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9/23/2021

TO: Local Agency Formation Commission

FROM: Gary Thompson, Executive Officer

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SUBJECT: MURRIETA FOCUSED MUNICIPAL SERVICE REVIEW

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After a lengthy, over an almost 3-year process, partially interrupted by the Covid-19 pandemic, the Murrieta Focused Municipal Service Review for retail water services limited to a portion of the City of Murrieta (Study Area) is now before the Commission. It should be noted that the Commission has no obligation other than to receive and file this report as any actions that would involve any change in the current service provisions to the Study Area must be initiated by a public agency desiring to apply for a reorganization, or by a petition of registered voters or landowners.

### **Background**

On December 6, 2018, the Commission awarded a contract to West Yost Associates, with FG Solutions as a sub-consultant, for performing a Focused Municipal Service Review (FMSR) for a specified area (Study Area) within the City of Murrieta (City). The purpose of the FMSR is to ascertain retail water service delivery infrastructure requirements, costs and financing requirements, and revenue and rate projections necessary for the City to plan for future redevelopment and new development consistent with the City's General Plan and Downtown Specific Plan. The Study Area boundary in general is located south of Clinton Keith Rd., west of Interstate 15, north of Elm St., and east of Rancho California Rd. The Study Area contains approximately 6.5 square miles in size and approximately 4,018 acres.

As several water agencies provide service and infrastructure either into, or are adjacent to the Study Area, the City had requested this FMSR in order to assist in determining the most efficient and cost-effective provision of retail water service,

and required infrastructure, for residential and commercial current and future customers within the Study Area.

The City, Eastern Municipal Water District (EMWD), Western Municipal Water District (WMWD) and Rancho California Water District (RCWD) agreed to jointly fund the full cost of the FMSR equally. A Funding Participation Agreement was entered into between the four agencies and LAFCO for purposes of LAFCO retaining the consultant and managing the FMSR process.

Subsequent to the initial commencement of the project, several issues arose requiring additional effort on the part of the consultant team, and with the advent of the Covid 19 pandemic that arose in 2020, necessitating two contract extensions. Eventually, the two project management personnel assigned to the project left West Yost Associates to form their own consulting firm. West Yost Associates was unable to provide the appropriate personnel to complete the project, therefore their contract expired on December 31, 2020. A new round of separate contracts with the consultants and sub-consultant involved in the original contract (Dopudja & Wells and FG Solutions) was subsequently entered into for completing the project.

### **Process**

After the consultants spent a few months gathering initial data, the project was officially kicked off with an initial public presentation on April 25, 2019, with well over 200 members of the public in attendance. Due to the unanticipated large numbers of the public that came to the meeting, this necessitated splitting the session into two presentations that evening due to lack of room space to accommodate everyone. It was also decided to conduct an additional public presentation at a subsequent date in a larger facility so any member of the public that missed the first sessions could attend and hear the same presentation. That presentation was held on July 17, 2019 and was attended by approximately 75 members of the public.

During the course of the next 12-14 months, the consultants, each agency, and LAFCO engaged in several meetings jointly and individually in addressing specific issues concerning the data, analysis thereof and the internal draft report. Significant discussion revolved around potential different scenarios that varied from the agreed upon initial assumptions used to develop the analysis, creating significant delays in completing the FMSR report for publication.



The FMSR was completed and published for comment on December 10, 2020. Well over 200 public and agency comments were received from December 10, 2020 through July 12, 2021. An initial Response to Comments Document and an Errata Document noting any corrections/clarifications to the FMSR was published during July of 2021.

A public presentation was held on August 26, 2021 at the City's City Hall for information to the public, and for receipt of further public and agency comment on the Final FMSR report, the Errata Document and Responses to Comments prior to bringing it forward to the Commission for presentation. Because of the significant public interest in this project, staff deemed it appropriate for a formal presentation of the FMSR and analysis in the City to receive further public and agency comment for the record. Subsequent to the August 26, 2021 presentation, further comments have been addressed in the Supplemental Response to Comments Document. No further clarifications and/or corrections have been required for the Errata Document.

### **Discussion**

Attached to this staff report, in addition to the FMSR report, are a number of documents that reflect all comments received from members of the public and public agencies, responses to those comments, and an Errata Document noting corrections and/or applicable revisions to the FMSR report. It should be noted that due to the change in consultant contracts, staff could not legally revise the actual FMSR report document since it was published under the original contractor, therefore the Errata Document was utilized to identify any changes applicable.

The consultants, LAFCO and all the involved agencies agreed on the process to be utilized to complete the FMSR, the road map developed for data collection and review, discussions regarding the administrative draft FMSR, findings and conclusions, and subsequent Final FMSR report publication.

A great deal of effort and time was expended by the agencies and consultants in collecting and synthesizing specific data related to each agency, and application of that data into the infrastructure and financial modeling. Several meetings with the consultants and individual agencies occurred during the collection of the data. All data collected and utilized reflects data current during the 2019/2020 timeframe.

A key element of the data collection requested from each water agency was to provide policy direction (staff level) or policy decision (Board of Directors level) for certain aspects of the analysis in order to apply those policies to the FMSR overall analysis. The preference was that the policies would be Board of Directors decisions, however, due to practicality reasons, none of the three agencies provided that level of policy input. Thus, agency staff level policy directions were provided and utilized.

One of the basic assumptions that was to be considered in the financial analysis was performing an "apples to apples" comparison related to certain assumptions regarding inflation factors for costs and rate structures, standard comparisons for meter sizes and average daily consumption for residential and commercial customers, and assumptions concerning policy directives provided by the three water agencies. These assumptions are outlined in the FMSR.

Each water agency has reported in their comments that there are deviations that may be relevant to those assumptions when final policy decisions are made at the Board of Directors level if a reorganization is ultimately pursued. Although that may ultimately be the case, lacking any specific Board of Directors final policy decision, those variables cannot be considered for this FMSR in order to best maintain the "apples to apples" comparison assumptions. Additionally, any policy decision by any Board of Directors can be changed at any time by a current or future Board of Directors.

Another key assumption which was confirmed by policy directions provided by each water agency was that private wells would not be required to connect into any of the agency systems. However, each agency provided parameters for voluntary connection if a well owner desired to connect.

Required upgrades of existing and required new infrastructure to support the projected build out parameters of the Study Area were developed for each agency. Costs were also established for those upgrades. However, no analysis of timing for infrastructure upgrades other than a straight line 10-year projection was assumed as timing of development and infrastructure improvements is a function of various factors affecting development that renders projecting a specific timeline infeasible.

One of the more difficult aspects of the financial modeling was to utilize an assumption, as best as practicable, that "growth

pays for growth". However, given the manner in which the agencies structured their methodology for serving the Study Area, and the applicable rate structures, achieving a strict "growth pays for growth" parameter was not always feasible. The financial modeling achieves the assumption as best as possible given the data and policy submittals by the agencies, however, it would be up to the individual agencies to clearly define their intentions on how they might achieve this parameter if any one agency were to move forward with a reorganization proposal.

The FMSR, as noted previous was published in December of 2020 which began a very lengthy public review process of approximately 7 months, considerably longer than normal review timeframes (example- Environmental Impact Reports are generally 30 to 60 days maximum). Well over 200 comments were received by public agencies and members of the public. The initial Response to Comments Document and Errata Document were published on July 12, 2021 and July 19, 2021 respectively for the first round of public and agency review. A Supplemental Response to Comments Document was generated as a result of comments received after July 12, 2021 through September 10, 2021 inclusive of comments received during the public presentation on August 26, 2021.

The FMSR provides certain conclusions regarding potential costs to residential and commercial customers based on the analysis modeling and the agreed upon assumptions utilized. As noted in the FMSR, EMWD provides for a lower average residential customer cost over the 10-year projection, while RCWD provides for a lower commercial customer cost over the same 10-year timeline. WMWD, the current service provider to the Study Area, provides a slightly higher residential and commercial customer cost than EMWD. Residential customer costs are the highest under the RCWD 10-year projection.

