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MAR 19 2020

SAN DIEGO LAFCO

March 17, 2020

Dear Mr. Simonds,

Enclosed with this letter, please find Fallbrook Public Utility District's (FPUD) application documents (Application) for the Detachment/Exclusion of FPUD from the San Diego County Water Authority (SDCWA) and Annexation into the Eastern Municipal Water District (EMWD) (the "Reorganization"). On December 9, 2019, after a number of public meetings and after receiving public input, the FPUD Board of Directors approved the Resolution of Application to initiate the Reorganization in order to provide ratepayers the most efficient and cost effective water service. A copy of the Resolution of Application is included as part of the Application. The feedback FPUD has received from the community to date on the proposed Reorganization has been overwhelmingly supportive.

Over the last decade imported water costs from SDCWA have increased, on average, 8% annually. In the rural community of Fallbrook, with larger lots and more outdoor water use, the cost of water impacts not only the quality of life of residents, but also the long-term viability of the agricultural community—the backbone of the local economy. As part of the Plan for Providing Services document, which is included in FPUD's Application, FPUD completed a detailed analysis of both the costs to FPUD and SDCWA, as well as the water reliability impacts associated with the proposed Reorganization, with the following key findings:

1. Cost Savings for FPUD Customers: By changing wholesale water agencies (from SDCWA to EMWD) FPUD customers will only pay for infrastructure actually used for delivery of water from EMWD. This is as compared to the current situation, where FPUD customers pay for SDCWA infrastructure that cannot be accessed by FPUD due to the configuration of SDCWA's infrastructure. The benefit to FPUD ratepayers is significant – there would potentially be no increase in water rates for three years compared to a projected 26% annual increase if SDCWA remained FPUD's wholesale water provider.
2. Cost Impact to SDCWA: The financial impact on water rates from the proposed Reorganization of the ~35,000

people served by FPUD to the 3.3 million customers currently served by SDCWA is less than 1%. In other words, the remaining SDCWA ratepayers would see a miniscule 15-20 cent increase in their cost of water each month. It is important to understand that this additional cost is essentially what FPUD ratepayers have been paying for decades to fund services and infrastructure to support other agencies further south in San Diego. Once FPUD detaches, SDCWA customers will be paying the true cost for their water services, as will FPUD customers.

This increase is minor as compared to the SDCWA rate impact associated with other SDCWA member agency projects, in which member agencies are currently implementing their own local water supply projects. The estimated rate impact associated with these projects is more than 10 times the impact of the proposed FPUD Reorganization.

Additionally, FPUD's proposal includes abandonment of its share of SDCWA assets, which provide it no benefit, and elimination of the cost associated with constructing facilities that were planned to serve FPUD in an emergency - points which cannot be ignored. Instead, FPUD has a local water supply project that provides it water from Camp Pendleton and will be more reliable than the SDCWA regional storage in the event of an emergency.

3. Reliability of Water Supplies is Maintained: Based on FPUD's water supply mix of local and imported water supplies, substantial water storage, and EMWD ability to help meet overall demands, FPUD customer water supply demands would be met under all projected drought conditions after changing wholesale water agencies (from SDCWA to EMWD).

While FPUD fully hoped to submit a Reorganization application supported by both of the other affected/subject agencies (EMWD and SDCWA), despite FPUD's active and good faith efforts, we have been unable to make progress with SDCWA on developing terms and conditions to jointly submit to LAFCO. In fact, SDCWA recently informed FPUD that it could not negotiate directly with FPUD on any potential terms and instead suggested that FPUD work on developing terms and conditions directly with each of the other individual 23 SDCWA member agencies. While we fully believe that SDCWA, as an affected agency/subject agency, should be the lead party in negotiations around terms and conditions, FPUD reached out to all other 22 member agencies and offered to work with them to address their concerns. To date we have met with more than half of the other 22 member agencies. However, these meetings did not result in any additional progress in developing potential terms as most member agencies we met with were similarly confused on how they could be in a position to negotiate terms and conditions on behalf of SDCWA.

As an aside, we want to point out that while FPUD's attempts at negotiating terms with SDCWA have to date been futile, FPUD was able to quickly develop a Memorandum of Understanding (MOU) with EMWD to set out a proposed framework for Annexation of FPUD to EMWD. This MOU is included in FPUD's Application to LAFCO. EMWD has also adopted a resolution in support of the proposed FPUD Reorganization, also included in the Application. Lastly, FPUD was able to obtain a letter from the Metropolitan Water District of Southern California (MWD) outlining terms and conditions for the proposed Reorganization related to FPUD's annexation into EMWD, a MWD member agency.

Given the lack of progress over the last 6 months in negotiating potential terms with SDCWA and the other 23 individual SDCWA member agencies¹, FPUD's Board of Directors, after careful evaluation, determined it was time to move forward with the proposed Reorganization and initiate the LAFCO process. Accordingly, in absence of a negotiated agreement with SDCWA, FPUD proposes that the detachment from SDCWA be consistent with the County Water Authority (CWA) Act (Water Code Appendix section 45-1 et seq.), the law under which SDCWA exists and is organized. The CWA Act establishes the legal requirements governing SDCWA and specifically establishes the legal requirements for a member agency seeking to detach² itself from SDCWA—requirements that each member agency that has become a member of SDCWA over the years has agreed to be bound. Specifically, Section 45-11(a)(2) of the CWA Act provides that the taxable property within the boundaries of the detaching member agency may still continue to be taxable by SDCWA for the purpose of paying bonded and other indebtedness outstanding or contracted for at the time of detachment/exclusion. Applied to the proposed Reorganization, the amount currently collected annually from taxable properties within FPUD's boundaries is roughly \$150,000. These payments would continue after detachment, pursuant to the CWA Act, until full payment was made to SDCWA, even though FPUD will cease to receive any benefit from any SDCWA facilities.

FPUD believes that LAFCO should be aware of the details of some of SDCWA's talking points around the FPUD Application and FPUD's position on them. Specifically, at the outset of discussions with SDCWA, prior to it "requiring" FPUD to only negotiate directly with the other SDCWA member agencies, SDCWA put forward:

- its position, notwithstanding language expressly to the contrary in the CWA Act, that any detachment election be conducted within the entire boundaries of SDCWA, as opposed to only within FPUD.
- the concept of rate neutrality;
- its position that FPUD pay an "exit fee," which "exit fee" SDCWA has indicated would be payable by FPUD at the time of exclusion/detachment.

None of these points is supported by the CWA Act or even permissible.

With regard to the territory in which a "detachment" election will be held, the CWA Act expressly provides that the vote on detachment take place solely within the boundaries of the member agency proposing detachment. Specifically, Section 45-11(a)(2) provides, in pertinent part, as follows:

¹ One member agency, Otay Water District, has filed a lawsuit to challenge the Resolution of Application to initiate the Reorganization alleging that FPUD violated the California Environmental Quality Act ("CEQA"). The Board found that the Reorganization was exempt from CEQA and Otay Water District disputes that finding. The filing of this lawsuit does not, however, preclude LAFCO from processing the Reorganization Documents. Otay's lawsuit is a meritless tactic intended to block, or at a minimum, delay FPUD's decision to pursue Reorganization for the benefit of its customers.

² Under the CWA Act, a detachment is called an "exclusion."

- (2) Any public agency whose corporate area as a unit has become or is a part of any county water authority may obtain the exclusion of the area therefrom in the following manner:

The governing body of any public agency may submit to the electors thereof at any general or special election the proposition of excluding from the county water authority the corporate area of the public agency. . . . The election shall be conducted and the returns thereof canvassed in the manner provided by law for the conduct of elections in the public agency. If a majority of electors voting thereon vote in favor of withdrawal, the result thereof shall be certified by the governing body of the public agency to the board of directors of the county water authority. A certificate of the proceedings shall be made by the secretary of the county water authority and filed with the Secretary of State.

This language is abundantly clear that any election be solely within the boundaries of the agency seeking to be detached/excluded from a County Water Authority, which election is to be conducted “in the manner provided by law for the conduct of elections in the public agency.”

With regard to the concept of rate-neutrality, the CWA Act does not support such a requirement and the applicable provisions of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code section 56000 et seq.) (CKH) similarly does not support such a requirement. As you know, proposals for the incorporation of unincorporated territory are subject to the revenue neutrality provisions of CKH. Stated simply, unless an exception applies, LAFCO is precluded from approving an incorporation proposal if it cannot find that the proposal is revenue neutral. The Legislature did not make revenue neutrality or rate neutrality a requirement of a detachment—it could have but it did not.

With regard to a so called “exit fee,” the CWA Act is clear that upon exclusion/detachment, the taxable property within the detaching member agency will continue to be taxable by SDCWA for the purpose of paying the bonded and other indebtedness—to the extent that this is the “exit fee” SDCWA envisions, FPUD agrees. However to the extent SDCWA expects that FPUD would pay some other payment (perhaps a lump sum) to SDCWA, FPUD does not agree—and any such payment is not specified in the CWA Act. The CWA Act supports FPUD’s position as it grants no authority to SDCWA to impose terms and conditions on a proposed exclusion/detachment. This is in stark contrast to the authority that a County Water Authority (such as SDCWA) has in an annexation setting, where the Legislature specifically granted a County Water Authority the authority not only to grant or deny an annexation request, but also to “fix the terms and conditions” on an annexation. (*See*, Section 45-10 (c).) If the Legislature wanted a County Water Authority to have the ability to dictate the terms and conditions imposed on an exclusion/detachment, it could have granted a County Water Authority such authority as it has in the annexation setting. Similarly, if the Legislature wanted a County Water Authority to have the authority to grant or deny a member agency exclusion/detachment, it could have so granted a County Water Authority such power. The provisions of Section 45-11 applicable to an exclusion/detachment from SDCWA have not changed in substance since 1943—over 75 years ago, to change the requirements now would not be equitable.

FPUD wants to emphasize that as of January 1, 2018 FPUD has contributed approximately \$300 million to help build SDCWA's infrastructure since it first became a member of SDCWA. These investments helped fund storage projects, emergency water supply projects and secure lower cost water supplies from canal lining projects—assets that do currently and will in the future continue to provide benefit to the remaining 23 SDCWA member agencies should the Reorganization be approved.³ Should the Reorganization be approved as proposed in its Application, FPUD would not recover its pro rata share of the value of these assets. Based on the language of the CWA Act, the fact that FPUD is relinquishing all FPUD's ownership interest in SDCWA assets that FPUD ratepayers have previously paid, and the fact that there will be no services or facilities provided by SDCWA to FPUD after detachment, an on-going payment or "exit fee" by FPUD to SDCWA is not required or even appropriate. To require an on-going payment or "exit fee" would ignore the express provisions of the CWA Act, and would likely make any exclusion or detachment from a County Water Authority fiscally impossible. If LAFCO were to require payments beyond those required by the CWA Act, FPUD would need to, on behalf of and for the benefit of its ratepayers, demand that any such payment to SDCWA be offset by the value of FPUD's share of SDCWA's current physical assets, funds (including reserves) and the avoided cost of planned capital investments specifically for FPUD.

We look forward to working with you to provide any additional information that you need to make a recommendation to the Commission.

Please contact me with any questions.

Sincerely,



Jack Bebee
General Manager

cc: Paul Jones, General Manager EMWD
Sandy Kerl, General Manager SDCWA
Paula de Sousa, General Counsel FPUD

³ One such asset to be funded by these past FPUD contributions was for a pump station project to deliver water to FPUD—a project which was not debt funded—so while FPUD has contributed to this project (which will not be needed if the Reorganization is approved) under the provisions of the CWA Act, SDCWA is not required to refund FPUD for its contributions for this project.

**SAN DIEGO LOCAL AGENCY FORMATION COMMISSION
CHANGE OF ORGANIZATION OR REORGANIZATION APPLICATION**

The following information must be submitted when filing a change of organization or reorganization proposal with the San Diego Local Agency Formation Commission (LAFCO); additional information may be requested during review of the proposal.

1. **Completed CHANGE OF ORGANIZATION OR REORGANIZATION APPLICATION.**
2. (a) A **certified resolution of application** from an affected city or district; or
 (b) A **landowner or registered voter petition** making application to San Diego LAFCO (available from LAFCO or <http://www.sdlafco.org/forms/petition.pdf>).
 (c) **Final Plan for Services**
3. A **metes-and-bounds legal description of the proposal territory perimeter** for the proposed boundary change(s), a **reproducible parcel/plat map**, and a **vicinity map**. For information about mapping requirements, refer to: http://www.sdlafco.org/forms/legal_description.pdf, and contact the County Assessor's Mapping Division at 619/531-5588. The Thomas Brother's Guide may be used for the vicinity map.
4. **Environmental documentation** to comply with the California Environmental Quality Act (CEQA); submit documents for applicable category only:
- (a) **INITIAL STUDY:** Submit completed form (available from LAFCO) if no environmental review has been conducted;
- (b) **CATEGORICAL EXEMPTION:** Submit document if an agency has certified that the project qualifies for a categorical exemption from CEQA;
- (c) **NEGATIVE DECLARATION (ND):** Submit document with certifying resolution and Initial Study*;
- (d) **ENVIRONMENTAL IMPACT REPORT (EIR):** Submit 15 copies of the Final EIR and certifying resolution, plus one copy of the EIR Appendix*.
- * For an ND or EIR, a copy of the receipt for the fee paid to the California Department of Fish and Game must be submitted.
5. If annexation to a city is proposed, submit one copy of the **city resolution approving rezoning and general plan land-use designations** for the proposal territory.
6. **JURISDICTIONAL CONFLICTS:** If the response to question number 6 on page 3 is "Yes", complete and sign the Policy L-107 form at http://www.sdlafco.org/forms/Legislative_Policy_L_107.pdf.
7. **Completed CAMPAIGN CONTRIBUTION DISCLOSURE FORM AND EVALUATION CHECKLIST for DISCLOSURE OF POLITICAL EXPENDITURES** (pages 7 and 8 of application).
8. **PROPERTY-OWNER CONSENT FORM FOR INCLUSION OF PROPERTY** (page 9 of application).
9. Completed **SUBJECT AGENCY SUPPLEMENTAL INFORMATION FORM** (pages 10-12 of application) from *each* subject agency.
10. **LAFCO processing fees.** The San Diego LAFCO FEE SCHEDULE is available at <http://www.sdlafco.org/document/feeschedule.pdf>, or contact LAFCO staff.

**SAN DIEGO LOCAL AGENCY FORMATION COMMISSION
9335 Hazard Way · Suite 200 · San Diego, CA 92123
(858) 614-7755 · www.sdlafco.org**

Item #1 -

**Completed CHANGE OF ORGANIZATION OR
REORGANIZATION APPLICATION**

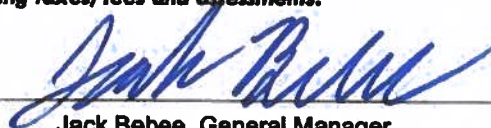
CHANGE OF ORGANIZATION OR REORGANIZATION APPLICATION

The information in this application is used by LAFCO staff to evaluate proposals for changes of government organization. Please respond to all items in this form, indicating "NA" when an item does not apply.

| SUBJECT AGENCY(IES) (City or Special District) | PROPOSED CHANGE OF ORGANIZATION/ACTION (Annexation, detachment, sphere amendment, etc.) |
|--|---|
| 1. <u>Fallbrook Public Utility District</u> | 1. <u>San Diego County Water Authority Detachment</u> |
| 2. _____ | 2. <u>Eastern Municipal Water District Attachment</u> |
| 3. _____ | 3. _____ |
| 4. _____ | 4. _____ |

As part of this application, the city of _____ or the Fallbrook Public Utility district, _____ (the applicant), and/or the _____ (real party in interest: subject landowner and/or registered voter) agree to defend, indemnify, hold harmless, and release the San Diego LAFCO, its agents, officers, attorneys, and employees from any claim, action, or proceeding brought against any or all of them, the purpose of which is to attack, set aside, void, or annul the approval or denial of this application or adoption of or refusal to adopt the environmental document which accompanies it or any other action San Diego LAFCO takes with respect to this application. This defense and indemnification obligation shall include, but not be limited to, attorneys' fees and other costs of defense, damages, costs, and expenses, including attorney fees payable to another party. The person signing this application will be considered the proponent for the proposed action(s) and will receive all related notices and other communications. San Diego LAFCO's acceptance of this application is sufficient to make this agreement a binding, bilateral contract between us.

I acknowledge that annexation to the city of _____ or the _____ district may result in the imposition of taxes, fees and assessments *existing within the (city or district)* on the effective date of annexation. I hereby waive any rights I may have under Articles XIII C and XIII D of the State Constitution (Proposition 218) to a hearing, assessment ballot proceeding or an election on those *existing taxes, fees and assessments*.

Agreed: _____
 Signature:  Date: 2/26/20
 Print/Type Name: Jack Bebee, General Manager
 Address: 990 East Mission Road, Fallbrook, CA 92028

Telephone: () 760-728-1125
 Property Address: 990 East Mission Road, Fallbrook, CA 92028

Cross Street(s): _____
 Assessor Parcel Number(s): _____ Acres: _____

Indicate below if anyone, in addition to the person signing this application, is to receive notices of these proceedings.
 Name: Paula de Sousa
 Address: 655 West Broadway, 15th Floor, San Diego, CA 92101
 Telephone: () 619-525-1300

A. PROPOSAL DESCRIPTION/JUSTIFICATION

1. Explain in detail why the proposal is necessary *at this time* (e.g., condition of an approved tentative map, an existing structure requires new services, etc.). As more fully described in the attached plan for providing service, the District is unique in that it receives its water from Metropolitan Water District Infrastructure and does not use San Diego County Water Authority Infrastructure. By annexing into Eastern MWD, the District would provide more efficient water service at lower cost.
2. Describe the use of *developed* property within the proposal territory, including details about existing structures. Describe anticipated development of *vacant* property, including types of buildings, number of units, supporting facilities, etc., and when development is scheduled to occur. The District's service area includes rural, semi-rural, and village residential. The change in water wholesale provider and lower water rates are expected to help the agricultural sector and rural residential sectors that are the basis of Fallbrook's local economy. There is no increase or change of zoning as part of this proposal.
3. Describe the topography and physical features of the proposal territory, as well as its general location in relation to communities, major freeways/highways, roads, etc. Fallbrook is a hilly, mountainous region in the north most region of San Diego County.
4. How many residents live within the proposal territory? Approximately 35,000 residents.
5. How many of these residents are registered voters? 17,178 (as of 07/01/2019)
6. Are there any jurisdictional issues associated with the LAFCO proposal or pending LAFCO action?
 NO YES (If yes, please complete the Policy L-107 form at http://www.sdlafco.org/forms/Legislative_Policy_L_107.pdf)

B. LAND USE INFORMATION

GENERAL PLAN AND ZONING:

If the proposal territory is *not* within an incorporated city, San Diego County General Plan and zoning information may be obtained by calling (858) 565-5981 or toll-free (888) 267-8770 with the Assessor Parcel Number(s) of the subject property. If the proposal territory is within a city, please call the appropriate city's planning department for General Plan and zoning information.

1. COUNTY:

- (a) The territory is within the Fallbrook community plan.
- (b) The County General Plan or community plan designation and allowed density: from rural land (RL-80) to commercial zoning
- (c) Current County zoning and allowed density: Same as above

2. CITY: **N/A**

(a) The territory is within the general plan area for the City of _____

(b) The City General Plan land use designation and allowed density: _____

(c) Current City zoning and allowed density: _____

(d) Current City prezoning and allowed density: _____

3. Indicate below *all* permits or approvals that will be needed by the County or any city to complete the project. If already granted, please note the date of approval and attach a copy of each resolution of approval. If approval is pending, please note the anticipated approval date. **None Required**

| Type of Approval or Permit | File No. | Approval Date | Is Resolution Attached? |
|------------------------------------|----------|---------------|--|
| Tentative Subdivision Map | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| Tentative Parcel Map | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| Major Use Permit | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| City/County General Plan Amendment | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| City Prezoning | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| County Rezone | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| (Other) | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |

4. Describe the land uses surrounding the proposal territory (e.g., residential, commercial, agricultural, industrial, open space, etc.).

North: various East: various
South: various West: various and government (Military Base)

5. Indicate with a if any portion of the proposal territory contains the following:

- Agricultural land uses Agricultural Preserve
 Open Space Easement Slopes greater than 25%
 Sewer moratorium area Coastal Permit Zone
 Unusual features such as: _____

6. For city annexation proposals: Is any part of the proposal territory under a Williamson Act contract? If yes, please contact the LAFCO office for special instructions regarding petition/resolution of application requirements. YES NO **N/A**

C. PUBLIC SERVICES INFORMATION

SEWER SERVICE:

1. (a) Is the proposal territory within a district or city that provides public sewer service? YES NO
(b) *If yes*, which agency? Fallbrook Public Utility District
2. (a) Is a developed parcel in need of annexation due to failed septic system? YES NO
(b) *If yes*, include a copy of any letters from the San Diego County Department of Environmental Health or private septic-system company.
(c) *If no*, is annexation for sewer service part of this application? YES NO
3. If annexation for sewer service is proposed, which district or city would serve the territory if this jurisdictional change is approved? _____
4. (a) Has the agency that will be providing service issued a letter of sewer availability? YES NO N/A
(b) *If yes*, please provide a copy of the letter with this application. (This documentation should be completed by the agency no longer than 6 months prior to submittal to LAFCO.)
5. (a) Will the agency be prepared to furnish sewer service upon annexation? YES NO N/A
(b) *If no*, please explain: _____

WATER SERVICE:

1. (a) Is the proposal territory within a district or city that provides public water service? YES NO
(b) *If yes*, which agency? Fallbrook Public Utility District
2. Is a well or other on-site water system currently used on the property? YES NO
FPUD's water distribution system
3. Is an on-site system proposed to be used when the property is developed? YES NO N/A
4. (a) Is annexation for water service part of this application? YES NO
(b) *If yes*, which district or city would serve the territory if this jurisdictional change is approved? Eastern Municipal Water District would provide whole sale water service
(c) Will the agency that will be providing service be prepared to furnish water service upon annexation? YES NO
5. (a) Has the agency that will be providing service issued a letter of water availability? YES NO N/A
See attach MOU w/ EMWD
(b) *If yes*, please provide a copy of the letter with this application. (This documentation should be completed by the agency no longer than 6 months prior to submittal to LAFCO.)

FIRE PROTECTION SERVICES: NOTE: Complete the following section *only* if annexation to a fire protection service provider is proposed—or if the current fire protection service provider is proposed to change.

N/A

1. (a) Is the proposal territory *currently* within an agency that provides fire protection? YES NO

(b) *If yes*, provide name and address/location of current fire service provider

(c) Provide estimated response times to the proposal territory:

priority _____ minutes; non-priority _____ minutes

2. Is annexation for fire protection service part of this application? YES NO

3. Which city or district would serve the proposal territory if this jurisdictional change is approved?

(a) Location/address of the proposed fire service provider: _____

(b) Estimated response times to the proposal territory:

Priority _____ minutes; non-priority _____ minutes

POLICE PROTECTION SERVICES: NOTE: Complete the following section *only* if the police protection provider is proposed to change.

N/A

1. Which police agency *currently* serves the proposal territory?

(a) Location/address of nearest police station: _____

(b) Estimated response times to the proposal territory: priority _____ minutes; non-priority _____ minutes

2. Which police agency would serve the proposal territory if this jurisdictional change is approved?

(a) Location/address of nearest police station: _____

(b) Estimated response times to the proposal territory:

Priority _____ minutes; non-priority _____ minutes

CAMPAIGN CONTRIBUTION DISCLOSURE PROVISIONS

LAFCOs are subject to the campaign disclosure provisions detailed in Government Code Section 84308, and the Regulations of the Fair Political Practices Commission (FPPC), Section 18438.

Please carefully read the following information to determine if the provisions apply to you. If you determine that the provisions are applicable, the Campaign Disclosure Form must be completed and returned to San Diego LAFCO with your application.

1. No LAFCO commissioner shall accept, solicit, or direct a contribution of more than \$250 from any party¹ or agent² while a change of organization proceeding is pending, and for three months subsequent to the date a final decision is rendered by LAFCO. This prohibition commences when your application has been filed, or the proceeding is otherwise initiated.

2. A party to a LAFCO proceeding shall disclose on the record of the proceeding any contribution of more than \$250 made to any commissioner by the party, or agent, during the preceding 12 months. No party to a LAFCO proceeding, or agent, shall make a contribution to a commissioner during the proceeding and for three months following the date a final decision is rendered by LAFCO.

3. Prior to rendering a decision on a LAFCO proceeding, any commissioner who received contribution of more than \$250 within the preceding 12 months from any party, or agent, to a proceeding shall disclose that fact on the record of the proceeding, and shall be disqualified from participating in the proceeding. However, if any commissioner receives a contribution that otherwise would require disqualification, and returns the contribution within 30 days of knowing about the contribution and the relevant proceeding, that commissioner shall be permitted to participate in the proceeding.

¹ "Party" is defined as any person who files an application for, or is the subject of, a proceeding.

² "Agent" is defined as a person who represents a party in connection with a proceeding. If an individual acting as an agent also is acting as an employee or member of a law, architectural, engineering, or consulting firm, or a similar entity or corporation, both the individual and the entity or corporation are agents. When a closed corporation is a party to a proceeding, the majority shareholder is subject to these provisions.

To determine whether a campaign contribution of more than \$250 has been made by you or your agent to a commissioner within the preceding 12 months, all contributions made by you or your agent during that period must be aggregated.

Names of current LAFCO commissioners are available at <http://www.sdlafco.org/document/CommRoster.pdf>. If you have questions about Government Code Section 84308, FPPC regulations, or the Campaign Disclosure Form, please contact San Diego LAFCO at 9335 Hazard Way, Suite 200, San Diego, CA 92123, (858) 614-7755.

CAMPAIGN CONTRIBUTION DISCLOSURE FORM

(a) Proposed change(s) of organization: Fallbrook
PUD - SDCWA Detachment/ EMWD

Attachment _____

(b) Name and address of any party, or agent, who has contributed more than \$250 to any commissioner within the preceding 12 months:

1. None

2. _____

(c) Date and amount of contribution:

Date _____ Amount \$ _____

Date _____ Amount \$ _____

(d) Name of commissioner to whom contribution was made:

1. _____
2. _____

(e) I certify that the above information is provided to the best of my knowledge.

Printed Name Jack Bebee, General Manager

Signature 

Date 2/26/2020 Phone 760-728-1125

To be completed by LAFCO:

Proposal:

Ref. No.

DISCLOSURE OF POLITICAL EXPENDITURES

Effective January 1, 2008, expenditures for political purposes, which are related to a change of organization or reorganization proposal that will be or has been submitted to LAFCO, are subject to the reporting and disclosure requirements of the Political Reform Act of 1974 and the Cortese-Knox-Hertzberg Act of 2000.

Please carefully read the following information to determine if reporting and disclosure provisions apply to you.

- Any person or combination of persons who, for political purposes, directly or indirectly contributes \$1,000 or more, or expend \$1,000 or more in support of, or in opposition to a proposal for a change of organization or reorganization that will be submitted to the Commission, shall disclose and report to the Commission to the same extent and subject to the same requirements of the Political Reform Act of 1974 (Government Code Section 81000 et seq.) as provided for local initiative measures, and Section 56700.1 of the Cortese-Knox-Hertzberg Act of 2000.
- Pursuant to Government Code Section 57009, any person or combination of persons who directly or indirectly contributes \$1,000 or more, or expends \$1,000 or in support of, or in opposition to, the conducting authority proceedings for a change of organization or reorganization, must comply with the disclosure requirements of the Political Reform Act of 1974, (Government Code section 81000 et seq.). Applicable reports must be filed with the Secretary of State and the appropriate city or county clerk. Copies of the report must also be filed with the Executive Officer of San Diego LAFCO.
- A roster of current San Diego LAFCO commissioners is available from the LAFCO office: 9335 Hazard Way, Suite 200, San Diego, CA 92123, (858) 614-7755, or from <http://www.sdlafco.org/document/CommRoster.pdf>

EVALUATION CHECKLIST FOR DISCLOSURE OF POLITICAL EXPENDITURES

The following checklist is provided to assist you in determining if the requirements of Government Code Sections 81000 et seq. apply to you. For further assistance contact the Fair Political Practices Commission at 428 J Street, Suite 450, Sacramento, CA 95814, (866) 275-3772 or at <http://www.fppc.ca.gov>.

1. Have you directly or indirectly made a contribution or expenditure of \$1,000 or more related to the support or opposition of a proposal that has been or will be submitted to LAFCO?

Yes

No

Date of contribution _____ Amount \$ _____

Name/Ref. No. of LAFCO proposal _____

Date proposal submitted to LAFCO _____

2. Have you, in combination with other person(s), directly or indirectly contributed or expended \$1,000 or more related to the support or opposition of a proposal that has been or will be submitted to LAFCO?

Yes

No

Date of contribution _____ Amount \$ _____

Name/Ref. No. of LAFCO proposal _____

Date proposal submitted to LAFCO _____

3. If you have filed a report in accordance with FPPC requirements, has a copy of the report been filed with San Diego LAFCO?

Yes

No

N/A

PROPERTY-OWNER CONSENT FORM FOR INCLUSION OF PROPERTY

N/A

Note: Processing of jurisdictional boundary change proposals, which involve *uninhabited*¹ territory, can be expedited by approximately 60 days if all affected landowners consent to the proposal. If you wish to take advantage of this option, please return the completed PROPERTY-OWNER CONSENT FORM FOR INCLUSION OF PROPERTY to San Diego LAFCO with your application for a jurisdictional boundary change. If consenting signatures of **100%** of the affected property owners are affixed and LAFCO does not receive any opposition from subject agencies, the Commission may consider the proposal without public notice, public hearing and/or an election.

¹ Territory included within a proposed boundary change that includes less-than 12 registered voters is considered *uninhabited* (Government Code 56045).

The undersigned owners(s) of property hereby consent(s) to inclusion of that property within a proposed change of organization or reorganization consisting of:

(Please list all proposed actions)

Annexation to: 1. _____
2. _____
3. _____

Detachment from: 1. _____
2. _____
3. _____

| <u>Date</u> | <u>Signature</u> | <u>Assessor's Parcel Number(s)</u> |
|-------------|------------------|------------------------------------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |
| 5. | _____ | _____ |

Attach additional sheets if necessary

SUBJECT AGENCY SUPPLEMENTAL INFORMATION FORM

NOTE: A copy of this form must be completed and signed by each local agency that will gain or lose territory as a result of the proposed jurisdictional boundary change. Attach additional sheets if necessary.

Signature of agency representative

Print name

Title

Telephone

Date

A. JURISDICTIONAL INFORMATION:

Name of agency:

1. Is the proposal territory within the agency's sphere of influence? Yes No
2. Upon annexation, will the proposal territory be included within an assessment district and be subject to assessment for new or extended services? Yes No
3. Does the agency have plans to establish any new assessment district that would include the proposal territory? Yes No
4. Will the proposal territory assume any existing bonded indebtedness? Yes No
If yes, indicate any taxpayer cost: \$ _____
5. Will the proposal territory be subject to any special taxes, benefit charges, or fees? Yes No
If yes, please provide details of all costs: _____

6. Is the agency requesting an exchange of property tax revenues as a result of this proposal? Yes No
7. Is this proposed jurisdictional change subject to a master property tax agreement or master enterprise district resolution? Yes No
8. FOR CITY ANNEXATIONS: Does the proposal territory contain existing commercial development that generates retail sales of ten million dollars or more per year? Yes No
9. FOR CITY ANNEXATIONS: If any part of the proposal territory is under a Williamson Act contract, please contact the LAFCO office for special instructions regarding petition or resolution of application requirements.

EXPEDITED PROPOSAL PROCESSING: Processing of jurisdictional boundary change proposals can be expedited by approximately 60 days if all affected landowners consent to the waiver of protest and termination (conducting authority) proceedings and subject agencies do not oppose the waiver. If you do NOT want to waive these proceedings, then attach a written statement to the subject agency information form containing a signature, date, and declaration of opposition to a waiver of such proceedings.

B. SEWER SERVICE: N/A

1. What is the agency's current wastewater treatment capacity (expressed in million gallons per day and equivalent dwelling units)? _____

2. What is the average volume of influent currently being treated by the agency (expressed in million gallons per day and equivalent dwelling units)? _____

3. (a) What is the agency's peak flow volume (expressed in million gallons per day)? _____

(b) What is the agency's peak flow capacity (expressed in million gallons per day)? _____

(c) Has the agency exceeded the flow (peak) capacity within the past two years?

(d) *If yes*, please describe the frequency and volume of incidents that exceeded the agency's peak capacity: _____

YES NO

4. (a) Has the agency issued a letter of sewer availability for the proposal territory? _____

YES NO

(b) *If yes*, please provide a copy of the letter. (This documentation should be completed by the agency no longer than 6 months prior to submittal to LAFCO.)

5. (a) How many future equivalent dwelling units have been reserved or committed for proposed projects? _____

(b) Can all projects that have received commitments of sewer availability (e.g., "will serve letters") be accommodated with planned capacity? _____

YES NO

6. (a) Does the agency have the necessary contractual and/or operational treatment capacity to provide sewer service to the proposal territory? _____

YES NO

(b) *If yes*, please specify the proposal territory's estimated sewer demand and the agency's available sewer capacity (expressed in million gallons per day and equivalent dwelling units): _____

(c) *If no*, please describe the agency's plans to upgrade capacity to resolve any capacity related issues: _____

7. Will the proposal territory be annexed to a sewer improvement district? _____

YES NO

8. (a) The distance for connection of the proposal territory to the agency's existing sewer system is _____ feet.

(b) Describe the location of the connection to the agency's existing sewer system: _____

C. WATER SERVICE:

1. (a) Does the subject agency have adequate water supply and sufficient contractual and/or operational capacity available to serve the proposal territory? YES NO

(b) *If yes*, describe the proposal territory's estimated water demand and the agency's available water supply and capacity (expressed in acre-feet or million gallons per day):

(c) *If no*, what plans does the agency have to increase its water capacity?

2. Specify any improvements (on and off-site) that will be necessary to connect and serve the anticipated development. Indicate the total cost of these improvements and method of financing (e.g., general property tax, assessment district, landowner or developer fees): _____

3. (a) Has the agency issued a letter of water availability for the proposal territory? YES NO
(b) *If yes*, please provide a copy of the letter. (This documentation should be completed by the agency no longer than 6 months prior to submittal to LAFCO.)

4. (a) The distance for connection of the proposal territory to the agency's existing water system is _____ feet.

(b) Describe the location of the connection to the agency's existing water system:

5. (a) Is the agency currently under any drought-related conditions and/or restrictions? YES NO

(b) *If yes*, describe the conditions and specify any related restrictions:

6. (a) Will the proposal territory utilize reclaimed water? YES NO

(b) *If yes*, describe the proposal territory's reclaimed water use and the agency's available reclaimed water supply and capacity (expressed in acre-feet or million gallons per day):

(c) The distance for connection of the proposal territory to the agency's existing reclaimed water system is _____ feet.

(d) Describe the location of the connection to the agency's existing reclaimed water system: _____

(e) *If no*, has the agency considered availability of reclaimed water to the proposal territory? YES NO

(f) What restrictions prevent use of reclaimed water? _____

7. Will the proposal territory be annexed to an improvement district? YES NO

Item #2a -

A certified resolution of application from an affected city or district

RESOLUTION NO. 4985

A RESOLUTION OF APPLICATION BY THE FALLBROOK PUBLIC UTILITY DISTRICT (FPUD) REQUESTING THE SAN DIEGO LOCAL AGENCY FORMATION COMMISSION TO COMMENCE PROCEEDINGS FOR THE DETACHMENT/ EXCLUSION OF FPUD FROM THE SAN DIEGO COUNTY WATER AUTHORITY AND ANNEXATION INTO THE EASTERN MUNICIPAL WATER DISTRICT AS MORE PARTICULARLY DESCRIBED HEREIN AND FINDING THAT THE ACTION IS EXEMPT FROM CEQA

WHEREAS, the Fallbrook Public Utility District ("FPUD") is a Public Utility District formed in 1922, and is organized under the provisions of the Public Utility District Act, (Public Utilities Code § 15500 et seq.); and

WHEREAS, FPUD is authorized to provide water, wastewater, and reclaimed water services, within all or part of its boundaries; and

WHEREAS, FPUD is a member of the San Diego County Water Authority ("County Water Authority") from which it purchase water to serve its rate payers; and

WHEREAS, the County Water Authority is organized under the provisions of the County Water Authority Act (Water Code Appendix Chapter 45); and

WHEREAS, the County Water Authority is a member agency of the Metropolitan Water District of Southern California ("Metropolitan"), which serves as the County Water Authority's largest supplier; and

WHEREAS, since the formation of the County Water Authority in 1944, with FPUD as a charter member, FPUD has contributed almost \$300 Million to construct and operate assets owned by the County Water Authority; and

WHEREAS, over the last 25 years, the County Water Authority has made major investments in new storage and treatment facilities located well south of the FPUD service area, which investments have increased the cost of water to FPUD ratepayer adding several hundred dollars per acre foot to the cost of water; and

WHEREAS, to date FPUD receives the majority of its water directly from Metropolitan pipelines and FPUD's water distribution system is not directly able to receive deliveries from the County Water Authority's new storage and treatment facilities, and as a result FPUD's rate payers currently do not receive the full benefit of these County Water Authority's investments; and

WHEREAS, FPUD's mission is to benefit the community of Fallbrook by providing efficient and reliable services and as part of its efforts to fulfill this mission, FPUD seeks to identify opportunities to reduce the cost of providing efficient and reliable services to its ratepayers; and

WHEREAS, to that end FPUD is currently under contract for the construction of the Santa Margarita River Conjunctive Use Project, which after complete will provide FPUD with a local water supply equal to roughly 30 percent of its current total water supply, providing a

buffer from escalating imported water costs and creating an additional shield against the impacts of drought; and

WHEREAS, Eastern Municipal Water District (“Eastern”), located in Riverside County, is a member agency of Metropolitan receiving water supplies from Metropolitan, which water it provides to retail waster service agencies such as cities and special districts in Riverside County; and

WHEREAS, FPUD has evaluated the possibility of annexing to Eastern as a means of obtaining a lower cost supply of reliable water; and

WHEREAS, based on FPUD’s evaluation, the reliability of supplies from Eastern to FPUD in combination with FPUD local supply resources are sufficient to meet FPUD’s needs; and

WHEREAS, Eastern has indicated its support of the possible annexation of FPUD into its boundaries; and

WHEREAS, if FPUD detaches from the County Water Authority, the County Water Authority and its remaining member agencies will realize future savings associated with no longer needing to complete construction of the North County EPS pump stations to serve FPUD and Rainbow Municipal Water District, which project is currently on hold, but is budgeted at \$40 million; and

WHEREAS, if FPUD detaches from the County Water Authority, the reduction in demand from FPUD for water supplies and expanded water facilities will result in benefit the County Water Authority and its remaining member agencies in that it will increase reliability of supplies from County Water Authority in times of drought and reductions in imported water supplies; and

WHEREAS, Board of Directors of FPUD desires to initiate proceedings pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, Division 3, commencing with Section 56000 of the California Government Code for the exclusion/ detachment of FPUD from the County Water Authority and annexation of FPUD into Eastern (the “Reorganization”); and

WHEREAS, the detachment of FPUD from the County Water Authority is expressly permitted and authorized by the County Water Authority Act, specifically Section 45-11; and

WHEREAS, the Riverside Local Agency Formation Commission and the San Diego Local Agency Formation Commission have executed a memorandum of understanding dated October 24, 2019 by which San Diego Local Agency Formation Commission will undertake the processing of any application by FPUD to proceed with the Reorganization; and

WHEREAS, the reasons for the proposed Reorganization are as follows:

1. Due to the combination of rising wholesale water costs and FPUD infrastructure needs, the Reorganization will help stabilize long-term water costs to address affordability and sustainability issues for FPUD for the benefit of its ratepayers.

2. The Reorganization will enable FPUD to better provide water supplies to those within its boundaries undertaking agricultural activities, in support of the local economy.
3. FPUD already obtains its water supplies directly off of Metropolitan's infrastructure instead of off of County Water Authority's infrastructure, which is unique for County Water Authority member agencies but similar to other cities and special districts receiving water supplies from Eastern. Accordingly, the Reorganization requires no modifications to FPUD infrastructure and the water supply from Eastern can be obtained at significantly lower cost.
3. The Reorganization would permit FPUD to cease funding County Water Authority infrastructure throughout the County that it does not need nor use.
4. The Reorganization would benefit the County Water Authority and its remaining member agencies by permitting the County Water Authority to save, in the future, the \$40 million budgeted for completing construction of the North County EPS pump stations to serve FPUD and Rainbow Municipal Water District should Rainbow Municipal Water District also detach.
5. The Reorganization would benefit the County Water Authority and its remaining member agencies because the reduction in demand from FPUD for water supplies and expanded water facilities will result in increased reliability of supplies from County Water Authority in times of drought and reductions in imported water supplies; and

WHEREAS, the Reorganization is supported by the draft Plan for Providing Services required by Government Code section 56653 attached hereto as Exhibit "A," and by this reference incorporated herein; and

WHEREAS, the external boundaries of FPUD, County Water Authority and Eastern are generally depicted in the maps attached hereto as Exhibit "B," and by this reference incorporated herein; and

WHEREAS, FPUD is inhabited; and

WHEREAS, the Reorganization is not a project within the meaning of CEQA because it does not have the potential to result in a direct physical change in the environment or a reasonably foreseeable indirect physical change to the environment (Pub. Res. Code § 21065; CEQA Guidelines § 15378(a).) The Reorganization will not require the construction of any new infrastructure or any changes to the manner in which FPUD receives its water supplies; and

WHEREAS, even if the Reorganization is a "project" within the meaning of CEQA, it is exempt under the Class 20 exemption for changes in the organization of local agencies. (CEQA Guidelines § 15320.) Under section 15320, changes in the organization of local governmental agencies are exempt if the changes do not modify the geographical area in which previously existing powers are exercised. The Reorganization is a change in FPUD's organization structure that does not modify FPUD's service area; and

WHEREAS, even if the Reorganization is a “project” within CEQA’s meaning, it is exempt under State CEQA Guidelines section 15061(b)(3)-Common Sense Exemption as “it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.” The Reorganization will not change the type, intensity, or manner of service that FPUD provides. Further, the Reorganization will not result in construction or other physical alteration of the environment because the Reorganization will not require any new infrastructure or any changes to the manner in which FPUD receives its water supplies. None of the exceptions identified in CEQA Guidelines § 15300.2, which prohibit the use of an exemption, apply here. The Reorganization does not present any unusual circumstances that would create a significant effect on the environment. Further, the Reorganization would not create cumulative impacts, damage scenic resources, be utilized on a hazardous waste site, or impact any historic resources.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Fallbrook Public Utility District as follows:

1. **Recitals.** The forgoing recitals are true and correct and are incorporated herein and are made an operative part of this Resolution of Application.
2. **Proposal.** A proposal is hereby made by FPUD to the San Diego Local Agency Formation Commission for a Reorganization as follows:
 - a. This proposal for the Reorganization is made pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 commencing with Section 56000 of the California Government Code.
 - b. The nature of the proposed Reorganization is detachment of FPUD from the County Water Authority and annexation of FPUD into Eastern.
 - c. FPUD is inhabited.
 - d. The boundaries of the proposal area are described in the legal description, and depicted on the corresponding maps attached hereto as Exhibit “B,” and by this reference incorporated herein.
 - e. The reasons for proposed Reorganization are as follows:
 - i. Due to the combination of rising wholesale water costs and FPUD infrastructure needs, the Reorganization will help stabilize long-term water costs to address affordability and sustainability issues for FPUD for the benefit of its ratepayers.
 - ii. The Reorganization will enable FPUD to better provide water supplies to those within its boundaries undertaking agricultural activities, in support of the local economy.
 - iii. FPUD already obtains its water supplies directly off of Metropolitan’s infrastructure instead of off of County Water Authority’s infrastructure, which is unique for County Water Authority member agencies but similar to other cities and special districts receiving water supplies from

Eastern. Accordingly, the Reorganization requires no modifications to FPUD infrastructure and the water supply from Eastern can be obtained at significantly lower cost.

- iv. The Reorganization would permit FPUD to cease funding County Water Authority infrastructure throughout the County that it does not need nor use.
 - v. The Reorganization would benefit the County Water Authority and its remaining member agencies by permitting the County Water Authority to save, in the future, the \$40 million budgeted for completing construction of the North County EPS pump stations to serve FPUD and Rainbow Municipal Water District should Rainbow Municipal Water District also detach.
 - vi. The Reorganization would benefit the County Water Authority and its remaining member agencies because the reduction in demand from FPUD for water supplies and expanded water facilities will result in increased reliability of supplies from County Water Authority in times of drought and reductions in imported water supplies; and
- g. It is desired by FPUD that the proposed Reorganization provide for and made subject to the following terms and conditions:
- i. Pursuant to the express provisions of the applicable portion of Section 45-11(a)(2) of the County Water Authority Act, establishing the process for detachments from a county water authority, that the portion of the Reorganization involving detachment from the County Water Authority be subject to the following conditions:
 - (1) That the matter of detachment of FPUD from the County Water Authority be submitted to a vote by only the electors of FPUD. (Water Code Appendix Section 45-11 (a)(2).)
 - (2) That to the extent that there is any, that the taxable property to be detached from the County Water Authority, i.e., FPUD, shall continue to be taxable by the County Water Authority for the purpose of paying the bonded and other indebtedness of the County Water Authority outstanding or contracted for at the time of the detachment and until the bonded or other indebtedness has been satisfied. (Water Code Appendix Section 45-11 (a)(2).)
 - (3) That if the taxable property to be detached from the County Water Authority is, at the time of detachment, subject to special taxes levied or to be levied by the County Water Authority pursuant to the terms and conditions previously fixed under Water Code Appendix Section 45-10 (c) or (d) for the annexation of the property to be detached County Water Authority, the taxable property within the excluded area so subject to the special taxes shall continue to be taxable by the County Water

Authority for the purpose of raising the aggregate sums to be raised by the levy of special taxes upon taxable property within the respective annexing areas pursuant to the terms and conditions for the annexation or annexations as so fixed and until the aggregate sums have been so raised by the special tax levies. (Water Code Appendix Section 45-11 (a)(2).)

The full text of Water Code Appendix Section 45-11 (a)(2) is attached hereto as Exhibit "C," and by this reference incorporated herein.

- ii. That upon the effective date of the Reorganization, the County Water Authority shall retain FPUD's share of and interest in any County Water Authority infrastructure.
- iii. That upon the effective date of the Reorganization, that the County Water Authority ceases collection of the Standby Water Availability Charge from the properties within FPUD.
- iv. That upon the effective date of the Reorganization, that Eastern commence collection of its Standby Assessment/Fee from the properties within FPUD.

3. CEQA Compliance.

- a. For all the reasons set forth in the above Recitals, and based upon all of the substantial evidence in the record as a whole, the Board of Directors finds that proposed Reorganization: (1) is not a "project" subject to environmental review under CEQA pursuant to Public Resources Code § 21065 and State CEQA Guidelines § 15378(a); (2) alternatively, is exempt from CEQA under the Class 20 exemption as a "change in organization" (State CEQA Guidelines § 15320); and (3) alternatively, is exempt from CEQA under the "common sense" exemption because it can be seen with certainty that there is no possibility that Reorganization would have a significant effect on the environment. (CEQA Guidelines § 15061(b)(3)); and (4) none of the exceptions to the application of the exemptions exist under State CEQA Guidelines § 15300.2.
- b. The Board of Directors hereby directs that all documents and other materials constituting the record of proceedings related to this Resolution of Application for approval of the power to exercise the Activated Powers, be maintained by the General Manager of the Fallbrook Public Utility District, or his designee, on file at the Fallbrook Public Utility District 990 East Mission Road, Fallbrook, CA 92028.
- c. The Board of Directors directs Staff to file a Notice of Exemption with the County Clerk for the County of San Diego.

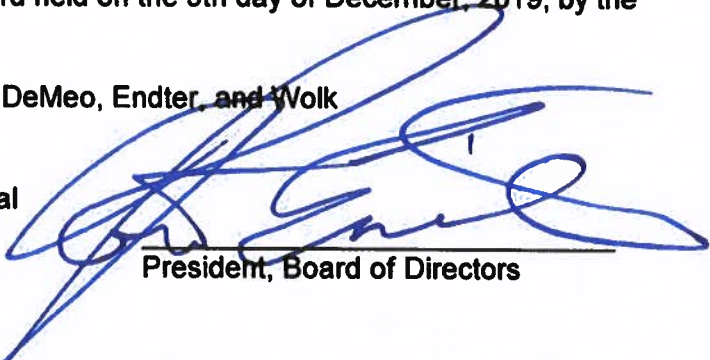
4. Adoption. This Resolution of Application is hereby adopted and approved by the Board of Directors of the Fallbrook Public Utility District and San Diego Local Agency Formation Commission is hereby requested to initiate proceedings as authorized and

in the manner provided by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 for the Reorganization described herein.

5. **Plan for Services.** The Board of Directors directs the Fallbrook General Manager to finalize the draft Plan for Services attached hereto as Exhibit "A," and by this reference incorporated herein.
6. **Submission of Resolution of Application and other Application Materials.** The Board of Directors further authorizes and directs the Fallbrook General Manager to file a certified copy of this Resolution of Application together with the required LAFCO application, finalized Plan for Services, maps, other documents with the Executive Officer of the San Diego Local Agency Formation Commission. The Fallbrook General Manager is further authorized and directed to pay the required application filing fee and to pay such additional sums as may be invoiced from the San Diego Local Agency Formation Commission for services rendered in the processing of the Reorganization application.
7. **Effective Date.** This Resolution shall take effect immediately upon adoption by the Board of Directors of the Fallbrook Public Utility District.

PASSED AND ADOPTED by the Board of Directors of the Fallbrook Public Utility District at a regular meeting of the Board held on the 9th day of December, 2019, by the following vote:

| | |
|-----------------|---|
| AYES: | Directors Baxter, DeMeo, Endter, and Volk |
| NOES: | None |
| ABSTAIN: | None |
| ABSENT: | Director McDougal |



President, Board of Directors

ATTEST:



Secretary, Board of Directors

List of Exhibits:

- Exhibit A: Plan for Providing Services**
- Exhibit B: Maps**
- Exhibit C: Text of County Water Authority Act Section 45-11 (A)(2)**

**EXHIBIT A
PLAN FOR PROVIDING SERVICES**

DRAFT

Fallbrook Public Utility District

Plan for Providing Service

Application for Proposed Reorganization

December 2019

DRAFT

1.0 INTRODUCTION

This document is part of the application for Reorganization from the Fallbrook Public Utility District (FPUD) to the San Diego County Local Agency Formation Commission (“LAFCO”). FPUD is requesting a governmental reorganization consisting of a) the detachment of FPUD from the San Diego County Water Authority (SDCWA) and b) annexation to the Eastern Municipal Water District (EMWD). The plan provides FPUD, LAFCO, affected property owners and voters, and other interested persons with information regarding existing and proposed local government services for the proposed reorganization.

2.0 MUNICIPAL SERVICES

2.1 Description of Service Territory

2.1.1. Fallbrook Public Utility District (FPUD)

History

Fallbrook is an unincorporated community in San Diego County. The first permanent recorded settlement in Fallbrook was in 1869, in the east area of FPUD, which later became Live Oak County Park. While agriculture has always played a major role in the community, the first plantings were olives and citrus. These crops were replaced in the 1920’s by avocados and it wasn’t long before Fallbrook became generally recognized as the “Avocado Capital of the World.”

Fallbrook Public Utility District (FPUD), organized under the provisions of the Public Utility District Act, Public Utilities Code section 15500 et seq., was formed on June 5, 1922 to serve water from local area wells along the San Luis Rey River. Soon after it was established, FPUD began to grow. Annexations into FPUD have expanded the service area from 500 acres to 28,000 acres (44 square miles). To meet the growing demand for water, additional ground water supplies were developed along both the San Luis Rey and Santa Margarita rivers.

FPUD became a member of the San Diego County SDCWA (SDCWA) at its formation on June 9, 1944, and thus was eligible to receive a portion of Colorado River water that would be diverted by the Metropolitan Water District of Southern California (MWD). When Colorado River water became available in 1948, consumption within FPUD gradually increased to approximately 10,000 acre-feet per year by 1959. Then in 1978, MWD augmented its supply system with water from the California State Water Project and began delivering water from both systems to San Diego County. Today, virtually all of FPUD’s water supplies are from the Colorado River and California State Water Project.

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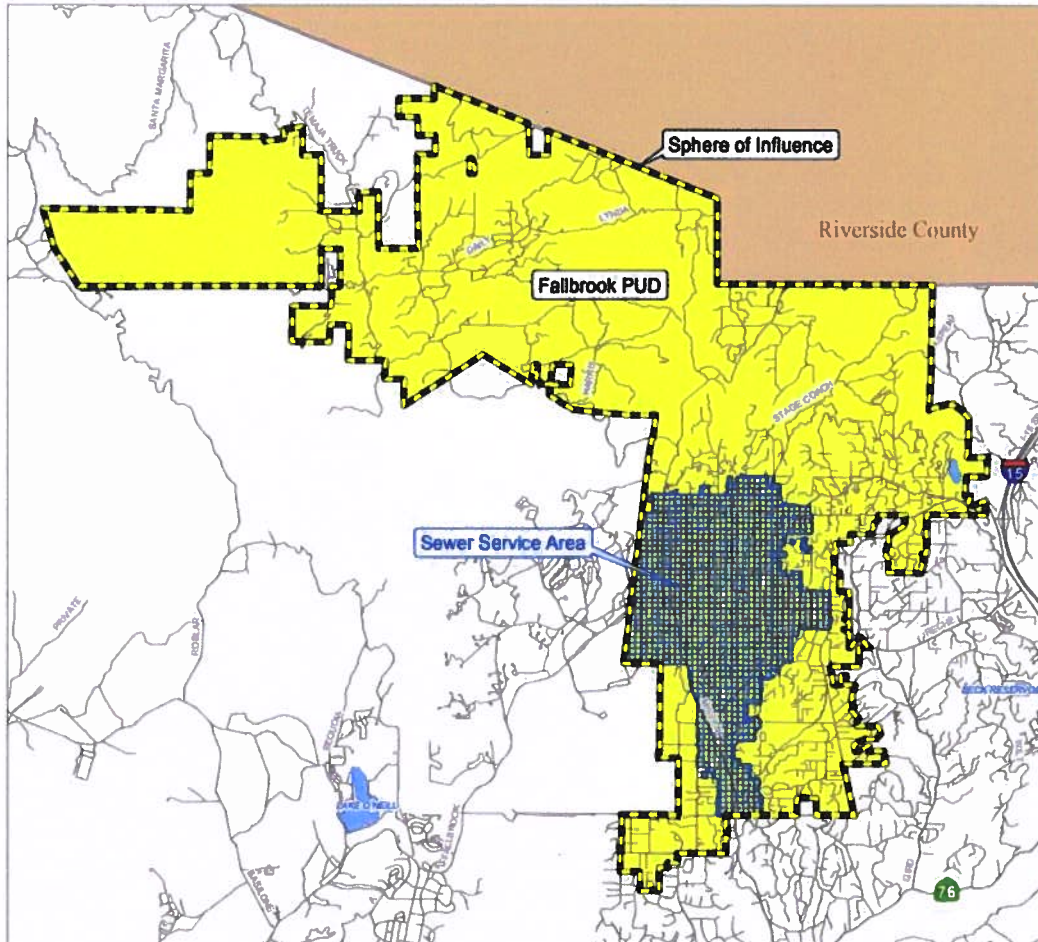
FPUD's scope of operations grew in the 1990's with both the 1990 dissolution of the DeLuz Heights Municipal Water District and annexation of its 12,000-acre service area to FPUD, and the 1994 dissolution of Fallbrook Sanitary District, which was located entirely within FPUD's boundaries. The Sanitary District had provided parts of Fallbrook with recycled water and wastewater service within a 4,200 acre area of downtown. FPUD took over those services, and the same year the playing fields at Fallbrook High School started receiving reclaimed water as its source of irrigation water. So did two new large nurseries. For the next ten years, FPUD's Reclamation Plant (Plant) began receiving a series of awards for safety in operations. In 2015, FPUD completed a major overhaul, upgrade and expansion of the Plant. The \$27 million project took three years to complete, replacing aged and aging equipment, and allowed for a substantial expansion of FPUD's recycled water distribution system. The overhaul involved upgrades to the existing Plant to improve reliability in operation and created much-needed storage space for recycled water.

