to the public. A recommendations will be submitted as part of staff's update to the Drought Response Plan on April 22.

5	Convert District pump stations to use recycled water for irrigation, if determined to offer acceptable conservation compared to the expense	JY is preparing cost estimates for each location. Recommendations will be submitted as part of staff's update to the Drought Response Plan on April 22.
6	Encourage and assist Pleasanton to expedite converting Val Vista Park to use recycled water	Completed.
7	Encourage and assist Pleasanton to expedite converting other customers in proximity to the wastewater treatment plant to use recycled water via temporary piping	Discussed the idea with Pleasanton which expressed interest. City staff now evaluating areas close to existing recycled water piping where this could be accomplished easily. Pleasanton is also considering hauling recycled water to Calippe for use in irrigating the City's golf course.
8	Encourage EBMUD to accelerate connecting San Ramon customers to recycled water	Discussed with EBMUD staff at DERWA O&M Coordination Meeting held on 3/12; EBMUD is attempting to expedite several conversions including San Ramon's Central Park.
9	Installing more recycled water hydrants throughout the service area as the existing budget allows	More will be added as recycled water pipes are extended.

ENHANCED CUSTOMER SERVICE

No.	Description	Activities / Status
1	Using AMI to notify customers when their usage is approaching the next tier	Staff is working as quickly as possible to complete the programming needed to access and organize AMI data. The "customer portal" is now expected to be live and operational by sometime in May.
2	Using AMI to allow customers to monitor their daily water usage from a website	
3	Using AMI to alert staff when customers have leaks	

AFFORDABILITY AND ENTICEMENT PROGRAMS

No.	Description	Activities / Status
1	Adding a District-alone component to further incentivize existing Zone 7 rebate programs for toilets, wash machines and landscape conversions	Scheduled for BOD consideration on 5/5

2	An "Affordability Program" incentive program for current Tier 1 usage level customers who achieve even further levels of conservation	Scheduled for BOD consideration on 5/5
<i>FULLY COOPERATE WITH REQUESTS FROM ZONE 7</i>		
No.	Description	Activities / Status
1	DSRSD will coordinate with and assist Zone 7 in all reasonable ways	First meeting with Retailers held 2/11/2014. DSRSD staff then met individually with Zone 7 on 3/20. Zone 7 has attended several TVWRG meetings, and Zone 7 provided the Retailers with an "advance showing" of their sustainability presentation planned for April 16.
2	Pursue implementing the existing intertie agreements with EBMUD as a possible source of additional water	Obtaining meters, and all 3 interties were dry-fit in February. To implement an intertie staff will need to submit a formal request to the EBMUD GM for approval to connect.
3	Work closely with Zone 7 to coordinate deliveries to retailers and the ever evolving limitations in the water supply.	First meeting held with Retailers 2/11/2014. Zone 7 performed a pressure test on Zone 1 on 3/19. DSRSD staff then met individually with Zone 7 on 3/20. No further meetings have been scheduled despite repeated requests by DSRSD staff.



Reference General Manager	Type of Action Provide Direction	Board Meeting of April 22, 2014
Subject Discuss Updated Declaration of a Community Drought Emergency and Budget Adjustment		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input checked="" type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input checked="" type="checkbox"/> Other
REPORT:	<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	B. Michalczyk
		<input type="checkbox"/> Board Member

Recommendation:

The General Manager, acting as the District’s Drought Coordinator, recommends that the Board discuss and, by Consensus, provide direction to District staff to finalize the updated Declaration of a Community Drought Emergency and the related budget adjustment for formal consideration by the Board on May 5, 2014.

Summary:

On February 18, 2014 the Board declared a Community Drought Emergency. Attachment 1 is an excerpt from the materials provided to the Board at that meeting which established the background and need for that action. Since February 18, 2014 the District has been closely monitoring the wet weather season as it developed as well as various policy and administrative actions taken at the local, regional and State levels. Key developments since February 18, 2014 include the following:

- The traditional wet weather season is essentially over and while conditions improved since early February (see Item 9A on tonight’s agenda), 2014 remains a critically dry year;
- The Cities of Dublin, Pleasanton and Livermore have each declared States of Drought Emergency;
- On April 16, 2014 the Zone 7 Water Agency directed the local water supply retailers and untreated water customers to assure a 25% total reduction for 2014 (with 5% coming from inside water use and 50-60% from outside water use), and adopted various mandatory conservation measures to achieve this reduction.

The proposed update to the Declaration of Community Drought Emergency maintains all the provisions of the February 18, 2014 Declaration of Community Drought Emergency and adds/revises the following:

- Updates the findings for action which include key developments since February 18, 2014;
- Establishes a revised conservation goal of 25% overall, 5% inside and 50-60% outside (all 2014 as compared to 2013) as directed by the Zone 7 Board of Directors on April 16, 2014;
- Authorizes and directs the General Manager to initiate appropriate actions including but not limited to the temporary curtailment or cessation of service to individual customers and/or areas of the District as may be appropriate to ensure the integrity of the community water supply system for health and safety purposes and to appropriately notify the Board a timely fashion of actions taken; and
- Approves a budget adjustment for FYE 2015 in an amount of \$150,000 to cover expenses related to the drought and the corresponding limitations in the water supply (which amount would be funded from the additional revenue projections related to the adoption of a drought rate stage).

Authority for the District to make this declaration is found in the California Emergency Services Act and California Water Code Sections 100, 13576, §§ 350 et seq., 375 et seq., and § 71640 et seq., and Govt. Code § 61100, sub. (a).

Committee Review			Legal Review	Staff Review		
COMMITTEE	DATE	RECOMMENDATION	Yes	ORIGINATOR	DEPARTMENT	REVIEWED BY
---	---	---		B. Michalczyk	Operations	
ATTACHMENTS <input type="checkbox"/> None						
<input checked="" type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$150,000 (proposed increase in the FYE 2015 operating budget)	<input type="checkbox"/> Funding Source A. A. Water Enterprise (Fund 600.70.70.000.4.427) B.	Attachments to S&R 1. Excerpt from February 18, 2014 Board Agenda Material Related to Declaration of Community Drought Emergency 2. 3.				
						108 of 165

RESOLUTION NO. _____

RESOLUTION OF THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT TO UPDATE AND DECLARE A COMMUNITY DROUGHT EMERGENCY

WHEREAS, the State of California has and continues to experience record dry conditions, with 2013 being the driest year on record; and

WHEREAS, January 2014, normally a very wet month, was critically dry and is now the driest January on record; and

WHEREAS, meteorological and hydrological conditions improved somewhat since early February 2014, but 2014 remains a critically dry year as classified by the State of California; and

WHEREAS, on January 17, 2014 California Governor Edmund G. Brown issued a Proclamation of a State of Emergency, and encouraged all Californians to reduce their water usage by 20%; and

WHEREAS, the Zone 7 Water Agency issued a Proclamation of a Local Drought Emergency on January 29, 2014 and authorized their General Manager to “establish appropriate levels of conservation consistent with the California State of Drought Emergency and local conditions;” and

WHEREAS, in conformance with the January 29, 2014 proclamation by the Zone 7 Water Agency the General Manager established a system-wide conservation goal of 20% for 2014 as compared to 2013 usage, which was based on demand reductions of 5% for indoor water use and 40% for outdoor water use; and

WHEREAS, on January 31, 2014 the Department of Water Resources reduced from 5% to 0% the anticipated allocation of water to customers of the State Water Project, including the Zone 7 Water Agency; and

WHEREAS, on March 18, 2014 the City of Dublin declared a Local Drought Emergency; and

WHEREAS, on March 18, 2014 the City of Pleasanton approved an urgency ordinance amending their water conservation plan as needed to protect the immediate threat of the potentially significant drought to preserve public health and safety; and

Res. No. _____

WHEREAS, on February 24, 2014 the City of Livermore declared a Water Shortage Emergency;
and

WHEREAS, on April 9, 2014 the California Department of Water Resources announced that as of that time 2014 water allocations to the State Water Contractors (including Zone 7) will remain at or near 0%; and

WHEREAS, on April 16, 2014 the Zone 7 Water Agency directed the local water supply retailers and untreated water customers to assure a 25% total reduction for 2014 with 5% coming from inside curtailment and 50-60% from outside curtailment, and adopting mandatory conservation measures to achieve these reductions; and

WHEREAS, the California Emergency Services Act and the California Water Code empowers local agencies to declare a state of emergency, which allows the agency to expend funds and promulgate orders and regulations necessary to provide for the protection of life and property, and to invoke exceptions allowed by law to normal contracting, purchasing, and California Environmental Quality Act (CEQA) requirements so that the Agency can more quickly take action and respond to rapidly changing conditions.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT, a public agency located in the Counties of Alameda and Contra Costa, California, that:

1. Resolution No. 10-14 is hereby rescinded and replaced in its entirety with this Resolution;
and
2. A State of Emergency has existed since February 18, 2014 and continues to prevail in the community served by the District by reason of the fact that the ordinary demands and requirements of the water consumers in the District's service area cannot be met and satisfied by the water supplies now available to the District without depleting the water supply to the extent that there would be insufficient water for human consumption, sanitation, and/or fire

Res. No. _____

- protection as a result of the ongoing drought and the resulting reductions to and restrictions on the available water supply; and
3. For the remainder of calendar year 2014, the General Manager is authorized and directed to take all appropriate steps and actions as may be within the General Manager's authority and/or as approved by the Board to curtail District water usage by twenty five percent (25%) overall with 5% coming from inside curtailment and 50-60% from outside curtailment as compared to the same period in calendar year 2013; and
 4. The General Manager is authorized and directed to initiate appropriate operational actions including but not limited to the temporary curtailment or cessation of service to individual customers and/or areas of the District as may be appropriate to ensure the continued integrity of the community water supply system for health and safety purposes and to appropriate notify to the Board in such circumstances in a timely fashion of actions taken; and
 5. The State of Emergency shall exist until either (a) the Board takes action to rescind this State of Emergency, (b) Zone 7's Board rescinds its January 29, 2014 Proclamation of a Local Drought Emergency, or (c) December 31, 2014, whichever occurs first; and
 6. As it relates to contracting and purchasing actions associated with the District's response to the need for curtailing water usage under this Declaration of a Community Emergency, the General Manager is hereby authorized to make decisions about invoking exceptions to normal contracting and purchasing requirements as allowed by California law; and
 7. As it relates to the California Environmental Quality Act (CEQA) and actions associated with the District's response to the need for curtailing water usage under this Declaration of a Community Emergency, the General Manager is hereby authorized to make decisions regarding invoking exemptions to CEQA as allowed by California law; and
 8. As it relates to obtaining staffing resources to accomplish actions associated with the District's response to the need for curtailing water usage under this Declaration of a Community Emergency, the Board affirms the existing language included in Personnel Rule

Res. No. _____

2.03 that allows the General Manager in an emergency to make appointments without the requirement for first establishing an eligibility list; and

9. Increase the operating budget 600.70.70.000.4.427 for FYE 2014 by \$150,000 to cover actual and anticipated additional expenses necessary for accomplishing the goal of curtailing District water use; and

10. Increase the operating budget 600.70.70.000.4.427 for FYE 2015 by \$150,000 to cover anticipated additional expenses necessary for accomplishing the goal of curtailing District water use; and

11. The General Manager is authorized and directed to undertake actions related to the District's response to this drought in accordance with the authority and approval of this resolution.

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, counties of Alameda and Contra Costa, at its special meeting held on the 5th day of May 2014, and passed by the following vote:

AYES:

NOES:

ABSENT:

ATTEST: _____
Nancy G. Hatfield, District Secretary

Georgan M. Vonheeder-Leopold, President

ATTACHMENT 1
EXCERPT FROM BOARD MATERIALS
DECLARATION OF COMMUNITY DROUGHT EMERGENCY
FEBRUARY 18, 2014

On January 17, 2014, the Governor issued a Proclamation of a State of Emergency referencing the record dry conditions under which the state's water supplies have dipped to alarming levels, creating an extreme peril to the safety of persons and property in California with which local authorities are unable to cope (Attachment 1). On January 29, 2014, the Board of Zone 7 adopted a resolution proclaiming a State of Local Drought Emergency (Attachment 2). On January 31, 2014, the Department of Water Resources announced that the anticipated allocation of water to customers of the State Water Project was being reduced from five percent to zero. At the February 4, 2014 District Board meeting, Zone 7 Engineer Amparo Flores made a presentation about the curtailment of the water supply available to Zone 7's customers that would result if no water was delivered from the State Water Project to Zone 7.

Staff and District General Counsel recommend that the Board consider adopting its own resolution proclaiming a State of Emergency based on the current drought conditions and the resulting impact on the water supply. Although this action will not itself have any immediate effect, it will be an effective step towards facilitating the sort of activities that the District may need to undertake to mitigate or prevent an emergency for our customers. With such a proclamation in place, the District will be authorized to make expenditures deemed necessary, and to "promulgate orders and regulations necessary to provide for the protection of life and property." The declaration will better enable District management to respond in real time to the developing conditions.

A resolution proclaiming a state of emergency would allow exceptions to competitive bidding statutes and California Environmental Quality Act (CEQA) as they apply to specific activities the District seeks to pursue. For example, the Public Contract Code provisions governing the District's contracting and purchasing procedures expressly authorize "the board of directors may act pursuant to ... Section 22050 in the case of an emergency." To invoke this exception to the normal CEQA procedures, the governing body is to "make a finding, based on substantial evidence set forth in the minutes ..., that the emergency will not permit a delay resulting from a competitive solicitation for bids, and that the action is necessary to respond to the emergency." The proposed resolution of a Community Drought Emergency would delegate responsibility to the General Manager for making decisions about invoking exceptions to normal contracting and purchasing requirements.

Similarly, CEQA contains a statutory exemption for "specific actions necessary to prevent or mitigate an emergency." (Govt. Code §§ 21080, subd. (b)(4).) The phrase describes the sort of activities District management is investigating. The proposed resolution of a Community Drought Emergency would delegate responsibility to the General Manager for making decisions regarding and invoking exemptions to CEQA.

To accomplish water use curtailment goals it may be deemed necessary to fill vacancies, make temporary assignments using existing staff, and/or hire temporary personnel or consultants if additional resources are needed in a specific area. Existing District policies and procedures require developing an eligibility list for

appointments that may impede or slow down the District's ability to secure the necessary staffing to accomplish critical tasks. The proposed resolution of a Community Drought Emergency asks the Board to affirm the existing language in Personnel Rule 2.03 (Attachment 3) that allows the General Manager in an emergency to make appointments without the requirement for first establishing an eligibility list.