Each water agency has submitted comments regarding certain aspects of their specific analysis results, and scenarios that they believe should be included. These submittals are included in the July 12, 2021 Response to Comments Document. EMWD and WMWD submitted minor adjustments that would not necessarily change the outcome of the overall modeling. RCWD submitted a completely revised model that they believe is more relevant to how they would provide the service. However, several agreed upon assumptions in the RCWD model have been modified. The revised RCWD model if implemented would reflect the lowest cost for residential and commercial customers over the 10-year forecast.

In any event, any final scenario that any of the water agencies would propose as part of a reorganization application to provide the retail water service would have to be further assessed at that time. All agency comments and revised scenarios are included in the public record of documents attached to this staff report.

### **CEQA Compliance**

This FMSR is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15306. CEQA Guidelines Section 15306 consists of "basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded." Section 15306 is directly applicable to municipal service reviews as the purpose of a municipal service review is data collection and analysis of municipal services, and the review itself does not result in any actual serious or major disturbance to an environmental resource.

### **Conclusions**

The FMSR report and the Final Errata Document provide conclusions based on the agreed upon assumptions and data provided by the agencies. The FMSR provides a "snapshot" generic analysis for the Study Area of current and future infrastructure requirements and costs thereof, costs of service provision including costs for water acquisition as applicable, and a sample average of costs to residential and commercial rate payers. As noted in comments received by the agencies, there may very well be different scenarios that could be implemented by any of the three water agencies that differ from the conclusions in the FMSR.

The Commission cannot, by statute, initiate any reorganization (boundary adjustment) to modify the existing or future service provision within the Study Area. Any potential reorganization must be initiated by a public agency, or by a landowner or registered voter petition, and submitted to LAFCO as a separate action for consideration. Additionally, given the potential for alternative scenarios that could be proposed and implemented by any of the agencies, LAFCO staff has no recommendation for any specific service provider.

## **FMSR Statement of Determinations**

In accordance with Government Code section 56430, whenever a municipal service review is conducted, certain determinations are to be made based on the review. As this FMSR was narrowly focused to a specific area within the City of Murrieta, and limited to future provision of water services to the area as it develops, the determinations are narrowly focused toward the scope of the FMSR.

### 1) Growth and Population Projections

- The Focused Municipal Service Review (FMSR) projected overall growth based on the City of Murrieta's General Plan and the Downtown Specific Plan for the Study Area.
- A ten-year projection of infrastructure and financial requirements analysis was performed, however, there is no assumption regarding the timing or prioritization of any future development and infrastructure upgrades.

### 2) Location and Characteristics of Disadvantaged Unincorporated Communities Within or Contiguous to the Study Area within the City or its Sphere of Influence.

- There are no Disadvantaged Unincorporated Communities within or contiguous to the Study Area.

### 3) Present and Planned Capacity of Public Facilities and Adequacy of Public Services, Including Infrastructure Needs and Deficiencies Related to Disadvantaged Unincorporated Communities

- The FMSR has identified current facility and infrastructure upgrades, and future infrastructure requirements necessary to support current services and absorb the projected future growth.
- Each of the three water agencies analyzed in the FMSR (Eastern Municipal Water District, Western Municipal Water District and Rancho California Water District) have the capacity and capability to support providing the infrastructure upgrades and water services to the Study Area.
- There are no deficiencies related to Disadvantaged Unincorporated Communities (DUCs) as there are no contiguous DUCs.

4) Financial Ability of the Districts to Provide Services

- Each of the three water agencies analyzed in the FMSR (Eastern Municipal Water District, Western Municipal Water District and Rancho California Water District) have the financial capability and financial capacity to provide the infrastructure and services as analyzed in the FMSR.
- Each of the three water agencies analyzed in the FMSR (Eastern Municipal Water District, Western Municipal Water District and Rancho California Water District) have similar, as well as different, avenues for obtaining financing for infrastructure and water service provision.

5) Status of, Opportunities for Shared Facilities

- Shared opportunities are already in place through various agreements for some current water related infrastructure and service provision.
- Additional shared infrastructure and service delivery opportunities between the water agencies could be achieved in the Study Area.

6) Accountability for Community Service Needs, Including Governmental Structure, and Operational Efficiencies.

- Accountability to the community through the current service provider's Board of Directors oversight is maintained at an adequate level.
- Current and future service provision at adequate levels in an efficient manner can be achieved by any of the three water agencies (Eastern Municipal Water District, Western Municipal Water District and Rancho California Water district) analyzed in the FMSR.
- Alternative governmental structures have been analyzed in the FMSR and conclusions provided.

7) Any Other Matter Related to Effective or Efficient Service Delivery, as Required by Commission Policy.

- No additional matters have been identified.



Staff's recommendation to the Commission is to

1. Conduct the public hearing.
2. Find the FMSR is Exempt from CEQA pursuant to CEQA Guidelines Section 15306.
3. Adopt the Statement of Determinations for the FMSR.
4. Receive and file the Focused Municipal Service Review and all related documents - **LAFCO 2019-11-3 Focused Municipal Service Review for the Murrieta Service Area.**

Respectfully Submitted,



Gary Thompson  
Executive Officer

Attachments:

- 1) Murrieta FMSR Report dtd December 10, 2020
- 2) Final FMSR Report Errata Document dtd September 10, 2021
- 3) Response to Comments Document dtd July 12, 2021
- 4) Supplemental Response to Comments Document dtd September 10, 2021

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**Murrieta FMSR Report**  
**December 10, 2020**

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# **Focused Municipal Service Review for the Murrieta Service Area (LAFCO 2019-11-3)**

**PREPARED FOR**

Riverside Local Agency Formation Commission (LAFCO)



**PREPARED BY**



# Focused Municipal Service Review for the Murrieta Service Area (LAFCO 2019-11-3)

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Prepared for

## Riverside Local Agency Formation Commission (LAFCO)

Project No. 868-40-19-1



Project Manager: Stephen Dopudja, PE

12-10-20

Date

QA/QC Review: Jon Wells, PE

12-10-20

Date

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Appendix C: Infrastructure and Land Use

## List of Acronyms and Abbreviations

AACE	Association for the Advancement of Cost Engineering
AACE	Advancement of Cost Engineering
AD	Assessment District
ADD	Average Day Demand
AF/year	Acre Feet Per Year
AWB	Annual Water Budget
CCF	Hundred Cubic Feet
ccf/year	100 Cubic Feet Per Year
CCI	Construction Cost Index
CFD	Community Facilities District
cfs	Cubic Feet Per Second
CII	Commercial, Industrial, Institutional
CIP	Capital Improvement Program
CY	Calendar Year
EMWD	Eastern Municipal Water District
ENR	Engineering News Record
ETAF	Evapotranspiration Adjustment Factor
EVMWD	Elsinore Valley Municipal Water District
FAQ	Frequently Asked Questions
FMSR	Focused Municipal Service Review
ft <sup>3</sup>	Cubic Feet
FY	Fiscal Year
GIS	Geographic Information System
gpm	Gallons Per Minute
HGL	Hydraulic Grade Line
HP	Horsepower
IWB	Indoor Water Budget
LAFCO	Local Agency Formation Commission
MDD	Maximum Day Demand
MG	Million Gallons
MSR	Municipal Service Review
MWD	Metropolitan Water District

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O&M	Operations and Maintenance
OWB	Outdoor Water Budget
PHD	Peak Hour Demand
PRV	Pressure Reducing Valve
psi	Pounds Per Square Inch
RCWD	Rancho California Water District
TWB	Total Water Budget
VFD	Variable Frequency Drive
WMP	Water Master Plan
WMWD	Western Municipal Water District



# Focused Municipal Services Review for the Murrieta Service Area

## PREFACE

This report is prepared pursuant to legislation enacted in 2000 that provides the Riverside Local Agency Formation Commission (LAFCO) with the authority to conduct comprehensive reviews to evaluate potential modifications to utility service areas under LAFCO's jurisdiction. Under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code § 56000 et seq.), which took effect January 1, 2001, LAFCO is required to prepare Municipal Service Reviews (MSRs).

