

Appendix J: Water Availability Assessment

Appendices

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LONG BEACH WATER DEPARTMENT

The Standard in Water Conservation &
Environmental Stewardship

Water Availability Assessment

Approved by the
City of Long Beach
Board of Water Commissioners

And prepared for the
Midtown Specific Plan
Mixed Use Development
Long Beach, California

May 7, 2015



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I. FINDINGS

The proposed development project called the Midtown Specific Plan (Project) is exempt from the SB 221 requirement of an affirmative written verification of sufficient water supply (Government Code 66473.7) because it will be sited within an urbanized area that has been previously developed for urban uses. The Project is further exempt from SB 221 requirements because the immediate contiguous properties surrounding the proposed Project site are, or previously have been, developed for urban uses.

The Project is not exempt from SB 610 requirement that a water availability assessment be completed because the Project is expected to use an amount of water equivalent to, or greater than, that used by a 500-unit development.

The water availability assessment must be approved by the Board of Water Commissioners and transmitted to the Project's lead agency on or before May 18, 2015, for inclusion in any environmental documentation for the Project.

State law allows water availability assessment to be based partially on the most recently adopted Urban Water Management Plan (Plan). For LBWD that is the Board-adopted Plan of 2010. The assessment cannot be wholly based on that Plan in part because the Plan relied on assurances in 2010 from the provider of supplemental water to Long Beach that it would be 100-percent reliable through the year 2035. However, events having taken place since that assurance indicate the supplemental supplier of water will not be 100-percent reliable through 2035.

This water availability assessment anticipates adequate water supplies will be available during normal, single- and multiple-dry water years to meet the projected water demand associated with the Project, in addition to the existing and other planned future uses of Long Beach Water Department's (LBWD) system. This finding is based on LBWD's rights to a reliable supply of groundwater and LBWD's preferential rights to water from the Metropolitan Water District of Southern California (MWD), per Section 135 of the Metropolitan Water District Act.

II. BACKGROUND

Effective January 1, 2002, California Senate Bill 221 and Senate Bill 610 amended Section 21151.9 of the Public Resources Code and Sections 10631, 10656, 10910-12, 10915 of the Water Code and Section 11010 of the Business and Professions Codes, and Sections 65867.5 of the Government Code as well as adding Sections 66455.3 and 66473.7 to the Government Code. The Senate Bills were designed to improve the link between information on water availability and certain land use



decisions made by cities and counties. SB 221 and SB 610 are companion measures which seek to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require certain information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects. Both statutes also require this information to be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Both measures recognize local control and decision making regarding the availability of water approval of the projects.

SB 221 conditions approval by a city or county of certain residential subdivisions on an affirmative written verification of sufficient water supply.

SB 610 requires a water assessment to be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912(a)) subject to the California Environmental Quality Act.

10910. (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13, beginning Section 21000 of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.

Under SB 610, the assessment must be completed prior to the issuance of a draft Environmental Impact Report or proposed Negative Declaration.

Water Code section 10911 (b): The city or county shall include the water assessment provided pursuant to Section 10910, and any information provided pursuant to subdivision (a), in any environmental document prepared for the project pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.

The Long Beach City Charter, Section 1400, states as follows:

There is hereby created a Water Department which shall be under the exclusive jurisdiction and control of five commissioners who shall be known as the Board of Water Commissioners. Said Water Department shall have full and complete jurisdiction over all water works necessary and incidental to the use, sale and distribution of water owned and controlled by the City.

Because LBWD will provide domestic water to the site, and because LBWD is a public water system of over 3,000 service connections, LBWD is responsible for performing the SB 610 assessment.

10910 (b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined in Section 10912.



III. A WATER AVAILABILITY ASSESSMENT IS REQUIRED FOR THE MIDTOWN SPECIFIC PCH MIXED USE DEVELOPMENT

SB 221 defines the Project as a “subdivision,” as defined by SB 221’s Government Code 66473.7(a)(1), as having more than 500 units when the public water system has more than 5,000 services. But the Project is exempt from SB 221 requirement of an affirmative written verification of sufficient water supply (Government Code 66473.7) because it will be sited within an urbanized area that has been previously developed for urban uses. The Project is further exempt from SB 221 requirements because the immediate contiguous properties surrounding the proposed Project site are, or previously have been, developed for urban uses.

Under Water Code § 10912(a)(7), SB 610 mandates that a water availability assessment be approved if a project "would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project." A development is defined by SB 610 as a “project” by Water Code 10912(a) and (b) if it meets any of the following in Table 1, below.

Table 1 - SB 610 Threshold for requiring WSA

	SB 610 Threshold	Dwelling Unit Equivalents
1. SFR or MFR	500 dwelling units	
2. Shopping center or business	1,000 employees or 500,000 sf of floor space	2.0 employees = 1 DU 1,000 sf = 1 DU
3. Commercial office building:	1,000 employees or 250,000 sf of floor space	2.0 employees = 1 DU 500 sf = 1 DU
3. Hotel or motel	500 rooms	1.0 room = 1 DU
4. Industrial, manufacturing, or processing plant, or industrial park	1,000 persons or 650,000 sf of floor space or 40 acres of land	2.0 persons = 1 DU 1,300 sf = 1 DU 0.080 acres = 1 DU
5. A mixed-use project that includes one or more of the projects specified above		
6. A project that would demand an amount of water equivalent to, or greater than the amount of water required by a 500 dwelling unit project.		



The Project is a mixed-use project as according to the following description provided to LBWD by the lead agency on February 17, 2015:

The overall Project Site contains 1,959 residential units and approximately 2.7 million square feet of commercial and employment uses, along with over 950 licensed hospital beds and almost 200 hotel rooms. The Proposed Project would increase the number of permitted residential units to approximately 3,700 dwelling units—roughly 1,700 more than existing conditions. The Proposed Project also increases potential commercial and employment building square footage to approximately 3 million square feet (a net increase of approximately 375,000 square feet over existing conditions), concentrating and intensifying development at key transit, employment, and freeway nodes.

The Proposed Project consists of two areas along Long Beach Boulevard totaling 373 acres, stretching from Anaheim Street on the south to Wardlow Road on the north: 1) the Midtown Specific Plan area spanning approximately 353 acres from Anaheim Street on the south to Spring Street on the north, 2) the Conventional Zoning areas, which consist of approximately 15 acres from Spring Street on the south to Wardlow Road on the north, and approximately 5 acres around Officer Black Park (west of Pasadena Avenue between 21st Street and 20th Street). All of these areas make up the overall Project Site and constitute the Proposed Project for purposes of CEQA...

The expected water demand of the Project is equal to that of approximately 2,219 dwelling units and therefore requires a SB 610 water supply availability assessment:

Table 2 - Project's Expected Water Demand Exceeds that of 500 Dwelling Units

	Dwelling Unit Equivalants	Project Size	Project Water Demand (in DUs)
SFR or MFR	1 unit = 1 DU	1,736 Units	1,736
Shopping center or business	1,000 sf = 1 DU	375,000 SF	375
Hotel or motel	1 unit = 1 DU	108 Units	<u>108</u>
			2,219 DUs



Table 3 estimates Project's expected water demand showing the net increase in Water Demand.