FPUD provides residents, businesses and agricultural customers with full-service water, wastewater and recycled water services within all or part of its boundaries. **Figure 1** shows FPUD's service area and boundaries.

Because of its geographic location, FPUD is unique and mostly independent of the SDCWA Aqueduct system, its reservoirs and its water treatment plant. Almost all of FPUD's water is treated and delivered through MWD owned facilities. Although FPUD pays SDCWA for emergency water service, due to the lack of regional SDCWA infrastructure directly to FPUD, it cannot physically receive deliveries from SDCWA to serve the vast majority of it's service area in a catastrophic emergency or in the event of an extended SDCWA shutdown for repair.

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FIGURE 1—FPUD Service Area



Governance and Organizational Structure

FPUD is governed by a 5-member Board of Directors who serve staggered 4-year terms. Each Director is elected by the registered voters of the subdistrict in which he or she resides. Previous to 2016 FPUD's Board of Directors were elected as at-large representatives. Legislation passed in 2016 allows FPUD to elect its directors by subdistrict. To run for office, a candidate must be a resident and qualified elector of the subdistrict they are running to represent. FPUD is administered by 68 Full Time employees organized by functional departments. The General Manager of FPUD is Jack Bebee, P.E.

Service Area and Local Economy

DRAFT

Currently, FPUD serves an area of 28,000 acres. Approximately 40% of the annual water deliveries are for agricultural use. This number is significantly lower than in prior years. The remainder is for municipal, residential and industrial uses. Total growth in population over the past 20 years has been about 24%, or about 1.6% annually. It increased from a population of 28,200 in 1995 to a population of 33,476 in 2015. Annual water consumption increased to a high of 19,597 acre-feet/year in 2007, then decreased to 9,000 in 2018 with a projection of even lower sales in 2019. This decrease in water consumption was due to the drought, water use restrictions placed on customers, as well as the increased cost of water.

As an unincorporated area of San Diego County, land use authority for Fallbrook resides with the County Board of Supervisors. The Fallbrook Community Plan (FCP), which is part of the County of San Diego General Plan, was adopted on Dec. 31, 1974 by the Board of Supervisors and updated in November 2015. The FCP did not project land use for intermediate future years but rather produced an ultimate land-use plan. While the Community Plan specifies land use, it does not constitute zoning. All future zoning is legally required to be consistent with the adopted community goals and objectives presented in the FCP.

The following general goal has been adopted in the FCP:

"Perpetuate the existing rural charm and village atmosphere while accommodating growth in such a manner that it will complement and not sacrifice the environment of our rustic, agriculturally oriented community."

The FCP attempts to fulfill this goal by limiting future multiple-use and high-density development to the designated town center and is referred to in the County General Plan as a "Country Town." Land outside the designated town center, extending to the community's boundaries, is intended for agricultural uses and rural, residential development and has parcel size limits of 1, 2, 4 or 8 acres, depending on topography and steepness of the land. Most population increase is occurring within the Country Town as land is developed into subdivisions and apartment units. Outside the Country Town land subdivision has been occurring gradually as 40- and 80-acre parcels are split up over many years down to the permissible minimum size of 2 or 4 acres. Based on the updated General Plan, larger parcels further from roads and utilities may be limited to minimum lot sizes, much larger than 2 to 4 acres.

Agricultural land use has been undergoing a gradual change from primarily avocados and citrus to a mixture of crops including other subtropical fruit and nut orchards such as macadamias, persimmons, kiwis, cherimoyas, grapes, dragon fruit, etc. In addition, ornamental flowers and commercial nurseries are increasing in prominence and will tend to preserve the agricultural orientation of the community. Decreases in agriculture, due to increasing water cost as well as development, are expected to remain close to the historic long-term trend.

2.1.2 San Diego County Water Authority (SDCWA)

History

DRAFT

SDCWA was established pursuant to legislation adopted by the California State Legislature in 1943 (County Water Authority Act) to provide a supplemental supply of water as the San Diego region's civilian and military population expanded to meet wartime activities. Because of the strong military presence, the federal government arranged for supplemental supplies from the Colorado River in the 1940s. In 1947, water began to be imported from the Colorado River via a single pipeline that connected to MWD's Colorado River Aqueduct located in Riverside County. To meet the water demand for a growing population and economy, SDCWA constructed four additional pipelines between the 1950s and early 1980s that are all connected to MWD's distribution system and deliver water to San Diego County. SDCWA is now the county's predominant source of wholesale water, supplying from 75% to 95% of the region's wholesale water needs depending upon weather conditions and yield from local surface, recycled, and groundwater resources and projects.

Governance & Organizational Structure

The decision-making body of SDCWA is its 36-member Board of Directors. Each of the 24 member agencies of SDCWA has at least one representative on the SDCWA Board of Directors. Member agencies may appoint one additional representative for each additional 5% of total assessed value of property taxable by the CWA for purposes within the public agency's boundaries. As a result, FPUD is entitled to representation by 1 director. The City of San Diego, the largest member agency in terms of assessed value is entitled to 10 Directors.

Under the CWA Act, a member agency's vote is based on its "total financial contribution" to the CWA since the CWA's organization in 1944. Total financial contribution includes all amounts paid in taxes, assessments, fees, and charges to or on behalf of SDCWA or MWD. The CWA Act authorizes each CWA Board of Directors member to cast one vote for each \$5,000,000, or major fractional part thereof, of the total financial contribution paid by the member agency. Based on this formula, FPUD is entitled to 2.32% of the total vote in Calendar Year 2019. For comparison purposes the City of San Diego is entitled to 39.81% of the total vote in calendar year 2018. The four largest urban water agencies (City of San Diego, City of Oceanside, Helix Water District and Otay Water District) have a combined vote total over 58% in calendar year 2018.

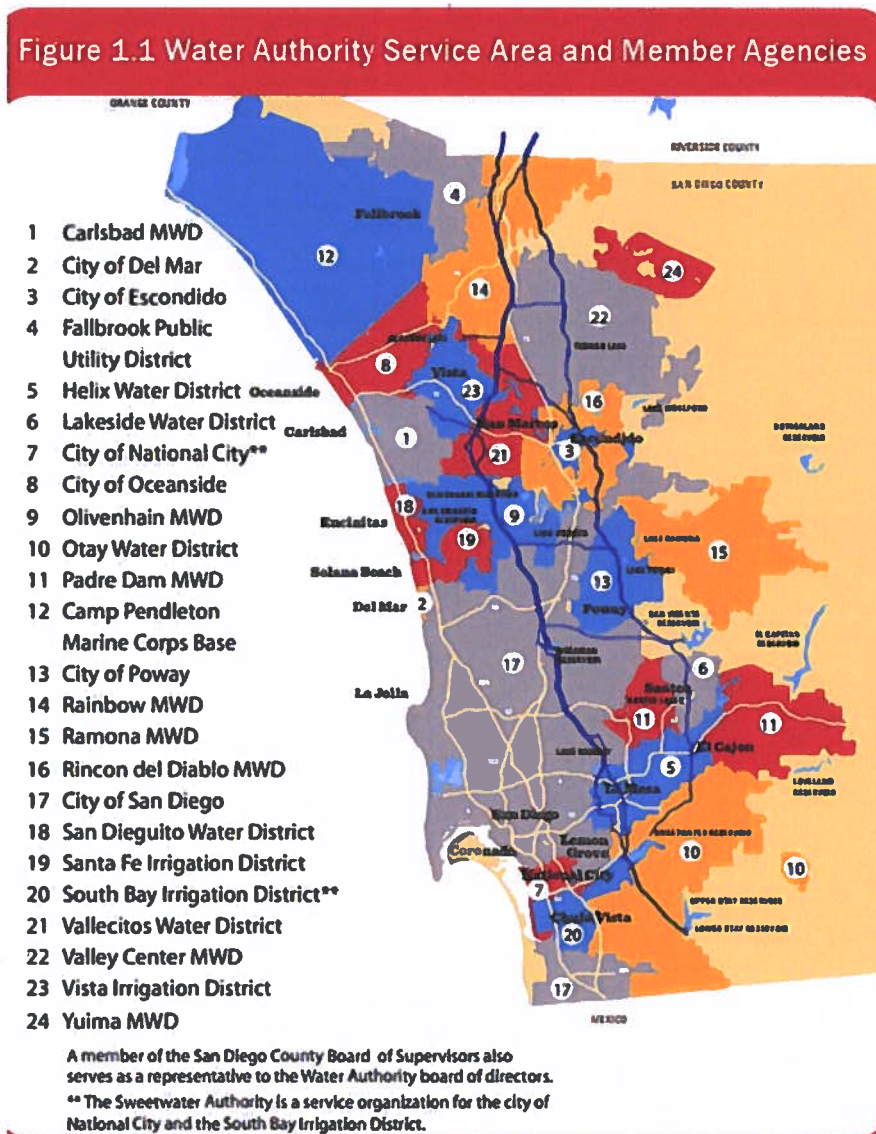
Service Area and Local Economy

SDCWA's boundaries extend from the border with Mexico in the south, to Orange and Riverside counties in the north, and from the Pacific Ocean to the foothills that terminate the coastal plain in the east. With a total of 951,000 acres (1,486 square miles), SDCWA's service area encompasses the western third of San Diego County. **Figure 2** shows SDCWA's service area, its member agencies, and aqueducts (shown as blue lines). SDCWA's 24 member agencies purchase water from SDCWA for retail distribution within their service territories. The member agencies (six cities, five water districts, eight municipal water districts, three irrigation districts, a public utility district, and a federal military reservation) have diverse and varying water needs.

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In terms of land area, the City of San Diego is the largest member agency with 210,726 acres. The smallest is the City of Del Mar, with 1,159 acres. Some member agencies, such as the cities of National City and Del Mar, use water almost entirely for municipal and industrial purposes. Others, including Valley Center, Rainbow, and Yuima Municipal Water Districts, deliver water that is used mostly for agricultural production.

FIGURE 2 –SDCWA Service Area and Member Agencies



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Facilities

Imported water supplies from MWD are delivered to SDCWA member agencies through a system of large-diameter pipelines, pumping stations, and reservoirs. The pipelines deliver supplies from MWD are divided into two aqueduct alignments, both of which originate at Lake Skinner in southern Riverside County and run in a north to south direction through the SDCWA service area. MWD's ownership of these pipelines extends to a "delivery point" six miles into San Diego County. From there, Pipelines 1 and 2 comprise the First San Diego Aqueduct, which reaches from the delivery point to the San Vicente Reservoir. Pipelines 3, 4, and 5 from the Second San Diego Aqueduct. These pipelines are located several miles to the west of the First San Diego Aqueduct.

Storage facilities are used by SDCWA to both manage daily operations and provide reserves for seasonal, drought, and emergency storage needs. SDCWA seasonal, drought, and emergency storage capacity currently includes 234,000 AF of in-region surface water. In addition to the Twin Oaks Valley WTP, SDCWA entered into an agreement with the Helix Water District to purchase 36 MGD of treatment capacity from the R.M. Levy WTP. Water from the Levy plant supplements treated water service to eastern San Diego County, storage and 70,000 AF of out of region leased groundwater storage in the San Joaquin Valley.

Economy

SDCWA's service area characteristics have undergone significant changes over the last several decades. Driven by an average annual population increase of 50,000 people per year, large swaths of rural land were shifted to urban uses to accommodate the growth in population. This shift in land use has resulted in the region's prominent urban and suburban character. San Diego County also has a rich history of agriculture, beginning with the large cattle ranches established in the 18th century and continuing through the diverse range of crops and products grown today. Although the total number of agricultural acres under production has declined, the region maintains a significant number of high value crops, such as cut-flowers, ornamental trees and shrubs, nursery plants, avocados, and citrus. Based on the 2009 Crop Statistics and Annual Report by the San Diego County Department of Agricultural Weights and Measures, the region has 6,687 farms—more than any other county in the nation. San Diego County agriculture is a \$1.5 billion dollar per year industry, and ranks first in the state in gross value of agricultural production for flowers, foliage, and nursery products.

Today, San Diego boasts an economy that is not dominated by any one sector; in fact, no sector accounts for more than 15% of the regional economy. Several sectors are "economic drivers," specifically tourism, the military, and the "innovation" sector, which together make up a third of the regional economy. Tourism is an obvious strength, due in part to the weather, the beaches, the San Diego Zoo, and the Convention Center. The military is pivoting toward Asia and has committed to San Diego, as have many military contractors, like General Dynamics (makers of the Predator drone) and ViaSat (satellite communications leaders). Moreover, innovation will continue to drive San Diego's economy, with forward-looking technologies with massive growth potential from companies like QUALCOMM (pioneers in mobile phone technology), Illumina

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(revolutionized DNA sequencing with tremendous potential to improve healthcare and quality of life), and ESET (cybersecurity experts). San Diego also fares well in industries like healthcare, education, and a lean government sector. These sectors are generally population-driven—they rise in tandem with population—and, like the economic driver sectors, have proven through the Great Recession to be less affected by economic cycles. In sum, “recession-resilient” sectors account for over 60% of the San Diego economy.

2.1.3 Eastern Municipal Water District (EMWD)

History

EMWD is a public water agency formed in 1950 by popular vote. In 1951, it was annexed into the MWD and gained access to a supply of imported water from the Colorado River Aqueduct. When EMWD was formed in 1950 it was a small agency, primarily serving agricultural customers. Since then, potable water use in EMWD’s service area has shifted from primarily agricultural to urban use. The reduction in agricultural demand has two major causes: rural farmland has been transformed to urban housing, and most remaining agricultural demands have been shifted to the recycled water system. EMWD is organized under the provisions of the Municipal Water Law of 1911, Water Code section 71000 et seq.

Today, EMWD remains one of MWD’s 26 member agencies and receives water from Northern California through the State Water Project (SWP) in addition to deliveries through the Colorado River Aqueduct. EMWD’s initial mission was to deliver imported water to supplement local groundwater for a small, mostly agricultural, community. Over time, EMWD’s list of services has evolved to include groundwater production, desalination, water filtration, wastewater collection and treatment, and regional water recycling. EMWD provides both retail and wholesale water service covering a total population of over 750,000. EMWD’s mission is “to provide safe and reliable water and wastewater management services to our community in an economical, efficient, and responsible manner, now and in the future.”

Governance and Organizational Structure

EMWD is governed by a 5-member Board of Directors who serve staggered 4-year terms, representing the district division they were elected to represent. As a member agency of MWD, EMWD also has a member appointed to the MWD Board.

Service Area and Local Economy

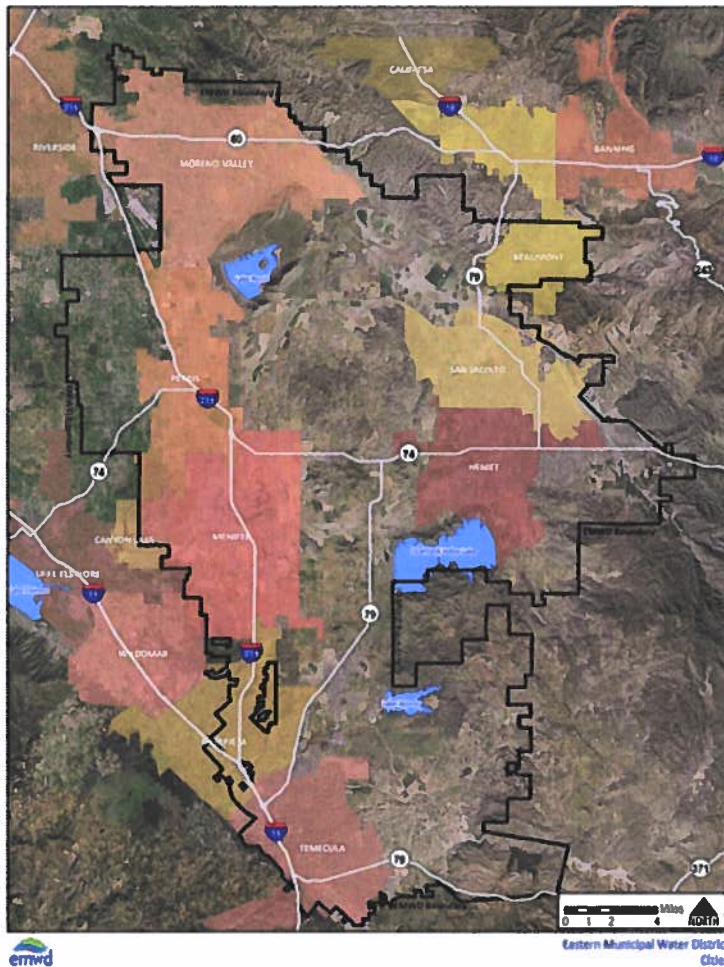
EMWD is located in western Riverside County, approximately 75 miles east of Los Angeles. (Figure 3.) EMWD provides potable water, recycled water, and wastewater services to an area of

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approximately 555 square miles in western Riverside County. The 555 square mile service area includes seven incorporated cities in addition to unincorporated areas in the County of Riverside.

FIGURE 3—EMWD Service Area

Figure 3-1: Areas Within EMWD Boundaries



EMWD is both a retail and wholesale agency, serving a retail population of 546,146 people and a wholesale population of 215,075 people. The agency was initially formed in 1950 to bring imported water to the area and in 1951 was annexed into the MWD. EMWD is now one of MWD's 26 member agencies.

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Facilities

The majority of EMWD's supplies are imported water purchased through MWD from the State Water Project (SWP) and the Colorado River Aqueduct. Imported water is delivered to EMWD either as potable water treated by MWD, or as raw water that EMWD can either treat at one of its two local filtration plants or deliver as raw water for non-potable uses. EMWD's local supplies include groundwater, desalinated groundwater, and recycled water. Groundwater is pumped from the Hemet/San Jacinto and West San Jacinto areas of the San Jacinto Groundwater Basin. Groundwater in portions of the West San Jacinto Basin is high in salinity and requires desalination for potable use. EMWD owns and operates two desalination plants that convert brackish groundwater from the West San Jacinto Basin into potable water. EMWD also owns, operates, and maintains its own recycled water system that consists of four Regional Water Reclamation Facilities and several storage ponds spread throughout EMWD's service area that are all connected through the recycled water system. As of 2014, EMWD has used 100% of the recycled water it produces.

As stated above, since its formation as a water agency, EMWD has shifted from primarily serving agricultural uses to primarily serving urban uses. Today, EMWD's retail customers are mostly residential, with other uses consisting of commercial, industrial, institutional, landscape and agricultural. In addition to retail potable water demand, EMWD delivers water to seven wholesale customer agencies.

Economy

As the population within EMWD's service area continues to grow, the characteristics of the service area are continually changing. Tract homes, commercial centers and new industrial warehouses are replacing areas of agriculture and vacant land. Over the next 25 years, EMWD's total population is projected to grow by over 500,000 people, a 67% increase over the current population.

As part of the broader Inland Empire Southern Riverside county's economy reflects strong sectors in logistics, construction, health care, manufacturing, professional, management & scientific, and finance, insurance and real estate. Construction has historically been the major driver of the economy given its undeveloped land and Southern California's need for single family homes, apartments, industrial facilities, and infrastructure. Health Care firms are expanding in the Inland Empire. These same economic sectors are reflected within EMWD's service area. Much of the service area is characterized by being above the national average in median household income.

EMWD has a history of boom and bust development cycles. From the mid- 1980's to 1990's, population growth in EMWD routinely exceeded 10% per year. In the early 1990's, growth slowed during an economic recession. During the late 1990's, growth began to steadily increase, and the first five years of the 2000's again brought accelerated population growth to the area. Growth within EMWD's service area reached its peak rate in 2005, but then there was a major decline in housing development and growth slowed again. Starting in 2006 EMWD saw a sharp decline in

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the number of new connections added, reaching a low point in 2010. Since 2010, new connections have slowly been increasing; but they remain well below the peak levels of new development seen in the early 2000's.

2.2 Existing Service Providers and Service Provider after Reorganization

Table 1 provides the current public services provider for the FPUD service area and the responsible public service provider if LAFCO's approved the reorganization.

Table 1—Summary of Municipal Services

| <u>Municipal Service</u> | <u>Current Provider</u> | <u>Provider After Reorganization</u> |
|--|--|---|
| Wastewater Collection and Treatment | Fallbrook Public Utility District | Fallbrook Public Utility District |
| Water Service | Fallbrook Public Utility District <i>*Imported Water from SDCWA</i> | Fallbrook Public Utility District <i>*Imported Water from EMWD</i> |
| Recycled Water | Fallbrook Public Utility District | Fallbrook Public Utility District |

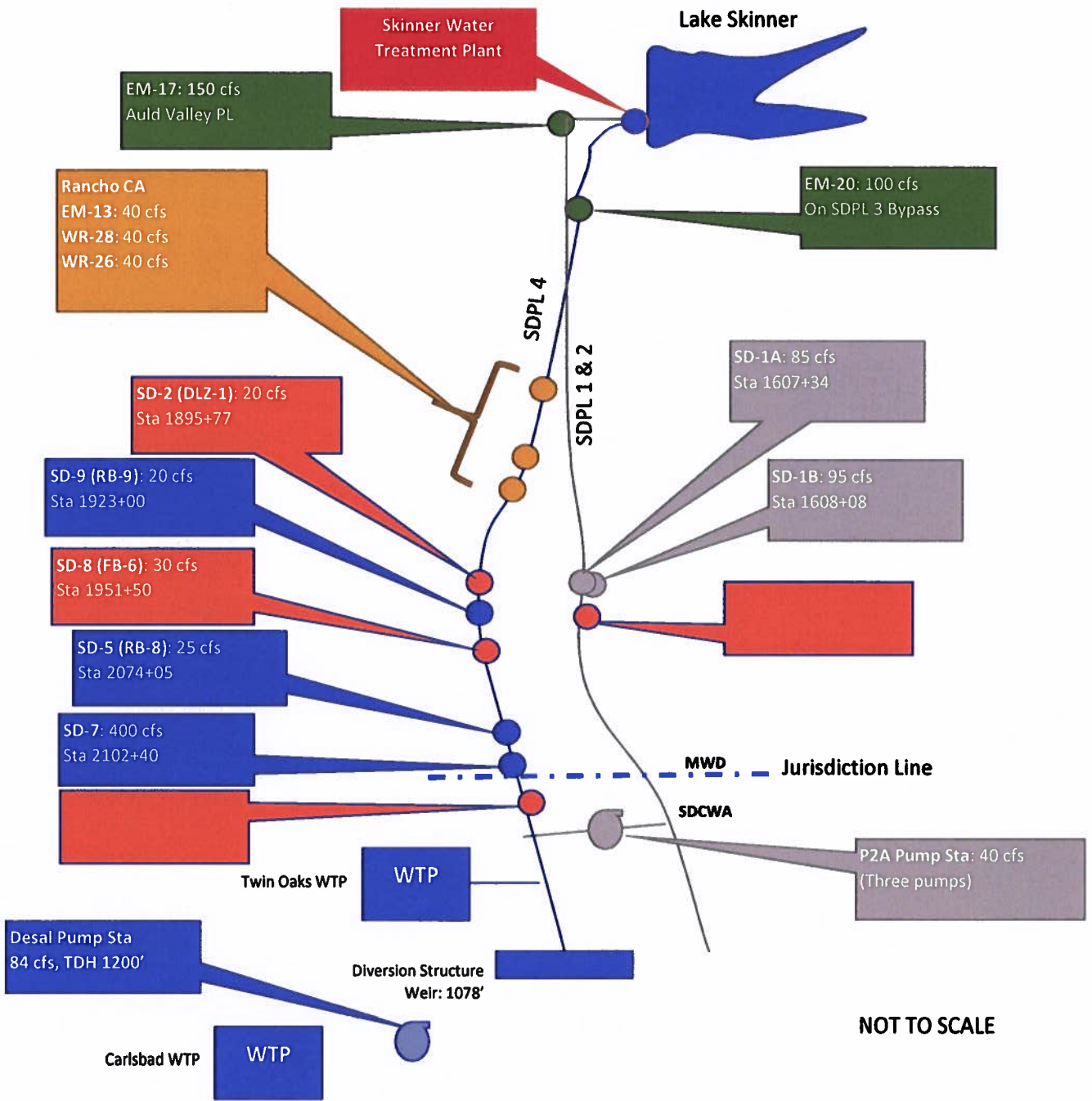
2.2.1 Level and Range of Services To Be Provided

Imported Water

FPUD imports 99% of its potable water from SDCWA with the remaining 1% coming from a local well. FPUD has four connections to SDCWA's system. **Figure 4** provides a schematic of how imported water is delivered to FPUD. Three of these connections are to pipelines owned by the MWD and one connection is to a pipeline owned by SDCWA. SDCWA currently purchases treated water from MWD that is treated at the Skinner Water Treatment Plant (WTP) and delivered to FPUD's connections. With approval of the reorganization, imported water treated at Skinner WTP will continue to be delivered to the same FPUD connections with no physical or operational changes necessary. FPUD does currently have the ability to take deliveries to occur on one connection it has to SDCWA owned pipeline, but FPUD has recently determined that continued deliveries through this connection are not necessary and FPUD will stop taking deliveries on this connection. Because there are no physical or operational change in the delivery of imported water to FPUD under reorganization there are no facilities to be built by EMWD or FPUD to begin service at the same level as today.

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FIGURE 4—How FPUD Receives Water Deliveries



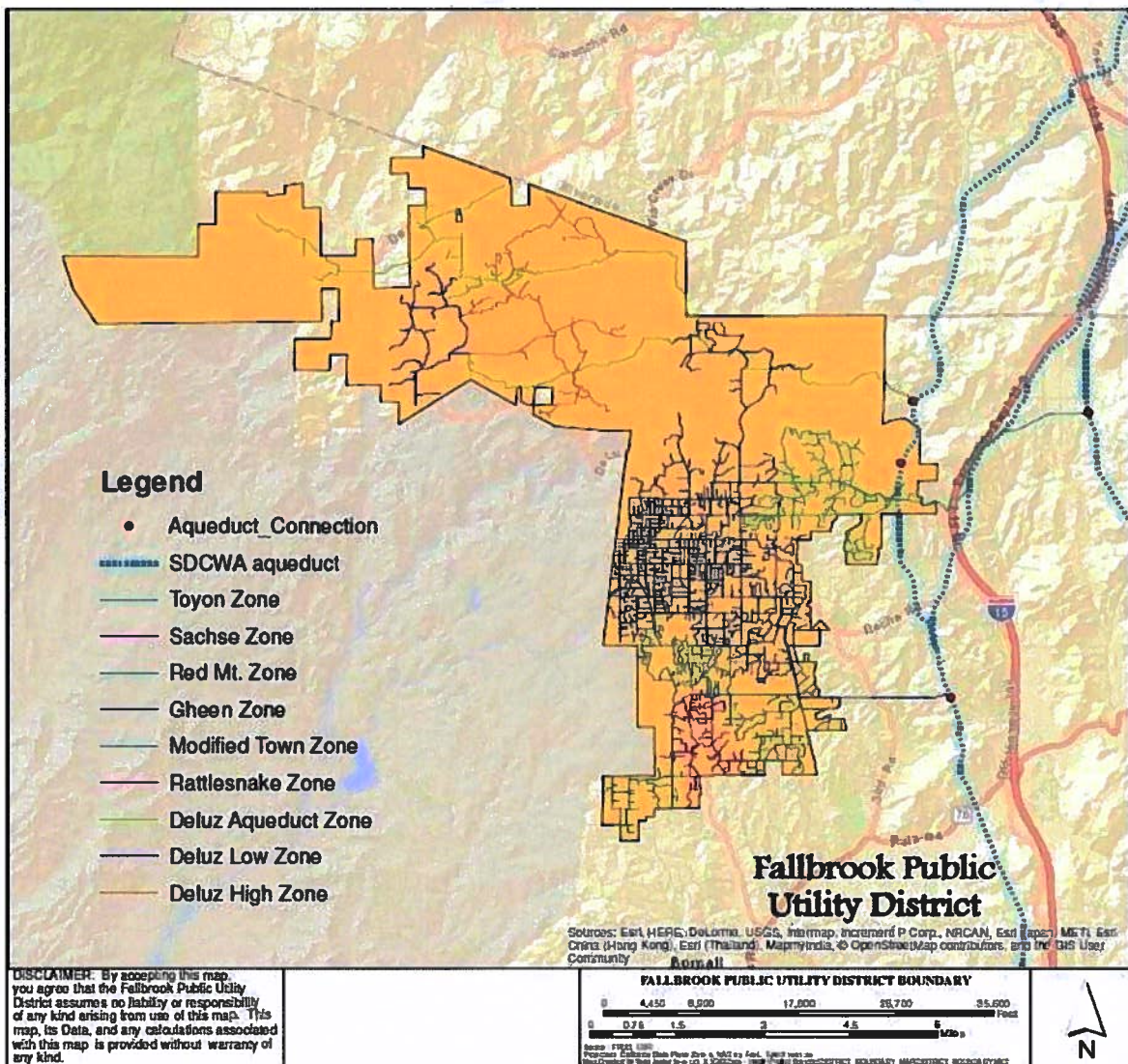
NOT TO SCALE

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Retail Water Distribution

FPUD's water distribution system (Figure 5) is comprised of 270 miles of pipeline, 6,800 valves, an ultraviolet disinfection water treatment plant, nine steel reservoirs, a 300-million-gallon treated water reservoir, five pump stations and plans for a groundwater treatment plant. District staff operates the system, and conduct all system maintenance and repairs. FPUD is in the middle of an Advanced Metering Infrastructure (AMI) system upgrade that will enable real-time meter reading and provide customers with real-time water use. Reorganization will not result in any changes to retail water distribution in FPUD's service area.

FIGURE 5—FPUD Water Distribution System



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FPUD Local Water Supply

FPUD also recently signed an agreement with U.S. Marine Corps Base Camp Pendleton to share local water in the Santa Margarita River, of the SMRCUP. The river is expected to provide 30%-40% of FPUD's total water needs, reducing reliance on imported water. Construction of a bi-directional pipeline and groundwater treatment plant is expected to begin in the Fall of 2019 and be operational by 2023. These construction activities and the provision of a new, more reliable water supply will occur as planned under annexation to EMWD which will not affect the provision or cost of this service to District customers.

FPUD's five-year average annual water sales is 10,375 acre-feet. Residential and commercial customers represent 59% of sales, and agricultural customers make up the remaining 41%. FPUD's historic sales trend is down due to improved water efficiency for both residential and commercial indoor and outdoor use, combined with sharp decreases in agricultural water demands. The decrease in agricultural water demands is due to drought restrictions and the increases in water costs over the last decade driven by a sharp rise in the cost of the water we purchase. FPUD's agricultural water sales have reduced from 7,000 acre-feet in Fiscal Year 2008 to 3,200 in Fiscal Year 2017.

No Change In Water Operations

Since there is no change in service boundaries or inclusion of additional territory, FPUD will be able to continue to serve its customers in the same manner if the reorganization is approved. Reorganization approval will not result in the need for any additional infrastructure that would not otherwise be needed if reorganization were not approved and FPUD remained a member of SDCWA.

Other Services

Certain services provided by SDCWA to FPUD will be provided under similar circumstances by EMWD. These include current MWD funded water conservation programs available to FPUD customers under similar conditions as currently provided. Commercial, Multi-Family and Residential rebate programs similarly available as a member agency of SDCWA would be available to FPUD customers under membership in EMWD. Similar to SDCWA, EMWD provides supplement to MWD funding for water conservation programs to its member agencies.

EMWD does not offer agricultural customers a discount water program in exchange for lesser reliability equivalent to SDCWA's Transitional Special Agricultural Water (TSAWR) Program. The SDCWA Board recently took actions to move towards making TSAWR into a Special Agricultural Water Rate Program (SAWR) and allowing new customers to qualify for the program. In exchange for a lesser level of reliability in a water shortage commercial agricultural customers participating in the TSAWR receive a substantial discount on the price of water purchased from SDCWA. However, EMWD has proposed a nominal wholesale charge or mark up to the cost of

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MWD water that results in a lower cost to FPUD customers than SDCWA’s TSAWR. **Table 2** compares the different calendar year 2020 SDCWA water rates (TSAWR and Full Service (FS)) to those proposed by EMWD.

Table 2—2020 SDCWA TSAWR, Full Service M&I and Potential EMWD Charges

| <i>Rate</i> | <i>TSAWR</i> | <i>SDCWA FS</i> | <i>EMWD</i> |
|--|--------------|-----------------|-------------|
| <i>Treated</i> | \$1,231 | \$1,686 | \$1,078 |
| <i>RTS</i> | 28 | 28 | 82 |
| <i>CC</i> | 24 | 24 | 24 |
| <i>IAC</i> | 43 | 43 | 0 |
| <i>EMWD</i> | | | 11 |
| <i>Total</i> | \$1,326 | \$1,781 | \$1,195 |
| <i>Rate Differential From SDCWA FS</i> | (\$455/AF) | | (\$586/AF) |

Source :SDCWA and MWD websites

Note: IAC is converted to \$ per AF based on FPUD/RMWD 2020 shares divided by FPUD/RMWD 3 year average of SDCWA deliveries

MWD RTS is based on FPUD and RMWD 2020 shares divided by FPUD and RMWD 10 year deliveries

MWD CC is based on FPUD and RMWD actual 2020 shares divided by FPUD RMWD 3 year average

Stand-By Availability charge is considered equivalent regardless of membership and not shown

Reliability

In contrast to SDCWA, EMWD is both a retail and wholesale water supplier. As a retailer, approximately 50% of EMWD’s supplies consist of local groundwater and recycled water. The remainder are deliveries of imported water from MWD. As a wholesale water supplier EMWD delivers only imported water from MWD. In terms of delivery of water to FPUD, EMWD would act in its wholesale capacity and take delivery of MWD water in the same manner as SDCWA and FPUD would receive delivery of water from EMWD in the same manner as it receives deliveries of wholesale water from SDCWA. While the method of deliver is exactly the same, there are some potential changes in the overall reliability of the imported water supplies from EMWD versus SDCWA during cutbacks that are described in more detail below.

Over the last 25 years SDCWA as a wholesale water supplier, and many of its retail member agencies, have been successfully diversifying the region’s water supply portfolio by developing local recycled water, groundwater and seawater desalination supplies. SDCWA has also invested in surface water storage and out-of-region groundwater storage to improve reliability in both drought related and catastrophic emergencies. Because of the success of supply diversification and the significant reduction in water demand through conservation, SDCWA’s dependence on imported water from MWD has been reduced and the reliability of its service area has substantially

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improved in the last two drought as compared to the maximum of 32% combined agricultural and non-agricultural shortages SDCWA experienced in 1991-1992 prior to the region's diversification program. The more reliable local supplies available to MWD member agencies, the less reliant they are on MWD imported water supplies in a drought induced shortage, and the higher the agencies level of reliability.

As noted previously, FPUD's TSAWR customers receive a lesser level of reliability in exchange for discounted water from SDCWA. TSAWR customers reliability in a shortage is set at the level of reliability and cutbacks that MWD places on its member agencies. TSAWR customers do not benefit from the reliability investments made through SDCWA's diversification and Carryover Storage Program. If the reorganization is approved FPUD's current TSAWR customers would not benefit from EMWD's local supplies or groundwater storage programs and would similarly be subject to a pass-through of MWD cutbacks.

The benefits of SDCWA's diversification program are realized by FPUD's non TSAWR customers (also referred to as Municipal & Industrial or M&I) in higher levels of reliability during drought related shortages. However, MWD and its member agencies (including SDCWA) have also made significant investments in reliability over the last 25 years and will continue to do so. Local supply development and water conservation has reduced demand on MWD for imported water by just over half of its peak demand. That result along with MWD investments in in-region and out-of-region storage has significantly bolstered its ability to withstand multiyear droughts at cutback levels much lower than 20% experienced by MWD M&I customers in the peak cutback year of 1991. Although MWD planning documents anticipate that it will not experience cutbacks if its assumptions on local and imported supplies are fulfilled, they have experienced two rounds of cutbacks within the last 10 years. Both instances (2010-2011 and 2015-2016) resulted in a maximum cutback level of 15%.

A comparative analysis, which follows, was conducted to estimate the reliability and cutback level FPUD would experience in shortage similar to the maximum cutback of 15% from MWD initiated in the last two droughts. In this analysis it is assumed that FPUD has fully implemented the SMR CUP currently under construction. Both SDCWA and MWD have detailed computer models that calculate member agency allocations including the various adjustments for highly reliable local supplies, extraordinary conservation and population growth used by both agencies. The final allocations to an individual member agency consider what other member agencies supplies and demands are in the allocation year. The analysis contained below uses simplified assumptions based on the allocation methodologies and supply and demand amounts contained in the most recent UWMPs for 2030. (Table 3.)

The analysis is for a single dry year in a prolonged multi-year drought event. The range includes whether SDCWA has carryover storage supplies and in circumstances where it has exhausted those supplies. Shortages under EMWD reduce available MWD supplies by the level of the overall MWD cutback and does not attempt to apply any adjustments to EMWD that may result in it receiving a higher allocation. The analysis also assumes EMWD does not provide FPUD any of its local or stored water supplies. For more accurate estimates of what FPUD's shortage allocation would be it would be necessary to request that SDCWA and potentially MWD run their allocation

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models. A more complete report was prepared for Rainbow Municipal Water District, providing much of the background on SDCWA and MWD reliability planning for the assessment of water reliability that applies also to FPUD. (See **Attachment A - Analysis of RMWD Water Supply Reliability** November 2019.)

Table 3—Reliability Analysis Summary

| FPUD Reliability Single Dry Year 2030 | | | | | |
|--|------------------------|--------------|----------------------|-------------------------|-------------|
| 15% MWD Cutback | | | | | |
| | M&I Cutback | | TSAWR Cutback | Combined Cutback | |
| | Low* | High* | | Low | High |
| SDCWA | 0% | 4% | 15% | 3% | 8% |
| EMWD | 10% | | 10% | 10% | |

*** Range is based on use of Carryover Storage supplies and allocation under MWD Water Shortage Allocation Plant (WSAP) or Preferential Rights**

Although the above reliability analysis supports that the overall range in reliability is better under SDCWA, FPUD believes the differences in the severity of the shortage will not have a significant impact given the rural characteristics of the District’s service area and ability to encourage reduced outdoor water use to achieve the cutback target. FPUD benefits from both improved MWD reliability through local supply development and reduced demand on MWD and its own groundwater conjunctive use project. The range of shortages indicated above are well within the historic shortages managed by FPUD without economic harm to its customers. Article 26 of FPUD’s Administrative Code provides the detailed actions FPUD takes in a water shortage. Additionally, the State of California through the Urban Water Management Planning Act (Water Code Section §10610 et seq.) requires preparation of a Shortage Contingency Plan. The Shortage Contingency Plan identifies the stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50% reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage.

Managing a Water Shortage

In SDCWA’s 2008 Model Drought Response Ordinance provided to its member agencies for regional consistency in drought management, SDCWA established an up to 10% conservation target considered to be a voluntary stage prior to imposing mandatory restrictions. This is reflected in FPUD’s Administrative Code Article 26 and its UWMP Shortage Contingency Plan.

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Table 11-2. Correlation between WSDRP Stages and Model Drought Ordinance Levels

| WSDRP STAGE | DROUGHT RESPONSE LEVEL | USE RESTRICTIONS | CONSERVATION TARGET |
|---|------------------------|------------------|---------------------|
| Voluntary (Stage I) | 1 - Drought Watch | Voluntary | Up to 10% |
| Supply Enhancement (Stage II) | 1 - Drought Watch | Voluntary | Up to 10% |
| | 2 - Drought Alert | Mandatory | Up to 20% |
| Mandatory Supply Cutback (Stage III) | 2 - Drought Alert | Mandatory | Up to 20% |
| | 3 - Drought Critical | Mandatory | Up to 40% |
| | 4 - Drought Emergency | Mandatory | Above 40%+ |

Source: SDCWA Urban Water Management Plan

Although a 10% shortage has resulted in mandatory water use restrictions in previous droughts. Achieving that goal is considered very manageable by most water suppliers. Because FPUD residential customers typically have larger lot sizes that are irrigated a reduction in 10% has been achievable and surpassed in the recent past. A 10% reduction in water use by commercial agricultural customers has also been achievable and is less than those customers would experience under continued participation in TSAWR in a similar 15% MWD cutback.

During the most recent drought, the State of California imposed an Emergency Conservation Regulation that required reduced water use over what was necessary given available MWD and SDCWA supplies. Below (Table 4) is an excerpt from an FPUD Water Supplier monthly report to the state of California addressing FPUD’s performance during implementation of the Emergency Regulation. It compares monthly water use for the summer of 2015 at the height of the last drought and imposition of the most severe restrictions with pre-drought water use for the same months in 2013.

Table 4—FPUD Water Use Report (2015)

| Supplier Name | Stage Invoked | Mandatory Restrictions | Reporting Month | REPORTED Total Monthly Potable Water Production | REPORTED Total Monthly Potable Water Production 2013 | Reduction in Water Use |
|-----------------------------------|---------------|------------------------|-----------------|---|--|------------------------|
| Fallbrook Public Utility District | Stage 2 | Yes | Sep-19 | 960.8 | 1454.2 | 51% |
| Fallbrook Public Utility District | Stage 2 | Yes | Aug-19 | 1097.5 | 1514.9 | 38% |
| Fallbrook Public Utility District | Stage 2 | Yes | Jul-19 | 1006.9 | 1513 | 50% |
| Fallbrook Public Utility District | Stage 2 | Yes | Jun-19 | 945.5 | 1307 | 38% |

Source: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2019sept/nw_supplier_data090319.xlsx

FPUD can manage the differences in shortages between SDCWA and EMWD through demand management during a shortage consistent with its UWMP Shortage Contingency Plan. The large

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amount of outdoor irrigation provides FPUD customers with a cushion with which to reduce water usage during a shortage without inflicting economic harm or hardship. FPUD considers this to be more cost effective for its customers than to consistently pay significantly more for its water supply as a member agency of SDCWA.

The most noticeable trend in reliability since the last drought (2015-2016) has been the continued decline in water use. (Table 5.) This continued drop in water use pertains to SDCWA an MWD as large wholesale agencies and to FPUD as an individual water district. In comparing FPUD's monthly water use in the summer of 2018 to its 2013 water use shows a continuance of lower water demand.

Table 5—FPUD Water Use Report (2018)

| Supplier Name | Stage Invoked | Mandatory Restrictions | Reporting Month | REPORTED Total Monthly Potable Water Production | REPORTED Total Monthly Potable Water Production 2013 | Reduction in Water Use |
|-----------------------------------|---------------|------------------------|-----------------|---|--|------------------------|
| Fallbrook Public Utility District | Stage 1 | Yes | Sep-18 | 944.8 | 1454.2 | 54% |
| Fallbrook Public Utility District | Stage 1 | Yes | Aug-18 | 1143 | 1514.9 | 33% |
| Fallbrook Public Utility District | Stage 1 | Yes | Jul-18 | 1201.7 | 1513 | 26% |
| Fallbrook Public Utility District | Stage 1 | Yes | Jun-18 | 928.3 | 1307 | 41% |

Source: https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2019sept/nw_supplier_data090319.xlsx

Although the 2015 updates of the UWMP were used in conducting the above reliability analysis, updates will be prepared in 2020 with new water demand forecasts. It is assumed that continued decreases and slower growth rates will be included in UWMPs throughout the MWD service area. These lower demand forecasts along with continued local supply development will reduce demand on imported water and strengthen the reliability of imported water supplies from MWD. This continued trend will likely reduce the margin of difference for FPUD in reliability as a member agency of EMWD and SDCWA.

Catastrophic Emergency

For the last 20 years SDCWA has been implementing the Emergency Storage Project (ESP). The ESP is a system of new, existing and expanded reservoirs, pipelines and pump stations that will ensure that its member agencies receive a 75% Level of Service during a catastrophic earthquake that severs San Diego County from MWD's imported water system. SDCWA's ESP manages the risk of seismic events on the San Andreas, San Jacinto and Elsinore faults. Although FPUD has been paying for the ESP through its water rates for 20 years, it is not able to receive ESP service due to a yet to be constructed pump station and appurtenant facilities by SDCWA. It should be noted that SDCWA's planning documents for these facilities indicate that SDCWA will need to use MWD's aqueduct system to make ESP deliveries to FPUD.

If the facilities are constructed FPUD's customers would be able to receive ESP water in a catastrophic emergency. FPUD's M&I customers would receive a 75% level of service while

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FPUD's TSAWR customers would be cut at twice the rate of non-TSAWR customers (50% cutback compared to 25% for non-TSAWR customers). This lower level of reliability is in exchange for the discounted water rate TSAWR customers pay and in recognition that in an emergency outdoor irrigation water will be a low priority.

MWD also has an Emergency Response Plan and emergency water storage for its member agencies and their sub-agencies. MWD maintains sufficient storage in its 800,000 acre foot Diamond Valley Lake and other storage reservoirs to provide a similar 75% Level of Service in the event of earthquakes on the San Andreas and San Jacinto earthquake faults that would sever the imported water conveyance system for the State Water Project and Colorado River. The difference between SDCWA and MWD emergency storage programs is the response to a seismic event on the Elsinore Fault in southern Riverside County that disrupts service from MWD's treatment plants, reservoirs and local pipelines. The Elsinore Fault is considered the least active of the 3 earthquake faults, and MWD in its Emergency Response Plan intends to complete repairs on those facilities within 14 days of the seismic event and restore service to at least the 75% level. When facilities for SDCWA's ESP are completed it expects to provide emergency water for a 75% Level of Service to FPUD customers following the seismic event on the Elsinore Fault and the interruption of imported water deliveries.

In an effort to address the proposed reorganization's potential for 14 days with limited or no service in the event of an earthquake on the Elsinore Fault, FPUD customers will receive local water supply during an emergency from its Santa Margarita River Conjunctive Use Project (SMRCUP). FPUD is constructing the SMRCUP in partnership with U.S. Marine Corps Base Camp Pendleton to share local water in the Santa Margarita River through a groundwater storage and recovery project. Local supply from the SMRCUP will provide an additional layer of water supply reliability to the FPUD service area. Construction of a bi-directional pipeline and groundwater treatment plant is expected to begin in the Fall of 2019 and be operational by 2023. These construction activities and the provision of a new, more reliable water supply will occur as planned under reorganization which will not affect the provision or cost of this service to FPUD customers.

The SMRCUP is planned to produce approximately 9 acre feet per day on average and can meet all the daily indoor health and safety of FPUD residents for the 14 day expedited repair period. Additional drinking water will be available from the SMRCUP, FPUD's Red Mountain Reservoir and other storage tanks to meet very limited irrigation needs of M&I and agricultural customers during this period as well.

The below **Table 6** reflects the Level of Service FPUD customers can expect during a catastrophic emergency as a member agency of SDCWA and under reorganization as a member agency of EMWD.

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Table 6—FPUD Reliability During a Catastrophic Emergency

| FPUD Reliability Catastrophic Emergency | | | | | |
|--|--|---|-------------------------------|---------------------------------|-------------------------------|
| | | San Andreas & San Jacinto Faults | | Elsinore Fault | |
| | | M&I Level Of Service | TSAWR Level of Service | M&I Level Of Service | TSAWR Level of Service |
| SDCWA | | 75% | 37% | 75% | 37% |
| EMWD | | 75% | NA | 20% to 75%** | NA |

****Range is based on MWD emergency planning for seismic event on Elsinore fault is to expedite repairs to facilities in southern Riverside county to restore service within 14 days. Indoor Health and Safety water use minimum level of service form local supplies and storage for 14 day period. SDCWA plans to provide emergency deliveries with earthquake on Elsinore Fault.**

While the SMRCUP is designed to be a baseline supply for FPUD and Camp Pendleton, FPUD is considering entering into an MOU with Rainbow Municipal Water District (RMWD) that will allow a portion of this FPUD’s local water to be provided to RMWD in the event of a catastrophic emergency on the imported water system, such as an earthquake along the Elsinore Fault. A small amount of SMRCUP supply will be provided to RMWD during this 14 day period to supplement RMWD stored supplies in its local reservoirs and storage tanks.

3.0 FINANCING

In California, funding for special districts comes in two distinct types, based on their source (or sources) of revenue: Enterprise Districts and Non-Enterprise Special Districts.

Non -Enterprise Districts deliver services that provide general benefits to entire communities. They are primarily funded by property taxes. Enterprise Districts finance district operations via fees for public service, similar to a business. Under this model, the customers that consume goods or services such as drinking or irrigation water, waste disposal, or electricity, pay a fee. Rates are set by a governing board and there is a nexus between the costs of providing services and the rates customers pay. Sometimes enterprise district may also receive property taxes which comprise a portion of their budget.

FPUD operates as an enterprise fund, which has a set of self-balancing accounts that record the financial position of each of FPUD’s services. The service funds track revenues from service fees and operating expenses specific to each service. This, in turn, makes each service fund independent and self-sufficient, and also ensures service fees are set to recover only costs associated with the particular service.

FPUD’s accounting system and practices are based upon Generally Accepted Accounting Principles (GAAP) and are kept on an accrual basis. Under the accrual basis, revenues are recognized when earned and expenditures are recognized when a liability is incurred. FPUD’s budget is prepared on a cash basis, which means that projected revenues are recognized when cash is assumed to be received and projected expenses are recognized when cash is disbursed.

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Annual Budget Process

Each year, FPUD develops and adopts a new budget for the upcoming fiscal year. The budgeting process begins in January and starts with the budget message. The budget message establishes the priorities of FPUD in the next fiscal year and provides budget managers with guidance on how to prioritize their budget needs.

The capital and operating budget are included in FPUD's preliminary budget. Once assembled, the preliminary budget is reviewed by the General Manager and staff in a series of meetings. Adjustments are made to the preliminary budget and the revised preliminary budget is reviewed by the FPUD Board of Directors Fiscal Policy and Insurance Committee. Once the Committee's comments are incorporated and the proposed budget developed, budget workshops with the Board, if required, are held. The final proposed budget is then sent to the Board for review. Once Board comments are incorporated into the document, a public hearing, if necessary, is held and the recommended budget is adopted.

Budget adjustments are made if projects or expenditures are needed that fall outside FPUD's adopted budget. These items are brought to the Board for approval and to appropriate the funds. A mid-year budget update is also provided to the Board each year to update spending trends and identify early any potential shortfalls or surpluses. FPUD maintains a balanced budget, which means that sources of funds equals uses of funds in instances of shortfall. Reserve fund withdrawals, if necessary, provide a source of funds. Likewise deposits to reserves are a use of funds and are unappropriated balances.

Financial Impacts of Reorganization

The proposed reorganization will have financial impacts to FPUD, EMWD, and CWA. While FPUD has pursued discussions with SDCWA to identify a potential cost structure for detachment, the parties have not made significant progress on reaching consensus. The last communication requested that FPUD meet with each SDCWA member agency separately to negotiate a solution. While FPUD did in fact reach out to each member agency and met with many of them and provided potential concepts for a cost structure for detachment, the general consensus from these meetings is that development of separate agreements with each SDCWA member agency is unworkable. This is because any impacts or benefits to SDCWA resulting from the reorganization, if approved, will impact SDCWA's rate setting process, and the impact on each member agency will vary over time with that agency's water demands.

In absence of a negotiated agreement with SDCWA, FPUD proposes that the detachment from SDCWA be consistent with the County Water Authority (CWA) Act (Water Code Appendix section 45-1 et seq.), the law under which SDCWA exists and is organized. Section 45-11 of the CWA Act sets forth certain requirements a member agency must follow in order to detach (called an "exclusion" in the CWA Act) from SDCWA. In accordance with this provision if the detachment is successful, taxable property within the detaching member agency may still continue

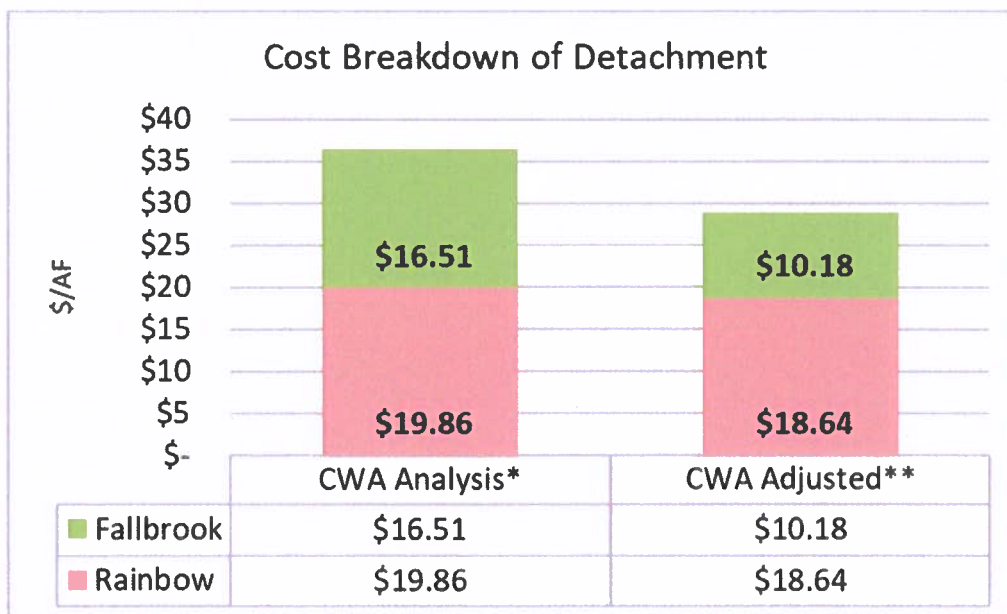
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to be taxable by SDCWA for the purpose of paying bonded and other indebtedness outstanding or contracted for at the time of detachment/exclusion. The amount currently collected annually from FPUD customers is roughly \$150,000. These payments would continue after detachment pursuant to the CWA Act even though FPUD will cease to receive any benefit from any SDCWA facilities.

The remaining SDCWA member agencies would also benefit from past investments made by FPUD in regional infrastructure. As of January 1, 2018 FPUD has contributed approximately \$300 million to help build SDCWA’s infrastructure. These investments helped fund storage projects, emergency water supply projects and secure lower cost water supplies from canal lining projects. These investments will continue to provide benefits to the remaining SDCWA member agencies and FPUD will not recover any value from these regional investments that will continue to support all other member agencies of SDCWA. Further, there is no outstanding SDCWA debt associated with SDCWA facilities that only serve FPUD and that will, consequently, have no benefit to other remaining agencies after detachment.

Figure 6 shows the anticipated impact on SDCWA rates based on current FPUD and RMWD demand projections, including the reduction in SDCWA demands from the local groundwater development. As shown in **Figure 6**, the relative projected impact to SDCWA from FPUD detachment is \$10.18/AF. The current SDCWA rate is approximately \$1686/AF, so this represents an increase of 0.6%. The average rate increase experienced by FPUD over the last 10 years from SDCWA is over 8%. Using recent water usage for the City of San Diego of 91 gallons per capita per day (gpcd) and a rate impact of \$10.18 per AF for FPUD, the average person from the City of San Diego would see an annual cost impact of \$1 per year. Currently the average person from the City of San Diego pays an additional \$41 per year for SDCWA’s desalinated water (excluding the conveyance pipeline costs) and Imperial Irrigation District’s transfer water.