This focused MSR was prepared for Riverside LAFCO to provide a hydraulic, infrastructure and financial analysis for the retail water component of Western Municipal Water District's Murrieta Service Area.

West Yost would like to extend our appreciation to the staffs of LAFCO, the City of Murrieta, Western Municipal Water District, Rancho California Water District, and Eastern Municipal Water District for their assistance throughout our analysis. We would also like to thank the members of the community who participated in two public outreach sessions, to express their perspectives and input into this focused MSR process.

## EXECUTIVE SUMMARY

This Executive Summary (ES) is provided to give the reader a high-level overview of our analyses and findings. The body of the report and appendices provides more in-depth information and supporting detail. To aid the reader in cross referencing, this Executive Summary follows the specific sections from the detailed body report. For example, ES Section Introduction and Background provides a summary of Section 1 Introduction and Background from the detailed body of the report, and ES Section Existing Facilities and Supply Sources provides a summary of Section 2 Existing Facilities and Supply Sources from the detailed body of the report, and continues throughout this Executive Summary.

## Introduction and Background

The City of Murrieta is serviced by four different water service providers. For several years, discussions have been held within the Murrieta community and among the water districts serving the Murrieta area regarding service delivery, cost to rate payers, and infrastructure. There are several complex considerations that often overlap, but also compete for consideration. These include competing interest for existing and future customers. Some examples are the costs and efficiencies of system improvements serving existing customers or combined with expansion for future customers, proximity of existing infrastructure compared to rates and an agency's overall cost of service, availability of existing storage versus the feasibility of expanding storage facilities, etc. Nowhere do these issues appear to converge more than in the Murrieta Retail Service Area. This focused MSR specifically considered these competing issues in determining the hydraulic, infrastructure and financial implications for existing and future customers. The City of Murrieta also has a desire to facilitate the needs of future customers that will come from growth, through the potential build out of the region.

The implications of these competing interests have historically existed in the Murrieta Retail Service Area. Several steps have been taken to sort through the challenges to identify alternatives and find the most appropriate path forward. The City of Murrieta convened an ad hoc committee to review these discussions more formally. Consequently, the City of Murrieta initiated a formal request to LAFCO for this focused MSR in order to analyze these concerns, with a particular focus on the portion of the City of Murrieta designated as the Murrieta Retail Service Area. This area includes existing and future residential and commercial connections and is projected to include substantial future planned growth in addition to development projects that have already been approved. In addition to the Murrieta area, the two additional service areas of Rainbow and Rock Mountain were also included for consideration.

Therefore, three separate areas are the subject of this Focused Municipal Service Review (FMSR):

- Murrieta, specifically the portion of the City of Murrieta currently receiving water service from Western Municipal Water District (WMWD). This area is defined as the Murrieta Study Area, or Study Area, for the purposes of this report.
- Rainbow, a portion of WMWD’s service area located south of Murrieta (Rainbow Study Area)
- Rock Mountain, a portion of WMWD’s service area located south of Murrieta (Rock Mountain Study Area)

Because the Rainbow and Rock Mountain Study Areas are more geographically independent and less complicated from a hydraulic and infrastructure perspective, they are covered more independently in Section 9 of this FMSR.

In 2019, LAFCO issued its request for proposals for this Focused Municipal Service Review, and stated the following objective:

To conduct a Focused Municipal Service Review (FMSR) that will inform the LAFCO, local water purveyors, the City of Murrieta, and the public, regarding the most effective and efficient method of providing water service to the “Study Area”.

Three alternatives for future ownership of WMWD’s Murrieta Study Area were evaluated. These three Ownership Scenarios are identified below, and later sections of this report describe the technical and financial implications of the three Ownership Scenarios:

- Continued operation by WMWD “WMWD Ownership Scenario”
- Acquisition by Rancho California Water District (RCWD) “RCWD Ownership Scenario”
- Acquisition by Eastern Municipal Water District (EMWD) “EMWD Ownership Scenario”

Further detail on the background of this report can be found in Section 1.

### Existing Facilities and Supply Sources for the Murrieta Service Area

The Murrieta Retail Service Area is 6.5 square miles in size and lies within the City of Murrieta. The area is contained by Interstate 15 to the northeast and the Santa Rosa Plateau to the southwest. It is on the south end of the WMWD service area boundary, bordered by EMWD to the northeast, Elsinore Valley Municipal Water District (EVMWD) to the northwest, and RCWD to the southwest and south.

In 2006, WMWD took over ownership of the Murrieta Study Area from the Murrieta County Water District and incorporated it into WMWD. This transfer created a unique circumstance in which WMWD took ownership of a retail service area that was not adjacent to any of its other retail service areas. As such the Murrieta Study Area operates as a stand-alone retail water system, surrounded by the retail service areas of adjacent water districts.

The Murrieta Retail Area water system consists of 2,869 potable water connections served by over 52 miles of potable water pipelines, three potable water tanks, one booster station, and one pressures reducing valve (PRV) station.

Only one well, New Clay Well, is currently active and producing water for the Murrieta Service Area. WMWD is currently working to bring a replacement for the North Well, a previously inactivated well, online in the near future. New Clay Well currently produces 450 gpm for the system and the North Well is expected to produce 700 gpm, making the total well production 1,150 gpm.

An intertie to EMWD where Los Alamos Rd crosses over the I-15, referred to as the “Los Alamos Interconnection,” provides the rest of the supply to the service area under existing conditions. An emergency intertie connects the system to EVMWD on Washington Ave near Palomar street. Further detail on existing facilities and supply sources can be found in Section 2 of this report.

### Agency Infrastructure Policies

At the outset of this FMSR process, it was important to establish certain policies that had been, or would be established by each agency under their respective ownership alternatives. Each agency was requested to provide their policy responses that were used in this analysis. The following categories of policies and assumptions were implemented throughout the analysis to evaluate the infrastructure requirements for service for each of the candidate agencies:

- Water Supply Policies
- Water Demand Policies
- Infrastructure Performance Criteria

The details of these policies and criteria can be found in Section 3 of the report.

### System Demands

The system demands for the Study Area were evaluated from a historical perspective and developed looking forward into the future. These demands were critical to this study in order to identify potential system improvements to serve both existing and future customers. This has several benefits. It identifies potential system improvements for existing and future customers separately to ensure that “growth pays for growth”, which ensure neither customer types subsidize the other. However, in the case of overlapping system improvements, it also allows for a more cost-effective solution to both customer types. For example, a situation could arise where the existing system demands would justify upsizing a pipeline to 12-inches in diameter, but the ultimate demands would require a 16-inch pipeline. Under this type of scenario, the respective cost split to either the existing or future customers would be less than each group constructing their own respective improvements.

Water demand in this report refers to the sum of local groundwater production from WMWD wells plus imported regional water. WMWD estimates its water demand as the amount of metered consumption plus 3.5 percent non-revenue water which is typically water lost through pipe leaks or water use that is not metered.

The CY 2019 estimated water demand for the Murrieta Study Area provided by WMWD is as follows :

- Total metered consumption: 2,304 acre feet per year (AF/year)
- Plus 3.5 percent non-revenue water: 84 AF/year
- Total demand: 2,388 AF/year

The infrastructure analysis described in Sections 5 and 6 of this FMSR uses the following average demands at buildout, with the projected demands obtained from the 2018 Kennedy Jenks analysis:

- Average day demand, current: 1,295 gpm (equal to 2,090 AF/year)
- Average day demand, buildout: 2,338 gpm (approximately 80 percent higher than current)

System demands are detailed in Section 4 of this report.

### Infrastructure Requirements

An analysis of system infrastructure to meet current needs of the Murrieta Study Area, and at buildout was performed. While we did carefully analyze the buildout condition, the scope of this FMSR did not include any specific effort to identify how to phase or accommodate immediate development along the Jefferson Avenue Corridor. Any phasing would vary, depending on the specific developer, their funding approaches, goals of the City’s General Plan and the water agency ultimately serving the Murrieta Study Area.