Table 3 – Project's Estimated Annual Water Demand

Land Use	Demand Factors			Project Demand	
	Millions of Square Feet	Dwelling Units	AF / Unit / Yr		
DWR Assumption**		500	0.50 per DU	250 af/yr	% of Total
		500	0.30 per DU	150 af/yr	
Single-Family Housing		-	0.30 * per DU	0 af/yr	0%
Multiple-Family Dwelling Units		1,736	0.25 * per DU	434 af/yr	81%
Hotels/ Motels		108	0.14 ^ per DU	15 af/yr	3%
Commercial/ Retail Uses	0.375		per 1 mil SF 224 ~	84 af/yr	16%
Office Uses			per 1 mil SF 224	0 af/yr	0%
Expected Net Increase in Water Demand				533 af/yr	
Existing Water Demand				1,500 af/yr	
Total Water Demand; Existing Plus Project Increase				2,033 af/yr	

* Based on average use in Long Beach.

^ Based on average use of large hotels in Long Beach.

~ Based on LBWD Comprehensive Sewer System Master Plan and Management Program.

** "Note: In determining whether a project would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project, it is generally acknowledged that one acre-foot of water can serve two to three households on an annual basis; therefore, one dwelling unit typically consumes .3 to .5 acre-feet of water per year, depending upon several factors, including the regional climate." (DWR Handbook, page 3).

IV. BOARD OF WATER COMMISSIONERS MUST APPROVE THE WATER AVAILABILITY ASSESSMENT BY MAY 18, 2015

The water supply governing body of the public water system in this case is the City of Long Beach Board of Water Commissioners (Board). Because the Project is a "project" as defined by SB 610, the Board must approve the assessment and deliver it to the lead agency within 90 days after that agency requests the assessment (per Water Code section 10910(g)(1):

(g)(1) ...the governing body of each public water system shall submit the assessment to the city or county no later than 90 days from the date on which the request was received. The governing body of each public water system



shall approve the assessment prepared pursuant to this section at a regular or special meeting.

LBWD received a request from Jorge Estrada, an Associate with the Placeworks corporation, on behalf of Steve Gerhardt, Planner, City of Long Beach Development Services, to conduct the assessment on February 17, 2015 (Attachment A). Therefore, the Board must approve the assessment and transmit that assessment to Mr. Gerhardt no later than May 18, 2015.

V. LBWD'S 2010 UWMP CANNOT BE THE SOLE BASIS OF THIS WATER AVAILABILITY ASSESSMENT

If the projected water demand associated with the Project had been accounted for in a water supplier's most recently adopted urban water management plan, the water supplier *may* rely on information from that plan in preparing certain elements of the assessment.

LBWD's most recently adopted urban water management plan, its 2010 UWMP as revised in 2011, hereafter referred to as the 2010 UWMP, did not articulate specific development projects; but factored in their expected demand by projecting increases in factors influencing this demand, such as increases in housing, population, and employment.

Approximately eighty-five percent (85%) of the Project's demand will be from multi-family units and hotel rooms, the balance from retail, restaurant and other. The 2010 UWMP projected water demands based on a number of factors, including an increase in multi-family housing from 90,954 units in 2010 to 108,773 units by 2035, or a total increase of 17,819 units. The Project, by adding an equivalent of 2,044 dwelling units, represents approximately eleven percent (11%) of the new water demand from multi-family housing accounted for in the 2010 UWMP.

The 2010 UWMP water demand forecast took growth in the commercial and retail sector into consideration, indirectly, by projecting an increase in water demand based on an increase in total employment, projecting an increase from 179,842 in 2010 to 196,185 jobs by 2034, an increase of 16,343 jobs. The Project's commercial and retail space represents about nine percent (9%) of this projected increase in employment, or about 1,500 jobs (375,000 sf x's [California Department of Water Resources' equivalent of 1000 employees per 250,000 square feet]).

LBWD had used the UWMP to develop water availability assessments for projects since 2011. Although those projects were also not specifically identified in the Current 2010 UWMP, the assessments found that projected water supplies for twenty years would be available during normal, single-dry, and multiple-dry water years to



meet the projected water demand associated with these past projects, in addition to the existing and other planned future uses of LBWD's system.

Those assessments were fundamentally based on three factors: the reliability of LBWD's groundwater, MWD statements of reliability, and Long Beach preferential right to certain MWD water supplies.

What has not materially changed from the assumptions in the 2010 UWMP are the reliability of LBWD's groundwater and the Long Beach preferential rights to MWD supplies. Therefore, for the purpose of this water availability assessment, the 2010 UWMP as it pertains to groundwater and preferential rights is an appropriate reference, except as noted below. A copy of the 2010 UWMP is available at <http://www.lbwater.org/2010-urban-water-management-plan> or upon request.

What has materially changed from the 2010 UWMP is the reliability of MWD's imported water supplies and the severe drought conditions prevailing at the time this water availability assessment was being created and adopted. As discussed in the next section, MWD supplies are demonstrably less reliable than MWD anticipated in 2010 and less reliable than LBWD assumed in its 2010 UWMP.

VI. RELIABILITY OF IMPORTED WATER

MWD provides, through its wholesale water programs, about 50-percent of the potable water consumed in Long Beach and throughout southern California. As such, MWD's reliability is essential for the reliability of the City and the region. These supplies are imported from the San Francisco/ Sacramento Bay Delta region through the State Water Project and from the Colorado River through the Colorado River Aqueduct.

On April 14, 2015, the Board of Directors of the MWD declared a 15% water shortage allocation which according to the criteria it used in the 2010 Regional UWMP (Page 2-21), constitutes an "Extreme Shortage" condition:

"The WSDM Plan distinguishes between Shortages, Severe Shortages, and Extreme Shortages. Within the WSDM Plan, these terms have specific meaning relating to Metropolitan's ability to deliver water to its customers.

Shortage: Metropolitan can meet full-service demands and partially meet or fully meet interruptible demands, using stored water or water transfers as necessary.

Severe Shortage: Metropolitan can meet full service demands only by using stored water, transfers, and possibly calling for extraordinary conservation. In a Severe Shortage, Metropolitan may have to curtail Interim Agricultural Water Program deliveries.

Extreme Shortage: Metropolitan must allocate available supply to full-service customers.



A. METROPOLITAN WATER DISTRICT'S RELIABILITY

In its assumption of 100-percent reliability in its 2010 Regional UWMP, MWD made certain assumptions about how much water would be conserved in Southern California. But two factors may conspire to undermine these conservation estimates.

1. MWD's water shortage allocation plan undermines water conservation targets

MWD allocates water during shortages such that water agencies that conserved in the past are harmed, and agencies that did not conserve benefit. The former received a reduced MWD allocation and its customers' demand has hardened; the latter's allocation is not reduced and its customers demand is not hardened.

MWD allocates water to its 26 member agencies with the goal of equalizing the percent-reduction to retail customers across its service area.

For example,

- If one MWD member agency had retail demand of 200 gallons per capita per day (GPCD) in the past, but reduced its demand to just 150 GPCD by eliminating excessive landscape irrigation in its service area;
- And another MWD member agency had a demand of 200 GPCD in the past but had not reduced excessive landscape irrigation in its service area so its current demand remained at 200 GPCD;
- All else being equal, when MWD allocates water to equalize the reduction in the then-current retail demand, say a 20-percent reduction, the water conserving agency retail demand will have to drop to 120 GPCD and the water-wasting agency to 160 GPCD.
- Because the water conserving agency had already eliminated excessive landscape irrigation in its service area, the additional cuts from MWD may require reductions in indoor use and use by the commercial sector. The water wasting agency had only to reduce a portion of its excessive landscape irrigation and no indoor or commercial water use.