Finally, the resolution includes a proposed increase in the operating budget of \$150,000 from the Water Enterprise Fund to make expenditures as necessary in order to accomplish the desired degree of curtailment. The proposed Drought Response Action Plan includes a description of the various actions items that staff plans to implement, some of which may require funding over and above the previously approved budget.

The resolution proclaiming a state of emergency based on the current drought conditions is a useful step in streamlining actions to facilitate the protection of the District's limited potable water supplies, and for the District to be in a better position to quickly take the steps needed to mitigate or prevent the current threat to the public health and safety of the District's customers.

The water supply situation will be continuously monitored and further action by the Board may be required by late April when final hydrologic data is available, or earlier if conditions warrant.



Reference Operations Manager	Type of Action Provide Direction	Board Meeting of April 22, 2014
Subject Discuss Mandatory Water Use Prohibitions and Restrictions		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Resolution
<input checked="" type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	D. Gallagher
		<input type="checkbox"/> Board Member

Recommendation:

The Operations Manager, acting as the District’s Drought Coordinator, recommends that the Board discuss and, by Consensus, provide direction to District staff to finalize the Mandatory Use Prohibitions and Restrictions Ordinance.

Summary:

The Board is contemplating declaring a revised State of Community Drought Emergency curtailing water use in the District’s service area by 25% overall with 5% coming from inside water curtailment and 50-60% coming from outside water curtailment. In order to achieve that result and thereby protect the health and safety of the community and the operational integrity of the potable water system, a series of mandatory potable water use prohibitions and restrictions is required. On April 16, 2014 Zone 7 directed that many of these restrictions and prohibitions be enacted by each water retailer.

The purpose of this Ordinance is to conserve the water supply of the District for the greatest public benefit with particular regard to public health and safety, fire protection, and domestic (indoor) use; to conserve water by enacting water use restrictions and prohibitions that are intended to preserve the limited water supply’s ability to meet human health and safety needs; to conserve a sufficient amount of water so that the demand for water does not exceed the supply, which otherwise would force the imposition of additional and/or stricter drought stage declarations, restrictions, or prohibitions; and to the extent necessary, reduce water use fairly and equitably.

The prohibitions and restrictions are generally consistent with direction by Zone 7 and those enacted or to be enacted by the other Tri-Valley retail water agencies. A summary chart is in preparation and will be available at or before the Board meeting.

This Ordinance is adopted pursuant to the District’s authority under Sections 350 et seq. and 71640 et seq. of the California Water Code, which derive in part from Section 2 of Article X of the California Constitution.

The Water Committee asked that the Board give special consideration to the following prohibitions on which they did not reach a firm conclusion (the Water Committee supports all other prohibitions, restrictions and exemptions as presented):

1. Prohibited use of potable water in recirculating decorative water features;
2. Prohibited use of potable water at commercial car washes at which customers use hand sprays that do not use recirculated water; and
3. The consumption level above which will be considered a waste and unreasonable use of water for residential customers billed with tiered rates.

Committee Review			Legal Review	Staff Review		
COMMITTEE Water	DATE April 17, 2014	RECOMMENDATION Approve	Yes	ORIGINATOR D. Gallagher	DEPARTMENT Operations	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input checked="" type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$0	<input type="checkbox"/> Funding Source A. B.	Attachments to S&R 1. 2. 3.				

ORDINANCE NO. _____

**AN URGENCY ORDINANCE OF DUBLIN SAN RAMON SERVICES DISTRICT
ADOPTING WATER USE PROHIBITIONS AND RESTRICTIONS FOR THE DURATION
OF THE 2014 COMMUNITY DROUGHT EMERGENCY**

WHEREAS, the State of California has and continues to experience record dry conditions, with 2013 being the driest year on record; and

WHEREAS, January 2014, normally a very wet month, was critically dry and is now the driest January on record; and

WHEREAS, meteorological and hydrological conditions improved somewhat since early February 2014 but 2014 remains a critically dry year as classified by the State of California; and

WHEREAS, on January 17, 2014 California Governor Edmund G. Brown issued a Proclamation of a State of Emergency, and encouraged all Californians to reduce their water usage by 20%; and

WHEREAS, the Zone 7 Water Agency issued a Proclamation of a Local Drought Emergency on January 29, 2014 and authorized their General Manager to “establish appropriate levels of conservation consistent with the California State of Drought Emergency and local conditions;” and

WHEREAS, in conformance with the January 29, 2014 proclamation by the Zone 7 Water Agency the General Manager established a system-wide conservation goal of 20% for 2014 as compared to 2013 usage, which was based on demand reductions of 5% for indoor water use and 40% for outdoor water use; and

WHEREAS, on January 31, 2014 the Department of Water Resources reduced from 5% to 0% the anticipated allocation of water to customers of the State Water Project, including the Zone 7 Water Agency; and

Ord. No. _____

WHEREAS, on March 18, 2014 the City of Dublin declared a Local Drought Emergency; and

WHEREAS, on March 18, 2014 the City of Pleasanton approved an urgency ordinance amending their water conservation plan as needed to protect the immediate threat of the potentially significant drought to preserve public health and safety; and

WHEREAS, on February 24, 2014 the City of Livermore declared a Water Shortage Emergency; and

WHEREAS, on April 9, 2014 the California Department of Water Resources announced that as of that time 2014 water allocations to the State Water Contractors (including Zone 7) will remain at or near 0%; and

WHEREAS, on April 16, 2014 the Zone 7 Water Agency directed the local water supply retailers and untreated water customers to assure a 25% total reduction for 2014 with 5% coming from inside curtailment and 50-60% from outside curtailment directed that the local water supply retailers adopt various mandatory conservation measures to achieve these reductions; and

WHEREAS, the Zone 7 Water Agency supplies all of the potable water currently available to the District for distribution and use by its customers; and

WHEREAS, Zone 7's primary sources of supplies include: imported water from the State Water Project (80%); local groundwater supplies originating from rainfall, and runoff, and recharge (20%); and

WHEREAS, on May 5, 2014 the District Board of Directors declared that a State of Emergency has existed since February 22, 2014 and continues to prevail in the community served by the District by reason of the fact that the ordinary demands and requirements of the water consumers in the District's service area cannot be met and satisfied by the water supplies now available to the District without depleting the water supply to the extent that there would be

Ord. No. _____

insufficient water for human consumption, sanitation, and/or fire protection as a result of the ongoing drought and the resulting reductions to and restrictions on the available water supply.

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of Dublin San Ramon Services District as follows:

SECTION 1. PURPOSE AND AUTHORITY. The purpose of this Ordinance is to conserve the water supply of the District for the greatest public benefit with particular regard to public health and safety, fire protection, and domestic (indoor) use; to conserve water by enacting water use restrictions and prohibitions that are intended to preserve the limited water supply's ability to meet human health and safety needs; to conserve a sufficient amount of water so that the demand for water does not exceed the supply, which otherwise would force the imposition of additional and/or stricter drought stage declarations, restrictions, or prohibitions; and to the extent necessary, reduce water use fairly and equitably. This Ordinance is adopted pursuant to the District's authority under Sections 350 et seq. and 71640 et seq. of the California Water Code, which derive in part from Section 2 of Article X of the California Constitution.

SECTION 2. EFFECT OF ORDINANCE.

- (a) This Ordinance shall take effect immediately, shall supersede and control over any other ordinance or regulation of the District in conflict herewith, and shall remain in effect until the Community Drought Emergency has ended.
- (b) The prohibitions, restrictions exemptions and guidelines herein shall apply throughout the District's water service area.

SECTION 3. WATER USE LIMITATIONS.

- (a) Mandatory Prohibitions on Water Use. During the Community Drought Emergency, and to preserve the water supply for the greatest public benefit with particular regard to

domestic use, sanitation, and fire protection, the following uses of water are prohibited except as allowed under Section 3 (d) “Exemptions” of this Ordinance:

- (1) Any and all waste and unreasonable use of potable water as determined by the District;
- (2) Any and all use of potable water in violation of DSRSD District Code Section 4.10.030 (G), including but not limited to:
 - a. waste through leakage of defective or inoperable plumbing, piping or other water-use equipment;
 - b. gutter flooding;
 - c. single pass cooling systems in new constructions;
 - d. non-recirculating systems in a new conveyer car wash and commercial laundry systems;
 - e. Non-recycling decorative water fountains;
 - f. The use of water suitable for potable domestic use for non-potable uses, including irrigation of cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, when suitable recycled water is available to an area, for which the District has recycled water purveyorship authority.
- (3) Any and all use of potable water for outdoor lawn and landscaping watering;
- (4) Any and all use of potable water for non-potable purposes, where and when the District is ready, willing and able to furnish and recycled water for the purpose from

- its recycled water distribution system which use and purpose is appropriately permitted for said use;
- (5) Any and all use of potable water for compaction and dust control purposes;
 - (6) Any and all use of potable water for street sweeping, gutter flooding, sewer or storm drain cleaning, and maintenance purposes or other similar uses;
 - (7) Any and all use of potable water for hosing down or pressure washing driveways, sidewalks, walkways, patios, parking lots, tennis courts, or other hard surfaces;
 - (8) Any and all vehicle washing including autos, trucks, boats, trailers, recreational vehicles, etc.;
 - (9) Any and all use of potable water for cleaning the exteriors of buildings or homes;
 - (10) Any and all filling of new swimming pools and/or “topping off” of existing swimming pools;
 - (11) Any and all draining and subsequent refilling of existing swimming pools, except where required for the protection of public health and safety and upon the prior written approval of the District which approval shall specify allowable refill times and rates;
 - (12) Any and all escape of potable water from pipe breaks or leaks after the customer has been notified of the probable existence of the break or leak by the District or after the customer had or should have had reasonable knowledge of the pipe break or leak;
 - (13) Any and all use of potable water in decorative fountains and other water features that do not recirculate potable water, said fountains or other water features shall be

drained and left empty (*INPUT SOUGHT FROM BOD RELATED TO SUCH FACILITIES THAT RECIRCULATE WATER*);

(14) Any and all decorative fountains or water features that exhibit any leaks. Said leaks shall be repaired within seventy-two (72) hours after the customer has been notified, or the water feature must be drained and left empty;

(b) Mandatory Restrictions on Water Use. During the Community Drought Emergency, and to preserve the water supply for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection the following water uses are restricted:

(1) Serving water at restaurants unless in response to an unsolicited request by the customer;

(2) The use of water in the bathrooms and/or lavatories of all commercial water customers of the District unless water conservation messages are posted in appropriate and effective locations in the bathrooms and/or lavatories of said customers.

(c) General Prohibition and Restriction The use of an unreasonable and/or inappropriate amount of potable water even if otherwise in conformance with the restrictions and prohibitions on water use herein is a violation of this Ordinance. Indoor residential use that does not exceed health and safety needs shall generally be considered to be reasonable and appropriate. The State of California has determined (*Central Valley Project and State Water Project - Drought Operations Plan and Operational Forecast (April 1, 2014 through November 15, 2014)*) that health and safety uses are approximately 55 gallons per person per day. This usage generally corresponds to Tier One (10 units) usage in the District's rate schedules. In general, residential customers that use water at the rate of more than 640

gallons per day over the course of a week (the volume equivalent of about 50 units per bimonthly billing period and about 50% in excess of the threshold for Tier 3 consumption are hereby found to be using an unreasonable and/or inappropriate amount of water and shall be subject to enforcement action if they fail to reduce their usage during the Community Drought Emergency. ***(INPUT SOUGHT FROM BOD RELATED TO THE CONSUMPTION LEVEL ABOVE WHICH IT WOULD BE CONSIDERED A WASTE AND UNREASONABLE USE OF WATER)***

(d) Exemptions to Mandatory Prohibitions and Restrictions. During the Community Drought Emergency, the following exemptions to the above listed mandatory prohibitions and restrictions are allowed:

(1) Potable water for the irrigation of lawns, gardens, or other landscaped areas may be used only if done in compliance with (i) through (iv) below:

- (i) The irrigation does not result in any runoff, ponding, flooding or marshy conditions;
- (ii) It is not raining during the time of the irrigation and is not prior to three days after rain;
- (iii) The irrigation is done in accordance with the following daily schedule:
 - If the irrigation is done by hand watering, by the use of a bucket, watering can, or similar container without any direct connection to a potable water supply;
 - If the irrigation is done by hand watering using a shut-off nozzle equipped hose, only between the hours of 6:00 PM and 9:00 AM;

- If the irrigation is done by an irrigation system only if not done during day-light hours;
 - If the irrigation is done by a drip or similar high efficiency irrigation system at any time;
- (iv) The irrigation is done in accordance with the following weekly / monthly schedule:
- One day per week (and not on consecutive days) during the months of April and May;
 - Two days per week (and not on consecutive days) during the months of June to September;
 - One day per week (and not on consecutive days) during the months of October and November; and
 - At no time during the months of December to March;
- (2) Potable water may be used for the irrigation of lawns or other landscaped areas for very short periods of time for the express purpose of adjusting or repairing a potable irrigation system, as long as the system is continually supervised by the owner or their representative while the water is turned on.
- (3) Vehicle washing at commercial facilities or automobile dealerships, as long as the washing utilizes buckets or a self-contained washing system without any direct connection to a potable water supply.
- (4) Vehicle washing done at a commercial car wash facility that recirculates water
- (INPUT SOUGHT FROM BOD RELATED TO THE USE OF POTABLE WATER AT A COMMERCIAL CAR WASHING FACILITY THAT DOES NOT***

RECIRCULATE WATER AND AT WHICH A CUSTOMER WASHES THEIR OWN CAR WITH HAND NOZZELS);

- (5) Cleaning building or home exteriors if for the express purpose of preparing the exterior surfaces for repair and/or repainting, if done using a pressurized washing device equipped with a quick-acting positive shutoff nozzle;
- (6) Cleaning windows using potable water is allowed as long as a bucket or similar container is used, without any direct connection to a potable water supply;
- (7) “Topping off” of existing public and private swimming pools or spas is allowed, but only if the swimming pool or spa is covered when not in use to reduce evaporation;
- (8) The draining and subsequent refilling of public and private swimming pools and spas if needed for the protection of public health and safety, but only upon the prior written approval of the District which approval shall specify allowable refill times and rates.
- (9) Notwithstanding anything in this Ordinance to the contrary, potable water may be used to actively irrigate or otherwise provide water to environmental mitigation projects in existence as of the effective date of this Ordinance and that have been duly approved by regulatory authorities provided that the project has active and valid permits.