West Yost was provided an existing InfoWater model for the Murrieta Service Area by WMWD that was last updated in 2014. This model was updated to the most current geographic information system (GIS) infrastructure data and the most recent demand developments as part of the Draft 2018 Water Master Plan (WMP) Update. The updated model was used as the basis of the hydraulic analysis for the infrastructure within the Murrieta Service Area. Because it was necessary to assess the hydraulic impact of supplying the Murrieta Service Area through the EMWD and RCWD distribution systems, EMWD and RCWD also supplied the most recent versions of their distribution system hydraulic models for this analysis. West Yost regularly works with and updates the EMWD potable water distribution system model. The EMWD hydraulic model used in the analysis was current as of the analysis date of September 2019. The RCWD potable water hydraulic model was provided to West Yost in July 2019. The resulting infrastructure requirements are provided in Sections 5 of the report.

As outlined in System Demands, the system demands have a direct correlation to the size and extent of necessary infrastructure. Infrastructure requirements were considered separately for current and future customers to ensure that “growth pays for growth”. We also identified where overlapping current and future upgrades would provide cost benefits for both customer types.

### Cost Estimates

West Yost developed opinions of the probable construction cost for the planning and design of the recommended infrastructure identified in the sections above. The opinion of probable construction cost was developed based on a combination of data supplied by manufacturers, published industry standard cost data and curves, construction costs for similar facilities built by other public agencies, and construction costs previously estimated by West Yost for similar facilities with similar construction cost indexes.

Additionally, the costs presented in this document are for construction only and do not include uncertainties in estimation or unexpected construction costs (e.g., variations in final quantities) or specific cost estimates for engineering, legal costs, environmental review, soils investigation, surveying, construction management, and inspections and/or contract administration. Some of these additional cost items are referred to as contingency costs or mark-ups, and are further described below.

The opinion of probable construction cost has been adjusted to reflect January 2020 dollars based on an Engineering News Record (ENR) Construction Cost Index (CCI) of 11,392 (20-Cities Average). These construction costs are to be used for conceptual cost estimates only, and should be updated regularly. Construction costs are not intended to represent the lowest prices in the industry for each type of construction; rather they are representative of average or typical construction costs. These planning-level construction costs have been prepared for guidance in evaluating various facility improvement options, and are intended for budgetary purposes only, within the context of this planning effort.

The cost estimates prepared for this document are in accordance with the guidelines of the Association for the Advancement of Cost Engineering (AACE) International for a Class 5 Estimate, suitable for long-range capital planning, with an accuracy range of -50 percent to +100 percent. Construction costs were developed based on bids from other water system design

projects and from standard cost estimating guides. The basis of the cost estimates and the resulting cost estimates can be found in Section 6 of the Report.

All of the cost estimates have been provided to each of the participants of the FMSR for their review and comments

### **Financial Assessment Methodology and Policies**

The financial assessment for this FMSR is intended to show the effect on three distinct groups in the Study Area:

- Rate payers
- Residents currently on private wells
- Development community

To do this, a financial model was prepared for each Ownership Scenario. The financial model contains a year by year projection of revenues and expenses for the Study Area. Three Ownership Scenarios were created:

- WMWD Ownership Scenario. The financial model for the WMWD Ownership Scenario was prepared as if WMWD would continue to own and operate the water system.
- RCWD Ownership Scenario. The financial model for the RCWD Ownership Scenario was prepared as if RCWD would become the owner of the water system on July 1, 2020.
- EMWD Ownership Scenario. The financial model for the EMWD Ownership Scenario was prepared as if EMWD would become the owner of the water system on July 1, 2020.

Financial models were developed for each Ownership Scenario. The models project what the various expenses are over the next 10 years to operate and maintain the water system, including building the capital improvements described in Sections 5 and 6 of this report. The financial analysis considers whether debt would be issued to pay for capital improvements, estimates future costs for water supply, and shows how growth would pay for growth.

The financial models also show where the money comes from to pay these costs. The majority of utility revenues are from water rates. Smaller amounts of revenues are from connection fees (one time charges that development pays before connecting to the water system), and standby fees. The financial assessment methodology and policies are detailed in Section 7 below.



### Financial Assessment of the Three Ownership Scenarios

As described above, three financial models were prepared: one for each Ownership Scenario. The financial models have several elements in common:

- 10-year projection period, starting July 1, 2020 and ending June 30, 2030.
- Identifying how each utility would structure the financial tracking of revenues and expenses: utilities typically create “Funds” which house certain types of revenues and expenses. As examples, most utilities have an Operating Fund, into which water rate revenues are put, and from which operation and maintenance expenses are paid. Many utilities have a separate fund for connection fees, where the fund’s revenues are connection fees and the funds expenses are development-related capital projects funded by connection fees. Each utility would do this differently.
- Projections of water rate revenues, using the applicable rate structure, current number of connections and current water use, projected development, and projected increases in water rate revenues.
- Projections of other types of revenues, including connection fees, standby charges, interest income, and (if applicable) ad valorem tax revenue. Each utility charges a standby fee to all parcels in the Study Area, regardless of whether or not they are connected to the water system.
- Projections of operation and maintenance expenses. This includes projecting the cost to purchase imported water and produce local groundwater, and the remaining costs to operate and maintain the water system.
- Identification of which capital costs are related to development, and which capital costs are related to providing service to the existing customer base.
- Identification of which capital costs would be funded on a pay-as-you-go basis, and which capital costs would be debt funded.
- Projected beginning and ending year reserve balances in each utility fund.
- Projected water rates, assuming that the water rate revenue increases are distributed equally among all connections.

The following are assumptions common to the three Ownership Scenarios.

- Inflation assumptions
- Current connection and water use data
- Projected future water demands and water source production
- Calculation of total costs to ratepayers

The results of the financial models and the above assumptions can be found in Section 8 of this report.

### Rainbow and Rock Mountain Service Area

At the outset of the FMSR for the Murrieta Study Area, several questions have come up regarding the analysis of the Rainbow and Rock and Mountain Study Areas. The questions center on how the analysis differs for the Rainbow and Rock Mountain Study Areas versus the Murrieta Study Area. It is correct that the Rainbow and Rock Mountain Study Areas were originally contemplated for analysis in the Request for Proposal. However, several key distinctions were identified that eliminated the need for such a detailed analysis of the Rainbow and Rock and Mountain Study Areas.

The most significant distinction is the physical infrastructure. Currently, the Rainbow and Rock Mountain Study Areas are WMWD customers. However, WMWD does not have physical facilities in the Rock Mountain Service Area. WMWD does have a storage reservoir, distribution pipelines and and Metropolitan Water District (MWD) turnout in the Rainbow Service Area. The water operations for both service areas are provided under contract through RCWD. Because of this existing arrangement, a detailed analysis of the Rainbow and Rock Mountain areas would be largely duplicative. It was determined that a duplicate effort was not warranted under this Municipal Service Review. As a result, that detailed analysis was ultimately eliminated from the scope of work.

### Findings and Conclusions

The comparison of three potential water purveyors, each with distinct policy drivers, revenue approaches, and physical infrastructure in proximity to the study area, leads to a complex analysis. The contents of this report cover those issues and analysis in detail. In an effort to provide LAFCO, the participating water agencies, the City of Murrieta and the potentially affected customers, with an overview, this Executive Summary is being provided for a quicker reference. All of the supporting analysis is included in the body of this report. Table ES1-1 provides a summary of the key policies and parameters that were considered within this FMSR. These critical parameters reflect policy decision inputs provided each agency, and the corresponding results. It should be noted that the policy decision inputs are a reflection of policy as of this analysis period. The inputs are subject to change in the future through action of the Board of Directors of any of the agencies.