FIGURE 6—Rate Impact of FPUD/RMWD Detachment.

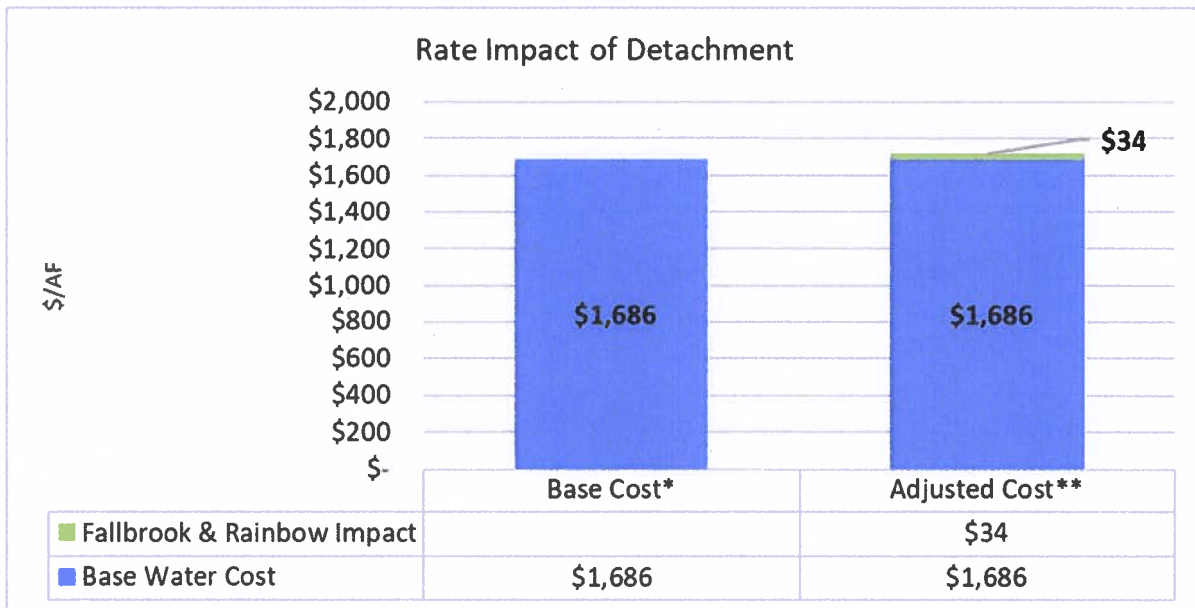


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- * Based upon SDCWA’s August Preliminary Financial Impact Analysis | De-Annexation.
- ** Based upon updated water sales projections and includes 3,100 AF of local supplies.

Although all the water purchased by FPUD is received directly from MWD, there will be a reduction in revenue for SDCWA if FPUD began to purchase wholesale water through MWD. SDCWA prepared a summary of the anticipated costs based on FY 2018 water demands and CY 2020 rates in August 2019. This analysis results in an estimated revenue reduction to CWA of approximately \$36.37/AF on top of the existing rate of \$1686/AF for remaining agencies from the detachment of FPUD and RMWD based on their being no cost reduction in SDCWA operations due to detachment. (Figure 7.)

FIGURE 7—SDCWA Projected Rate Impact



- * Based upon CWA’s Recommended Calendar Year 2020 Rates and Charges presentation.
- ** Based upon updated water sales projection for CWA of 338,958 AF.

SDCWA’s estimate is higher than the actual projected impact for two key reasons:

1. The FY 2018 flows are higher than current and projected flows largely due to a continued decline in agriculture in the region.
2. FPUD is constructing a new groundwater treatment plant that will supply 30-40% of anticipated annual water demands.

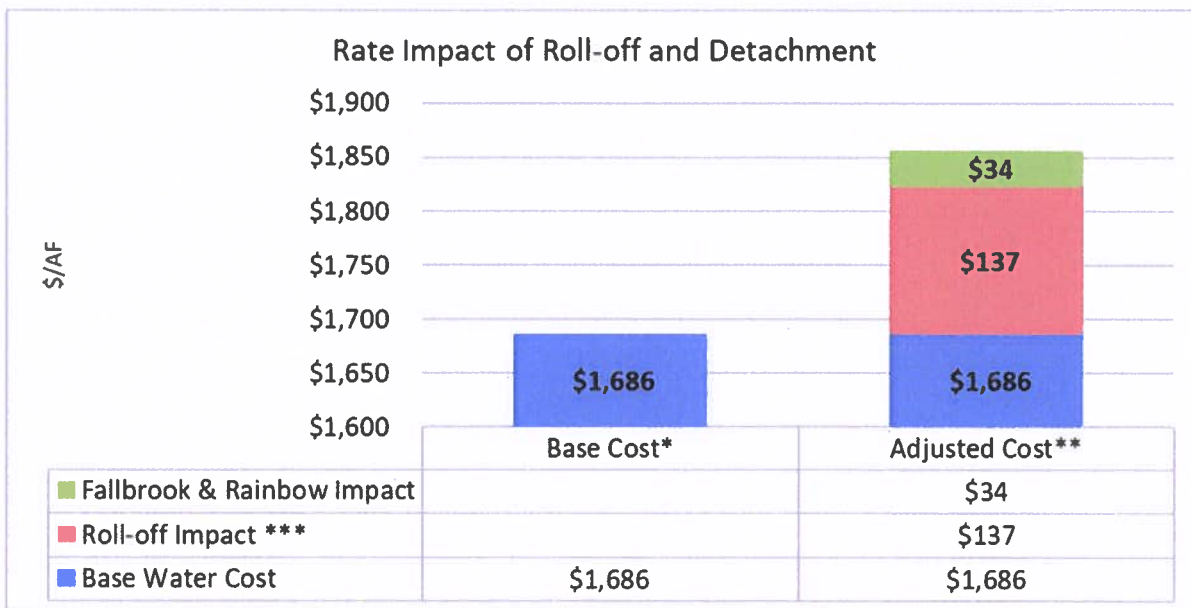
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These factors will reduce the water demands on SDCWA, which will reduce the cost impact of on SDCWA of detachment.

SDCWA has also argued that the detaching agency must ensure revenue neutrality for the remaining agencies. Under this concept, FPUD would continue to make the same net payment to SDCWA, but would receive no services. In turn, SDCWA would use this money to subsidize other member agencies rates to be able to offset the potential 0.56% rate increase associated with the detachment of FPUD. We feel this concept is flawed at a number of levels:

1. This approach is inconsistent with the CWA act and would not have any cost of service basis and would violate proposition 26.
2. Currently member agencies can build local projects and reduce their water demands with a similar effect as detachment. The vast majority of rates allocated to a member agency are based on demands. While some are rolling averages, the costs paid by a District to SDCWA are largely proportional directed to water demands. **Figure 8** shows an example of the rate impacts to other member agencies for three local supply projects that are underway. These projects include Phase I of the City of San Diego Pure Water Program, Pure Water Oceanside and the East County Advanced Purification Facility.

FIGURE 8—Rate Impact of Roll-Off and Detachment



* Based upon SDCWA's Recommended Calendar Year 2020 Rates and Charges presentation.

** Based upon updated water sales projection for SDCWA of 338,958 AF.

*** Pure Water Phase I, East County AWP, Pure Water Oceanside.

As shown in **Figure 8**, the impact of these projects to other remaining member agencies is approximately \$137 per AF or over ten times times the projected impact of the FPUD detachment. If FPUD was required to make each agency revenue neutral for the impact of their reduced water

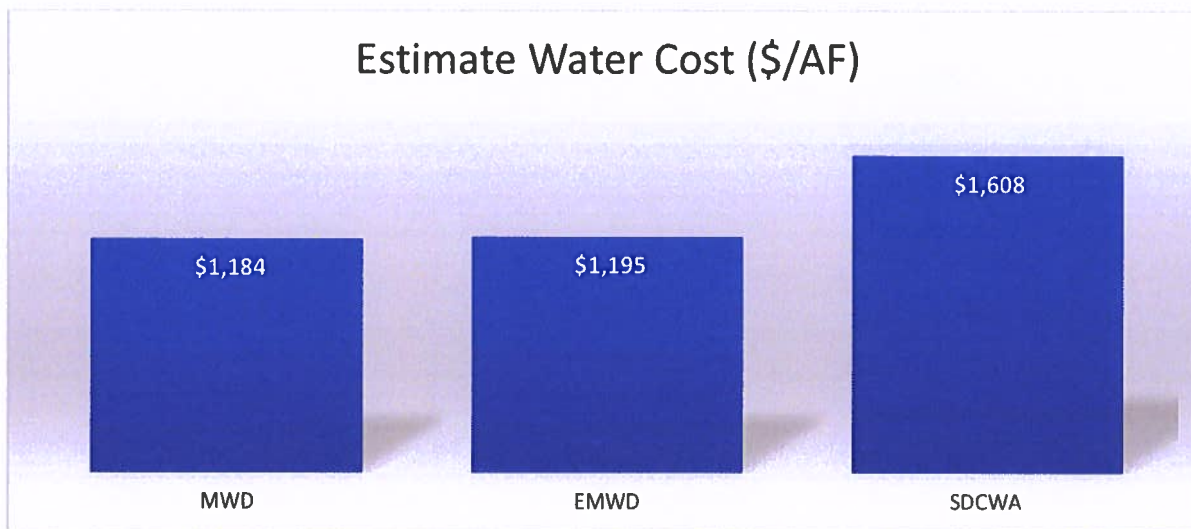
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purchases then the same concept would need to be in place for entities that are rolling off SDCWA and shifting existing SDCWA costs to the remaining agencies including FPUD and RMWD if detachment is not successful.

The majority of water used by FPUD is currently delivered from MWD through MWD facilities, and FPUD pays SDCWA for this water. The cost of treated MWD water to SDCWA is \$1,184/AF. Currently, FPUD is charged by SDCWA over \$450/AF on top of the MWD price versus an additional \$11/AF if the water was supplied by EMWD (See Figure 9). If FPUD detaches from SDCWA and attaches to EMWD, there is a substantial long-term savings to FPUD customers due to this difference in unit water costs.

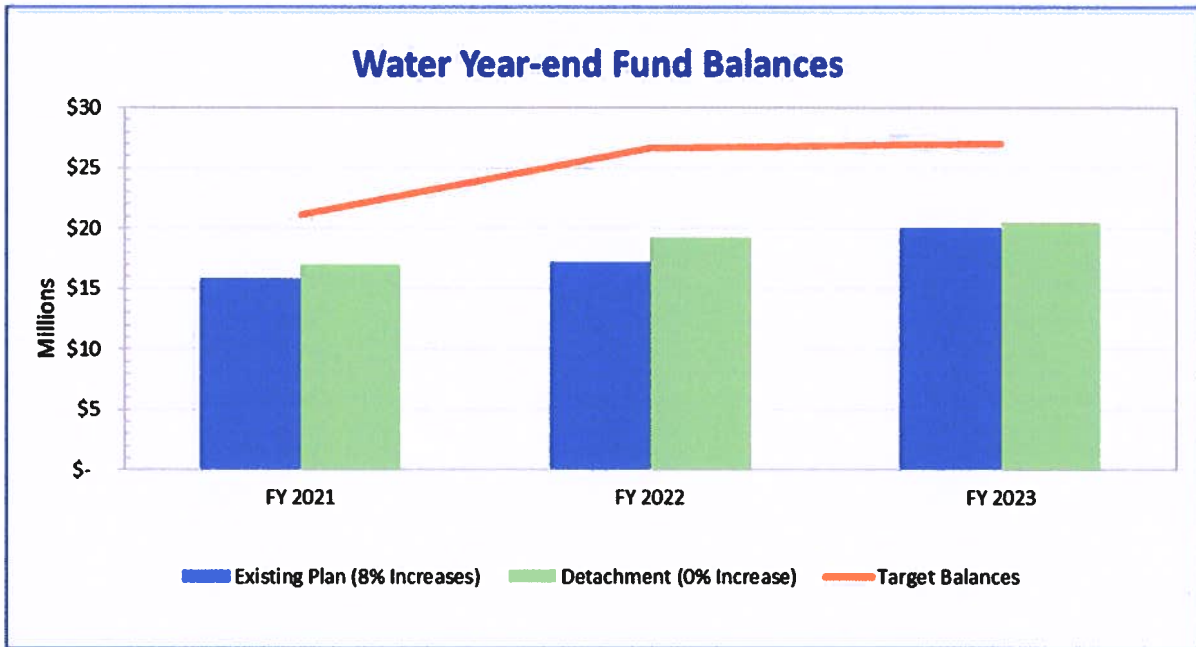
Figure 9 shows the projected water rate increases for FPUD with and without detachment. As shown in Figure 9, without detachment an annual increase of 8% is anticipated over the next three years. With the reorganization it is anticipated that no rate increase could be achieved for 3 years or rates could be slightly decreased based on the reduction in the cost of water with on-going savings in wholesale water costs of over 25%.

FIGURE 9—Wholesale Water Costs



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FIGURE 10—Projected Rate Impacts of Detachment



FPUD has had to implement significant rate increases over the past decade to address the combined impacts of increased water supply costs, declining sales and aging infrastructure needs. Increasing water rates has had a significant impact on the quality of life in our community due to the loss of agriculture and the inability to afford the water costs to maintain a rural lifestyle. These trends will continue into the future and further negatively impact our community unless LAFCO supports efforts by FPUD to reduce its water costs through the process of detachment from SDCWA and annexation to EMWD.

Attachment A



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Analysis of RMWD Water Supply Reliability

Prepared By
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November 2019

INTRODUCTION

Rainbow Municipal Water District (District) is evaluating whether it is in the long term interests of its ratepayers to remain as a member agency of the San Diego County Water Authority (SDCWA) a member agency of the Metropolitan Water District of Southern California (Metropolitan) or to de-annex from SDCWA as allowed under the County Water Authority Act (Water Code § 45-11) and consider annexation to the Eastern Municipal Water District (EMWD), also a member agency of Metropolitan.

The evaluation of a potential de-annexation from SDCWA and annexation to EMWD has two major criteria that determine the effects on District ratepayers. The comparative long term cost to the ratepayers of remaining a member agency of SDCWA versus annexation to EMWD and the comparative water supply reliability and associated risk of water shortages of membership in each wholesale water supplier. A comparative cost analysis of long term membership in both SDCWA and EMWD has been prepared previously by Ken Weinberg Water Resources Consulting LLC. This Technical Memorandum (TM) compares the different levels of water supply reliability the District would experience through either continued membership in SDCWA or as a member agency of EMWD.

EXECUTIVE SUMMARY

Due to SDCWA's investments in reliability over the last two decades the San Diego region and the District's ability to withstand drought related shortages has significantly improved from what was experienced in San Diego county during what has been considered the most severe drought of 1987-1992. With the construction of SDCWA's Emergency Storage Program and Carryover Storage Program (ESP/CSP) the region's ability to supplement supplies to its member agencies during a drought or a catastrophic emergency is a significant benefit to all SDCWA member agencies. Likewise, investments by Metropolitan in surface water and groundwater storage, water transfers and financial incentives to local agencies for receiving water, groundwater recovery and water conservation has contributed to major improvements in urban southern California's resilience to multiyear droughts.

District reliability varies by customer class. The District has two classes of service, Municipal & Industrial (M&I) and Transitional Special Agricultural Water Rate (TSAWR) customers. Because TSAWR customers pay a discounted rate to SDCWA they do not benefit from SDCWA's investments in its own Colorado River Supplies through the IID Water Transfer and the Coachella and All American Canal Lining Projects or from the Carlsbad Desalination Plant. In FY 2018 TSAWR customers who made up approximately 44% of District water sales also do not benefit or receive a significantly reduced benefit from the ESP and no benefit from the CSP.

SDCWA Reliability

The District and SDCWA analyze long term supply reliability every 5 years through the update and adoption of an Urban Water Management Plan (UWMP) as mandated by the state under the Urban Water Management Planning Act. UWMPs are the best basis to evaluate supply reliability.

In its 2015 UWMP, SDCWA identified, on a regional scale, its water supply - demand balance under normal weather and a single and three consecutive dry year weather conditions. The results of that analysis indicated the following:

- Under normal weather conditions SDCWA would be able to meet all of its member agencies expected water demands.
- In a single Dry Year SDCWA assumed Metropolitan would experience shortages of 15%-20% and that SDCWA would begin to experience shortages in 2035 through 2040 of approximately 5-10%.
- In multiple dry year analysis SDCWA expects to experience shortages beginning after 2030 and continue to be subject to dry year shortages until 2040 ranging between approximately 2% to 15%.

SDCWA UWMP Assumptions on Local Supplies

In any long term analysis of supply reliability, it is necessary to project future outcomes that can have some amount of uncertainty. SDCWA's 2015 UWMP reliability analysis assumes that additional "Verifiable" local recycling and groundwater projects are implemented by member agencies as planned. Local Supply projects are considered verifiable if there is substantial evidence and commitment by the member agencies that they will be implemented. SDCWA's 2015 UWMP analysis does not include the City of San Diego's 93,000 acre foot Pure Water Program. The City of San Diego has since determined that Phase 1 Pure Water program consisting of 33,000 acre feet of new supply was a verifiable project and in this reliability analysis it will be added to the other SDCWA member agency verifiable local projects.

SDCWA Assumptions on Metropolitan Shortage Allocation

Also in SDCWA's 2015 UWMP is an assumption that its allocation of Metropolitan supplies during a Metropolitan declared shortage will be its Preferential Right to MWD water under Section 135 of the Metropolitan Water District Act¹. SDCWA's Preferential Right is currently 23% of available Metropolitan supplies. A Preferential Right allocation would provide SDCWA significantly more water than the allocation methodology used by Metropolitan in the last two

¹ Preferential Right is calculated as the "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"

droughts (2010-2011 and 2015-2016) under the Water Shortage Allocation Plan (WSAP) which attempts to match allocations to dependence on Metropolitan supplies (SDCWA currently purchases about 15% of total Metropolitan supplies and will be reducing purchases to between less than 1% and 13% by 2035²).

Metropolitan has never allocated water using Preferential Rights.

EMWD and Metropolitan Reliability

Under the terms of annexation being explored with EMWD the District would not receive any of EMWD local supplies or stored water in either normal or dry weather conditions. Because of that contemplated arrangement, the District would be entirely dependent on the reliability and availability of Metropolitan supplies.

In evaluating Metropolitan supply reliability there are three foundational planning documents that provide the basis for reliability; the 2015 Integrated Resources Plan (IRP), the Water Surplus and Drought Management (WSDM) Plan and the 2015 Regional Urban Water Management Plan (RUWMP). Metropolitan's IRP lays out the regional strategy of improving reliability of imported supplies, utilizing in region and out of region storage and increasing diversification through the development of reliable local supplies and water conservation.

Similar to reliability under SDCWA, the District could expect Metropolitan to:

- meet its member agency demands for water in normal years
- meet its member agency demands for water in a single dry year

However, Metropolitan's 2015 RUWMP reliability analysis indicates that Metropolitan will be able to meet the expected demands of all its member agencies in single and multiple dry years and has identified the potential availability of surplus supply in all years. Metropolitan's analysis rests upon the following two key factors

- Use of Diamond Valley Lake and other storage assets in dry years when supplies are low
- Implementation of additional local supply and conservation as a "Buffer" to ensure that available supplies are in excess of forecasted water needs

Metropolitan Reliance on Future Projects and Conservation

To achieve the surplus supply potential identified in Metropolitan's IRP and 2015 RUWMP several specific goals related to imported water (State Water Project/Colorado River), local

² SDCWA's amount of total Metropolitan purchases in 2035 ranges from 13% in 2015 UWMP Normal Weather and less than 1% in 2018 Interim Demand Reset. It is assumed that Metropolitan's total supplies delivered average 1.7 MAF (2015 IRP Table 3-6 less QSA supplies).

supply projects and water conservation need to be achieved. To the extent these goals are not achieved Metropolitan will not realize these potential surpluses and may experience shortages. Metropolitan's 2015 IRP Update lays out a strategy of "*Adaptive Management*" where new supplies and programs will be implemented if needed.

Assumption of Metropolitan Reliability For District Reliability Analysis

It is not certain that Metropolitan will achieve all the new supplies and programs contemplated in the 2015 IRP and 2015 RUWMP. The analysis of District reliability is evaluated from the more conservative perspective of Metropolitan's experience in the two most recent drought related shortages. In 2010-2011 and 2015-2016 Metropolitan initiated its Water Supply Allocation Plan (WSAP) and allocated water to its member agencies at a maximum Level 3 cutback of 15%.

Reliability in an Emergency

Assessing the District's reliability in a catastrophic emergency where imported water is cutoff requires a different analysis than dry year drought induced shortages. SDCWA's Emergency Storage Project (ESP) is designed to address a catastrophic failure of the imported water system in the event of a major earthquake on three different fault lines;

- San Andreas
- San Jacinto
- Elsinore

The most probable large seismic event is considered by experts to occur along the more active San Andreas and San Jacinto faults. Earthquakes on either one of these faults would allow Metropolitan supplies from Diamond Valley, Lake Skinner and other facilities in southern Riverside County to maintain service to San Diego County. In the event of a large magnitude earthquake on the Elsinore fault, SDCWA estimates that those facilities would be out of service for up to 2 months. MWD's planning scenarios do not include any outage due to an earthquake on the Elsinore Fault that would exceed 14 days. The Elsinore fault is considered to be the least active of the three faults and has not seen seismic activity in the Riverside county area over a 5.3 magnitude earthquake since 1910³.

SDCWA Emergency Reliability

SDCWA's ESP consists of pipelines, pump stations and new and existing surface storage reservoirs capable of storing up to 90,000 AF of emergency supplies. The ESP was designed to provide up to a 75% level of service for either a 2 month complete cutoff of imported water or a 6-month emergency with limited imported water supplies from Metropolitan. ESP facilities are currently unable to deliver treated water to most of the District's service area. With the planned construction of the future North County Pump Station (planning started in 1996), the

³Caltech, Southern California Earthquake Data Center <http://scedc.caltech.edu/significant/elsinore.html>

final ESP facility to be built, the District would be capable of receiving deliveries of treated water from the Twin Oaks Valley Water Treatment Plant.

In such an event, the SDCWA Board of Directors would declare an emergency and supplies would be allocated from ESP facilities to augment member agencies M&I level of service to at least 75% of calculated need. TSAWR customers receive a lower level of service from the ESP being cut at twice the rate of M&I customers due to TSAWR customers not paying SDCWA's storage charge. The District's TSAWR customers would receive a Level of Service of approximately 35-40% of needed water.

Metropolitan Emergency Reliability

Metropolitan's emergency storage requirements are based on the potential of a major earthquake along the San Andreas and San Jacinto Faults damaging the aqueducts that transport Southern California's imported water supplies (SWP, CRA, and Los Angeles Aqueduct). Unlike SDCWA, Metropolitan's emergency planning anticipates that its facilities in southern Riverside County will still be operational and a crippling seismic event along the Elsinore fault has not occurred. Metropolitan would draw on its emergency storage in Diamond Valley Lake (DVL) and has access to emergency storage at its other reservoirs, at the SWP terminal reservoirs, and in its groundwater conjunctive use storage accounts.

The adopted criteria assume that damage from such an event could render the aqueducts out of service for six months similar to SDCWA's six month emergency scenario, but Metropolitan has based its planning on a 100 percent reduction in these imported supplies. Firm supplies to member agencies would be restricted by a mandatory cutback of 25 percent from normal-year demand levels (75% Level of Service). Metropolitan emergency response planning does address outages caused by an earthquake on the Elsinore Fault through expedited repairs that would make key facilities operational within a 14 day period.

Recent District Actions

RMWD recently signed an MOU with the Fallbrook Public Utility District (FPUD) to receive local water supply during an emergency from its Santa Margarita River Conjunctive Use Project (SMRCUP). FPUD is constructing the SMRCUP in partnership with U.S. Marine Corps Base Camp Pendleton to share local water in the Santa Margarita River through a groundwater storage and recovery project.

While the SMRCUP is designed to be a baseline supply for FPUD and Camp Pendleton, the MOU will allow a portion of this local water to be provided to RMWD in the event of a catastrophic emergency on the imported water system, such as an earthquake along the Elsinore Fault. When combined with existing RMWD storage reservoirs, supplemental supply from the SMRCUP will provide an additional layer of water supply reliability to the RMWD service area during the 14 day period when Metropolitan is affecting emergency repairs on its facilities that

may be damaged during a seismic event on the Elsinore Fault. Construction of a bi-directional pipeline and groundwater treatment plant is expected to begin in the Fall of 2019 and be operational by 2023.

Comparative Analysis of Reliability in 2030

District reliability under a drought related or catastrophic emergency is evaluated as a member agency of SDCWA and EMWD. To display future year reliability, 2030 is selected as a representative future year. District reliability as a member agency of EMWD is 100% reliant on available Metropolitan supplies in both a drought shortage and emergency situation. For illustration purposes, it is assumed that the District receives a cutback in its supplies equivalent to the Metropolitan shortage. For example, a 15% Metropolitan shortage equates to a 15% District shortage.

It should be noted here that MWD has never actually refused to deliver water during a WSAP allocation period. Should a member agency order a delivery of more water than their allocation, the cost of that water goes up, but in its history MWD has never not delivered the water.

As a SDCWA member agency cutback percentages are calculated under a WSAP allocation and a Preferential Rights allocation. As a EMWD member agency it is only considered in a WSAP allocation.

Both SDCWA and Metropolitan have detailed allocation methodologies and computer models that calculate member agency allocations including the various adjustments used by both agencies. Both methodologies are intended to provide an allocation of water that are commensurate with the member agency's need for wholesale water. Both methodologies have adjustments that can either provide more water to the District in an allocation or reduce the District's allocation. Because the District is 100% dependent on imported water and not a growth agency, adjustments in SDCWA's allocation method can provide additional water for agencies with highly reliable local supplies, population growth and exceptional water conservation while another retail reliability adjustment can ensure that no member agency is cutback by more than 5% of the regional average. Metropolitan also has a retail reliability adjustment which the member agency must qualify for. For this analysis, it is assumed that EMWD will not need the "Retail Promise" adjustment due to its local supply availability.

The analysis contained below uses simplified assumptions based on the allocation methodologies and supply and demand amounts contained in the most recent 2015 UWMPs. SDCWA reliability will be displayed as a range in the WSAP allocation scenario since adjustments can reduce the District's Level of Service in a shortage but by no more than 5%⁴.

⁴ Current SDCWA's Retail Reliability Adjustment occurs at the 20% cutback level but discussions have occurred about reducing that threshold. It is assumed here that the adjustment will be in place at a lower cutback levels so shortages will not be more than 5% greater than the regional average

For more accurate estimates of what the District's shortage allocation would be it would be necessary to request that SDCWA and Metropolitan run their respective allocation models.

Emergency service is displayed based on the scenario of which fault line the earthquake occurs on and the resulting Level of Service the District can expect.

Results of District Reliability in 2030

The following major assumptions used in calculating an shortage allocation contained in Table A went into determining the allocation of Metropolitan water to SDCWA and potential cutbacks to the District in 2030.

Table A Major Assumptions

| | | |
|---|--|--------------|
| a | SDCWA Total Retail 2030 Demand (Base Period) | 676,000 AF |
| b | SDCWA Member Agency Base Period Local Supplies | 172,000 AF |
| c | SDCWA Base Period Local Supplies | 330,200 |
| d | Member Agency Base Period Demand on SDCWA (a-b) | 504,000 AF |
| e | SDCWA Base Period Demand on Metropolitan | 173,800 AF |
| f | SDCWA & Member Agency Adjustment for Dry Year Loss of Local Supply | 45,000 AF |
| g | SDCWA Adjusted Base Period Demand on MWD | 218,800 AF |
| i | SDCWA Preferential Right | 24.22% |
| j | MWD Total Base Period Demand | 1,700,000 AF |
| k | Available MWD Supplies in Level 3 15% Cutback | 1,445,000 AF |
| l | WSAP Level 3 Allocation to SDCWA (l x f) | 185,980 AF |
| m | MWD Preferential Right Allocation to SDCWA ³ | 349,979 AF |

Table B District Cutback in a 15% Metropolitan Shortage

| SDCWA WSAP Allocation | SDCWA Pref. Right Allocation (M&I Only) | EMWD WSAP Allocation |
|-----------------------------|--|----------------------------|
| 6%-11% ⁵ | 6%** | 15% |

⁵If cutbacks are at SDCWA regional average of 6% RMWD combined cutback is 10%

*** Assumes SDCWA has sufficient supplies to not initiate allocation for M&I but allocates shortage to TSAWR per TSAWR program guidelines*

⁵ A 6% combined RMWD cutback assumes use of SDCWA carryover supplies to eliminate M&I shortage in the single year analysis. A 12% high end cutback assumes adjustments that favor agencies with highly reliable supplies, exceptional conservation and population growth result in steeper cutbacks but not greater than the regional average. The regional average M&I cutback in the analysis is 6% and combined RMWD cutback of 10%

Elsinore Fault

The Elsinore Fault crosses the buried steel MWD aqueducts in between the District and the MWD storage and treatment facilities. This fault is significant but has a low level of activity (see <https://scedc.caltech.edu/significant/elsinore.html>). The United States Geological Service (USGS), in its Uniform California Earthquake Rupture Forecast ranks the Elsinore fault as having the lowest probability of a significant quake of any fault of its type in the region (see <https://pubs.er.usgs.gov/publication/70036562>). The only recorded earthquake of any significant size to occur on the Elsinore fault occurred in 1910 with a magnitude of 6.5. There was no surface rupture and very little damage reported in the region.

Large diameter pipelines move with the surrounding soil in an earthquake. While during periods of prolonged shaping there could be damage to joints in a pipeline, this sort of damage can be repaired quickly. Significant damage could occur if the fault were to rupture at the surface, displacing the pipeline at the area of the surface rupture. The Elsinore fault, unlike many faults in the region, has never caused a recorded surface rupture.

MWD owns and operates its own pipeline fabrication facility and could construct and install the necessary repairs to their pipelines within a few weeks of any type of potential pipeline damage from the Elsinore fault.

Table C below includes an assessment of the reliability of water supply should a major earthquake occur on the Elsinore fault. Should such an unlikely event occur, it is likely that damage to MWD's pipelines would be mirrored in SDCWA's pipelines and even the District's own system. In such a catastrophic emergency, all of the District's customers would be put on emergency demand reduction programs that prohibit exterior irrigation. In this scenario, the District's demands are expected to drop to the 10-15 AF per day level. With several hundred acre feet in storage, and access to a supply of local water from the District's MOU with Fallbrook Public Utility District, the District is prepared to provide baseline supply for health and human safety for several weeks as repairs are completed on either MWD or SDCWA's pipeline systems.

Table C District Cutbacks in a Catastrophic Emergency

| SDCWA Emergency Level of Service Seismic Event on San Andreas, San Jacinto, Elsinore Faults | EMWD (Metropolitan) Emergency Level of Service Seismic Event on San Andreas, San Jacinto Faults | EMWD (Metropolitan) Emergency Level of Service Seismic Event on San Andreas, San Jacinto, Elsinore Faults |
|--|--|--|
| 59% | 75% | 8%-75%*** |

*** Assumes RMWD storage and MOU with FPU for SMRCUP supplies meet health and safety needs set at indoor water use of 55 gpcd based on 2030 population and Total water demand. Also dependent on time to repair Metropolitan Facilities Southern Riverside

CONCLUSIONS

Investments by SDCWA and its member agencies in its own imported and local water supplies has cushioned SDCWA from shortage in Metropolitan supplies. However, in Metropolitan’s planning documents they are not forecasting shortages through 2040 based on assumptions of significant progress on resolving imported water conflicts and implementing more local supplies and conservation in the future. Although Metropolitan believes those goals are achievable SDCWA does not face the level of uncertainties in supply reliability or local projects implementation as Metropolitan. Therefore, SDCWA will maintain a higher level of reliability for its member agencies because they will benefit from Metropolitan’s investments in reliability as well as their own and their member agencies.

Although this Report relied upon the approved 2015 updates of the UWMPs and Metropolitan’s IRP to conduct the comparative reliability analysis, those plans will be updated in 2020 with new water demand forecasts. It is expected that continued decreases in water use and slower growth rates will be reflected in UWMPs throughout the MWD service area. These lower demand forecasts, along with continued local supply development, will reduce demand on imported water and strengthen the reliability of imported water supplies from MWD. This continued trend will likely reduce the margin of difference for RMWD in reliability as a member agency of EMWD and SDCWA.

The following summarizes the District's reliability during drought induced shortages as a member agency of EMWD based on Metropolitan's planned reliability and the experience of Metropolitan in the last two drought allocations compared to continued membership in SDCWA:

| | |
|---------------------------------|--|
| Normal years - | No impact |
| Short duration drought - | Equivalent based on Metropolitan planning documents to slightly better due to elimination of TSAWR |
| Long Duration drought - | Equivalent based on MWD planning to lesser reliability due to higher cutback levels based on Metropolitan recent maximum cutbacks allocated by WSAP or Preferential Rights |
| Catastrophic Emergency - | Slightly greater reliability based on elimination of TSAWR to lesser reliability for first 14 days if seismic event on Elsinore Fault occurs and disables Metropolitan's southern Riverside County facilities. Mitigated to some extent through District storage and Emergency Assistance MOU with FPUD |

ANALYSIS OF RMWD WATER SUPPLY RELIABILITY

BACKGROUND

The Rainbow Municipal Water District (RMWD) is a local governmental agency serving water and sanitation services to an unincorporated area of northern inland San Diego County in California. RMWD was formed in 1953 under the Municipal Water District Act of 1911 (Section 7100 et. seq. of the California Water Code). The District is responsible for providing water service to almost 8,200 metered accounts. Water supply is derived from the regional aqueduct systems owned and operated by the Metropolitan Water District of Southern California (Metropolitan) and the San Diego County Water Authority (SDCWA). The District is a retail supplier that currently depends entirely upon imported water purchased through SDCWA to service a small customer base within a very large agricultural water use area.

Filtered water is supplied from two MWD and SDCWA water aqueducts through a total of eight connections. MWD is the owner and operator of both Aqueducts from southern Riverside County to a Delivery Point approximately six miles into the San Diego County at which point SDCWA is the owner and operator of both Aqueducts. This joint ownership arrangement was memorialized in the annexation agreement that resulted in SDCWA becoming a Metropolitan member agency and was finalized in December 1946 (MWD Resolution 3612). Of the total of eight District connections to the Aqueduct 4 are on the MWD owned portion of the Aqueducts and the remaining are on the SDCWA owned aqueducts. One connection uses only 3000 feet of SDCWA pipeline. In recognition of this split ownership the District does not pay SDCWA's transportation charges for deliveries to connections on the Metropolitan owned portion of the pipelines. Flow Control Facilities (FCF) that deliver water into the District's distribution system are owned and maintained by SDCWA regardless of pipeline ownership.

The District's existing water distribution system consists of twelve major pressure zones. Water is stored in a total of 16 water tanks and reservoirs and is conveyed to the twelve major pressure zones utilizing seven potable water pump stations and over 30 pressure reducing stations. The existing distribution system has over 325 miles of pipelines 6-inches in diameter and larger. There are seven booster pump stations in the District's distribution system which pump water up to higher zones with storage reservoirs.

The District has interconnections with the City of Oceanside and Fallbrook Public Utility District (FPUD) because of their close proximity. These interconnections are used for emergency supply. RMWD and FPUD have an emergency exchange agreement, which was enacted in 1986 to transfer water in an emergency event. An MOU for local water resource development and emergency supply was approved in late 2019.

The District's consideration and evaluation of a change in wholesale agency membership would have no effect on existing water operations under normal operating conditions. If the District chose to take all its deliveries off of the MWD owned pipelines, it would require physical and

operational changes to how water is delivered to District customers. It is not within the scope of this analysis to evaluate the reliability or level of service under potentially changed operations of District facilities. District staff, along with a hydraulic modeling firm have generated a list of improvements required to facilitate operations after detachment.

Current District Wholesale Reliability

The District's current reliability is dictated by which class of service or water rate a customer pays. Customers that are considered Municipal and Industrial (M&I) by SDCWA receive the same amount of supplies in a shortage situation as any other M&I member agency. These customers' reliability is enhanced by SDCWA's separately owned supplies consisting of the Colorado River QSA supplies, All American and Coachella Canal lining water, the IID Water transfer and the Carlsbad Desalination Project. New water storage created through SDCWA's Emergency Storage and Carryover Storage Projects (ESP/CSP) and Central Valley groundwater banks also provide a buffer for M&I customers in emergency and other shortages. These supplies not only provide a reliability buffer to reduce the effect of shortages of Metropolitan's imported water supplies but under some circumstance could delay or even eliminate the need to allocate water to M&I customers. Similarly, during a declared emergency event, where imported water could be cut off from an earthquake north of San Diego County, District M&I customers would receive up to a 75% level of service through the Emergency Storage Program (ESP).

If a District customer pays the *Transitional Special Agricultural Water Rate (TSAWR)* they do not pay SDCWA's Storage or Supply Reliability Charges. In recognition of the lower price paid for water by TSAWR customers they do not receive a reliability benefit from QSA or Carlsbad desalination supplies during a shortage allocation and are cut at twice the level of M&I customers during an ESP event. In FY 2018 34% of District's customers were in the TSAWR and approximately 44% of water deliveries by volume are in the TSAWR program. Under the rules of that program, in a drought related shortage TSAWR customers receive the level of cutback SDCWA receives from MWD and, as noted above, a significantly reduced level of service in an emergency declared by the SDCWA Board. Metropolitan does not distinguish between M&I and agricultural customers considering all SDCWA deliveries M&I under normal and shortage allocation conditions⁶.

The ultimate consequence of an unreliable water supply is the need for an allocation of water by the wholesale agency. Although the shortage allocation experienced by the District may vary depending on which wholesaler serves it and potentially other factors (State mandated conservation levels), the District's response to water shortages is considered to remain the same. Currently, RMWD ordinance 16-10 addresses the possible water shortage scenarios in

⁶ Metropolitan previously had an agricultural class of service under the Interim Agricultural Water Program (IAWP) that received reduced deliveries under drought and shortage conditions but terminated that program and class of service in 2013.

conjunction with the SDCWA Water Shortage and Drought Management Plan. The sections within the ordinance discuss stages each with both Voluntary and Mandatory reduction of water usage.

District Drought Response (Ordinance 16-10)

The District Board of Directors adopted Ordinance 16-10 to guide its response to increasingly severe drought conditions. These requirements to manage impending or actual water shortages would continue to be in place whether the District remained a member agency of SDCWA or de-annexed and joined EMWD.

There are 4 different stages of water shortage scenarios within Ordinance 16-10. Each stage has specific instructions for various water uses to be prohibited or to be restricted. Drought Response Level 1 is for periods when RMWD is notified that due to drought or other supply reductions, there is a reasonable probability there will be supply shortages or if the State Water Resources Control Board adopts regulations that places restrictions on certain end uses of water. Public outreach and conservation practices are promoted during Drought Response Level 1, and if the SWRCB adopts water use restrictions the following types of uses are prohibited:

1. Irrigation with potable water that results in excessive runoff
2. Use of a hose without a shutoff nozzle
3. Using potable water on driveways and sidewalks
4. Non recirculating decorative fountains
5. Outdoor irrigation within 48 hours of measurable rainfall
6. Serving of drinking water at restaurants unless requested
7. Irrigation of decorative turd on public street medians
8. Irrigation of landscapes in newly constructed buildings and homes inconsistent with state regulations and requirements

For Drought Response Levels 2-4, Level 1 restrictions continue to apply and there are increasingly restrictive measures on water use that can result in civil or criminal penalties if not complied with. These restrictions include limited number and days of irrigation, vehicle washing at commercial establishments using water recycling systems, establishment of customer allocations and under a Level 4 Drought emergency cessation of all outdoor irrigation except for crops.

For agricultural customers participating in the TSAWR program, the requirements are specified in that program. For instance, the water reductions contained in the District's ordinance are not in addition to any mandatory reductions which may apply to a participant in the TSAWR, unless expressly stated in the TSAWR. Violations of the conditions of special supply programs are subject to the penalties established under the applicable program. A person using water subject

to a special supply program and other water provided by the RMWD is subject to this ordinance in the use of the other water.

Enforcement and Penalties

Each stage of the water shortage plan has specific prohibitions, penalties and consumption reduction methods. Section 5.1 discussed the consumption reduction and water use prohibitions. The violation of ordinance 08-01, covered under section 5, is a misdemeanor pursuant to sections 350-358, 375-377 and 71640-71644 of California Water Code and punishable by imprisonment in the county jail for not more than 30 days or a fine not to exceed \$1000 or both. Each day that a violation of this ordinance occurs is a separate offense. Administrative fines may be levied for each violation of a provision of this ordinance as follows:

1. One hundred dollars for a first violation.
2. Five hundred dollars for each additional violation of this ordinance within one year of the first violation.

Violation of a provision of this ordinance is subject to enforcement through installation of a flow-restricting device in the meter.

DETERMINING DISTRICT RELIABILITY

The intent of this analysis is to evaluate the District's supply reliability as a continued member agency of SDCWA or as a member agency of EMWD. It is assumed the District will continue to address retail level shortages under current Board policy Ordinance 16-10 irrespective of which wholesale agency it purchases water from.

This analysis of supply reliability will focus on the water wholesaler's ability to meet:

- Normal weather year water demand
- Dry weather year water demand
- non-drought year emergency water service

Reliability as A SDCWA Member Agency

As a member agency of SDCWA the District relies on SDCWA's statutory obligation (County Water Authority Act § 45-5.11) to:

"as far as practicable, shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs. If available supplies become inadequate to fully meet the needs of its member agencies, the board shall adopt

reasonable rules, regulations, and restrictions so that the available supplies are allocated among its member agencies for the greatest public interest and benefit.”⁷

As noted above, the District has two customer classes that receive two different levels of reliability in either a drought or catastrophic emergency related shortages; M&I and TSAWR. An evaluation of reliability as a SDCWA member agency and its comparison to membership in EMWD must take those differences into account separately and then evaluate on the basis of the combined level of reliability for all customers.

The District analyzes its reliability as a SDCWA member agency every five years through its update and adoption of an Urban Water Management Plan (UWMP) as mandated by the state under the *Urban Water Management Plan Act*.

Reliability and availability of supply in quantities that meet the needs of retail customers is due to:

1. weather related conditions and/or regulatory constraints
2. failure or insufficiency of infrastructure

This analysis will primarily focus on the hydrologic and/or regulatory constraints on available supply and will discuss more briefly District reliability for infrastructure related shortages as it relates to catastrophic emergency events that result in failure of the imported water delivery system as contemplated under SDCWA's Emergency Storage Program (ESP).

The Importance of Urban Water Management Plans

The Urban Water Management Plan (UWMP) Act requires agencies with more than 3,000 AF of water demand or serving more than 3,000 connections to prepare an UWMP. The UWMP requires the estimation of water demand and the supplies that will serve that demand for a 25 year planning horizon under normal weather and dry weather conditions. In its 2015 UWMP, SDCWA identified on a regional scale its water supply demand balance under normal weather and single and multiple dry year weather conditions. The results are provided in the below excerpted tables:

⁷ In December 1952, the Metropolitan Board adopted the Laguna Declaration, which stated "*The District is prepared, with its existing governmental powers and its present and projected distribution facilities, to provide its service area with adequate supplies of water to meet expanding and increasing needs in the years ahead. When and as additional water resources are required to meet increasing needs for domestic, industrial and municipal water, the District will be prepared to deliver such supplies.*" (Section 4202 (a). MWD Administrative Code)

Table 9-1. Normal Water Year Supply and Demand Assessment (AF/YR) ¹

| | 2020 | 2025 | 2030 | 2035 | 2040 |
|---|----------------|----------------|----------------|----------------|----------------|
| WATER AUTHORITY SUPPLIES | | | | | |
| IID Water Transfer | 190,000 | 200,000 | 200,000 | 200,000 | 200,000 |
| ACC and CC Lining Projects | 80,200 | 80,200 | 80,200 | 80,200 | 80,200 |
| Carlsbad Desalination Plant | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| Sub-Total | 320,200 | 330,200 | 330,200 | 330,200 | 330,200 |
| MEMBER AGENCY SUPPLIES (VERIFIABLE SUPPLIES) | | | | | |
| Surface Water | 51,580 | 51,480 | 51,380 | 51,280 | 51,180 |
| Water Recycling | 40,459 | 43,674 | 45,758 | 46,118 | 46,858 |
| Seawater Desalination | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Potable Reuse | 3,300 | 3,300 | 3,300 | 3,300 | 3,300 |
| Brackish GW Recovery | 12,100 | 12,500 | 12,500 | 12,500 | 12,500 |
| Groundwater | 17,940 | 19,130 | 20,170 | 20,170 | 20,170 |
| Sub-Total | 131,379 | 136,084 | 139,108 | 139,368 | 140,008 |
| METROPOLITAN WATER DISTRICT SUPPLIES | 136,002 | 181,840 | 207,413 | 224,863 | 248,565 |
| Total Projected Supplies | 587,581 | 648,124 | 676,721 | 694,431 | 718,773 |
| Total Demands with Water Efficiency Savings | 587,581 | 648,124 | 676,721 | 694,431 | 718,773 |

¹ Normal water year demands based on 1960 – 2013 hydrology.

Source: SDCWA 2015 Urban Water Management Plan, June 2016

Table 9-1 above indicates that under normal weather conditions SDCWA is projecting to meet all the demands of its member agencies. This is the same assumption contained in the District’s 2015 UWMP Table 7-2.

Table 7-2: Normal Year Supply and Demand Comparison

| | 2020 | 2025 | 2030 | 2035 | 2040 |
|--------------------|--------|--------|--------|--------|--------|
| Supply totals (AF) | 20,810 | 20,820 | 20,830 | 20,850 | 20,660 |
| Demand totals (AF) | 20,810 | 20,820 | 20,830 | 20,850 | 20,660 |
| Deficit (AF) | 0 | 0 | 0 | 0 | 0 |
| % of Demands | 0% | 0% | 0% | 0% | 0% |

Source: RMWD 2015 Urban Water Management Plan, June 2016

Wholesale water shortages related to hydrologic constraints have been experienced by the SDCWA and the District on three occasions in the past 28 years; 1991-1992, 2009-2011 and 2015-2016. In all these occasions shortages in imported water deliveries from Metropolitan to SDCWA resulted in allocations of water to the District. Metropolitan and SDCWA have adopted

**Table 9-2. Single Dry Water Year Supply and Demand Assessment
Five Year Increments (AF/YR)**

| | 2020 | 2025 | 2030 | 2035 | 2040 |
|---|----------------|-----------------|-----------------|-----------------|-----------------|
| WATER AUTHORITY SUPPLIES | | | | | |
| IID Water Transfer | 190,000 | 200,000 | 200,000 | 200,000 | 200,000 |
| ACC and CC Lining Projects | 80,200 | 80,200 | 80,200 | 80,200 | 80,200 |
| Carlsbad Desalination Plant | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| Sub-Total | 320,200 | 330,200 | 330,200 | 330,200 | 330,200 |
| MEMBER AGENCY SUPPLIES ¹ | | | | | |
| Surface Water | 6,004 | 6,004 | 6,004 | 6,004 | 6,004 |
| Water Recycling | 40,459 | 43,674 | 45,758 | 46,118 | 46,858 |
| Seawater Desalination | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Potable Reuse | 3,300 | 3,300 | 3,300 | 3,300 | 3,300 |
| Brackish GW Recovery | 12,100 | 12,500 | 12,500 | 12,500 | 12,500 |
| Groundwater | 15,281 | 15,281 | 15,281 | 15,281 | 15,281 |
| Sub-Total | 83,144 | 86,759 | 88,843 | 89,203 | 89,943 |
| METROPOLITAN WATER DISTRICT SUPPLIES | 263,340 | 264,740 | 263,340 | 260,680 | 258,720 |
| Total Projected Supplies without Storage Takes | 666,684 | 681,699 | 682,383 | 680,083 | 678,863 |
| Total Demands with Water Efficiency Savings | 629,198 | 694,147 | 725,006 | 743,990 | 770,765 |
| Potential Supply (Shortage) or Surplus | 37,486 | (12,448) | (42,623) | (63,907) | (91,902) |
| Utilization of Carryover Supplies | 0 | 12,448 | 42,623 | 40,000 | 40,000 |
| Total Projected Core Supplies with Utilization of Carryover Storage Supplies | 666,684 | 694,147 | 725,006 | 720,083 | 718,863 |
| Remaining Potential Surplus Supply, or (Shortage) that will be handled through Management Actions | 37,486 | 0 | 0 | (23,907) | (51,902) |
| ¹ Member agency local supplies include verifiable recycling and brackish groundwater, as well as dry-year estimates for surface water and groundwater. | | | | | |

Source: SDCWA 2015 Urban Water Management Plan, June 2016

detailed water shortage allocation methodologies to allocate water to their respective member agencies that will be discussed in later sections of this Report.

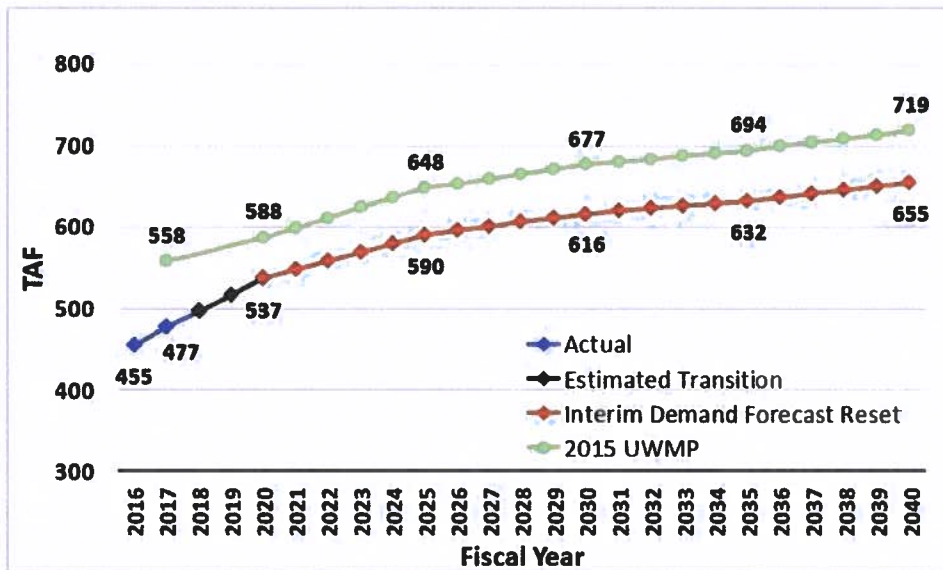
Under single and multiple dry years SDCWA forecasts shortages beginning in 2035 and increasing in 2040 under the single Dry Year analysis (Table 9-2). Shortages can occur by 2035 more than doubling in 2040. This is due to a combination of increasing water demands and shortages of dry year imported water deliveries by Metropolitan.

In 2018 SDCWA staff released a revised forecast of projected demand (Interim Demand Reset) that lowered the forecast of total consumptive water demand in the region and also assumed inclusion of significantly higher amounts of local projects being implemented by its member agencies than in the verifiable supplies mix. This resulted in a reduced demand on Metropolitan for imported supplies to as low as 10,000 AF by 2035. Figure 1 shows the drop in

consumptive demand from the 2015 UWMP and the increase assumption on local supply availability from the verifiable resource mix in Table 9-2 above.

Figure 1

Interim Demand Forecast Reset



Source: SDCWA Presentation to Member Agency Managers February 13, 2018

Along with the drop in consumptive water use of approximately 60,000 AF or 9% by 2040 SDCWA’s Interim Demand Reset also assumed much greater availability of new local water supplies. Table 10-4 is from the Scenario Planning Chapter of SDCWA’s 2015 UWMP which looks at management actions the region could take if assumptions on imported supply or other variables are worse than assumed in the official UWMP Reliability Analyses contained in the 9-2 Tables. The use of additional planned projects in Table 10-4 along with the reduction of consumptive water use in Figure 1 combines to lower the amount of Metropolitan water needed by SDCWA to 10,000 AF in 2035 and improves reliability in the face of further uncertainties in imported water availability.

Table 10-4. Potential Strategies to Manage Uncertainty Scenarios (2035)

| POTENTIAL STRATEGY | ESTIMATED YIELD (AF) |
|---|-----------------------------|
| MEMBER AGENCY VERIFIABLE LOCAL PROJECTS (PLANNED) ¹ | 29,520 |
| MEMBER AGENCY POTENTIAL ADDITIONAL PLANNED LOCAL PROJECTS ² | |
| Potable Reuse | 106,099 |
| Additional Planned Recycled Water and Brackish Groundwater | 10,926 |
| Fallbrook PUD/MCB Camp Pendleton Groundwater Recharge and Recovery Project | 3,100 |
| Otay WD Rosarito Beach Desalination Project | 16,100 |
| Total Additional Planned Local Projects (Member Agencies) | 136,225 |
| WATER AUTHORITY POTENTIAL STRATEGIES | |
| Carlsbad Desalination Plant Additional Capacity | 5,600 |
| Potential Regional Seawater Desalination Facility (MCB Camp Pendleton Phase I) ³ | 56,000 |
| Regional Shortage Management Actions (Dry-year transfers and potential extraordinary conservation savings) | — ⁴ |
| Total Minimum Estimated Yield from Potential Strategies | 227,345 |
| ¹ Potential strategy for Scenario 3. Yields from verifiable local supply planned projects were not included in the 2035 Scenario 3 planning assessment (yields remained at 2015 levels), and are therefore included as strategies to address potential uncertainties of water supply sources for Scenario 3. | |
| ² The estimated yields from the additional planned local supply projects are from the member agencies, and the development and implementation of these supplies rest with the member agencies. | |
| ³ Ultimate decision to move forward on construction of the proposed MCB Camp Pendleton desalination project would be considered in context of the development of member agency local supplies, such as potable reuse, changes in imported supply reliability, and regional water demand levels. | |
| ⁴ Availability of dry-year supplies is described in Section 11.2.4. | |

Source: SDCWA 2015 Urban Water Management Plan, June 2016

It is unclear how SDCWA is using the Interim Demand Reset for its long-term reliability and financial planning. The analysis of District reliability is based on the official SDCWA Board adopted 2015 UWMP and the assumptions on demand and local supply contained in that document. The implementation of 136,000 AF in additional member agency projects would have its greatest impact on the District and other member agencies that are more dependent on SDCWA as the rate base to spread costs across would diminish significantly. The implications of the Demand Reset Analysis are discussed in further detail below.

As noted in Table 9-5 below, in multiple dry years SDCWA begins to experience shortages in Metropolitan supplies beginning in 2028. Tables 9-6 and 9-7 show that in the later years analyzed in its 2015 UWMP multiple dry years result in increasing amounts of shortage due to primarily increased demand for water from growth.

**Table 9-5. Multiple Dry Water Year Supply and Demand Assessment
Five-Year Increments (AF/YR) – 2026-2028**

| | 2026 | 2027 | 2028 |
|--|----------------|----------------|----------------|
| Member Agency Supplies ¹ | 127,941 | 105,048 | 88,009 |
| Water Authority Supplies | 330,200 | 330,200 | 330,200 |
| Metropolitan Allocation (Preferential Right) | 264,600 | 245,570 | 226,440 |
| Total Estimated Core Supplies w/o Storage Takes | 722,741 | 680,818 | 644,649 |
| Total Demands w/ Water Efficiency Savings | 699,895 | 706,894 | 713,963 |
| Potential Supply (Shortage) or Surplus (Difference between Supplies and Demands) | 22,846 | (26,076) | (69,314) |
| Utilization of Carryover Supplies | 0 | 26,076 | 40,000 |
| Total Projected Core Supplies w/ Utilization of Carryover Storage Supplies | 722,741 | 706,894 | 644,649 |
| Remaining Potential Surplus Supply, or (Shortage) that will be handled through Management Actions | 22,846 | 0 | (29,314) |

¹ Member agency local supplies include verifiable recycling and brackish groundwater, as well as dry-year estimates for surface water and groundwater.