SECTION 4. ADMINISTRATIVE IMPLEMENTATION. The General Manager is authorized and directed to establish appropriate administrative procedures consistent with the provisions of this ordinance and to take appropriate action to enact the provisions of this ordinance.

Ord. No. _____

SECTION 5. EXEMPTION FROM CEQA. The District Board of Directors finds that the actions taken in this Ordinance are exempt from provisions of the California Environmental Quality Act of 1970 (CEQA) because they are immediate actions necessary to prevent or mitigate an emergency, as described in subdivision (b)(4) of Public Resources Code section 21080 and in section 15269(c) of the Guidelines promulgated under said Act and codified in Title 14 of the Code of California Regulations (CEQA Guidelines), and to assume the maintenance, restoration, or enhancement of a natural resource, as described in section 15307, of the CEQA Guidelines.

SECTION 6. SEVERABILITY. If any provision of this Ordinance is held to be invalid or unenforceable, that holding will not affect the remainder of the Ordinance, which shall remain in full force and effect.

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, Counties of Alameda and Contra Costa, at its special meeting held on the 5th day of May 2014, by the following vote:

AYES:

NOES:

ABSENT:

Georgean M. Vonheeder-Leopold, President

ATTEST:

Nancy G. Hatfield, District Secretary



Reference Operations Manager	Type of Action Provide Direction	Board Meeting of April 22, 2014
Subject Discuss Enforcement Provisions and Penalties for Violations of Mandatory Potable Water Use Prohibitions and Restrictions		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Resolution
<input checked="" type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	D. Gallagher
		<input type="checkbox"/> Board Member

Recommendation:

The Operations Manager, acting as the District’s Drought Coordinator, recommends that the Board discuss and, by Consensus, provide direction to District staff to finalize the Enforcement and Penalty Ordinance.

Summary:

The Board is contemplating declaring a revised State of Community Drought Emergency curtailing water use in the District’s service area by 25% overall with 5% coming from inside water curtailment and 50-60% coming from outside water curtailment. In order to achieve that result and thereby protect the health and safety of the community and the operational integrity of the potable water system, a series of mandatory potable water use prohibitions and restrictions is required. On April 16, 2014 Zone 7 directed that many of these restrictions and prohibitions be enacted by each water retailer.

The purpose of this Ordinance is to conserve the water supply of the District for the greatest public benefit with particular regard to public health and safety, fire protection, and domestic (indoor) use; to conserve water by enforcing water use restrictions and prohibitions that if continued would endanger the water supply’s ability to meet human health and safety needs; to conserve a sufficient amount of water so that the demand for water does not exceed the supply, which otherwise would force the imposition of additional drought stage declarations, restrictions, or prohibitions; and to the extent necessary, direct staff to enforce said water use restrictions and prohibitions fairly and equitably.

The Ordinance establishes enforcement provisions and penalties that progress in severity as violations of the prohibitions and restrictions remain uncorrected. A comparison of the proposed enforcement provisions and penalties with those of other Tri-Valley retailers is in preparation and will be available at or before the Board meeting.

This Ordinance will be adopted pursuant to the District’s authority under Sections 350 et seq. and 71640 et seq. of the California Water Code, which derive in part from Section 2 of Article X of the California Constitution.

Committee Review			Legal Review	Staff Review		
COMMITTEE Water	DATE April 17, 2014	RECOMMENDATION Approve	Yes	ORIGINATOR D. Gallagher	DEPARTMENT Operations	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input checked="" type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$0	<input type="checkbox"/> Funding Source A. B.		Attachments to S&R 1. 2. 3.			

ORDINANCE NO. ____

**AN URGENCY ORDINANCE OF DUBLIN SAN RAMON SERVICES DISTRICT
ADOPTING PROCEDURES AND PENALTIES FOR THE ENFORCEMENT OF WATER
USE RESTRICTIONS AND PROHIBITIONS FOR THE 2014 COMMUNITY DROUGHT
EMERGENCY SYSTEM**

WHEREAS, the State of California has and continues to experience record dry conditions, with 2013 being the driest year on record; and

WHEREAS, January 2014, normally a very wet month, was critically dry and is now the driest January on record; and

WHEREAS, meteorological and hydrological conditions improved somewhat since early February 2014 but 2014 remains a critically dry year as classified by the State of California; and

WHEREAS, on January 17, 2014 California Governor Edmund G. Brown issued a Proclamation of a State of Emergency, and encouraged all Californians to reduce their water usage by 20%; and

WHEREAS, the Zone 7 Water Agency issued a Proclamation of a Local Drought Emergency on January 29, 2014 and authorized their General Manager to “establish appropriate levels of conservation consistent with the California State of Drought Emergency and local conditions;” and

WHEREAS, in conformance with the January 29, 2014 proclamation by the Zone 7 Water Agency the General Manager established a system-wide conservation goal of 20% for 2014 as compared to 2013 usage, which was based on demand reductions of 5% for indoor water use and 40% for outdoor water use; and

WHEREAS, on January 31, 2014 the Department of Water Resources reduced from 5% to 0% the anticipated allocation of water to customers of the State Water Project, including the Zone 7 Water Agency; and

Ord No. _____

WHEREAS, on March 18, 2014 the City of Dublin declared a Local Drought Emergency; and

WHEREAS, on March 18, 2014 the City of Pleasanton approved an urgency ordinance amending their water conservation plan as needed to protect the immediate threat of the potentially significant drought to preserve public health and safety; and

WHEREAS, on February 24, 2014 the City of Livermore declared a Water Shortage Emergency; and

WHEREAS, on April 9, 2014 the California Department of Water Resources announced that as of that time 2014 water allocations to the State Water Contractors (including Zone 7) will remain at or near 0%; and

WHEREAS, on April 16, 2014 the Zone 7 Water Agency directed the local water supply retailers and untreated water customers to assure a 25% total reduction for 2014 with 5% coming from inside curtailment and 50-60% from outside curtailment directed that the local water supply retailers adopt various mandatory conservation measures to achieve these reductions; and

WHEREAS, the Zone 7 Water Agency supplies all of the potable water currently available to the District for distribution and use by its customers; and

WHEREAS, Zone 7's primary sources of supplies include: imported water from the State Water Project (80%); local groundwater supplies originating from rainfall, and runoff, and recharge (20%); and

WHEREAS, on May 5, 2014 the District Board of Directors declared that a State of Emergency has existed since February 22, 2014 and continues to prevail in the community served by the District by reason of the fact that the ordinary demands and requirements of the water consumers in the District's service area cannot be met and satisfied by the water supplies

Ord No. _____

now available to the District without depleting the water supply to the extent that there would be insufficient water for human consumption, sanitation, and/or fire protection as a result of the ongoing drought and the resulting reductions to and restrictions on the available water supply.

WHEREAS, on May 5, 2014 the District Board of Directors adopted an urgency ordinance specifying water use restrictions and prohibitions that are to be effective during the 2014 Community Drought Emergency.

NOW, THEREFORE, BE IT ORDAINED by the Board of Directors of Dublin San Ramon Services District as follows:

SECTION 1. PURPOSE AND AUTHORITY. The purpose of this Ordinance is to conserve the water supply of the District for the greatest public benefit with particular regard to public health and safety, fire protection, and domestic (indoor) use; to conserve water by enforcing water use restrictions and prohibitions that if continued would endanger the water supply's ability to meet human health and safety needs; to conserve a sufficient amount of water so that the demand for water does not exceed the supply, which otherwise would force the imposition of additional drought stage declarations, restrictions, or prohibitions; and to the extent necessary, direct staff to enforce said water use restrictions and prohibitions fairly and equitably. This Ordinance is adopted pursuant to the District's authority under Sections 350 et seq. and 71640 et seq. of the California Water Code, which derive in part from Section 2 of Article X of the California Constitution.

SECTION 2. EFFECT OF ORDINANCE.

Ord No. _____

- (a) This Ordinance shall take effect immediately, shall supersede and control over any other ordinance or regulation of the District in conflict herewith, and shall remain in effect until the Community Drought Emergency has ended.
- (b) The prohibitions, restrictions exemptions and guidelines herein shall apply throughout the District's water service area.
-

SECTION 3. ENFORCEMENT ACTIONS.

- (a) Violation of Mandatory Prohibitions and Restrictions on Water Use.

During the Community Drought Emergency, certain uses of potable water will be restricted or prohibited as determined by a separate Ordinance of the District. A District customer who intentionally or unintentionally violates prohibitions or restrictions related to the use of potable water will be subject to the following enforcement actions:

- (1) For first violations customers will be subject to a either a verbal or written warning at the discretion of the District, which warning shall provide advice and/or guidance on what the customer needs to do to cure the violation. Verbal warnings will occur via telephone call or a site visit by District staff. Written warnings will be in the form of a door hanger tag, a letter sent via postal carrier, or other functionally equivalent methods;
- (2) For second violations customers will be subject to a penalty of \$250 in accordance with Chapter 1.3.010 (General Penalty) of the District Code. The assessment of the violation will be communicated to the customer via a Notice of Violation in the form of a door hanger tag, a letter sent via postal carrier, or other functionally equivalent

Ord No. _____

- methods. The penalty amount will be communicated to the customer via a letter sent via postal carrier or other functionally equivalent methods, and the penalty amount will be added to the customer's bill on the next statement. The Notice of Violation will clearly state that any further violations of a prohibited or restricted water use will be subject to greater penalties and the potential of the District installing a flow restrictor on the customer's service, or at the option of the District, disconnection (shut-off) of their service.
- (3) For third violations customers will be subject to an additional penalty of \$500 in accordance with Chapter 1.3.010 (General Penalty) of the District Code. The assessment of the violation will be communicated to the customer via a Notice of Violation in the form of a door hanger tag, a letter sent via postal carrier, or other functionally equivalent methods. The penalty will be communicated to the customer via a letter sent via postal carrier or other functionally equivalent methods, and the penalty amount will be added to the customer's bill on the next statement. The Notice of Violation will clearly state that any further violations of a prohibited or restricted water use will be subject to greater penalties and the potential of the District installing a flow restrictor on the customer's service, or at the option of the District, disconnection (shut-off) of their service.
- (4) For fourth violations customers will be subject to an additional penalty of \$1,000 in accordance with Chapter 1.3.010 (General Penalty) of the District Code. The violation will be communicated to the customer via a door hanger tag, a letter sent via postal carrier, or other functionally equivalent methods. The penalty will be communicated to the customer via a letter sent via postal carrier or functionally

Ord No. _____

(5) equivalent methods, and the penalty amount will be added to the customer's bill on the next statement. The Notice of Violation will clearly state that any further violations of a prohibited or restricted water use will result in the District installing a flow restrictor on the customer's service, or at the option of the District, disconnection (shut-off) of their service.

For fifth and any subsequent violations customers will be subject to the District, at its discretion, physically limiting or stopping the amount of water that the customer is allowed to receive. If feasible and if sufficient to cause the cessation of the violation, a flow restrictor will be installed on the customer's meter connection that will limit the flow of water to the home. The flow restrictor will allow enough water to meet health and safety needs (i.e. most indoor water uses), but the pressure and flow will be insufficient to allow landscape irrigation or other outdoor uses. If a flow restrictor is not feasible or appropriate for any reason, or timely enough to provide the necessary amount of curtailment, the customer's service connection will be appropriately disconnected from the water system (i.e., by closing and locking the service valve and/or by physically removing the water meter). A door tag will be left on the home informing the occupant of the action taken and the steps that they must take before the District will consider removing the physical limitation. The action taken and the applicable penalties and costs will be communicated to the customer via a letter sent via postal carrier or other functionally equivalent methods. Applicable penalties and/or costs will be added to the customer's bill, and full payment of all outstanding penalties, fees, and costs will be required before the physical limitation will be removed.

Ord No. _____

(b) Excessive Water Use.

Customers who violate the prohibition and restriction of the use an unreasonable and/or inappropriate amount of water in any time period (such as but not limited to hourly, daily, weekly or over the course of a billing cycle) will be subject to the following enforcement actions:

- (1) For first violations customers will be notified by a letter sent via postal carrier or other functionally equivalent methods. The notice of violation will include a directive to the customer to immediately reduce water usage, along with a warning that continuing to use unreasonable and/or inappropriate amounts of water will be subject to actions and penalties;
- (2) For second violations customers will be assessed a penalty of \$250 in accordance with Chapter 1.3.010 (General Penalty) of the District Code. The notice of violation and the identification of the penalty amount will be communicated to the customer via a letter sent via postal carrier or other functionally equivalent methods, and the penalty will be added to the customer's bill on the next statement. The Notice will include a directive to the customer to immediately reduce water usage, along with a warning that continuing to use unreasonable and/or inappropriate amounts of water will be subject to additional penalties including the potential of the District installing a flow restrictor on the customer's service, or at the option of the District, disconnection (shut-off) of their service.

Ord No. _____

- (3) For third violations customers will be assessed a penalty of \$500 in accordance with Chapter 1.3.010 (General Penalty) of the District Code. The notice of violation and the identification of the penalty amount will be communicated to the customer via a letter sent via postal carrier or other functionally equivalent methods, and the penalty will be added to the customer's bill on the next statement. The Notice will include a
- (4) directive to the customer to immediately reduce water usage, along with a warning that continuing to use unreasonable and/or inappropriate amounts of water will be subject to additional penalties including the potential of the District installing a flow restrictor on the customer's service, or at the option of the District, disconnection (shut-off) of their service.
- (5) For fourth violations customers will be assessed a penalty of \$1,000 in accordance with Chapter 1.3.010 (General Penalty) of the District Code. The notice of violation and the identification of the penalty amount will be communicated to the customer via a letter sent via postal carrier or other functionally equivalent methods, and the penalty will be added to the customer's bill on the next statement. The Notice will include a directive to the customer to immediately reduce water usage, along with a warning that continuing to use unreasonable and/or inappropriate amounts of water will be subject to additional penalties including the potential of the District installing a flow restrictor on the customer's service, or at the option of the District, disconnection (shut-off) of their service.
- (6) For fifth and subsequent violations the customer's water service connection may be physically limited or disconnected as determined by the General Manager using the

Ord No. _____

following criteria. If feasible and if sufficient to cause the cessation of the violation, a flow restrictor will be installed on the customer's meter connection that will restrict the flow of water to the home. The flow restrictor will allow enough water to meet California health and safety standards. If a flow restrictor is not feasible or appropriate for any reason, or timely enough to provide the necessary amount of curtailment, the customer's service connection will be appropriately disconnected from the water system (i.e. by closing and locking the service valve and/or by physically removing the water meter). A door tag will be left on the home informing the occupant of the action taken and the steps that they must take before the District will remove the physical limitation. The action taken and the applicable penalties and costs will be communicated to the customer via a letter sent via postal carrier or other functionally equivalent methods. Applicable penalties and/or costs will be added to the customer's bill, and full payment of all outstanding penalties, fees, and costs will be required before the physical limitation will be removed.