**Table ES-1. Key Parameters and Comparison of Ownership Scenarios**

Parameter <sup>(a)</sup>	WMWD	RCWD	EMWD
<b>Key Policies</b>			
Financially Distinct or Financially Integrated	Distinct	Distinct <sup>(b)</sup>	Integrated
Ad Valorem Tax	No	Possibly <sup>(c)</sup>	No
<b>Possible Funding Sources for \$37M of Pipe Extensions</b>			
Developers	Yes	Yes	Yes
Assessment Districts <sup>(d)</sup>	Yes	Yes	Yes
Community Facility Districts <sup>(d)</sup>	Yes, but can't be financed through WMWD	Yes	Yes
Low Income Discount	Yes	No	No
<b>Projected Total Cost to Ratepayers</b>			
Example Single-Family Residence	Middle	Highest	Lowest
Example Commercial Customer	Middle, but higher than EMWD Scenario.	If water rate surcharge then highest. If ad valorem tax then lowest.	Middle, but less than WMWD Scenario.
<b>Residents with Private Wells</b>			
Mandatory Connection of Private Wells	No	No	No
Standby Charge, \$/Acre/year	\$21	\$69.92	\$14
Voluntary Connection to Public Water System for Customers Currently Using Private Wells	Option to Convert Indoor Use Only. May reduce meter size and connection fee.	Must Convert Indoor and Irrigation Use.	Option to Convert Indoor Use Only. May reduce meter size and connection fee.
<b>Connection Fee Comparison<sup>(e)</sup></b>			
Single Family Residential <sup>(f)</sup>	\$7,050	\$2,537	\$5,501
2" Meter <sup>(g)</sup>	\$37,599	\$13,445	\$44,008 - \$73,328
<p>(a) Please refer to Section 8 for more detail on these parameters.</p> <p>(b) RCWD indicated that this policy would be reevaluated after RCWD has experience operating the system.</p> <p>(c) The decision of whether to adopt an ad valorem tax under the RCWD Ownership Scenario will be made by the RCWD Board of Directors. If RCWD decides not to adopt an ad valorem tax, then RCWD would adopt a water rate surcharge that collects the same amount of money.</p> <p>(d) Section 8.5.2 contains additional detail, including a comparison of how frequently each agency has used these funding mechanisms in the recent past.</p> <p>(e) RCWD connection fees are lower because of revenue from Ad Valorem property taxes that reduce reliance on connection fees.</p> <p>(f) The Connection Fee for a ¾-inch meter is shown to provide a standard for comparison. It is acknowledged that future single-family residences may require a 1-inch meter depending on fire sprinkler requirements inside the home.</p> <p>(g) A 2-inch meter is shown for comparative purposes. Separately, in the example Total Cost to Ratepayers calculation, a customer with a 2-inch water meter and water consumption of 125 ccf/month is used for comparison. EMWD noted that this customer with water consumption of 125 ccf/month would likely require a 1.5-inch water meter. EMWD's Connection Fee for a 1.5-inch meter is \$27,505</p>			

After compiling the information and performing our analysis, we can offer the following overall conclusions regarding Infrastructure, Future Development and the Total Cost to Ratepayers.

### Infrastructure

The cost of infrastructure to serve the Study Area's supply needs is one of the important factors in determining the most cost effective approach to serve the area. The proximity of the Study Area to existing infrastructure has a significant impact on the cost of future or expanded infrastructure. The closer the Study Area is to existing infrastructure, the less infrastructure would be anticipated. We also analyzed potential impacts to customers with their own private wells:

- Due to its close proximity to the Study Area and current infrastructure, RCWD has the lowest infrastructure costs associated with providing service to future development.
- Under all Ownership Scenarios, nearly \$5 million is anticipated to replace legacy small diameter water lines in the Study Area. For purposes of this FMSR, these improvements are projected to be done over the next 10 years.
- Both EMWD and WMWD offer an option for residents who currently use private wells. If a resident chooses to connect to the public water system, EMWD and WMWD offer the option of converting indoor use only, and would allow customers to leave their irrigation demands connected to their private well.
- EMWD offers existing private well users the lowest standby charges.

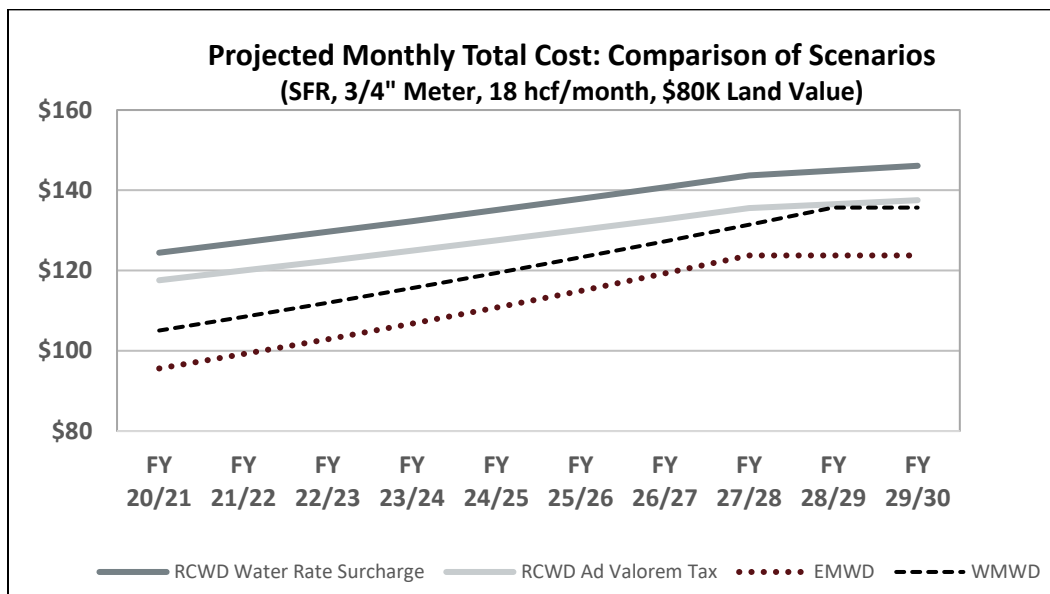
### Future Development

Several important factors are important to accommodate potential development in the Study Area. These include connection fees for agencies, future extension of facilities, policies regarding growth paying for growth, and the funding mechanisms for infrastructure required to serve future development.

- RCWD has the lowest connection fees of the three agencies. Each agency calculates its connection fee differently, and RCWD's lower fees acknowledge that Ad Valorem tax revenues are also used to pay for water system infrastructure.
- The pipe extensions required to extend water service to facilitate development would not be funded directly by the utility. All agencies would allow developers to build and fund them.
- All agencies would allow formation of one or more Assessment Districts where the assessment is based on the value of the property.
- All agencies would allow formation of one or more Community Facilities Districts (CFD), though WMWD does not allow CFDs to be financed through WMWD.
- This FMSR did not specifically assess the ability to immediately serve projected development in the Jefferson Avenue Corridor. That being said, it is likely the RCWD Ownership Scenario would allow some development in the Jefferson Avenue Corridor with less up front cost to developers than the other agencies. However, depending on the location of the development, and the timing of future development, some of this developer-funded investment might be redundant or stranded in the long-term.

