

PROPOSAL NO.: LAFCO 3111

HEARING DATE: January 19, 2011

**RESOLUTION NO. 3128**

**A RESOLUTION OF THE LOCAL AGENCY FORMATION COMMISSION OF THE COUNTY OF SAN BERNARDINO MAKING DETERMINATIONS ON LAFCO 3111 – A SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATE FOR THE JOSHUA BASIN WATER DISTRICT (sphere of influence expansion by approximately 160+/- acres and affirmation of the balance of its existing sphere of influence, as shown on the attached maps).**

**On motion of Commissioner \_\_\_\_\_, duly seconded by Commissioner \_\_\_\_\_, and carried, the Local Agency Formation Commission adopts the following resolution:**

**WHEREAS**, a service review mandated by Government Code 56430 and a sphere of influence update mandated by Government Code Section 56425 have been conducted by the Local Agency Formation Commission of the County of San Bernardino (hereinafter referred to as “the Commission”) in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Sections 56000 et seq.); and,

**WHEREAS**, at the times and in the form and manner provided by law, the Executive Officer has given notice of the public hearing by the Commission on this matter; and,

**WHEREAS**, the Executive Officer has reviewed available information and prepared a report including her recommendations thereon, the filings and report and related information having been presented to and considered by this Commission; and,

**WHEREAS**, a public hearing by this Commission was called for January 19, 2011 at the time and place specified in the notice of public hearing and in an order or orders continuing the hearing; and,

**WHEREAS**, at the hearing, this Commission heard and received all oral and written protests; the Commission considered all plans and proposed changes of organization, objections and evidence which were made, presented, or filed; it received evidence as to whether the territory is inhabited or uninhabited, improved or unimproved; and all persons present were given an opportunity to hear and be heard in respect to any matter relating to the application, in evidence presented at the hearing; and,

**WHEREAS**, at this hearing, this Commission certified that the sphere of influence update including a sphere amendment is statutorily exempt from environmental review pursuant to the

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provisions of the California Environmental Quality Act (CEQA) and such exemption was adopted by this Commission on January 19, 2011. The Commission directed its Executive Officer to file a Notice of Exemption within five working days of its adoption; and,

**WHEREAS**, based on presently existing evidence, facts, and circumstances filed with the Local Agency Formation Commission and considered by this Commission, it is determined that the sphere of influence for the Joshua Basin Water District (hereafter shown as the "District") shall be amended as shown on the map attached as Exhibit "A" to this resolution, defined as follows:

- (1) Expand the District's sphere of influence to include the northeast  $\frac{1}{4}$  of Section 29, Township 2 North, Range 6 East; and,
- (2) Affirm the balance of the District's existing sphere of influence.

**WHEREAS**, the determinations required by Government Code Section 56430 and local Commission policy are included in the report prepared and submitted to the Commission dated January 10, 2011 and received and filed by the Commission on January 19, 2011, a complete copy of which is on file in the LAFCO office. The determinations of the Commission are:

### 1. **Growth and population projections for the affected area:**

The District overlays all of the Joshua Community Plan area (County Service Area 20 boundary and sphere of influence) representing 95% of the District's boundary and sphere. The rural desert character of the Joshua Tree Community is defined in part by the geographic location, desert environment and low-density residential development. Residential development within the plan area is characterized by large lots, the varied placement of homes, and open spaces around the homes. The character of the community is further defined by the natural environment and by the limited commercial and industrial uses.

#### Land Use

The most prominent County land use designation within the plan area is Rural Living (RL), which makes up approximately 74% or 37,101 acres of the total land area. The second and third most prominent land use districts within the plan area are Resource Conservation (RC) and Single Residential (RS), which make up approximately 12% and 10% of the total land area, respectively. The Joshua Tree plan area also contains Multiple Residential, Community Industrial, Institutional (IN), and several commercial land use districts; however these land use districts only make up a small percentage of the total plan area. The Joshua Tree Community plan area contains some Bureau of Land Management (BLM) lands. Those portions of BLM lands that are within the Joshua Tree Community Plan area comprise 10,199 acres, which equates to approximately 17% of the total land area within the plan area. The majority of the commercial and industrial land use districts are concentrated along Highway 62 in the southwestern portion of the plan area.

The District's boundary and sphere extends an additional five square miles to the northwest into the Homestead Valley Community Plan area. The land use designations for the additional five square miles include 1,690 acres designated as HV/RL-5 (Rural Living, 5 acres minimum lot size), 1,280 acres designated as HV/RL (Rural Living, 2.5 acres minimum lot size), 30 acres designated as HV/RL-10 (Rural Living, 10 acres minimum lot size), 40 acres designated as HV/RC (Resource Conservation), and approximately 160 acres designated as HV/IN

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(Industrial), which is where the District's boundary extends into the Landers Landfill located at the northwest portion of Section 28.

The proposed sphere expansion area of the northeast portion of Section 29, comprising approximately 160 acres designated also as HV/IN, which includes the remaining portion of the Landers Landfill that is currently not within a sphere of influence of a retail water provider.

Residential build-out for the community is estimated to be 37,619 units based on San Bernardino County General Plan current zoning and maximum densities. The additional five square miles is estimated to have a residential build-out of approximately 853 units. These residential build-out projections are not expected to occur within the 2030 horizon of this report.

### Population Projections

The Joshua Tree Community Plan provides population projections that are based on historic and expected growth trends. The County projections estimate a population range of between 9,387 and 15,500 people by 2030. The larger projections are based on regional permit data. These numbers imply that the plan area will reach between 11 to 16 percent of its potential population capacity by 2030.

The Southern California Association of Governments (SCAG) in its *2008 Regional Transportation Plan Growth Forecast* projected the population and the number of households within the unincorporated community of Joshua Tree to be similar to projections used for the Joshua Tree Community Plan. SCAG projections assume that growth potential is not constrained by a lack of public services or utilities. As such, the population estimates are not target levels, but rather reasonably foreseeable levels, based on the current trends.

Given the similar projections of the Joshua Tree Community Plan and Southern California Association of Governments, it is LAFCO's opinion is that these projections are likely to occur.

## **2. Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies:**

The District actively provides retail water service to residential and commercial customers (no agricultural use is reported) and is authorized to operate wastewater package treatment plants that are limited to a specific area. This section of the report first provides an overview of regional water issues and follows with a discussion on local water conditions and a review of the District's water and wastewater activities.

### **Water**

The Joshua Tree community is located in the Colorado River Hydrologic Region, and is in the South Mojave Watershed as designated by the California Department of Water Resources.<sup>1</sup> The community is also within the boundaries of the Mojave Water Agency (MWA), a state water contractor.<sup>2</sup>

<sup>1</sup> California Water Plan, Update 2009, Integrated Water Management, DWR, Bulletin 160-09, Vol. 3, Colorado River.

<sup>2</sup> For more information on the Mojave Water Agency, please see LAFCO 3033 – Service Review and Sphere of Influence Update for MWA. (Agenda Item 9 from July 2008 LAFCO hearing).

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State Water Project

Water is the lifeblood for communities in the desert regions due to its limited nature. The availability of water will ultimately determine whether or not a community will prosper in the desert environs of San Bernardino County. Therefore, the most significant regional issue for the Joshua Tree community is present and future water supply. The *2007 State Water Project Delivery Reliability Report* indicates that SWP deliveries will be impacted by two significant factors. First, it is projected that climate change is altering hydrologic conditions in the State. Second, a ruling by the Federal Court in December 2007 imposed interim rules to protect delta smelt which significantly affects the SWP. Further, the *Report* shows, "...a continued eroding of SWP delivery reliability under the current method of moving water through the Delta" and that "annual SWP deliveries would decrease virtually every year in the future..." The *Report* assumes no changes in conveyance of water through the Delta or in the interim rules to protect delta smelt.

The Department of Water Resources prepares biennial SWP water delivery reliability reports in order to provide the public with reliability estimates for both current and projected 20 year conditions. This is accomplished by modeling the effects of current hydrologic and SWP facility conditions and changes that are projected to occur. The table below summarizes the history of the current and future MWA contractual maximum annual amount from the SWP and the SWP reliability factors that have been and are being used for water supply planning purposes since 2005.

Year	MWA Table A <sup>(1)</sup> Annual Maximum	SWP Reliability Factor (long- term)	Average Annual SWP Yield (Acre-feet)
2005	75,800	77%	58,366
2007	75,800	66-69%	50,028 – 52,302
2009	75,800	61%	46,238
2010	82,800	61%	50,508
2015	85,800	61% <sup>(2)</sup>	52,338 <sup>(2)</sup>
2020	89,800	61% <sup>(2)</sup>	54,778 <sup>(2)</sup>

(1) Table A refers to the section within the MWA contract with DWR which specifies the maximum annual amount of water that the MWA can receive from the State Water Project.