(c) Violation is a Misdemeanor.

Pursuant to California Water Code Section 71644, the use of water in violation of restrictions or prohibitions on water use, or the waste and unreasonable use of water in accordance with this Ordinance is a misdemeanor.

(d) Multiple Violations

Violations of more than one prohibition and restriction on water use are separate violations each of which shall be subject to separate and independent enforcement in accordance with the provisions of this Ordinance.

SECTION 4. APPLICATION PROCEDURE FOR WAIVER OF ENFORCEMENT

ACTIONS.

Consideration of written applications for waivers of the enforcement actions described herein shall be as follows:

- (a) A customer may submit a written application for a waiver of an enforcement action related to water use to the District's Drought Coordinator. The application must be on the District's form and must include the customer name, account number(s), a description of the water use for which the customer was cited, and a description of the reason and justification why a waiver is requested. If penalties and/or costs have been assessed, the application must be accompanied by a deposit in an amount specified in the enforcement action.
- (b) The Drought Coordinator will consider each application for a waiver to an enforcement action based on the customer's reason and justification for violating a mandatory prohibition and/or restriction and/or for the unreasonable and/or inappropriate water use. The Drought Coordinator may grant a one-time waiver of a particular enforcement action if the customer's justification is deemed to be reasonable, and if the customer has mitigated or agrees to immediately mitigate the cause for the enforcement action. If a waiver is granted the deposit furnished by the customer shall be refunded.
- (c) A customer may appeal a denial of an application for a waiver within ten (10) calendar days by submitting a written appeal to the Board of Directors on the District's form and include the reasons why the customer disagrees with the denial.

Ord No. _____

Applications for more than one waiver of an enforcement action by a customer are not permitted.

SECTION 5. ADMINISTRATIVE IMPLEMENTATION. The General Manager is authorized and directed to establish appropriate administrative procedures consistent with the provisions of this ordinance and to take appropriate action to enact the provisions of this ordinance.

SECTION 6. EXEMPTION FROM CEQA. The District Board of Directors finds that the actions taken in this Ordinance are exempt from provisions of the California Environmental Quality Act of 1970 (CEQA) because they are immediate actions necessary to prevent or mitigate an emergency, as described in subdivision (b)(4) of Public Resources Code section 21080 and in section 15269(c) of the Guidelines promulgated under said Act and codified in Title 14 of the Code of California Regulations (CEQA Guidelines), and to assume the maintenance, restoration, or enhancement of a natural resource, as described in section 15307, of the CEQA Guidelines.

SECTION 7. SEVERABILITY. If any provision of this Ordinance is held to be invalid or unenforceable, that holding will not affect the remainder of the Ordinance, which shall remain in full force and effect.

Ord No. _____

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, Counties of Alameda and Contra Costa, at its special meeting held on the 5th day of May 2014, by the following vote:

AYES:

NOES:

ABSENT:

Georgan M. Vonheeder-Leopold, President

ATTEST:

Nancy G. Hatfield, District Secretary

H:\Board\2014\04-22-14Sp\4 - Enforcement and Penalties\DSRSD Water Shortage Enforcement Ordinance.docx



Reference Financial Services Manager	Type of Action Provide Direction	Board Meeting of April 22, 2014
Subject Discuss Adopting Stage 3 Water Supply Shortage Rates		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input checked="" type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	J. Archer
		<input type="checkbox"/> Board Member

Recommendation:

The Financial Services Manager recommends that the Board discuss and, by Consensus, provide direction to District staff to finalize the adoption of Stage 3 Water Supply Shortage Rates.

Summary:

The Board is contemplating declaring a revised State of Community Drought Emergency curtailing water use in the District’s service area by 25% overall with 5% coming from inside water curtailment and 50-60% coming from outside water curtailment. That declaration and curtailment level is consistent with direction from Zone 7 and with actions that have been or will shortly be taken by other water retailers in the Tri-Valley.

On April 16, 2013 the Board, by adopting Resolution No. 11-13, established a schedule of water rates for normal (baseline) and various water shortage levels. A summary of those rates is included as Attachment 1. These rates are automatically adjusted for the percentage increase in the Consumer Price increase; the rates shown in Attachment 1 are current. These rates do not include any near term action by Zone 7 to change the wholesale rate they charge the District for water. Per District Code, that wholesale rate is automatically passed through to district customers. Noticing and further processing in accordance with Proposition 218 is not required at this time because the rates were noticed and processed at the time of their April 2013 adoption (Attachment 5). The rates, including the drought rates, contained a provision (in footnote 1) for CPI-driven increases on January 1, which call for notification “on the October or November billing statements of the new rates that will be effective on January 1 of the following year.” An analysis of the rate impact on various customer classes is presented in Attachment 2. This action does not affect recycled water rates.

The water shortage rates serve several purposes:

- Provide an price signal to all customers to use less water during the State of Emergency
- Generate additional revenue from high volume users to fund conservation related expenses during the shortage; and
- Ensure the financial integrity of the District during the emergency (a significant fraction of the District’s water operating costs are fixed – i.e. do not vary with quantity sold but due to regulatory constraints much of the fixed costs must be recovered volumetrically).

In a separate action the Board will consider an “Affordability Program” for low-volume water users that is designed to offset the impact of these rates on those customers.

The Stage 3 Water Shortage Rates are projected to generate additional revenue in an amount of approximately \$300,000, generally from large volume users, that will be used to support conservation related expenditures.

Committee Review			Legal Review	Staff Review		
COMMITTEE Finance	DATE 4/16/14	RECOMMENDATION ---	Yes	ORIGINATOR D. Gallagher	DEPARTMENT Operations	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input checked="" type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$300,000 revenue	<input type="checkbox"/> Funding Source A. Fund 600 B.	Attachments to S&R 1. Current Water Rates and Water Supply Shortage Rates 2. Residential Water Shortage Bill Impacts at Stage 3 Rates 3. Residential Water Shortage Bill Impact Table 4. Residential Water Shortage Bill Impacts at Stage 2 Rates 5. Proposition 218 Noticing				
<small>H:\Board\2014\04-22-14Spc\5 - Adoption of Drought Stage\SR Stage 3 Shortage Rate.docx</small>						

RESOLUTION NO. _____

RESOLUTION OF THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT ESTABLISHING STAGE 3 WATER CONSUMPTION RATES DURING A WATER SHORTAGE UNDER CHAPTER 4.40 OF THE DISTRICT CODE

WHEREAS, the State of California has and continues to experience record dry conditions, with 2013 being the driest year on record; and

WHEREAS, January 2014, normally a very wet month, was critically dry and is now the driest January on record; and

WHEREAS, meteorological and hydrological conditions improved somewhat since early February 2014 but 2014 remains a critically dry year as classified by the State of California; and

WHEREAS, on January 17, 2014 California Governor Edmund G. Brown issued a Proclamation of a State of Emergency, and encouraged all Californians to reduce their water usage by 20%; and

WHEREAS, the Zone 7 Water Agency issued a Proclamation of a Local Drought Emergency on January 29, 2014 and authorized their General Manager to “establish appropriate levels of conservation consistent with the California State of Drought Emergency and local conditions;” and

WHEREAS, in conformance with the January 29, 2014 proclamation by the Zone 7 Water Agency the General Manager established a system-wide conservation goal of 20% for 2014 as compared to 2013 usage, which was based on demand reductions of 5% for indoor water use and 40% for outdoor water use; and

WHEREAS, on January 31, 2014 the Department of Water Resources reduced from 5% to 0% the anticipated allocation of water to customers of the State Water Project, including the Zone 7 Water Agency; and

Res. No. _____

WHEREAS, on March 18, 2014 the City of Dublin declared a Local Drought Emergency; and

WHEREAS, on March 18, 2014 the City of Pleasanton approved an urgency ordinance amending their water conservation plan as needed to protect the immediate threat of the potentially significant drought to preserve public health and safety; and

WHEREAS, on February 24, 2014 the City of Livermore declared a Water Shortage Emergency; and

WHEREAS, on April 9, 2014 the California Department of Water Resources announced that as of that time 2014 water allocations to the State Water Contractors (including Zone 7) will remain at or near 0%; and

WHEREAS, on April 16, 2014 the Zone 7 Water Agency directed the local water supply retailers and untreated water customers to assure a 25% total reduction for 2014 with 5% coming from inside curtailment and 50-60% from outside curtailment, and adopting mandatory conservation measures to achieve these reductions; and

WHEREAS, achieving that level of water use curtailment requires a multi-faceted approach of public outreach, use restrictions and prohibitions and economic incentives to curtail water use; and

WHEREAS, the District has previously adopted Resolution No. 11-13 Adoption of Water Rates including Water Consumption Rates During a Water Shortage (Stages 1-4) in accordance with Dublin San Ramon Services District Code Section 4.40.020; and

WHEREAS, the use of the incremental revenues generated by this action is in accordance with amounts anticipated in the January 2013 Water Rate Study for Stage 3 Water Conservation Rates and is to be used to support anticipated additional expenses necessary for

Res. No. _____

public information and water conservation efforts to achieve the needed water curtailment levels.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT, a public agency located in the counties of Alameda and Contra Costa, California as follows:

Stage 3 Water Consumption Rates During a Water Shortage in accordance with Board Resolution No. 11-13 and Section 4.40.020 and of the District Code (Provision of Potable Water Service) be adopted and shall be in effect starting June 1, 2014 and remain in effect until terminated by Resolution of the Board of Directors.

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, Counties of Alameda and Contra Costa, at its special meeting held on the 5th day of May 2014, by the following vote:

AYES:

NOES:

ABSENT:

Georgan M. Vonheeder-Leopold, President

ATTEST:

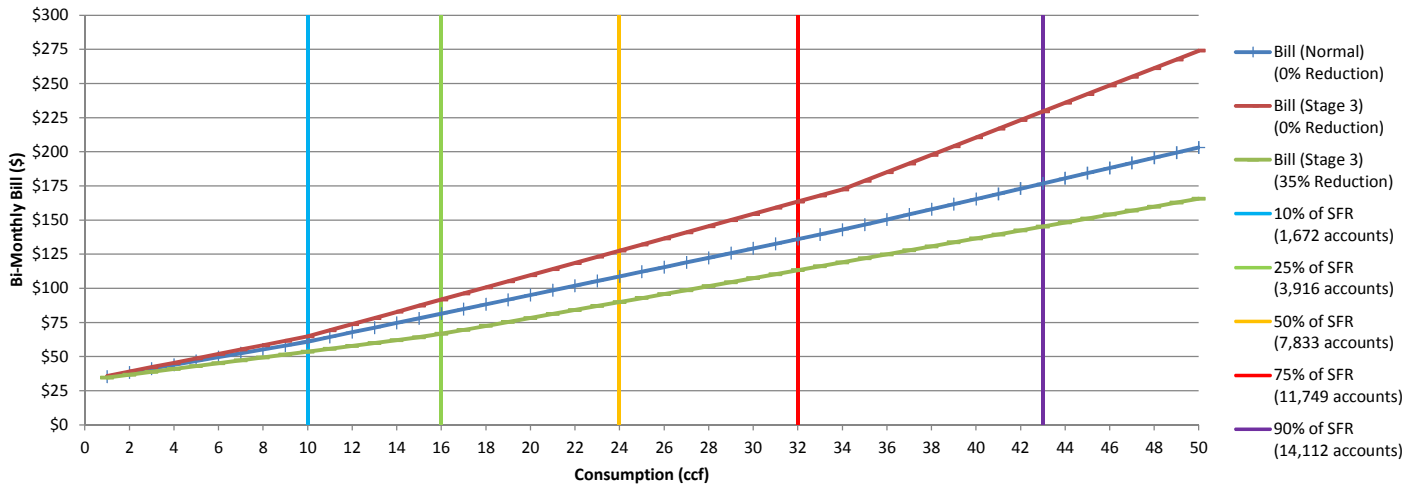
Nancy G. Hatfield, District Secretary

ATTACHMENT 1

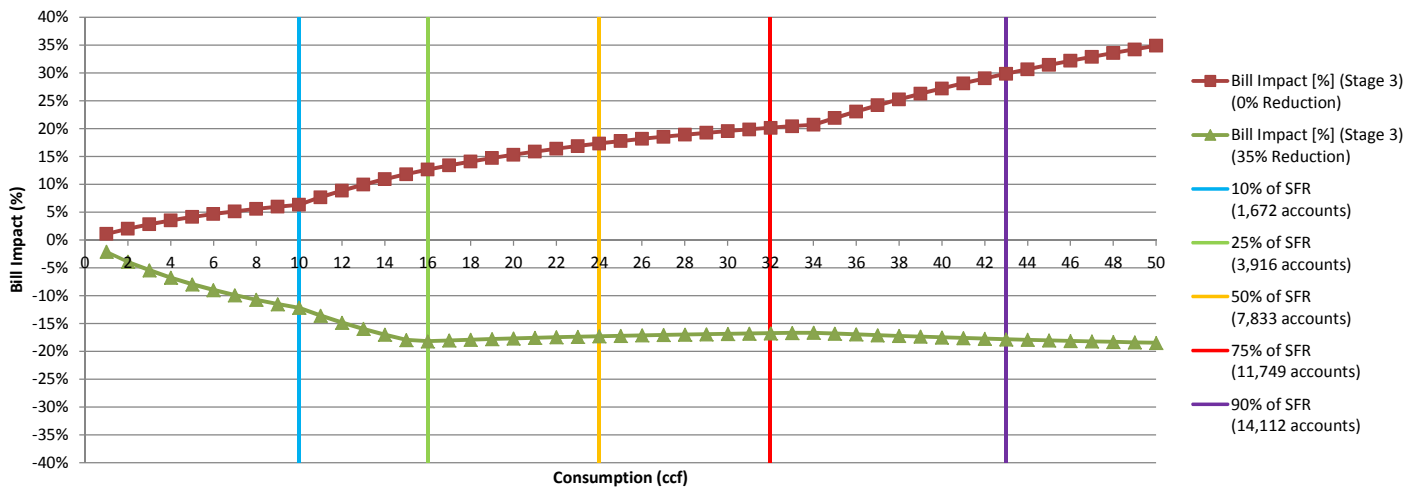
**CURRENT WATER CONSUMPTION RATES AND WATER SUPPLY
SHORTAGE RATES**

	Baseline (per ccf)	Stage 1 (per ccf)	Stage 2 (per ccf)	Stage 3 (per ccf)	Stage 4 (per ccf)
Associated Water Use Curtailment	0%	10%	20%	35%	50%
Residential Customers					
Tier 1 (0-10 ccf)	\$0.51	\$0.57	\$0.641	\$0.897	\$1.308
Tier 2 (11-34 ccf)	\$1.08	\$1.35	\$1.67	\$2.15	\$3.50
Tier 3 (over 34 ccf)	\$1.44	\$1.87	\$2.80	\$4.02	\$5.53
Commercial Customers					
Winter (Nov-Apr) All ccf	\$1.03	\$1.12	\$1.23	\$1.55	\$1.95
Summer (May-Oct) All ccf	\$1.23	\$1.44	\$1.72	\$2.16	\$3.08
Potable Irrigation Customers					
All ccf	\$1.44	\$1.87	\$2.80	\$4.02	\$5.53