### Total Cost to Ratepayers

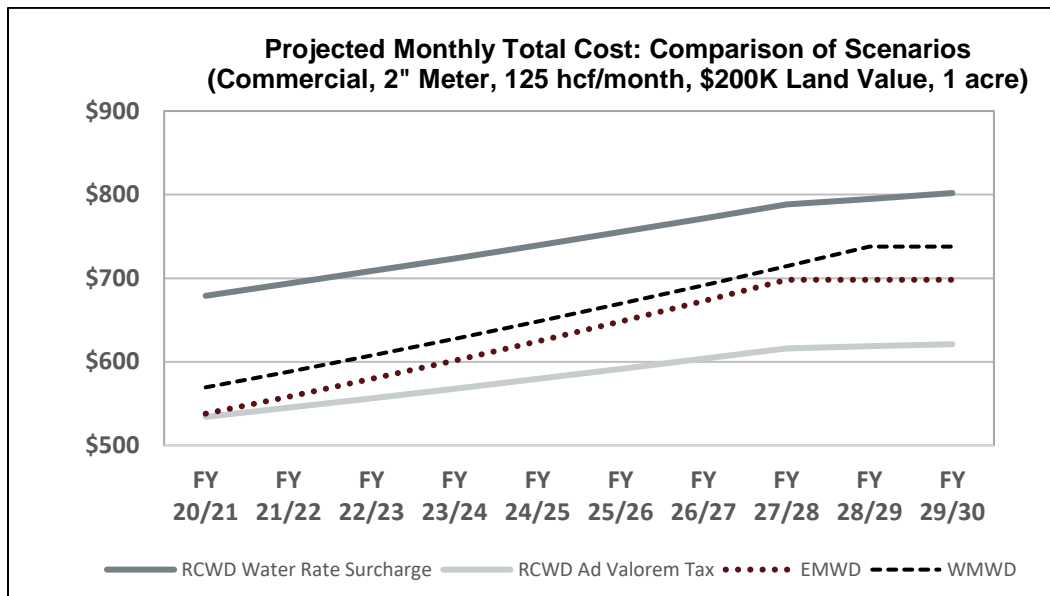
Figure ES-1 shows that the EMWD Ownership Scenario has the lowest total cost of water for the example single-family residence. After EMWD's Acquisition Balance is paid off (expected to be after FY 29/30), the total cost of water for the single-family residential example would decrease further. The RCWD Ownership Scenario has the highest total cost of water, though the total cost of water under the RCWD Ownership Scenario will also depend on whether an Ad Valorem tax is applied, or if RCWD applies the water rate surcharge.



**Figure ES-1. Projected Monthly Total Cost: Comparison of Scenarios  
(SFR, ¾-inch Meter, 18 CCF/month, \$80K Land Value)**

Figure ES-2 shows that with the implementation of the Ad Valorem Tax, the total cost of water will be lowest under the RCWD Scenario for the property value assumption shown for a commercial water bill. Without implementation of the Ad Valorem Tax, the EMWD Ownership Scenario will provide the lowest total cost of water until the Acquisition Balance is paid off (expected to be after FY 29/30). There is a wide range of projected total cost under the RCWD Ownership Scenario, depending on whether an Ad Valorem Tax or Water Rate Surcharge is applied. After the EMWD's Acquisition Balance is paid off (expected to be after FY 29/30), the total cost of water under the EMWD Ownership Scenario is expected to increase, because EMWD's commercial water rates are generally higher than WMWD's commercial water rates.

It should be noted that EMWD believes its rate structure and policies may result in further commercial conservation. EMWD provided records for commercial connections nearest the Murrieta Study Area which indicated an average of 59 CCF/month for similar 2-inch water meters. Based on the EMWD data, the overall cost of the representative commercial connection would decrease due to the lower volume. The trend would be the same as described above. Initially, EMWD is likely to offer the lowest cost to commercial connections. After the Acquisition Balance is paid off (expected to be after FY 29/30), commercial connections may pay more under the EMWD Ownership Scenario than had WMWD retained water system ownership.



**Figure ES-2. Projected Monthly Total Cost: Comparison of Scenarios  
(Commercial, 2-inch Meter, 125 CCF/month, \$200K Land Value, 1 acre)**

The total cost to connections under the RCWD scenario will depend on the specifics of each connection and whether RCWD chooses to (and is able to) adopt an Ad Valorem tax or pursue a water rate surcharge.

### Areas of Uncertainty

The purpose of this FMSR is to give the agencies and ratepayers an immediate and long-term outlook for each of the potential Ownership Scenarios. The engineering and financial analyses contained in this FMSR contain some underlying estimates and projections of future conditions. Numerically, the analyses and calculations are detailed and are shown throughout this report and in the appendices. Detailed findings and conclusions can be found in Section 10.

### 1.0 INTRODUCTION AND BACKGROUND

The City of Murrieta is serviced by four different water service providers. For several years, discussions have been held within the Murrieta community and among the water districts serving the Murrieta area regarding service delivery, cost to rate payers, and infrastructure. There are several complex considerations that often overlap, but also compete for consideration. These include competing interest for existing and future customers. Some examples are the costs and efficiencies of system improvements serving existing customers or combined with expansion for future customers, proximity of existing infrastructure compared to rates and an agency's overall cost of service, availability of existing storage versus the feasibility of expanding storage facilities, etc. Nowhere do these issues appear to converge more than in the Murrieta Retail Service Area. This focused MSR specifically considered these competing issues in determining the hydraulic, infrastructure and financial implications for existing and future customers. The City of Murrieta also has a desire to facilitate the needs of future customers that will come from growth, through the potential build out of the region.

The implications of these competing interests have historically existed in the Murrieta Retail Service Area. Several steps have been taken to sort through the challenges to identify alternatives and find the most appropriate path forward. The City of Murrieta convened an ad hoc committee to review these discussions more formally. Consequently, the City of Murrieta initiated a formal request to LAFCO for this focused MSR in order to analyze these concerns with a particular focus on the portion of the City of Murrieta designated as the Murrieta Retail Service Area. This area includes existing and future residential and commercial connections and is projected to include substantial future planned growth in addition to development projects that have already been approved. In addition to the Murrieta area, the two additional service areas of Rainbow and Rock Mountain were also included for consideration.

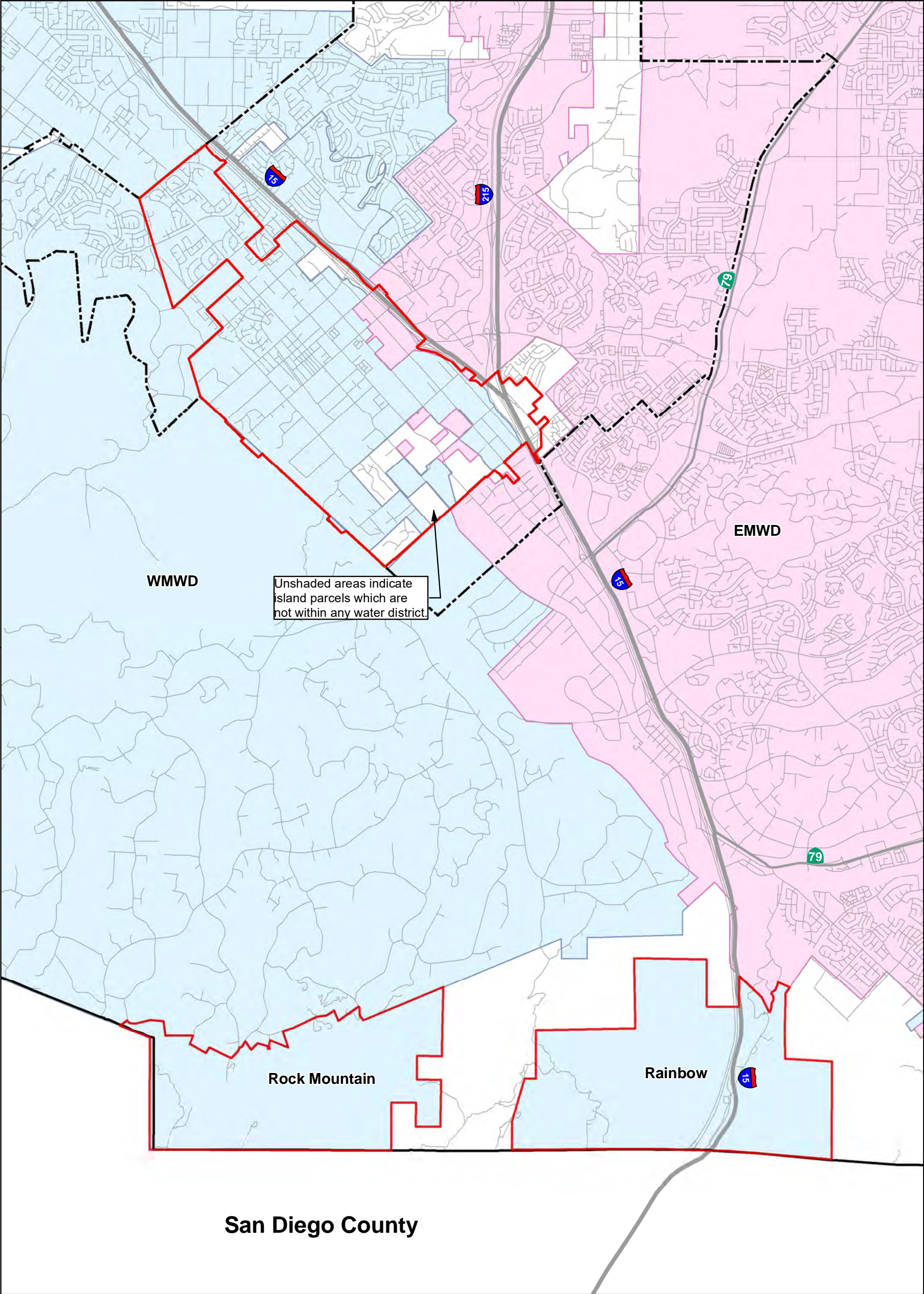
Therefore, three separate areas are the subject of this Focused Municipal Service Review (FMSR):