Source: SDCWA 2015 Urban Water Management Plan, June 2016

Even with the shortages identified in SDCWA’s 2015 UWMP as occurring over multiple dry years, cutbacks to M&I customers would not exceed 10% until 2038 and in most years identified as a shortage would range between 2% and 7% ⁸. This is due to a combination of more reliable local and imported supplies provided by the Water Authority and local supplies implemented by member agencies which reduce demand for less reliable imported water from Metropolitan.

⁸ Shortage identified in SDCWA 2015 UWMP divided by forecast demand on SDCWA supplies in the shortage years

**Table 9-6. Multiple Dry Water Year Supply and Demand Assessment
Five-Year Increments (AF/YR) – 2031-2033**

| | 2031 | 2032 | 2033 |
|--|----------------|----------------|----------------|
| Member Agency Supplies ¹ | 129,680 | 106,442 | 89,059 |
| Water Authority Supplies | 330,200 | 330,200 | 330,200 |
| Metropolitan Allocation (Preferential Right) | 262,780 | 243,490 | 224,280 |
| Total Estimated Core Supplies w/o Storage Takes | 722,660 | 680,132 | 643,539 |
| Total Demands w/ Water Efficiency Savings | 728,330 | 735,613 | 742,969 |
| Potential Supply (Shortage) or Surplus (Difference between Supplies and Demands) | (5,670) | (55,481) | (99,430) |
| Utilization of Carryover Supplies | 5,670 | 40,000 | 40,000 |
| Total Projected Core Supplies w/ Utilization of Carryover Storage Supplies | 728,330 | 720,132 | 683,539 |
| Remaining Potential Surplus Supply, or (Shortage) that will be handled through Management Actions | 0 | (15,481) | (59,430) |

¹ Member agency local supplies include verifiable recycling and brackish groundwater, as well as dry-year estimates for surface water and groundwater.

Source: SDCWA 2015 Urban Water Management Plan, June 2016

**Table 9-7. Multiple Dry Water Year Supply and Demand Assessment
Five-Year Increments (AF/YR) – 2036-2038**

| | 2036 | 2037 | 2038 |
|--|----------------|----------------|----------------|
| Member Agency Supplies ¹ | 130,116 | 106,954 | 89,647 |
| Water Authority Supplies | 330,200 | 330,200 | 330,200 |
| Metropolitan Allocation (Preferential Right) | 260,260 | 241,410 | 222,480 |
| Total Estimated Core Supplies w/o Storage Takes | 720,576 | 678,564 | 642,327 |
| Total Demands w/ Water Efficiency Savings | 749,030 | 756,521 | 764,086 |
| Potential Supply (Shortage) or Surplus (Difference between Supplies and Demands) | (28,454) | (77,957) | (121,759) |
| Utilization of Carryover Supplies | 28,454 | 40,000 | 40,000 |
| Total Projected Core Supplies w/ Utilization of Carryover Storage Supplies | 749,030 | 718,564 | 682,327 |
| Remaining Potential Surplus Supply, or (Shortage) that will be handled through Management Actions | 0 | (37,957) | (81,759) |

¹ Member agency local supplies include verifiable recycling and brackish groundwater, as well as dry-year estimates for surface water and groundwater.

Source: SDCWA 2015 Urban Water Management Plan, June 2016

SDCWA UWMP Assumptions on Local Supplies and MWD Shortage Allocation

There are three key assumptions in SDCWA's UWMP that can affect the results of its Dry Year analysis:

1. Implementation of additional local recycling and groundwater projects
2. The development of a revised "Demand Reset" analysis that lowered SDCWA demand on and Metropolitan supplies below 2015 UWMP estimates
3. In a Metropolitan declared shortage SDCWA will receive its Preferential Right to MWD water.

Future Local Project Implementation

Member Agency local supplies included in the SDCWA 2015 UWMP analysis of Dry Year reliability include what are termed "*verifiable projects*". Verifiable Projects are future supply projects that can demonstrate based on substantial evidence that the projects are proceeding, and the supply can be expected to be available. Projects being planned by member agencies or considered to be at a conceptual level are not included. If those planned or conceptual projects are implemented along with the Verifiable projects, there may be more than assumed in the SDCWA 2015 UWMP Dry Year analysis. Although some verifiable projects have not yet been implemented, it is a reasonable assumption for SDCWA to include them in its 2015 UWMP dry year analysis.

Shortage Allocation by Preferential Right

The assumption that SDCWA's Preferential Right to MWD water will be the basis of its Metropolitan supply shortage allocation requires certain caveats. Preferential Rights, or Article 135 of the MWD Act, provides a member agency a right to available Metropolitan water in an amount equal to its pro rata share of total historical payments to Metropolitan excluding the purchase of water⁹. On the three occasions in the last 28 years that Metropolitan has allocated water to its member agencies (1991-1992, 2010-2011, 2015-2016), Preferential Rights has not been invoked or used as the method to allocate water.

The Water Shortage Allocation Plan (WSAP) approved by the Metropolitan Board has been the methodology used to allocate water and is based on a combination of an agency's demand on Metropolitan, its total retail demand and other factors such as water conservation and population growth. Historically, SDCWA reliance on Metropolitan supplies has exceeded its Preferential Right and assuming a Preferential Right allocation was a worst-case planning scenario. With the ramp-up of the QSA supplies, Carlsbad Desalination and increasing member

⁹ In January 2001 SDCWA filed suit against Metropolitan challenging the calculation of Preferential Rights in that SDCWA financial contribution including water purchases which were excluded in Section 135 were much higher than its Preferential Right. After superior and appellate rulings in favor of Metropolitan SDCWA appealed to the California Supreme Court which in 2002 upheld the validity of the Preferential Rights calculation.

agency local supply projects SDCWA's percent reliance on MWD will be significantly less than its Preferential Right percentage.

That differential increased even more with the recent California Court of Appeal decision in *SDCWA v MWD* rate litigation where the Court ordered Metropolitan to add certain wheeling charges paid by SDCWA for QSA supply transportation to its calculation of Preferential Rights. As a result of the Court of Appeals decision, SDCWA's Preferential Right to Metropolitan's available supplies is currently 23% while it constitutes less than 15% of total MWD deliveries and will continue to reduce those deliveries to less than 10% of total Metropolitan deliveries over the next 15 years ¹⁰.

The assumption that SDCWA's Board of Directors will invoke its Preferential Right or that a future Metropolitan Board will use Preferential Rights as the method to allocate water is speculative and in conflict with past practice and previous litigation by SDCWA against Metropolitan and the legality of Preferential Rights. It may be more likely that Metropolitan's Water Shortage Allocation Plan (WSAP) or a future version of that allocation methodology based on the need for Metropolitan water will be used when the next dry year shortage in Metropolitan supplies occurs. It is likely with the use of a need based shortage allocation under Metropolitan's WSAP that cutbacks to SDCWA will be larger than assumed in the SDCWA 2015 UWMP.

These larger cutbacks may be somewhat mitigated by the fact that in SDCWA's analysis they use an historically low 1.4 MAF of available MWD water in a single dry year and in the three multiple dry years' scenarios use 1.4 MAF, 1.3 MAF and 1.2 MAF as available Metropolitan supplies to apply their Preferential Right percentage. If Metropolitan's available supplies are more than assumed by SDCWA then a WSAP allocation may be closer to the assumption and allocation by Metropolitan used in SDCWA's 2015 UWMP.

2018 Demand Reset Analysis

As discussed above, in 2018 SDCWA released a revised 2035 Demand forecast that differed from the 2015 UWMP. The Demand Reset both lowered total demand in 2035 by 9% but included Additional Planned local projects by member agencies. The 9% reduction in demand resulted in SDCWA needing only 10,000 AF in Metropolitan supplies in 2035. The inclusion of Additional Planned projects adds 136,000 AF or over an 100% increase in available new local supplies over the estimate of verifiable only contained in the 2015 UWMP. These additional planned projects include both Phases of the City of San Diego's Pure Water project and East County Advanced Water Purification Project, to recycling and groundwater projects in north County and Otay Water District's participation in a binational seawater desalination Plant in Rosarito Beach, Baja California, Mexico. To the extent some or all of these projects are implemented in the region, SDCWA's supplies will be more reliable. The reduction in SDCWA's

¹⁰ FY 2018 MWD deliveries less QSA Supplies compared to Total MWD Deliveries FY 2018 less QSA supplies

deliveries from Metropolitan under the 2018 Interim Demand Reset will increase the disparity between SDCWA's need for Metropolitan water (less than 1% of total Metropolitan supplies in 2035) and its Preferential Right (24.22%).

SDCWA Drought Shortage Allocation Methodology

SDCWA's Water Shortage & Drought Response Plan (WSDRP) details its policies and procedures for drought and shortage management. The Shortage allocation methodology is included in the WSDRP Plan and has separate methods for allocating water to member agencies M&I users and TSAWR participants.

M&I Cutbacks

M&I shortage allocations are based on a member agency's three year average of SDCWA deliveries prior to the activation of the WSDRP. The base period is adjusted upwards for conservation, population growth, loss of local supply and highly reliable local supply implementations e.g.; water recycling, brackish groundwater recovery and seawater desalination. A final adjustment upwards is made if SDCWA cutbacks reach or exceeds 20% ¹¹. A *Retail Reliability Adjustment* is made for member agencies to ensure that their total Level of Service is within 5% of the regional average. For example, if the region wide cutback level for M&I is 10% any individual member agency will not experience a greater than 15% shortage.

TSAWR Cutbacks

TSAWR is allocated through a separate methodology that also establishes a Base Period previous to the allocation period for average deliveries to TSAWR customers. Each individual agency has a pro rata share of the total base period TSAWR deliveries. TSAWR supplies are set aside from SDCWA's allocation of water from Metropolitan based on the cutback percentage established by Metropolitan. If Metropolitan's cutback is 15% then SDCWA reduces the Base Period TSAWR demand by 15% and sets that amount of MWD aside. The member agency's pro-rata percentage of the total Base Period TSAWR deliveries is then applied to the available TSAWR supplies. That is the member agency's TSAWR allocation. TSAWR customers do not benefit from any of SDCWA's QSA or desalinated supplies and do not receive any water from Carry Over Storage or any water transfers SDCWA may acquire.

¹¹ There has been discussion based on recent allocation experience of lowering the shortage percentage for the Retail Reliability Analysis. This analysis assumes that the Retail Reliability Adjustment can be utilized at any level of cutback

RMWD Reliability Planning

The main test of reliability as a member agency of SDCWA or EMWD is the result it has on District customers. The District's 2015 UWMP analyzed its Dry Year reliability based on SDCWA's regional reliability analysis and how shortage allocation would impact the District. Tables 7-3 and Tables 7-4 from the 2015 UWMP illustrate the results. In the District's analysis, it was assumed that a dry year increase in demand would result in a minimum 15% cutback to TSAWR deliveries. That is a more conservative assumption than contained in SDCWA's Dry Year analyses.

Table 7-3: Single Dry Year Supply and Demand Comparison

| | 2020 | 2025 | 2030 | 2035 | 2040 |
|---------------|--------|--------|--------|--------|--------|
| Demand totals | 22,188 | 22,296 | 22,321 | 22,459 | 22,188 |
| Supply totals | 21,362 | 20,849 | 20,753 | 20,915 | 21,362 |
| Deficit (AF) | 826 | | 1,568 | 1,544 | 826 |
| % of Demands | 4% | 6% | 7% | 7% | 4% |

Notes: Same as first year of Multiple Dry Year analysis from Table 7-4, per Water Authority supply allocation policy. Assumes dry-year increase in demands. Assumes minimum 15 percent reduction in TSAWR program deliveries

Table 7-4: Multiple Dry Years Supply and Demand Comparison

| | | 2020-22 | 2025-27 | 2030-32 | 2035-37 |
|-------------|--------------------|---------|---------|---------|---------|
| First year | Demand totals (AF) | 22,188 | 22,296 | 22,321 | 22,459 |
| | Supply totals (AF) | 21,362 | 20,849 | 20,753 | 20,915 |
| | Deficit (AF) | 826 | 1,447 | 1,568 | 1,544 |
| | % of Demands | 4% | 6% | 7% | 7% |
| Second year | Demand totals | 22,051 | 22,372 | 22,418 | 22,516 |
| | Supply totals | 21,105 | 20,476 | 20,894 | 21,224 |
| | Deficit (AF) | 946 | 1,896 | 1,524 | 1,292 |
| | % of Demands | 4% | 8% | 7% | 6% |
| Third year | Demand totals | 21,922 | 22,449 | 22,516 | 22,573 |
| | Supply totals | 20,868 | 20,745 | 20,724 | 20,670 |
| | Deficit (AF) | 1,054 | 1,704 | 1,792 | 1,903 |
| | % of Demands | 5% | 8% | 8% | 8% |

Notes: Per Water Authority supply allocation policy. Assumes dry-year increase in demands. Assumes minimum 15 percent reduction in TSAWR program deliveries.

Potential RMWD Local Supply Projects

As a SDCWA member agency, one of the biggest factors affecting retail level reliability is the availability of local supplies to the member agency. Local supplies reduce a demand on SDCWA and under the SDCWA shortage allocation methodology receive additional water if they are a highly reliable supply e.g. recycled water, brackish or seawater desalination.

Currently the District does not own or use local water as a source of its municipal supply. In its Board approved 2015 Urban water Management Plan (June 2016) (UWMP) the District did identify conceptual projects it was considering that could provide up to 2,500 AFY of reliable local supplies from recycled water and recovered brackish groundwater. Table 6-7C from the 2015 UWMP provides the specific details. Since the completion of the District’s 2015 UWMP it has been determined that the *Rainbow Recycled Water Project Expansion* is not considered feasible or cost effective due to the excessive cost for distribution pipelines to convey non potable recycled water to irrigators. The District is still evaluating the feasibility and cost effectiveness of *Bonsall Groundwater Desalter Expansion*.

Table 6-7C: Additional Conceptual Future Water Supply Projects

| Name of Future Projects or Programs | Joint Project with other agencies? | Description | Conceptual Implementation Year | Planned for Use in Year Type | Conceptual Supply (AF/yr.) |
|--|------------------------------------|---------------------------------------|--------------------------------|------------------------------|----------------------------|
| Rainbow Recycled Water Project Expansion | No | Possible expansion of Planned project | 2025 to 2030 | All (baseline supply) | 500 |
| Bonsall Groundwater Desalter Expansion | No | Possible expansion of Planned project | 2025 to 2035 | All (baseline supply) | 2,000 |
| TOTAL: | | | | | 2,500 |

NOTES: Only "Conceptual" projects are included. Conceptual projects are those project concepts that have not been subject to formal study or that have significant uncertainties or obstacles to implementation. This table is not part of the official DWR UWMP table set and is presented as supplemental information only
 Source: RMWD 2015 Urban Water Management Plan (June 2016)

The District classified these supplies as *“Conceptual”* which means that they are not used in any of the required reliability analyses contained in the District’s or SDCWA’s UWMPs. If implemented local supplies would enhance the reliability of the District’ supplies during a shortage and would decrease or eliminate the estimated shortfalls contained in Tables 7-3 and 7-4 above.

Reliability in an Emergency

Assessing the District's reliability in a catastrophic emergency where imported water is cutoff requires a different analysis than dry year drought induced shortages. SDCWA's Emergency Storage Project (ESP) is designed to address a catastrophic failure of the imported water system in the event of a major earthquake under two major scenarios.

- 2 month emergency: no imported water available due to a major seismic event on the Elsinore Fault in southern Riverside County that results in a failure of Metropolitan's conveyance and treatment facilities and an inability to supply imported water to San Diego County. ***Note: MWD's emergency planning documentation does not forecast a two month outage due to the Elsinore fault in any scenario. MWD's longest forecast outage is two weeks.***
- 6 month emergency : partial availability of imported water due to a major seismic event on the San Andreas and/or the San Jacinto Faults that results in loss of imported water supplies. Metropolitan is still able to convey and treat stored water through its southern Riverside County facilities.

Figure 3 below identifies the location the earthquake faults that could impact the delivery of imported water into San Diego County.

Figure 3



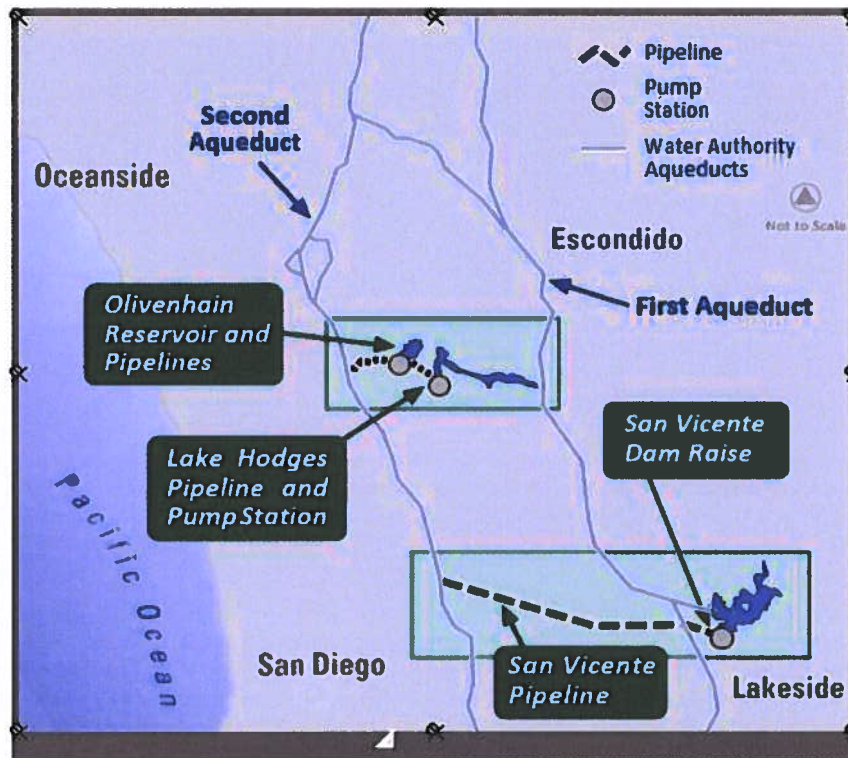
Earthquake faults in Southern California could damage pipelines that deliver imported water to the San Diego region.

Source: SDCWA Emergency & Carryover Storage Fact Sheet , March 2019

The ESP consists of pipelines, pump stations and new and existing surface storage reservoirs capable of storing up to 90,000 AF of emergency supplies. the ESP was designed to provide up to a 75% level of service to Municipal & Industrial customers for either the 2-month or 6-month catastrophic emergency condition. As originally planned the ESP would deliver untreated water to agencies north of Olivenhain Dam. Subsequently, SDCWA built the Twin Oaks Valley Water Treatment Plant (TOVWTP) which is capable of supplying treated water to member agencies south of the plant. Currently SDCWA cannot supply the required treated water in an emergency condition from TOVWTP. District staff is working with SDCWA staff to build a North County pump station capable of supplying treated water to the District in the event Metropolitan’s Skinner Plant is unable to deliver water to the District. It is estimated that pumping of treated water from TOVWTP to the District will not be available until at least 2025. SDCWA placed the project on hold in 2019 when RMWD and FPUD signaled an intent to explore annexation into EMWD. Only planning level work – no design work – has been completed on the project since it was identified as being needed in 1996.

Figure 4 below identifies the major storage and conveyance facilities associated with the ESP.

Figure 4



Source: SDCWA Emergency & Carryover Storage Fact Sheet , March 2019

In such an event the SDCWA Board of Directors would declare an emergency and supplies would be allocated from ESP facilities to augment member agencies level of service to at least 75% of calculated need. Level of need is based on a member agency's demand for water during the emergency and the amount of local supplies available to them. A member agency without its own local supplies would receive the highest proportion of ESP water. SDCWA's 2013 Emergency Water Delivery Plan provides the following general approach to an allocation under a catastrophic emergency. Note that in Step 9 of the procedure, member agencies with TSAWR customers receive a lower level of service from the ESP.

The following general procedure from the January 2013 Emergency Water Delivery Plans shows the methodology for calculating the allocation of ESP supplies to member agencies in a prolonged outage situation without imported supplies:

1. Define the water storage and conveyance facility infrastructure that would be in place at the time of the emergency event in order to estimate duration of emergency (that is, time needed to repair damaged pipelines and/or infrastructure).
2. Determine the total demand of each member agency during the emergency, considering both M&I and agricultural demands.
3. Determine the net demand of each member agency, considering the availability of recycled water supplies.
4. Determine the local supplies available to each member agency from groundwater and surface water storage.
5. Determine the amount of local water that could be transferred within City of San Diego service areas, and between member agencies.
6. Determine the amount of Carlsbad Desalination Plant supplies that could be delivered to member agencies.
7. Determine the amount of imported water supplies from Metropolitan available to deliver to member agencies.
8. Allocate ESP supplies in Olivenhain, Lake Hodges, and San Vicente Reservoirs to each member agency to achieve an initial level of service of 75 percent, considering other supplies available to each member agency as described above and taking into account limitations of delivery facilities.
9. Determine reductions in member agency deliveries due to the influence of the Water Authority's TSAWR program. The cutback rate for TSAWR customers is twice the rate imposed on Water Authority M&I customers, up to a 90 percent cutback. Reductions in deliveries that arise from such a cutback would be reallocated to commercial and industrial customers.
10. Determine increases in member agency deliveries due to redistribution of the emergency water not delivered to member agencies as a result of the TSAWR program.
11. Determine net Water Authority deliveries to member agencies from all water supply sources available to the Water Authority, consisting of Carlsbad Desalination Plant supplies, imported water supplies from Metropolitan, and ESP

Source: SDCWA 2015 Urban Water Management Plan, June 2016

M&I Emergency Deliveries

In the case of a prolonged cutoff of the imported water system the District can assume a 75% level of service for its M&I customers.

TSAWR Emergency Deliveries

In the case of a prolonged cutoff of the imported water system the District can assume an approximately 35-40% level of service for its TSAWR customers. Because of its lower priority of service cutbacks to TSAWR agricultural users may be even greater.

District Supply Reliability as a Member Agency of EMWD

District Reliability is Based on Metropolitan Reliability

Under the terms of annexation being explored with EMWD the District would not receive any of EMWD local supplies or stored water in either normal or dry weather conditions. As contemplated in a potential annexation, the District would receive imported water through EMWD supplied by Metropolitan. Because of that arrangement, the District would be entirely dependent on the reliability and availability of Metropolitan supplies.

In evaluating Metropolitan supply reliability there are three foundational planning documents that provide the basis for reliability; the *2015 Integrated Resources Plan (IRP)*, the *Water Surplus and Drought Management (WSDM) Plan* and the *2015 Regional Urban Water Management Plan (RUWMP)*. Metropolitan's primary planning process for determining its long-term strategy for meeting the reliability needs of its member agencies and sub agencies is periodic updates of the IRP. First developed in 1995, Metropolitan's IRP lays out the regional strategy of improving reliability of imported supplies, utilizing in region and out of region storage and increasing supply diversification through the development of reliable local supplies and water conservation. This is the fundamental strategy Metropolitan has employed since the first IRP in 1995 and continues to be reflected in its most current water supply planning documents.

2015 IRP UPDATE ¹²

In its 2015 IRP Update, Metropolitan continued to stay committed to its reliability strategy of supply diversification and water storage. Metropolitan has developed dry-year storage with a capacity of more than 5.5 million acre feet to manage water supplies for both surplus and shortage conditions. Metropolitan owned storage consists of the 800,000 Acre foot Diamond Valley Reservoir in southern Riverside County, storage capacity in other Metropolitan owned and other state and federal surface reservoirs as well as groundwater storage within Southern California and in the Central Valley.

The following examples are Metropolitan surface water storage identified in the IRP

¹² First IRP was adopted in 1996 and first updated in 2010. This is the second update to the 1996 IRP

SURFACE WATER RESERVOIRS

- Diamond Valley Lake (810,000 acre-feet)
- SWP Article 56 Carryover Storage (up to 200,000 acre-feet)
- Flexible Storage in Castaic Lake and Lake Perris (219,000 acre-feet)
- Intentionally Created Surplus in Lake Mead (1.5 million acre-feet)

Source: MWD IRP 2015 Update, January 2016

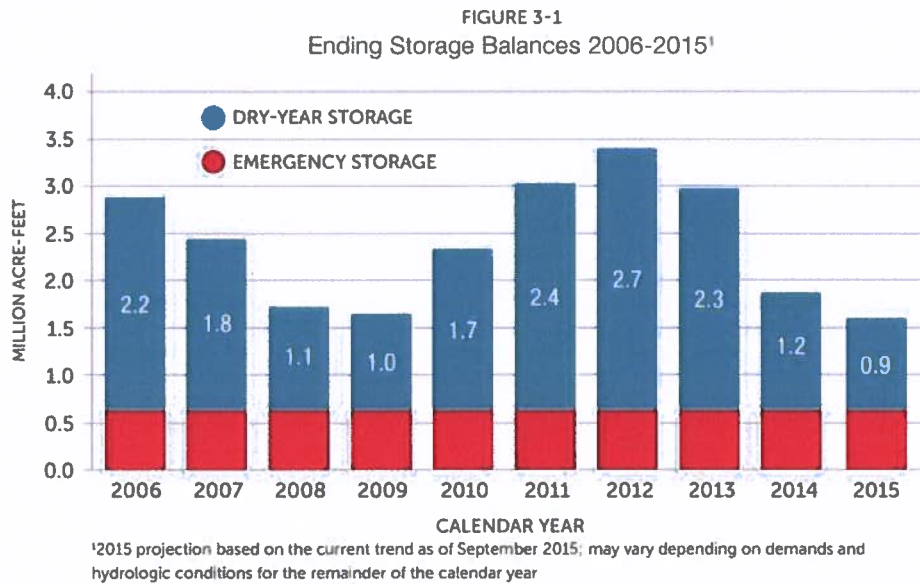
The following statement from the 2015 IRP update summarizes Metropolitan's stated reliability strategy:

A VISION FOR WATER MANAGEMENT

Diversifying the region's water supplies and developing adequate and healthy water storage reserves has proven to be the backstop for reliability. Stored water reserves provide certainty for meeting the needs of the region's vast service area when traditional sources of supply are challenged by drought, climate change and other risks. But these storage resources must be developed, managed and enhanced. The important elements of using storage to manage water supplies and enhance reliability have been detailed since 1999 in Metropolitan's Water Surplus and Drought Management Plan (WSDM Plan).

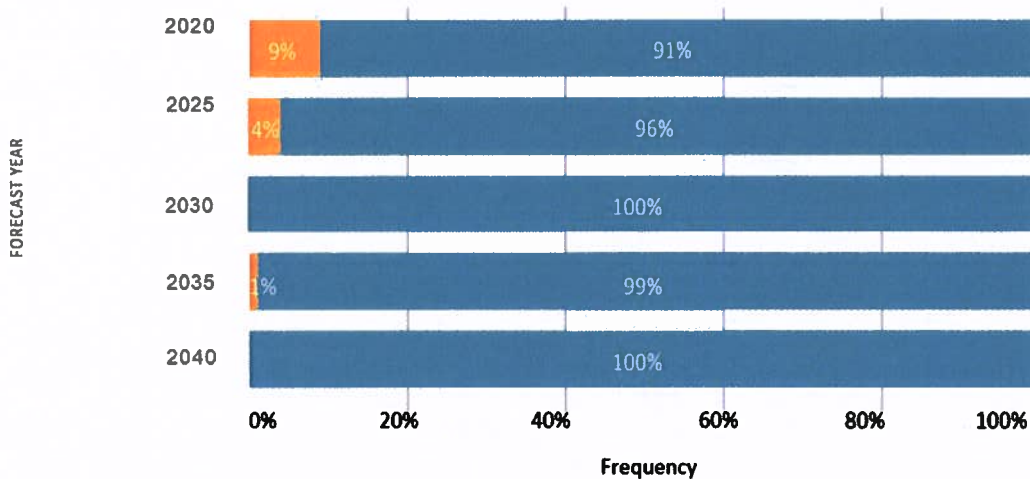
In the 2015 IRP Update, Metropolitan identified a storage level of under 1 million acre feet (MAF) out of a total storage capacity of approximately 5.5 MAF as a trigger condition for initiating a shortage allocation. The significance of dropping below 1 MAF of storage and initiating a shortage allocation is that the uncertainty over the length of time that dry weather conditions will continue requires prudent management of remaining stored water. It will be necessary to protect those storage levels by limiting deliveries to member agencies through specific allocations of water. Figure 3-1 below from the 2015 IRP Update provides end of year storage levels for Metropolitan. This period includes the two most recent droughts and imported water shortages (2007-2011 and 2013-2015). Note that in 2009 and 2015 Metropolitan instituted water shortage allocations to its member agencies.

Metropolitan analyzes supply availability and potential storage levels through a probabilistic computer model, IRPSIM. IRPSIM calculates probability based on 90 years of weather data correlated to supply availability and water demand. Figure 4-2 below illustrates that in its



analysis Metropolitan has identified a 9% probability of storage levels dropping below 1 MAF in 2020 and triggering a shortage allocation. Figure 4-2 also provides an estimate of the probability of allocation in five year intervals from 2020 through 2040.

Figure 4-2



Source: MWD IRP 2015 Update, January 2016

This analysis of reliability is based on the implementation of the “IRP Approach” approved by the Metropolitan Board in 2015.

Metropolitan’s IRP Approach

Table ES-1 is from the 2015 IRP Update demonstrates that under average weather conditions supplies expected to be available to meet full retail water demand will exceed the amount of estimated demand. Similar to analyzing reliability as a SDCWA member agency, membership in EMWD will be equivalent to that of SDCWA in normal weather years. Also, similar to evaluating District reliability as a SDCWA member agency, it is necessary to focus on Metropolitan reliability under dry weather conditions and potential shortages as indicated in Metropolitan’s 2015 Regional Urban Water Management Plan (RUWMP)

TABLE ES-1
2015 IRP Update
Total Level of Average-Year Supply Targeted (Acre Feet)

| | 2016 | 2020 | 2025 | 2030 | 2035 | 2040 |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Retail Demands before Conservation | 4,878,000 | 5,219,000 | 5,393,000 | 5,533,000 | 5,663,000 | 5,792,000 |
| Total Conservation Target | 1,034,000 | 1,096,000 | 1,197,000 | 1,310,000 | 1,403,000 | 1,519,000 |
| Retail Demands after Conservation | 3,844,000 | 4,123,000 | 4,196,000 | 4,223,000 | 4,260,000 | 4,273,000 |
| Minimum CRA Diversion Target | 900,000 | 900,000 | 900,000 | 900,000 | 900,000 | 900,000 |
| Average Year SWP Target | 1,202,000 | 984,000 | 984,000 | 1,213,000 | 1,213,000 | 1,213,000 |
| Total Local Supply Target | 2,199,000 | 2,307,000 | 2,356,000 | 2,386,000 | 2,408,000 | 2,426,000 |
| Total Supply Reliability Target | 4,301,000 | 4,191,000 | 4,240,000 | 4,499,000 | 4,521,000 | 4,539,000 |

Source: MWD IRP 2015 Update, January 2016

In analyzing Metropolitan reliability during a single dry year Table 2-4 from Metropolitan’s 2015 IRP Update evaluates its balance of supply and demand by using the single dry year on record to determine how its resources plan would perform. Under Metropolitan’s 2015 RUWMP it will have sufficient supplies, including stored water, to meet demand having a surplus of water in all years analyzed. In the single dry year analysis in Table 2-4 Retail demands after conservation are less than total supply available in each of the 5 year increments through 2040.

Table 2-4

| | | | | | | |
|--|------------------|------------------|------------------|------------------|------------------|------------------|
| Minimum CRA Diversion Target | 900,000 | 900,000 | 900,000 | 900,000 | 900,000 | 900,000 |
| Average Year SWP Target | 1,202,000 | 984,000 | 984,000 | 1,213,000 | 1,213,000 | 1,213,000 |
| Total Local Supply Target | 2,199,000 | 2,307,000 | 2,356,000 | 2,386,000 | 2,408,000 | 2,426,000 |
| Total Supply Reliability Target | 4,301,000 | 4,191,000 | 4,240,000 | 4,499,000 | 4,521,000 | 4,539,000 |
| | 2016 | 2020 | 2025 | 2030 | 2035 | 2040 |
| Retail Demands before Conservation | 4,878,000 | 5,219,000 | 5,393,000 | 5,533,000 | 5,663,000 | 5,792,000 |
| Total Conservation Target | 1,034,000 | 1,096,000 | 1,197,000 | 1,310,000 | 1,403,000 | 1,519,000 |
| Retail Demands after Conservation | 3,844,000 | 4,123,000 | 4,196,000 | 4,223,000 | 4,260,000 | 4,273,000 |

Source: MWD IRP 2015 Update, January 2016

Two Tables noted as Table 2-5 below provide an analysis of Metropolitan’s reliability in multiple dry years from its 2015 RUWMP under differing weather conditions. This analysis reviews impacts to Metropolitan resulting from a repeat of the historical dry weather pattern experienced in 1991-1992 (hydrology) and when looking across the 90-hydrologies contained in IRPSIM and their effects on both Metropolitan water demand and supply availability including storage levels.

**Table 2-5 Multiple
Dry-Year**

Supply Capability¹ and Projected Demands

Repeat of 1990-1992 Hydrology

(Acre-feet per year)

| Forecast Year | 2020 | 2025 | 2030 | 2035 | 2040 |
|--|------------------|------------------|------------------|------------------|------------------|
| Current Programs | | | | | |
| In-Region Supplies and Programs | 239,000 | 272,000 | 303,000 | 346,000 | 364,000 |
| California Aqueduct ² | 712,000 | 730,000 | 743,000 | 752,000 | 752,000 |
| Colorado River Aqueduct | | | | | |
| Total Supply Available ³ | 1,403,000 | 1,691,000 | 1,690,000 | 1,689,000 | 1,605,000 |
| Aqueduct Capacity Limit ⁴ | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 |
| Colorado River Aqueduct Capability | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 |
| Capability of Current Programs | 2,151,000 | 2,202,000 | 2,246,000 | 2,298,000 | 2,316,000 |
| Demands | | | | | |
| Total Demands on Metropolitan | 1,727,00 | 1,836,00 | 1,889,00 | 1,934,00 | 1,976,00 |
| IID-SDCWA Transfers and Canal | 0 | 0 | 0 | 0 | 0 |
| Linings | 274,00 | 282,00 | 282,00 | 282,00 | 282,00 |
| | 0 | 0 | 0 | 0 | 0 |
| Total Metropolitan Deliveries⁵ | 2,001,000 | 2,118,000 | 2,171,000 | 2,216,000 | 2,258,000 |
| Surplus | 150,000 | 84,000 | 75,000 | 82,000 | 58,000 |
| Programs Under Development | | | | | |
| In-Region Supplies and Programs | 36,000 | 73,000 | 110,000 | 151,000 | 192,000 |
| California Aqueduct | 7,000 | 7,000 | 94,000 | 94,000 | 94,000 |
| Colorado River Aqueduct | | | | | |
| Total Supply Available ³ | 80,000 | 75,000 | 50,000 | 25,000 | 25,000 |
| Aqueduct Capacity Limit ⁴ | 0 | 0 | 0 | 0 | 0 |
| Colorado River Aqueduct Capability | 0 | 0 | 0 | 0 | 0 |
| Capability of Proposed Programs | 43,000 | 80,000 | 204,000 | 245,000 | 286,000 |
| Potential Surplus | 193,000 | 164,000 | 279,000 | 327,000 | 344,000 |

¹ Represents Supply Capability for resource programs under listed year type.

² California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

³ Colorado River Aqueduct includes programs, IID-SDCWA transfer and exchange and canal linings conveyed by the aqueduct.

⁴ Maximum CRA deliveries limited to 1.20 MAF including IID-SDCWA transfer and exchange and canal linings.

⁵ Total deliveries are adjusted to include IID-SDCWA transfer and exchange and canal linings. These supplies are calculated as local supply but need to be shown for the purposes of CRA capacity limit calculations without double counting.

Source: MWD Regional Urban Water Management Plan, March 2016

**Table 2-5 Multiple
Dry-Year**

Supply Capability¹ and Projected Demands

**Average of 1922-2012
Hydrologies**

(Acre-feet per year)

| Forecast Year | 2020 | 2025 | 2030 | 2035 | 2040 |
|--|------------------|------------------|------------------|------------------|------------------|
| Current Programs | | | | | |
| In-Region Supplies and Programs | 693,000 | 774,000 | 852,000 | 956,000 | 992,000 |
| California Aqueduct ² | 1,760,000 | 1,781,000 | 1,873,000 | 1,899,000 | 1,899,000 |
| Colorado River Aqueduct | | | | | |
| Total Supply Available ³ | 1,468,000 | 1,488,000 | 1,484,000 | 1,471,000 | 1,460,000 |
| Aqueduct Capacity Limit ⁴ | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 |
| Colorado River Aqueduct Capability | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 |
| Capability of Current Programs | 3,653,000 | 3,755,000 | 3,925,000 | 4,055,000 | 4,091,000 |
| Demands | | | | | |
| Total Demands on Metropolitan | 1,586,000 | 1,636,000 | 1,677,000 | 1,726,000 | 1,765,000 |
| IID-SDCWA Transfers and Canal Linings | 274,000 | 282,000 | 282,000 | 282,000 | 282,000 |
| Total Metropolitan Deliveries⁵ | 1,860,000 | 1,918,000 | 1,959,000 | 2,008,000 | 2,047,000 |
| Surplus | 1,793,000 | 1,837,000 | 1,966,000 | 2,047,000 | 2,044,000 |
| Programs Under Development | | | | | |
| In-Region Supplies and Programs | 43,000 | 80,000 | 118,000 | 160,000 | 200,000 |
| California Aqueduct | 20,000 | 20,000 | 225,000 | 225,000 | 225,000 |
| Colorado River Aqueduct | | | | | |
| Total Supply Available ³ | 5,000 | 25,000 | 25,000 | 25,000 | 25,000 |
| Aqueduct Capacity Limit ⁴ | 0 | 0 | 0 | 0 | 0 |
| Colorado River Aqueduct Capability | 0 | 0 | 0 | 0 | 0 |
| Capability of Proposed Programs | 63,000 | 100,000 | 343,000 | 385,000 | 425,000 |
| Potential Surplus | 1,856,000 | 1,937,000 | 2,309,000 | 2,432,000 | 2,469,000 |

¹ Represents Supply Capability for resource programs under listed year type.

² California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

³ Colorado River Aqueduct includes programs, IID-SDCWA transfer and exchange and canal linings conveyed by the aqueduct.

⁴ Maximum CRA deliveries limited to 1.20 MAF including IID-SDCWA transfer and exchange and canal linings.

⁵ Total deliveries are adjusted to include IID-SDCWA transfer and exchange and canal linings. These supplies are calculated as local supply but need to be shown for the purposes of CRA capacity limit calculations without double counting.

Source: MWD Regional Urban Water Management Plan, March 2016

IRP Water Supply Buffer

A key approach in Metropolitan's long term water supply planning is the development of "Buffer Supplies". A Water Supply Buffer requires the development of multiple sources of local and imported supplies that ensure that potential available supplies under any weather condition will always exceed the demand for water. Concurrent with creating the supply buffer is an adaptive management strategy that assesses current and anticipated conditions and then adjusts the buffer to expedite or slow down the development of new supplies as warranted.

A potential drawback to the supply buffer is it rests on the actions of others beyond Metropolitan itself to implement local supply and imported water projects.

Metropolitan IRP & UWMP Assumptions on Imported and Local Water Supplies

The reliability analysis contained in Metropolitan's IRP and 2015 RUWMP rests on a set of key assumptions related to Colorado River water availability, addressing regulatory concerns in the Bay Delta through the construction and operation of new diversion and conveyance facilities of California WaterFix and reliance on Metropolitan member agency implementation of local supply projects. To the extent that any of these assumptions are not realized as expected, the estimated surpluses on Metropolitan's planning documents would be significantly less.

For purposes of evaluating Metropolitan reliability this analysis of District reliability as a member of EMWD considers cutbacks declared by Metropolitan in the two most recent drought events as the best benchmark for supply reliability. In both drought events Metropolitan experienced a maximum of 15% cutback.

Metropolitan Shortage Allocation

Shortage allocation is administered by Metropolitan through the Water Shortage Allocation Plan (WSAP) Per its 2015 RUWMP:

The WSAP formula is calculated in three steps: base period calculations, allocation year calculations, and supply allocation calculations. The first two steps involve standard computations, while the third step contains specific methodology developed for the WSAP.

Step 1: Base Period Calculations

The first step in calculating a water supply allocation is to estimate water supply and demand using a historical base period with established water supply and delivery data. The base period for each of the different categories of demand and

supply is calculated using data from fiscal years (July through June) ending 2013 and 2014.

Step 2: Allocation Year Calculations

The next step in calculating the water supply allocation is estimating water needs in the allocation year. This is done by adjusting the base period estimates of retail demand for population growth and changes in local supplies.

Step 3: Supply Allocation Calculations

The final step is calculating the water supply allocation for each member agency based on the allocation year water needs identified in Step 2. There are a number of adjustments that go into a member agency's water supply allocation. Each element and its application in the allocation formula are discussed in detail in Metropolitan's WSAP.

Source: MWD Regional Urban Water Management Plan, March 2016

Metropolitan Reliability in an Emergency

Emergency storage requirements are based on the potential of a major earthquake damaging the aqueducts that transport Southern California's imported water supplies (SWP, CRA, and Los Angeles Aqueduct). The adopted criteria assume that damage from such an event could render the aqueducts out of service for six months. Therefore, Metropolitan has based its planning on a 100% reduction in these imported supplies for a period of six months, which is a greater shortage than required by the Act.

The emergency plan outlines that under such a catastrophe, non-firm service deliveries would be suspended, and firm supplies to member agencies would be restricted by a mandatory cutback of 25% from normal-year demand levels (75% Level of Service). At the same time, water stored in surface reservoirs and groundwater basins under Metropolitan's program would be made available, and Metropolitan would draw on its emergency storage, as well as other available storage. In addition to Diamond Valley Lake (DVL), Metropolitan has access to emergency storage at its other reservoirs, and at the SWP terminal reservoirs, and in its groundwater, conjunctive use storage accounts.

COMPARATIVE ANALYSIS OF RELIABILITY

Reliability in Prolonged Drought/Shortage

As either a member agency of SDCWA or EMWD, the District will be vulnerable to shortages of imported water from Metropolitan. Although Metropolitan and its member agencies have made substantial investments in storage, local supplies and improvements to imported water reliability the vulnerability remains. Within the last 10 years Metropolitan has initiated its WSAP program during two different drought events for multiple years during each drought. WASAP allocations were as high as a Level 3 Shortage Allocation of 15%.

As a member agency of SDCWA the District's M&I customers benefit from the San Diego region's investments in more reliable imported supplies through the QSA, highly reliable local supplies such as SDCWA's Carlsbad Desalination Project and stored water from the Emergency and Carryover Storage Project (ESP/CSP). The District's supply reliability is also improved by current and future investments by other SDCWA member agencies in local water recycling and brackish groundwater recovery that reduce a demand for MWD imported water.

On the other hand, the District customers who are part of the TSAWR program receive the same level of reliability as any customer that is 100% reliant on imported water from Metropolitan. In evaluating District reliability, a prudent perspective is to understand the impact experienced in the last two droughts where Metropolitan instituted WASAP at Level 3 or a 15% shortage of imported supplies. The approximate cutbacks to District customers in 2030 are estimated in Tables A-D below.

Both SDCWA and Metropolitan have detailed computer models that calculate member agency allocations including the various adjustments used by both agencies. The final allocations consider what other member agencies supplies and demands are in the allocation year. The analysis contained below uses simplified assumptions based on the allocation methodologies and supply and demand amounts contained in the most recent UWMPs. ¹ For more accurate estimates of what the District's shortage allocation would be it would be necessary to request that SDCWA and potentially Metropolitan run their allocation models.

Table A provides the assumptions for a Metropolitan's WSAP were the allocation is based on SDCWA dependence on Metropolitan with an adjustment for Loss of Local Water Supply.

Allocation as SDCWA Member Agency

Table A 2030 Dry Year MWD Level 3 15% Shortage Assumptions

| | | |
|----------|---|---------------------|
| a | SDCWA Total Retail 2030 Demand (Base Period) | 676,000 AF |
| b | SDCWA Member Agency Base Period Local Supplies | 172,000 AF |
| c | SDCWA Base Period Local Supplies | 330,200 |
| d | Member Agency Base Period Demand on SDCWA (a-b) | 504,000 AF |
| e | SDCWA Base Period Demand on Metropolitan | 173,800 AF |
| f | SDCWA & Member Agency Adjustment for Dry Year Loss of Local Supply | 45,000 AF |
| g | SDCWA Adjusted Base Period Demand on MWD | 218,800 AF |
| i | SDCWA Preferential Right | 24.22% |
| j | MWD Total Base Period Demand | 1,700,000 AF |
| k | Available MWD Supplies in Level 3 15% Cutback | 1,445,000 AF |
| l | WSAP Level 3 Allocation to SDCWA (l x f) | 185,980 AF |
| m | MWD Preferential Right Allocation to SDCWA ³ | 349,979 AF |

¹ Includes 2015 UWMP Verifiable Local Supplies and Phase 1 Pure Water of 33,000 AF

² SDCWA 2015 Urban Water Management Plan Dry Year analyses

³ MWD Act prohibits selling or transferring excess Preferential Right

Table B 2030 WSAP Allocation

| | |
|--|---------|
| WSAP SDCWA Level 3 Allocation | 185,980 |
| TSAWR Base Period Demand | 30,000 |
| TSAWR Allocation from MWD Allocation | 25,500 |
| Member Agency Base Period M&I Demand on SDCWA | 474,000 |
| MWD WSAP M&I Allocation After TSAWR | 160,480 |
| Total SDCWA Dry Year Supplies | 330,000 |
| Potential Single Year Carryover Storage withdrawal | 30,000 |
| SDCWA M&I Allocation No Carryover Supplies | 490,480 |
| SDCWA Dry Year M&I Demand | 507,180 |
| SDCWA M&I Shortage No Carryover Storage | 16,700 |
| SDCWA M&I Regional Shortage Percent No Carryover Storage | 3% |
| SDCWA M&I Shortage w/Carryover Storage Withdrawal | 0 |
| SDCWA M&I Shortage Percent w/ Carryover Storage | 0% |

**RMWD Reliability Single Dry Year 2030
15% MWD Cutback**

| | M&I Cutback | | TSAWR Cutback | Combined Cutback | |
|-------|-------------|---------|---------------|------------------|------|
| | Low* | High* | | Low | High |
| SDCWA | 0% | 3%-8%** | 15% | 6% | 11% |
| EMWD | 15% | | 15% | 15% | |

* Range is based on use of Carryover Storage supplies and allocation under MWD Water Shortage Allocation Plant (WSAP) or Preferential Rights. Percentage indicates regional average shortage percentage

** SDCWA allocation methodology may provide adjustments to other SDCWA member agencies that reduces RMWD allocation but seeks to ensure that no member agency will be greater than 5% from the regional shortage percentage. RMWD M&I high range may be 5% higher as indicated above and under Combined Cutback.

Factors affecting RMWD Shortage Percent

Under a WSAP allocation as calculated above, adjustments in SDCWA allocation methodology that favor agencies with highly reliable local supplies, exceptional water conservation and population growth can result in a greater cutback on M&I to District customers but not greater than 5% from the regional M&I average. Conversely, if SDCWA had CSP supplies available they could eliminate the entire 3% cutback to M&I for that year. In a multi-year prolonged drought that exceeds three consecutive years SDCWA carryover supplies may be depleted. For these reasons a range of possible M&I shortages is displayed along with potential for adjustments to other member agencies resulting in a 5% differential for RMWD from the regional shortage percentage under the No Carryover supplies scenario.

With the potential effect of adjustments and the use of carryover storage supplies a WSAP allocation could result in a range of combined District cutbacks (including TSAWR customers) of 6% to 11%.

If SDCWA were to invoke its Preferential Right to available MWD supplies as assumed in its 2015 UWMP then the allocation of Metropolitan Supplies would increase and the shortage would be equivalent to the 0% for M&I under the Carryover Storage use under WSAP. It is assumed that even under a Preferential Right Allocation, SDCWA would still adhere to the requirements of TSAWR and would impose the 15% Metropolitan cutback.

Allocation as EMWD Member Agency

In this example, it is assumed that in 2030 District reliability would be entirely dependent on Metropolitan’s available supplies and would experience a cutback entirely resulting from application Metropolitan’s WSAP.

Table C 2030 WSAP Allocation (EMWD)

| | | |
|-----------------------------------|-------------------------------------|------------|
| Rainbow 2030 Base Period Demand | <i>M&I and TSAWR</i> | 21,000 AF |
| Rainbow Allocation | <i>Base Period Demand × (1-.15)</i> | 17,850 AF |
| Rainbow Combined Cutback % | | 15% |

Reliability in Emergency

Both SDCWA and EMWD (through Metropolitan) have storage programs that are designed to maintain a 75% level of service in a catastrophic cutoff of imported water. Because of the lower level of service provided to TSAWR customers the Districts combined level of service if the emergency occurred in 2030 would be 59%. The Level of Service provided by EMWD through Metropolitan in a similar emergency would be 75% since there would be no distinction made for agricultural customers. If an earthquake severed the connection just north of the San Diego County line service may be impacted. That disruption in service is part of the planning for SDCWA’s Emergency Storage Project. Disruption to Metropolitan’s facilities in southern Riverside County that serve the District would rely on expedited repair efforts by Metropolitan that would focus on restoring that segment into service within 14 days of the emergency event.

RMWD recently signed an MOU with the Fallbrook Public Utility District (FPUD) to receive local water supply during an emergency from its Santa Margarita River Conjunctive Use Project (SMRCUP). FPUD is constructing the SMRCUP in partnership with U.S. Marine Corps Base Camp Pendleton to share local water in the Santa Margarita River through a groundwater storage and recovery project.

While the SMRCUP is designed to be a baseline supply for FPUD and Camp Pendleton, the MOU will allow a portion of this local water to be provided to RMWD in the event of a catastrophic emergency on the imported water system, such as an earthquake along the Elsinore Fault. When combined with existing RMWD storage reservoirs, supplemental supply from the SMRCUP will provide an additional layer of water supply reliability to the RMWD service area during the 14 day period when Metropolitan is affecting emergency repairs on its facilities that may be damaged during a seismic event on the Elsinore Fault. Construction of a bi-directional pipeline and groundwater treatment plant is expected to begin in the Fall of 2019 and be operational by 2023.

Table D

RMWD Emergency Reliability Comparison

| SDCWA Emergency Level of Service Seismic Event on San Andreas, San Jacinto, Elsinore Faults | EMWD (Metropolitan) Emergency Level of Service Seismic Event on San Andreas, San Jacinto Faults | EMWD (Metropolitan) Emergency Level of Service Seismic Event on San Andreas, San Jacinto, Elsinore Faults |
|--|--|--|
| 59% | 75% | 8%-75%*** |

**** Assumes RMWD storage and MOU with FPUD for SMRCUP supplies meet health and safety needs set at indoor water use of 55 gpcd based on 2030 population and Total water demand. Also dependent on time to repair Metropolitan Facilities Southern Riverside.*

CONCLUSION

If RMWD were to detach from SDCWA and become a member agency of EMWD, the District could experience a slightly higher overall level of reliability due to the elimination of the TSAWR class of service and the required lesser reliability for current TSAWR customers in both a drought induced shortage and a catastrophic emergency.

Investments by SDCWA and its member agencies in its own imported and local water supplies has cushioned SDCWA from shortage in Metropolitan supplies. However, in Metropolitan's planning documents they are not forecasting shortages through 2040 based on assumptions of significant progress on resolving imported water conflicts and implementing more local supplies and conservation in the future. Although Metropolitan believes those goals are achievable SDCWA does not face the level of uncertainties in supply reliability or local projects implementation as Metropolitan. Therefore, SDCWA will maintain a higher level of reliability for its member agencies because they will benefit from Metropolitan's investments in reliability and also their own and their member agencies.

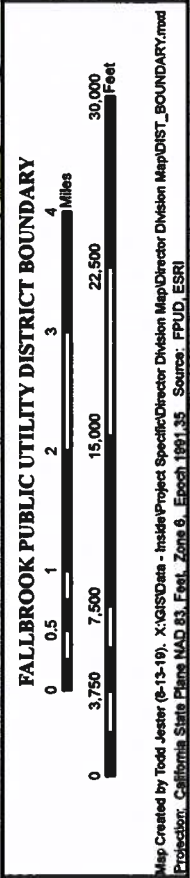
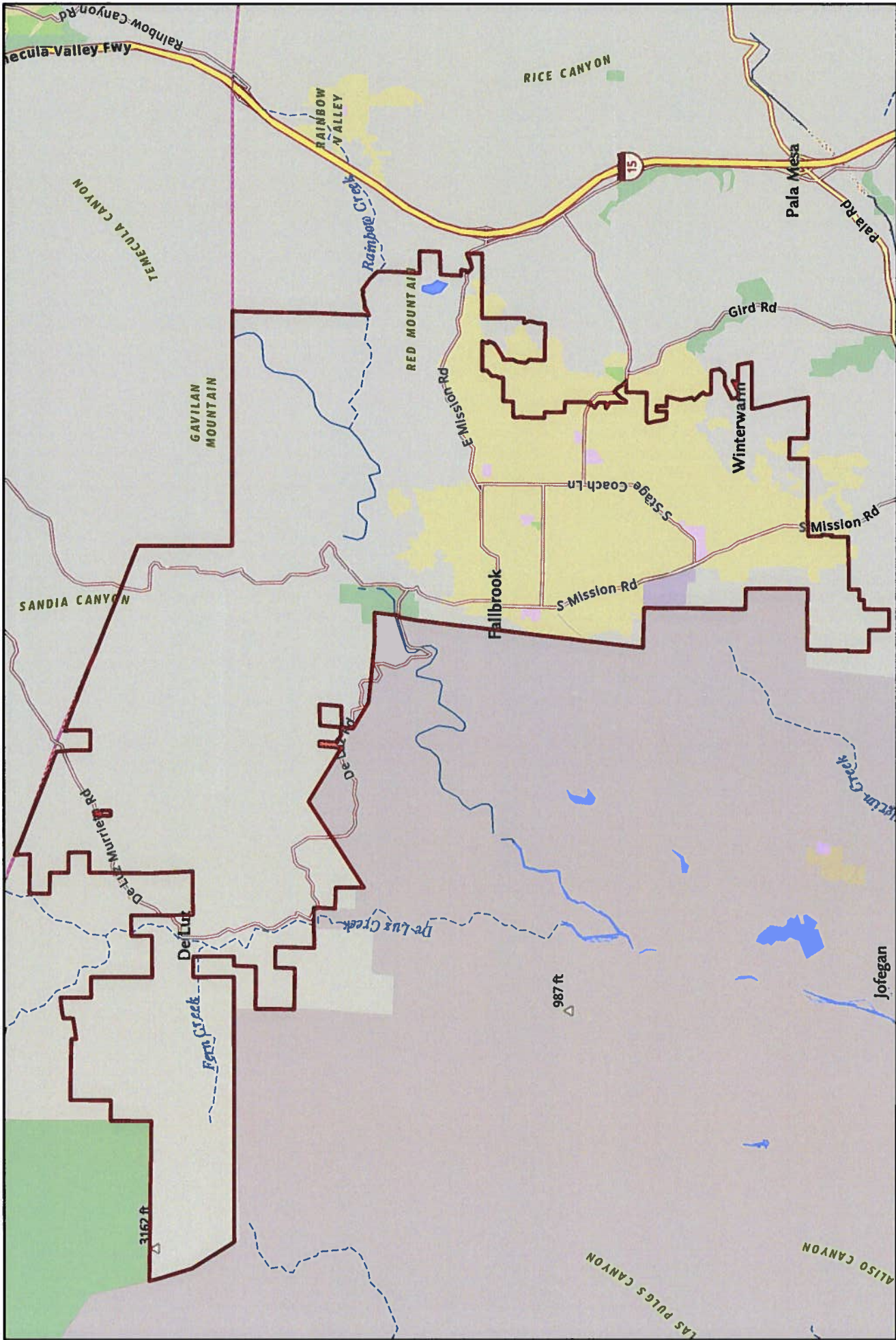
Although this Report relied upon the approved 2015 updates of the UWMPs and Metropolitan's IRP to conduct the comparative reliability analysis, those plans will be updated in 2020 with new water demand forecasts. It is expected that continued decreases in water use and slower growth rates will be reflected in UWMPs throughout the MWD service area. These lower demand forecasts along with continued local supply development will reduce demand on imported water and strengthen the reliability of imported water supplies from MWD. This continued trend will likely reduce the margin of difference for FPUD in reliability as a member agency of EMWD and SDCWA.