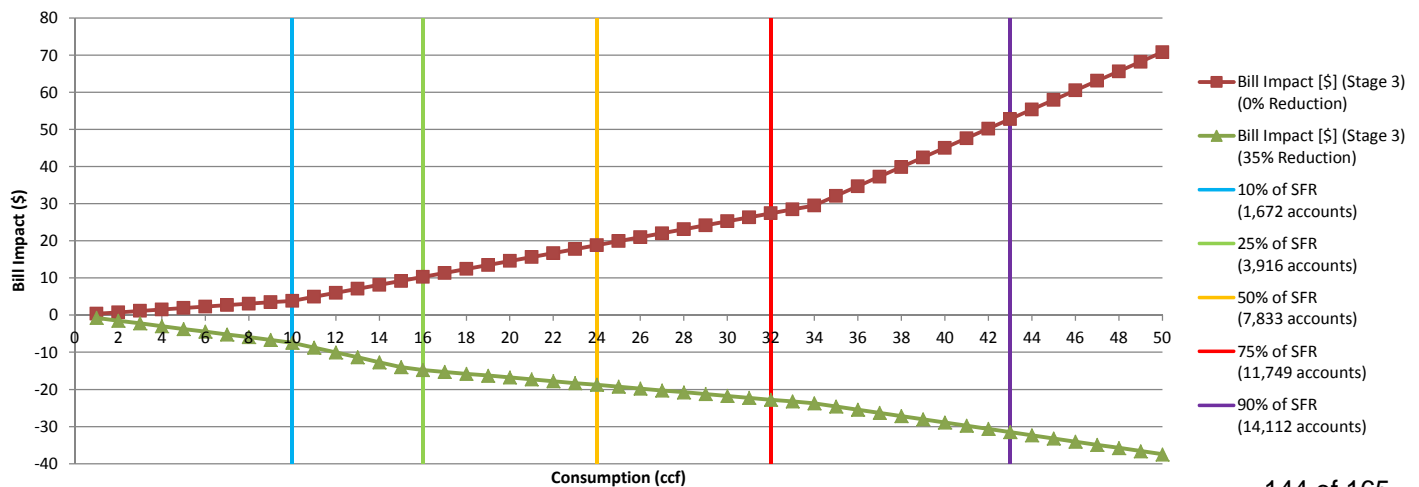
Bill Comparison of Single Family Residences at Stage 3 Water Shortage Condition Rates



Bill Impact (%) of Single Family Residences at Stage 3 Water Shortage Condition Rates



Bill Impact (\$) of Single Family Residences at Stage 3 Water Shortage Condition Rates



**Major District Customers
Stage 3 Water Shortage Condition
Bill Impacts**

Potable non-irrigation

Customer	Normal (Baseline)	Stage 3 (0% Reduction)	Variance	Bill Impact	Stage 3 (35% Reduction)	Variance	Bill Impact
	Annual Water Bill	Annual Water Bill	Bill Impact	Impact %	Annual Water Bill	Bill Impact	Impact %
Federal Correctional Institution	513,360	599,494	86,134	16.78%	424,613	(88,747)	-17.29%
County of Alameda (Santa Rita Jail)	433,692	433,692	0	0.00%	288,737	(144,954)	-33.42%
Dublin Unified School District	275,300	323,020	47,719	17.33%	235,571	(39,729)	-14.43%
USAG CSTC (Camp Parks)	154,014	173,106	19,091	12.40%	133,238	(20,776)	-13.49%
Amador Lakes Apartments	131,383	153,899	22,516	17.14%	108,309	(23,075)	-17.56%
Avalon Bay Communities Inc	130,531	150,583	20,052	15.36%	110,392	(20,138)	-15.43%
San Ramon Valley Unified School District	69,707	79,107	9,400	13.49%	60,651	(9,056)	-12.99%
City of Dublin	62,494	71,351	8,856	14.17%	54,344	(8,150)	-13.04%
City of San Ramon	17,006	18,935	1,929	11.34%	15,351	(1,656)	-9.73%

Potable irrigation

Customer	Normal (Baseline)	Stage 3 (0% Reduction)	Variance	Bill Impact	Stage 3 (35% Reduction)	Variance	Bill Impact
Federal Correctional Institution	1,131	1,237	106	9.35%	1,146	15	1.30%
County of Alameda (Santa Rita Jail)	3,437	3,437	0	0.00%	2,781	(656)	-19.09%
Dublin Unified School District	98,940	159,898	60,958	61.61%	107,387	8,447	8.54%
USAG CSTC (Camp Parks)	45,522	68,987	23,465	51.55%	48,774	3,251	7.14%
Amador Lakes Apartments	92,335	150,176	57,841	62.64%	100,349	8,015	8.68%
Avalon Bay Communities Inc	69,711	93,016	23,305	33.43%	72,940	3,229	4.63%
San Ramon Valley Unified School District	78,247	126,580	48,334	61.77%	84,944	6,697	8.56%
City of Dublin	357,751	567,278	209,527	58.57%	386,784	29,033	8.12%
City of San Ramon	107,543	168,838	61,296	57.00%	116,036	8,493	7.90%

Total potable water

Customer	Normal (Baseline)	Stage 3 (0% Reduction)	Variance	Bill Impact	Stage 3 (35% Reduction)	Variance	Bill Impact
Federal Correctional Institution	514,491	600,731	86,240	16.76%	425,759	(88,732)	-17.25%
County of Alameda (Santa Rita Jail)	437,129	437,129	0	0.00%	291,519	(145,610)	-33.31%
Dublin Unified School District	374,241	482,918	108,677	29.04%	342,958	(31,282)	-8.36%
USAG CSTC (Camp Parks)	199,537	242,093	42,557	21.33%	182,012	(17,524)	-8.78%
Amador Lakes Apartments	223,718	304,075	80,357	35.92%	208,658	(15,060)	-6.73%
Avalon Bay Communities Inc	200,241	243,598	43,357	21.65%	183,332	(16,909)	-8.44%
San Ramon Valley Unified School District	147,953	205,687	57,734	39.02%	145,595	(2,359)	-1.59%
City of Dublin	420,245	638,629	218,383	51.97%	441,129	20,884	4.97%
City of San Ramon	124,549	187,773	63,225	50.76%	131,387	6,838	5.49%

Notes:

- 1) Santa Rita Jail is billed at the Limited Access rate (essentially a Zone 7 cost of water "pass through"), which is unaffected by water shortage conditions
- 2) Stage 3 bill impacts based on 35% reduction in consumption.
- 3) Potable irrigation consumption (excluding Santa Rita Jail) would need to decrease by approximately 41% for neutral bill impact.
- 4) Based on FYE13 consumption at calendar year 2014 rates.

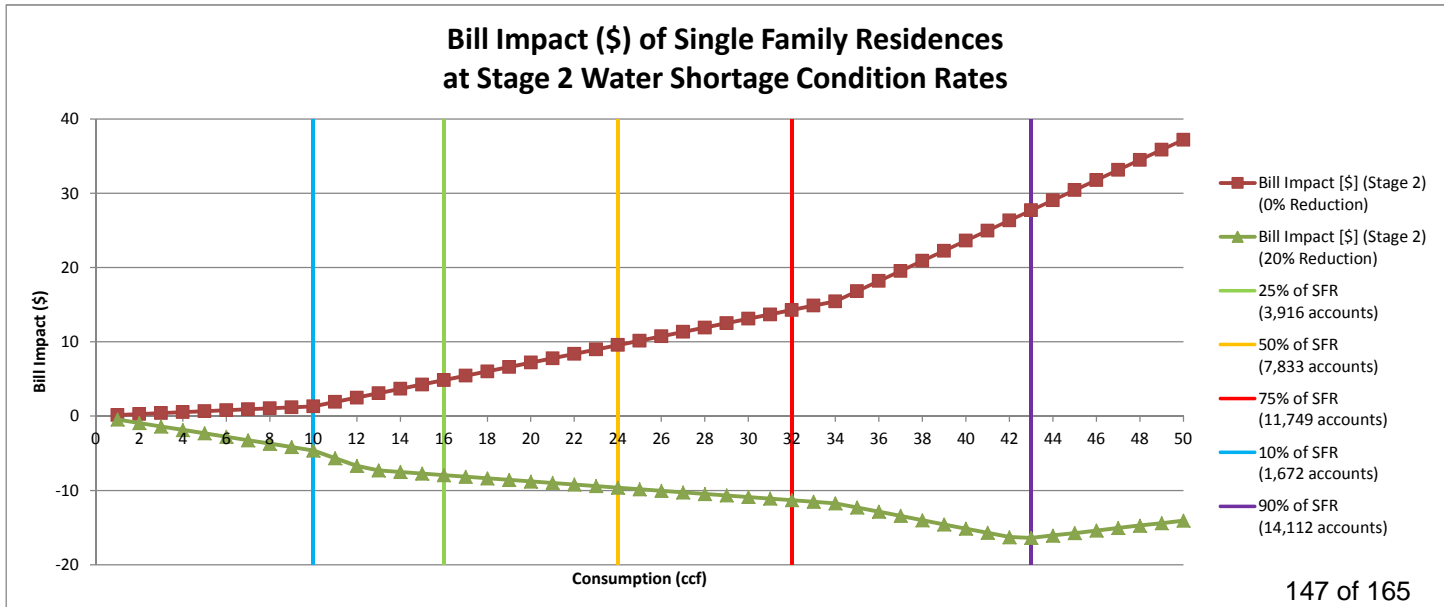
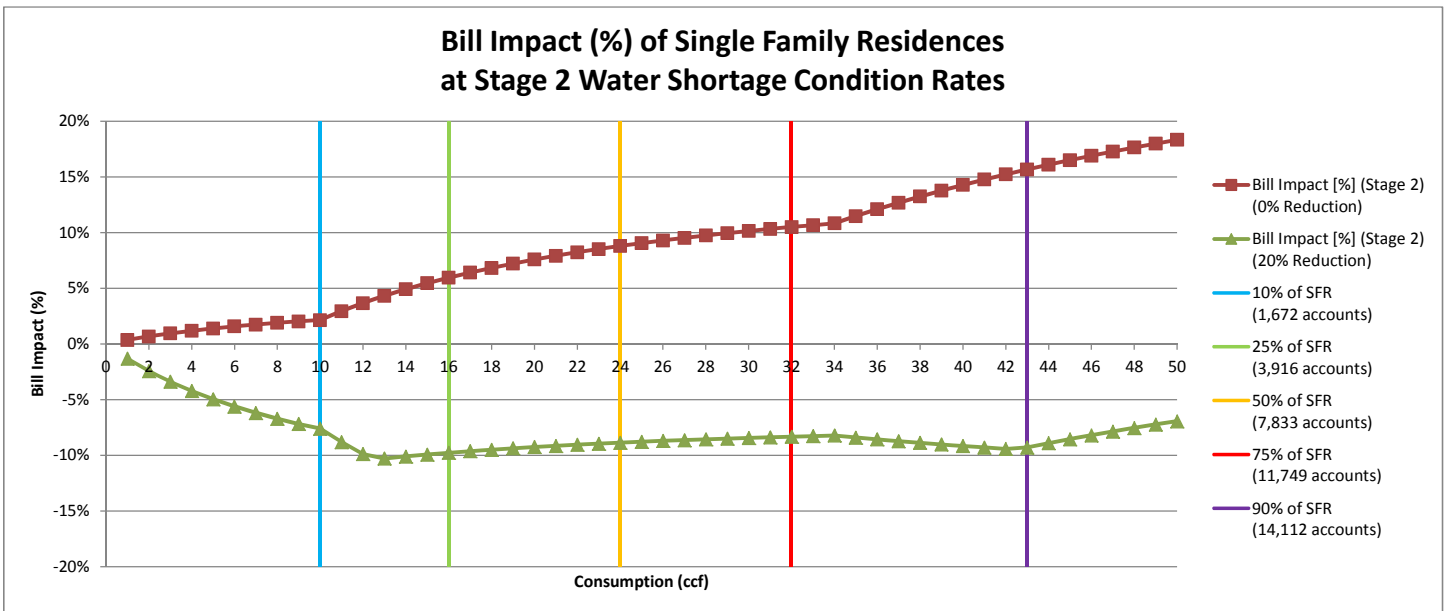
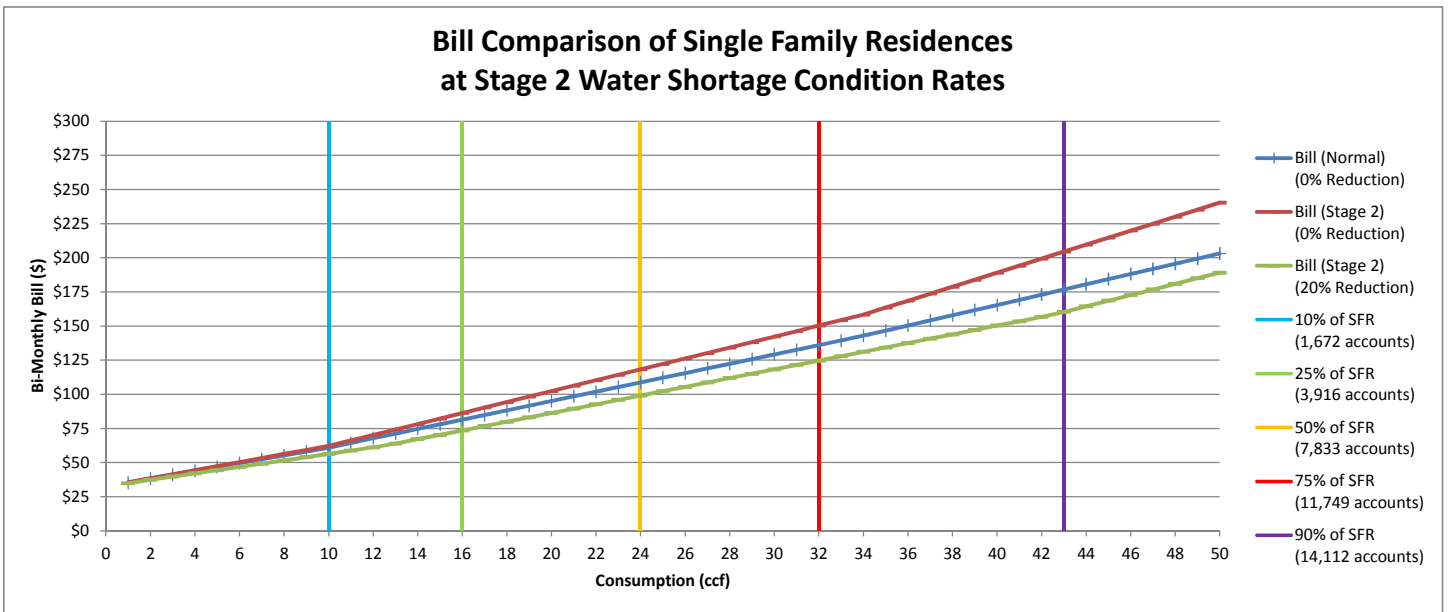
Stage 2 Water Shortage Condition Bill Impacts