MWD provide in its allocation plan a credit to agencies that reflects a certain amount of water conservation, but the credit is typically so small as to be immaterial.

Therefore, a water agency that wants to provide the most water possible to its customers during shortages and to maintain the easy-to-eliminate water demand



prior to the shortage, may determine that conserving water in the years leading up to an allocation is a mistake.

This rational calculation by water managers could lead to less conservation in MWD's service area than MWD anticipated in its 2010 Regional UWMP.

For MWD to realize the conservation targets it set for the region in its UWMP, MWD may have to upend the perverse incentive which currently forms the foundation of its allocation strategy.

It is not unreasonable to assume a continuation of this perverse incentive will make it impossible for MWD to achieve the conservation necessary to meet its goal of 100-percent water reliability through 2030.

2. MWD's over estimating the amount of water conserved through certain programs creates inconsistency between assumed level of water conservation and actual conservation

MWD's 2010 Regional UWMP assumed certain amounts of water will be conserved between 2010 and 2035. These assumptions were based, in part, on a calculation of the effectiveness of MWD's regional conservation programs.

But MWD over estimates the amount of water actually conserved by some of these programs, thereby over estimating the amount of water likely to be conserved between 2010 and 2035. This, in turn, calls into question the assumption of 100-percent reliability through the year 2035.

For example, MWD assumes certain amounts of water are conserved for each weather-based irrigation controller installed. But depending on the study cited, these devices may be conserving just a fraction of the water they are assumed by MWD to be conserving.

MWD did not predict in its 2005 Regional UWMP the shortage it suffered in 2007. And MWD did not predict in its 2010 Regional UWMP the shortage it is currently suffering.

Given the permanent reduction of water from the Owen Valley, from the Colorado River and from the State Water Project, and MWD's incentive for water agencies to not conserve prior to actual shortage allocations, it is reasonable to assume MWD will continue suffer additional shortages over the next 20 years.



B. STATE WATER PROJECT RELIABILITY

California's Department of Water Resources (DWR) manages the SWP. DWR is in the process of updating its bi-annual assessment of the reliability of the SWP. Following is an excerpt from the 2013 draft report summary (only the cover pages and summary of this 81 page document are included in Attachment B).

"The analyses in this report consider climate change and the effects of sea level rise on water quality, but do not incorporate the probability of catastrophic levee failure. The differences between the 2011 and 2013 Reports can be attributed primarily to updates in the assumptions and inputs to the computer simulation analyses.

As noted in the discussion of SWP exports in Chapter 4 of this report, estimated average annual Delta exports (that is, SWP water of various types pumped by and transferred to contractors from the Banks Pumping Plant) have decreased since 2005, although the bulk of the change occurred by 2009 as the federal BOs went into effect, restricting operations. These effects are also reflected in the SWP delivery estimates provided in Chapters 5 and 6 of this report. Chapters 5 and 6 characterize the SWP's water delivery reliability under existing conditions and future conditions, respectively. The most salient findings in this report are as follows:

- The estimated average annual SWP exports decrease from 2,612 thousand acre-feet (taf)/year to 2,466 taf/year (146 taf/year or about 5.6%) between the existing- and future-conditions scenarios.*
- Under existing conditions, the average annual delivery of Table A water estimated for this 2013 Report is 2,553 taf/year, 29 taf (1%) more than the 2,524 taf/year estimated for the 2011 Report.*
- Under future conditions, the average annual delivery of Table A water estimated for this 2013 Report is 2,400 taf/year, about 1% less than the 2,465-taf/year estimate for the future-conditions scenario presented in the 2011 Report. "*

With respect to SWP reliability 20-years into the future (2033), DWR expects additional downward pressure on water reliability caused by the impacts of climate change including the increased variability in floods and droughts, and sea level rise.

The weather in Long Beach has been extremely hot and dry for the first three months of 2015: rainfall, at 1.6 inches, was only 22% of normal for that time of year; and the average daily high temperature, at 74 degrees, was 10% warmer than normal for that time of year. The current water supply forecast is largely negative:

- As of April 1, 2015, the northern snow pack, which feeds the State Water Project, was only 5% of normal;
- As of April 7, 2015, 99.8% of California remained in an "Abnormally Dry" to "Exceptional Drought" condition; and parts of southern California, including



Long Beach, were in the most severe drought condition: an “Exceptional Drought” condition;

- As of April 14, 2015, the key reservoir feeding the State Water Project, Lake Oroville, was at 51% of capacity, which was only 65% of normal for that time of year; and
- The National Oceanic and Atmospheric Administration’s (NOAA) most recent 3-month forecast (made March 19, 2015) predicts temperatures for most of California, especially along the coast, will be much higher than normal for that time of year and rainfall for most of California, including southern California, will be normal for that time of year; i.e., little to no rainfall is expected.

If these unusually warm and dry conditions persist through the winter of 2015-16, the water shortage throughout California could become catastrophic. Even above normal precipitation and below normal temperatures would probably not be enough to lift California out of a drought condition.

C. COLORADO RIVER RELIABILITY

The U.S. Bureau of Reclamation briefly discusses the severe negative impact climate change has already had on the Colorado River (Attachment C.2):

“In the Western United States, these changes are not just anticipated for the future, but are being measured today:

- * Average temperatures are rising, thereby increasing evaporation and perhaps increasing the severity of recent droughts;*
- * A greater portion of winter precipitation is falling in the mountains as rain rather than snow, reducing the winter snowpack;*
- * Winter low temperatures are rising, and the snowpack is melting earlier in the spring; and*
- * Collectively, these trends for precipitation and temperature are producing earlier runoff, making it harder to use the winter precipitation later in the summer.*

Climate projections published by the Intergovernmental Panel on Climate Change (IPCC) indicate these changes will continue or even accelerate during the twenty-first century. Particularly in the Southwest, there is strong agreement in climate forecasts toward higher temperatures and less runoff into reservoirs. Increased temperatures will also mean increased water demands and increased rates of evaporation.”



D. GOVERNOR BROWN’S EXECUTIVE ORDER B-29-15

On April 1, 2015, Governor Brown issued Executive Order B-29-15, finding that, among other things, “...conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions ...” and ordering that, among other things, the “State Water Resources Control Board shall impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016.

These restrictions will require water suppliers to California’s cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers’ service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use.”

On April 18, 2015, the State Water Resources Control Board released a draft of the water use reduction target they intend to impose on each individual urban water supplier, the final order is expected in early May, 2015. The draft water use reduction target for the City of Long Beach is 16-percent below water usage in 2013. The penalty for failure to meet the 16% reduction is a fine of up to \$10,000 per day.

Nevertheless, an adequate supply of water is available to meet the needs of existing LBWD customers as well as the new demand placed on LBWD by the Project because LBWD has a reliable supply of groundwater and LBWD has sufficient preferential rights to MWD supplies.