(2) Reliability estimates will be updated again in 2011. The 2009 Reliability Report estimated an average reliability of 60% for the SWP, but also modeled reliability for each Contractor, concluding that the average annual supply for MWA would be 61%. The 2009 Reliability Report estimate is the only known reliability variable at this time and is used for the purposes of this discussion and for water supply estimates in the MWA 2010 UWMP currently under preparation. Current court proceedings and efforts to address issues in the Delta (supply source for the SWP) may result in future changes to SWP supply reliability.

Source: Mojave Water Agency

The 2007 Reliability Report concluded that contractors to the SWP could anticipate average reliability of 66-69% through the year 2027. The range was provided to account for variable impact associated with different conclusions about the potential effects of modeled climate change. The average assumes that in some years contractors are likely to be allocated less than the stated average and in some years contractors are likely to be allocated more than the stated average.

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In 2009 the DWR provided an updated reliability report incorporating new biological opinions in place of the referenced interim rules promulgated by the Federal Court. The new biological opinions were significantly more restrictive than the interim rules and consequently the 2009 reliability analysis indicated a reduction in reliability to 61% for long-term (2029) conditions. MWA has subsequently acquired additional contractual amounts to SWP water, increasing the maximum annual amount from 75,800 acre-feet to 82,800 acre-feet in 2010, 85,800 acre-feet in 2015 and 89,800 acre-feet in 2020. Considering the DWR modeling results, the average annual yield to MWA would be 50,508 acre-feet in 2010 and 54,778 acre-feet in 2029.

Since preparation of the 2009 Reliability Report, the same Federal Court has found the new biological opinions to be unacceptable (and inappropriately restrictive to Delta water exports) and has ordered them to be redone. As of this writing yet another set of interim operational guidelines are being developed with the Court and are expected to be less restrictive to water exports than the biological opinions that were included in the DWR modeling for the 2009 Reliability Report. There is also a major effort underway to develop a habitat conservation plan to address the myriad of issues impacting water supply exports from the Delta. That effort, if accomplished in a manner consistent with the “co-equal goals” of ecosystem restoration and water supply reliability envisioned by the State Legislature’s 2009 Comprehensive Water Package, is anticipated to significantly increase reliability of the SWP water supply. The eventual success and/or resulting increase to reliability are unknown at this time; however, the outcome will eventually be reflected in the biennial DWR reliability assessments.

MWA operates under the guidance of a Board adopted integrated regional water management plan and is also required by State law to submit an Urban Water Management Plan (UWMP) to the State of California every 5 years ending in “0” and “5”. The MWA UWMP compiles information on all known water supplies and demand on a sub-regional scale for the entire MWA. Future water supplies and demand (population growth) are also projected for at least the ensuing 20 years. The MWA 2005 UWMP utilized the DWR SWP reliability report available at the time, which assumed a long-term reliability factor of 77%. Given that assumption the UWMP concluded that there would be sufficient water supply (natural and imported) within the MWA to meet the projected demand within the requisite 20 year period.

MWA is currently in the process of developing its 2010 UWMP. The UWMP will incorporate the most recent reliability information provided by DWR (2009), which indicates a reliability of 61% on average. Although development of the 2010 UWMP is incomplete, initial analysis indicates that given projected growth rates, the modeled decrease in reliability for the SWP by DWR, and the acquisition of additional SWP contractual amounts by MWA, there will be sufficient supply to meet anticipated increased demands through the required 20 year planning horizon (2030).

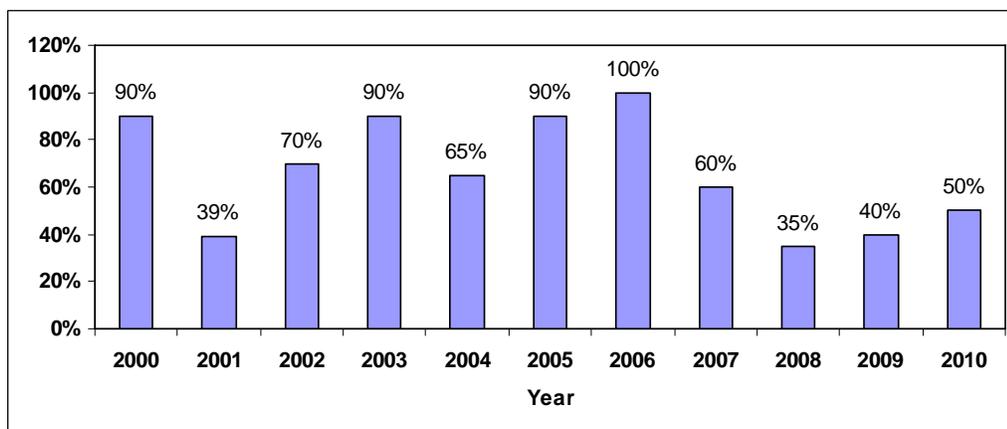
The figure below shows the allocation percentage that State Water Contractors were allowed to purchase since 1998, which averages 67% over the 11 years summarized. For example, MWA is entitled to purchase up to 82,800 acre-feet of imported water per year. For 2010, the allocation percentage was 50%<sup>3</sup>; therefore, MWA could purchase up to 41,400 acre-feet. MWA mitigates for this variability in supply by utilizing the significant water storage capability within the agency ground water basins to take delivery of SWP water when it is available. Water available from the SWP in excess of local demand is delivered and stored in the ground water basins to be used to meet demand during those years when the amount of water available from the SWP is less than the annual demand.

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<sup>3</sup> State of California. Department of Water Resources. “Late Spring Weather Allows DWR to Increase Water Allocation”, Press Release. 23 June 2010.

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**Department of Water Resources State Water Project  
Final Allocation Percentages Statewide (1998-2010)**



source: Department of Water Resources

The allocation percentage for 2011 is 50%; therefore the amount that MWA can purchase for 2011 is 41,400 acre-feet.<sup>4</sup> According to the MWA press release cited, DWR is conservative in estimating water deliveries since farmers and others can suffer if expected amounts cannot be delivered. It is likely that the 50 percent allocation will be increased as rain and snowfall totals continue to increase.

**Morongo Basin Pipeline (Mojave Water Agency Improvement District M)**

In 1990, the southeastern portion of the Mojave Water Agency’s territory voted in favor of forming Improvement District M and to incur bonded indebtedness of \$66.5 million to finance the construction costs of the Morongo Basin Pipeline. Construction on the approximately 71 mile Morongo Pipeline began in 1992 and was completed in 1995 and serves the areas of Johnson Valley, Joshua Tree, Landers, and Yucca Valley. The Pipeline delivers water from Hesperia to a five million gallon reservoir in Landers. From there, water is delivered to percolation ponds in the Yucca Valley area that act as natural filtration systems where water seeps back into the ground to recharge the aquifer.

The landowners of the improvement district are obligated to pay for 75% of the costs for construction of the Pipeline, and the participating agencies are obligated to pay the remaining 25%. The participating agencies each pay a share of the 25% as follows:

**Improvement District M - Participating Agency Share**

<b>Agency</b>	<b>Original Share</b>	<b>Current Share</b>
<b>Hi-Desert Water District</b>	59%	59%
<b>Joshua Basin Water District</b>	27%	27%
<b>Bighorn-Desert View Water Agency</b>	9%	9%
<b>CSA 70 Zone W-1 (Goat Mountain)</b>	4%	1%
<b>CSA 70 Zone W-4 (Pioneertown)</b>	1%	0%
<b>MWA</b>	0%	4%

<sup>4</sup> State of California. Department of Water Resources. “State Water Project Allocation Increased”, Press Release. 17 December 2010.

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Originally, CSA 70 Zone W-1 was obligated to pay 4% and CSA 70 W-4 to pay 1%. However, in 1995, MWA acquired 3% of the rights from CSA 70 W-1 and 1% from CSA W-4. According to County Special Districts Department staff, MWA was requested by the County Board of Supervisors to buy CSA 70 W-1 and W-4 shares due to lack of utilization of the water. The percentage share identified for each participating agency also reflects the percentage of water which they are entitled. The Board of Supervisors action relinquished its rights to purchase supplemental water from the Pipeline when they sold the W-1 and W-4 shares.

Improvement District M has entitlement of up to 7,257 acre-feet per year (AFY) of MWA's State Water Project water. The District has a 27% share of the Improvement District M entitlement, or 1,959 AFY (the community uses roughly 1,700 AFY of groundwater). At the time the Morongo Basin Pipeline agreement was executed among the participants and MWA in 1990, MWA's SWP allotment was 50,800 AFY. Subsequently, MWA has acquired additional allotment, currently at 82,800 AFY. Discussion continues as to whether the District and others within Improvement District M are entitled to a proportionate share of MWA's SWP allotment above 50,800.

The chart below shows the amount of supplemental water sent through the Morongo Basin Pipeline (Improvement District M) from 1998 to September 2009. Subsequent data is not yet available. Currently, the District does not utilize State Water Project resources but an extension of the Morongo Basin Pipeline is planned to connect to Joshua Tree in the future. However, the entitlement listed below extends only until 2022, at which time all agencies participating in Improvement District M will have access to supplemental water in the same manner as all other municipal water customers.