ccf	Fixed Service	Zone 7	Consumption	Consumption	Consumption	Bill	Bill	Bill	Bill Impact %	Bill Impact %	Bill Impact (\$)	Bill Impact (\$)
			(Normal)	(Stage 2)	(Stage 2)	(Normal)	(Stage 2)	(Stage 2)	(Stage 2)	(Stage 2)	(Stage 2)	(Stage 2)
			(0% Reduction)	(0% Reduction)	(20% Reduction)	(0% Reduction)	(0% Reduction)	(20% Reduction)	(0% Reduction)	(20% Reduction)	(0% Reduction)	(20% Reduction)
5	32.56	11.65	2.55	3.21	2.56	46.76	47.42	44.44	1.40%	-4.95%	0.66	(2.32)
10	32.56	23.30	5.10	6.41	5.13	60.96	62.27	56.33	2.15%	-7.60%	1.31	(4.63)
15	32.56	34.95	10.50	14.76	9.75	78.01	82.27	70.27	5.46%	-9.92%	4.26	(7.74)
20	32.56	46.60	15.90	23.11	16.43	95.06	102.27	86.27	7.58%	-9.25%	7.21	(8.79)
25	32.56	58.25	21.30	31.46	23.11	112.11	122.27	102.27	9.06%	-8.78%	10.16	(9.84)
30	32.56	69.90	26.70	39.81	29.79	129.16	142.27	118.27	10.15%	-8.43%	13.11	(10.89)
35	32.56	81.55	32.46	49.29	36.47	146.57	163.40	134.27	11.48%	-8.39%	16.83	(12.30)
40	32.56	93.20	39.66	63.29	43.15	165.42	189.05	150.27	14.28%	-9.16%	23.63	(15.15)
45	32.56	104.85	46.86	77.29	52.09	184.27	214.70	168.53	16.51%	-8.54%	30.43	(15.74)
50	32.56	116.50	54.06	91.29	63.29	203.12	240.35	189.05	18.33%	-6.93%	37.23	(14.07)

Stage 3 Water Shortage Condition Bill Impacts

ccf	Fixed Service	Zone 7	Consumption	Consumption	Consumption	Bill	Bill	Bill	Bill Impact %	Bill Impact %	Bill Impact (\$)	Bill Impact (\$)
			(Normal)	(Stage 3)	(Stage 3)	(Normal)	(Stage 3)	(Stage 3)	(Stage 3)	(Stage 3)	(Stage 3)	(Stage 3)
			(0% Reduction)	(0% Reduction)	(35% Reduction)	(0% Reduction)	(0% Reduction)	(35% Reduction)	(0% Reduction)	(35% Reduction)	(0% Reduction)	(35% Reduction)
5	32.56	11.65	2.55	4.49	2.92	46.76	48.70	43.05	4.14%	-7.94%	1.94	(3.71)
10	32.56	23.30	5.10	8.97	5.83	60.96	64.83	53.54	6.35%	-12.18%	3.87	(7.42)
15	32.56	34.95	10.50	19.72	8.75	78.01	87.23	64.02	11.82%	-17.93%	9.22	(13.99)
20	32.56	46.60	15.90	30.47	15.42	95.06	109.63	78.27	15.33%	-17.66%	14.57	(16.79)
25	32.56	58.25	21.30	41.22	22.41	112.11	132.03	92.83	17.77%	-17.20%	19.92	(19.28)
30	32.56	69.90	26.70	51.97	29.40	129.16	154.43	107.39	19.56%	-16.86%	25.27	(21.77)
35	32.56	81.55	32.46	64.59	36.38	146.57	178.70	121.95	21.92%	-16.80%	32.13	(24.62)
40	32.56	93.20	39.66	84.69	43.37	165.42	210.45	136.51	27.22%	-17.48%	45.03	(28.91)
45	32.56	104.85	46.86	104.79	50.36	184.27	242.20	151.07	31.44%	-18.02%	57.93	(33.20)
50	32.56	116.50	54.06	124.89	57.35	203.12	273.95	165.63	34.87%	-18.46%	70.83	(37.49)

¹ Based on Calendar Year 2013 Consumption (15,665 Single Family Residences)
² Bill Impacts assume Zone 7 Cost of Water Charge remains fixed (\$2.33/ccf) during drought stage



**Major District Customers
Stage 2 Water Shortage Condition
Bill Impacts**

Potable non-irrigation

Customer	Normal (Baseline)	Stage 2 (0% Reduction)	Variance	Bill Impact	Stage 2 (20% Reduction)	Variance	Bill Impact
Federal Correctional Institution	513,360	554,215	40,855	7.96%	463,339	(50,021)	-9.74%
County of Alameda (Santa Rita Jail)	433,692	433,692	0	0.00%	350,861	(82,831)	-19.10%
Dublin Unified School District	275,300	299,401	24,101	8.75%	254,154	(21,146)	-7.68%
USAG CSTC (Camp Parks)	154,014	162,911	8,897	5.78%	142,169	(11,845)	-7.69%
Amador Lakes Apartments	131,383	142,082	10,699	8.14%	118,394	(12,989)	-9.89%
Avalon Bay Communities Inc	130,531	140,123	9,592	7.35%	119,249	(11,282)	-8.64%
San Ramon Valley Unified School District	69,707	74,270	4,564	6.55%	64,691	(5,016)	-7.20%
City of Dublin	62,494	66,846	4,352	6.96%	58,029	(4,465)	-7.14%
City of San Ramon	17,006	17,972	966	5.68%	16,117	(890)	-5.23%

Potable irrigation

Customer	Normal (Baseline)	Stage 2 (0% Reduction)	Variance	Bill Impact	Stage 2 (20% Reduction)	Variance	Bill Impact
Federal Correctional Institution	1,131	1,187	56	4.93%	1,145	14	1.21%
County of Alameda (Santa Rita Jail)	3,437	3,437	0	0.00%	3,062	(375)	-10.91%
Dublin Unified School District	98,940	131,073	32,133	32.48%	106,832	7,891	7.98%
USAG CSTC (Camp Parks)	45,522	57,892	12,369	27.17%	48,560	3,038	6.67%
Amador Lakes Apartments	92,335	122,824	30,490	33.02%	99,822	7,488	8.11%
Avalon Bay Communities Inc	69,711	81,995	12,285	17.62%	72,728	3,017	4.33%
San Ramon Valley Unified School District	78,247	103,725	25,478	32.56%	84,504	6,257	8.00%
City of Dublin	357,751	468,200	110,448	30.87%	384,876	27,125	7.58%
City of San Ramon	107,543	139,853	32,311	30.04%	115,478	7,935	7.38%

Total potable water

Customer	Normal (Baseline)	Stage 2 (0% Reduction)	Variance	Bill Impact	Stage 2 (20% Reduction)	Variance	Bill Impact
Federal Correctional Institution	514,491	555,402	40,911	7.95%	464,484	(50,007)	-9.72%
County of Alameda (Santa Rita Jail)	437,129	437,129	0	0.00%	353,923	(83,206)	-19.03%
Dublin Unified School District	374,241	430,474	56,234	15.03%	360,986	(13,255)	-3.54%
USAG CSTC (Camp Parks)	199,537	220,803	21,266	10.66%	190,729	(8,808)	-4.41%
Amador Lakes Apartments	223,718	264,907	41,189	18.41%	218,216	(5,501)	-2.46%
Avalon Bay Communities Inc	200,241	222,118	21,877	10.93%	191,976	(8,265)	-4.13%
San Ramon Valley Unified School District	147,953	177,995	30,042	20.30%	149,195	1,242	0.84%
City of Dublin	420,245	535,045	114,800	27.32%	442,905	22,660	5.39%
City of San Ramon	124,549	157,826	33,277	26.72%	131,594	7,046	5.66%

Notes:

- 1) Santa Rita Jail is billed at the Limited Access rate (essentially a Zone 7 cost of water "pass through"), which is unaffected by water shortage conditions
- 2) Stage 2 bill impacts based on 20% reduction in consumption.
- 3) Potable irrigation consumption (excluding Santa Rita Jail) would need to decrease by approximately 27% for neutral bill impact.
- 4) Based on FYE13 consumption at calendar year 2014 rates.



DUBLIN SAN RAMON SERVICES DISTRICT

7051 Dublin Blvd.
Dublin, CA 94568
www.dsrds.com

Postal Permit
Info Here



Dublin San Ramon Services District Notice of Public Hearing
Potential Change to Water Charges and Rates

Informational Meetings: February 19, March 5, March 19, April 2 at 6:00 p.m.
Public Hearing: April 16, 2013 at 6:00 p.m.

DSRSD Boardroom, 7051 Dublin Blvd., Dublin, CA

This notice has been sent to all customers who currently receive water service provided by Dublin San Ramon Services District. More information is available at www.dsrds.com.



Important information about your water rates

Dublin San Ramon Services District (DSRSD, the District) is proposing to restructure its water rates and service charges. If the proposal is adopted, some customer bills will increase and some will decrease. The average residential bill will increase by approximately \$1.35 per month (\$16.20 per year).

The changes to the rates and charges shown in this notice are the maximum changes that are proposed by staff to become effective on July 1, 2013. The Board of Directors may adopt lower rates or charges, or alter the date these changes become effective.

In a separate action, the Board will consider adopting rates for normal water conditions, instead of the current Stage 1 water rates.

The District encourages all public comments. The topic of water rates will be on the Board agendas of the regularly scheduled Board meetings on February 19, March 5, March 19 and April 2, 2013, affording customers the opportunity to ask clarifying questions, gain an understanding of the proposal to restructure the District's water rates and service charges, and make statements. The Board will discuss and potentially adopt the proposed changes at a public hearing on April 16, 2013. The Board will listen to public comments up to the close of the public hearing. Protests have specific requirements and deadlines as noted in the column to the right. All meetings are held in the District Office Boardroom, 7051 Dublin Blvd., Dublin, at 6:00 p.m.

Why Are Water Rates Changing?

The proposed changes are based on the results of a comprehensive study of the cost to provide safe and reliable water service 24 hours a day, seven days a week. Water rates are designed to recover the cost of providing service and to fairly allocate costs among various types of customers. The proposed changes accomplish the following four goals established by the District's Board of Directors.

1 Make cash flow more predictable: Approximately 96% of costs to operate the water system (not including the cost of water) are fixed, meaning they do not vary with the volume of water used. Yet fixed charges (the Fixed Water Service Charge and Temporary Infrastructure Charge) generate only about 20% of current water rate revenue. Under the proposed restructuring, the Fixed Water Service Charge generates 25% of current water rate revenue and the Temporary Infrastructure Charge is suspended and reduced to zero. Increasing the proportion of revenue that is predictable throughout the year stabilizes rates and improves the District's credit rating, thereby reducing the cost of future bor-

Low Income Assistance (LIA)

If the maximum proposed rates and charges are adopted, residential customers enrolled in the DSRSD Low Income Assistance program will receive a larger credit, due to the increase in the Fixed Water Service Charge. The example at right is based on 10 units of water used in a two-month period.

LIA Current Stage 1 Rates		LIA Proposed Normal Rates	
(10 units bimonthly)	Cost	(10 units bimonthly)	Cost
Fixed Charges		Fixed Charges	
Water Service Charge (5/8")	\$17.12	Water Service Charge (5/8")	\$31.75
Temp. Infrastructure Charge	\$9.00	Temp. Infrastructure Charge	\$ -
Low Income Assistance Credit	(\$17.12)	Low Income Assistance Credit	(\$31.75)
Consumption Charges		Consumption Charges	
Zone 7 Cost of Water	\$22.70	Zone 7 Cost of Water	\$22.70
Tier One (1-20 units)	\$8.90	Tier One (1-10 units)	\$5.00
Tier Two (21-34 units)	\$ -	Tier Two (11-34 units)	\$ -
Tier Three (over 34 units)	\$ -	Tier Three (over 34 units)	\$ -
Power Charge	\$2.80	Power Charge	\$2.80
Total Bimonthly Bill	\$43.40	Total Bimonthly Bill	\$30.50
Monthly Equivalent	\$21.70	Monthly Equivalent	\$15.25
		Monthly Difference	-\$6.45

How Can I Learn More?

Visit our website www.dsrds.com for additional information plus a rate calculator where you can estimate your water bill if the Board adopts the maximum proposed changes.