VII. PREFERENTIAL RIGHTS

By virtue of certain capital investment in MWD since the early 1930’s, Long Beach is entitled to certain rights to MWD’s water. This entitlement is embedded in State law and comes in the form of a preferential right to MWD supplies. Section 135 of the Metropolitan Water District Act states:

Sec. 135. [Preferential Right to Purchase Water]: Each member public agency shall have a preferential right to purchase from the district for distribution by such agency, or any public utility therein empowered by such agency for the purposes, for domestic and municipal uses within the agency a portion of the water served by the district which shall, from time to time, bear the same ratio to all of the water supply of the district as the total accumulation of amounts paid by such agency to the district on tax assessments and otherwise, excepting purchase of water, toward the capital cost and operating expense of the district’s works shall bear to the total payments received by the district on account of tax assessments and otherwise, excepting purchase of water, toward such capital cost and operating expense.



MWD has validated LBWD’s preferential rights on many occasions, including the two correspondences shown in Attachments D and E.

The MWD recalculates each of its member agency’s preferential rights on an annual basis. Preferential rights are expressed as a percent of MWD’s water. LBWD’s currently has a preferential right to about 2.5% of MWD supplies. For example, as shown in the following table, LBWD has a preferential right to receive approximately 37,500 acre-feet of MWD water when MWD only has 1,500,000 acre-feet of supplies:

LBWD's approx Preferential Rights as a Percent of MWD's Imported Water	2.5%
MWD Supplies *	1,500,000 af / year
LBWD's Preferential Rights	<u>37,500 af / year</u>

* MWD dry-year supplies would include imported water, stored water, water purchased on the spot market, etc.

It is highly unlikely that MWD will ever have less than 1,500,000 acre-feet of water. Indeed, MWD’s 2010 Regional UWMP assumes, even during a multi-year dry period, its supply will be more than 50-percent greater than this amount.

LBWD requested and MWD provided (in a letter dated May 13, 2010) a current estimate of MWD’s reliability and LBWD’s preferential rights (Attachment E). This assessment finds MWD 100-percent reliable over the next 20 years under normal, single- and multiple-dry year events, with these caveats:

- The assumption of 100-percent reliability assumes certain minimum amounts of water will be in storage at the beginning of each dry period; and
- Even if MWD might otherwise be 100-percent reliable, it may choose to allocate supplies in order to preserve stored water for the future.

The letter reaffirms LBWD’s Preferential Rights, stating:

”Section 135 of the Metropolitan Water District Act does not related to pricing but to amounts of water that can be purchased for domestic and municipal uses within a member agency service area. As such, any member agency is permitted to purchase supplies consistent with the Metropolitan Water District Act, including Section 135.” (page 3).

Therefore, the amount of water represented by LBWD’s Preferential Rights, even in extreme shortages exceeds the supplementing water LBWD would need from MWD to complement its groundwater.



VIII. WATER DEMAND, SUPPLY AND RELIABILITY

LBWD's total projected water supplies and demands during normal, single- and multiple-dry water years during a 20-year projection meet the projected water demand of the Project in addition to LBWD's existing and planned future uses, including agricultural and manufacturing uses. LBWD's water supply and demand projections, except as noted in this document, are found in the 2010 UWMP, which is incorporated into this analysis by reference.

The demand for domestic water in Long Beach is met with a combination of groundwater, and of surface water imported and treated by MWD. LBWD has a right to both of these sources of water.

A. SUPPLEMENTAL WATER SUPPLY

MWD is the "supplemental" supplier of water for LBWD and the other 25 MWD member agencies that supply water to the 18 million people of the southern California coastal-plain. Therefore, if retail demand for water in Long Beach increases, more water is purchased wholesale from MWD; if retail demand is reduced, less water is purchased wholesale from MWD.

Please see the above sections and the 2010 UWMP for a discussion of these supplemental water supplies.

B. GROUNDWATER SUPPLY

A portion of the water supply provided to the Project will be treated groundwater. The groundwater is pumped from the Central Basin aquifer. This is a very reliable supply of water (for more information see the 2010 UWMP).

C. WATER SUPPLY AND DEMAND IN NORMAL, SINGLE- AND MULTIPLE-DRY YEAR CONDITIONS

As stated above, because the type of development such as the Project was included as part of the projected water demand in the 2010 UWMP, the water demand for the proposed development need not be separately analyzed.

See the 2010 UWMP for water supply and demand estimates and the impact of population, housing, employment and climate on the estimates, for single- and multiply-year dry conditions, factoring groundwater reliability, MWD supply reliability and preferential rights (with issues raise above), and additional factors adding to reliability.



IX. ATTACHMENTS

- A. LEAD AGENCY REQUEST WATER AVAILABILITY ASSESSMENT AND PROJECT DESCRIPTION
- B. THE STATE WATER PROJECT DELIVERY RELIABILITY REPORT 2013 DRAFT
- C. THE WATER CONSERVATION INITIATIVE AND IMPLEMENTATION OF THE SECURE WATER ACT
- D. LETTER FROM LBWD TO MWD DOCUMENTING PREFERENTIAL RIGHTS (DATED MAY 1, 2008)
- E. MWD LETTER UPDATING SUPPLY RELIABILITY AND CONFIRMING LBWD'S PREFERENTIAL RIGHTS (DATED MAY 13, 2010)



LONG BEACH WATER DEPARTMENT

**The Standard in Water Conservation &
Environmental Stewardship**

**Water Availability Assessment
prepared for the
Midtown Specific Plan Water Supply Assessment**

Attachments

May 7, 2015



- A. Lead Agency request water supply assessment and Project description

From: Jorge Estrada [<mailto:jestrada@placeworks.com>]
Sent: Tuesday, February 17, 2015 11:51 AM
To: Matthew Lyons
Cc: Steve Gerhardt; Angela Reynolds; Colin Drukker; Suzanne Schwab; William Halligan; Ian Adam (iadam@fuscoe.com)
Subject: FW: Infrastructure Assessment & Water Supply Assessment

Hi Matt,

Attached is the project description portion of the Initial Study for your files and use in preparing the WSA for Midtown Specific Plan. Per Steve at the City, please commence the WSA.

Also, per Ian Adam's email below, attached are the estimated demand increases due to the proposed land use changes for both water and sewer that Fuscoe is using for their infrastructure assessment. As Ian noted, it will be important for the WSA that the same or very similar water demand estimates be used so that there is consistency between the sewer/water infrastructure studies and the water supply assessment study. Please coordinate with Ian (cc'd) to ensure that the generation rates and numbers they are using for the infrastructure assessment are in line with the numbers you will be using for the WSA.

Aside from the project description and Fuscoe's estimated demand numbers, please let us know if there is anything else you need from us for your preparation of the WSA.

Best Regards,

JORGE ESTRADA
Associate



3 MacArthur Place, Suite 1100 | Santa Ana, California 92707
714.966.9220 | jestrada@placeworks.com | placeworks.com

The Planning Center|DC&E is now PlaceWorks. Please update your records.

1.3.2 Description of the Project

The Proposed Project consists of two areas along Long Beach Boulevard totaling 373 acres, stretching from Anaheim Street on the south to Wardlow Road on the north (see Figures 2, *Local Vicinity*, and 3, *Aerial Photograph*): 1) the Midtown Specific Plan area spanning approximately 353 acres from Anaheim Street on the south to Spring Street on the north, 2) the Conventional Zoning areas, which consist of approximately 15 acres from Spring Street on the south to Wardlow Road on the north, and approximately 5 acres around Officer Black Park (west of Pasadena Avenue between

21st Street and 20th Street). All of these areas make up the overall Project Site and constitute the Proposed Project for purposes of CEQA, but are described separately below.