**Mojave Water Agency Morongo Pipeline Deliveries**

Year	Improvement District M Entitlement	JBWD Share (27%)	SWP Allocation	JBWD Share times SWP Allocation	Improvement District M Delivery
1998	7,257	1,959	100%	1,959	2,121
1999	7,257	1,959	100%	1,959	2,412
2000	7,257	1,959	90%	1,763	3,786
2001	7,257	1,959	39%	764	2,878
2002	7,257	1,959	70%	1,372	2,390
2003	7,257	1,959	90%	1,763	2,427
2004	7,257	1,959	65%	1,274	4,821
2005	7,257	1,959	90%	1,763	2,041
2006	7,257	1,959	100%	1,959	3,451
2007	7,257	1,959	60%	1,176	4,779
2008	7,257	1,959	35%	686	3,195
2009	7,257	1,959	40%	784	2,137
Total				17,223	36,438

source: Department of Water Resources, Mojave Water Agency  
 units in acre-feet unless otherwise noted  
 Data for 2009 is through September

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Additionally, MWA has a four percent entitlement share of the Morongo Pipeline. MWA delivers water through the pipeline for storage in the Warren Basin (Yucca Valley area) for potential sale at a later date. The District could purchase the water when there is not sufficient water to deliver because of reductions to the State Water Project allocation. The chart below shows the MWA storage from 1998 through 2008.

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Delivery	236	270	144	0	0	0	0	919	1,216	0	0	0

source: Mojave Water Agency  
units in acre-feet  
Data for 2009 is through September

### Bulk Hauled Water

In remote areas of the south desert, the hauling of domestic water is the sole means for water acquisition. In a joint letter to county planning and building departments in 2003, the California Department of Health Services<sup>5</sup> and the California Conference of Directors of Environmental Health specify that, "bulk hauled water does not provide the equivalent level of public health protection nor reliability as that provided from a permanent water system or from an approved onsite source of water supply." This statement is based on five potential public health risks for hauled water:

1. The potential for contamination exists when water is transferred from tanker trucks to water storage tanks.
2. Storage tanks are often the source of bacterial contamination.
3. There is no assurance that licensed water haulers follow State guidelines at all times.
4. The future reliability of hauled water is susceptible to economic conditions.
5. There is generally a higher risk for contamination.

The letter further states that hauled water for domestic purposes should only be allowed to serve existing facilities due to a loss of quantity or quality and where an approved source cannot be acquired. A copy of this letter is on-file at the LAFCO staff office.

The County of San Bernardino recognizes the potential health hazards with hauled water. Future development will be restricted unless there is access to an individual well or domestic water system. County Code of San Bernardino Section 33.0623 (last amended in 1996) under Health and Sanitation and Animal Regulations reads:

Water furnished by a domestic hauler shall not be used as a source of water by any public water supply system unless it has been demonstrated to DEHS [Department of Environmental Health Services] that there are no reasonable means of obtaining an acceptable quality and quantity of groundwater, and that water treatment methods have been approved by DEHS. Exception: During an officially declared state or local emergency, a public water system may utilize hauled water as a temporary source of supply.

However, those without connection to a domestic water system or without individual wells on their property must rely on hauled water for domestic and other uses.

<sup>5</sup> The California Department of Health Services has been reorganized since 2003 and water related health issues are coordinated under the California Department of Public Health.

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Water Rates

Due to the limited size and type of outdoor landscaping that is prevalent throughout the South Desert, the average water usage is comparatively lower than other water agencies in the San Bernardino County area. A comparison of the residential water rates charged by the agencies within the Morongo Basin is identified in the chart below.

**Water Agency Rate Comparison (as of July 2010)**  
(rates measured in units, or one hundred cubic feet)

Agency	Water Use Fee				Monthly Meter Charge (3/4" Meter)	Monthly Average Cost (10 units of water)
	Tier One	Tier Two	Tier Three	Tier Four		
<b>Bighorn-Desert View Water Agency</b>	\$3.00	-	-	-	\$27.50	\$57.50
<b>CSA 70 Zone F (Morongo Valley)</b>	\$4.51	\$5.02	\$5.73	-	\$57.25	\$102.35
<b>CSA 70 Zone W-1 (Landers)</b>	\$3.76	\$4.18	\$5.38	-	\$23.17	\$60.77
<b>CSA 70 Zone W-3 (Morongo Valley)</b>	\$3.00	\$3.34	\$3.41	-	\$38.17	\$67.17
<b>CSA 70 Zone W-4 (Pioneertown)</b>	\$5.38	\$6.71	\$9.06	\$9.97	\$31.05	\$84.85
<b>Golden State Water Company (Morongo)</b>	\$2.47	-	-	-	\$28.15	\$52.85
<b>Hi-Desert Water District</b>	\$3.40	\$5.30	\$6.41	\$8.56	\$11.10	\$56.50
<b>Joshua Basin Water District</b>	\$1.97	\$2.19	\$2.32	\$2.42	\$21.84	\$42.64
<b>Twentynine Palms Water District</b>	\$2.15	-	-	-	\$11.00 <sup>1</sup>	\$32.50

<sup>1</sup> Charge is for 5/8" meter

Currently, the District is the sole retail water provider within the community. Not all areas in the community have direct access to a piped retail water service; therefore, it is understood that water service to those developed properties is provided through on-site wells or through hauling of domestic water.

Urban Water Management Plan

Pursuant to the *Urban Water Management Planning Act*<sup>6</sup>, each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero, and shall file with the Department of Water Resources (DWR) a copy of the plan. In years ending in six and one, DWR submits a report to the State Legislature summarizing the status of the plans and identifies the outstanding elements of the individual plans. LAFCO has reviewed the DWR report to the Legislature for the 2005 urban water management plans, and

<sup>6</sup> California Water Code, Division 6, Part 2.6, Section 10610, et seq.

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the report identifies that the District submitted its review but that the DWR did not finish its review of the District's plan as of the date of the report to the State Legislature<sup>7</sup>. Subsequent to its review, the DWR requested additional information from the District. The 2005 urban water management plan was updated in August 2009.

### Facilities

The water system presently consists of five wells, approximately 270 miles of mainlines, 17 reservoirs, 11 booster pump stations, and roughly 1,300 fire hydrants. The District service area historically has been a residential community with few commercial and institutional customers. Currently, there are approximately 5,683 water service connections (4,422 active and 227 inactive) with roughly 10% of the customer base being commercial and/or industrial. In addition, there are approximately 1,034 vacant parcels with purchased but not yet installed water meters. The District installed two new customer-funded meters for the year ended June 30, 2010, a decrease of 78% over the previous year. In prior years, new service installations were nine for 2009, 24 for 2008, 105 for 2007, 192 in 2006 and 147 in 2005. Also, the District has a temporary tie-in to the Hi-Desert Water District for emergency situations through hydrant transfer via pump and hose connections.

The District's maximum day demand identified in its *Water Master Plan* is approximately 2.77 million gallons, or 1,920 gallons per minute, which indicates that there is ample supply to meet current demands. The District is required by the State Department of Health to maintain one day (24 hours) of storage based on the maximum daily demand. This storage is required in order to continue service during power outages, pump malfunctions, or other emergency situations. The District has adequate existing storage to meet the emergency storage requirement in most of the pressure zones.

The District is fully metered for all customers, and customers pay the sector rate for each billing unit consumed. Since 1995, more than 3,800 new meters have been installed to replace older, less efficient meters within the service area. The new water meter retrofits have the capability to detect low-flow leaks and in turn reduce water losses. The District has also installed radio read meters for more accurate meter reading operations. Within the past few years, the District has upgraded the existing systems including the installation of three new wells, the replacement of nearly 58,000 feet of old pipeline, and replacement of much of the old four-inch steel pipe for better water delivery and fire protection. The District states that replacement of the remaining four-inch pipes are a high replacement priority. The District also worked closely with the County of San Bernardino to relocate water lines at Alta Loma and Sunnyhill, enabling the realignment of the street for safer traffic conditions. For FY 2009-10, the District completed \$770,000 in capital projects, including land purchase for future facilities, new accounting software, and waste water feasibility study.

### Supply and Demand

#### *Groundwater*

The current water supply is from the Joshua Tree Groundwater Basin and the Copper Mountain Valley Groundwater Basin. The basins are not adjudicated basins and, as such, there are no entitlements to withdraw water. Overall management of water resources is the responsibility of

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<sup>7</sup> California. Department of Water Resources, "Summary of the Status of 2005 Urban Water Management Plans", Report to the Legislature. 31 December 2006.

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the District. According to the District's Urban Water Management Plan, the water stored in groundwater is estimated to be well over 625,000 acre feet based upon a 2005 study. However, both basins are in overdraft conditions. While the groundwater may be extracted at a rate greater than recharge, the quantity of withdrawals relative to the stored amounts is small. Since the District relies on groundwater as its source of supply, it is not subject to short-term shortages caused by periodic drought. As a result the groundwater basins are capable of absorbing the effects of multiple dry years without seriously hindering the water supply.