The following summarizes the District's reliability during drought induced shortages as a member agency of EMWD based on Metropolitan's planned reliability and the experience of Metropolitan in the last two drought allocations compared to continued membership in SDCWA:

| | |
|--------------------------|---|
| Normal years - | No impact |
| Short duration drought - | Equivalent based on Metropolitan planning documents to slightly better due to elimination of TSAWR |
| Long Duration drought - | Equivalent based on MWD planning to lesser reliability due to higher cutback levels based on Metropolitan recent maximum cutbacks allocated by WSAP or Preferential Rights |
| Catastrophic Emergency - | Slightly greater reliability based on elimination of TSAWR to lesser reliability for first 14 days if seismic event on Elsinore Fault occurs and disables Metropolitan's southern Riverside County facilities. Mitigated to some extent through District storage and Emergency Assistance MOU with FPUD |

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EXHIBIT B
MAPS OF FPUD, EASTERN AND COUNTY WATER AUTHORITY

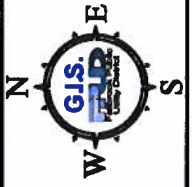
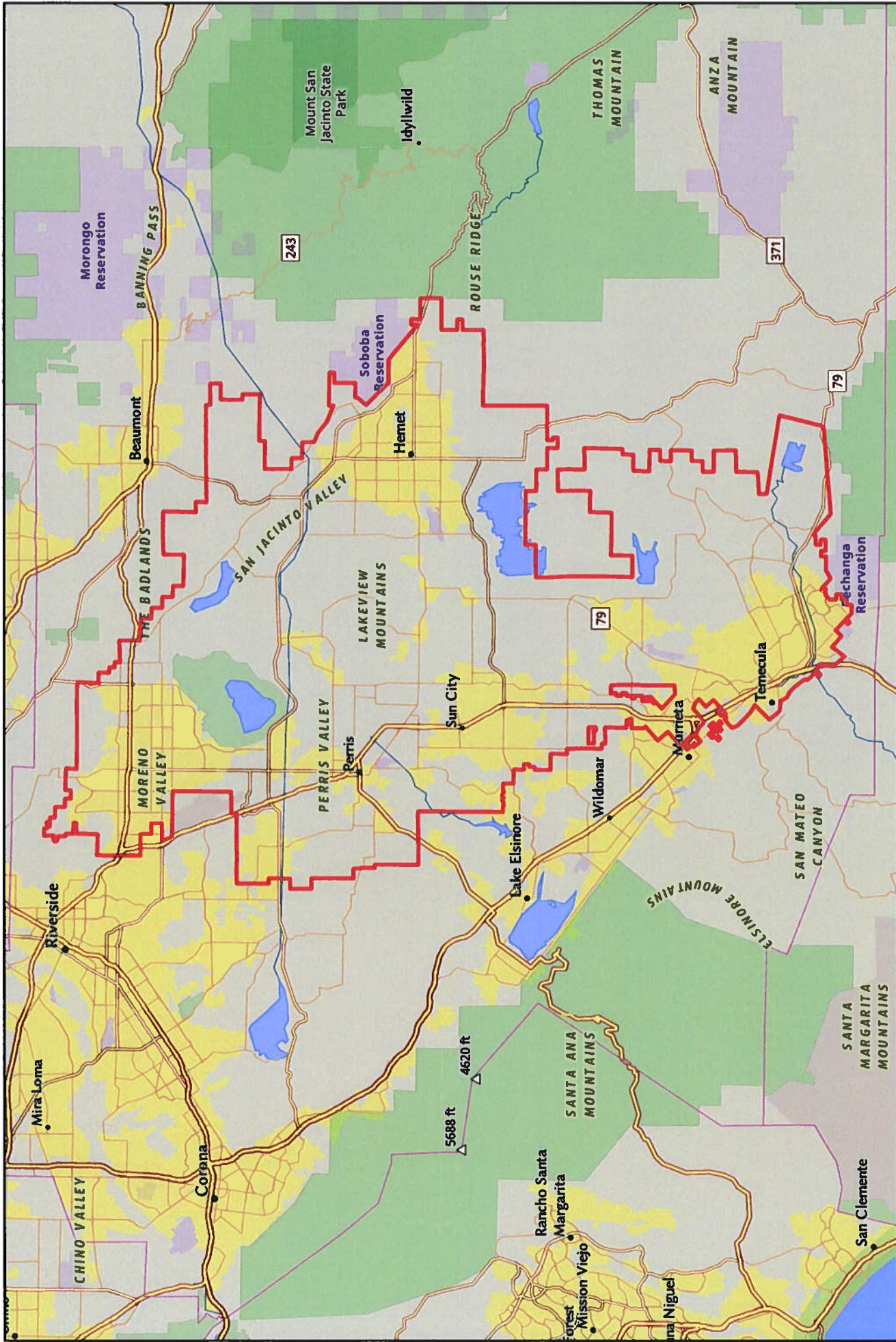


FPUD BOUNDARY

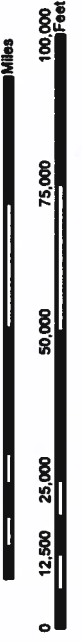


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Map Created by Todd Jester (8-13-19), X:\GIS\Data - Inside\Project Specific\Director Division Map\Director Division Map\DIST_BOUNDARY.mxd
 Projection: California State Plane NAD 83, Feet, Zone 6, Epoch 1991.35, Source: FPUD, ESRI



EASTERN MUNICIPAL WATER AUTHORITY BOUNDARY

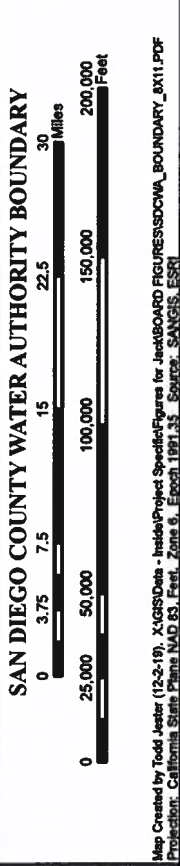
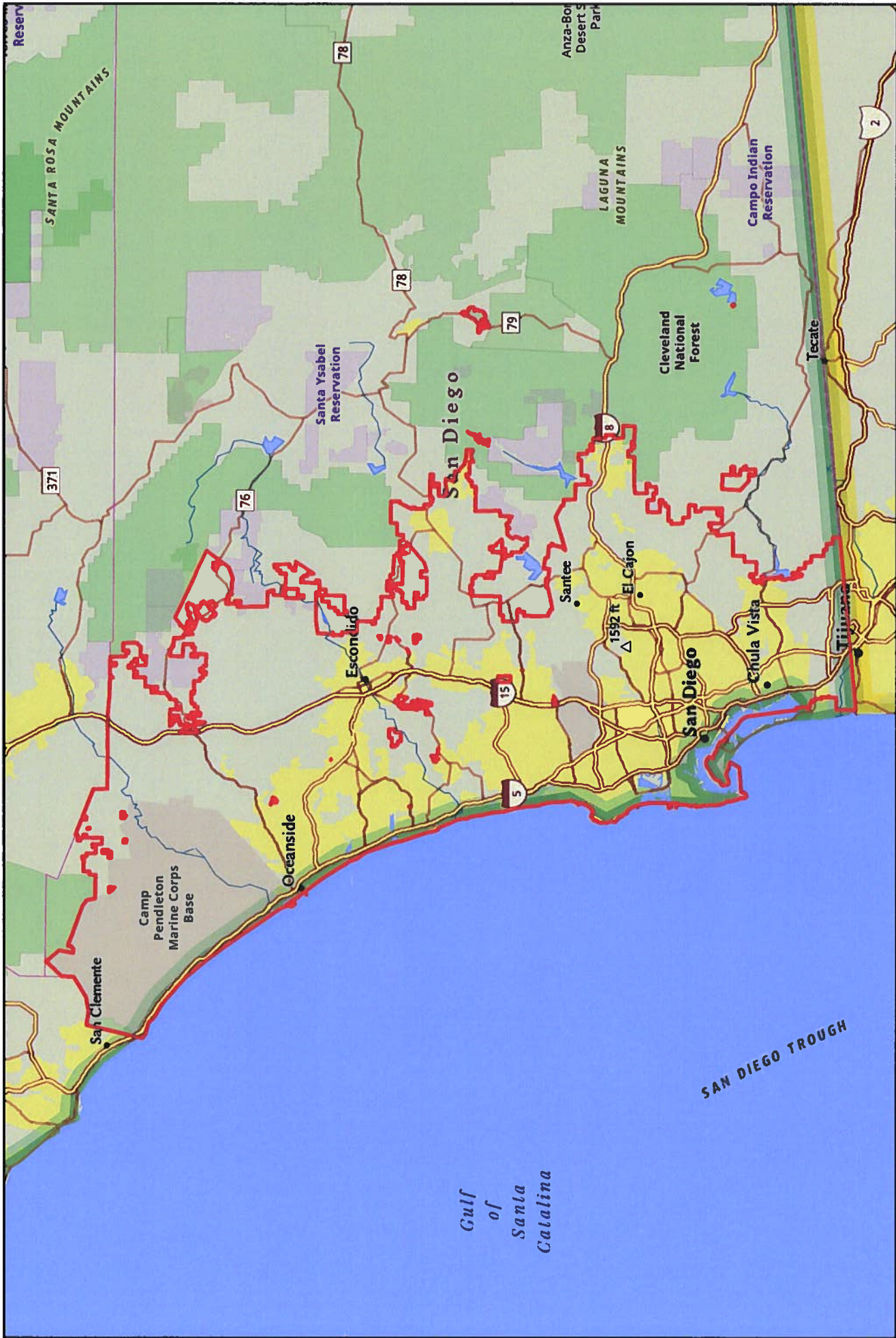


EASTERN MUNICIPAL WATER DISTRICT BOUNDARY



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 Projection: California State Plane NAD 83, Feet, Zone 6, Epoch 1991, 35. Source: Riverside County Flood Control, ESRI



SAN DIEGO COUNTY WATER AUTHORITY BOUNDARY

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 Projection: California State Plane NAD 83, Feet, Zone 9, Epoch 1981.85. Source: SANDAG, ESRI

EXHIBIT C
TEXT OF COUNTY WATER AUTHORITY ACT SECTION 45-11 (a)(2)

Water Code Appendix Section 45-11 (a)(2) provides as follows:

(a)

(2) Any public agency whose corporate area as a unit has become or is a part of any county water authority may obtain the exclusion of the area therefrom in the following manner:

The governing body of any public agency may submit to the electors thereof at any general or special election the proposition of excluding from the county water authority the corporate area of the public agency. Notice of the election shall be given in the manner provided in subdivision (c) of Section 10. The election shall be conducted and the returns thereof canvassed in the manner provided by law for the conduct of elections in the public agency. If a majority of electors voting thereon vote in favor of withdrawal, the result thereof shall be certified by the governing body of the public agency to the board of directors of the county water authority. A certificate of the proceedings shall be made by the secretary of the county water authority and filed with the Secretary of State. Upon the filing of the certificate, the corporate area of the public agency shall be excluded from the county water authority and shall no longer be a part thereof; provided, that the taxable property within the excluded area shall continue to be taxable by the county water authority for the purpose of paying the bonded and other indebtedness of the county water authority outstanding or contracted for at the time of the exclusion and until the bonded or other indebtedness has been satisfied; provided further, that if the taxable property within the excluded area or any part thereof is, at the time of the exclusion, subject to special taxes levied or to be levied by the county water authority pursuant to the terms and conditions previously fixed under subdivision (c) or (d) of Section 10 for the annexation of the excluded area or part thereof to the county water authority, the taxable property within the excluded area or part thereof so subject to the special taxes shall continue to be taxable by the county water authority for the purpose of raising the aggregate sums to be raised by the levy of special taxes upon taxable property within the respective annexing areas pursuant to the terms and conditions for the annexation or annexations as so fixed and until the aggregate sums have been so raised by the special tax levies. Upon the filing of the certificate of proceedings, the Secretary of State shall, within 10 days, issue a certificate reciting the filing of the papers in his or her office and the exclusion of the corporate area of the public agency from the county water authority. The Secretary of State shall transmit the original of the certificate to the secretary of the county water authority and shall forward a certified copy thereof to the county clerk of the county in which the county water authority is situated.

Item #3 -

A metes-and-bounds legal (geographic) description for the perimeter of the subject area and a reproducible map may be required.

FALLBROOK PUBLIC UTILITY DISTRICT BOUNDARY DESCRIPTION

All that certain real property situated in the County of San Diego, State of California, the boundaries more particularly described as follows:

1. Beginning at the common Northerly corner of Section 3 and 4, T 9 S, R 3 W, S.B.B.&M.; thence Southerly along the East line of said Section 4 and along the East line of Section 9, T 9 S, R 3 W, S.B.B.&M. and the West line of Section 10, T 9 S, R 3 W, S.B.B.&M. to a point on said West line that is North 5°02'09" East 2080.00 feet from the Southwest corner of said Section 10, T 9 S, R 3 W.
2. Thence North 64°26'59" East 609.48 feet to the beginning of a curve concave Southeasterly having a radius of 700 feet;
3. Thence Easterly 212.69 feet along said curve through a central angle of 17°24'32";
4. Thence North 81°51'31" East 16.76 feet to the beginning of a curve concave Southerly having a radius of 450 feet;
5. Thence Easterly 103.82 feet along said curve through a central angle of 13°13'09";
6. Thence South 84°55'20" East 22.73 feet to the beginning of a curve concave Northerly having a radius of 150 feet;
7. Thence Easterly 51.97 feet along said curve through a central angle of 19°51'02";
8. Thence North 75°13'39" East 247.35 feet;
9. Thence North 73°41'15" East 211.53 feet;
10. Thence South 68°56'22" East 209.22 feet;
11. Thence North 43°04'26" East 144.10 feet;
12. Thence South 52°21'29" East 992.60 feet;
13. Thence South 40°01'12" East 588.02 feet more or less to the East line of the Southwest Quarter of said Section 10;
14. Thence Southerly along said East line to the Southeast corner of said Quarter Section;
15. Thence Southerly along the East line of the Northeast

Quarter of the Northwest Quarter of Section 15, T 9 S, R 3 W, South 2°50'40" West to the Southeast corner thereof;

16. Thence Easterly along the Northerly line of the Southwest Quarter of the Northeast Quarter of said Section 15 to the Northeast corner thereof;

17. Thence Southerly along the Easterly line of said Southwest Quarter of the Northeast Quarter of Section 15 South 2°11'00" West 1354.51 feet to the Southeast corner thereof;

18. Thence Westerly along the Southerly line of said Southwest Quarter of the Northeast Quarter South 89°01'00" West 1463.18 feet to the Southwest corner thereof;

19. Thence Southerly along the North and South center line of said Section 15 to the Northwest corner of the Southwest Quarter of the Southeast Quarter of said Section 15;

20. Thence North 89°30'50" East 398.21 feet to a point as described in a deed to Max W. Anderson recorded in Book 5012, Page 470 of San Diego County Official Records October 9, 1953;

21. Thence South 8°15'40" West 307.26 feet to a point as described in said deed;

22. Thence South 47°47'40" West 160.06 feet, as described in said deed, to the intersection with the survey line for Route 3, Mission Road, 1-C as located by the San Diego County Highway Commission, on file in the office of the County Recorder of San Diego County as File No. 115928, Map No. 356, of Miscellaneous Maps;

23. Thence Easterly along said survey line to the intersection with the East line of said Southwest Quarter of the Southeast Quarter of Section 15;

24. Thence along said East line Southerly to the Southeast corner of said Southwest Quarter of the Southeast Quarter of Section 15;

25. Thence West along the South line of Section 15 to the Southwest corner thereof;

26. Thence Southerly along the East line of Section 16, and along the East line of Section 21, T 9 S, R 3 W, S.B.B.&M. to the Southeast corner of the Northeast Quarter of said Section 21;

27. Thence along the Southerly line of said Northeast Quarter South 89°44'39" West 340.27 feet;

28. Thence South $23^{\circ}52'34''$ East 298.45 feet;
29. Thence South $5^{\circ}28'39''$ West 298.93 feet;
30. Thence South $15^{\circ}31'27''$ West 373.63 feet;
31. Thence South $2^{\circ}26'08''$ West 430.64 feet to a point on the South line of the North Half of the Southeast Quarter of said Section 21 that is South $89^{\circ}58'10''$ West 384.00 feet from the Southeast corner of the Northeast Quarter of the Southeast Quarter of said Section 21;
32. Thence Westerly along said South line to the North and South center line of said Section 21;
33. Thence North along said North and South center line to the center of a road known as Ridge Drive and a 224.77 foot radius curve concave Northeasterly, and a radial line bearing North $12^{\circ}50'51''$ East;
34. Thence Northerly along said curve through a central angle of $84^{\circ}01'25''$ a distance of 329.62 feet;
35. Thence North $6^{\circ}52'16''$ East 42.28 feet to a point on the Southerly line of the Southeast Quarter of the Northwest Quarter of said Section 21 that is South $89^{\circ}39'59''$ West 167.81 feet from the center of said Section 21, T 9 S, R 3 W;
36. Thence along said Southerly line South $89^{\circ}39'59''$ West 30.24 feet to the Westerly line of said road known as Ridge Drive;
37. Thence along said Westerly line North $6^{\circ}52'16''$ East 398.50 feet to the beginning of a tangent 530 foot radius curve concave Easterly;
38. Thence along the radial of said 530 foot radius curve South $83^{\circ}07'44''$ East 30.00 feet to the center of that road known as Ridge Drive and the beginning of a 500 foot radius curve concave Easterly;
39. Thence Northerly along said curve through a central angle of $23^{\circ}53'34''$ a distance of 208.50 feet to a tangent line;
40. Thence North $30^{\circ}45'50''$ East 103.77 feet to a point on the North South center line of said Section 21 that is North $0^{\circ}03'44''$ West 676.01 feet from the center of said Section 21;
- 40.1 Thence along the North South center line of Section 21 North $0^{\circ}03'44''$ West 676.01 feet to the center of said Section 21;

41. Thence along the South line of the Northwest Quarter of the Northeast Quarter $89^{\circ}24'26''$ East 143.56 feet;
42. Thence North $55^{\circ}52'30''$ East 272.51 feet;
43. Thence North $60^{\circ}17'00''$ East 486.22 feet;
44. Thence North $53^{\circ}09'54''$ East 241.28 feet to the beginning of a tangent 300 foot radius curve concave Northwesterly;
45. Thence Northeasterly along said curve through a central angle of $31^{\circ}13'00''$ a distance of 163.76 feet to a tangent line;
46. Thence North $21^{\circ}57'00''$ East 367.21 feet to the beginning of a tangent 300 foot radius curve concave Southeasterly;
47. Thence North $73^{\circ}09'20''$ West 126.49 feet;
48. Thence North $21^{\circ}01'50''$ West 72.11 feet;
- 48.1 Thence North $21^{\circ}12'48''$ East 334.62 feet to the North line of the Northwest Quarter of the Northeast Quarter of Section 21;
49. Thence continuing South $89^{\circ}05'$ West along the North line of said Section 21 to a point on said line distant Easterly 647.3 feet from the Northwest corner of the Northeast Quarter of the Northwest Quarter of said Section 21;
50. Thence South $0^{\circ}01'10''$ East, 316.82 feet;
51. Thence South $51^{\circ}44'40''$ West, 461.45 feet;
52. Thence South $0^{\circ}01'10''$ East, 335.26 feet to the North line of the South 413 feet of said Northeast Quarter of the Northwest Quarter;
53. Thence South $32^{\circ}29'45''$ West 176.29 feet;
54. Thence South $0^{\circ}01'10''$ East 265.00 feet to the South line of the North Half of said Northwest Quarter;
55. Thence West along said South line to the West line of said Section 21;
56. Thence South along said West line to the South line of the North Half of the Southeast Quarter of the Northeast Quarter of Section 20, T 9 S, R 3 W, S.B.B.&M.;
57. Thence West along said South line to a point that is 423.63

feet Easterly of the Northwest corner of the South Half of the Southeast Quarter of the Northeast Quarter of said Section 20;

58. Thence South $13^{\circ}33'40''$ West 369.96 feet;

59. Thence South $78^{\circ}58'30''$ East 114.68 feet;

60. Thence South $0^{\circ}10'$ West 291.58 feet to the South line of the Southeast Quarter of the Northeast Quarter of Section 20, T 9 S, R 3 W, S.B.B.&M.;

61. Thence along said South line North $89^{\circ}48'06''$ West 57.13 feet;

62. Thence North $58^{\circ}14'30''$ West to the East line of the West Quarter of the East Half of the East Half of said Section 20;

63. Thence South along said East line to the North line of the Southeast Quarter of the Southeast Quarter of said Section 20;

64. Thence East along said North line to the East line of the West Half of said Southeast Quarter of the Southeast Quarter;

65. Thence South along said East line to the South line of said Section 20;

66. Thence East along said South line to the Northeast corner of Section 29, T 9 S, R 3 W, S.B.B.&M.;

67. Thence along the East line of said Section 29, South $0^{\circ}05'30''$ West, 1708.15 feet;

68. Thence North $69^{\circ}09'30''$ West, 123.90 feet to the beginning of a tangent curve concave Northerly having a radius of 500 feet;

69. Thence Westerly along said curve 59.27 feet;

70. Thence South $7^{\circ}27'40''$ West, 187.20 feet;

70.1 Thence South $50^{\circ}27'20''$ West 201.40 feet;

71. Thence South $58^{\circ}48'$ East, 333.50 feet;

72. Thence South $25^{\circ}01'30''$ East, 149.44 feet to said East line of Section 29;

73. Thence along said East line, South $0^{\circ}05'30''$ West, 401.00 feet to the Northeast corner of the Northeast Quarter of the Southeast Quarter of said Section 29;

- 73.1 Thence Westerly along the Northerly line of said Northeast Quarter of the Southeast Quarter North $89^{\circ}34'00''$ West 369.55 feet;
- 73.2 Thence leaving said Northerly line South $24^{\circ}56'23''$ West 41.65 feet;
- 73.3. Thence South $55^{\circ}32'55''$ East 108.45 feet;
- 73.4 Thence South $64^{\circ}37'22''$ East 329.88 feet to the East line of the Southeast Quarter of said Section 29;
74. Thence Southerly along the East line of the Southeast Quarter of said Section 29 to the Southwest corner of the Northwest Quarter of the Southwest Quarter of Section 28, T 9 S, R 3 W, S.B.B.&M.;
75. Thence South $89^{\circ}59'55''$ East, 86.65 feet;
76. Thence North $34^{\circ}03'40''$ East, 450.02 feet;
77. Thence North $42^{\circ}25'$ East, 326.59 feet;
78. Thence North $41^{\circ}53'40''$ East, 204.45 feet;
79. Thence South $57^{\circ}34'$ East to the center line of County Road Survey No. 820;
80. Thence Southeasterly along said center line to the Westerly boundary of Live Oak Park, as per Book 1088, Page 15 of Deeds;
81. Thence Southerly along said Westerly line to the South line of the North Half of the Southwest Quarter of said Section 28, T 9 S, R 3 W, S.B.B.&M.;
82. Thence Westerly along said South line to the East line of the West Half of the Southwest Quarter of the Southwest Quarter of said Section 28;
83. Thence Southerly along the East line of said West Half of the Southwest Quarter of the Southwest Quarter to the South line of said Section 28;
84. Thence Westerly along said South line to the Southwest corner of said Section 28 and continuing Westerly along the South line of Section 29; T 9 S, R 3 W, S.B.B.&M. to a point 100 feet East of the Southwest corner of the Southeast Quarter of the Southeast Quarter of said Section 29;
85. Thence in a Southwesterly direction to a point 100 feet

Southerly from said Southwest corner of the Southeast Quarter of the Southeast Quarter of Section 29, and said point being on a line running parallel to the East line of the Subdivision of Tract "D" of the partition of the Monserate Rancho, according to Map thereof, No. 821, filed in the office of County Recorder of the County of San Diego on September 25, 1896;

86. Thence in a Southerly direction along said line East of and parallel to said East line of the Subdivision of Tract "D" of the partition of Monserate Rancho, said line to have as a point of beginning said Southwest corner of the Southeast Quarter of the Southeast Quarter of Section 29 to a line which is parallel with and South $12^{\circ}33'06''$ East, 1320 feet from the North line of Tract "B", said partition of Monserate Rancho;

87. Thence Easterly along said parallel line South $89^{\circ}49'16''$ East, to a point that is 954.97 feet from the Northeasterly corner of Record of Survey 3832;

87.1 Thence North $0^{\circ}10'44''$ East, 644.39 feet;

87.2 Thence South $89^{\circ}47'45''$ East, 310.70 feet;

87.3 Thence South $0^{\circ}10'44''$ West, 644.26 feet;

87.4 Thence South $89^{\circ}47'45''$ East to the Northeast corner of R.O.S. 3832;

87.5 Thence along the Easterly line thereof South $13^{\circ}10'22''$ West 955.78 feet to a line which is distant 1500 feet Easterly at right angles from said Easterly line of Subdivision of Tract D;

88. Thence Southerly and parallel with said Easterly line of the Subdivision of Tract "D" to the North line of Parcel 3 as shown on a parcel map filed in Book of parcel maps at Page 7314 in the office of the County Recorder of San Diego County on May 25, 1978;

89. Thence along the Northwesterly line thereof South $48^{\circ}28'37''$ West 200.00 feet;

90. Thence South $40^{\circ}40'14''$ East 776.33 feet to the Northerly line of Parcel 4 of said Parcel Map 7314;

91. Thence along the Northerly and Westerly line thereof South $48^{\circ}28'37''$ West 100.00 feet to the beginning of a tangent 200 foot radius curve concave Southeasterly;

92. Thence along said curve through a central angle of $61^{\circ}02'44''$ a distance of 213.09 feet to a tangent line;

93. Thence Southerly and parallel with said Easterly line of the Subdivision of Tract "D" South $12^{\circ}34'07''$ East 248.83 feet to the North line of Ray Gird Peters land as per Book 1019, Page 261 of Deeds;
94. Thence Easterly along said North line to a line which is distant 3,000 feet Easterly at right angles from said Easterly line of Subdivision Tract "D";
95. Thence along said parallel line South $12^{\circ}33'06''$ East, 554.10 feet;
96. Thence South $42^{\circ}10'$ West, 469.66 feet;
97. Thence South $89^{\circ}50'11''$ West, 783.66 feet;
98. Thence South $61^{\circ}35'40''$ West, 884.64 feet to a line which is distant 1,000 feet Easterly at right angles from said Easterly line of Subdivision of Tract "D";
99. Thence thereon South $12^{\circ}33'06''$ East 484.64 feet;
100. Thence North $89^{\circ}34'34''$ East 204.77 feet;
101. Thence North $62^{\circ}01'$ East 889.50 feet to a point in a curve concave Westerly having a radius of 360 feet, the radial line through said point bears South $81^{\circ}49'19''$ East;
102. Thence Southerly along said curve 46.32 feet to the end thereof;
103. Thence on a tangent to said curve South $15^{\circ}33'$ West, 212.86 feet to the beginning of a curve concave Easterly having a radius of 150 feet;
104. Thence Southerly along said curve 80.85 feet to the end thereof;
105. Thence on a tangent to said curve South $15^{\circ}20'$ East, 84.61 feet;
106. Thence North $89^{\circ}34'34''$ East 1123.93 feet to a line which is distant 3,000 feet Easterly at right angles from said Easterly line of Subdivision of Tract "D";
107. Thence thereon South $12^{\circ}33'06''$ East, 902.02 feet to the South line of said Ray Gird Peters' land;
108. Thence Westerly along said South line to the Easterly line

of said Subdivision of Tract "D" of the Partition of Monserate Rancho;

109. Thence Southeasterly along the Easterly line of said Subdivision of Tract "D" to the South line of Lot 60 of said Subdivision of Tract "D";

110. Thence Westerly along the South lines of Lots 60 and 59 of said Subdivision of tract "D" to the West line of said Lot 59;

111. Thence Northerly along said West line to the South line of Lot 47 of said Subdivision of Tract "D";

112. Thence Westerly along said South line to the East line of Lot 57 of said Subdivision of Tract "D";

113. Thence Southerly along said East line to the South line of said Lot 57;

114. Thence Westerly along the South line of Lots 57, 56, and 55 of said Subdivision of Tract "D" to the North and South center line of Section 7, T 10 S, R 3 W, S.B.B.&M.;

115. Thence South along said North and South center line of said Section 7 a distance of 10 feet;

116. Thence Westerly on a line South of and parallel to the North section line of said Section 7 to the East line of the Westerly 20 acres of the East Half of the Northwest Quarter of said Section 7;

117. Thence Southerly along said East line to the North line of Parcel 1 of Parcel Map No. 7797;

118. Thence Easterly along said North line North $88^{\circ}38'20''$ East 113.78 feet to the Northeast corner of said Parcel 1 of Parcel Map No. 7797;

119. Thence Southerly along the Easterly line thereof South $0^{\circ}12'10''$ East a distance of 711.61 feet to the Southeast corner thereof;

119.1 Thence Northwesterly along the Southerly line thereof North $50^{\circ}11'10''$ West a distance of 148.54 feet to the East line of the

Westerly 20 acres of the East Half of the Northwest Quarter of said Section 7;

119.2 Thence Southerly along said east line to the East and West center line of said Section 7;

120. Thence Westerly along said East and West center line of said Section 7 to the East line of Section 12, T 10 S, R 4 W, S.B.B.&M.;

121. Thence Westerly along the center line of said Section 12 to the Northeast corner of the Northwest Quarter of the Southeast Quarter of said Section 12;

122. Thence along the East line thereof South 0°09'02" West 663.89 feet;

123. Thence North 89°53'40" West 679.66 feet;

124. Thence South 0°09'02" West 298.00 feet;

125. Thence North 89°53'40" West 640.19 feet to the North and South center line of said Section 12;

126. Thence Southerly along the North and South center line of said Section 12 to the South line thereof;

127. Thence Westerly along the South line of said Section 12 to the Southeast corner of the Southwest Quarter of the Southwest Quarter of said Section 12;

128. Thence Northerly along the East line of said Southwest Quarter of the Southwest Quarter of said Section 12 to the Southeast corner of the Northwest Quarter of the Southwest Quarter of said Section 12;

129. Thence Westerly along the Southerly line of the Northwest Quarter of the Southwest Quarter of said Section 12 to the West line of said Section 12;

130. Thence Northerly along the West line of said Section 12 to the Northwest corner of said Section 12;

131. Thence East along the North line of said Section 12 to the West line of the East Half of the East half of Section 1, T 10 S, R 4 W, S.B.B.&M.;

132. Thence North along said West line to the East and West center line of the Northeast Quarter of said Section 1;

133. Thence Westerly along said East and West center line to the West line of the Northeast Quarter of said Section 1;
134. Thence Northerly along said West line to the North line of Section 1; and the South Quarter corner of Section 36, T 9 S, R 4 W, S.B.B.&M.;
135. Thence Northerly along the North and South center line of said Section 36 to the North Quarter corner of said Section 36, and the South line of Section 25, T 9 S, R 4 W, S.B.B.&M.;
136. Thence Westerly along said South line and its Westerly prolongation to the "Fence Line" as shown on Record of Survey Map No.831, on file in the Office of the County Recorder;
137. Thence Northerly along said "Fence Line" as shown on said Map 831, to the Westerly prolongation of the North line of Fractional Section 13, T 9 S, R 4 W, S.B.B.&M.;
138. Thence South $89^{\circ}02'13.5''$ East 91.28 feet along said Westerly prolongation to the Easterly line of Rancho Santa Margarita y Las Floras as shown on said Map 831;
139. Thence Northerly along said Easterly line of said Rancho to the most Northeasterly corner thereof;
140. Thence Westerly and Northwesterly along said boundary to the West line of Section 11, T 9 S, R 3 W;
141. Thence Northerly along the West line of said Section 11 to the Northeast corner of the Southeast Quarter of the Northeast Quarter of Section 10, T 9 S, R 4 W;
142. Thence North $87^{\circ}55'19''$ West 484.81 feet;
143. Thence North $50^{\circ}33'10''$ West 65.75 feet to the beginning of a tangent 300.00 foot radius curve concave Southwesterly;
144. Thence Northwesterly along said curve 83.43 feet; to a tangent line;
145. Thence North $66^{\circ}29'10''$ West 88.08 feet to the beginning of a tangent 150 foot radius curve concave Northeasterly;
146. Thence Northwesterly along said curve 76.67 feet to a tangent line;
147. Thence North $39^{\circ}29'40''$ West 80.91 feet to the beginning of a tangent 200 foot radius curve concave Southwesterly;

148. Thence Northwesterly along said curve 176.22 feet to a tangent line;
149. Thence North 89°59'40" West 31.31 feet;
150. Thence North 5°21'10" East 1114.78 feet to the North line of the East Half of the Northeast Quarter of Section 10, T 9 S, R 4 W, S.B.B.&M;
151. Thence along said North line South 87°55'19" West 316 feet to the Northeast corner of the West Half of the Northeast Quarter of Section 10;
152. Thence Southerly along the East line of the West Half of the Northeast Quarter (Lot 2) of said Section 10 to an intersection with the boundary of the Rancho Santa Margarita y Las Flores as shown on Map 831;
153. Thence Northwesterly and Southwesterly along said boundary to an intersection with the West line of Section 9, T 9 S, R 4 W, S.B.B.&M;
154. Thence Northerly along the West line of said Section 9 to the South line of the Northeast Quarter of the Northeast Quarter of Section 8, T 9 S, R 4 W, S.B.B.&M.;
155. Thence Westerly along said Southerly line to the West line of the Northeast Quarter of the Northeast Quarter of said Section 8;
156. Thence Northerly along said West line to the South line of Section 5, T 9 S, R 4 W, S.B.B.&M.;
157. Thence Westerly along said South line to the East line of the Southwest Quarter of the Southwest Quarter of Section 5, T 9 S, R 4 W, S.B.B.&M.;
158. Thence Northerly along said East line of the Southwest Quarter of the Southwest Quarter and the Northwest Quarter of the Southwest Quarter of Section 5 to the North line of the Northwest Quarter of the Southwest Quarter;
159. Thence Westerly along said North line to the East line of Section 6, T 9 S, R 4 W, S.B.B.&M.;
160. Thence Southerly along said East line to the South line of the Northeast Quarter of the Southeast Quarter of said Section 6;
161. Thence Westerly along the South line of the Northeast Quarter of the Southeast Quarter and the Northwest Quarter of the

Southeast Quarter of Section 6 to the West line of the Southwest Quarter of said Section 6;

162. Thence Northerly along said West line of the Southwest Quarter and the West line of the Northeast Quarter of Section 6 to the North line of the South Half of the Northeast Quarter of Section 6;

163. Thence Easterly along said North line to the East line of Section 6;

164. Thence Northerly along said East line to the South line of Section 31, T 8 S, R 4 W, S.B.B.&M.;

165. Thence Easterly along the South line to the East line of said Section 31;

166. Thence Northerly along said East line to the North line of the Southeast Quarter of Section 31;

167. Thence Westerly along the North line of the Southeast Quarter to the East line of the West Half of the Southeast Quarter of Section 31;

168. Thence Southerly along said East line to the South line of said Section 31;

169. Thence Westerly along the South line of said Section 31 and the South line of Sections 36, 35 and 34, T 8 S, R 5 W, S.B.B.&M., to the Southwest corner of partial Section 34;

170. Thence Northwesterly and Northerly along the West boundary of partial Section 34 to the Northwest corner of said Section 34;

171. Thence along the North line of said Section 34 and 35 to the Southwest corner of Section 25, T 8 S, R 5 W, S.B.B.&M.;

172. Thence Northerly along the West line of said Section 25 to the South line of the Northwest Quarter of Section 25;

173. Thence Easterly along said South line of the Northwest Quarter to the East line of the West Half of the Northwest Quarter of said Section 25;

174. Thence Northerly along said East line of the West Half of the Northwest Quarter of Section 25 to the North line of said Section 25;

175. Thence Easterly along said North line to the Range line between R 4 W, and R 5 W, S.B.B.&M.;

176. Thence Southerly along said Range line between R 4 W and R 5 W, S.B.B.&M to the North line of Section 30, T 8 S, R 4 W, S.B.B.&M.;
177. Thence Easterly along the North line of Section 30 to the East line of the Southwest Quarter of the Southwest Quarter of Section 19, T 8 S, R 4 W, S.B.B.&M.;
178. Thence Northerly along the East line of the Southwest Quarter of the Southwest Quarter of Section 19 to the North line of the South Half of the Southeast Quarter of the Southwest Quarter of Section 19;
179. Thence Easterly along said South line to the East line of the Southwest Quarter of Section 19;
180. Thence Southerly along the East line of the Southwest Quarter of Section 19 and the East line of the Northwest Quarter of Section 30, to the North line of the Southwest Quarter of the Northeast Quarter of Section 30, T 8 S, R 4 W, S.B.B.&M.;
181. Thence Easterly along said North line to the West line of the East Half of the Northeast Quarter of Section 30;
182. Thence Southerly along the West line of said East Half of the Northeast Quarter and the Southeast Quarter of Section 30 to the South line of Section 30;
183. Thence Easterly along the South line of Section 30 and 29, T 8 S, R 4 W, S.B.B.&M. to the West line of the Southeast Quarter of the Southwest Quarter of Section 29;
184. Thence Northerly along the West line of said Southeast Quarter of the Southwest Quarter of Section 29 to the North line of the Southeast Quarter of the Southwest Quarter of Section 29;
185. Thence Easterly along the North line to the East line of the Southwest Quarter of Section 29;
186. Thence Southerly along the East line of the Southwest Quarter of Section 29 and continuing along the West line of the Northeast Quarter of Section 32, T 8 S, R 4 W, to the South line thereof;
187. Thence Easterly along said South line to the West line of Section 33, T 8 S, R 4 W, S.B.B.&M.;
188. Thence Northerly along the West line of Section 33 and continuing along the West line of Section 28, T 8 S, R 4 W,

S.B.B.&M., to the South line of the Northwest Quarter of the Northwest Quarter of Section 28;

189. Thence Easterly along said South line to the East line of the Northwest Quarter of the Northwest Quarter of Section 28;

190. Thence Northerly along the East line of said Northwest Quarter of the Northwest Quarter of Section 28 to the North line of Section 28;

191. Thence Westerly along the North line of Section 28 to the East line of Section 20, T 8 S, R 4 W, S.B.B.&M.;

192. Thence Northerly along said East line to the North line of the Southeast Quarter of the Southeast Quarter of Section 20;

193. Thence Westerly along said North line to the West line of the Northeast Quarter of the Southeast Quarter of Section 20;

194. Thence Northerly along said West line to the North line of the Southeast Quarter of Section 20;

195. Thence Easterly along said North line of the Southeast Quarter of Section 20 and the North line of the Southwest Quarter of Section 21 to the East line of Lot 5 (Southwest Quarter of the Northwest Quarter) of fractional Section 21, T 8 S, R 4 W, S.B.B.&M.;

196. Thence Northerly along said East line of Lot 5 (Southwest Quarter of the Northwest Quarter) of fractional section 21 to its intersection with the Riverside - San Diego County boundary line;

197. Thence Southeasterly along said San Diego - Riverside County boundary line to the West line of Lot 2 (Southwest Quarter of the Southeast Quarter) of Section 22, T 8 S, R 4 W, S.B.B.&M.;

198. Thence Southerly along the West line of Lot 2 (Southwest Quarter of the Southeast Quarter) Section 22 and the West line of the Northwest Quarter of the Northeast Quarter of Section 27, T 8 S, R 4 W, S.B.B.&M. to the South line of the Northwest Quarter of the Northeast Quarter of Section 27;

199. Thence Easterly along the South line of said Northwest Quarter of the Northeast Quarter of Section 27 to the East line of said Lot 2.

200. Thence Northerly along said East line of Lot 2 to its intersection with the San Diego - Riverside County boundary line.

201. Thence Southeasterly along the San Diego - Riverside County

boundary line to the intersection of the East line of fractional Section 25, T 9 S, R 4 W, S.B.B.&M.;

202. Thence Southerly along said East line and the East line of Section 36, T 9 S, R 4 W, S.B.B.&M. to the North line of Section 6, T 9 S, R 3 W, S.B.B.&M.;

203. Thence Easterly along the North line of Section 6, 5 and 4, T 9 S, R 3 W, S.B.B.&M. to the common Northerly corner of Section 3 and 4, T 9 S, R 3 W, S.B.B.&M. and the TRUE POINT OF BEGINNING.

EXCEPTING and excluding from the foregoing territory the following described territory:

The Northwest Quarter of the Northwest Quarter of Section 11, T 9 S, R 4 W, S.B.B.&M.

EXCEPTING the Easterly 330.00 feet of the Southwest Quarter of the Northeast Quarter of Section 28, T 8 S, R 4 W, S.B.B.&M. in the County of San Diego, State of California according to United States Government Survey approved April 28, 1885.

EXCEPTING therefrom the Northerly 330.00 feet.

Also excepting therefrom that portion lying Easterly and Northerly of the following described boundary lines.

Commencing at the Northwest Corner of the Southwest Quarter of the Northeast Quarter of said Section 28; thence along the Easterly line of said Southwest Quarter of the Northeast Quarter, South 01°30'24" West 330.07 feet to the Southeast corner of the Northerly 330.00 feet of said Southwest Quarter of the Northeast Quarter; thence along the Southerly line of said Northerly 330.00 feet North 87°20'12" West 174.28 feet to the most Westerly corner of land described in deed to Bernard H. Fry, Jr., et ux, recorded August 24, 1966 as File No. 138233 and the TRUE POINT OF BEGINNING. Thence along the Easterly and Southerly boundary lines of said Fry's land as follows: South 17°01'55" East 121.40 feet to an angle point therein: South 00°44'38" West 58.03 feet; South 02°29'13" West 35.00 feet; and South 87°30'41" East 55.49 feet to the Southeast corner of said Fry's land, being a point on the Westerly line of the Easterly 80.00 feet of said Southwest Quarter of the Northeast Quarter and being also the Northwest corner of land described in deed to Lawrence T. Southern, et ux, recorded August 24, 1966 as File No. 138232; thence along the Northerly and Westerly boundary line of said Southern's land as follows: South 87°30'41" East 10.47 feet; South 02°29'19" West 222.10 feet; and South 87°29'28" East 73.33 feet to the Easterly line of said Southwest Quarter of the Northeast Quarter of Section 28.

Item #4 -

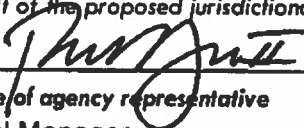
Environmental documentation to comply with the California Environmental Quality Act (CEQA); submit documents for applicable category only:

- a) **INITIAL STUDY:** Submit completed form (available from LAFCO) if no environmental review has been conducted;
- b) **CATEGORICAL EXEMPTION:** Submit document if an agency has certified that the project qualifies for a categorical exemption from CEQA;
- c) **NEGATIVE DECLARATION (ND):** Submit document with certifying resolution and Initial Study*;
- d) **ENVIRONMENTAL IMPACT REPORT (EIR):** Submit 15 copies of the Final EIR and certifying resolution, plus one copy of the EIR Appendix*.

* For an ND or EIR, a copy of the receipt for the fee paid to the California Department of Fish and Game must be submitted.

SUBJECT AGENCY SUPPLEMENTAL INFORMATION FORM

NOTE: A copy of this form must be completed and signed by each local agency that will gain or lose territory as a result of the proposed jurisdictional boundary change. Attach additional sheets if necessary.

 Paul Jones II
 Signature of agency representative Print name
General Manager
 Title
951-928-6130 12.18.19
 Telephone Date

A. JURISDICTIONAL INFORMATION:

Name of agency:
Eastern Municipal Water District

1. Is the proposal territory within the agency's sphere of influence? Yes No
2. Upon annexation, will the proposal territory be included within an assessment district and be subject to assessment for new or extended services? Yes No
3. Does the agency have plans to establish any new assessment district that would include the proposal territory? Yes No
4. Will the proposal territory assume any existing bonded indebtedness? Yes No
 If yes, indicate any taxpayer cost: \$ _____
5. Will the proposal territory be subject to any special taxes, benefit charges, or fees? Yes No
 If yes, please provide details of all costs: _____
6. Is the agency requesting an exchange of property tax revenues as a result of this proposal? Yes No
7. Is this proposed jurisdictional change subject to a master property tax agreement or master enterprise district resolution? Yes No
8. FOR CITY ANNEXATIONS: Does the proposal territory contain existing commercial development that generates retail sales of ten million dollars or more per year? Yes No N/A
9. FOR CITY ANNEXATIONS: If any part of the proposal territory is under a Williamson Act contract, please contact the LAFCO office for special instructions regarding petition or resolution of application requirements.

EXPEDITED PROPOSAL PROCESSING: Processing of jurisdictional boundary change proposals can be expedited by approximately 60 days if all affected landowners consent to the waiver of protest and termination (conducting authority) proceedings and subject agencies do not oppose the waiver. If you do NOT want to waive these proceedings, then attach a written statement to the subject agency information form containing a signature, date, and declaration of opposition to a waiver of such proceedings.

DEC 24 2019

BY C. Teran
 DEPUTY

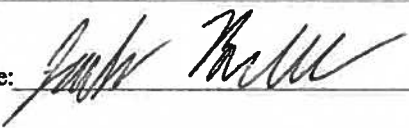
NOTICE OF EXEMPTION

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| <p>TO:</p> <p><input checked="" type="checkbox"/> Office of Planning and Research P. O. Box 3044, Room 113 Sacramento, CA 95812-3044</p> | <p>FROM: Fallbrook Public Utility District (Public Agency) 990 E. Mission Road Fallbrook, CA 92028 Telephone: (760) 728-1125</p> |
| <p><input checked="" type="checkbox"/> San Diego County Clerk 1600 Pacific Highway, Room 260 San Diego, CA 92101</p> | |

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| <p>1. Project Title:</p> | <p>Request to San Diego Local Agency Formation Commission to Commence Proceedings for the Detachment/Exclusion of Fallbrook Public Utility District from the San Diego County Water Authority and Annexation into the Eastern Municipal Water District</p> |
| <p>2. Project Applicant:</p> | <p>Fallbrook Public Utility District</p> |
| <p>3. Project Location – Identify street address and cross streets or attach a map showing project site (preferably a USGS 15' or 7 1/2' topographical map identified by quadrangle name):</p> | <p>Fallbrook, California (see attached map showing District's service area)</p> |
| <p>4. (a) Project Location – City: Fallbrook</p> | <p>(b) Project Location – County: San Diego</p> |
| <p>5. Description of nature, purpose, and beneficiaries of Project:</p> | <p>The Fallbrook Public Utility District (FPUD) adopted a resolution of application requesting the San Diego County Local Agency Formation (LAFCO) to commence proceedings for a reorganization to include detachment/exclusion of territory from San Diego County Water Authority (SDCWA) and annexation to Eastern Municipal Water District (EMWD).</p> <p>FPUD already obtains its water supplies directly off of Metropolitan Water District's infrastructure instead of from the SDCWA's infrastructure, which is unique for SDCWA's member agencies but similar to cities and special districts that receive water supplies from EMWD.</p> <p>The purpose of the reorganization would be to: (1) stabilize long-term water costs to address affordability and sustainability issues for FPUD, for the benefit of its ratepayers; (2) enable FPUD to better provide water supplies to those within its boundaries undertaking agricultural activities; (3) obtain reliable water supplies from EMWD at a significantly lower cost without having to change existing infrastructure or build new infrastructure; and (4) benefit SDCWA because the reduction in demand from FPUD would result in increased reliability of supplies from the SDCWA in times of drought and reductions in imported water supplies.</p> |

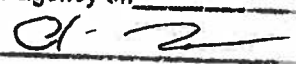
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| 6. Name of Public Agency approving project: | <p>Fallbrook Public Utility District approved the application to request detachment/exclusion and if the application is approved it will be the lead agency implementing the detachment/exclusion.</p> <p>San Diego Local Agency Formation Commission will take action on the application and will rely on Fallbrook Public Utility District's CEQA determination as a responsible agency.</p> |
| 7. Name of Person or Agency undertaking the project, including any person undertaking an activity that receives financial assistance from the Public Agency as part of the activity or the person receiving a lease, permit, license, certificate, or other entitlement of use from the Public Agency as part of the activity: | Fallbrook Public Utility District |
| 8. Exempt status: (check one) | |
| (a) <input type="checkbox"/> Ministerial project. | (Pub. Res. Code § 21080(b)(1); State CEQA Guidelines § 15268) |
| (b) <input checked="" type="checkbox"/> Not a project. | (Pub. Res. Code § 21065; State CEQA Guidelines § 15378(a)) |
| (c) <input type="checkbox"/> Emergency Project. | (Pub. Res. Code § 21080(b)(4); State CEQA Guidelines § 15269(b),(c)) |
| (d) <input checked="" type="checkbox"/> Categorical Exemption. State type and section number: | Class 20—Change in Organization of Local Agencies (State CEQA Guidelines § 15320) |
| (e) <input type="checkbox"/> Declared Emergency. | (Pub. Res. Code § 21080(b)(3); State CEQA Guidelines § 15269(a)) |
| (f) <input type="checkbox"/> Statutory Exemption. State Code section number: | |
| (g) <input checked="" type="checkbox"/> Other. Explanation: | State CEQA Guidelines § 15061(b)(3) (common sense exemption) |
| 9. Reason why project was exempt: | <p>Fallbrook Public Utility District (FPUD) desires to initiate proceedings pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 for the exclusion/detachment of FPUD from the San Diego County Water Authority (SDCWA) and annexation of FPUD into Eastern Municipal Water District (Reorganization). The Reorganization is not a project within the meaning of CEQA because it does not have the potential to result in a direct physical change in the environment or a reasonably foreseeable indirect physical change to the environment. (Pub. Res. Code §65; CEQA Guidelines § 15378(a). The Reorganization will not require the construction of any new infrastructure or any changes in which FPUD receives its water supplies.</p> <p>Even if the Reorganization is considered a "project" within CEQA's meaning, it is exempt under the categorical</p> |

| | |
|---|--|
| | <p>exemption for changes in the organization of local agencies. (CEQA Guidelines § 15320). Under section 15320, changes in the organization of a local governmental agency are exempt if the changes do not modify the geographical area in which previously existing powers are exercised. This exemption applies because the Reorganization is a change in FPUD's organization structure that does not modify FPUD's service area.</p> <p>The Reorganization is also exempt under the "common sense" exemption because it can be seen with certainty that there is no possibility that the Reorganization may have a significant effect on the environment. (CEQA Guidelines § 15061(b)(3).) The Reorganization will not change the type, intensity, or manner of service that FPUD provides. Further the Reorganization will not result in construction or other physical alteration of the environment because the Reorganization will not require any new infrastructure or any changes to the manner in which FPUD receives its water supplies. The Reorganization does not change the ultimate source of FPUD's water supplies.</p> <p>Finally, there is no evidence that the activation involves any unusual circumstances that might cause a significant effect on the environment. (CEQA Guidelines § 15300.2(c).) There is no evidence in the record that the Reorganization will increase FPUD's reliance on Bay Delta water, thereby creating cumulative impacts. In addition, there is no evidence in the record that water supplies from Eastern Municipal Water District's water supply are less reliable.</p> |
| 10. Lead Agency Contact Person: | Jack Bebee, General Manager |
| Telephone: | (760) 728-1125 |
| 11. If filed by applicant: Attach Preliminary Exemption Assessment (Form "A") before filing. | |
| 12. Has a Notice of Exemption been filed by the public agency approving the project? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | |
| 13. Was a public hearing held by the Lead Agency to consider the exemption? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, the date of the public hearing was: <u>12/9/2019</u> | |

Signature:  Date: 12/16/19 Title: General Manager

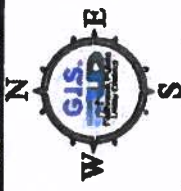
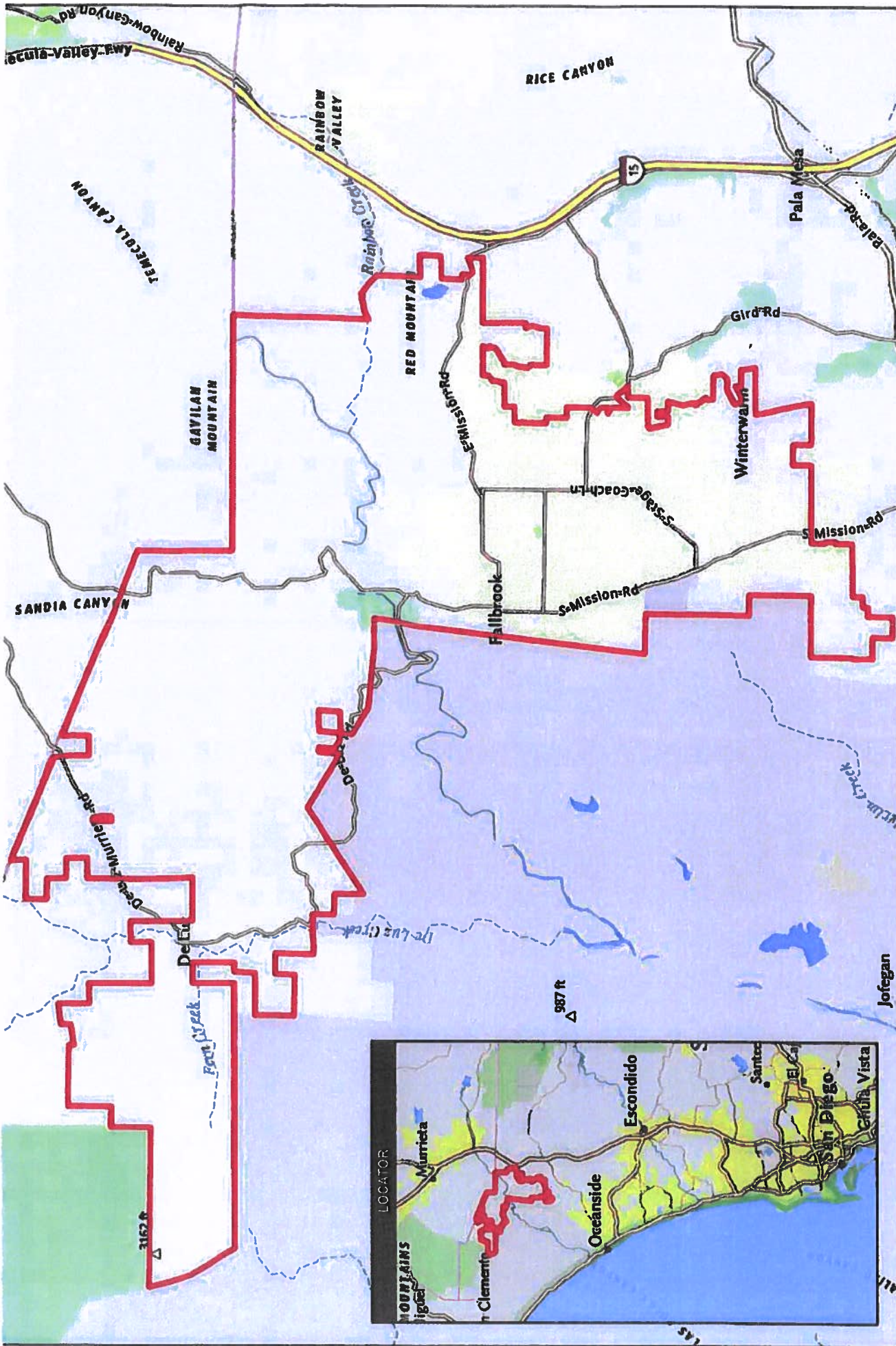
Name: _____
 Signed by Lead Agency Signed by Applicant

Date Received for Filing: _____
(Clerk Stamp Here)

FILED IN THE OFFICE OF THE COUNTY CLERK
San Diego County on DEC 24 2019
Posted DEC 24 2019 Removed _____
Returned to agency on _____
Deputy 

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

C. Teran



Map Created by Todd Jester (12-16-19). X:\GIS\MapData - InMap\Project Specific\Director Division Map\Director Division Map\DISTRICT_BOUNDARY.mxd
 Project: California State Plane NAD 83, East Zone 6, Epoch 1981.85. Source: FPUD, ESRI

FPUD BOUNDARY



DISCLAIMER: By accepting this map, you agree that the Fallbrook Public Utility District assumes no liability or responsibility of any kind arising from use of this map. This map, its Data, and any calculations associated with this map is provided without warranty of any kind.