Midtown Specific Plan

The Midtown Specific Plan (Specific Plan) provides a framework for the development and improvement of a 353-acre corridor along Long Beach Boulevard. The Specific Plan acts as a bridge between the Long Beach General Plan and development that would occur within the Midtown Specific Plan area. Jurisdictions may adopt specific plans by resolution or ordinance. The Specific Plan would be adopted by the Long Beach City Council as ordinance and function as the regulatory document that serves as the implementing zoning for the Midtown Specific Plan area, thereby ensuring the orderly and systematic implementation of the Long Beach General Plan. The Midtown Specific Plan would also be referenced as PD-29.



B. The State Water Project Delivery Reliability Report 2013 (Draft)

The State Water Project

Draft Delivery Reliability Report 2013

December 2013



State of California
Natural Resources Agency
Department of Water Resources

State of California
Edmund G. Brown Jr., Governor

California Natural Resources Agency
John Laird, Secretary for Natural Resources

Department of Water Resources
Mark W. Cowin, Director

Laura King Moon
Chief Deputy Director

Nancy Vogel,
Assistant Director for Public Affairs

Kasey Schimke
Asst. Director, Legislative Affairs

Cathy Crothers
Office of the Chief Counsel

Gary Bardini
Deputy Director, Integrated Water Management

Paul Helliker
Deputy Director, Delta and Statewide Water
Management

John Pacheco
Deputy Director, California Energy Resources
Scheduling

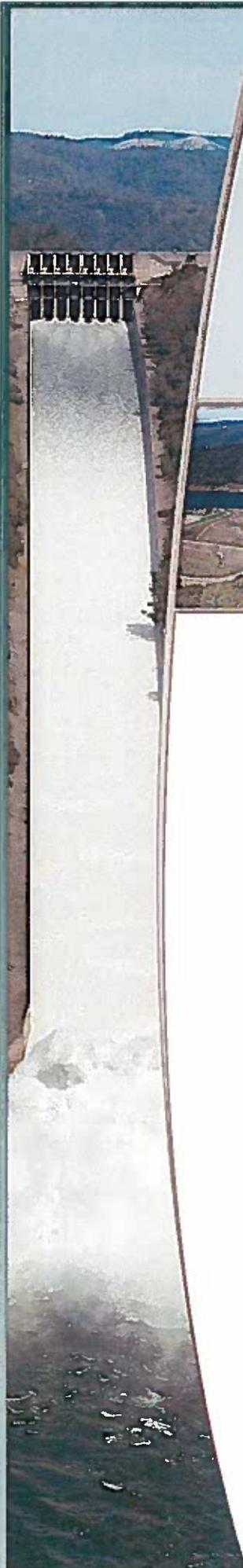
Carl Torgersen
Deputy Director, State Water Project

Kathie Kishaba
Deputy Director, Business Operations

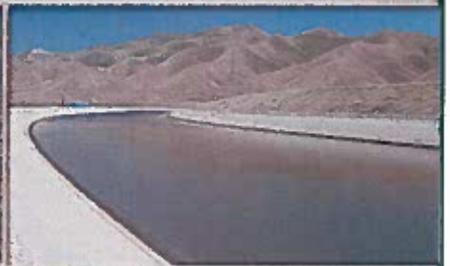
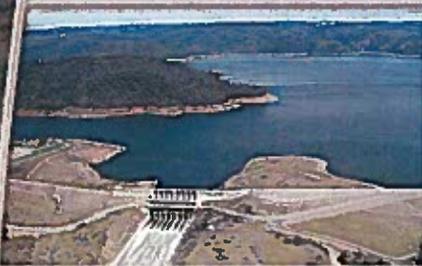
Bay-Delta Office
Katherine Kelly, Chief
Modeling Support Branch
Francis Chung, Chief

Individuals contributing to the development of the report

Laurence Kerckhoff, Attorney IV, Office of the Chief Counsel
Art Hinojosa, Principal Engineer, Division of Flood Management
Rich Juricich, Principal Engineer, Division of Planning and Local Assistance
Douglas Osugi, Supervising Engineer, FloodSAFE Environmental Stewardship
and Statewide Resources
Cassandra Enos-Nobriga, Program Manager II, Division of Environmental Services
Erik Reyes, Supervising Engineer, Bay-Delta Office
Sina Darabzand, Senior Engineer, Bay-Delta Office
Nazrul Islam, Senior Engineer, Bay-Delta Office
Matthew Reeve, Program Manager II, Bay-Delta Office
Christopher Quan, Engineer, Bay-Delta Office
Alan Olson, Engineer, Bay-Delta Office
Holly Canada, Engineer, Bay-Delta Office
Cynthia Pierson, Executive Assistant, DWR Executive
Rebecca Daniel, Office Technician, Bay-Delta Office
Prepared with Technical Assistance from AECOM



Summary



This report is intended to inform the public about key factors important to the operation of the State Water Project (SWP) and the reliability of its water deliveries.

For many SWP water contractors, water provided by the SWP is a major component of the water supplies available to them. SWP contractors include cities, counties, urban water agencies, and agricultural irrigation districts. These local utilities and other public and private entities provide the water that Californians use at home and work every day and that helps to nourish the state's bountiful crops. Thus, the availability of water from the SWP is an important component to the water supply planning of its recipients and ultimately affects the amount of water that local residents and communities can use.

The availability of these water supplies may be highly variable. A wet water year may be followed by a dry or critically dry year. Knowing the probability that they will receive a certain amount of SWP water in a given year—whether it be a wet water year,

a critical year, or somewhere in between—gives contractors a better sense of the degree to which they may need to implement increased conservation measures or plan for new facilities.

The Delta is the key to the SWP's ability to deliver water to its agricultural and urban contractors. All but five of the 29 SWP contractors receive water deliveries from the Delta (pumped by either the Harvey O. Banks or Barker Slough pumping plants).

Yet the Delta faces numerous challenges to its long-term sustainability. For example, climate change poses the threat of increased variability in floods and droughts, and sea level rise complicates efforts to manage salinity levels and preserve water quality in the Delta so that the water remains suitable for urban and agricultural uses. Among the other challenges are continued subsidence of Delta islands, many of which are already below sea level, and the related threat of a catastrophic levee failure as water pressure increases on fragile levees.

Protection of endangered and threatened fish species, such as the delta smelt, is also an important factor of concern for the Delta. Ongoing regulatory restrictions, such as those imposed by federal biological opinions on the effects of SWP and Central Valley Project (CVP) operations on these species, also contribute to the challenge of determining the SWP's water delivery reliability.

Two large-scale plans for the Delta that are being developed could affect SWP water delivery reliability: the Delta Plan and the Bay Delta Conservation Plan (BDCP). When complete, the BDCP will provide the basis for issuing endangered species permits to operate the SWP and CVP. The BDCP seeks to improve the health of the ecological system as a whole.

The analyses in this report factor in all of the regulations governing SWP operations in the Delta and upstream, and assumptions about water uses in the upstream watersheds. Analyses were conducted that considered the amounts of water that SWP contractors use and the amounts of water they choose to hold for use in a subsequent year.

Many of the same specific challenges to SWP operations described in the *State Water Project Delivery Reliability Report 2011* (2011 Report) remain in 2013. Most notably, the effects on SWP pumping caused by issuance of the 2008 and 2009 federal biological opinions (BOs), which were reflected in the 2011 Report, continue to affect SWP delivery reliability today. The analyses in this report consider climate change and the effects of sea level rise on water quality, but do not incorporate the probability of catastrophic levee failure. The differences between the 2011 and 2013 Reports can be attributed primarily to updates in the assumptions and inputs to the computer simulation analyses.