### Joshua Tree Groundwater Basin

The Department of Water Resource's Bulletin 118 (last updated February 2004) describes the Joshua Tree Groundwater Basin as follows:

The Joshua Tree Basin is located in the northwestern portion of the Colorado Desert Hydrologic Study Area at an average elevation of about 2,400 feet. This basin includes the water-bearing sediments south of the Pinto Mountain fault beneath the town of Joshua Tree, eastward to immediately south of the town of Twentynine Palms, which is outside the boundaries of the basin. The northern boundary of the basin is the Pinto Mountain fault, and the southern boundary is exposed consolidated basement of the Little San Bernardino Mountains within Joshua Tree National Park. The western boundary of the basin is coincident with a basement constriction located between the towns of Yucca Valley and Joshua Tree that causes a change in the groundwater level gradient. The eastern boundary of the basin lies along a line extending from the southern tip of the Mesquite fault to a basement outcrop of the Little San Bernardino Mountains.

### Copper Mountain Valley Groundwater Basin

Bulletin 118 states natural recharge in the basin is derived mainly from direct percolation of precipitation. Percolation of septic tank effluent also contributes to recharge of groundwater. Water levels in the basin have generally remained unchanged for more than 50 years. In 1975, the DWR reported that failing septic tanks may be threatening water quality in parts of the basin. The following description of the Copper Mountain Valley Groundwater Basin is taken from Bulletin 118.

The Copper Mountain Valley Groundwater Basin underlies an alluvial valley in the northwestern Colorado Desert Region. This basin, which is about one mile north of the town of Joshua Tree, includes the water-bearing sediments below and adjacent to Coyote Lake (dry). The northern boundary of the basin is coincident with the surface drainage divide between this basin and the Ames Valley Groundwater Basin. The southern boundary of the basin is the Pinto Mountain fault. The contact of alluvium with consolidated rocks forming Copper Mountain and the San Bernardino Mountains mark the east and west boundaries, respectively. Average annual precipitation is about 4 inches for lower elevation, eastern part of the basin to 10 inches in the higher elevation, western part of the basin.

In 2004, the District implemented a resolution that provides for special water conservation provisions. Resolution 04-665 limits the use of water and includes penalties for excessive use. It also has several provisions for conservation ethics for all District customers. As stated in the 2005 Urban Water Management Plan (updated in 2009), the District further intends to implement a resolution for the 2010 UWMP that includes the following language, "*Joshua Basin*

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*Water District shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or other impervious structure."*

### *Groundwater Recharge and Discharge*

Under present conditions, pumping of ground water by the District for domestic and commercial use is the main discharge from the Joshua Tree ground-water subbasin.

According to a 2004 USGS report<sup>8</sup>, the sources of ground-water inflow to the subbasins are infiltration of stormflow runoff, ground-water underflow from the neighboring Warren groundwater subbasin, and septage. The study indicates little to no recharge has reached the water table since 1952 resulting in a water-level decline of about 35 feet from the late 1950s to 1998 in the south-central part of the Joshua Tree groundwater subbasin. Further, the report states that the cumulative volume of water pumped from the groundwater subbasins between 1958–2001 was 42,210 acre-feet; of this total pumpage, a model simulated that 99 percent was removed from ground-water storage.

### *Recharge Project*

The District participated in the construction of the Morongo Basin Pipeline to convey State Water Project (SWP) water from the California Aqueduct in the Mojave River watershed to the area of Improvement District M. The Morongo Basin Pipeline is currently entitled to supply up to 7,250 acre-feet per year (afy) of SWP water to Improvement District M; however, annual deliveries are currently going to the Hi-Desert Water District. In order for the District to benefit from the Morongo Pipeline, the District is planning to construct a water recharge basin and connect the existing Morongo Basin Pipeline to the new basin.

The proposed recharge basins would be designed to achieve an annual average recharge of approximately 2,000 afy, which is more than what is required to replace the amount that is pumped from the groundwater basin on an annual basis. Currently, the District has an agreement in place with the Mojave Water Agency (MWA) in which the District is entitled up to 1,959 afy of SWP water until the year 2022. However, the District cannot access the SWP water without the extension of the Morongo Pipeline and construction of recharge facilities that would occur under the proposed project. SWP water that would be delivered to the District under the proposed project would provide some relief of the overdraft condition, eliminate ongoing overdraft by enabling the District to meet current water demands, or provide recharge water by bringing in slightly more water than the demand.

Because septic tanks are currently the primary form of wastewater treatment in this area, the District is concerned with nitrate from existing development reaching the water table and the possible mixing of septage into ground water with rising ground-water levels. In response to this concern, the USGS is conducting a study to determine the effects of recharging water into the groundwater basin.

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<sup>8</sup> U.S. Geological Survey, (2004) *Evaluation of Geohydrologic Framework, Recharge Estimates, and Ground-Water Flow of the Joshua Tree Area*, San Bernardino County, California

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### **Wastewater**

The Joshua Tree community area is located within the Colorado River Water Basin regulated by the Colorado River Regional Water Quality Control Board (Regional Board). The regulating document for this region is the Water Quality Control Plan that was adopted by the Regional Board in 1993 and last amended in November 2002. The Regional Board is currently in the process of developing and updating various regulatory requirements concerning urban runoff, septic systems, groundwater and surface waters in their jurisdiction.

Current regulations do not require a single-family residence of less than five units to report on domestic sewage use and maintenance. If a property is more than five single-family units, 20 mobile home spaces, 50 recreational vehicle spaces or exceeds 5,000 gallons per day, then an annual waste discharge report is required.

Currently, for larger, non-residential systems, the Regional Board requires that “no part of the subsurface disposal systems shall be closer than 150 feet to any water well or closer than 100 feet to any stream, channel, or other water source.” The Regional Board also requires that a sufficient amount of land shall be reserved for a possible 100 percent replacement of the septic system. There is no density restriction at the present time, but it is under review by the Regional Board. The County Department of Environmental Health utilizes the requirements developed by each particular Regional Board.

The Regional Board has issued directives regarding the use of septic systems and the preservation of the groundwater basin in this region. The Regional Board has adopted waste discharge requirements which have resulted in the requirement for installation of package treatment plants for developments approved within the District’s boundaries and in other areas under its jurisdiction.

### Sewer Authorization

In response to the regional discharge requirements, in 2006 the District requested that the Commission authorize it the “Sewer” function. In 2007 the Commission authorized the District the “Sewer” function but limited the services of that function to operation of wastewater package treatment plants and planning and engineering related to regional sewer service (LAFCO 3074). LAFCO does not believe that the sewer function and service should include the ability to operate a regional wastewater facility at that time based upon the direction of the Community Plan and that such a requirement should be considered on a regional basis and not until such a requirement is mandated in the future. Further consideration by the Commission is required for the District to expand the services to include the actual provision of collection, treatment and disposal of wastewater.

### Wastewater Treatment Strategy

In 2009 the District adopted a Wastewater Treatment Strategy in order to plan for a long-term and regional approach to protecting the groundwater. The strategy identifies 7,000 parcels in one third of the District (35 square miles), mostly along Twentynine Palms Highway, where densities are currently zoned at rates that would require new development to provide wastewater treatment.

The District has summarized its Wastewater Treatment Strategy as follows:

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1) *In compliance with the orders of the Colorado River Basin Regional Water Quality Control Board, local “package waste water treatment plants” would be installed by developers in projects exceeding 15 units. They would be designed to JBWD specifications, and would be owned and operated by JBWD. A “community facilities district” would be established only for those properties served by the package treatment plant to provide an annual fee that will pay for replacement of the package plant. The cost would vary depending on the size of the project and type of package plant, but could be \$200 to \$500 per year range, with a typical life of 15 years. If the customers within the community facilities district later connect to a central waste water treatment plant, funds remaining in the community facilities district could be used to help connect to the new plant.*

1.a) *Depending on location, size, and other factors, the package treatment plants may have the flexibility of being tied into larger future package plants. For example, two small package plants might be moved or eliminated and tied into a larger package plant that becomes available in the same vicinity at a later time. The system needs to be flexible because there is no way to know in advance, what areas will develop and to what extent.*

2) *Eventually it is expected that there will be enough users on package treatment plants to justify eliminating the package plants and connecting to a centralized waste water treatment plant. In order to pay for the central treatment plant, every property within the waste water zone would pay a development impact, or capacity fee at the time they develop. The fee would be placed in a fund until it is time to construct the central plant. Currently the cost is expected to be in the range of \$5,000 per parcel. This would pay for the central plant and main transmission lines. Smaller lines would be paid by developers and/or from funds remaining in the community facilities district accounts (number 1 above).*

3) *Customers on a new waste water system would receive a monthly fee for maintenance of the package treatment plant and collection system. The cost would vary significantly depending on size, from \$15 per month to \$70 per month, in addition to administrative and billing costs.*

*This strategy provides for an equitable way for future development to pay for the costs of wastewater treatment, assuring that the ground water is protected, and in a way that doesn't force existing customers to pay unless they later connect to the system. While this adds a cost to new builders, the cost of not addressing wastewater early leaves fewer, more onerous options for future Boards to consider.*

As stated in the quoted text above, every property within the wastewater zone will pay the charge at the time the property is developed. The capacity fee identified above as \$5,000 per parcel has been clarified by the District to be \$5,270 per equivalent dwelling unit for 2010 (*Wastewater Treatment Strategy*, page 50). To date the District has collected two charges, totaling \$10,540. The charge has an automatic adjustment provision and shall increase every January 1 based upon the increase in the Engineering News-Record Construction Cost Index—Los Angeles. The charge as of January 1, 2011 is \$5,370 per edu. The District has indicated that all charges collected will be kept separate from the District's other funds, are to be used only for its stated purpose, and that an annual report will be issued detailing the funds collected, and interest earned providing a fund balance.