- Murrieta, specifically the portion of the City of Murrieta currently receiving water service from Western Municipal Water District (WMWD). This area is defined as the Murrieta Study Area, or Study Area, for the purposes of this report.
- Rainbow, a portion of WMWD's service area located south of Murrieta (Rainbow Study Area)
- Rock Mountain, a portion of WMWD's service area located south of Murrieta (Rock Mountain Study Area)

Because the Rainbow and Rock Mountain Study Areas are more geographically independent and less complicated from a hydraulic and infrastructure perspective, they are covered more independently in Section 9 of this FMSR

Figure 1-1 below, shows the Murrieta Study Area, the Rainbow Study Area, Rock Mountain Study Area. The blue shaded area is the area receiving wholesale water from WMWD, and the pink shaded area is the area receiving wholesale water from Eastern Municipal Water District (EMWD). There are several "islands" shown on Figure 1-1 that do not receive wholesale water from either





LOS ANGELES

SAN BERNARDINO

RIVERSIDE

ORANGE

SAN DIEGO

Study Areas

County Boundary

City Boundary

Interstate Highway

State Highway

Local Roads

Water Districts

Eastern Municipal Water District

Western Municipal Water District

0

2,500

5,000

Scale in Feet

fg

fgSolutions

WEST YOST

Figure 1-1

Murrieta, Rainbow & Rock Mountain Study Areas

Riverside LAFCO

Focused Water MSR

Murrieta Area



agency. These islands may be subject to LAFCO review and adjudication if an application is filed by any agency. Table 1-1 shows the current number of connections in the Study Area by connection type.

<b>Table 1-1. Current Number of Water System Connections by Connection Type</b>						
<b>Meter Size</b>	<b>Single Family Residential</b>	<b>Multi Family Residential</b>	<b>Non-Residential</b>	<b>Irrigation</b>	<b>Fire Protection</b>	<b>Total</b>
5/8"	347	2	25	3	105	482
3/4"	1,939	6	10	3	10	1,968
1"	76		51	45		172
1.5"	1		31	45		77
2"	1	41	75	44		161
3"			4	1		5
4"		2	2			4
<b>Total</b>	<b>2,364</b>	<b>51</b>	<b>198</b>	<b>141</b>	<b>115</b>	<b>2,869</b>
<i>Source: WMWD, 2/19/2020. Based on connection meter export at January 15, 2020.</i>						

## 1.1 Objectives of this Analysis

In 2019, LAFCO issued its request for proposals for this Focused Municipal Service Review. The objective is to conduct an FMSR that will inform the Local Agency Formation Commission (LAFCO), local water purveyors, the City of Murrieta, and the public, regarding the most effective and efficient method of providing water service to the Murrieta Study Area.

To meet this objective, LAFCO retained West Yost Associates to analyze the infrastructure, supply capacity and financial costs for providing water service to the Murrieta Study Area. These analyses were performed for current and future connections, and contemplated how best to provide that service in the most efficient and cost-effective manner. Completion of this Focused MSR will serve as a roadmap for provision of adequate infrastructure and water supply to support development of the area in a manner consistent with the City of Murrieta's General Plan and Downtown Specific Plan which were adopted in 2011 and 2017 respectively.

This analysis considers many of the complex and often competing interests, as well as the specific advantages each agency brings towards resolving these challenges.

## 1.2 Water Agencies

This section provides a brief introduction to the three candidate agencies, WMWD, Rancho California Water District (RCWD) and EMWD, to provide service to the Study Area, with information obtained from the respective agencies.

### 1.2.1 Western Municipal Water District

WMWD was formed in 1954. Today, WMWD supplies water on both a wholesale and a retail basis to a region stretching 527-square miles in western Riverside County with an assessed

valuation of \$83 billion and a population of more than 880,000 people. This regional area includes the cities of Corona, Norco and Riverside and the water agencies serving Box Springs, Eagle Valley, Lake Elsinore, Temescal Valley and Temecula.

While most of WMWD's business is in wholesaling of water to water agencies and municipalities, WMWD directly serves approximately 25,000 residential and business connections (and provides emergency service when necessary) in the following areas:

- **Riverside** – home to WMWD's largest grouping of direct connections. Areas served include a portion of the city of Riverside, Orangecrest, Mission Grove, El Sobrante, Eagle Valley, Woodcrest, Lake Mathews, portions of Mead Valley and Perris, and March Air Reserve Base.
- **Murrieta** – with the merger of the city's water utility agency in 2005, WMWD now serves a 6.5-square mile section of western Murrieta (the Study Area), primarily in the historic downtown area of the city.
- **Rainbow and Rock Mountain** – WMWD's most distant served communities are an unincorporated area of southern Riverside County bordering San Diego County.

### 1.2.2 Rancho California Water District

Development of the Temecula / Rancho California community began in 1964 when the Vail Ranch was acquired by the partnership of Kaiser Corporations and Macco Realty Company. In 1965, in order to provide for a continuing and reliable water supply, the developers of Temecula/Rancho California formed the original Rancho California Water District (the "Rancho District") over the easterly 41,000 acres of the community. The Santa Rosa Ranches Water District was organized on January 24, 1968 (the "Santa Rosa District") to serve the westerly 44,800 acres of the community.

In early 1977, the Rancho and Santa Rosa districts were consolidated in accordance with Local Agency Formation Commission resolutions under the name "Rancho California Water District."

RCWD currently serves the area known as Temecula/Rancho California, which includes the City of Temecula, portions of the City of Murrieta, and unincorporated areas of Riverside County. The total gross acreage within the RCWD's service area is approximately 99,000 acres (154.7 square miles). As of Fiscal Year (FY) 18/19, RCWD served approximately 44,000 connections. RCWD currently provides emergency water service calls to customers in close proximity to the Murrieta Study Area, and it appears the RCWD as the surge capacity to extend emergency service to the study area if necessary.

### 1.2.3 Eastern Municipal Water District

Eastern Municipal Water District (EMWD) is the water, wastewater service and recycled water provider to more than 825,000 people living and working within a 555-square mile service area in western Riverside County. It is California's sixth-largest retail water agency and its mission is "To deliver value to our customers and the communities we serve by providing safe, reliable, economical and environmentally sustainable water, wastewater and recycled water services."

EMWD provides service to retail customers located within the cities of Canyon Lake, Hemet, San Jacinto, Menifee, Moreno Valley, Murrieta, Perris and Temecula, as well as the unincorporated communities of French Valley, Good Hope, Homeland, Lakeview, Mead Valley, Murrieta Hot Springs, Nuevo, Romoland, Valle Vista and Winchester. As of 2019, EMWD served approximately 153,000 connections. EMWD currently provides emergency water service calls to customers in close proximity to the Murrieta Study Area, and it appears the RCWD as the surge capacity to extend emergency service to the study area if necessary.

EMWD also supplies water on a wholesale basis to the Cities of Hemet, San Jacinto and Perris; Lake Hemet Municipal Water District; Nuevo Water Company; Rancho California Water District; and Western Municipal Water District.