As noted in the discussion of SWP exports in Chapter 4 of this report, estimated average annual Delta exports (that is, SWP water of various types pumped by and transferred to contractors from the Banks Pumping Plant) have decreased since 2005, although the bulk of the change occurred by 2009 as the federal BOs went into effect, restricting operations. These effects are also reflected in the SWP delivery estimates provided in Chapters 5 and 6 of this report. Chapters 5 and 6 characterize the SWP's water delivery reliability under existing conditions and future conditions, respectively. The most salient findings in this report are as follows:

- The estimated average annual SWP exports decrease from 2,612 thousand acre-feet (taf)/year to 2,466 taf/year (146 taf/year or about 5.6%) between the existing- and future-conditions scenarios.
- Under existing conditions, the average annual delivery of Table A water estimated for this 2013 Report is 2,553 taf/year, 29 taf (1%) more than the 2,524 taf/year estimated for the 2011 Report.
- Under future conditions, the average annual delivery of Table A water estimated for this 2013 Report is 2,400 taf/year, about 1% less than the 2,465 taf/year estimate for the future-conditions scenario presented in the 2011 Report.
- The likelihood of existing-condition SWP Article 21 deliveries (supplemental deliveries to Table A water) being greater than 20 taf/year has decreased relative to the likelihood presented in the 2011 Report. The same can be said for the estimated likelihood of Article 21 deliveries greater than 20 taf/year under future conditions. Both this report and the 2011 Report show a likelihood ranging between 21% and 26% of Article 21 water deliveries greater than 20 taf/year under both existing and future conditions.



C. THE WATER CONSERVATION INITIATIVE AND IMPLEMENTATION OF THE SECURE WATER ACT

The Water Conservation Initiative and Implementation of the Secure Water Act

October 2009

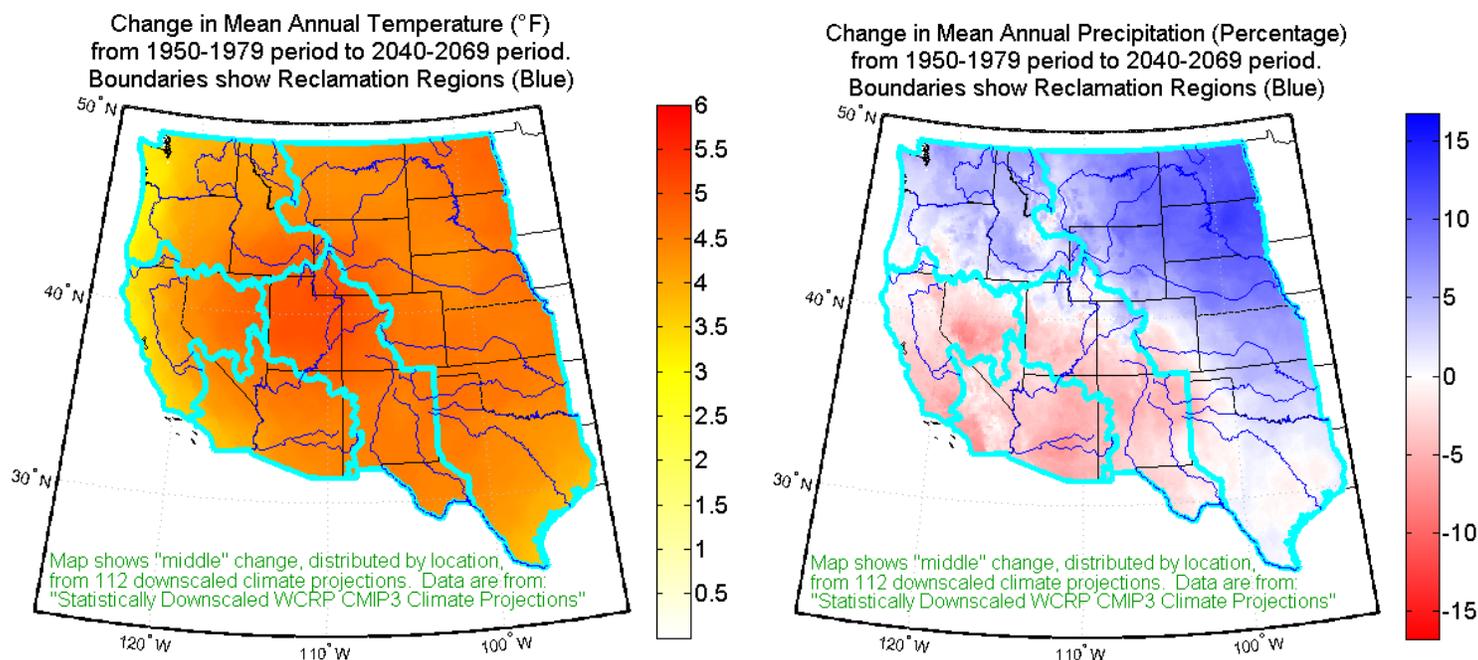
Climate Change and Water Resources

As our climate changes and the earth warms, the most immediate impact is on the hydrologic cycle. Warming impacts where precipitation falls, how much falls, and in what form. These changes directly affect the water supply available for drinking, irrigating crops, generating electricity, supplying industry, and filling our lakes and rivers.

In the Western United States, these changes are not just anticipated for the future, but are being measured today:

- Average temperatures are rising, thereby increasing evaporation and perhaps increasing the severity of recent droughts;
- A greater portion of winter precipitation is falling in the mountains as rain rather than snow, reducing the winter snowpack;
- Winter low temperatures are rising, and the snowpack is melting earlier in the spring; and
- Collectively, these trends for precipitation and temperature are producing earlier runoff, making it harder to use the winter precipitation later in the summer.

Figure 1. Precipitation and Temperature Trends in Western States



Climate projections published by the Intergovernmental Panel on Climate Change (IPCC) indicate these changes will continue or even accelerate during the twenty-first century. Particularly in the Southwest,

there is strong agreement in climate forecasts toward higher temperatures and less runoff into reservoirs. Increased temperatures will also mean increased water demands and increased rates of evaporation.

Climate change will add to the challenges we face today in managing our water supply, water quality, flood risks, wastewater, aquatic ecosystems, and energy production. These new stresses are likely to be felt first in the fastest growing region of the nation – the West. The Western States accounted for 50% of the nation’s population growth from 1990 to 2000, with some of the fastest growth in the driest areas.

It has often been said that "water is the lifeblood of the West." This part of our nation is critically dependent upon water for its economic health. To illustrate, the Bureau of Reclamation water projects in the West provide economic benefits conservatively estimated at \$21 billion annually. These benefits come from the range of water uses that Reclamation projects support, shown below:

Project Purpose	Total Estimated Benefit Value (2008 \$\$)
Hydropower	\$3.7 billion
Flood Control	\$16 million
Irrigation	\$11.5 billion
Municipal and Industrial	\$4.6 billion
Recreation	\$1billion
Total	\$21 billion

As the largest wholesale water provider and the second largest producer of hydroelectric power in the West, Reclamation is vitally interested in how climate and other stressors will affect the supply of water in this water-short region.