### 3. Financial ability of agencies to provide services:

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In reviewing the financial documents, the District's net assets have increased by 15% since FY 2005-06 as shown on the chart below. As of June 30, 2010, the District had \$28.03 million in net assets. Of this amount \$5.56 million is unrestricted, which has decreased each year primarily due to an increase in the District's investment in capital assets.

	2005-06	2006-07	2007-08	2008-09	2009-10
<b>Net Assets</b>					
Invested in capital assets					
– net of related debt	14,738,947	17,450,068	19,666,213	21,229,577	22,465,168
Restricted for debt service	381	0	0	0	0
Unrestricted	9,776,741	8,977,200	7,654,348	6,639,001	5,556,234
<b>Total Net Assets</b>	<b>\$24,516,069</b>	<b>\$26,427,268</b>	<b>\$27,320,561</b>	<b>\$27,868,578</b>	<b>\$28,031,402</b>

### Revenues

Operating revenue includes revenues from water sales and services. Non operating revenues include taxes and assessments, investment income, and grants. The District's operating revenues for the year ended June 30, 2010 were \$2,818,039. The majority of revenues came from water sales to customers. The second-largest source of revenue was \$1,071,511 in standby charges. In FY 2009-10, although operating revenues increased two percent, non-operating revenues such as property taxes and investment income have decreased more than ten percent.

#### 1. *Water Sales*

Rates for water use are comprised of a consumptive component and a monthly charge. The monthly charge is charged to all active water accounts in an attempt to equally spread the fixed costs of the District to all customers. The District implemented a six percent water rate increase during the mid-year and has a three-percent increase scheduled for January 2011. This will be the final increase authorized by the District as a result of a 2007 rate study, which is designed to provide for the capital needs of the District with small, regular rate increases. The District intends to initiate another rate study during FY 2010-11.

#### 2. *Water Availability (Standby) Charges*

Water Availability Charges are authorized under the State Uniform Standby Charge Procedures Act. The Water Availability Charges are imposed on each non-exempt parcel of land within the District's boundaries. The District's Water Availability Charges are used to pay long-term indebtedness incurred by the District for the purpose of ensuring an adequate supply of water.

In 1982, the State Legislature added specific legislation regarding the District to the Water Code (Stats.1982, c.267, §4) that restricts all funds derived from the assessment for improvements to the water system within the improvement district; i.e., new water mains, fire hydrants, service laterals, upgrading of storage tanks, etc. The language from the Water Code is as follows:

31031.5. Notwithstanding Sections 31031 and 31032.1, in any improvement district situated within the Joshua Basin Water District, the

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water standby or availability charge or assessment shall not exceed thirty dollars (\$30) per acre per year for land on which the charge or assessment is levied or thirty dollars (\$30) per year for a parcel less than one acre. In any such improvement district, the proceeds from any water standby or availability charge or assessment in excess of ten dollars (\$10) per acre per year or ten dollars (\$10) per year for a parcel less than one acre shall only be used for the purposes of the improvement district. This section, applicable only to the Joshua Basin Water District, is necessary because of the unique and special water management and financing problems of the area included within the district.

In 1990, the voters approved a \$70 million bond issue to construct the 71 - mile long Morongo Basin Pipeline plus four miles to the Joshua Tree turnout, in order to bring State Project Water to the District. The District is responsible for paying a portion of the debt service on the bond measure, and Water Availability Charges are utilized for that purpose. The amount, or rate, of the charge and the methodology by which it is calculated is adopted each year by the Board and has remained unchanged since. The total number of parcels within the District boundaries subject to the Water Availability charge is approximately 11,782, with a total adopted Water Availability charge of approximately \$1,163,600.

### 3. *Property Taxes*

In 1977-78, before Proposition 13, the District levied the following taxes, as identified in the County's 1977-78 tax rate book:

- All landowners within the boundaries of the District paid a tax rate of \$1.00 per \$100 of assessed valuation.
- Bonded indebtedness was paid by those within Improvement District #1 at a tax rate of \$3.75 per \$100 of assessed valuation.
- Bonded indebtedness was paid by those within Improvement District #2 at a tax rate of \$0.40 per \$100 of assessed valuation.

Following Proposition 13, the Legislature enacted statutes to implement its provisions. Under these statutes, a local government's share of the one percent general levy was based on the share of the property tax going to that local government before Proposition 13. The FY 2009-10 County Tax Rate book identifies that the District receives a share of the one percent general tax levy and levies a tax for Improvement District #2 at a rate of \$0.0258 per \$100 of assessed valuation. The bond for Improvement District #1 has been retired and is not shown on the FY 2009-10 County Tax Rate book. LAFCO understands that the tax rate for Improvement District #1 was converted to the District's share of the general ad valorem tax.

The FY 2009-10 audit identifies that the District received \$868,967 in property taxes for FY 2009-10. The District has identified that of this amount, \$450,804 is attributable to its share of the one percent general levy.

Assessed values decreased 7% in the District for the year ending June 30, 2010. This is compared to increases of 12%, 16%, 15%, 29%, and 14% for the years ended June

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30, 2009, June 30, 2008, June 30, 2007, June 30, 2006, and June 30, 2005, respectively.

The figure below is taken from the FY 2009-10 financial statements and provides a breakdown of the revenues and expenditures for FY 2008-09 and FY 2009-10.

Statements of Revenues, Expenses and Changes in Net Assets For the Years Ended June 30, 2010 and 2009		
	2010	2009
<b>OPERATING REVENUES</b>	\$ 2,818,039	\$ 2,775,396
<b>OPERATING EXPENSES</b>		
Customer accounts	146,421	136,945
Fringe benefits	469,228	447,217
General and administrative	1,540,847	1,668,409
Pumping plant	321,937	314,608
Source of supply	41,725	56,279
Transmission and distribution	356,280	300,207
Vehicle and equipment	109,995	120,421
Depreciation	1,195,062	1,167,607
<b>Total operating expenses</b>	4,181,495	4,211,693
<b>OPERATING LOSS</b>	(1,363,456)	(1,436,297)
<b>NON-OPERATING REVENUES (EXPENSES)</b>		
Standby charges	1,071,511	1,159,817
Property taxes	868,967	915,878
Investment income	39,446	163,854
Grant revenue	73,250	31,750
Interest expense	(251,738)	(278,940)
Inter-agency payments	(219,763)	(219,594)
Other non-operating revenue/(expense)	(62,133)	(56,004)
<b>Total non-operating revenues (expenses)</b>	1,519,540	1,716,761

### Long-Term Debt

The District's total net long-term liabilities at June 30, 2010, including the 1974 General Obligation Bonds, the 1997 Refunding Revenue Bonds, and the Copper Mountain Mesa Limited Obligation Bonds, are \$4,008,113.

The \$4.5 million Copper Mountain Mesa Limited Obligation Bonds were issued by the District in 1996 to finance the installation and construction of a water distribution system and two booster pumping stations. The \$5.9 million Revenue Refunding Bonds, issued in 1991 and refinanced in 1997 for \$5.4 million by the Basin – Hi-Desert Financing Authority (described below), were sold to finance capital improvements to the current system; specifically, to change existing four-inch mainlines to six-inch. The figure below, taken from the FY 2009-10 audit, shows the breakdown of the long-term debt.

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	June 30, 2010	June 30, 2009	Net Change
General Obligation Bonds - 1974	\$ 525,000	\$ 615,000	\$ (90,000)
Refunding Revenue Bonds - 1997	515,000	1,005,000	(490,000)
Rural Development - CCM	3,703,438	3,778,438	(75,000)
Less current portion	(688,000)	(655,000)	(33,000)
Less deferred amounts	(47,325)	(97,079)	49,754
	\$ 4,008,113	\$ 4,646,359	\$ (638,246)

### Other Information

#### *Budgets*

In reviewing the district's budgets submitted for this review, the budgets include at least one year's worth of actual financial data, as recommended by the *Best Practices* of the Government Finance Officers Association.

#### *Regular Audits*

Government Code Section 26909 requires all districts to provide for regular audits; the Agency conducts annual audits and meets this requirement. Section 26909 also requires districts to file a copy of the audit with the State Controller and county auditor within 12 months of the end of the fiscal year. According to records from the County Auditor, as of December 20, 2010 the last audit received was for FY 2008-09 on October 23, 2009. However, in December 2010 the District accepted the FY 2009-10 audit with filing of the document with the appropriate agencies likely to occur in the first part of 2011.