Attend the Board meetings on February 19, March 5, March 19, or April 2, 2013 to ask questions and make statements. Meetings are held in the District Office Boardroom, 7051 Dublin Blvd, Dublin, at 6:00 p.m. Online video recordings of Board meetings are posted the next day on www.dsrds.com (click Meetings, then Board Meetings).

Attend the public hearing on April 16, 2013 at 6:00 p.m. in the District Office Boardroom to make a comment or deliver a written protest.

How Do I Protest?

The District and its Board of Directors welcomes and will consider input from the community on the proposed changes to rates and service charges at any time, including during the public hearing. However, in accordance with Proposition 218, only valid written protests received by the pertinent deadline below will be counted as formal protests.

Protests submitted by mail, fax, or email must be received by 5:00 p.m. on April 16, 2013. Hand-delivered protests must be received before the close of the public hearing on April 16, 2013.

Any record property owner or tenant-customer of a parcel receiving water service may submit a written protest. Only one protest will be counted per parcel served by the District.

The written protest must identify the affected property by assessor's parcel number, street address or DSRSD account number; identify the record property owner or tenant-customer; clearly state that the transmittal is a protest to the proposed charges; identify what proposed charges are being protested; and bear the original signature of the record property owner or tenant-customer. In the case of electronically delivered documents, a scanned signature will be accepted, subject to verification.

➤ **Mail or deliver protests to:**

District Secretary
Dublin San Ramon Services District
7051 Dublin Blvd., Dublin, CA 94568

Please note on the envelope, "Protest of Proposed Charge"

➤ **Or, email protests as a pdf document attached to an email to Board@dsrds.com.** Please note in the subject line: "Protest of Proposed Charge"

➤ **Or, fax protests to (925) 829-1180.** Please note in the subject line: "Protest of Proposed Charge"

For more information read the complete *DSRSD Policy on Proposition 218 Receipt, Tabulation and Validation of Written Protests* on the District website.

rowing for long-term capital improvements. To offset the increase in the Fixed Water Service Charge, potable water customers will pay less for each unit of water in each tier.

2 Meet the current, minimum debt coverage with rate-payer revenue: When a bond is issued, a minimum amount of “debt coverage” (revenue in excess of operating expenses) is established to assure investors that the District can make required debt payments. The District’s current water-related bonds require debt coverage of 120% of annual debt payments. The proposed rates are designed to generate all of this required revenue. The District combines revenue from ratepayers with fees paid by developers to meet a higher internal debt coverage target of 160%. However, such fees are an unpredictable source of revenue, as was shown in the recent recession when fee revenue suddenly dropped to near zero and the District had to impose the Temporary Infrastructure Charge to meet its debt coverage requirement.

Under the proposed rates, customers can still reduce their bills by using water more efficiently

3 Budget for future replacement of recycled water assets: Since our recycled water system is no longer in start-up mode, it is prudent to begin setting aside funds to replace pipelines, pump stations, storage reservoirs, and components of the water recycling plant.

4 Continue motivating efficient water use: Historically, the District has planned for less water to be available during dry years. Currently, and for the foreseeable future, water deliveries also are being restricted to protect endangered species in the Sacramento-San Joaquin Delta (through which the District’s water supply flows). As part of the water rate study, the Board of Directors asked that rates be restructured to provide adequate revenue with decreasing water sales. Under the proposed rates, customers can still reduce their bills by using water more efficiently. All proposed rates also were adjusted to allocate costs more equitably among residential and non-residential customers (commercial, industrial, institutional and irrigation).

What Will Not Change: The proposed changes only address some of the District’s costs of providing water service. The following charges will not change: (a) water purchased from Zone 7 Water Agency (about half of an average residential bill); (b) the Power Charge (for pumping water to service elevations above 389 feet); and, (c) the Limited Access Rate (applies to customers who are not fully tied into the District’s potable water system or who maintain their own fire storage reservoirs).

Proposed Changes to Charges & Rates

Fixed Water Service Charge

All customers, including those who receive recycled water, pay a Fixed Water Service Charge that is based on the capacity of the customer’s meter (all residential customers pay the 5/8 inch meter rate). The charge is the same in each billing period, regardless of how much water is used. Each meter is charged in proportion to the amount of water that can flow through it in relation to a 5/8” meter (the smallest meter). For example, a 3/4” meter has 150% of the capacity of a 5/8” meter so the 3/4” meter charge is 150% of the 5/8” meter charge.

Current Charges and Maximum Proposed Charges

Meter Size	Current Bimonthly (two months) Fixed Service Charge (incl. Temp. Infrastructure Charge)	Maximum Proposed Bimonthly (two months) Fixed Service Charge
5/8"	\$26.12	\$31.75
3/4"	39.18	47.65
1"	65.30	79.40
1 1/2"	130.59	158.75
2"	217.50	254.00
3"	449.58	555.65
4"	1,005.93	1,587.50
6"	2,650.86	3,175.00
8"	4,638.76	5,556.25
10"	7,289.62	8,731.25

Water Consumption Charge

All potable water customers pay a Water Consumption Charge. Customers are billed for the amount of water they use in each two-month billing period. The rate per unit of water varies by type of customer, but all rates are designed to promote efficient water use.

Water Shortage Rates

In addition to Normal Rates, the District has established Water Shortage Rates that apply when the Board of Directors declares a water shortage because additional conservation is necessary to ensure the reliability of the water supply. Shortages are declared in stages of increasing severity. Water Shortage Rates are designed so that if a customer achieves the targeted reduction goal, the overall bill will not increase significantly.

Note: For residential customers (see top chart, next page), the Tier 1 Rate is proposed to apply to the first 10 units of water used in a billing period instead of the first 20 units, and the Tier 2 Rate is proposed to apply to units 11 through 34. The Tier 3 Rate would continue to apply to more than 34 units. A unit of water is one hundred cubic feet (ccf), which equals 748 gallons.

Recycled Water Rate

The Recycled Water Rate will continue to be based on the following formula: 90% of the combined rate of the District’s Zone 7 Rate and the Normal Potable Irrigation Rate per unit. The current

Residential Customers - Proposed Maximum Water Consumption Rates

	\$/unit				
	Normal Water Conditions	Minimal Shortage Stage 1	Moderate Shortage Stage 2	Severe Shortage Stage 3	Critical Shortage Stage 4
Targeted Reduction Goal	0%	10%	20%	35%	50%
Tier 1: 0 – 10 units	\$0.500	\$0.560	\$0.625	\$0.875	\$1.275
Tier 2: 11 – 34 units	1.050	1.320	1.630	2.100	3.410
Tier 3: Over 34 units	1.400	1.820	2.730	3.920	5.390

Commercial Customers¹ - Proposed Maximum Water Consumption Rates

	\$/unit				
	Normal Water Conditions	Minimal Shortage Stage 1	Moderate Shortage Stage 2	Severe Shortage Stage 3	Critical Shortage Stage 4
Targeted Reduction Goal	0%	10%	20%	35%	50%
Winter (November to April)	\$1.000	\$1.090	\$1.200	\$1.510	\$1.900
Summer (May – October)	1.200	1.400	1.680	2.110	3.000

¹ Commercial customers include institutional and master metered multi-family customers

Potable Irrigation Customers – Proposed Maximum Water Consumption Rates

	\$/unit				
	Normal Water Conditions	Minimal Shortage Stage 1	Moderate Shortage Stage 2	Severe Shortage Stage 3	Critical Shortage Stage 4
Targeted Reduction Goal	0%	10%	20%	35%	50%
All Consumption	\$1.400	1.820	2.730	3.920	5.390



Photo courtesy of CA Department of Water Resources

The District’s water supply, which flows through the Sacramento-San Joaquin Delta, will be limited for the foreseeable future due to pumping restrictions that protect threatened and endangered fish.

rate is \$3.12 per unit and the proposed rate would be 0.90 x (\$2.27 + \$1.40) or \$3.30 per unit. The recycled water rate does not increase during potable water shortages.

Customer Impacts

Each water customer will be impacted differently under this proposal, depending on type and consumption. Two examples for residential customers are shown, below and on the next page.

Additional examples and a rate calculator are available at www.dsrds.com.

(continued on next page)

Current Residential Stage 1 Rates		Proposed Residential Normal Rates	
Average Annual Use (23 units bimonthly)	Cost	Average Annual Use (23 units bimonthly)	Cost
Fixed Charges		Fixed Charges	
Water Service Charge (5/8")	\$17.12	Water Service Charge (5/8")	\$31.75
Temp. Infrastructure Charge	\$9.00	Temp. Infrastructure Charge	\$ -
Consumption Charges		Consumption Charges	
Zone 7 Cost of Water	\$52.21	Zone 7 Cost of Water	\$52.21
Tier One (1-20 units)	\$17.80	Tier One (1-10 units)	\$5.00
Tier Two (21-34 units)	\$3.78	Tier Two (11-34 units)	\$13.65
Tier Three (over 34 units)	\$ -	Tier Three (over 34 units)	\$ -
Power Charge	\$6.44	Power Charge	\$6.44
Total Bimonthly Bill	\$106.35	Total Bimonthly Bill	\$109.05
Monthly Equivalent	\$53.18	Monthly Equivalent	\$54.53
		Monthly Difference	\$1.35

Recently, you received a special mailer entitled Potential Change to Water Charges and Rates. This notice provided information about water rate adjustments (under which the average residential water bill would increase by approximately \$1.35 per month) being considered by the Board of Directors on April 16, 2013 at 6:00 p.m. in the DSRSD Boardroom, 7051 Dublin Blvd., Dublin CA. More information about the proposed changes is also available on the District's web site, www.dsrsd.com.

When the District established the current water rates in 2009, annual adjustments to the fixed water service charge and water consumption rates were included. These adjustments were based on the percentage by which the most recent Consumer Price Index (CPI) had increased compared to the previous year's CPI. These adjustments ensured that water revenues remained sufficient to cover the costs to provide safe and reliable water service 24 hours a day, seven days a week.

On April 16, 2013, the Board of Directors will consider adopting water rate adjustments as described in the special mailer entitled Potential Change to Water Charges and Rates and will also consider continuing the practice of annual CPI increases in fixed water service charges and water consumption charges, effective each January 1st for up to five years. Specifically, it will be proposed that the General Manager be authorized and directed to increase those charges based upon the percentage change by which the most recent CPI (All Urban Consumers for the San Francisco-Oakland-San Jose, CA area) available as of August 31 has increased in relation to the most recent corresponding CPI available the preceding August 31.



Dublin San Ramon Services District
7051 Dublin Boulevard,
Dublin, CA 94568
Central Phone (925) 828-0515
Fax (925) 829-1180
www.drsrd.com

Attachment 5

FIRST-CLASS MAIL
PRESORTED
U.S. POSTAGE PAID
PLEASANTON, CA
PERMIT NO. 388



Reference Financial Services Manager	Type of Action Provide Direction	Board Meeting of April 22, 2014
Subject Discuss Adoption of 2014 Drought Affordability Program - Low Usage Credit		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input checked="" type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input checked="" type="checkbox"/> Other
REPORT:	<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	J. Archer
		<input type="checkbox"/> Board Member

Recommendation:

The Financial Services Manager recommends the Board discuss and, by consensus, provide direction to District staff to finalize the 2014 Drought Affordability Program – Low Usage Credit for formal consideration by the Board on May 5, 2014.

Summary:

The District’s Rate Policies and Guidelines policy (section 3.1.3) states *“The District will attempt to minimize impacts to customers when rate adjustments are needed.”* The current drought condition within the District and throughout California has required the District to implement water shortage condition rates, which will increase customer bills to the extent that they do not achieve the targeted conservation levels.

The District is seeking to minimize the drought impact on those customers who use a minimal amount of water; defined as Tier 1 use, (i.e., less than 10 ccf each bill cycle). This represents 5 ccf per month or about 125 gallons per household per day. Assuming an average of 2.5 persons per household, this is approximately 50 gpcpd, which is within the State of California standard for health and safety purposes of 50-55 gpcpd. As such, the District should not be economically discouraging water use below those health and safety levels. This program effectively rebates the increased cost of the Stage 3 Water Shortage Rates to Tier 1 customers who are and remain eligible to participate in the program.

The increased cost of \$13,720 will be funded by the water shortage condition rates adopted separately.

Committee Review			Legal Review	Staff Review		
COMMITTEE Finance	DATE 4-16-14	RECOMMENDATION Approve	Not Required	ORIGINATOR B. Michalczyk	DEPARTMENT Executive	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input checked="" type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$13,720	<input type="checkbox"/> Funding Source A. Fund 600 B.		Attachments to S&R 1. 2. 3.			

RESOLUTION NO. ____

RESOLUTION OF THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT ESTABLISHING A 2014 DROUGHT AFFORDABILITY PROGRAM-LOW USAGE CREDIT FOR RESIDENTIAL LOW WATER CONSUMPTION CUSTOMERS

WHEREAS, the Board of Directors has a policy to minimize the impact to customers when rate increases are required; and

WHEREAS, the District is able to fund such a program using funds provided as a part of the drought rates and not by charging customers more than their cost of service in order to fund this program; and

WHEREAS, the water rate action taken by the Board provides sufficient revenues to cover the ongoing water operations and maintenance costs; and

WHEREAS, the Board desires to promote water conservation and so will provide rate relief through a credit to customer accounts for those customers who have exhibited continued efficient water usage.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT, a public agency in the Counties of Alameda and Contra Costa, California as follows:

1. That a 2014 Drought Affordability Program-Low Usage Credit (the "Program") for residential low water consumption customers as described in Exhibit "A" is hereby established and the General Manager is authorized and directed to develop the implementation procedures for such a program as soon as practical; and
2. That the credit shall be in the form of a onetime \$12 credit applied to the account for the eligible residential customers determined in accordance with the Program.

Res. No. _____

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, Counties of Alameda and Contra Costa, at its special meeting held on the 5th day of May 2014 and passed by the following vote:

AYES:

NOES:

ABSENT:

Georgan M. Vonheeder-Leopold, President

Attest:

Nancy Gamble Hatfield, District Secretary

DRAFT

2014 Drought Affordability Program

A Program to Assist Low Usage Customers

PURPOSE

It is the desire of the District to recognize those residential customers who use the lowest amounts of potable water. These customers exhibit water efficiency in everyday life as evidenced by their consumption history. While all customers are very strongly encouraged to cut their water consumption as part of this drought, this program is intended to recognize that it is more difficult for customers who have already made concerted conservation efforts to achieve additional water savings and who are using water at or below State of California standards for health and safety purposes.