The Secure Water Act

The fundamental purpose of the Secure Water Act is to provide authority so that the Federal water and science agencies can work together with the States and local water managers to plan for climate change and the other threats to our water supplies, and take action to secure our water resources for the communities, economies, and the ecosystems they support.

Reclamation’s strategy for implementing the Secure Water Act includes **collaboration among agencies to enhance climate change science**, which will allow us to better **assess the threats to our water systems** and **implement mitigation strategies**. This approach will help us to maintain:

- Water supply, including both surface storage and groundwater aquifers;
- Generation of hydroelectric power;
- Cooling water for thermal power plants;
- River flows to maintain ecosystems and water quality;
- Recreational use of lakes and rivers; and
- Protection from floods and rising sea levels.

Collaboration Among Agencies

The Secure Water Act supports increased collaboration among the Federal water agencies. Reclamation will work together with the lead science agencies in the areas of climate and water, namely the USGS and NOAA, and the Regional Integrated Sciences and Assessments (RISA) university centers to ensure that the best information and science is available for water management.

These partnerships will build on collaborations that have already begun:

- Reclamation has formed, with the USACE, NOAA, and the USGS the Climate Change and Water Working Group (C-CAWWG) to bring the water managers and climate scientists together to create efficient R&D collaborations and information sharing across the federal agencies toward understanding and addressing climate change impacts on Western water supplies and water use.
- Reclamation, the USACE, NOAA and the USGS collaborated to write: *Climate Change and Water Resources Management: A Federal Perspective*, USGS Circular 1331. This report represents the two primary "operating agencies" and the two primary water "science agencies" collaborating to address the need for a comprehensive assessment of approaches for including climate change in water resources management.
- As part of CCAWWG coordination, Reclamation and the USACE are developing detailed descriptions of information and tools that water managers need from the science agencies and other researchers. Perspectives from both State and local water managers will also be sought and included in this report.
- Reclamation is working with the USGS, NOAA, and the RISA program to develop a Climate Change Training program for water managers. In discussions with water managers, a credible, consistent source of climate information and training is always one of the highest priorities identified.
- Reclamation is providing input to NOAA as they plan for the next generation of Global Circulation Models (GCMs) to define the types of outputs that will be of most value to water managers.
- Reclamation is participating in the Postdocs Applying Expertise (PACE) Fellowship program with NOAA to sponsor research activities focused on water management needs. There are currently three active postdocs participating in this program -- two focused on water supply questions for the Colorado River Basin and one studying potential changes to in extreme precipitation events.

Enhancing Climate Change Science

Reclamation will expand its research into the effects of climate change on the water cycle and how that may be managed for now and in the future. Some highlights of the research program and research underway include:

- Creation of a downscaled climate projection archive. This is an archive of GCM projections downscaled to spatial scales useful for water management analyses;
- Evaluations of global climate model projections to determine how flood frequencies may change in the 21st century;
- Evaluation of whether our ability to predict water supply is being diminished by climate change, and identification of possible new, more accurate methods; and
- Evaluation of how various hydrologic forecast models perform under climate change, leading to more informed choices among models.

Assessing Threats to the Water Supply

West-wide Climate Change Risk Assessments

The research and development activities described above will be used to undertake *West-wide Climate Change Risk Assessments*. These assessments will provide consistent projections for all of the major

river basins in the west of how climate change will affect:

- Temperature and precipitation;
- Water supply;
- Water demand and consumptive use; and
- Aquatic habitats.

These assessments will also include reconnaissance-level analysis of how water project operations may be affected. This information will provide a sound and consistent foundation for the Basin Studies and other planning activities that will formulate local and regional mitigation strategies to address climate change and other threats to our water supplies.

Basin Studies

Through the Basin Study Program, Reclamation will partner with basin stakeholders to conduct comprehensive studies to evaluate the impacts of climate change and define options for meeting future water demands in river basins in the West. The Basin Studies will identify adaptation strategies to resolve basin-wide water supply issues, including changes to the operation of water supply systems, modifications to existing facilities, development of new facilities, or non-structural changes. The Basin Studies will build on the West-wide Risk Assessments to develop basin-specific strategies to help meet water demands. By encouraging input from basin stakeholders, the Basin Studies will also build capacity and collaboration in the process of identifying water management solutions.

In FY 2009, Reclamation provided funding to initiate the first three basin studies under this program, including:

- The Colorado River Basin Water Supply and Demand Study (\$1 million Reclamation, \$1 million matching) covering portions of Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming;
- Yakima River Basin Study and Associated Basin Restoration Implementation Plan, covering south central Washington (\$1.3 million Reclamation, \$1.3 million matching);
- Modeling for the Future of the Milk and St. Mary River Systems in north central and southern Montana (\$350,000 Reclamation, \$350,000 matching).

The Colorado River study provides an ideal example of the collaborative process that we will employ under the Basin Study Program. The study encompasses the Colorado River Basin (upper and lower) and those areas of the seven basin states -- Wyoming, Colorado, Utah, New Mexico, Arizona, Nevada, and California (Basin States) -- that receive Colorado River water. Cost-share partners include each of the seven Basin States. The proposal is to complete a comprehensive review of water supply and current and long-term demands through 2060 within the Colorado River Basin; to assess options for resolving water supply imbalances; and to develop recommendations for future consideration to address current and projected imbalances. Paramount to the study is an assessment of the potential impacts of climate variability and climate change on water supplies and demands, including impacts on hydropower.

Implementing Mitigation Strategies

The American West is now the fastest growing region of the country and faces serious water challenges. Adequate and safe water supplies are fundamental to the health, economy, security, and ecology of the country. With increased demands for water from growing populations and energy needs, amplified recognition of environmental water requirements, and the potential for decreased supplies due to drought and climate change, a water balance cannot be achieved without water conservation and water reuse. Federal leadership is critical to widespread acceptance and implementation of effective strategies to

mitigate the impacts of climate change. Reclamation will implement projects to help water users adapt to climate change through the Water Conservation Initiative (WCI).

The Water Conservation Initiative

The WCI includes the Basin Study Program, described above, which will help identify the impacts of climate change and identify potential adaptation measures. Climate change adaptation measures identified through the Basin Studies, West-wide Climate Change Risk Assessments, and other programs, can be implemented through the other two components of the WCI, including cost-shared grants for conservation and water management improvement projects, and funding of water reuse and recycling projects through the Title XVI Water Reclamation and Reuse Program. Reclamation will also partner with States, tribes and local entities under the WCI to develop incentives and best practices for implementing water conservation and water recycling projects. Together, these programs form an important part of Reclamation's implementation of the Secure Water Act.

Water Conservation Challenge Grant Program

Water Conservation Challenge Grants (previously Water for America Challenge Grants) provide cost-shared funding for the following types of on-the-ground projects: (1) water conservation and efficiency projects that allow users to decrease diversions and to use or transfer the water saved; (2) water marketing projects with willing sellers and buyers, including water banks, that transfer water to other uses to meet critical needs for water supplies; (3) projects that improve water management by increasing the use of renewable energy, by increasing operational flexibility (constructing aquifer recharge facilities or making system optimization and management improvements), or by addressing endangered species and other environmental issues; and (4) pilot and demonstration projects that address the technical and economic viability of treating and using brackish groundwater, seawater, impaired waters, or otherwise creating new water supplies within a specific locale.