Item #5 –

N/A

Item #6 -

JURISDICTIONAL CONFLICTS:

If the response to question number 6 on page 3 is “Yes”, complete and sign the Policy L-107 form at http://www.sdlafco.org/forms/Legislative_Policy_L_107.pdf.

SAN DIEGO LAFCO JURISDICTIONAL CONSULTATION Policy L-107 Form

Completion of this Jurisdictional Consultation Form is necessary if there are jurisdictional issues associated with a pending or future LAFCO application. The purpose of the jurisdictional consultation procedure is to encourage the early identification and resolution of jurisdictional issues and concerns. To assist LAFCO staff in the review of your LAFCO application and to determine whether adequate measures have been taken to identify and resolve issues, please respond to the following questions.

1. What jurisdictional issues pertain to the LAFCO proposal or pending LAFCO action?

- a. Differing development standards between existing and proposed service providers or jurisdictions;
- b. Existing and/or planned land uses and zoning, including densities, community character, and appropriate jurisdictional transition areas;
- c. Existing and/or planned provision of governmental services, including any potential impacts to service levels or financial ability to sustain service levels;

None of the above directly apply as to Fallbrook Public Utility District

2. What parties (local agencies or organizations) are opposed to the proposed LAFCO action? The County Water Authority has not been supportive

3. Are there any other local community or governmental concerns associated with the LAFCO proposal or pending LAFCO action: Yes No

Please specify: Otay Water District

4. Respond to the following for efforts that have been taken to resolve jurisdictional issues:

a. List the dates of any meetings/discussions held to resolve jurisdictional issues: Various meetings; See attached letter.

b. List the jurisdictions and organizations that participated in the meetings/discussions: See item 4(a) above.

c. What was the outcome of the meetings/discussions: See Item 4(a) above.

5. If the jurisdictional issues were not resolved, discuss whether additional consultation is needed and a preferred outcome: Unclear if additional consultation will result in resolution.


Fallbrook Public Utility District's Application sets forth its preferred outcome.

6. If the parties resolved the issues associated with the pending or future LAFCO action, then sign the statement (below) and return this form and any applicable agreements that have been reached.

As a representative/proponent of the proposed LAFCO action (e.g., annexation, detachment, sphere change, etc.), I believe the jurisdictional issues associated with this LAFCO proposal:

- have been resolved
 have not been resolved

Attached is a copy of the related agreement or other document demonstrating that jurisdictional issues have been satisfactorily resolved.



Signature of proponent

Jack Bebee

Print name

760-728-1125

3/18/2020

Telephone

Date

**San Diego Local Agency Formation Commission
9335 Hazard Way, Suite 200
San Diego, CA 92123
(858) 614-7755**

SAN DIEGO LAFCO JURISDICTIONAL CONSULTATION Policy L-107 Form

Completion of this Jurisdictional Consultation Form is necessary if there are jurisdictional issues associated with a pending or future LAFCO application. The purpose of the jurisdictional consultation procedure is to encourage the early identification and resolution of jurisdictional issues and concerns. To assist LAFCO staff in the review of your LAFCO application and to determine whether adequate measures have been taken to identify and resolve issues, please respond to the following questions.

1. What jurisdictional issues pertain to the LAFCO proposal or pending LAFCO action?

- a. Differing development standards between existing and proposed service providers or jurisdictions;
- b. Existing and/or planned land uses and zoning, including densities, community character, and appropriate jurisdictional transition areas;
- c. Existing and/or planned provision of governmental services, including any potential impacts to service levels or financial ability to sustain service levels;

2. What parties (local agencies or organizations) are opposed to the proposed LAFCO action? none

3. Are there any other local community or governmental concerns associated with the LAFCO proposal or pending LAFCO action: Yes No

Please specify: no concerns with pending LAFCO application

4. Respond to the following for efforts that have been taken to resolve jurisdictional issues:

a. List the dates of any meetings/discussions held to resolve jurisdictional issues: various, including Memorandum of Understanding (MOU)

b. List the jurisdictions and organizations that participated in the meetings/discussions: Fallbrook Public Utility District (FPUD) and Riverside LAFCO

c. What was the outcome of the meetings/discussions: Agreed to MOU

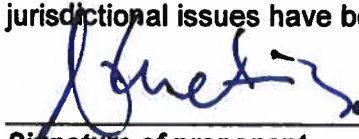
5. If the jurisdictional issues were not resolved, discuss whether additional consultation is needed and a preferred outcome: MOU reflects the parties preferred outcome.

6. If the parties resolved the issues associated with the pending or future LAFCO action, then sign the statement (below) and return this form and any applicable agreements that have been reached.

As a representative/proponent of the proposed LAFCO action (e.g., annexation, detachment, sphere change, etc.), I believe the jurisdictional issues associated with this LAFCO proposal:

- have been resolved
- have not been resolved

Attached is a copy of the related agreement or other document demonstrating that jurisdictional issues have been satisfactorily resolved.



Nick Kanetis, Deputy General Manager

Signature of proponent

Print name

951-928-3777

March 17, 2020

Telephone

Date

**San Diego Local Agency Formation Commission
9335 Hazard Way, Suite 200
San Diego, CA 92123
(858) 614-7755**



990 East Mission Road
Fallbrook, California
92028-2232
www.fpud.com

(760) 728-1125

Board of Directors

Dave Baxter
Division 1

Ken Endter
Division 2

Jennifer DeMeo
Division 3

Don McDougal
Division 4

Charley Wolk
Division 5

Staff

Jack Bebee
General Manager

David Shank
*Assistant General Manager/
Chief Financial Officer*

Mary Lou West
Secretary

General Counsel

Paula de Sousa Mills
Best Best & Krieger

October 10, 2019

VIA ELECTRONIC MAIL

Chair Jim Madaffer
Board of Directors
San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123

Dear Chair Madaffer,

At the October 7, 2019 San Diego Local Agency Formation Commission (SDLAFCO) meeting, Ms. Collins, who is special counsel from Lewis Brisbois, Bisgaard & Smith representing the San Diego County Water Authority (SDCWA), suggested that Fallbrook Public Utility District (FPUD) and Rainbow Municipal Water District (RMWD) have not been participating in a consultation process with SDCWA and its 24 member agencies. I do not feel this statement accurately represents the past efforts by both FPUD (or RMWD for that matter) to provide information and receive input from SDCWA and its member agencies relative to FPUD's and RMWD's evaluation of detachment from SDCWA.

Nearly five months ago, at the May 23, 2019 SDCWA regular Board meeting, SDCWA General Counsel announced to the SDCWA Board that RMWD and FPUD were evaluating detachment from SDCWA based on information SDCWA had received from a meeting with Tom Kennedy, General Manager of RMWD. Following this meeting, I requested meetings with SDCWA to further discuss the potential process and terms and to outline our current status on the evaluation. On May 24, 2019, both RMWD and FPUD received a Public Records Act request from SDCWA General Counsel. We were also informed that SDCWA would not be able to meet with us until the demanded records were supplied. The records were supplied on June 21, 2019, and we were finally able to get a meeting scheduled with you on July 30, 2019. At that meeting, SDCWA requested a proposal relative to detachment, which we provided to SDCWA and all Board members on August 21, 2019.

During this same time period (from May 23, 2019, up until the August SDCWA Regular Board Meeting), I had also been requesting that SDCWA put an item on open session so that this topic could be discussed with all SDCWA member agencies. In response to my first request, SDCWA staff denied my request and instead asked that I provide a written statement. Thereafter, at the June 27, 2019 SDCWA Regular Board meeting, SDCWA allowed me to make a verbal statement, but no time for discussion was permitted and member agencies were not provided an opportunity to ask question or to discuss the matter or my verbal statement. At this meeting, in my statement I identified that I was happy to meet with any Directors or agencies that have concerns or want additional information. I continued to request that there be an item to discuss this item in open session with all SDCWA member agencies, but those requests were denied. Because of this, in August I began to schedule informational outreach meetings with each agency since I was unable to get a discussion on the SDCWA agenda. The purpose of these meetings was to provide an opportunity for questions to be asked by member agencies and for information to be given. After holding several meetings with General Managers and some Board members, I received the attached August 21, 2019 letter from you addressed to me and Tom Kennedy requesting that we stop making "public relations rounds with Water Authority Directors." (Attachment 1).

Per your request as the Chair of the SDCWA Board, I discontinued scheduling meetings with agencies and their Board representatives. At the August 22, 2019 SDCWA regular Board meeting, there was an item placed in closed session under "risk of litigation." I was informed that I could not attend the discussion. I was also informed by SDCWA General Counsel that not only would there not be any open session item to permit discussion with other SDCWA Board members on this matter at that meeting, but also that I would only be allowed to address the Board under public comment (Attachment 2). At this meeting, I did fill out a public speaker slip and addressed the SDCWA Board when I again reiterated my desire to have an open session discussion on the item and my willingness to meet with any other agency Board member who wanted more information or had concerns. Finally, at the September 26, 2019 Board meeting, there was an open session discussion item on detachment during which I provided an update to the Board members and again reiterated I was happy to meet with any directors or agencies to discuss any concerns or details.

Based on the recent correspondence and public comments from Ms. Collins, it appears SDCWA would like for FPUD and RMWD to further engage in efforts directly with member agencies without involvement of SDCWA. Sandy Kerl conveyed a similar message to me and Tom Kennedy in a meeting we had on October 9, 2019, which message she confirmed in an email communication sent today (October 10, 2019), on which you were copied. Since this approach is in conflict with your previous letter, I will consider the statements made by Ms. Collins and Ms. Kerl to be SDCWA's current position and I will be reaching out to the General Managers at each SDCWA member agency (who I have cc'd on this letter) to see if they have interest in a meeting or a presentation to their legislative body (Board/Council).

Chair Jim Madaffer

Page 3

October 10, 2019

Last, during our meeting with Ms. Kerl on October 9, 2019, which was set up specifically for the purpose of discussing potential terms for detachment from SDCWA, I shared some detail regarding a potential proposal/framework that could be used for our detachment from SDCWA and she stated that she would discuss the proposed framework with leadership. Frustratingly, in her email of October 10, 2019, Ms. Kerl states that she does not have any details of our proposal. As the issue at hand is a possible detachment from SDCWA, it is confusing to me that SDCWA appears to now (after it specifically sought out a proposal from FPUD and RMWD) be disinterested in hearing, much less discussing the terms of a potential detachment. It, in fact, seems quite clear from SDCWA's actions that SDCWA has no intention in having a substantive discussion regarding development of potential terms of detachment with SDCWA.

Sincerely



Jack Bebee
General Manager

Attachments

Cc: Keene Simonds, San Diego LAFCO Executive Office
Sandy Kerl, Acting General Manager, SDCWA
SDCWA Member Agency General Managers

Attachment 1



**Our Region's Trusted Water Leader
San Diego County Water Authority**

August 21, 2019

MEMBER AGENCIES

- Carlsbad
Municipal Water District
- City of Del Mar
- City of Escondido
- City of National City
- City of Oceanside
- City of Poway
- City of San Diego
- Fallbrook
Public Utility District
- Helix Water District
- Lakeside Water District
- Olivenhain
Municipal Water District
- Olay Water District
- Padre Dam
Municipal Water District
- Camp Pendleton
Marine Corps Base
- Rainbow
Municipal Water District
- Romana
Municipal Water District
- Rincon del Diablo
Municipal Water District
- San Dieguito Water District
- Santa Fe Irrigation District
- South Bay Irrigation District
- Vallecitos Water District
- Valley Center
Municipal Water District
- Vista Irrigation District
- Yuma
Municipal Water District

**Jack Bebee, General Manager
Fallbrook Public Utility District
990 E Mission Road
Fallbrook, CA 92028**

**Tom Kennedy, General Manager
Rainbow Municipal Water District
3707 Old Hwy 395
Fallbrook, CA 92028**

Dear Jack and Tom:

On July 30 I, along with my fellow officers Gary Croucher and Christy Guerin, and our Acting General Manager Sandy Kerl and our General Counsel Mark Hattam, all met with you both and your counsel to discuss de-annexation issues. We had a productive meeting. In the meeting you said that the process would be far easier if all our agencies could all agree on what the terms would be for a de-annexation. We understood that, and I asked you to please provide a specific proposal to us so that we could examine it and then set up another meeting to discuss it. You expressly committed to getting us a proposal. However, to date we have seen nothing from either Rainbow or Fallbrook. Instead, your agencies have continued with the contractual processes with Eastern Municipal Water District, and with making public relations rounds with Water Authority Directors. From those meetings we are now hearing some questions as to why we are not meeting with you, as people apparently are not being told all the above facts. Of course, once we actually receive the promised proposal from your agencies we would be pleased to schedule another meeting. Hopefully we will receive it soon so that we have something concrete to discuss.

Thank you,

**Jim Madaffer, Chair
San Diego County Water Authority
Board of Directors**

OTHER REPRESENTATIVE

County of San Diego

**C: SDCWA Board of Directors
SDCWA Member Agency General Managers**

Attachment 2

Jack Bebee

From: Hattam, Mark <MHattam@sdewa.org>
Sent: Monday, August 12, 2019 4:19 PM
To: Kennedy, Tom; Jack Bebee; Paula De Sousa Mills; Pellman, Lloyd W.
Cc: Kerl, Sandy; Thompson, Frances; Catacutan, Jennifer; Madaffer, Jim; Croucher, Gary; Guerin, Christy
Subject: De-Annexation Issues

Tom and Jack:

This non-privileged e-mail (copied to your counsel) responds to the requests you made as General Managers of your agencies for time to address the Water Authority Board prior to closed session at the upcoming August 21 Board meeting, and to get a more detailed financial breakdown as to the general estimate agency cost information that was previously sent by Sandy Kerl to the Board and to member agency GM's. This e-mail, at the instruction of the Officers, responds to your inquiries.

First, at the August 21 full Board meeting we will have two items on the agenda that relate in some manner to the potential de-annexation applications that Rainbow and/or Fallbrook intend to file. One item will be a possible deferral of certain infrastructure work, as we earlier discussed and which both of you said you understood why this work should be delayed. As an FYI, because neither of you sit on the Boards at your home agencies, you may vote on this deferral issue.

The other item will be an anticipated litigation closed session at full Board. Because this item involves your agencies, you will not be allowed to attend. We also made you aware of this at our recent meeting. (I also note that from the PRA responses that Tom Kennedy at Rainbow last year had a closed session item related to potential litigation with the Water Authority on this issue. See November 28, 2018, 2:42 p.m. e-mail from Kennedy to Bebee and Paul Jones.) If you want to speak publicly, you (or your staff person) would need to fill in a speaker slip, and each of your agencies may then have up to 3 minutes apiece to say what you want during the normal public comment session at full Board. The Officers will not be agendaizing any special speaking item in open session.

Second, as to the cost summary, you already have the general estimated numbers. If the Water Authority decides to produce a further public breakdown, you will be copied. Thank you.

Mark J. Hattam
General Counsel
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123
(858) 522-6791
mhattam@sdewa.org

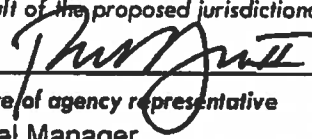
Item #9 -

JURISDICTIONAL CONFLICTS:

Completed **SUBJECT AGENCY SUPPLEMENTAL INFORMATION FORM** (pages 10-12 of application) from *each* subject agency.

SUBJECT AGENCY SUPPLEMENTAL INFORMATION FORM

NOTE: A copy of this form must be completed and signed by each local agency that will gain or lose territory as a result of the proposed jurisdictional boundary change. Attach additional sheets if necessary.

| | |
|---|---------------|
|  | Paul Jones II |
| Signature of agency representative General Manager | Print name |
| Title | Date |
| 951-928-6130 | 12.18.19 |
| Telephone | Date |

A. JURISDICTIONAL INFORMATION:

Name of agency:
Eastern Municipal Water District

1. Is the proposal territory within the agency's sphere of influence? Yes No
2. Upon annexation, will the proposal territory be included within an assessment district and be subject to assessment for new or extended services? Yes No
3. Does the agency have plans to establish any new assessment district that would include the proposal territory? Yes No
4. Will the proposal territory assume any existing bonded indebtedness? Yes No
If yes, indicate any taxpayer cost: \$ _____
5. Will the proposal territory be subject to any special taxes, benefit charges, or fees? Yes No
If yes, please provide details of all costs: _____
6. Is the agency requesting an exchange of property tax revenues as a result of this proposal? Yes No
7. Is this proposed jurisdictional change subject to a master property tax agreement or master enterprise district resolution? Yes No
8. FOR CITY ANNEXATIONS: Does the proposal territory contain existing commercial development that generates retail sales of ten million dollars or more per year? Yes No
9. FOR CITY ANNEXATIONS: If any part of the proposal territory is under a Williamson Act contract, please contact the LAFCO office for special instructions regarding petition or resolution of application requirements.

EXPEDITED PROPOSAL PROCESSING: Processing of jurisdictional boundary change proposals can be expedited by approximately 60 days if all affected landowners consent to the waiver of protest and termination (conducting authority) proceedings and subject agencies do not oppose the waiver. If you do NOT want to waive these proceedings, then attach a written statement to the subject agency information form containing a signature, date, and declaration of opposition to a waiver of such proceedings.

C. WATER SERVICE:

1. (a) Does the subject agency have adequate water supply and sufficient contractual and/or operational capacity available to serve the proposal territory? YES NO
- (b) *If yes*, describe the proposal territory's estimated water demand and the agency's available water supply and capacity (expressed in acre-feet or million gallons per day):
Current FPUD demands are 8.500 AFY. EMWD would meet these demands with purchased water from MWD, which has the supply capacity to meet FPUD's current and projected future demands.
- (c) *If no*, what plans does the agency have to increase its water capacity?
N/A YES NO
2. Specify any improvements (on and off-site) that will be necessary to connect and serve the anticipated development. Indicate the total cost of these improvements and method of financing (e.g., general property tax, assessment district, landowner or developer fees): The existing connections between FPUD's system and the San Diego Aqueduct will continue to be used
Water will be supplied to the San Diego Aqueduct through EMWD's existing connection at the Skinner WTP. YES NO
3. (a) Has the agency issued a letter of water availability for the proposal territory?
(b) *If yes*, please provide a copy of the letter. (This documentation should be completed by the agency no longer than 6 months prior to submittal to LAFCO.)
4. (a) The distance for connection of the proposal territory to the agency's existing water system is 0 feet.
(b) Describe the location of the connection to the agency's existing water system:
There is an existing connection to the San Diego Aqueduct (via RMWD) YES NO
5. (a) Is the agency currently under any drought-related conditions and/or restrictions?
(b) *If yes*, describe the conditions and specify any related restrictions:
N/A YES NO
6. (a) Will the proposal territory utilize reclaimed water?
(b) *If yes*, describe the proposal territory's reclaimed water use and the agency's available reclaimed water supply and capacity (expressed in acre-feet or million gallons per day):
FPUD has its own WWTP and RW system (3.1 MGD of capacity per 2015 UWMP)
- (c) The distance for connection of the proposal territory to the agency's existing reclaimed water system is N/A feet.
(d) Describe the location of the connection to the agency's existing reclaimed water system: N/A
- (e) *If no*, has the agency considered availability of reclaimed water to the proposal territory? YES NO
- (f) What restrictions prevent use of reclaimed water? FPUD has its own recycled water system.
A connection to EMWD's system would not be necessary.
7. Will the proposal territory be annexed to an improvement district? YES NO

EXHIBIT D
TEXT OF COUNTY WATER AUTHORITY ACT SECTION 45-11 (a)(2)

Water Code Appendix Section 45-11 (a)(2) provides as follows:

(a)

(2) Any public agency whose corporate area as a unit has become or is a part of any county water authority may obtain the exclusion of the area therefrom in the following manner:

The governing body of any public agency may submit to the electors thereof at any general or special election the proposition of excluding from the county water authority the corporate area of the public agency. Notice of the election shall be given in the manner provided in subdivision (c) of Section 10. The election shall be conducted and the returns thereof canvassed in the manner provided by law for the conduct of elections in the public agency. If a majority of electors voting thereon vote in favor of withdrawal, the result thereof shall be certified by the governing body of the public agency to the board of directors of the county water authority. A certificate of the proceedings shall be made by the secretary of the county water authority and filed with the Secretary of State. Upon the filing of the certificate, the corporate area of the public agency shall be excluded from the county water authority and shall no longer be a part thereof; provided, that the taxable property within the excluded area shall continue to be taxable by the county water authority for the purpose of paying the bonded and other indebtedness of the county water authority outstanding or contracted for at the time of the exclusion and until the bonded or other indebtedness has been satisfied; provided further, that if the taxable property within the excluded area or any part thereof is, at the time of the exclusion, subject to special taxes levied or to be levied by the county water authority pursuant to the terms and conditions previously fixed under subdivision (c) or (d) of Section 10 for the annexation of the excluded area or part thereof to the county water authority, the taxable property within the excluded area or part thereof so subject to the special taxes shall continue to be taxable by the county water authority for the purpose of raising the aggregate sums to be raised by the levy of special taxes upon taxable property within the respective annexing areas pursuant to the terms and conditions for the annexation or annexations as so fixed and until the aggregate sums have been so raised by the special tax levies. Upon the filing of the certificate of proceedings, the Secretary of State shall, within 10 days, issue a certificate reciting the filing of the papers in his or her office and the exclusion of the corporate area of the public agency from the county water authority. The Secretary of State shall transmit the original of the certificate to the secretary of the county water authority and shall forward a certified copy thereof to the county clerk of the county in which the county water authority is situated.

Item #2c -

Final Plan of Service

Fallbrook Public Utility District

Plan for Providing Service

Application for Proposed Reorganization

February 2020

1.0 INTRODUCTION

This document is part of the application for Reorganization from the Fallbrook Public Utility District (FPUD) to the San Diego County Local Agency Formation Commission (“LAFCO”). FPUD is requesting a governmental reorganization consisting of a) the detachment of FPUD from the San Diego County Water Authority (SDCWA) and b) annexation to the Eastern Municipal Water District (EMWD). The plan provides FPUD, LAFCO, affected property owners and voters, and other interested persons with information regarding existing and proposed local government services for the proposed reorganization.

2.0 MUNICIPAL SERVICES

2.1 Description of Service Territory

2.1.1. Fallbrook Public Utility District (FPUD)

History

Fallbrook is an unincorporated community in San Diego County. The first permanent recorded settlement in Fallbrook was in 1869, in the east area of FPUD, which later became Live Oak County Park. While agriculture has always played a major role in the community, the first plantings were olives and citrus. These crops were replaced in the 1920’s by avocados and it wasn’t long before Fallbrook became generally recognized as the “Avocado Capital of the World.”

Fallbrook Public Utility District (FPUD), organized under the provisions of the Public Utility District Act, Public Utilities Code section 15500 et seq., was formed on June 5, 1922 to serve water from local area wells along the San Luis Rey River. Soon after it was established, FPUD began to grow. Annexations into FPUD have expanded the service area from 500 acres to 28,000 acres (44 square miles). To meet the growing demand for water, additional ground water supplies were developed along both the San Luis Rey and Santa Margarita rivers.

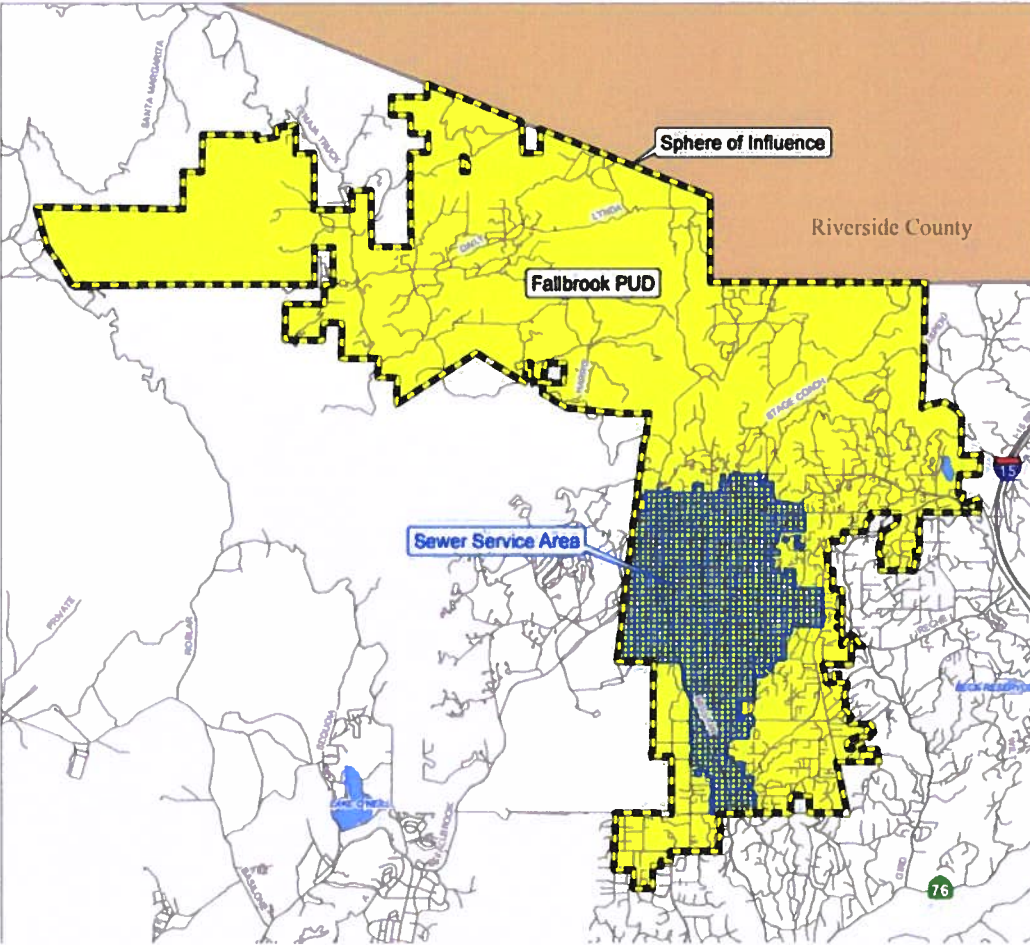
FPUD became a member of the San Diego County SDCWA (SDCWA) at its formation on June 9, 1944, and thus was eligible to receive a portion of Colorado River water that would be diverted by the Metropolitan Water District of Southern California (MWD). When Colorado River water became available in 1948, consumption within FPUD gradually increased to approximately 10,000 acre-feet per year by 1959. Then in 1978, MWD augmented its supply system with water from the California State Water Project and began delivering water from both systems to San Diego County. Today, virtually all of FPUD’s water supplies are from the Colorado River and California State Water Project.

FPUD's scope of operations grew in the 1990's with both the 1990 dissolution of the DeLuz Heights Municipal Water District and annexation of its 12,000-acre service area to FPUD, and the 1994 dissolution of Fallbrook Sanitary District, which was located entirely within FPUD's boundaries. The Sanitary District had provided parts of Fallbrook with recycled water and wastewater service within a 4,200 acre area of downtown. FPUD took over those services, and the same year the playing fields at Fallbrook High School started receiving reclaimed water as its source of irrigation water. So did two new large nurseries. For the next ten years, FPUD's Reclamation Plant (Plant) began receiving a series of awards for safety in operations. In 2015, FPUD completed a major overhaul, upgrade and expansion of the Plant. The \$27 million project took three years to complete, replacing aged and aging equipment, and allowed for a substantial expansion of FPUD's recycled water distribution system. The overhaul involved upgrades to the existing Plant to improve reliability in operation and created much-needed storage space for recycled water.

FPUD provides residents, businesses and agricultural customers with full-service water, wastewater and recycled water services within all or part of its boundaries. **Figure 1** shows FPUD's service area and boundaries.

Because of its geographic location, FPUD is unique and mostly independent of the SDCWA Aqueduct system, its reservoirs and its water treatment plant. Almost all of FPUD's water is treated and delivered through MWD owned facilities. Although FPUD pays SDCWA for emergency water service, due to the lack of regional SDCWA infrastructure directly to FPUD, it cannot physically receive deliveries from SDCWA to serve the vast majority of its service area in a catastrophic emergency or in the event of an extended SDCWA shutdown for repair.

FIGURE 1—FPUD Service Area



Governance and Organizational Structure

FPUD is governed by a 5-member Board of Directors who serve staggered 4-year terms. Each Director is elected by the registered voters of the subdistrict in which he or she resides. Previous to 2016 FPUD’s Board of Directors were elected as at-large representatives. Legislation passed in 2016 allows FPUD to elect its directors by subdistrict. To run for office, a candidate must be a resident and qualified elector of the subdistrict they are running to represent. FPUD is administered by 68 Full Time employees organized by functional departments. The General Manager of FPUD is Jack Bebee, P.E.

Service Area and Local Economy

Currently, FPUD serves an area of 28,000 acres. Approximately 40% of the annual water deliveries are for agricultural use. This number is significantly lower than in prior years. The remainder is for municipal, residential and industrial uses. Total growth in population over the past 20 years has been about 24%, or about 1.6% annually. It increased from a population of 28,200 in 1995 to a population of 33,476 in 2015. Annual water consumption increased to a high of 19,597 acre-feet/year in 2007, then decreased to 9,000 in 2018 with a projection of even lower sales in 2019. This decrease in water consumption was due to the drought, water use restrictions placed on customers, as well as the increased cost of water.

As an unincorporated area of San Diego County, land use authority for Fallbrook resides with the County Board of Supervisors. The Fallbrook Community Plan (FCP), which is part of the County of San Diego General Plan, was adopted on Dec. 31, 1974 by the Board of Supervisors and updated in November 2015. The FCP did not project land use for intermediate future years but rather produced an ultimate land-use plan. While the Community Plan specifies land use, it does not constitute zoning. All future zoning is legally required to be consistent with the adopted community goals and objectives presented in the FCP.

The following general goal has been adopted in the FCP:

"Perpetuate the existing rural charm and village atmosphere while accommodating growth in such a manner that it will complement and not sacrifice the environment of our rustic, agriculturally oriented community."

The FCP attempts to fulfill this goal by limiting future multiple-use and high-density development to the designated town center and is referred to in the County General Plan as a "Country Town." Land outside the designated town center, extending to the community's boundaries, is intended for agricultural uses and rural, residential development and has parcel size limits of 1, 2, 4 or 8 acres, depending on topography and steepness of the land. Most population increase is occurring within the Country Town as land is developed into subdivisions and apartment units. Outside the Country Town land subdivision has been occurring gradually as 40- and 80-acre parcels are split up over many years down to the permissible minimum size of 2 or 4 acres. Based on the updated General Plan, larger parcels further from roads and utilities may be limited to minimum lot sizes, much larger than 2 to 4 acres.

Agricultural land use has been undergoing a gradual change from primarily avocados and citrus to a mixture of crops including other subtropical fruit and nut orchards such as macadamias, persimmons, kiwis, cherimoyas, grapes, dragon fruit, etc. In addition, ornamental flowers and commercial nurseries are increasing in prominence and will tend to preserve the agricultural orientation of the community. Decreases in agriculture, due to increasing water cost as well as development, are expected to remain close to the historic long-term trend.

2.1.2 San Diego County Water Authority (SDCWA)

History

SDCWA was established pursuant to legislation adopted by the California State Legislature in 1943 (County Water Authority Act) to provide a supplemental supply of water as the San Diego region's civilian and military population expanded to meet wartime activities. Because of the strong military presence, the federal government arranged for supplemental supplies from the Colorado River in the 1940s. In 1947, water began to be imported from the Colorado River via a single pipeline that connected to MWD's Colorado River Aqueduct located in Riverside County. To meet the water demand for a growing population and economy, SDCWA constructed four additional pipelines between the 1950s and early 1980s that are all connected to MWD's distribution system and deliver water to San Diego County. SDCWA is now the county's predominant source of wholesale water, supplying from 75% to 95% of the region's wholesale water needs depending upon weather conditions and yield from local surface, recycled, and groundwater resources and projects.

Governance & Organizational Structure

The decision-making body of SDCWA is its 36-member Board of Directors. Each of the 24 member agencies of SDCWA has at least one representative on the SDCWA Board of Directors. Member agencies may appoint one additional representative for each additional 5% of total assessed value of property taxable by the CWA for purposes within the public agency's boundaries. As a result, FPUD is entitled to representation by 1 director. The City of San Diego, the largest member agency in terms of assessed value is entitled to 10 Directors.

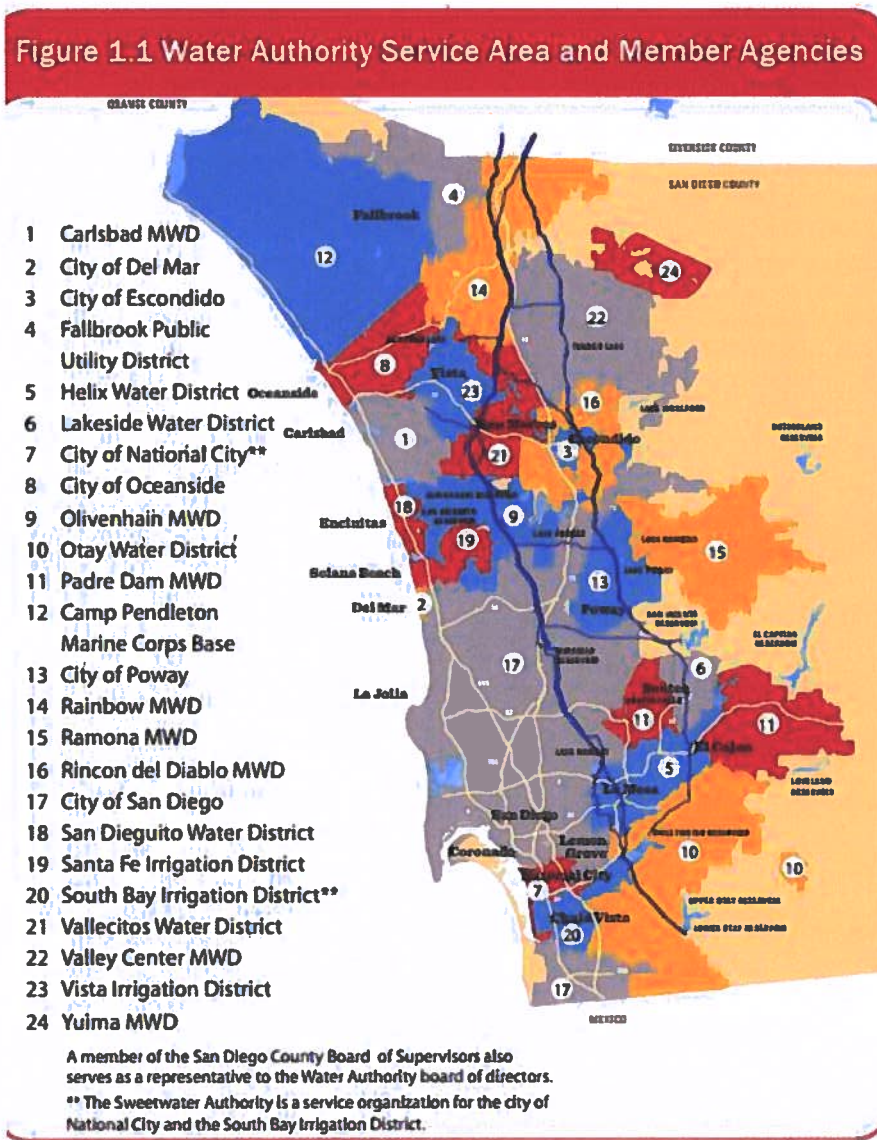
Under the CWA Act, a member agency's vote is based on its "total financial contribution" to the CWA since the CWA's organization in 1944. Total financial contribution includes all amounts paid in taxes, assessments, fees, and charges to or on behalf of SDCWA or MWD. The CWA Act authorizes each CWA Board of Directors member to cast one vote for each \$5,000,000, or major fractional part thereof, of the total financial contribution paid by the member agency. Based on this formula, FPUD is entitled to 2.275% of the total vote in Calendar Year 2020. For comparison purposes, the City of San Diego is entitled to 39.76% of the total vote in calendar year 2020. The four largest urban water agencies (City of San Diego, City of Oceanside, Helix Water District and Otay Water District) have a combined vote total of 57.5% in calendar year 2020.

Service Area and Local Economy

SDCWA's boundaries extend from the border with Mexico in the south, to Orange and Riverside counties in the north, and from the Pacific Ocean to the foothills that terminate the coastal plain in the east. With a total of 951,000 acres (1,486 square miles), SDCWA's service area encompasses the western third of San Diego County. **Figure 2** shows SDCWA's service area, its member agencies, and aqueducts (shown as blue lines). SDCWA's 24 member agencies purchase water from SDCWA for retail distribution within their service territories. The member agencies (six cities, five water districts, eight municipal water districts, three irrigation districts, a public utility district, and a federal military reservation) have diverse and varying water needs.

In terms of land area, the City of San Diego is the largest member agency with 210,726 acres. The smallest is the City of Del Mar, with 1,159 acres. Some member agencies, such as the cities of National City and Del Mar, use water almost entirely for municipal and industrial purposes. Others, including Valley Center, Rainbow, and Yuima Municipal Water Districts, deliver water that is used mostly for agricultural production.

FIGURE 2 –SDCWA Service Area and Member Agencies



Facilities

Imported and desalinated ocean water supplies are delivered to SDCWA member agencies through a system of large-diameter pipelines, pumping stations, and reservoirs. The pipelines deliver supplies from MWD are divided into two aqueduct alignments, both of which originate at Lake Skinner in southern Riverside County and run in a north to south direction through the SDCWA service area. MWD's ownership of these pipelines extends to a "delivery point" six miles into San Diego County. From there, Pipelines 1 and 2 comprise the First San Diego Aqueduct, which reaches from the delivery point to the San Vicente Reservoir. Pipelines 3, 4, and 5 from the Second San Diego Aqueduct. These pipelines are located several miles to the west of the First San Diego Aqueduct.

Storage facilities are used by SDCWA to both manage daily operations and provide reserves for seasonal, drought, and emergency storage needs. SDCWA seasonal, drought, and emergency storage capacity currently includes 234,000 AF of in-region surface water. In addition to the Twin Oaks Valley WTP, SDCWA entered into an agreement with the Helix Water District to purchase 36 MGD of treatment capacity from the R.M. Levy WTP. Water from the Levy plant supplements treated water service to eastern San Diego County, storage and 70,000 AF of out of region leased groundwater storage in the San Joaquin Valley.

Economy

SDCWA's service area characteristics have undergone significant changes over the last several decades. Driven by an average annual population increase of 50,000 people per year, large swaths of rural land were shifted to urban uses to accommodate the growth in population. This shift in land use has resulted in the region's prominent urban and suburban character. San Diego County also has a rich history of agriculture, beginning with the large cattle ranches established in the 18th century and continuing through the diverse range of crops and products grown today. Although the total number of agricultural acres under production has declined, the region maintains a significant number of high value crops, such as cut-flowers, ornamental trees and shrubs, nursery plants, avocados, and citrus. Based on the 2009 Crop Statistics and Annual Report by the San Diego County Department of Agricultural Weights and Measures, the region has 6,687 farms—more than any other county in the nation. San Diego County agriculture is a \$1.5 billion dollar per year industry, and ranks first in the state in gross value of agricultural production for flowers, foliage, and nursery products.

Today, San Diego boasts an economy that is not dominated by any one sector; in fact, no sector accounts for more than 15% of the regional economy. Several sectors are "economic drivers," specifically tourism, the military, and the "innovation" sector, which together make up a third of the regional economy. Tourism is an obvious strength, due in part to the weather, the beaches, the San Diego Zoo, and the Convention Center. The military is pivoting toward Asia and has committed to San Diego, as have many military contractors, like General Dynamics (makers of the Predator drone) and ViaSat (satellite communications leaders). Moreover, innovation will continue to drive San Diego's economy, with forward-looking technologies with massive growth

potential from companies like QUALCOMM (pioneers in mobile phone technology), Illumina (revolutionized DNA sequencing with tremendous potential to improve healthcare and quality of life), and ESET (cybersecurity experts). San Diego also fares well in industries like healthcare, education, and a lean government sector. These sectors are generally population-driven—they rise in tandem with population—and, like the economic driver sectors, have proven through the Great Recession to be less affected by economic cycles. In sum, “recession-resilient” sectors account for over 60% of the San Diego economy.

2.1.3 Eastern Municipal Water District (EMWD)

History

EMWD is a public water agency formed in 1950 by popular vote. In 1951, it was annexed into the MWD and gained access to a supply of imported water from the Colorado River Aqueduct. When EMWD was formed in 1950 it was a small agency, primarily serving agricultural customers. Since then, potable water use in EMWD’s service area has shifted from primarily agricultural to urban use. The reduction in agricultural demand has two major causes: rural farmland has been transformed to urban housing, and most remaining agricultural demands have been shifted to the recycled water system. EMWD is organized under the provisions of the Municipal Water Law of 1911, Water Code section 71000 et seq.

Today, EMWD remains one of MWD’s 26 member agencies and receives water from Northern California through the State Water Project (SWP) in addition to deliveries through the Colorado River Aqueduct. EMWD’s initial mission was to deliver imported water to supplement local groundwater for a small, mostly agricultural, community. Over time, EMWD’s list of services has evolved to include groundwater production, desalination, water filtration, wastewater collection and treatment, and regional water recycling. EMWD provides both retail and wholesale water service covering a total population of over 750,000. EMWD’s mission is “to provide safe and reliable water and wastewater management services to our community in an economical, efficient, and responsible manner, now and in the future.”

Governance and Organizational Structure

EMWD is governed by a 5-member Board of Directors who serve staggered 4-year terms, representing the district division they were elected to represent. As a member agency of MWD, EMWD also has a member appointed to the MWD Board.

Service Area and Local Economy

EMWD is located in western Riverside County, approximately 75 miles east of Los Angeles. (Figure 3.) EMWD provides potable water, recycled water, and wastewater services to an area of approximately 555 square miles in western Riverside County. The 555 square mile service area includes seven incorporated cities in addition to unincorporated areas in the County of Riverside.

Figure 3-1: Area Within EMWD Boundaries

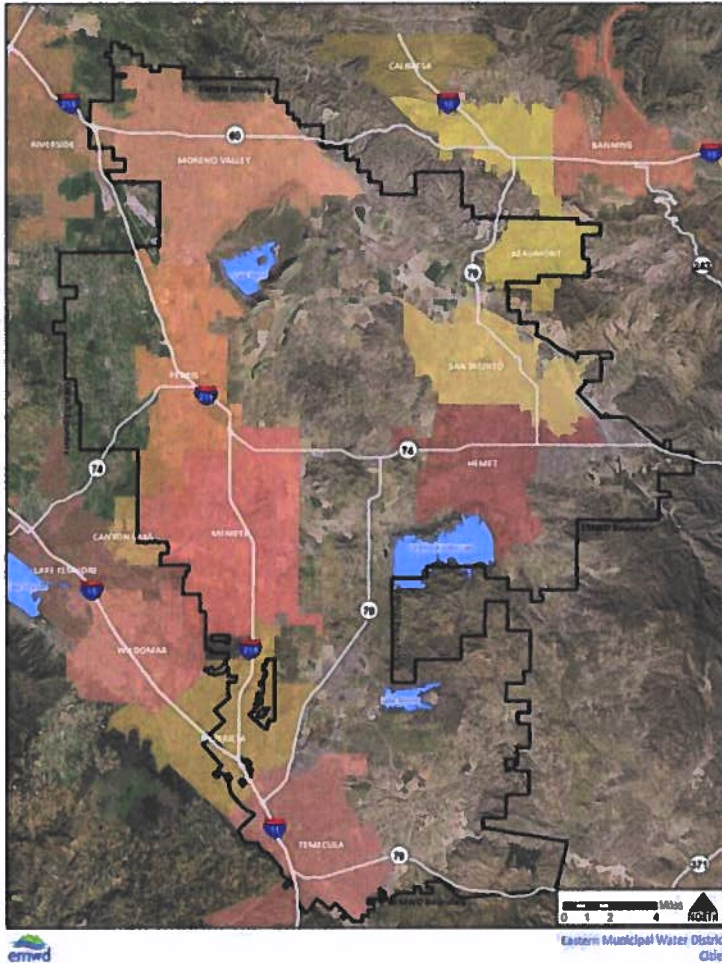


FIGURE 3—EMWD Service Area

EMWD is both a retail and wholesale agency, serving a retail population of 546,146 people and a wholesale population of 215,075 people. The agency was initially formed in 1950 to bring imported water to the area and in 1951 was annexed into the MWD. EMWD is now one of MWD's 26 member agencies.

Facilities

The majority of EMWD's supplies are imported water purchased through MWD from the State Water Project (SWP) and the Colorado River Aqueduct. Imported water is delivered to EMWD either as potable water treated by MWD, or as raw water that EMWD can either treat at one of its two local filtration plants or deliver as raw water for non-potable uses. EMWD's local supplies include groundwater, desalinated groundwater, and recycled water. Groundwater is pumped from the Hemet/San Jacinto and West San Jacinto areas of the San Jacinto Groundwater Basin. Groundwater in portions of the West San Jacinto Basin is high in salinity and requires desalination for potable use. EMWD owns and operates two desalination plants that convert brackish groundwater from the West San Jacinto Basin into potable water. EMWD also owns, operates, and maintains its own recycled water system that consists of four Regional Water Reclamation Facilities and several storage ponds spread throughout EMWD's service area that are all connected through the recycled water system. As of 2014, EMWD has used 100% of the recycled water it produces.

As stated above, since its formation as a water agency, EMWD has shifted from primarily serving agricultural uses to primarily serving urban uses. Today, EMWD's retail customers are mostly residential, with other uses consisting of commercial, industrial, institutional, landscape and agricultural. In addition to retail potable water demand, EMWD delivers water to seven wholesale customer agencies.

Economy

As the population within EMWD's service area continues to grow, the characteristics of the service area are continually changing. Tract homes, commercial centers and new industrial warehouses are replacing areas of agriculture and vacant land. Over the next 25 years, EMWD's total population is projected to grow by over 500,000 people, a 67% increase over the current population.

As part of the broader Inland Empire Southern Riverside county's economy reflects strong sectors in logistics, construction, health care, manufacturing, professional, management & scientific, and finance, insurance and real estate. Construction has historically been the major driver of the economy given its undeveloped land and Southern California's need for single family homes, apartments, industrial facilities, and infrastructure. Health Care firms are expanding in the Inland Empire. These same economic sectors are reflected within EMWD's service area. Much of the service area is characterized by being above the national average in median household income.

EMWD has a history of boom and bust development cycles. From the mid- 1980's to 1990's, population growth in EMWD routinely exceeded 10% per year. In the early 1990's, growth slowed during an economic recession. During the late 1990's, growth began to steadily increase, and the

first five years of the 2000's again brought accelerated population growth to the area. Growth within EMWD's service area reached its peak rate in 2005, but then there was a major decline in housing development and growth slowed again. Starting in 2006 EMWD saw a sharp decline in the number of new connections added, reaching a low point in 2010. Since 2010, new connections have slowly been increasing; but they remain well below the peak levels of new development seen in the early 2000's.

2.2 Existing Service Providers and Service Provider after Reorganization

Table 1 provides the current public services provider for the FPUD service area and the responsible public service provider if LAFCO's approved the reorganization.

Table 1—Summary of Municipal Services

| <u>Municipal Service</u> | <u>Current Provider</u> | <u>Provider After Reorganization</u> |
|--|--|---|
| Wastewater Collection and Treatment | Fallbrook Public Utility District | Fallbrook Public Utility District |
| Water Service | Fallbrook Public Utility District <i>*Imported Water from SDCWA</i> | Fallbrook Public Utility District <i>*Imported Water from EMWD</i> |
| Recycled Water | Fallbrook Public Utility District | Fallbrook Public Utility District |

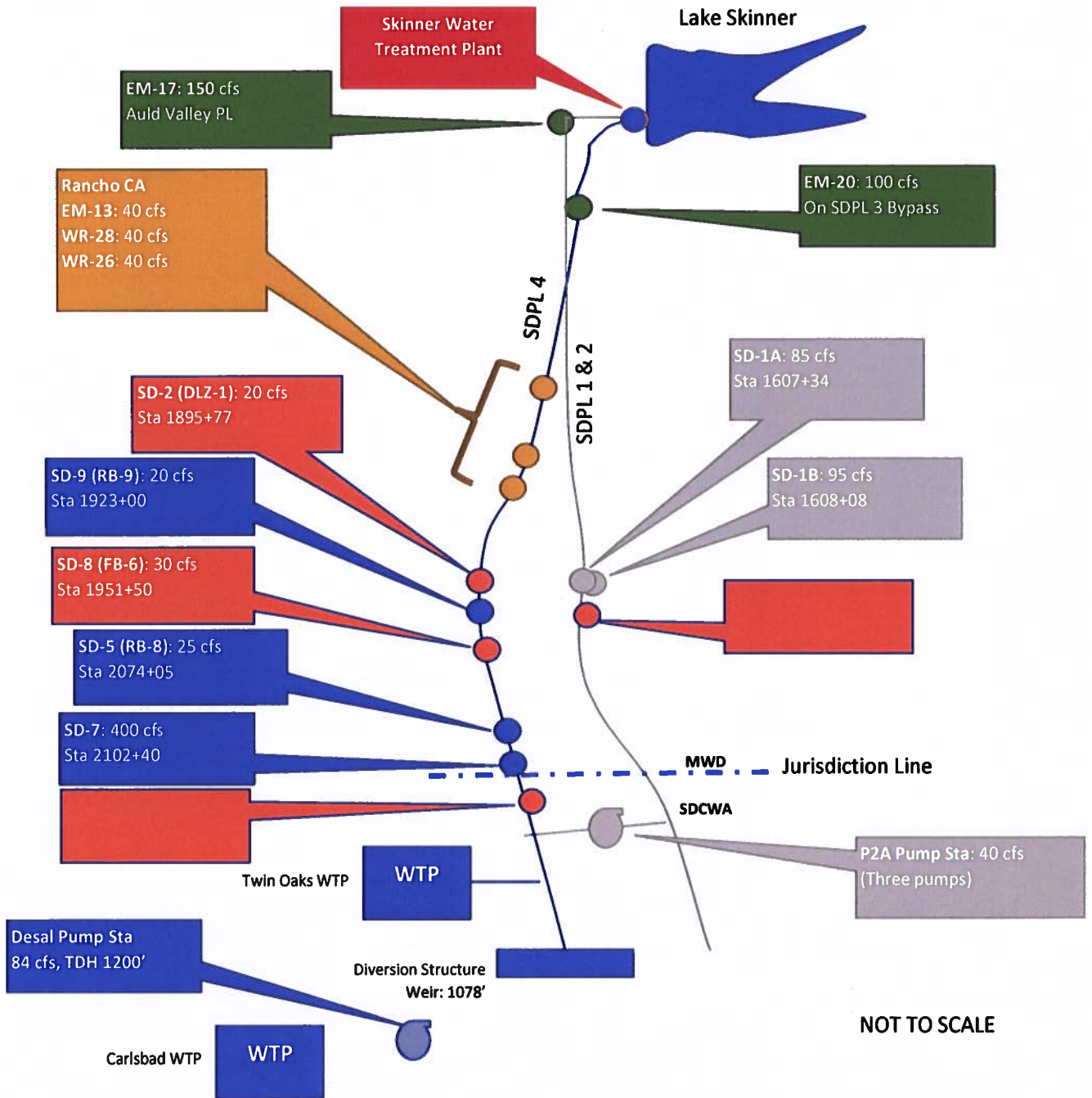
2.2.1 Level and Range of Services To Be Provided

Imported Water

FPUD imports 99% of its potable water from SDCWA with the remaining 1% coming from a local well. FPUD has four connections to SDCWA's system. **Figure 4** provides a schematic of how imported water is delivered to FPUD. Three of these connections are to pipelines owned by the MWD and one connection is to a pipeline owned by SDCWA. SDCWA currently purchases treated water from MWD that is treated at the Skinner Water Treatment Plant (WTP) and delivered to FPUD's connections. With approval of the reorganization, imported water treated at Skinner WTP will continue to be delivered to the same FPUD connections with no physical or operational changes necessary. FPUD does currently have the ability to take deliveries to occur on one connection it has to SDCWA owned pipeline, but FPUD has recently determined that continued deliveries through this connection are not necessary and FPUD will stop taking deliveries on this connection. Because there are no physical or operational change in the delivery of imported water

to FPUD under reorganization there are no facilities to be built by EMWD or FPUD to begin service at the same level as today.