#### *Pension Obligations*

A review of the most current financial statements available identifies that there is a zero net pension obligation. In August, 2008 the District transitioned from a defined contribution plan to a defined benefit pension plan, Public Employees' Retirement System (PERS) that provides retirement and disability benefits, annual cost - of - living adjustments, and death benefits to plan members and beneficiaries. PERS is part of the Public Agency portion of the California Public Employees' Retirement System, (CalPERS), a cost-sharing multiple -employer plan administered by CalPERS, which acts as a common investment and administrative agent for participating public employers with the State of California.

#### *Joshua Basin-Hi Desert Financing Authority*

In February 1991, the District and Hi-Desert Water District created the Joshua Basin – Hi-Desert Financing Authority (the "Authority") pursuant to the laws of the State of California. The Authority is a joint exercise of powers agreement by and between Joshua Basin Water District and Hi-Desert Water District. The Authority has a five-member Board of Directors comprised of: (a) three members of the Board of Directors of Joshua Basin Water District and (b) two members of the Board of Directors of Hi-Desert Water District. Participation in the joint venture gives the District the ability to finance the cost of the installation and construction of any building, facility, structure, or other improvement which may be used to provide water to the lands and inhabitants of the District. As provided in the law, the Authority shall be a public entity separate from Joshua Basin Water District and Hi-Desert Water District. The debts,

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liabilities and obligations of the Authority shall not constitute debts, liabilities or obligations of Joshua Basin Water District or Hi-Desert Water District. The debts, liabilities and obligations of either Joshua Basin Water District or Hi-Desert Water District shall not constitute debts, liabilities or obligations of the other agency.

In November 1997, the Joshua Basin-Hi Desert Financing Authority (the “Authority”) issued \$5,400,000 in revenue refunding bonds. The proceeds of this issue, together with other lawfully available monies, were used to establish irrevocable escrows to advance refund and defease in their entirety the District’s outstanding 1991 Revenue Bonds and the 1978 and 1979 State Safe Drinking Water Act Loans.

The 1997 Revenue Bonds are limited obligations of the Authority. They are payable from and secured by a first pledge of certain payments received by the Authority from the District under an installment agreement and from interest and other income derived from any funds and accounts held under the indenture of trust. The obligation of the District to make such payments is payable solely from all gross income and revenue received by the District. The 1997 Revenue Bonds bear interest from 3.8% to 5.05% and mature from May 1, 1998 through May 1, 2011.

**4. Status of, and opportunities for, shared facilities:**

At this time the District has no facilities that are shared with other entities. There are no overlapping services that would make it beneficial to have shared facilities.

**5. Accountability for community service needs, including governmental structure and operational efficiencies:**

Local Government Structure and Community Service Needs

The District is an independent special district governed by a five-member board elected at-large. Elections are held every two years on odd numbered years. The November 2, 2010 election had 4,068 registered voters within the District with a 63% voter turnout. The current board, their positions, and terms of office are shown below:

<b>Board Member</b>	<b>Title</b>	<b>Term</b>
Mickey Luckman	President	2012
Michael Reynolds	Vice President	2012
William Long	Director	2012
Michael Luhrs	Director	2014
Gary Wilson	Director	2014

Regular Board meetings occur on the first and third Wednesdays of each month at 7:00 p.m. at the District office. The District regularly communicates with its customers by including a newsletter with its water bills.

The District board in 2005 authorized a Citizens Advisory Committee (CAC). The CAC was initially established by the Board of Directors in 2005 as an informal “blue ribbon” committee, when the District was developing its Urban Water Management Plan. When the Plan was finished, members showed a willingness to continue to assist the District. Since that time, the CAC has been instrumental in advising the Board on many issues, including: establishing water conservation programs; implementing a sound financial plan; establishing waste water

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strategies; and planning for and reviewing the District website. The Public is encouraged to attend the CAC meetings. Meetings are held at the District offices, but not on a regular basis. Intended to be broad-based, the committee can include as many as 15 representatives. Current members of the CAC include: Penny Mason, Al Marquez, Jay St. Gaudens, Robert Johnson, Karen Tracy, Steven Whitman and Victoria Fuller.

### 2008-09 Grand Jury Report

On September 5, 2007, a citizen's complaint was submitted to the 2007-2008 San County Bernardino Grand Jury against the District. The complaint made two allegations against the District: (1) the District expended public money on engineering and planning studies for sewer construction in Joshua Tree prior to receiving authorization from LAFCO, and (2) the District expended public money in an attempt to purchase county tax sale property for a sewer treatment plant, but the District did not have authority from LAFCO to purchase property for this use.

For these allegations, the 2008-09 Grand Jury found:

- The District made expenditures for feasibility studies that provided information required by LAFCO and state law as part of the application process for new authority. The expenditures by the District for the feasibility studies were reasonable and appropriate. The Grand Jury found no evidence of other expenditures by the District related to planning or engineering for sewer services.
- The District did not expend any public monies to purchase property for a sewer treatment plant. The district board of directors did not have authority from LAFCO to purchase property for a sewer treatment plant when the board of directors approved the April 4, 2007 resolution. However, the board's approval of the resolution did not materially violate any law warranting further investigation or action.

### Operational Efficiency

Operational efficiencies are realized through several joint agency practices, for example:

- Beginning in 2008, the District contributes to the California Public Employees Retirement System ("PERS"), a cost-sharing multiple-employer public employee defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of living adjustments, and death benefits to plan members and beneficiaries. PERS acts as a common investments and administrative agent for participating public entities with the State of California.
- In FY 2008-09, the District joined a planning effort for the Integrated Regional Wastewater Management Plan with the City of Twentynine Palms, Hi-Desert Water District, Bighorn Desert View Water Agency, Twentynine Palms Water District, Town of Yucca Valley, and County of San Bernardino. This is currently a joint planning effort, and one of the goals is to collaborate on a regional strategy for Wastewater Management which, in the future, could lead to shared facilities or closer coordination of services and activities.
- The District is a member of the Alliance for Water Awareness and Conservation. This alliance promotes water conservation throughout the High Desert and operates on an adopted memorandum of understanding. The three goals of AWAC are to:

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- Educate the community of the importance of water conservation.
- Provide the local community with the tools to effectively reduce per capita consumption to targeted areas.
- Reduce regional water use by 10 percent gross per capita by 2010 and 15 percent gross per capita by 2015 (5 percent in the Morongo Basin by 2015), and 20 percent by 2020 to achieve a sustainable, reliable supply to meet regional water demands.
- In the past few years, the District also worked closely with the County of San Bernardino to relocate water lines at Alta Loma and Sunnyhill, enabling the realignment of the street for safer traffic conditions.
- The District has cooperated with Copper Mountain College to extend a mainline for two miles to the campus.

### Government Structure Options

There are two types of government structure options:

1. Areas served by the agency outside its boundaries through “out-of-agency” service contracts;
2. Other potential government structure changes such as consolidations, reorganizations, dissolutions, etc.

#### *Out-of-Agency Service Agreements:*

Since 1996, the District has provided water service outside of its boundary and sphere of influence to the small visitors comfort station at the Joshua Tree National Park. Service outside an agency’s boundaries is subject to LAFCO approval, per Government Code Section 56133. However, this section does not apply to an extended service that an agency was provided on or before January 1, 2001. The District has provided a copy of correspondence from 1996 to the U.S. Department of the Interior regarding service provision to the Park. Therefore, this service review will acknowledge this long-standing service delivery issue noting that it is grandfathered without requirement for LAFCO review and approval.

#### *Government Structure Options:*

While the discussion of some government structure options may be theoretical, a service review should address possible options.

- Reorganization of Joshua Basin Water District and County Service Area 20 into a single agency:
  - Consolidation of JBWD and CSA 20 with CSA 20 as Successor Agency. As a county service area, CSA 20 could provide water service to the community through assumption of the water service provided by Joshua Basin Water District. LAFCO is not aware of any community interest in this option.

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- Consolidation of JBWD and CSA 20 through Formation of a Community Services District. The option of forming an independent single, multi-purpose special district, through reorganization of the existing service providers, is a preferred form of government that is feasible for the Joshua Tree community. The agencies within the community could be reorganized into a community services district (CSD), which would assume the responsibility for providing the services provided by the agencies proposed to be reorganized (Joshua Basin Water District and County Service Area 20). The new CSD could assume the responsibilities and all functions, obligations, assets, liabilities, and equipment of the agencies that are to be reorganized. This scenario would provide for an efficient service delivery pattern for the full range of services available within the community through a single agency. Formation of a CSD could also include the detachment of Joshua Tree portion of CSA 70 R-19 with the CSD assuming responsibility for road service.