OVERVIEW

This program will provide the customer with a onetime \$12 credit on their account in conformance with the following criteria:

- 1) Residential customer on a tiered rate schedule (excluding those residential accounts to multifamily units that are not individually metered and billed by the District to the tenant);
- 2) Account in continued good standing (accounts that have not incurred a Hand Delivered Notification (“hang tag”) fee over the review period of January 2013 to October 2014);
- 3) Account has been continuously active between January 2013 and October 2014;
- 4) Consumption not more than 10 ccf for each bimonthly bill (or the total of two consecutive monthly bills if billed monthly) presented to the account during the period between May and October 2013 and between May and October 2014;
- 5) Total consumption for all bills presented to the account during the period between May to October 2014 is less than or equal to total consumption

for all bills presented to the account during the period between May to October 2013;

- 6) The program would become effective upon the Board setting Stage 3 water rates;
- 7) The program would terminate at the earlier of (a) October 31, 2014; (b) the District returning to Baseline rates; (c) The District changed the drought rate stage at which time the Board may, but would not be obligated to, revise the amount of the credit; or (d) the unilateral action of the Board of Directors ending the 2014 Drought Affordability Program.

ECONOMICS OF THE PROGRAM

Amount of the individual credit: The proposed \$12 credit is calculated assuming the District sets rates in Stage 3. That stage represents a \$0.387 per ccf increase in water rates in Tier 1 (\$0.897 vs \$0.510/ccf). Conservatively assuming 10 ccf usage per billing period, a Tier 1 customer could see an increased bill of \$3.87 per billing period or \$11.61 over the three billing cycles from May to October.

Amount of total credits issued: Based on 2013 consumption data, there would be 1,143 accounts eligible for the program. If they all meet the above criteria, credits issued would total approximately \$13,720.

Effect on Existing Low Income Assistance Program The District's current Low Income Assistance Program (under which a qualifying customer receives a credit for the fixed portion of their water bill) will remain in effect and would continue to provide additional economic relief to many of the same customers.

Other Ways to Save If any customers who are eligible for this program were able to further reduce their water usage they would enjoy savings from that level of reduced consumption in addition to the credit received under this program.

METHODOLOGY

Following October 2014 billings, after the peak summer season has ended; staff will prepare a list of residential accounts that met all criteria listed above. Credits would be issued to eligible accounts beginning with December 1st billings.



Reference Financial Services Manager	Type of Action Provide Direction	Board Meeting of April 22, 2014
Subject Discuss Enhanced Rebate Program for Water Efficient Devices and Appliances and Lawn Replacements		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input checked="" type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input type="checkbox"/> Informational	<input checked="" type="checkbox"/> Other
REPORT:	<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	J. Archer
		<input type="checkbox"/> Board Member

Recommendation:

The Financial Services Manager recommends that the Board discuss and, by Consensus, provide direction to District staff to finalize the Enhanced Rebate program for Water Saving Devices and Appliances and Lawn Replacements for formal consideration by the Board on May 5, 2014.

Summary:

The District currently participates in several conservation rebate programs administered by Zone 7. The existing rebate programs include:

- High Efficiency Toilet (HET) rebates;
- Waterless Urinal rebates;
- High Efficiency Clothes Washer (HEW) rebates;
- Weather Based Irrigation Controller (“Smart Controller”) rebates; and
- Lawn Replacement rebates.

During 2013 Zone 7 processed rebates in an amount of \$46,000 to District customers for these programs.

The goal of the District Enhanced Rebate Program is to achieve greater market penetration and, thereby, even greater water conservation and curtailment. Adding District amounts to the rebates would do this by increasing the financial incentives to District customers to invest in specified devices and appliances and landscape replacements. For most of the programs, the amount of the District’s contribution would be approximately 50% of the amount provided by Zone 7 as explained in the program description. The Weather Based Irrigation Controller rebate program would be funded by the District at the level previously funded by Zone 7, because that program was recently suspended by the Zone. Zone 7 does not currently offer a rebate for pool or spa covers. Accordingly, the rebate program for Weather Based Irrigation Controllers and pool and spa covers would be administered entirely by District staff. The Enhanced Rebate Program will be funded from the budget adjustments related to water conservation activities separately approved by the Board.

The Enhanced Rebate Program will remain in effect until the earlier of (a) the expiration of the District’s Community Drought Emergency or (b) until a total of \$30,000 in enhanced rebates are made by the District.

It should be noted that the City of Pleasanton will be enhancing the Zone 7 rebate program with a 100% match of the Zone 7 rebates. However, they will not offer the Weather Based Irrigation Controller or Pool and Spa rebate programs.

Committee Review			Legal Review	Staff Review		
COMMITTEE Finance	DATE 4-16-14	RECOMMENDATION Approve	Not Required	ORIGINATOR B. Michalczyk	DEPARTMENT Executive	REVIEWED BY
ATTACHMENTS <input type="checkbox"/> None						
<input checked="" type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input checked="" type="checkbox"/> Cost \$30,000	<input type="checkbox"/> Funding Source A. Fund 600 B.		Attachments to S&R 1. 2.			

RESOLUTION OF THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT ESTABLISHING AN ENHANCED REBATE PROGRAM FOR IDENTIFIED WATER SAVING DEVICES AND APPLIANCES AND SPECIFIED TURFGRASS REMOVAL RETROFITS

WHEREAS, the District has declared a Community Drought Emergency and is seeking to curtail water usage in 2014 by twenty five percent (25%) overall with 5% coming from inside curtailment and 50-60% from outside curtailment as compared to the same period in calendar year 2013; and

WHEREAS, a proven way to reduce water usage is by economically encouraging customers to replace high water using appliances and devices to better manage their water use and to replace turfgrass lawns; and

WHEREAS, the Board desires to promote water conservation and so desires to establish a program of enhanced rebates for water saving devices and appliances and landscape conversions; and

WHEREAS, the Board desires that the District Enhanced Rebate Program be generally consistent with the rebate programs administered by Zone 7 and closely coordinated with those Zone 7 rebate programs.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF DUBLIN SAN RAMON SERVICES DISTRICT, a public agency in the Counties of Alameda and Contra Costa, California as follows:

1. The Enhanced Rebate Program as outlined in Exhibit "A" to this resolution, which by this reference is made an integral part, hereof, is adopted; and
2. The District Enhanced Rebate Program shall be effective immediately upon adoption of this resolution and remain in effect until the earlier of: a) the District issuing total rebates in an amount of \$30,000, or some greater amount if so approved by the Board of Directors, or b) the end of the District's Community Drought Emergency; and

Res. No. _____

3. The General Manager is authorized and directed to establish detailed processes, procedures and guidelines to administer the District Enhanced Rebate Program.

ADOPTED by the Board of Directors of Dublin San Ramon Services District, a public agency in the State of California, Counties of Alameda and Contra Costa, at its special meeting held on the 5th day of May 2014 and passed by the following vote:

AYES:

NOES:

ABSENT:

Georgean M. Vonheeder-Leopold, President

Attest:

Nancy Gamble Hatfield, District Secretary

H:\Board\2014\04-22-14Sp\7 -Enhanced Rebate Programs\Enhanced Rebate Program RESO.docx

EXHIBIT A Enhanced Rebate Program

This program is intended to temporarily supplement existing Zone 7 rebate programs that are available to District customers, and to add a program to provide rebates for pool covers.

BACKGROUND

The District currently participates in several conservation rebate programs with Zone 7. The existing Zone 7 rebate programs include;

- High Efficiency Toilet (HET) rebates of \$100 per toilet
- Waterless Urinal rebates of \$100 per urinal;
- High Efficiency Clothes Washer (HEW) rebates of \$50 (Energy Star models are also eligible for a \$200 rebate from PG&E);
- Weather Based Irrigation Controller (“Smart Controller”) rebates of \$75 for single family homes and \$100 for multi-family dwellings (*NOTE: THIS PROGRAM IS BEING DISCONTINUED BY ZONE 7 DURING THE DROUGHT BECAUSE OF THE IRRIGATION LIMITATIONS THAT WILL BE IN PLACE*); and
- Turf grass Lawn Replacement rebates, with rebates of \$0.50/square feet up to a maximum of \$500 for single family homes, and \$0.50/square feet up to a maximum of \$3,000 for multi-family, businesses, or institutional customers (a minimum of 250 square feet must be converted).

In 2013, Zone 7 reimbursed \$46,000 for rebates issued to District customers for these programs.

PURPOSE

The primary purpose of these programs is to increase market penetration for these programs and thereby accelerate long-term near-permanent water conservation by offering financial incentives to customers for investing in water efficient appliances and for replacing turf grass with water efficient landscaping. By increasing the amount of the rebates, the current programs should become more attractive to customers.

EFFECTIVENESS

Based on data provided by Zone 7, the various programs have varying degrees of cost effectiveness and water savings as can be seen in the following table. The most cost-effective rebate program based on water savings per dollar spent is that for turf grass lawn replacements, which has achieved conservation at a rate of about \$136 per acre-foot of potable water saved. This program would temporarily add an additional District rebate to that offered by Zone 7 rebate for each of the programs currently in place, thereby providing an even greater incentive to customers to take advantage of these programs and thereby save water.

EXHIBIT A
Enhanced Rebate Program

Program	Program Cost	Water Savings (AF)	Cost per AF
HET	1,976	0.35	\$ 5,666
HEW	33,300	10.87	\$ 3,063
WBIC/Irrigation hardware	9,609	N/A	
Water Efficient Landscape	1,401	10.28	\$ 136

DISTRICT ENHANCED REBATE PROGRAM

The following would be the amounts to be rebated by the District under the Enhanced Rebate Program. The amounts presented are generally 50% of the base program administered by Zone 7.

PROGRAM	DISTRICT ENHANCED REBATE AMOUNT	COMMENT
High Efficiency Toilet (HET)	\$50 per toilet	
Waterless Urinals	\$50 per urinal	
High Efficiency Clothes Washer (HEW)	\$25	Energy Star models are also eligible for a \$200 rebate from PG&E
Pool and Spa covers (to reduce evaporation)	\$50 per pool or spa cover (one rebate total per account)	Zone 7 does not currently offer rebates for pool or spa covers
Weather Based Irrigation Controller ("Smart Controller) - <i>Single Family Homes</i>	\$75 ¹	Zone 7 discontinuing program during drought due to irrigation limitations in place
Weather Based Irrigation Controller ("Smart Controller) – <i>Multi-Family Dwelling</i>	\$100 ¹	Zone 7 discontinuing program during drought due to irrigation limitations in place
Lawn Replacement Program - <i>Single Family Homes</i>	\$0.25/square feet up to a maximum of \$250	To convert turf grass; a minimum of 250 square feet must be converted
Lawn Replacement Program - <i>Multi-Family or Businesses</i>	\$0.25/square feet up to a maximum of \$1,500	To convert turf grass; a minimum of 250 square feet must be converted

ESTIMATED COST

Assuming that 2014 usage of these programs is increased by 25% over 2013 levels because of the added incentives created by the District's Enhanced Rebate Program and based on the approximate 50%

¹ At 100% of the prior Zone 7 level because Zone 7 is discontinuing the program during the drought; if Zone 7 were to re-enact the program the District amount would be 50% of the Zone 7 amount.

EXHIBIT A
Enhanced Rebate Program

additional rebate amount available as compared to Zone 7, and adding an allowance for the “District-only” rebate programs, it is projected that the District cost would be \$30,000².

ELIGIBILITY

To be eligible for these matching rebates, customers would be required to comply with the terms and conditions of the Zone 7 rebate program and install the listed water efficient appliances or remove their turf grass during the time the District’s program remains in effect. The District will need to develop administrative procedures for the Weather Based Irrigation Controller rebate program because the District will be the sole funding source and hence the administrator of that program. Likewise, the District will need to develop administrative procedures for the Pool Cover rebate program because Zone 7 does not offer such a program and therefore the District will be the sole funding source and the administrator of that program. The District’s Enhanced Rebate Program would remain in effect until the District’s Community Drought Emergency ends, or until the District issues rebates totaling \$30,000.

ADMINISTRATION

The Enhanced Rebate Program would be administered by the District’s Clean Water Program staff, with rebates issued through the District’s Utility Billing system to the party responsible for the water bill.

² $\$46,000 * 1.25 * 0.50 = \$28,750$ plus a \$1,250 allowance for Weather Based Irrigation Controllers and Pool and Spa Covers = \$30,000



Reference Operations Manager	Type of Action Provide Direction	Board Meeting of April 22, 2014
Subject Discuss Updated District Drought Response Action Plan		
<input type="checkbox"/> Motion	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Resolution
<input type="checkbox"/> Ordinance	<input checked="" type="checkbox"/> Informational	<input type="checkbox"/> Other
REPORT:	<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Presentation
	<input checked="" type="checkbox"/> Staff	D. Gallagher
		<input type="checkbox"/> Board Member

Recommendation:

The Operations Manager, acting as the District’s Drought Coordinator, requests that the Board discuss and, by Consensus, provide direction to District staff to finalize the Updated Drought Response Action Plan for formal consideration by the Board on May 5, 2014.

Summary:

On February 18, 2014, the Board of Directors endorsed a Drought Response Action Plan. The Action Plan included items that could be immediately implemented, and other items that staff agreed to investigate and evaluate before a decision could be made regarding implementation. District staff has been acting on the tasks included in that Action Plan and has been reporting progress to the Board on a regular basis. The most recent report is included in Item 9C on this Board agenda. Since the endorsement of the February 18, 2014 Drought Response Action Plan, some aspects of the Action Plan are completed, some are being implemented, some need funding to pursue, and some will not be recommended for implementation due to the cost or other factors.

The updated Drought Response Action Plan is not finalized at the time of the agenda preparation deadline. It will be finalized and provided to the Board of Directors at the April 22 Board meeting, or prior to the meeting, if at all possible.

Committee Review			Legal Review	Staff Review		
COMMITTEE ---	DATE ---	RECOMMENDATION ---	Yes	ORIGINATOR D. Gallagher	DEPARTMENT Operations	REVIEWED BY
ATTACHMENTS <input checked="" type="checkbox"/> None						
<input type="checkbox"/> Resolution	<input type="checkbox"/> Minute Order	<input type="checkbox"/> Task Order	<input type="checkbox"/> Staff Report	<input type="checkbox"/> Ordinance		
<input type="checkbox"/> Cost \$ TBD	<input type="checkbox"/> Funding Source A. 600 B. 610		Attachments to S&R 1. 2. 3.			