FIGURE 4—How FPUD Receives Water Deliveries



NOT TO SCALE

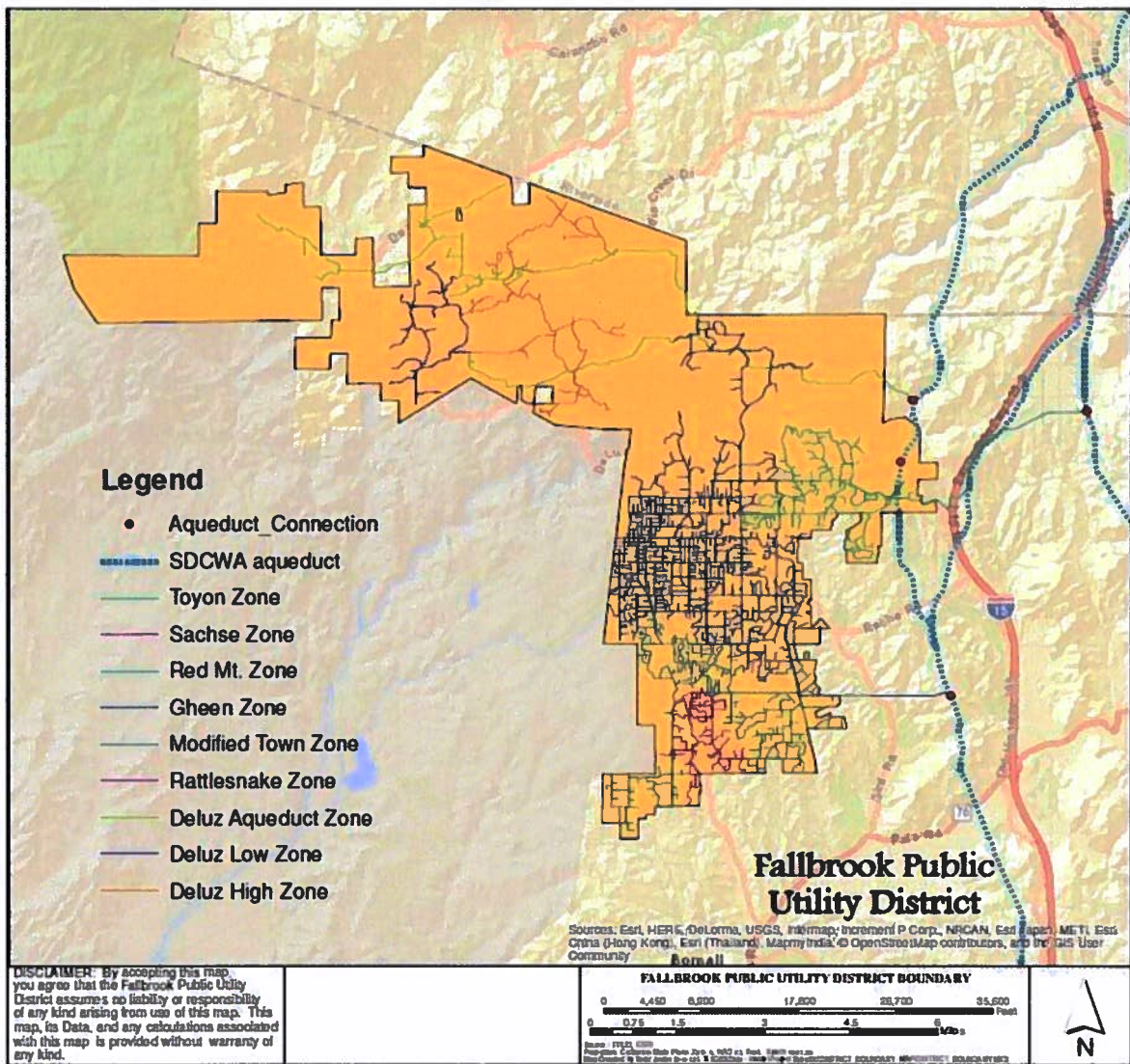
LEGEND

■ Signifies FPUD Connection to Imported Water System

Retail Water Distribution

FPUD’s water distribution system (**Figure 5**) is comprised of 270 miles of pipeline, 6,800 valves, an ultraviolet disinfection water treatment plant, nine steel reservoirs, a 300-million-gallon treated water reservoir, five pump stations and plans for a groundwater treatment plant. District staff operates the system, and conduct all system maintenance and repairs. FPUD is in the middle of an Advanced Metering Infrastructure (AMI) system upgrade that will enable real-time meter reading and provide customers with real-time water use. Reorganization will not result in any changes to retail water distribution in FPUD’s service area.

FIGURE 5—FPUD Water Distribution System



FPUD Local Water Supply

FPUD also recently signed an agreement with U.S. Marine Corps Base Camp Pendleton to share local water in the Santa Margarita River, of the SMRCUP. The river is expected to provide 30%-40% of FPUD's total water needs, reducing reliance on imported water. Construction of a bi-directional pipeline and groundwater treatment plant is expected to begin in the Fall of 2019 and be operational by 2023. These construction activities and the provision of a new, more reliable water supply will occur as planned under annexation to EMWD which will not affect the provision or cost of this service to District customers.

FPUD's five-year average annual water sales is 10,375 acre-feet. Residential and commercial customers represent 59% of sales, and agricultural customers make up the remaining 41%. FPUD's historic sales trend is down due to improved water efficiency for both residential and commercial indoor and outdoor use, combined with sharp decreases in agricultural water demands. The decrease in agricultural water demands is due to drought restrictions and the increases in water costs over the last decade driven by a sharp rise in the cost of the water we purchase. FPUD's agricultural water sales have reduced from 7,000 acre-feet in Fiscal Year 2008 to 3,200 in Fiscal Year 2017.

No Change In Water Operations

Since there is no change in service boundaries or inclusion of additional territory, FPUD will be able to continue to serve its customers in the same manner if the reorganization is approved. Reorganization approval will not result in the need for any additional infrastructure that would not otherwise be needed if reorganization were not approved and FPUD remained a member of SDCWA.

Other Services

Certain services provided by SDCWA to FPUD will be provided under similar circumstances by EMWD. These include current MWD funded water conservation programs available to FPUD customers under similar conditions as currently provided. Commercial, Multi-Family and Residential rebate programs similarly available as a member agency of SDCWA would be available to FPUD customers under membership in EMWD. Similar to SDCWA, EMWD provides supplement to MWD funding for water conservation programs to its member agencies.

EMWD does not offer agricultural customers a discount water program in exchange for lesser reliability equivalent to SDCWA's Transitional Special Agricultural Water (TSAWR) Program. The SDCWA Board recently took actions to move towards making TSAWR into a Special Agricultural Water Rate Program (SAWR) and allowing new customers to qualify for the program.

In exchange for a lesser level of reliability in a water shortage commercial agricultural customers participating in the TSAWR receive a substantial discount on the price of water purchased from SDCWA. However, EMWD has proposed a nominal wholesale charge or mark up to the cost of MWD water that results in a lower cost to FPUD customers than SDCWA’s TSAWR. **Table 2** compares the different calendar year 2020 SDCWA water rates (TSAWR and Full Service (FS)) to those proposed by EMWD.

Table 2—2020 SDCWA TSAWR, Full Service M&I and Potential EMWD Charges

| <i>Rate</i> | <i>TSAWR</i> | <i>SDCWA FS</i> | <i>EMWD</i> |
|--|--------------|-----------------|-------------|
| <i>Treated</i> | \$1,231 | \$1,686 | \$1,078 |
| <i>RTS</i> | 28 | 28 | 82 |
| <i>CC</i> | 24 | 24 | 24 |
| <i>IAC</i> | 43 | 43 | 0 |
| <i>EMWD</i> | | | 11 |
| <i>Total</i> | \$1,326 | \$1,781 | \$1,195 |
| <i>Rate Differential From SDCWA FS</i> | | (\$455/AF) | (\$586/AF) |

Source :SDCWA and MWD websites

Note: IAC is converted to \$ per AF based on FPUD/RMWD 2020 shares divided by FPUD/RMWD 3 year average of SDCWA deliveries

MWD RTS is based on FPUD and RMWD 2020 shares divided by FPUD and RMWD 10 year deliveries

MWD CC is based on FPUD and RMWD actual 2020 shares divided by FPUD RMWD 3 year average

Stand-By Availability charge is considered equivalent regardless of membership and not shown

Reliability

Ensuring EMWD has sufficient water supplies to meet anticipated demands under a wide range of potential future drought scenarios for FPUD customers is of critical importance. FPUD conducted a number of studies to ensure that its customers reliable needs would be met if EMWD became the District’s wholesaler. The initial studies looked at projected supply availability under SDCWA and EMWD, assuming EMWD would not be able to provide additional supplies. Ultimately EMWD completed a detailed study based on their detailed knowledge of their demand management approaches for member agencies and his study demonstrated that FPUD demands would be met under all potential future drought scenarios. The executive summary is below and the full report is included in attachment A.

EMWD Water Supply Reliability Analysis Executive Summary

The Fallbrook Public Utility District (FPUD) and the Rainbow Municipal Water District (RMWD) are retail water suppliers located in the northern-most portion of San Diego County, just south of the City of Temecula, serving primarily agricultural and residential customers. FPUD and RMWD are currently member agencies of the San Diego County Water Authority (SDCWA) and are considering a de-annexation from the SDCWA and an annexation into the Eastern Municipal Water District (EMWD).

FPUD and RMWD are currently being supplied with imported water from the Metropolitan Water District of Southern California's (Metropolitan) Robert A. Skinner Water Treatment Plant via the Metropolitan/San Diego Aqueduct, and would continue to be supplied with the same water by EMWD. The potential de-annexation of FPUD and RMWD from SDCWA is not anticipated to have any significant impacts to regional and local water supply or system reliability and no new supplies would need to be developed or imported. The de-annexation of FPUD and RMWD from the SDCWA would not result in Metropolitan, as a State Water Contractor, increasing its reliance on the Sacramento-San Joaquin Delta (Delta) since FPUD and RMWD would continue to be supplied from Metropolitan's Robert A. Skinner Water Treatment Plant.

The de-annexation of FPUD and RMWD would allow for SDCWA to reduce the amount of imported water it purchases from Metropolitan and EMWD would increase its imported water purchases from Metropolitan the amount equivalent to SDCWA's reduction. **There would be no net increase in imported water to the region.** Under all conditions presented in their respective 2015 Urban Water Management Plans, both SDCWA and EMWD include imported water supplied by Metropolitan as part of their long-term water supply portfolios, thus both remain reliant on imported water supplied by Metropolitan to meet their service area demands. Whether FPUD and RMWD are part of SDCWA or EMWD would not change SDCWA and EMWD's combined demand for imported water from Metropolitan.

FPUD and RMWD would remain dependent on the reliability and availability of Metropolitan supplies. Metropolitan has made substantial investments in large scale regional projects, local supply development, and conservation, to sustain Metropolitan's ability to provide "adequate and reliable supplies of high-quality water to meet present and future needs."

Through Metropolitan's adaptive management approach and integrated resources planning, Metropolitan is able to balance regional water supply sources, storage assets, and demand management to handle a wide range of water supply scenarios, including single year, and multi-year drought conditions and interruption in local supplies. However, Metropolitan acknowledges that severe hydrologic conditions may require the implementation of their Water Supply Allocation Plan (WSAP), which determines how member agencies would have their supplies from Metropolitan allocated during declared shortages.

It is important to note that under the WSAP, **Metropolitan does not physically limit member agency purchases**, but instead, incentivizes demand management through rate surcharges that apply to purchases above an agency's calculated allocation. In addition, the WSAP calculates allocations based on each member agency's service area as a whole. Historically, EMWD has elected to divide Metropolitan's allocation amongst its retail agencies using the WSAP as a guide. This means that even if a particular retail agency were to exceed its portion of the allocation, as long as the region as a whole does not exceed the Metropolitan allocation, the retail agency that exceeded its portion of the allocation, would not be assessed a surcharge.

EMWD has evaluated how the annexation of FPUD and RMWD would impact its water supply portfolio in an allocation year under three planning scenarios: 2015, at the height of the statewide drought restrictions; 2019, under current day conditions; and 2035, as an evaluation of long-term conditions. This analysis examined how much of EMWD's regional demands could be met without requiring customers to pay Metropolitan's allocation surcharge under the WSAP Regional Shortage Levels of 1, 3, and 5.

The WSAP has 10 Regional Shortage Levels, but since its adoption in 2008, Metropolitan has never declared a shortage level more severe than Regional Shortage Level 3 (which was adopted during the 2014 – 2016 drought emergency). It is also reasonable to assume that should a Level 3 or Level 5 Regional Shortage be implemented, Metropolitan member agencies would initiate various levels of their Water Shortage Contingency Plans that are required by the California Water Code 10632.

Table ES-1 shows the percent of available water supply compared to EMWD's service area demands both with and without the additional FPUD and RMWD demands for each of the three planning scenarios under the different WSAP Regional Shortage Levels. Based on this analysis, EMWD has a regional buffer of up to 22 percent with the addition of FPUD and RMWD. Therefore, under all of the evaluated conditions, based on actual achieved levels of conservation (or projected conservation levels with respect to the 2035 scenario), adequate supplies existed such that no single EMWD retail agency, including RMWD and FPUD, would be subject to the Metropolitan allocation surcharge even at a WSAP Regional Shortage Level 5.

Table ES-1: Wholesaler Supply Availability Under WSAP Without Paying MWD Allocation Surcharges (% of Projected Demand Served)

| Scenario | Service Area | Available Water Supply vs. Demand during WSAP Regional Shortage | | |
|--|----------------------------------|---|---------|---------|
| | | Level 1 | Level 3 | Level 5 |
| 2015 Drought Conditions | Current EMWD Service Area | 126.2% | 116.3% | 106.3% |
| | <i>With FPUD/RMWD Annexation</i> | 122.4% | 112.1% | 101.8% |
| Current Day 2019 Conditions | Current EMWD Service Area | 122.3% | 112.3% | 102.4% |
| | <i>With FPUD/RMWD Annexation</i> | 122.7% | 112.1% | 101.6% |
| Projected 2035 Conditions ^(a) | Current EMWD Service Area | 104.5% | 108.1% | 105.9% |
| | <i>With FPUD/RMWD Annexation</i> | 103.1% | 106.0% | 103.1% |

(a) 2035 scenario assumes that implementation of water supplier Water Shortage Contingency Plans result in 10 percent conservation in a Level 3 Regional Shortage, and 15 percent conservation in a Level 5 Regional Shortage

Sufficient water to meet demands would be fully available for FPUD and RMWD if their service is provided by EMWD. Furthermore, the WSAP considers all full service MWD demands and does not differentiate between water supply end uses. Therefore, agricultural demands being served by EMWD would experience the same level of reliability as the overall regional demands.

EMWD has also made substantial investments in local projects, and similar to Metropolitan, is able to balance its local and imported supplies to meet wholesale and retail demands. Even during 2015, when Metropolitan initiated the Regional Shortage Level 3, EMWD had additional water available above EMWD’s service area demands and therefore would have been able to accommodate FPUD and RMWD’s demands above their Metropolitan allocation without being subject to any surcharges.

Based on the analysis EMWD performed, FPUD and RMWD are forecasted to experience 100 percent water supply reliability as part of EMWD under current and future conditions and under various water supply allocation scenarios. FPUD and RMWD would also receive the same system reliability as they do currently under SDCWA since the same infrastructure would be used to treat and convey the water into their respective service areas.

Catastrophic Emergency

For the last 20 years SDCWA has been implementing the Emergency Storage Project (ESP). The ESP is a system of new, existing and expanded reservoirs, pipelines and pump stations that will ensure that its member agencies receive a 75% Level of Service during a catastrophic earthquake that severs San Diego County from MWD’s imported water system. SDCWA’s ESP manages the risk of seismic events on the San Andreas, San Jacinto and Elsinore faults. Although FPUD has been paying for the ESP through its water rates for 20 years, it is not able to receive ESP service

due to a yet to be constructed pump station and appurtenant facilities by SDCWA. It should be noted that SDCWA's planning documents for these facilities indicate that SDCWA will need to use MWD's aqueduct system to make ESP deliveries to FPUD.

If the facilities are constructed FPUD's customers would be able to receive ESP water in a catastrophic emergency. FPUD's M&I customers would receive a 75% level of service while FPUD's TSAWR customers would be cut at twice the rate of non-TSAWR customers (50% cutback compared to 25% for non-TSAWR customers). This lower level of reliability is in exchange for the discounted water rate TSAWR customers pay and in recognition that in an emergency outdoor irrigation water will be a low priority.

MWD also has an Emergency Response Plan and emergency water storage for its member agencies and their sub-agencies. MWD maintains sufficient storage in its 800,000 acre foot Diamond Valley Lake and other storage reservoirs to provide a similar 75% Level of Service in the event of earthquakes on the San Andreas and San Jacinto earthquake faults that would sever the imported water conveyance system for the State Water Project and Colorado River. The difference between SDCWA and MWD emergency storage programs is the response to a seismic event on the Elsinore Fault in southern Riverside County that disrupts service from MWD's treatment plants, reservoirs and local pipelines. The Elsinore Fault is considered the least active of the 3 earthquake faults, and MWD in its Emergency Response Plan intends to complete repairs on those facilities within 14 days of the seismic event and restore service to at least the 75% level. When facilities for SDCWA's ESP are completed it expects to provide emergency water for a 75% Level of Service to FPUD customers following the seismic event on the Elsinore Fault and the interruption of imported water deliveries.

In an effort to address the proposed reorganization's potential for 14 days with limited or no service in the event of an earthquake on the Elsinore Fault, FPUD customers will receive local water supply during an emergency from its Santa Margarita River Conjunctive Use Project (SMRCUP). FPUD is constructing the SMRCUP in partnership with U.S. Marine Corps Base Camp Pendleton to share local water in the Santa Margarita River through a groundwater storage and recovery project. Local supply from the SMRCUP will provide an additional layer of water supply reliability to the FPUD service area. Construction of a bi-directional pipeline and groundwater treatment plant is expected to begin in the Fall of 2019 and be operational by 2023. These construction activities and the provision of a new, more reliable water supply will occur as planned under reorganization which will not affect the provision or cost of this service to FPUD customers.

The SMRCUP is planned to produce approximately 9 acre feet per day on average and can meet all the daily indoor health and safety of FPUD residents for the 14 day expedited repair period. Additional drinking water will be available from the SMRCUP, FPUD's Red Mountain Reservoir and other storage tanks to meet very limited irrigation needs of M&I and agricultural customers during this period as well.

While the SMRCUP is designed to be a baseline supply for FPUD and Camp Pendleton, FPUD is considering entering into an MOU with Rainbow Municipal Water District (RMWD) that will allow a portion of this FPUD's local water to be provided to RMWD in the event of a catastrophic

emergency on the imported water system, such as an earthquake along the Elsinore Fault. A small amount of SMRCUP supply will be provided to RMWD during this 14 day period to supplement RMWD stored supplies in its local reservoirs and storage tanks.

3.0 FINANCING

In California, funding for special districts comes in two distinct types, based on their source (or sources) of revenue: Enterprise Districts and Non-Enterprise Special Districts.

Non -Enterprise Districts deliver services that provide general benefits to entire communities. They are primarily funded by property taxes. Enterprise Districts finance district operations via fees for public service, similar to a business. Under this model, the customers that consume goods or services such as drinking or irrigation water, waste disposal, or electricity, pay a fee. Rates are set by a governing board and there is a nexus between the costs of providing services and the rates customers pay. Sometimes enterprise district may also receive property taxes which comprise a portion of their budget.

FPUD operates as an enterprise fund, which has a set of self-balancing accounts that record the financial position of each of FPUD's services. The service funds track revenues from service fees and operating expenses specific to each service. This, in turn, makes each service fund independent and self-sufficient, and also ensures service fees are set to recover only costs associated with the particular service.

FPUD's accounting system and practices are based upon Generally Accepted Accounting Principles (GAAP) and are kept on an accrual basis. Under the accrual basis, revenues are recognized when earned and expenditures are recognized when a liability is incurred. FPUD's budget is prepared on a cash basis, which means that projected revenues are recognized when cash is assumed to be received and projected expenses are recognized when cash is disbursed.

Annual Budget Process

Each year, FPUD develops and adopts a new budget for the upcoming fiscal year. The budgeting process begins in January and starts with the budget message. The budget message establishes the priorities of FPUD in the next fiscal year and provides budget managers with guidance on how to prioritize their budget needs.

The capital and operating budget are included in FPUD's preliminary budget. Once assembled, the preliminary budget is reviewed by the General Manager and staff in a series of meetings. Adjustments are made to the preliminary budget and the revised preliminary budget is reviewed by the FPUD Board of Directors Fiscal Policy and Insurance Committee. Once the Committee's comments are incorporated and the proposed budget developed, budget workshops with the Board, if required, are held. The final proposed budget is then sent to the Board for review. Once Board

comments are incorporated into the document, a public hearing, if necessary, is held and the recommended budget is adopted.

Budget adjustments are made if projects or expenditures are needed that fall outside FPUD's adopted budget. These items are brought to the Board for approval and to appropriate the funds. A mid-year budget update is also provided to the Board each year to update spending trends and identify early any potential shortfalls or surpluses. FPUD maintains a balanced budget, which means that sources of funds equals uses of funds in instances of shortfall. Reserve fund withdrawals, if necessary, provide a source of funds. Likewise deposits to reserves are a use of funds and are unappropriated balances.

Financial Impacts of Reorganization

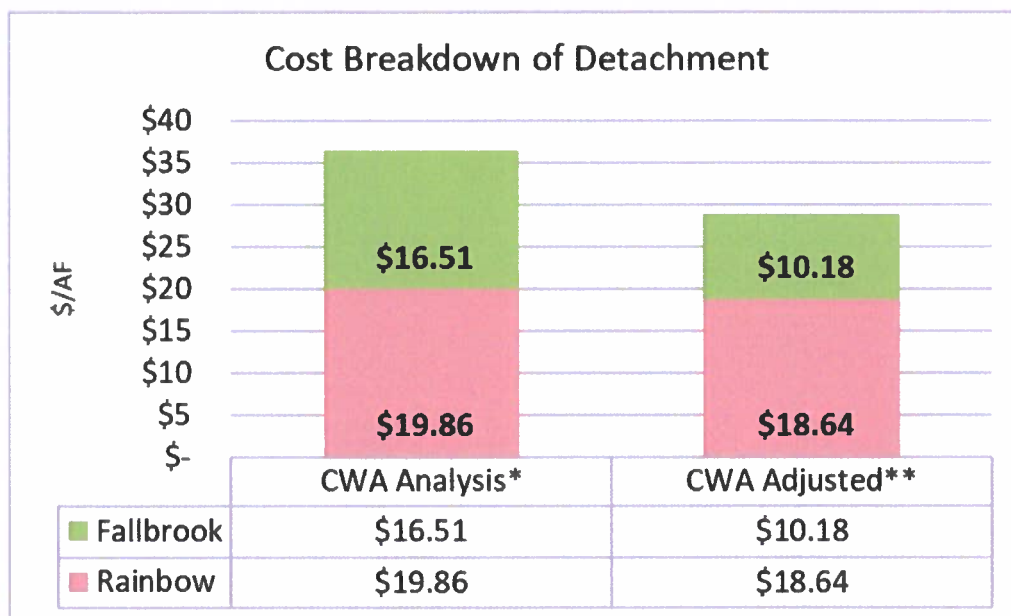
The proposed reorganization will have financial impacts to FPUD, EMWD, and CWA. While FPUD has pursued discussions with SDCWA to identify a potential cost structure for detachment, the parties have not made significant progress on reaching consensus. The last communication requested that FPUD meet with each SDCWA member agency separately to negotiate a solution. While FPUD did in fact reach out to each member agency and met with many of them and provided potential concepts for a cost structure for detachment, the general consensus from these meetings is that development of separate agreements with each SDCWA member agency is unworkable. This is because any impacts or benefits to SDCWA resulting from the reorganization, if approved, will impact SDCWA's rate setting process, and the impact on each member agency will vary over time with that agency's water demands.

In absence of a negotiated agreement with SDCWA, FPUD proposes that the detachment from SDCWA be consistent with the County Water Authority (CWA) Act (Water Code Appendix section 45-1 et seq.), the law under which SDCWA exists and is organized. Section 45-11 of the CWA Act sets forth certain requirements a member agency must follow in order to detach (called an "exclusion" in the CWA Act) from SDCWA. In accordance with this provision if the detachment is successful, taxable property within the detaching member agency may still continue to be taxable by SDCWA for the purpose of paying bonded and other indebtedness outstanding or contracted for at the time of detachment/exclusion. The amount currently collected annually from FPUD customers is roughly \$150,000. These payments would continue after detachment pursuant to the CWA Act even though FPUD will cease to receive any benefit from any SDCWA facilities.

The remaining SDCWA member agencies would also benefit from past investments made by FPUD in regional infrastructure. As of January 1, 2018 FPUD has contributed approximately \$300 million to help build SDCWA's infrastructure. These investments helped fund storage projects, emergency water supply projects and secure lower cost water supplies from canal lining projects. These investments will continue to provide benefits to the remaining SDCWA member agencies and FPUD will not recover any value from these regional investments that will continue to support all other member agencies of SDCWA. Further, there is no outstanding SDCWA debt associated with SDCWA facilities that only serve FPUD and that will, consequently, have no benefit to other remaining agencies after detachment.

Figure 6 shows the anticipated impact on SDCWA rates based on current FPUD and RMWD demand projections, including the reduction in SDCWA demands from the local groundwater development. As shown in **Figure 6**, the relative projected impact to SDCWA from FPUD detachment is \$10.18/AF. The current SDCWA rate is approximately \$1686/AF, so this represents an increase of 0.6%. The average rate increase experienced by FPUD over the last 10 years from SDCWA is over 8%. Using recent water usage for the City of San Diego of 91 gallons per capita per day (gpcd) and a rate impact of \$10.18 per AF for FPUD, the average person from the City of San Diego would see an annual cost impact of \$1 per year. Currently the average person from the City of San Diego pays an additional \$41 per year for SDCWA’s desalinated water (excluding the conveyance pipeline costs) and Imperial Irrigation District’s transfer water.

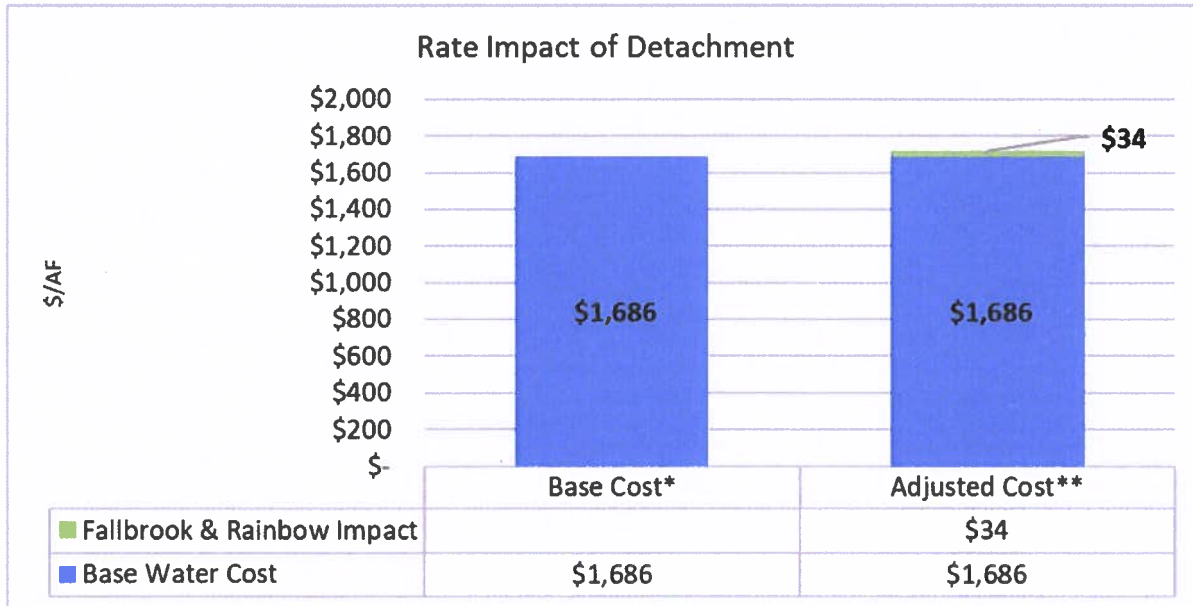
FIGURE 6—Rate Impact of FPUD/RMWD Detachment.



* Based upon SDCWA’s August Preliminary Financial Impact Analysis | De-Annexation.
 ** Based upon updated water sales projections and includes 3,100 AF of local supplies.

Although all the water purchased by FPUD is received directly from MWD, there will be a reduction in revenue for SDCWA if FPUD began to purchase wholesale water through MWD. SDCWA prepared a summary of the anticipated costs based on FY 2018 water demands and CY 2020 rates in August 2019. This analysis results in an estimated revenue reduction to CWA of approximately \$36.37/AF on top of the existing rate of \$1686/AF for remaining agencies from the detachment of FPUD and RMWD based on their being no cost reduction in SDCWA operations due to detachment. (Figure 7.)

FIGURE 7—SDCWA Projected Rate Impact



* Based upon CWA’s Recommended Calendar Year 2020 Rates and Charges presentation.

** Based upon updated water sales projection for CWA of 338,958 AF.

SDCWA’s estimate is higher than the actual projected impact for two key reasons:

1. The FY 2018 flows are higher than current and projected flows largely due to a continued decline in agriculture in the region.
2. FPUD is constructing a new groundwater treatment plant that will supply 30-40% of anticipated annual water demands.

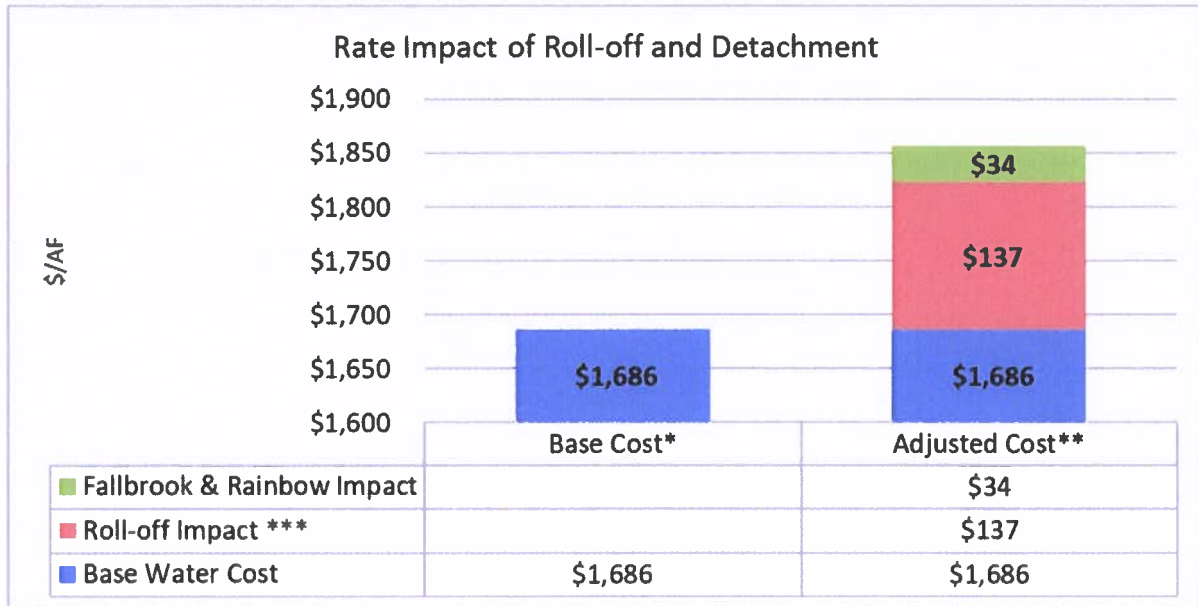
These factors will reduce the water demands on SDCWA, which will reduce the cost impact of on SDCWA of detachment.

SDCWA has also argued that the detaching agency must ensure revenue neutrality for the remaining agencies. Under this concept, FPUD would continue to make the same net payment to SDCWA, but would receive no services. In turn, SDCWA would use this money to subsidize other member agencies rates to be able to offset the potential 0.56% rate increase associated with the detachment of FPUD. We feel this concept is flawed at a number of levels:

1. This approach is inconsistent with the CWA act and would not have any cost of service basis and would violate proposition 26.
2. Currently member agencies can build local projects and reduce their water demands with a similar effect as detachment. The vast majority of rates allocated to a member agency are based on demands. While some are rolling averages, the costs paid by a District to SDCWA are largely proportional directed to water demands. **Figure 8** shows an example

of the rate impacts to other member agencies for three local supply projects that are underway. These projects include Phase I of the City of San Diego Pure Water Program, Pure Water Oceanside and the East County Advanced Purification Facility.

FIGURE 8—Rate Impact of Roll-Off and Detachment



* Based upon SDCWA’s Recommended Calendar Year 2020 Rates and Charges presentation.

** Based upon updated water sales projection for SDCWA of 338,958 AF.

*** Pure Water Phase I, East County AWP, Pure Water Oceanside.

As shown in **Figure 8**, the impact of these projects to other remaining member agencies is approximately \$137 per AF or over ten times times the projected impact of the FPUD detachment. If FPUD was required to make each agency revenue neutral for the impact of their reduced water purchases then the same concept would need to be in place for entities that are rolling off SDCWA and shifting existing SDCWA costs to the remaining agencies including FPUD and RMWD if detachment is not successful.

The majority of water used by FPUD is currently delivered from MWD through MWD facilities, and FPUD pays SDCWA for this water. The cost of treated MWD water to SDCWA is \$1,184/AF. Currently, FPUD is charged by SDCWA over \$450/AF on top of the MWD price versus an additional \$11/AF if the water was supplied by EMWD (See **Figure 9**). If FPUD detaches from SDCWA and attaches to EMWD, there is a substantial long-term savings to FPUD customers due to this difference in unit water costs.

Figure 9 shows the projected water rate increases for FPUD with and without detachment. As shown in **Figure 9**, without detachment an annual increase of 8% is anticipated over the next three years. With the reorganization it is anticipated that no rate increase could be achieved for 3 years

or rates could be slightly decreased based on the reduction in the cost of water with on-going savings in wholesale water costs of over 25%.

FIGURE 9—Wholesale Water Costs

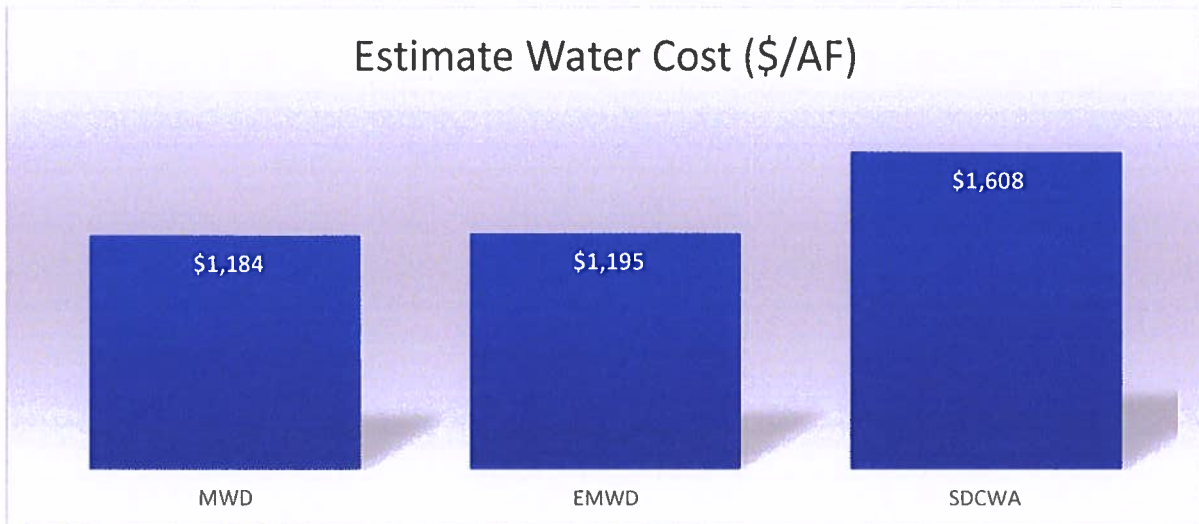
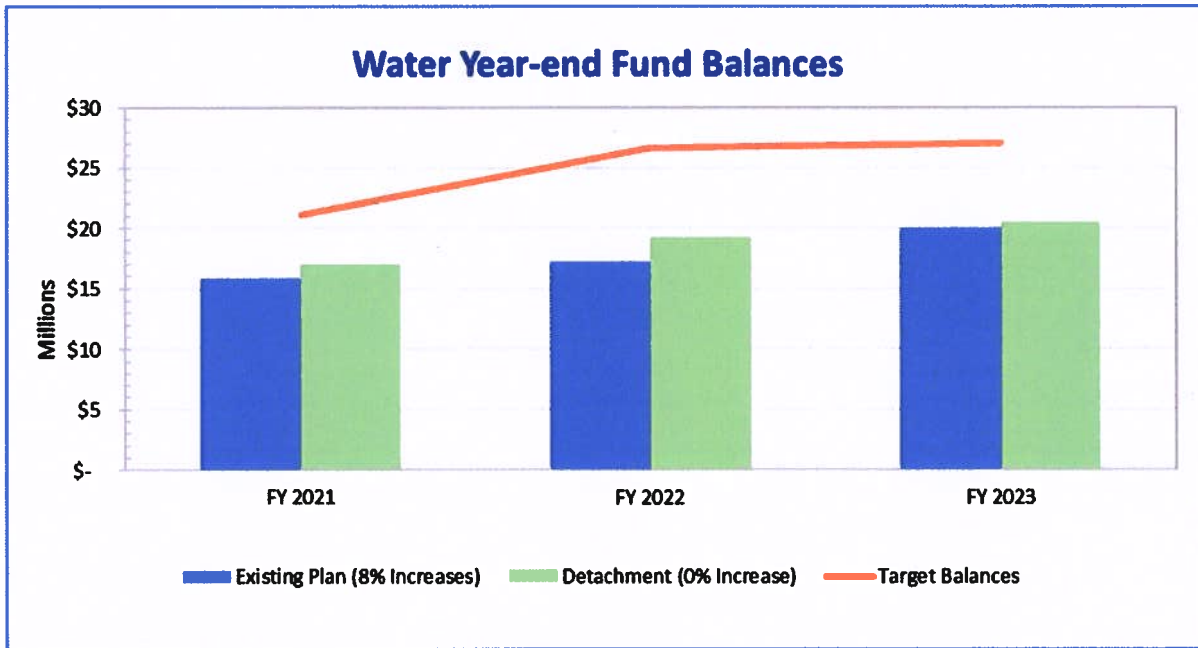


FIGURE 10—Projected Rate Impacts of Detachment



FPUD has had to implement significant rate increases over the past decade to address the combined impacts of increased water supply costs, declining sales and aging infrastructure needs. Increasing water rates has had a significant impact on the quality of life in our community due to the loss of agriculture and the inability to afford the water costs to maintain a rural lifestyle. These trends will continue into the future and further negatively impact our community unless LAFCO supports efforts by FPUD to reduce its water costs through the process of detachment from SDCWA and annexation to EMWD.

Attachment A

TECHNICAL MEMORANDUM

Water Resources and Facilities Planning Department



DATE: February 12, 2020

PREPARED FOR: Fallbrook Public Utility District / Rainbow Municipal Water District

PREPARED BY: Eastern Municipal Water District

SUBJECT: Analysis of Eastern Municipal Water District's Water Supply and System Reliability with the Potential Annexation of Fallbrook Public Utility District and Rainbow Municipal Water District

EXECUTIVE SUMMARY

The Fallbrook Public Utility District (FPUD) and the Rainbow Municipal Water District (RMWD) are retail water suppliers located in the northern-most portion of San Diego County, just south of the City of Temecula, serving primarily agricultural and residential customers. FPUD and RMWD are currently member agencies of the San Diego County Water Authority (SDCWA) and are considering a de-annexation from the SDCWA and an annexation into the Eastern Municipal Water District (EMWD).

FPUD and RMWD are currently being supplied with imported water from the Metropolitan Water District of Southern California's (Metropolitan) Robert A. Skinner Water Treatment Plant via the Metropolitan/San Diego Aqueduct, and would continue to be supplied with the same water by EMWD. The potential de-annexation of FPUD and RMWD from SDCWA is not anticipated to have any significant impacts to regional and local water supply or system reliability and no new supplies would need to be developed or imported. The de-annexation of FPUD and RMWD from the SDCWA would not result in Metropolitan, as a State Water Contractor, increasing its reliance on the Sacramento-San Joaquin Delta (Delta) since FPUD and RMWD would continue to be supplied from Metropolitan's Robert A. Skinner Water Treatment Plant.

The de-annexation of FPUD and RMWD would allow for SDCWA to reduce the amount of imported water it purchases from Metropolitan and EMWD would increase its imported water purchases from Metropolitan the amount equivalent to SDCWA's reduction. **There would be no net increase in imported water to the region.** Under all conditions presented in their respective 2015 Urban Water Management Plans, both SDCWA and EMWD include imported water supplied by Metropolitan as part of their long-term water supply portfolios, thus both remain reliant on imported water supplied by Metropolitan to meet their service area demands. Whether FPUD and RMWD are part of SDCWA or EMWD would not change SDCWA and EMWD's combined demand for imported water from Metropolitan.

FPUD and RMWD would remain dependent on the reliability and availability of Metropolitan supplies. Metropolitan has made substantial investments in large scale regional projects, local supply development, and conservation, to sustain Metropolitan's ability to provide "adequate and reliable supplies of high-quality water to meet present and future needs."

Through Metropolitan's adaptive management approach and integrated resources planning, Metropolitan is able to balance regional water supply sources, storage assets, and demand management to handle a wide range of water supply scenarios, including single year, and multi-year drought conditions and interruption in local supplies. However, Metropolitan acknowledges that severe hydrologic conditions may require the implementation of their Water Supply

Allocation Plan (WSAP), which determines how member agencies would have their supplies from Metropolitan allocated during declared shortages.

It is important to note that under the WSAP, **Metropolitan does not physically limit member agency purchases**, but instead, incentivizes demand management through rate surcharges that apply to purchases above an agency's calculated allocation. In addition, the WSAP calculates allocations based on each member agency's service area as a whole. Historically, EMWD has elected to divide Metropolitan's allocation amongst its retail agencies using the WSAP as a guide. This means that even if a particular retail agency were to exceed its portion of the allocation, as long as the region as a whole does not exceed the Metropolitan allocation, the retail agency that exceeded its portion of the allocation, would not be assessed a surcharge.

EMWD has evaluated how the annexation of FPUD and RMWD would impact its water supply portfolio in an allocation year under three planning scenarios: 2015, at the height of the statewide drought restrictions; 2019, under current day conditions; and 2035, as an evaluation of long-term conditions. This analysis examined how much of EMWD's regional demands could be met without requiring customers to pay Metropolitan's allocation surcharge under the WSAP Regional Shortage Levels of 1, 3, and 5.

The WSAP has 10 Regional Shortage Levels, but since its adoption in 2008, Metropolitan has never declared a shortage level more severe than Regional Shortage Level 3 (which was adopted during the 2014 – 2016 drought emergency). It is also reasonable to assume that should a Level 3 or Level 5 Regional Shortage be implemented, Metropolitan member agencies would initiate various levels of their Water Shortage Contingency Plans that are required by the California Water Code 10632.

Table ES-1 shows the percent of available water supply compared to EMWD's service area demands both with and without the additional FPUD and RMWD demands for each of the three planning scenarios under the different WSAP Regional Shortage Levels. Based on this analysis, EMWD has a regional buffer of up to 22 percent with the addition of FPUD and RMWD. Therefore, under all of the evaluated conditions, based on actual achieved levels of conservation (or projected conservation levels with respect to the 2035 scenario), adequate supplies existed such that no single EMWD retail agency, including RMWD and FPUD, would be subject to the Metropolitan allocation surcharge even at a WSAP Regional Shortage Level 5.

Table ES-1: Wholesaler Supply Availability Under WSAP Without Paying MWD Allocation Surcharges (% of Projected Demand Served)

| Scenario | Service Area | Available Water Supply vs. Demand during WSAP Regional Shortage | | |
|--|----------------------------------|---|---------|---------|
| | | Level 1 | Level 3 | Level 5 |
| 2015 Drought Conditions | Current EMWD Service Area | 126.2% | 116.3% | 106.3% |
| | <i>With FPUD/RMWD Annexation</i> | 122.4% | 112.1% | 101.8% |
| Current Day 2019 Conditions | Current EMWD Service Area | 122.3% | 112.3% | 102.4% |
| | <i>With FPUD/RMWD Annexation</i> | 122.7% | 112.1% | 101.6% |
| Projected 2035 Conditions ^(a) | Current EMWD Service Area | 104.5% | 108.1% | 105.9% |
| | <i>With FPUD/RMWD Annexation</i> | 103.1% | 106.0% | 103.1% |

(a) 2035 scenario assumes that implementation of water supplier Water Shortage Contingency Plans result in 10 percent conservation in a Level 3 Regional Shortage, and 15 percent conservation in a Level 5 Regional Shortage

Sufficient water to meet demands would be fully available for FPUD and RMWD if their service is provided by EMWD. Furthermore, the WSAP considers all full service MWD demands and does not differentiate between water supply end uses. Therefore, agricultural demands being served by EMWD would experience the same level of reliability as the overall regional demands.

EMWD has also made substantial investments in local projects, and similar to Metropolitan, is able to balance its local and imported supplies to meet wholesale and retail demands. Even during 2015, when Metropolitan initiated the Regional Shortage Level 3, EMWD had additional water available above EMWD’s service area demands and therefore would have been able to accommodate FPUD and RMWD’s demands above their Metropolitan allocation without being subject to any surcharges.

Based on the analysis EMWD performed, FPUD and RMWD are forecasted to experience 100 percent water supply reliability as part of EMWD under current and future conditions and under various water supply allocation scenarios. FPUD and RMWD would also receive the same system reliability as they do currently under SDCWA since the same infrastructure would be used to treat and convey the water into their respective service areas.

INTRODUCTION

The Fallbrook Public Utility District (FPUD) and the Rainbow Municipal Water District (RMWD) are retail water suppliers located in the northern-most portion of San Diego County, just south of the City of Temecula, serving primarily customers in the agricultural and residential sectors. FPUD and RMWD are currently member agencies of the San Diego County Water Authority (SDCWA), a wholesaler that sources its water supplies from a portfolio that includes imported water from the Metropolitan Water District of Southern California (Metropolitan), water purchased/transferred from the Imperial Irrigation District (IID), and a purchase agreement for water produced by the Carlsbad Desalination Plant. All of RMWD’s demands are currently being supplied by water purchased from the SDCWA. The majority of FPUD’s demands are also

currently being supplied by water purchased from the SDCWA, with a small portion of FPUD's demands being supplied by a single groundwater well.

FPUD and RMWD are considering a de-annexation from the SDCWA and annexing into the Eastern Municipal Water District (EMWD). EMWD is also a member agency of Metropolitan and provides retail and wholesale water service to an approximately 555 square mile area in western Riverside County. In addition to imported water purchased from Metropolitan, EMWD's water supply portfolio includes potable groundwater, desalinated groundwater, and recycled water.

FPUD and RMWD are evaluating water supply and system reliability as well as potential financial impacts associated with remaining a part of SDCWA compared to becoming a member agency of EMWD. This Technical Memorandum (TM) compares the water supply reliability for FPUD and RMWD if they remain a member of SDCWA or became a member agency of EMWD.

The TM includes the following sections:

- **System Descriptions** – This section describes SDCWA, EMWD, and Metropolitan's water supply and delivery systems as they relate to delivering water to FPUD and RMWD.
- **Comparison of Wholesaler Water Supply Portfolios** – This section details SDCWA and EMWD water supply portfolios.
- **Water Supply and System Reliability** – This section discusses the potential water supply and system reliability impacts of the FPUD and RMWD de-annexation from SDCWA at a regional level.
- **Water Supply Impact of a FPUD/RMWD Annexation** – This section presents a detailed case study that evaluates a variety of dry year scenarios and how EMWD may be able to mitigate the impacts of a Metropolitan allocation.
- **Operational Impact of Detachment/Annexation** – In this section, potential operational impacts are discussed.

SYSTEM DESCRIPTIONS

SAN DIEGO COUNTY WATER AUTHORITY

SDCWA is a water wholesaler located in the western portion of San Diego County, covering just under 1,500 square miles. SDCWA has 24 member agencies, consisting of six cities, five water districts, eight municipal water districts, three irrigation districts, a public utility district, and a federal military reservation. Many of SDCWA's member agencies have developed their own local water supplies ranging from groundwater, surface water, recycled water, and brackish groundwater recovery. The SDCWA's supplies consist of purchases from Metropolitan, water transfers from the IID, and desalinated ocean water from the Carlsbad Desalination Plant.

SDCWA receives imported water from Metropolitan via the San Diego Aqueduct, a series of pipelines that originate from Metropolitan's Robert A. Skinner Water Treatment Plant and the adjacent Lake Skinner. The pipelines are operated by Metropolitan to a delivery point six miles south of the Riverside/San Diego County boundary. In their 2015 Urban Water Management Plan (UWMP), SDCWA reported that it purchased close to 250,000 AF of water from Metropolitan in 2015, but projected that quantity to decrease to approximately 136,000 AF in

2020 due to member agencies increasing their local supplies via investments in water recycling, potable reuse, and brackish groundwater recovery. SDCWA projects the amount of imported water purchased from Metropolitan to return to 2015 levels by 2040.

With respect to FPUD and RMWD's supply from SDCWA, essentially all of their imported water deliveries come from the Robert A. Skinner Water Treatment Plant, and the majority of that quantity is delivered from the portion of the San Diego Aqueduct operated by Metropolitan.

EASTERN MUNICIPAL WATER DISTRICT

EMWD is a retail and wholesale water supplier located in western Riverside County with a service area of roughly 555 square miles that includes seven cities and several smaller water agencies. EMWD is a member agency of Metropolitan, and purchases both treated and raw imported water to supply its customers. For retail and wholesale service, treated water purchases are delivered from either Metropolitan's Henry J. Mills Water Treatment Plant or Robert A. Skinner Water Treatment Plant. Retail raw water purchases are delivered from a number of connections either directly to agricultural customers or for treatment at one of the two water filtration plants owned and operated by EMWD. EMWD's raw water system is also used to wholesale water to sub-agencies.

Local resources make up a significant portion of EMWD's water supply portfolio. In the eastern (Hemet/San Jacinto) and northern portion (Moreno Valley) of its service area, EMWD operates a number of potable groundwater wells. The groundwater in the Hemet/San Jacinto area is adjudicated under the Hemet-San Jacinto Watermaster (HSJWM), and EMWD possesses an adjusted base production right to pump from this region of the groundwater basin. In addition, EMWD owns and operates two desalination facilities (with a third under construction) that provide a potable supply from a region of brackish groundwater located in the western portion (Perris Valley) of its service area. EMWD also utilizes all of the wastewater treated at its four Regional Water Reclamation Facilities (RWRFs).

In the event of an imported water supply disruption, EMWD does maintain the ability to temporarily increase its supply available from local sources by pumping from groundwater in storage in the Hemet/San Jacinto Basin. EMWD has accumulated carry over credits with the HSJWM from the unused portion of the Soboba Settlement Water Recharge, unused adjusted base production right credits, pumping credits purchased from other entities in the region, and groundwater stored as a result of participation in Metropolitan's cyclic storage program.

EMWD's wholesale customers have a number of their own local supplies consisting primarily of groundwater, surface water, and recycled water.

For calendar year 2018, approximately 52 percent of EMWD's retail demand was met with local water supplies, while the remaining 48 percent was met via imported water. Roughly 95 percent of wholesale customer demands in 2018 were met via imported water, with the remainder being supplied with recycled water.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Metropolitan imports water from the Colorado River (via the Colorado River Aqueduct) and Northern California (via the State Water Project). Water from these sources is stored in three major reservoirs with a combined capacity of over 1 million acre-feet, all located within Riverside

County as well as six smaller reservoirs with a combined capacity of approximately 32,000 acre-feet at various locations within the Los Angeles, Orange, and San Bernardino Counties. Imported water is treated at one of five water treatment plants located throughout Metropolitan's service area with a combined capacity of roughly 2.36 billion gallons per day.

In addition to its imported water supplies, Metropolitan has developed and/or supported a variety of storage, transfer, local supply, and educational programs aimed at increasing its overall supply reliability.

For example, Metropolitan has engaged with a number of Central Valley agricultural districts and other Southern California State Water Project contractors and formed partnerships that allow Metropolitan to store its share of State Water Project supplies during wet years for use during dry years. Similarly, Metropolitan incentivizes member agencies to store local resources (such as groundwater) during wet years by offering credits to purchase additional imported water through its cyclic storage programs. Metropolitan also supports the development of local resources within its service area through financial incentives for local agencies to develop supplies that include water recycling, groundwater recovery, and seawater desalination.

In addition, Metropolitan continues to make significant investments in conservation, public outreach, and education programs that reduce demand within its service area. These include programs such as rebates for high efficiency fixtures and turf replacement.

Finally, Metropolitan has made sizeable investments in its ability to store water. Two of Metropolitan's major reservoirs are located within EMWD boundaries: Diamond Valley Lake, which was completed in March of 2000 and has a capacity of approximately 810,000 acre-feet (roughly doubling the region's water storage capacity), serves as a lynchpin of Metropolitan's ability to serve the Southern California region's drought and emergency water supply needs for a period of up to six months; and Lake Skinner, which has a capacity of approximately 44,000 acre-feet. Metropolitan's water treatment plants in the area include the Henry J. Mills treatment plant, which provides roughly 220 million gallons per day to EMWD and the Western Municipal Water District, and the Robert A. Skinner treatment plant (fed by Lake Skinner), which has a supply capacity of 350 million gallons per day, and provides supplies to a number of agencies including EMWD, EMWD's wholesale customers, and both FPUD and RMWD.

The general locations of these facilities are shown in Figure 1.

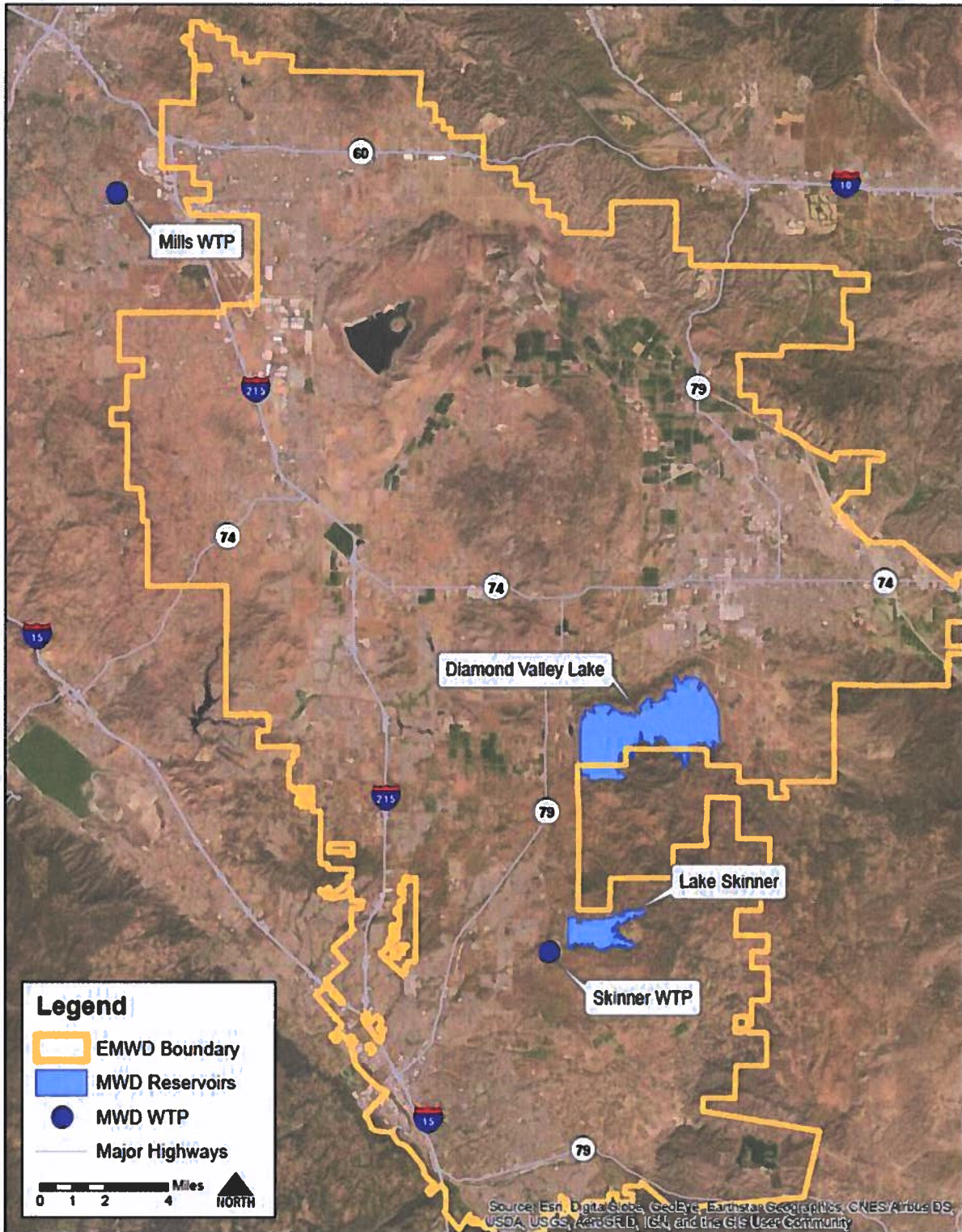


Figure 1: Major Metropolitan Facilities in the Vicinity of EMWD's Service Area

COMPARISON OF WHOLESALE WATER SUPPLY PORTFOLIOS

Details of the SDCWA and EMWD water supply portfolios are presented below. Information is taken from their respective 2015 UWMPs, with some updates made based on available information regarding local supply projects. In all cases, new local supply projects not reported in the 2015 UWMP were assumed to reduce the respective agency's reliance on water purchased from Metropolitan.