In addition, such a formation would solidify the community as outlined in the preamble to CSD law, which states that a CSD is:

- “... (1) A permanent form of governance that can provide locally adequate levels of public facilities and services.*
- (2) An effective form of governance for combining two or more special districts that serve overlapping or adjacent territory into a multifunction special district.*
- (3) A form of governance that can serve as an alternative to the incorporation of a new city.*
- (4) A transitional form of governance as the community approaches cityhood.*

For San Bernardino LAFCO, the establishment of Community Services District has been used to establish independent government structures that allow for the fostering and nurturing of communities for a future incorporation, maintaining their separate identity. With the support of the Joshua Tree community such a distinction could be achieved for the area. The establishment of the community designation for Joshua Tree is a potential first step in this process.

A few years ago, the District reviewed this possibility based upon resident interest. While the District board has not taken a position on this possibility, the Citizen Advisory Committee reviewed the structure and found no reason for the District not to support forming a CSD. However, the major hurdle to formation of a CSD would be local political differences and the support of the registered voters.

- Annexation of sphere territory. The District has two areas within its sphere of influence that are outside of its boundaries. However, the residents within these two areas requested to be excluded from the District when standby charges were put in place some years ago. The District states that upon payment of back fees and installation of infrastructure, the District would provide water service to the properties. Therefore, annexation of these areas at this time seems unlikely.
- Consolidation with one of the bordering water districts.
  - Consolidation with the Twentynine Palms Water District could not take place since Twentynine Palms Water District is not within the boundaries of the Mojave Water

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Agency and its Improvement District M. The delivery of supplemental water to recharge the basin would be required to be retained within the boundaries of the Joshua Basin Water District.

- Consolidation with the neighboring Bighorn-Desert View Water Agency and/or Hi-Desert Water District, would allow for economies of scale and allow for a more consolidated voice to address water issues and potentially future wastewater treatment issues. In 1989, an application was submitted by the Hi-Desert Water District and the Joshua Basin Water District to consolidate the districts into a single county water district. The LAFCO hearing was continued due to a pending recall of several of the directors of the Joshua Basin Water District and to allow time for the reorganized board of directors to formally express an opinion on the consolidation. The recall was successful; both districts requested withdrawal of the consolidation application and the Commission granted the request. LAFCO believes a similar sentiment would be shared with the other water districts. Therefore, this option is unlikely at this time, even if it would pose benefits to the customers and citizens of the area.
- Joint Powers Agency for Sewer Treatment. The Mojave Water Agency (MWA) is authorized by LAFCO an active sewer function (although it does not actively provide such a service at this time), and being a regional entity it could help shepherd the development of a regional wastewater treatment facility.

A similar situation occurred in the late 1970s in the Victor Valley region of the County. To meet the requirements of the federal Clean Water Act and provide wastewater treatment for the growing population, the communities of the Victor Valley requested that the Mojave Water Agency (MWA), being a regional entity, help shepherd the development of a regional wastewater treatment facility. In accepting the request, MWA was designated by the Lahontan Regional Water Quality Control Board as the responsible entity for the design of the Victor Valley Regional Wastewater Reclamation Project. A few years later, the communities of the Victor Valley completed the creation of the joint powers authority, which became known as the Victor Valley Wastewater Reclamation Authority (VWVRA). VWVRA was expressly created for the purpose of providing the operation and management of the treatment of wastewater through a regional facility and the ultimate disposal of effluent and solids. On June 1, 1978, VWVRA assumed the assets and authority for the Project, and MWA divested itself from the Project and the provision of sewer service.<sup>9</sup>

A similar response could occur in the Morongo Basin portion of MWA. In 2007, LAFCO authorized the sewer function for the Joshua Basin Water District to include operation of package treatment plants. At this time, Joshua Basin Water District does not actively have collection pipelines or a treatment facility. In February 2010, the LAFCO Commission approved the Hi-Desert Water District's request to expand the service description of its sewer function in order to actively provide the service. The District is undertaking a project titled "Hi-Desert Water District Water Reclamation Facility, Wastewater Treatment Plant, and Sewer Collection System Project". The project anticipates a treatment facility to treat the collected effluent within the project's boundaries. Both districts, or more, could form a joint powers agency for treatment of

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<sup>9</sup> For more information, see the service reviews for the Mojave Water Agency (LAFCO 3033 – Agenda Item 9, July 2008) and the Victor Valley Wastewater Reclamation Authority (Agenda Item 9, October 2009).

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wastewater from within each agency. In general, each district would collect wastewater within its own boundaries through collection systems owned independently, and transport the collected wastewater to a regional treatment plant. Governance of the joint powers agency would be the participating agencies. Such an agreement could reduce duplication of treatment plants and provide the opportunity for economies of scale while maintaining the independence of each district. The Joshua Basin Water District and the Hi-Desert Water District already have a joint powers authority for financing. At this time, both districts are planning for sewer collection and treatment within their respective boundaries, and cooperation on a regional facility could provide economies of scale.

- Maintenance of the status quo. This option would maintain the existing governmental structure of the Joshua Basin Water District.

At this time, the agencies, landowners, or residents have not formally expressed interest in any of the options outlined above.

**WHEREAS**, the following determinations are made in conformance with Government Code Section 56425 and local Commission policy:

### 1. **Present and Planned Uses:**

The rural desert character of the Joshua Tree Community is defined in part by its geographic location, desert environment and low-density residential development. Residential development within the plan area is characterized by large lots, the varied placement of homes, and open spaces around the homes. The character of the community is further defined by the natural environment and by limited commercial and industrial uses.

#### Land Use

The most prominent County land use within the plan area is Rural Living (RL), allowing one unit to 2.5 acres, which makes up approximately 74% or 37,101 acres of the total land area. The second and third most prominent land use districts within the plan area are Resource Conservation (RC) and Single Residential (RS), which make up approximately 12% and 10% of the total land area, respectively. The Joshua Tree Community Plan area also contains Multiple Residential, Community Industrial, Institutional (IN), and several commercial land use districts; however these land use districts only make up a small percentage of the total plan area. The majority of the commercial and industrial land use districts are concentrated along Highway 62 in the southwestern portion of the plan area.

The Joshua Tree Community plan area contains some Bureau of Land Management (BLM) lands. Those portions of BLM lands that are within the Joshua Tree Community Plan area comprise 10,199 acres, which equates to approximately 17% of the total land area within the plan area.

The District's boundary and sphere extends an additional five square miles to the northwest into the Homestead Valley Community Plan area. This area primarily has a County of San Bernardino General Plan land use designation of Rural Living. Roughly 160 acres has a land use designation of Industrial, where the District's boundary extends into the Landers Landfill in the northwest portion of Section 28.

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The proposed sphere expansion area of the northeast portion of Section 29, comprising approximately 160 acres, includes the remaining portion of the Landers Landfill that is currently not within a sphere of influence of a retail water provider.

### 2. Present and Probable Need for Public Facilities and Services:

The current water supply is from the Joshua Tree Groundwater Basin and the Copper Mountain Valley Groundwater Basin. The basins are not adjudicated basins and, as such, there are no entitlements to withdraw water. Overall management of water resources is the responsibility of the District. According to the District's Urban Water Management Plan, the water stored in groundwater is estimated to be well over 625,000 acre feet based upon a 2005 study. However, both basins are in overdraft conditions. While the groundwater may be extracted at a rate greater than recharge, the quantity of withdrawals relative to the stored amounts is small. Since the District relies on groundwater as its source of supply, it is not subject to short-term shortages caused by periodic drought. As a result the groundwater basins are capable of absorbing the effects of multiple dry years without seriously hindering the water supply.

The District participated in the construction of the Morongo Basin Pipeline to convey State Water Project (SWP) water from the California Aqueduct in the Mojave River watershed to the area of Improvement District M. The Morongo Basin Pipeline is currently entitled to supply up to 7,250 acre-feet per year (afy) of SWP water to Improvement District M; however, annual deliveries are currently going to the Hi-Desert Water District. In order for the District to benefit from the Morongo Pipeline, the District is planning to construct a water recharge basin and connect the existing Morongo Basin Pipeline to the new basin.

The proposed recharge basins would be designed to achieve an annual average recharge of approximately 2,000 afy, which is more than what is required to replace the amount that is pumped from the groundwater basin on an annual basis. Currently, the District has an agreement in place with the Mojave Water Agency (MWA) in which the District is entitled up to 1,959 afy of SWP water until the year 2022, which they cannot access without the extension of the Morongo Pipeline and construction of recharge facilities that would occur under the proposed project. SWP water that would be delivered to the District under the proposed project would provide some relief of the overdraft condition, eliminate ongoing overdraft by enabling the District to meet current water demands, or provide recharge water by bringing in slightly more water than the demand.

The Colorado River Regional Water Quality Control Board (Regional Board) has issued directives regarding the use of septic systems and the preservation of the groundwater basin in this region. The Regional Board has adopted waste discharge requirements which have resulted in the requirement for installation of package treatment plants for developments approved within the District's boundaries and in other areas under its jurisdiction. In 2009 the District adopted a Wastewater Treatment Strategy in order to plan for a long-term and regional approach to protecting the groundwater. The strategy identifies 7,000 parcels in one third of the District (35 square miles), mostly along Twentynine Palms Highway, where densities are currently zoned at rates that would require new development to provide waste water treatment.