Water Conservation Challenge Grants leverage Federal funding by requiring a minimum of 50 percent non-Federal cost-share contribution. Grants are available to States, tribes, irrigation and water districts, and other entities with water or power delivery authority. Beginning in 2010, Reclamation will also provide cost-shared assistance to universities, non-profits, and organizations with water or power delivery authority for research activities designed to enhance the management of water resources, including developing tools to assess the impacts of climate change on water resources, and research that will increase the use of renewable energy in the management and delivery of water and power. Additionally, to ensure that the most effective conservation and reuse approaches are employed, Reclamation will begin partnering with States, tribes and local entities to develop incentives and best practices in water conservation techniques and water recycling and reuse methodologies.

Since 2004, over 150 challenge grant projects have been funded, combining \$36 million in Federal funding with local partnerships to construct over \$140 million worth of water management improvements in 16 western states. Projects include such activities as converting leaky dirt canals to pipeline, eliminating water losses due to seepage and evaporation to result in substantial water savings; installation of measuring devices, including Supervisory Control and Data Acquisition (SCADA) systems to improve control over water deliveries and to reduce operational spillage; installation of automation technology to allow more precise, remote control of water diversions and deliveries; and projects involving water marketing such as a pilot water bank in the Deschutes River Basin in Oregon aimed at facilitating the voluntary transfer of water among users.

In addition to those projects funded through annual appropriations, in August 2009 Reclamation announced 13 new Challenge Grant projects that together will receive \$40 million in American

Recovery and Reinvestment Act funding to accomplish over \$96 million in water management improvements.

Title XVI Water Reclamation and Reuse Program

Title XVI of P.L. 102-575, as amended (Title XVI), provides authority for Reclamation's water recycling and reuse program, titled "Title XVI." The Title XVI program is focused on identifying and investigating opportunities to reclaim and reuse wastewaters and naturally impaired ground and surface water in the 17 Western States and Hawaii. Under the program, Reclamation makes available cost-shared funding for planning, design, and construction of water recycling projects, as well as research and demonstration projects.

For purposes of the Title XVI program, a water reuse project is a project (including the necessary facilities and features) that reclaims and reuses municipal, industrial, domestic, or agricultural wastewater and naturally impaired groundwater and/or surface waters. Consistent with State law, reclaimed water can be used for a variety of purposes, such as environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, or recreation. Water reuse is an essential tool in stretching the limited water supplies in the West. Title XVI projects develop and supplement urban and irrigation water supplies through water reuse, thereby improving efficiency, providing flexibility during water shortages, and diversifying the water supply. In FY 2008, approximately 196,000 acre-feet of water was recycled through projects that have received Title XVI Program funding.

In July 2009, Reclamation announced 27 Title XVI projects to receive approximately \$135 million in American Recovery and Reinvestment Act funding. These 27 projects will team non-federal sponsors with local communities and the federal government to provide growing communities with new sources of clean water while promoting water and energy efficiency and environmental stewardship. Federal funding will be leveraged to construct a total of more than \$675 million in Title XVI projects.

Feasibility Study Authority

The Secure Water Act authorizes Reclamation to conduct feasibility studies to study the feasibility and impacts of constructing infrastructure necessary to address the effects of global climate change on water resources. New infrastructure could include the construction of water supply or water management facilities, or infrastructure to benefit environmental needs or enhance habitat. Once Reclamation has identified climate adaptation strategies in a particular basin through the completion of a Basin Study or other climate analysis, we will provide cost-shared funding for feasibility studies to non-Federal partners to pursue implementation of adaptation strategies. Funding for feasibility studies will be included under the Basin Study Program in future budget cycles.



- D. Letter from LBWD to MWD documenting Preferential Rights (dated May 1, 2008)



Long Beach Water Department

The Standard in Water Conservation &
Environmental Stewardship

KEVIN L. WATTIER, GENERAL MANAGER

Board of Water Commissioners
WILLIAM B. TOWNSEND, President
JOHN D. S. ALLEN, Vice President
PAUL C. BLANCO, Secretary
STEPHEN T. CONLEY, Member
FRANK CLARKE, Member

May 1, 2008

Mr. Timothy F. Brick, Chairman
The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012

Dear Chairman Brick:

The City of Long Beach, a member public agency of the Metropolitan Water District of Southern California, acknowledges receipt of the attached letter dated February 8, 2008 from General Counsel Karen L. Tachiki. The letter states that it is Ms. Tachiki's opinion that the adoption by your board of a supply allocation plan, which occurred at your February 2008 board meeting, would not in any way revoke or modify a member agency's statutory preferential rights, granted pursuant to Section 135 of the MWD Act.

The City of Long Beach intends to rely on this opinion in our future water supply planning, including compliance with the Urban Water Management Planning Act (Water Code Sections 10610-10656) and Water Supply Assessments (Water Code Sections 10910-10915 and Government Coded Section 66473.7).

Furthermore, the City of Long Beach hereby reasserts its position that the Metropolitan Water District of Southern California is not currently in compliance with Sections 25, 130 and 132 of the MWD Act, nor has it been for some time in the sale of surplus water for uses other than municipal and domestic purposes. If said noncompliance results in real damages, either financial or otherwise, to the City of Long Beach, the City intends to take such action as necessary to protect its interests.

Sincerely,

William Townsend, President
Long Beach Board of Water Commissioners

Cc: City of Long Beach Mayor Foster & City Councilmembers
Long Beach City Attorney, Robert Shannon
Long Beach Board of Water Commissioners
 Long Beach Water Department General Manager, Kevin L. Wattier
Metropolitan Water District Board Members
Metropolitan Water District General Manager, Jeffrey Kightlinger
Metropolitan Water District General Counsel Tachiki
Metropolitan Water District Member Agency Managers

Attachment

The Metropolitan Water District of Southern California

Mr. Kevin L. Wattier

Page 2

February 8, 2008

cc: J. Kightlinger
T. Brick
N. Sutley
J. Quinonez
H. Hansen



- E. MWD letter updating supply reliability and confirming LBWD's preferential rights (dated May 13, 2010)



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Office of the General Counsel

VIA EMAIL AND U.S. MAIL

February 8, 2008

Mr. Kevin L. Wattier
General Manager
Long Beach Water Department
1800 East Wardlow Road
Long Beach, CA 90807

Dear Kevin:

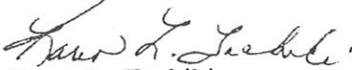
I understand from Jeff Kightlinger that you requested my opinion whether an action by Metropolitan's Board adopting the proposed water supply allocation plan would result in waiver of the member agency's preferential rights.

Section 135 of the MWD Act grants to each member agency a preferential right to purchase water from Metropolitan for distribution by such agency, in the proportionate amount determined under section 135. This right accrues to the member agency, not to Metropolitan, and it is my opinion that this right cannot be waived by action of the Metropolitan Board adopting the proposed allocation plan.

The proposed supply allocation plan was developed with member agency participation with the goal of providing equitable allocation of water across Metropolitan's service area. In developing the plan it was and continues to be our hope that all member agencies would employ this approach in lieu of other allocation methodologies, including preferential rights.

Because the preferential right to purchase water is a member agency right, it is my opinion that it is not subject to waiver by action of the Metropolitan Board. Only the Legislature, which granted this right to the member agencies, may modify or revoke it. Accordingly, it is my opinion that adoption of the proposed supply allocation plan by Metropolitan's Board would not in any way revoke or modify an agency's preferential rights.

Very truly yours,


Karen L. Tachiki
General Counsel