SAN DIEGO COUNTY WATER AUTHORITY

| | 2020 | 2025 | 2030 | 2035 | 2040 |
|---|----------------|----------------|----------------|----------------|----------------|
| Water Authority Supplies | | | | | |
| IID Water Transfer | 190,000 | 200,000 | 200,000 | 200,000 | 200,000 |
| ACC and CC Lining Projects | 80,200 | 80,200 | 80,200 | 80,200 | 80,200 |
| Carlsbad Desalination Plant | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| Sub-Total | 320,200 | 330,200 | 330,200 | 330,200 | 330,200 |
| Member Agency Supplies (Verifiable Supplies) | | | | | |
| Surface Water | 51,580 | 51,480 | 51,380 | 51,280 | 51,180 |
| Water Recycling | 40,459 | 43,674 | 45,758 | 46,118 | 46,858 |
| San Diego Pure Water ⁽¹⁾ | 0 | 33,600 | 33,600 | 83,000 | 83,000 |
| East County Adv. Purification | 0 | 12,900 | 12,900 | 12,900 | 12,900 |
| Seawater Desalination | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Potable Reuse | 3,300 | 3,300 | 3,300 | 3,300 | 3,300 |
| Brackish GW Recovery | 12,100 | 12,500 | 12,500 | 12,500 | 12,500 |
| Groundwater | 17,940 | 19,130 | 20,170 | 20,170 | 20,170 |
| Sub-Total | 131,379 | 182,584 | 185,608 | 245,268 | 245,908 |
| Metropolitan Water District Supplies | | | | | |
| Imported Water ⁽²⁾ | 136,002 | 135,340 | 160,913 | 128,963 | 152,665 |
| Total Projected Supplies | 587,581 | 648,124 | 676,721 | 694,431 | 718,773 |

(1) Assume Phases 2 and 3 of San Diego Pure Water both are not online until 2035

(2) SDCWA's 2015 UWMP did not include supplies available from the San Diego Pure Water and East County Advanced Purification projects. These new supplies are assumed to offset SDCWA purchases of imported water from Metropolitan.

Based on 2015 UWMP information (updated to include San Diego Pure Water and East County Advanced Purification), the portion of SDCWA's supply portfolio (when including member agency supplies) reliant on Metropolitan ranges from 19 percent (2035) to 24 percent (2030) over the next 20 years. Based on a weighted average over this period, roughly 21 percent of SDCWA's supply portfolio consists of purchases from Metropolitan.

EASTERN MUNICIPAL WATER DISTRICT

| | 2020 | 2025 | 2030 | 2035 | 2040 |
|---|----------------|----------------|----------------|----------------|----------------|
| EMWD Supplies | | | | | |
| Groundwater* | 12,303 | 12,303 | 12,303 | 12,303 | 12,303 |
| Brackish Desalination | 7,000 | 13,000 | 13,000 | 13,000 | 13,000 |
| Perris North CPRP (GW) | 0 | 6,700 | 6,700 | 6,700 | 6,700 |
| Purified Water Replenishment | 0 | 4,000 | 4,000 | 15,000 | 15,000 |
| Recycled Water - Retail | 45,245 | 48,334 | 50,017 | 51,800 | 53,300 |
| Recycled Water - Wholesale | 1,656 | 4,766 | 5,183 | 5,600 | 5,600 |
| Subtotal | 66,204 | 89,103 | 91,203 | 104,403 | 105,903 |
| Sub-Agency Supplies | | | | | |
| Groundwater | 51,998 | 62,948 | 70,393 | 71,120 | 71,826 |
| Surface Water | 290 | 4,500 | 4,500 | 4,500 | 4,500 |
| Recycled Water | 4,036 | 5,099 | 7,248 | 8,527 | 8,598 |
| Subtotal | 56,324 | 72,547 | 82,141 | 84,147 | 84,924 |
| Metropolitan Water District Supplies | | | | | |
| Imported Water - Retail | 81,197 | 78,397 | 89,797 | 89,897 | 100,397 |
| Imported Water - Wholesale | 50,500 | 54,100 | 57,700 | 61,200 | 64,800 |
| Subtotal | 131,697 | 132,497 | 147,497 | 151,097 | 165,197 |
| Total Projected Supplies | 254,225 | 294,147 | 320,841 | 339,647 | 356,024 |

*EMWD may elect to pump more groundwater than indicated based on availability of carry-over credits and water accumulated under the cyclic storage program

Based on 2015 UWMP information (updated to include current supply project timelines for EMWD), the portion of EMWD's supply portfolio (when including sub-agencies) reliant on Metropolitan ranges from 44 percent (2035) to 52 percent (2020) over the next 20 years. Based on a weighted average over this period, roughly 47 percent of EMWD's supply portfolio consists of purchases from Metropolitan.

IMPACT OF DETACHMENT/ANNEXATION ON WATER SUPPLY PORTFOLIOS

Based on their 2015 UWMPs, RMWD projects water demands of approximately 20,810 AF in 2020 and 20,660 AF in 2040, while FPUD projects water demands of approximately 12,319 AF in 2020 and 14,247 AF in 2040. If FPUD and RMWD were to de-annex from SDCWA, these quantities of imported water demand would be reduced from SDCWA's total and added to EMWD's total.

WATER SUPPLY AND SYSTEM RELIABILITY

The potential de-annexation of FPUD and RMWD from SDCWA is not anticipated to have any significant impacts to regional and local water supply and system reliability. FPUD and RMWD are currently being supplied with imported water from Metropolitan's Robert A. Skinner Water Treatment Plant via the Metropolitan/San Diego Aqueduct, and would continue to be supplied

with the same water by EMWD. FPUD and RMWD would remain dependent on the reliability and availability of Metropolitan supplies.

REGIONAL RELIABILITY – METROPOLITAN

Metropolitan remains fully committed to maintaining its current high level of service and reliability to its member agencies in varying hydrologic conditions. After the drought of 1987-1992, Metropolitan recognized the need to develop a long-term water resources strategy to reliably meet the needs of its service area. The result was an adaptive water management approach that allows Metropolitan to make continual refinements and investments in its robust regional supply portfolio, local project incentives, and conservation, which are reflected in Metropolitan's Integrated Resources Plan (IRP). The IRP is updated every 5 years, with the next update to be completed in 2020.

As with previous IRP updates, Metropolitan will re-assess the future supplies from the State Water Project and the Delta. Prior updates have resulted in Metropolitan adapting to court litigation, tighter future regulations in connection with the twin-tunnel California WaterFix approach, and will again be re-aligned with respect to the new, single-tunnel approach to Delta Conveyance. As EMWD and SDCWA are both member agencies of Metropolitan, whether FPUD and RMWD are served by EMWD or SDCWA would have a net zero impact on the Delta when considered from a regional perspective. Since FPUD and RMWD's imported water needs are currently being met with water from Metropolitan's Robert A. Skinner Water Treatment Plant, the existing condition would essentially be maintained under EMWD management and no new supplies would need to be developed or imported. The de-annexation of FPUD and RMWD from the SDCWA will not result in Metropolitan, as a State Water Contractor, to increase its reliance on the Delta as the same water currently being delivered via SDCWA would be delivered via EMWD.

Metropolitan's integrated resources planning process also identified the need to drastically increase storage capacity in anticipation of regional drought and similar local shortages, an example being Diamond Valley Lake, which secures up to six months in emergency supplies for the region.

Other opportunities identified by Metropolitan's adaptive management approach include groundwater storage programs such as cyclic storage programs, which incentivize water suppliers to import additional water in-lieu of pumping groundwater during wet years.

Metropolitan also has the capacity to provide additional imported water to agencies that have lost access to local supplies for extended periods of time. Examples include Santa Monica due to Methyl tert-butyl ether groundwater contamination, volatile organic compounds in the City of Los Angeles, environmental restrictions in the Owens Valley, and most recently, per- and poly-fluoroalkyl substances (PFAS) in Orange County.

Metropolitan has continued to encourage regional investment in local supplies and conservation by its member agencies through its Local Resource Program, Cyclic Storage Program, and ongoing conservation program funding. To date, Metropolitan has invested approximately \$800 million in conservation, \$470 million in recycling, and \$160 million in groundwater recovery. These investments by Metropolitan's various member agencies improve the reliability of the Metropolitan region as a whole, including EMWD and SDCWA.

Metropolitan has also planned for its potential contribution to the Colorado River Drought Contingency Plan (DCP) and does not expect its supplies to be curtailed under the DCP. The unused 2018 water coupled with wetter than expected hydrology in the Colorado River Basin in 2019 has resulted in over 1 million acre-feet of water stored by Metropolitan in Lake Mead, which can be used as Metropolitan's contribution to the DCP without impacting Metropolitan's supplies should hydrologic conditions warrant reductions in agency withdrawals.

In the short term, Metropolitan's reliability will also benefit from regional growth occurring at a slower pace than anticipated over the last several planning cycles. Both Metropolitan and its member agencies have continued to make improvements to their respective water supply portfolios during this period, and accordingly, until the Southern California region hits another high growth cycle, an additional margin of supply reliability will have been added.

These programs, investments, and on-going response to changing demands have improved Metropolitan's reliability and will allow Metropolitan to maintain its historic high level of service to its member agencies in both the short and long term future.

[WATER SUPPLY ALLOCATION PLAN \(WSAP\)](#)

In the event that severe hydrologic conditions impact Metropolitan's supply sources, the Water Supply Allocation Plan (WSAP) calculates how member agencies, including SDCWA and EMWD, would have their supplies from Metropolitan allocated.

When implementing the WSAP, Metropolitan aims to capture each member agency's supplies and demands using a historical base period that reflects non-drought conditions. Each member agency's base period demands are adjusted for factors such as growth. The quantity of adjusted demand that would not be met by a member agency's allocation year local supplies is considered the agency's wholesale demand on Metropolitan's supply sources. Each successive regional shortage level of the WSAP encourages demand management by reducing the amount of a member agency's wholesale demand that is not subject to an allocation surcharge. The WSAP would not limit the amount of water that is actually purchased by a member agency.

Since some member agencies rely more heavily on Metropolitan's imported water supplies than others, the WSAP includes a Retail Impact Adjustment to ensure that agencies do not see any undue shortages (relative to other member agencies) during an allocation year. This adjustment is prorated on a linear scale based on each member agency's dependence on Metropolitan.

The WSAP also includes a provision for member agency investment in an "extraordinary supply" which would only be in use during a Metropolitan allocation year. When calculating a member agency's allocation year wholesale demand, extraordinary supplies are only partially included (scaled based on regional shortage level) with the member agency's total local supply. As a result, member agencies may be able to partially offset supply reductions imposed by Metropolitan under the WSAP.

A detailed example of how Metropolitan would calculate a member agency's allocation is available in Appendix G of Metropolitan's WSAP document (December 2014 Revision). The minimum percentage of base wholesale demands that Metropolitan will allocate under each Regional Shortage Level is shown below in Table 1.

Table 1: WSAP Shortage Levels

| Regional Shortage Level | Wholesale Minimum Percentage | Maximum Retail Impact Adjustment Percentage |
|-------------------------|------------------------------|---|
| 1 | 92.5% | 2.5% |
| 2 | 85.0% | 5.0% |
| 3 | 77.5% | 7.5% |
| 4 | 70.0% | 10.0% |
| 5 | 62.5% | 12.5% |
| 6 | 55.0% | 15.0% |
| 7 | 47.5% | 17.5% |
| 8 | 40.0% | 20.0% |
| 9 | 32.5% | 22.5% |
| 10 | 25.0% | 25.0% |

*Regional shortage level 3 has not been exceeded by Metropolitan since the adoption of the WSAP in February 2008

LOCAL IMPLEMENTATION OF THE WSAP

A number of Metropolitan's member agencies, including EMWD, serve both retail and wholesale customers (sub-agencies). In these cases, Metropolitan's WSAP does not set individual allocations for sub-agencies, and instead considers the supplies and demands of member agencies as a whole, inclusive of both retail and wholesale service. The member agency would then locally administer the distribution of allocated water amongst individual sub-agencies and if necessary, assess surcharges to cover costs incurred by sub-agencies exceeding their allocation.

Historically, EMWD has elected to use Metropolitan's WSAP formula to determine each sub-agency's initial share of Metropolitan's allocation. However, since Metropolitan only evaluates demands from EMWD in aggregate (without accounting for whether the demands come from EMWD retail customers or specific wholesale customers), this provides an opportunity to mitigate the impact of the WSAP for sub-agencies that are unable to sufficiently reduce demands.

In the event that a sub-agency uses water above their portion of the allocation, EMWD would not assess a surcharge on the sub-agency as long as EMWD as a whole does not exceed its overall Metropolitan allocation. However, should EMWD as a whole exceed its overall allocation, EMWD would pass through any surcharges levied by Metropolitan based on a sub-agency's usage.

For example, if sub-agency "A" were to exceed their portion of the allocation by 50 AF, but sub-agencies "B" and "C" each were under their portion by 25 AF (and EMWD's retail service area, along with all other sub-agencies use exactly their share of the allocation), EMWD would not assess a fee on sub-agency "A".

However, if sub-agency "A" is the only sub-agency to exceed their portion of the allocation (with EMWD's retail service area and all other sub-agencies using their exact share of the overall allocation), then sub-agency "A" would be charged the full allocation surcharge incurred by EMWD.

IMPACT OF WSAP

Under the WSAP's 2014 revision, in the event of an allocation year, agencies would be subject to a surcharge of \$1,480 per acre-foot for water use between 100 percent and 115 percent of their allocated imported water supply, or a surcharge of \$2,960 per acre-foot for water use over 115 percent of their annual allocation. Metropolitan does not physically limit the amount of water available to a member agency at any Regional Shortage Level of its WSAP.

EMWD expects to be able to alleviate impacts of a Metropolitan allocation through several extraordinary supply projects that are currently under development. EMWD is a participant in the Santa Ana River Conservation and Conjunctive Use Program (SARCCUP), which is a watershed scale program involving five partner agencies (EMWD, Inland Empire Utilities Agency, Orange County Water District, San Bernardino Valley Municipal Water District, and Western Municipal Water District) of which a major component involves the recharge and storage of surface water in local groundwater basins during wet years. Beyond SARCCUP, EMWD is also pursuing its Enhanced Recharge and Recovery Program (ERRP), which would give EMWD an additional resource for wet year storage.

EMWD currently projects 6,500 acre-feet of extraordinary (dry year) supply from SARCCUP and up to 23,500 acre-feet of dry year supply available upon the completion of all phases of ERRP. The availability of these supplies would mitigate cutbacks that EMWD would otherwise experience under the WSAP.

In addition to the forthcoming availability of extraordinary supplies, EMWD is also able to mitigate the impact of cutbacks under the WSAP directly as a retail agency via demand management measures such as increased conservation messaging and adjusting customer water budgets through EMWD's Water Shortage Contingency Plan. During the recent drought emergency, EMWD was able to reduce retail demands by approximately 20 percent, which was significantly greater than the required reduction under the WSAP. This potential demand management could allow wholesale agencies to take a greater proportion of Metropolitan's supply allocation if needed.

WATER SUPPLY IMPACT OF A FPUD/RMWD ANNEXATION

To quantify how the annexation of FPUD and RMWD would impact dry year supplies under a Metropolitan allocation, EMWD has prepared an analysis of how the WSAP would have been applied to EMWD under 3 planning horizons: calendar year 2015 (at the height of the statewide drought restrictions), calendar year 2019 (to reflect present day conditions), and calendar year 2035 (to reflect long term/future conditions).

SCENARIO 1: 2015 DROUGHT CONDITIONS

The first scenario considered by this analysis examines how EMWD's customers, along with FPUD and RMWD, would have fared during the severe drought conditions that resulted in the 2014 – 2016 emergency conservation order issued by Governor Brown.

The calculations for this scenario utilize the following assumptions and methodologies:

1. The base period used to calculate Metropolitan's allocation is calendar year 2013 and 2014 – this is similar to the base period used by Metropolitan during the drought conditions (Metropolitan calculated using fiscal year data).
2. FPUD and RWMD are assumed to be 100 percent reliant on imported water, and their base period demands were assumed to be equivalent to the 2013 totals reported to the State Water Resources Control Board under the emergency conservation regulation.
3. The growth adjustment for each agency was based on population estimates generated by the California Department of Finance. Since the base period was 2013-2014, the growth rate was calculated as the growth from the 2013-2014 average population value to the 2015 population value.
4. Allocation year local supplies were assumed to be equal to actual local supply usage in calendar year 2015 in most cases.
5. No adjustments documented in the WSAP for conservation demand hardening or low per-capita use were assumed to be available.
6. No extraordinary supplies were considered.
7. The calculated supplies available (before reaching Metropolitan's allocation surcharge) was compared against each agency's actual usage in calendar year 2015.

The initial evaluation of these conditions took place assuming that Regional Shortage Level 1 of the WSAP is in effect. In this case, due to effective demand management measures taken by water suppliers during the drought, demand was reduced to such a significant degree below the WSAP baseline such that there would have been no need for any supplier within EMWD's service area to purchase water subject to Metropolitan's allocation surcharge. This remains the case even if FPUD and RMWD had been part of EMWD's service area at the time. The results are shown below in Table 2.

Table 2: Supplies Available Under WSAP Allocation, Shortage Level 1 (Values in Acre-Feet)

| Service Area | Total Potable Demand | Local Potable Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|----------------------|----------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 75,912 | 21,858 | 66,359 | 88,216 | 116.2% |
| City of Hemet | 3,768 | 3,768 | 1,065 | 4,833 | 128.3% |
| City of Perris | 2,201 | 659 | 1,872 | 2,531 | 115.0% |
| City of San Jacinto | 2,271 | 2,271 | 602 | 2,873 | 126.5% |
| Lake Hemet MWD | 13,999 | 9,689 | 6,589 | 16,278 | 116.3% |
| Murrieta County WD | 727 | 0 | 1,331 | 1,331 | 183.0% |
| Nuevo Water Company | 1,069 | 822 | 416 | 1,238 | 115.8% |
| Rancho California WD | 33,675 | 23,088 | 28,379 | 51,467 | 152.8% |
| Service Area Total | 133,623 | 62,155 | 106,510 | 168,665 | 126.2% |
| Fallbrook PUD | 11,727 | 0 | 12,851 | 12,851 | 109.6% |
| Rainbow MWD | 20,062 | 0 | 21,125 | 21,125 | 105.3% |
| Expanded Service Area Total | 165,412 | 62,155 | 140,392 | 202,547 | 122.4% |

These conditions were then evaluated with Regional Shortage Level 3 of the WSAP in effect. This represents the actual allocation level enacted by Metropolitan during the drought conditions. In this case, FPUD and RMWD would have been subject to an allocation surcharge had they been able to independently purchase water from Metropolitan. However, since EMWD's retail customers, along with the remainder of EMWD's wholesale customers, were able to significantly reduce their demands during the drought emergency, sufficient buffer (of roughly 20,000 acre-feet) remained within EMWD's allocation that FPUD and RMWD would not have had to purchase water subject to the allocation surcharge. The results are documented below in Table 3.

Table 3: Supplies Available Under WSAP Allocation, Shortage Level 3 (Values in Acre-Feet)

| Service Area | Total Potable Demand | Local Potable Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|----------------------|----------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 75,912 | 21,858 | 58,496 | 80,354 | 105.9% |
| City of Hemet | 3,768 | 3,768 | 907 | 4,675 | 124.1% |
| City of Perris | 2,201 | 659 | 1,649 | 2,308 | 104.8% |
| City of San Jacinto | 2,271 | 2,271 | 512 | 2,783 | 122.5% |
| Lake Hemet MWD | 13,999 | 9,689 | 5,681 | 15,370 | 109.8% |
| Murrieta County WD | 727 | 0 | 1,191 | 1,191 | 163.8% |
| Nuevo Water Company | 1,069 | 822 | 357 | 1,179 | 110.3% |
| Rancho California WD | 33,675 | 23,088 | 24,703 | 47,791 | 141.9% |
| Service Area Total | 133,623 | 62,155 | 93,187 | 155,342 | 116.3% |
| Fallbrook PUD | 11,727 | 0 | 11,498 | 11,498 | 98.0% |
| Rainbow MWD | 20,062 | 0 | 18,901 | 18,901 | 94.2% |
| Expanded Service Area Total | 165,412 | 62,155 | 123,305 | 185,461 | 112.1% |

These conditions were also evaluated with the WSAP's Regional Shortage Level 5 in effect. Note that Metropolitan has never implemented this level of their WSAP since the adoption of the plan in 2008. Similar to the Regional Shortage Level 3 results, sufficient buffer remained in the overall Metropolitan allocation for EMWD's service area (roughly 10,000 acre-feet) that FPUD and RMWD would not have had to purchase water subject to the allocation surcharge. The results are documented below in Table 4.

Table 4: Supplies Available Under WSAP Allocation, Shortage Level 5 (Values in Acre-Feet)

| Service Area | Total Potable Demand | Local Potable Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|----------------------|----------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 75,912 | 21,858 | 50,633 | 72,491 | 95.5% |
| City of Hemet | 3,768 | 3,768 | 748 | 4,516 | 119.9% |
| City of Perris | 2,201 | 659 | 1,426 | 2,085 | 94.7% |
| City of San Jacinto | 2,271 | 2,271 | 422 | 2,693 | 118.6% |
| Lake Hemet MWD | 13,999 | 9,689 | 4,772 | 14,461 | 103.3% |
| Murrieta County WD | 727 | 0 | 1,051 | 1,051 | 144.5% |
| Nuevo Water Company | 1,069 | 822 | 298 | 1,120 | 104.8% |
| Rancho California WD | 33,675 | 23,088 | 21,027 | 44,115 | 131.0% |
| Service Area Total | 133,623 | 62,155 | 79,863 | 142,018 | 106.3% |
| Fallbrook PUD | 11,727 | 0 | 10,145 | 10,145 | 86.5% |
| Rainbow MWD | 20,062 | 0 | 16,678 | 16,678 | 83.1% |
| Expanded Service Area Total | 165,412 | 62,155 | 106,219 | 168,374 | 101.8% |

It should be noted that EMWD continues to make investments that will maintain and further improve this water supply reliability. Since the conclusion of the 2014-2016 conservation order, EMWD has elected to participate in Metropolitan's Cyclic Storage Program, enabling EMWD to further accumulate carry over credits in the adjudicated portion of its groundwater basin, and is implementing various water banking projects as discussed in the extraordinary supply section of this memorandum.

SCENARIO 2: CURRENT DAY CONDITIONS (2019)

The second scenario considered by this analysis examines how EMWD's customers, along with FPUD and RMWD, would have fared had Metropolitan implemented the WSAP during 2019.

The calculations for this scenario utilize the following assumptions and methodologies:

1. The base period used to calculate Metropolitan's allocation remains calendar year 2013 and 2014 – this represents the most recent period where demands were not influenced

- by drought response both at the local and state level and is consistent with Metropolitan's intent to define a base period that reflects non-drought conditions.
2. FPUD and RWMD are assumed to be 100 percent reliant on imported water, and their base period demands were assumed to be equivalent to the totals reported to the State Water Resources Control Board under the voluntary conservation reporting.
 3. The growth adjustment for each agency was based on population estimates generated by the California Department of Finance. Since the base period was 2013-2014, the growth rate was calculated as the growth from the 2013-2014 average population value to the 2019 population value.
 4. Allocation year local supplies were assumed to be equal to actual local supply usage in calendar year 2019.
 5. No adjustments documented in the WSAP for conservation demand hardening or low per-capita use were assumed to be available.
 6. No extraordinary supplies were considered.
 7. The calculated supplies available (before reaching Metropolitan's allocation surcharge) was compared against each agency's actual usage in calendar year 2019.
 8. EMWD's local and imported supplies were adjusted to represent what the values would have been had EMWD not participated in Metropolitan's Cyclic Storage Program.
 9. While 2019 was actually a wet year rather than a dry year, the hydrology still resulted in reduced service area demands – accordingly, 2019 totals were assumed to reflect a dry year with some degree of customer conservation in place.
 10. 2019 data was not fully available for all agencies when this TM was written – in these cases, either 2018 data was substituted, or partial 2019 values were extrapolated to give an estimate for the full year.

If Metropolitan had declared a Regional Shortage Level 1, and no agencies achieved any level of conservation beyond what is reflected in their 2019 totals, no agency would have been required to pay an allocation surcharge. These results are shown below in Table 5.

Table 5: Supplies Available Under WSAP Allocation, Shortage Level 1 (Values in Acre-Feet)

| Service Area | Total Potable Demand | Local Potable Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|----------------------|----------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 77,738 | 19,961 | 72,578 | 92,540 | 119.0% |
| City of Hemet | 3,685 | 3,685 | 1,288 | 4,973 | 135.0% |
| City of Perris | 2,289 | 629 | 2,024 | 2,653 | 115.9% |
| City of San Jacinto | 2,260 | 2,260 | 771 | 3,031 | 134.1% |
| Lake Hemet MWD | 12,739 | 12,441 | 4,955 | 17,396 | 136.6% |
| Murrieta County WD | 1,605 | 0 | 1,417 | 1,417 | 88.3% |
| Nuevo Water Company | 961 | 558 | 748 | 1,306 | 135.9% |
| Rancho California WD | 43,164 | 20,967 | 32,448 | 53,414 | 123.7% |
| Service Area Total | 144,439 | 60,501 | 116,089 | 176,590 | 122.3% |
| Fallbrook PUD | 9,430 | 0 | 12,952 | 12,952 | 137.4% |
| Rainbow MWD | 17,910 | 0 | 21,292 | 21,292 | 118.9% |
| Expanded Service Area Total | 171,780 | 60,501 | 150,251 | 210,752 | 122.7% |

This scenario then evaluated the potential outcome had Metropolitan declared a Regional Shortage Level 3. Under these conditions, supplies remain sufficient such that no water purchases subject to the allocation surcharge are required. These results are documented below in Table 6.

Table 6: Supplies Available Under WSAP Allocation, Shortage Level 3 (Values in Acre-Feet)

| Service Area | Total Potable Demand | Local Potable Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|----------------------|----------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 77,738 | 19,961 | 64,105 | 84,066 | 108.1% |
| City of Hemet | 3,685 | 3,685 | 1,099 | 4,784 | 129.8% |
| City of Perris | 2,289 | 629 | 1,785 | 2,414 | 105.5% |
| City of San Jacinto | 2,260 | 2,260 | 658 | 2,918 | 129.1% |
| Lake Hemet MWD | 12,739 | 12,441 | 4,237 | 16,678 | 130.9% |
| Murrieta County WD | 1,605 | 0 | 1,267 | 1,267 | 79.0% |
| Nuevo Water Company | 961 | 558 | 652 | 1,210 | 125.9% |
| Rancho California WD | 43,164 | 20,967 | 28,346 | 49,313 | 114.2% |
| Service Area Total | 144,439 | 60,501 | 101,733 | 162,234 | 112.3% |
| Fallbrook PUD | 9,430 | 0 | 11,589 | 11,589 | 122.9% |
| Rainbow MWD | 17,910 | 0 | 19,050 | 19,050 | 106.4% |
| Expanded Service Area Total | 171,780 | 60,501 | 132,127 | 192,628 | 112.1% |

Finally, under the conditions of Scenario 2, water supplies were assessed under the assumption that Metropolitan had declared an unprecedented allocation at Regional Shortage Level 5. Even under these conditions, conservation efforts limited demand in the region such that no retail agency would have been subject to an allocation surcharge. These results are documented below in Table 7.

Table 7: Supplies Available Under WSAP Allocation, Shortage Level 5 (Values in Acre-Feet)

| Service Area | Total Potable Demand | Local Potable Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|----------------------|----------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 77,738 | 19,961 | 55,631 | 75,592 | 97.2% |
| City of Hemet | 3,685 | 3,685 | 911 | 4,596 | 124.7% |
| City of Perris | 2,289 | 629 | 1,546 | 2,176 | 95.1% |
| City of San Jacinto | 2,260 | 2,260 | 545 | 2,805 | 124.1% |
| Lake Hemet MWD | 12,739 | 12,441 | 3,520 | 15,961 | 125.3% |
| Murrieta County WD | 1,605 | 0 | 1,118 | 1,118 | 69.7% |
| Nuevo Water Company | 961 | 558 | 556 | 1,114 | 115.9% |
| Rancho California WD | 43,164 | 20,967 | 24,244 | 45,211 | 104.7% |
| Service Area Total | 144,439 | 60,501 | 87,377 | 147,878 | 102.4% |
| Fallbrook PUD | 9,430 | 0 | 10,225 | 10,225 | 108.4% |
| Rainbow MWD | 17,910 | 0 | 16,809 | 16,809 | 93.9% |
| Expanded Service Area Total | 171,780 | 60,501 | 114,003 | 174,504 | 101.6% |

An additional analysis was conducted using a more conservative base period of 2017-2018 (where demands were influenced by drought response actions) and compared against 2019 actuals. This analysis generated similar results to the conditions evaluated in Scenario 2.

SCENARIO 3: FUTURE CONDITIONS (2035)

The final scenario considered by this analysis examines how EMWD’s customers, along with FPUD and RMWD, would fare in the future. This scenario utilizes UWMP data from the 2035 planning horizon.

The calculations for this scenario utilize the following assumptions and methodologies:

1. The base period used to calculate Metropolitan’s allocation is calendar year 2035 under average hydrology of the UWMP.
2. FPUD and RWMD are assumed to be 100% reliant on imported water – this is a conservative assumption as FPUD’s 2015 UWMP projects 3,200 acre-feet of local groundwater supply available by 2035.
3. No growth adjustment was made in the calculations since the base period and the allocation period are both 2035.

4. Allocation year local supplies were assumed to be equal to dry year supplies documented for the 2035 planning horizon in the UWMP. EMWD supplies were updated to reflect projects anticipated to be complete by 2035.
5. No adjustments documented in the WSAP for conservation demand hardening or low per-capita use were assumed to be available.
6. EMWD assumes that SARCCUP and Phase II of its ERRP project are available as extraordinary supplies, however to be conservative, supplies that would be available from EMWD's Purified Water Replenishment project are not considered in this scenario.
7. No other extraordinary supplies are assumed to be available.

For scenario 3 conditions, if Metropolitan were to implement a Regional Shortage Level 1 allocation in 2035, EMWD would have a buffer of roughly three percent of the total service area demands available before reaching the threshold for an allocation surcharge. These results are documented below in Table 8.

Table 8: Supplies Available Under WSAP Allocation, Shortage Level 1 (Values in Acre-Feet)

| Service Area | Est. Potable Demand | Local Potable Supply | Extraord. Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|---------------------|----------------------|------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 134,000 | 32,103 | 17,700 | 95,855 | 145,658 | 108.7% |
| City of Hemet | 5,110 | 5,542 | 0 | 0 | 5,542 | 108.5% |
| City of Perris | 2,750 | 650 | 0 | 1,983 | 2,633 | 95.7% |
| City of San Jacinto | 3,614 | 3,422 | 0 | 178 | 3,600 | 99.6% |
| Lake Hemet MWD | 17,235 | 17,310 | 0 | 0 | 17,310 | 100.4% |
| Murrieta County WD | 6,500 | 0 | 0 | 6,175 | 6,175 | 95.0% |
| Nuevo Water Company | 1,420 | 820 | 0 | 561 | 1,381 | 97.3% |
| Rancho California WD | 45,865 | 30,886 | 0 | 13,979 | 44,865 | 97.8% |
| Service Area Total | 216,494 | 90,733 | 17,700 | 117,899 | 226,332 | 104.5% |
| Fallbrook PUD | 14,247 | 0 | 0 | 13,535 | 13,535 | 95.0% |
| Rainbow MWD | 20,850 | 0 | 0 | 19,808 | 19,808 | 95.0% |
| Expanded Service Area Total | 251,591 | 90,733 | 17,700 | 151,083 | 259,516 | 103.1% |

Should Metropolitan implement a Regional Shortage Level 3 in 2035, and EMWD customers are able to achieve 10 percent conservation against average year conditions, supplies remain sufficient to avoid paying the allocation surcharge, with an overall buffer (with FPUD and RMWD) of roughly six percent. These results are shown below in Table 9.

Table 9: Supplies Available Under WSAP Allocation, Shortage Level 3, with 10% Conservation (Values in Acre-Feet)

| Service Area | Adjusted Potable Demand | Local Potable Supply | Extraord. Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|-------------------------|----------------------|------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 120,600 | 32,103 | 17,700 | 83,772 | 133,575 | 110.8% |
| City of Hemet | 4,599 | 5,542 | 0 | 0 | 5,542 | 120.5% |
| City of Perris | 2,475 | 650 | 0 | 1,748 | 2,398 | 96.9% |
| City of San Jacinto | 3,253 | 3,422 | 0 | 150 | 3,572 | 109.8% |
| Lake Hemet MWD | 15,512 | 17,310 | 0 | 0 | 17,310 | 111.6% |
| Murrieta County WD | 5,850 | 0 | 0 | 5,525 | 5,525 | 94.4% |
| Nuevo Water Company | 1,278 | 820 | 0 | 484 | 1,304 | 102.0% |
| Rancho California WD | 41,279 | 30,886 | 0 | 11,976 | 42,862 | 103.8% |
| Service Area Total | 194,845 | 90,733 | 17,700 | 102,173 | 210,606 | 108.1% |
| Fallbrook PUD | 12,822 | 0 | 0 | 12,110 | 12,110 | 94.4% |
| Rainbow MWD | 18,765 | 0 | 0 | 17,723 | 17,723 | 94.4% |
| Expanded Service Area Total | 226,432 | 90,733 | 17,700 | 131,530 | 239,963 | 106.0% |

Finally, should Metropolitan implement a Regional Shortage Level 5 allocation in 2035, and customers are able to achieve 15 percent conservation against average conditions, supplies would be sufficient to avoid the allocation surcharge, with an overall buffer (including FPUD and RMWD) of roughly three percent. These results are shown below in Table 10.

Table 10: Supplies Available Under WSAP Allocation, Shortage Level 5, with 15% Conservation (Values in Acre-Feet)

| Service Area | Adjusted Potable Demand | Local Potable Supply | Extraord. Supply | Est. MWD Allocation | Est. Supply Available (w/o Surcharge) | % Demand Supplied (w/o Surcharge) |
|------------------------------------|-------------------------|----------------------|------------------|---------------------|---------------------------------------|-----------------------------------|
| EMWD Retail Service Area | 113,900 | 32,103 | 17,700 | 71,689 | 121,492 | 106.7% |
| City of Hemet | 4,344 | 5,542 | 0 | 0 | 5,542 | 127.6% |
| City of Perris | 2,338 | 650 | 0 | 1,513 | 2,163 | 92.5% |
| City of San Jacinto | 3,072 | 3,422 | 0 | 121 | 3,543 | 115.3% |
| Lake Hemet MWD | 14,650 | 17,310 | 0 | 0 | 17,310 | 118.2% |
| Murrieta County WD | 5,525 | 0 | 0 | 4,875 | 4,875 | 88.2% |
| Nuevo Water Company | 1,207 | 820 | 0 | 407 | 1,227 | 101.6% |
| Rancho California WD | 38,985 | 30,886 | 0 | 9,974 | 40,860 | 104.8% |
| Service Area Total | 184,020 | 90,733 | 17,700 | 86,448 | 194,881 | 105.9% |
| Fallbrook PUD | 12,110 | 0 | 0 | 10,685 | 10,685 | 88.2% |
| Rainbow MWD | 17,723 | 0 | 0 | 15,638 | 15,638 | 88.2% |
| Expanded Service Area Total | 213,852 | 90,733 | 17,700 | 111,978 | 220,411 | 103.1% |

AGRICULTURAL SUPPLY RELIABILITY

The WSAP is based on an agency's total demands and does not differentiate supply by use, for example water supplied for agricultural uses. Agriculture is an important part of EMWD's service area, and EMWD maintains the same level of reliability for agricultural uses as for all other demands. Based on the reliability analyzed above under the WSAP Regional Shortage Level 3, there would have been no impact to EMWD's, FPUD or RMWD's agriculture customers during the 2015 drought conditions.

SYSTEM RELIABILITY

FPUD and RMWD rely on the imported water that is transported through the San Diego Aqueduct operated by Metropolitan. Pipelines 4 and 5, which are part of this aqueduct system, cross the Elsinore Fault Zone in the Temecula Valley, with portions of the pipelines in areas with moderate to high liquefaction potential and may consequently be subject to disruption in the event of a major earthquake. However, Metropolitan maintains an emergency response plan for maintaining or quickly restoring service to its member agencies following a major earthquake or other catastrophic event.

The La Verne Shops, which include machine, fabrication, coating, and valve shops, are set up to provide emergency services for Metropolitan and their member agencies. The fabrication shop can roll pipe on a 24-hour-per-day basis and is able to fabricate two pipe sections up to 12 feet in diameter simultaneously. Metropolitan also maintains stockpiles and materials on hand, and has its own construction equipment and crews ready to mobilize as needed. Pre-selected urgent repair contractors can also provide additional construction support in case of an emergency. This emergency response plan and the ability to roll pipe at the La Verne shops expedited the emergency repairs necessary as a result of the Northridge earthquake, where Metropolitan was able to repair a line break on an eight-foot section of 84-inch pipe and restore service within 72 hours.

Maintaining these manufacturing and construction capabilities supports Metropolitan's efforts to efficiently operate and maintain its infrastructure and to expedite the repair of pipelines 4 and/or 5 should they be damaged in a major earthquake.

Metropolitan has also adopted a policy that allows for isolation of Metropolitan's system for the purpose of conveying potable water. This would allow either EMWD or Rancho California Water District (an agency covering much of the Temecula area that receives wholesale water service from EMWD and the Western Municipal Water District) to provide potable water through existing connections to the Metropolitan system to supply water to FPUD and RMWD in the event of an emergency.

OPERATIONAL IMPACT OF DETACHMENT/ANNEXATION

Operationally, the potential detachment of FPUD and RMWD from SDCWA is anticipated to cause little to no impact for all agencies. FPUD and RMWD are currently being supplied with imported water from Metropolitan's Robert A. Skinner Water Treatment Plant via the San Diego Aqueduct, and would continue to be supplied with the same water by EMWD. These connections are shown below in Figure 2.

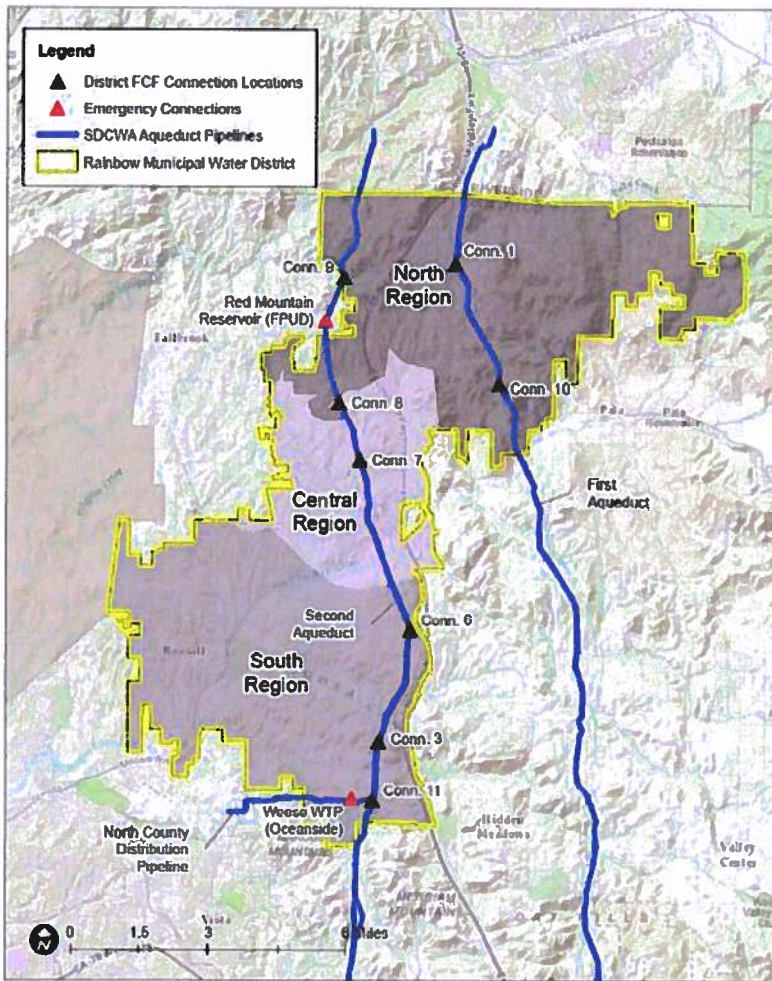


Figure 2: FPUD / RMWD Connections to San Diego Aqueduct

IMPACT OF SOUTHERN CALIFORNIA RELIANCE ON DELTA SUPPLIES

As EMWD and SDCWA are both member agencies of Metropolitan, this move would have a net zero impact on the California Delta when considered from a regional perspective. Since FPUD and RMWD's imported water needs are currently being met with water from Metropolitan's Robert A. Skinner Water Treatment Plant, the existing condition would essentially be maintained under EMWD management and no new supplies would need to be developed or imported.

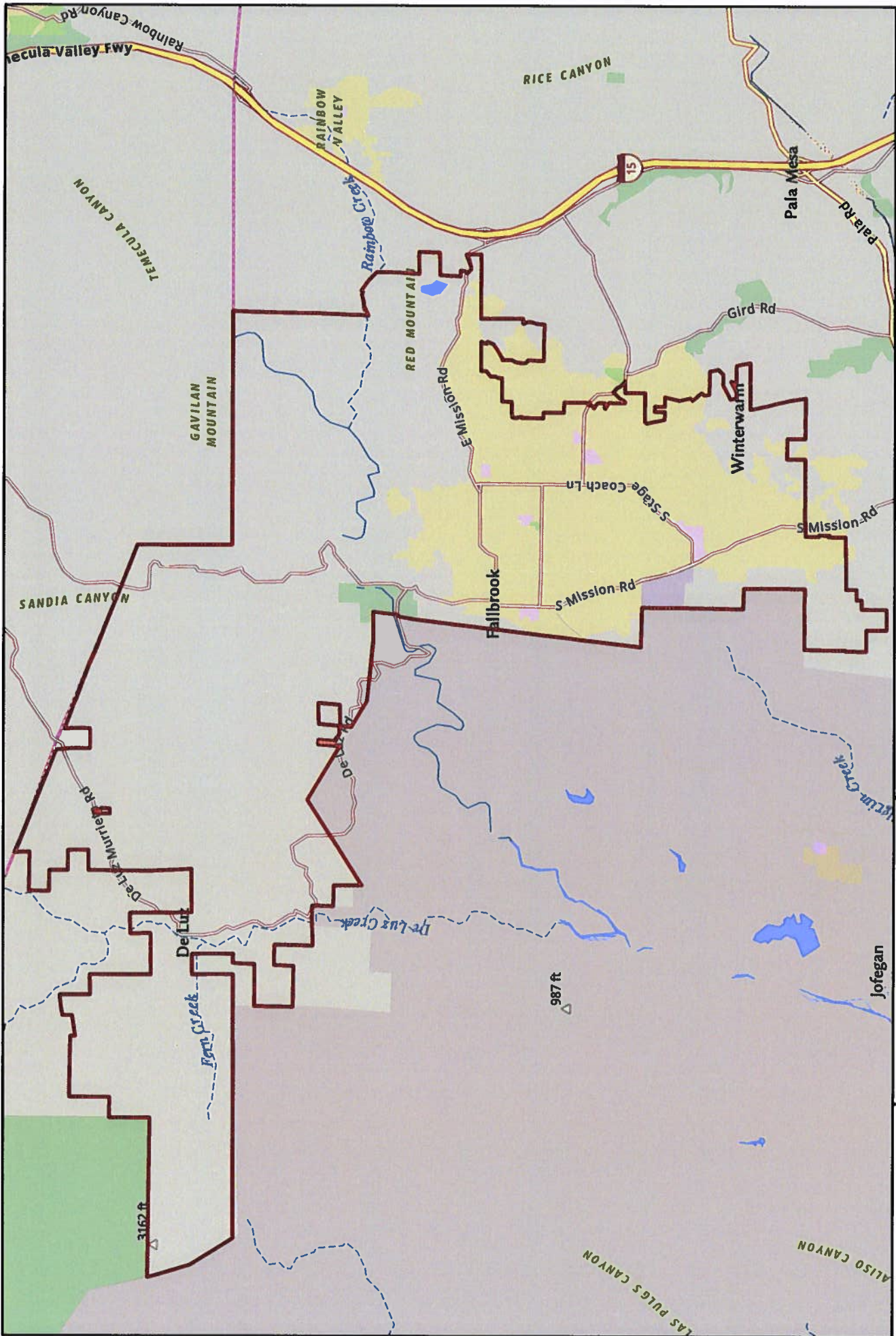
CONCLUSIONS

EMWD would remain a highly reliable water supplier even with the addition of FPUD and RMWD to its service area as wholesale customers and FPUD and RMWD would experience 100 percent water supply reliability as part of EMWD. This reliability will be maintained in the future with EMWD's commitment to its ongoing development of local and extraordinary water supplies. These projects include a third brackish groundwater desalination plant that is under construction, the development of additional potable groundwater wells, and significant investment in water banking projects such as SARCCUP and ERRP. Furthermore, EMWD's

robust conservation program and long term supply planning has allowed EMWD to mitigate the impacts of Metropolitan's WSAP even under historically severe drought conditions.

Similarly, Metropolitan's regional reliability has improved significantly over the several preceding decades with numerous storage and reliability programs including the construction of its Diamond Valley Lake reservoir, the implementation of its cyclic storage program, and ongoing funding of local resource projects and conservation programs. This increased reliability means that even during dry year conditions requiring implementation of its WSAP, Metropolitan does not physically limit member agency purchases, but instead, incentivizes demand management through allocation surcharges that apply to purchases above an agency's calculated allocation.

EXHIBIT B
MAPS OF FPUD, EASTERN AND COUNTY WATER AUTHORITY



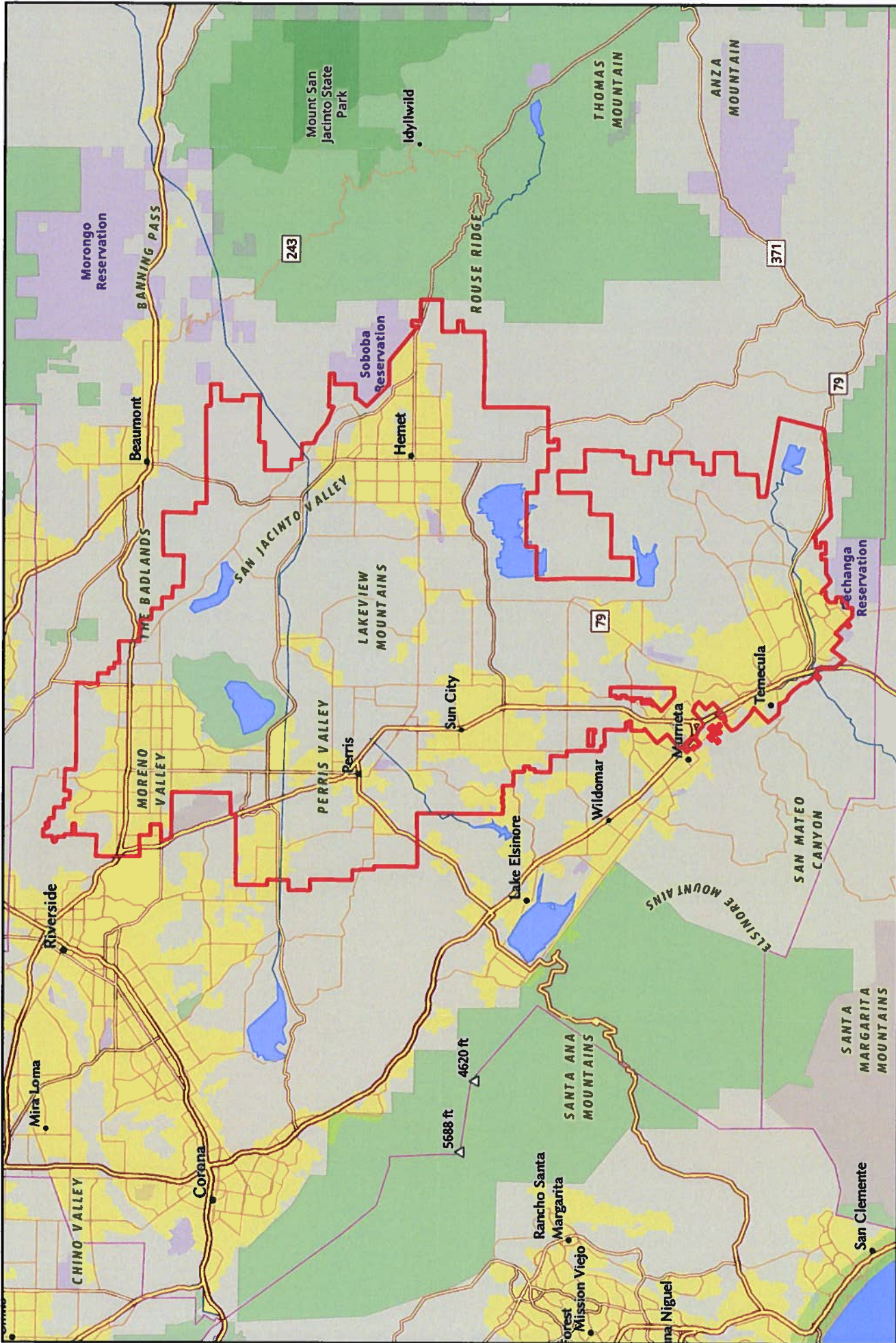
FALLBROOK PUBLIC UTILITY DISTRICT BOUNDARY

0 0.5 1 2 3 4 Miles
 0 3,750 7,500 15,000 22,500 30,000 Feet

Map Created by Todd Jester (8-13-19). X:\GISData - Inside Project Specific\Director Division Map\Director Division Map\DIST_BOUNDARY.mxd
 Projection: California State Plane NAD 83 Feet, Zone 6, Epoch 1997.35 Source: FPUD, ESRI

FPUD BOUNDARY

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EASTERN MUNICIPAL WATER AUTHORITY BOUNDARY

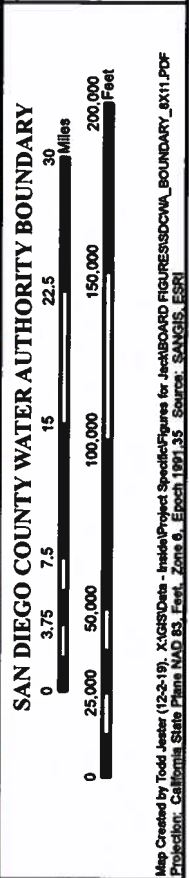
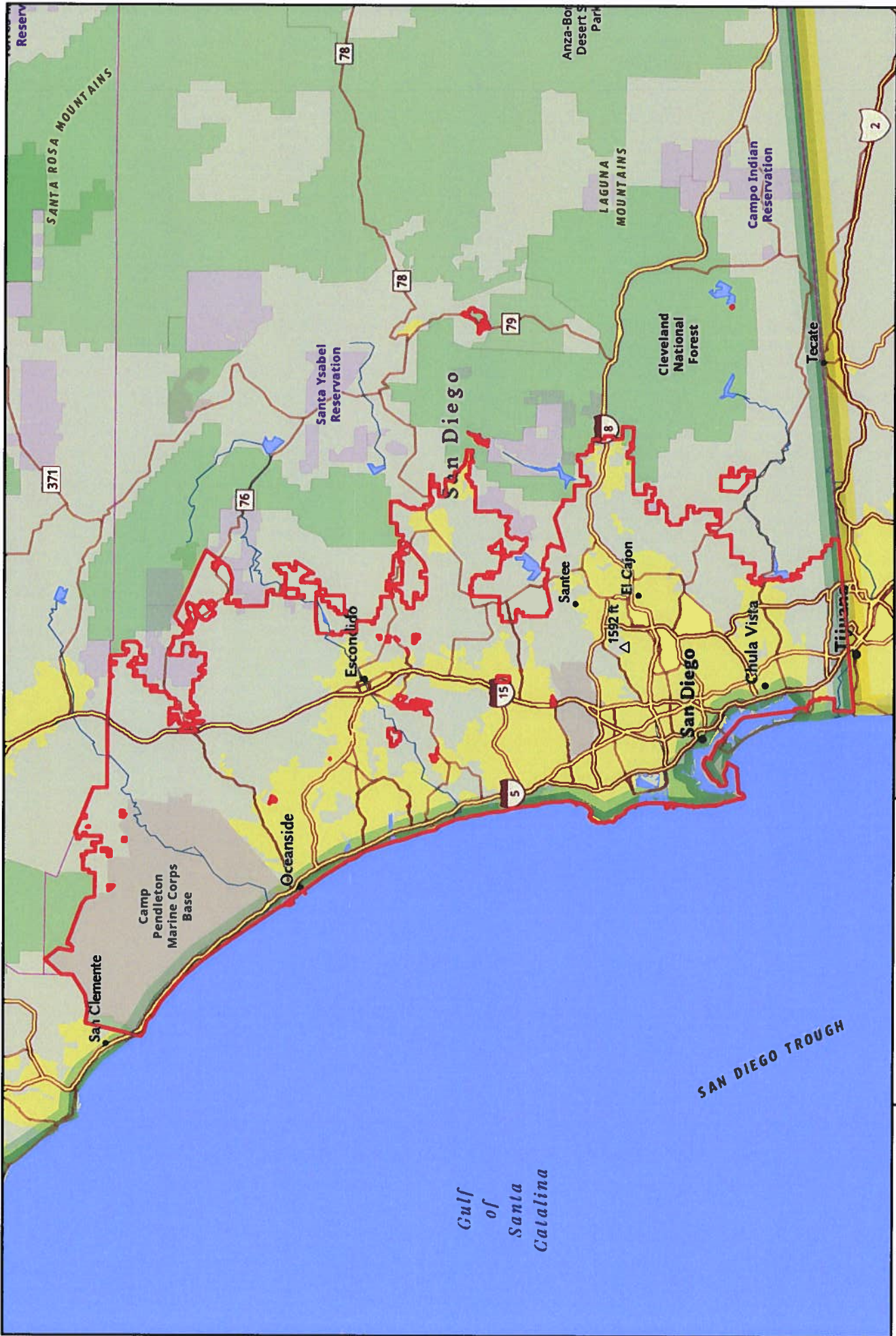


EASTERN MUNICIPAL WATER DISTRICT BOUNDARY



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Map Created by Todd Jester (12-2-10). X:\GISData - Inside\Project Specific\Figures for IacchBoard\FIGURESEASTERN_BOUNDARY_0K11.PDF
 Projection: California State Plane NAD 83 Feet, Zone 9. Epoch 1991.35 Source: Riverside County Flood Control, ESRI



SAN DIEGO COUNTY WATER AUTHORITY BOUNDARY

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 Projection: California State Plane NAD 83, Feet, Zone 6, Epoch 1991.35 Source: SANGIS, ESRI