### 3. Present Capacity of Public Facilities and Adequacy of Public Services

The water system presently consists of five wells, approximately 270 miles of mainlines, 17 reservoirs, 11 booster pump stations, and roughly 1,300 fire hydrants. The District service area historically has been a residential community with few commercial and institutional customers.

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Also, the District has a temporary tie-in to the Hi-Desert Water District for emergency situations through hydrant transfer via pump and hose connections. The District has adequate existing storage to meet the emergency storage requirement in most of the pressure zones.

The District is fully metered for all customers, and customers pay the sector rate for each billing unit consumed. Since 1995, more than 3,800 new meters have been installed to replace older, less efficient meters within the service area. The new water meter retrofits have the capability to detect low-flow leaks and in turn reduce water losses. The District has also installed radio read meters for more accurate meter reading operations. Within the past few years, the District has upgraded the existing systems including the installation of three new wells, the replacement of nearly 58,000 feet of old pipeline, and replacement of much of the old four-inch steel pipe for better water delivery and fire protection. The District also worked closely with the County of San Bernardino to relocate water lines at Alta Loma and Sunnyside, enabling the realignment of the street for safer traffic conditions. For FY 2009-10, the District completed \$770,000 in capital projects, including land purchase for future facilities, new accounting software, and waste water feasibility study.

**4. Social and Economic Communities of Interest:**

The social and economic communities of interest are the Morongo Unified School District (which is a regional entity servicing the south desert), the properties and residents within the Joshua Tree community, and the commercial activity along Twentynine Palms Highway. Other social and economic communities of interest are the neighboring Joshua Tree National Park and the Twentynine Palms Marine Corps Air Ground Combat Center.

**5. Additional Determinations**

- As required by State Law notice of the hearing was provided through publication in a newspaper of general circulation, *The Sun*. Individual notice was not provided as allowed under Government Code Section 56157 as such mailing would include more than 1,000 individual notices. As outlined in Commission Policy #27, in-lieu of individual notice the notice of hearing publication was provided through an eighth page legal ad.
- As required by State law, individual notification was provided to affected and interested agencies, County departments, and those agencies and individuals requesting mailed notice.
- Comments from landowners/registered voters and any affected agency have been reviewed and considered by the Commission in making its determinations.

**WHEREAS**, pursuant to the provisions of Government Code Section 56425(i) the range of services provided by the Joshua Basin Water District shall be limited to the following:

<b>FUNCTIONS</b>	<b>SERVICES</b>
Water	Retail, agricultural, domestic, replenishment
Sewer	Operation of Package Treatment Plans defined as consisting of units or modules designed for construction, assembly, connection and installation at the site for treatment of sewage and are to be

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operated for a limited area, including but not limited to a residential subdivision

Planning and engineering for regional sewer service

**WHEREAS**, having reviewed and considered the findings as outlined above, the Commission determines to expand the Joshua Basin Water District’s sphere of influence by approximately 160+/- acres and affirms the balance of its existing sphere of influence.

**NOW, THEREFORE, BE IT RESOLVED** by the Local Agency Formation Commission of the County of San Bernardino, State of California, that this Commission shall consider this to be the sphere of influence for the Joshua Basin Water District; it being fully understood that establishment of such a sphere of influence is a policy declaration of this Commission based on existing facts and circumstances which, although not readily changed, may be subject to review and change in the event a future significant change of circumstances so warrants;

**BE IT FURTHER RESOLVED** that the Local Agency Formation Commission of the County of San Bernardino, State of California, does hereby determine that the Joshua Basin Water District shall indemnify, defend, and hold harmless the Local Agency Formation Commission of the County of San Bernardino from any legal expense, legal action, or judgment arising out of the Commission’s affirmation of the sphere of influence, including any reimbursement of legal fees and costs incurred by the Commission.

**THIS ACTION APPROVED AND ADOPTED** by the Local Agency Formation Commission of the County of San Bernardino by the following vote:

**AYES: COMMISSIONERS:**

**NOES: COMMISSIONERS:**

**ABSENT: COMMISSIONERS:**

\*\*\*\*\*

STATE OF CALIFORNIA )  
 ) ss.  
COUNTY OF SAN BERNARDINO )

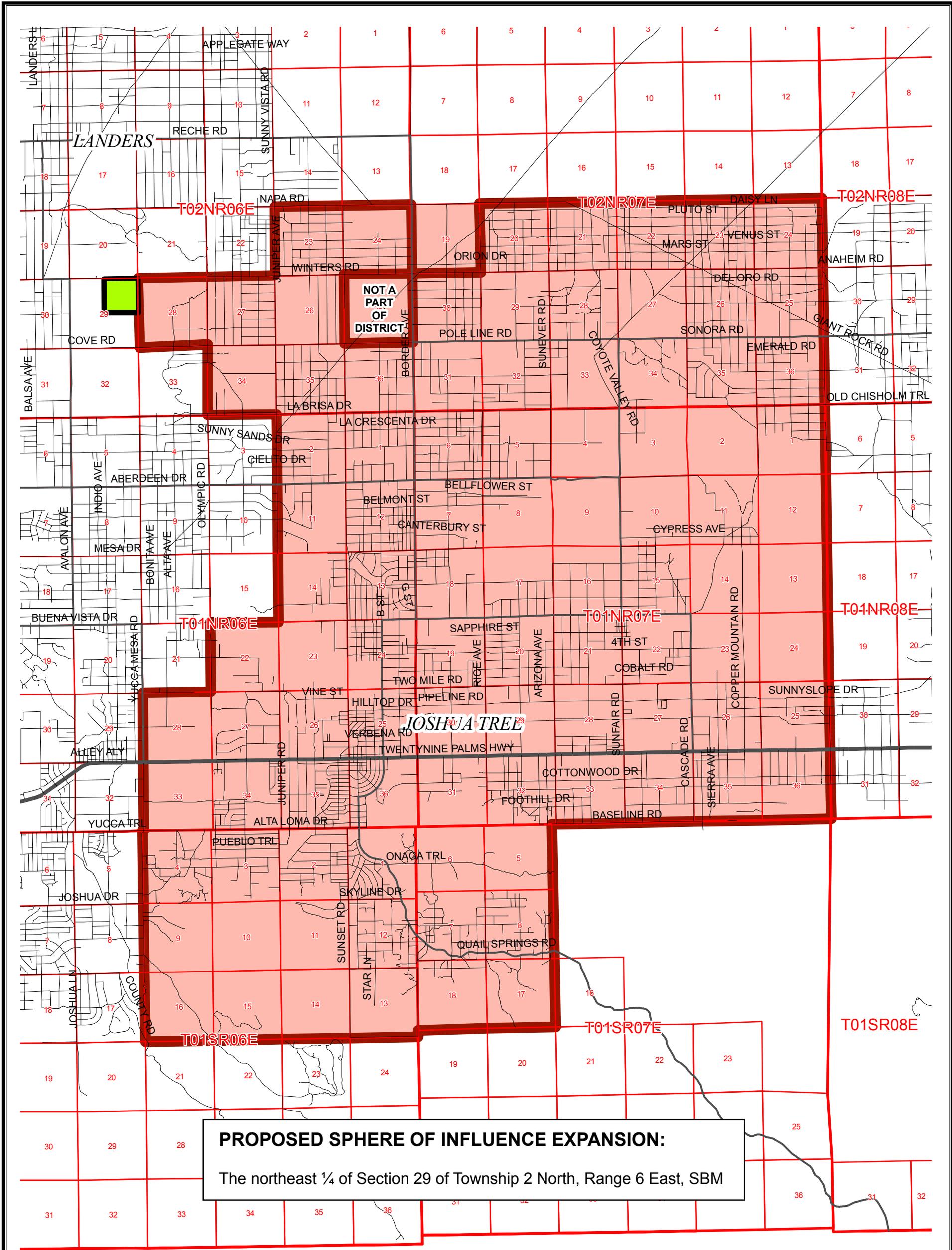
**RESOLUTION NO. 3128**

**I, KATHLEEN ROLLINGS-McDONALD, Executive Officer of the Local Agency Formation Commission of the County of San Bernardino, California, do hereby certify this record to be a full, true, and correct copy of the action taken by said Commission, by vote of the members present, as the same appears in the Official Minutes of said Commission at its meeting of January 19, 2011.**

**DATED:**

\_\_\_\_\_  
**KATHLEEN ROLLINGS-McDONALD**  
**Executive Officer**

**DRAFT**



**PROPOSED SPHERE OF INFLUENCE EXPANSION:**  
 The northeast ¼ of Section 29 of Township 2 North, Range 6 East, SBM

**LAFCO 3111 - SERVICE REVIEW AND SPHERE OF INFLUENCE UPDATE FOR JOSHUA BASIN WATER DISTRICT**

- Joshua Basin WD Boundary
- Joshua Basin WD Sphere
- Proposed Sphere Expansion Area