### 1.3 Restructuring Options

Three alternatives for future ownership of WMWD's Murrieta Study Area were evaluated. These three Ownership Alternatives are identified below, and later sections of this report describe the technical and financial implications of the three Ownership Alternatives.

- Continued operation by WMWD "WMWD Ownership Scenario"
- Acquisition by RCWD "RCWD Ownership Scenario"
- Acquisition by EMWD "EMWD Ownership Scenario"

### 1.4 Public Comments (Responses in Appendix A)

There were two public meetings held in Murrieta at the kick-off of this FMSR. These meetings were held in April 2019 and July 2019, before any of the analysis associated with this FMSR had been completed. During these meetings, public comments were received. A compilation of public comments is included in Appendix A.

Some of the major themes of the public comments included:

- Concerns about changing the water purveyor
- Opposition to imposing an Ad Valorem tax
- Opposition to paying Standby Charges
- Concern about the costs of water service
- Concerns that adequate fire flow is not available
- Concerns about the amount of development in the Study Area
- Drawdown of local aquifers
- Historical and miscellaneous concerns about Rancho California Water District
- Desire to keep private wells, not be connected to the public water system, not be metered, and not have aquifer drawdown.
- Meeting wasn't noticed and the room was too small for the meeting

### 2.0 EXISTING FACILITIES AND SUPPLY SOURCES

This chapter describes the Murrieta Retail Service Area's characteristics and its existing water distribution system.

#### 2.1 Overview of Murrieta Service Area

The Murrieta Retail Service Area is 6.5 square miles in size and lies within the City of Murrieta. In 2006, WMWD took over ownership of the Murrieta Retail Area from the Murrieta County Water District and incorporated it into WMWD. The area is contained by Interstate 15 to the northeast and the Santa Rosa Plateau to the southwest. It is on the south end of the WMWD service area boundary, bordered by EMWD to the northeast, Elsinore Valley Municipal Water District (EVMWD) to the northwest, and RCWD to the southwest and south.

#### 2.2 Western Municipal Water District

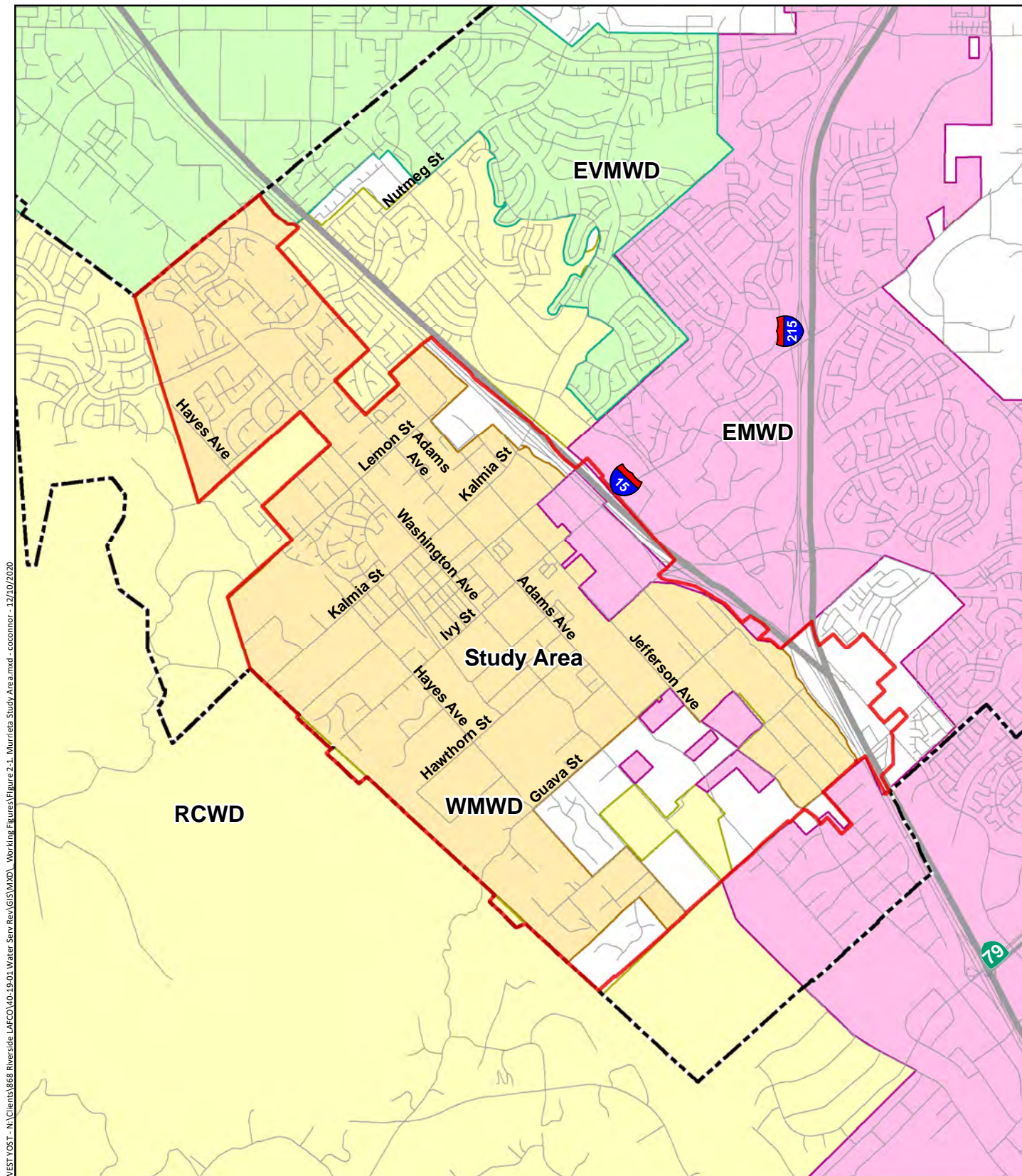
Figure 2-1 shows the Study Area and also the adjacent RCWD and EMWD Service Areas. This figure, created by the City of Murrieta and originally contained in the Request for Proposals for this project issued by LAFCO, shows the locations of the various water purveyors in the area.

Neighboring utilities are shown on Figure 2-1:

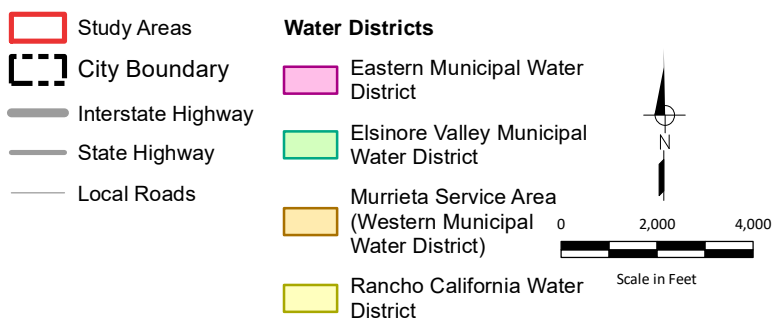
- **Study Area:** in orange
- **RCWD:** in yellow, to the southwest and the south of the Study Area
- **EMWD:** EMWD's retail water service area is shown in pink, to the east and northeast of the Study Area.
- **EVMWD:** in green, to the north and northeast of the Study Area. EVMWD was not assessed as a potential water service purveyor in this MSA.

As can be seen on Figure 2-1, there are several areas adjacent to the Study Area that are not part of any water district. These are colloquially referred to as "islands". The islands have no color on Figure 2-1.





WEST YOST - N:\Clients\868 Riverside LAFCO\40-19-01 Water Serv Rev\GIS\MXD\ Working Figures\Figure 2-1 Murrieta Study Area.mxd - coconnor - 12/10/2020



**Figure 2-1**  
**Murrieta Study Area**  
Riverside LAFCO  
Focused Water MSR  
Murrieta Area

### 2.2.1 Summary of Water System Facilities

The Murrieta Area water system consists of 2,869 potable water connections served by over 52 miles of potable water pipelines, four potable water tanks, one booster station, and one pressure reducing valve (PRV) station. The existing system facilities can be found on Figure 2-2.

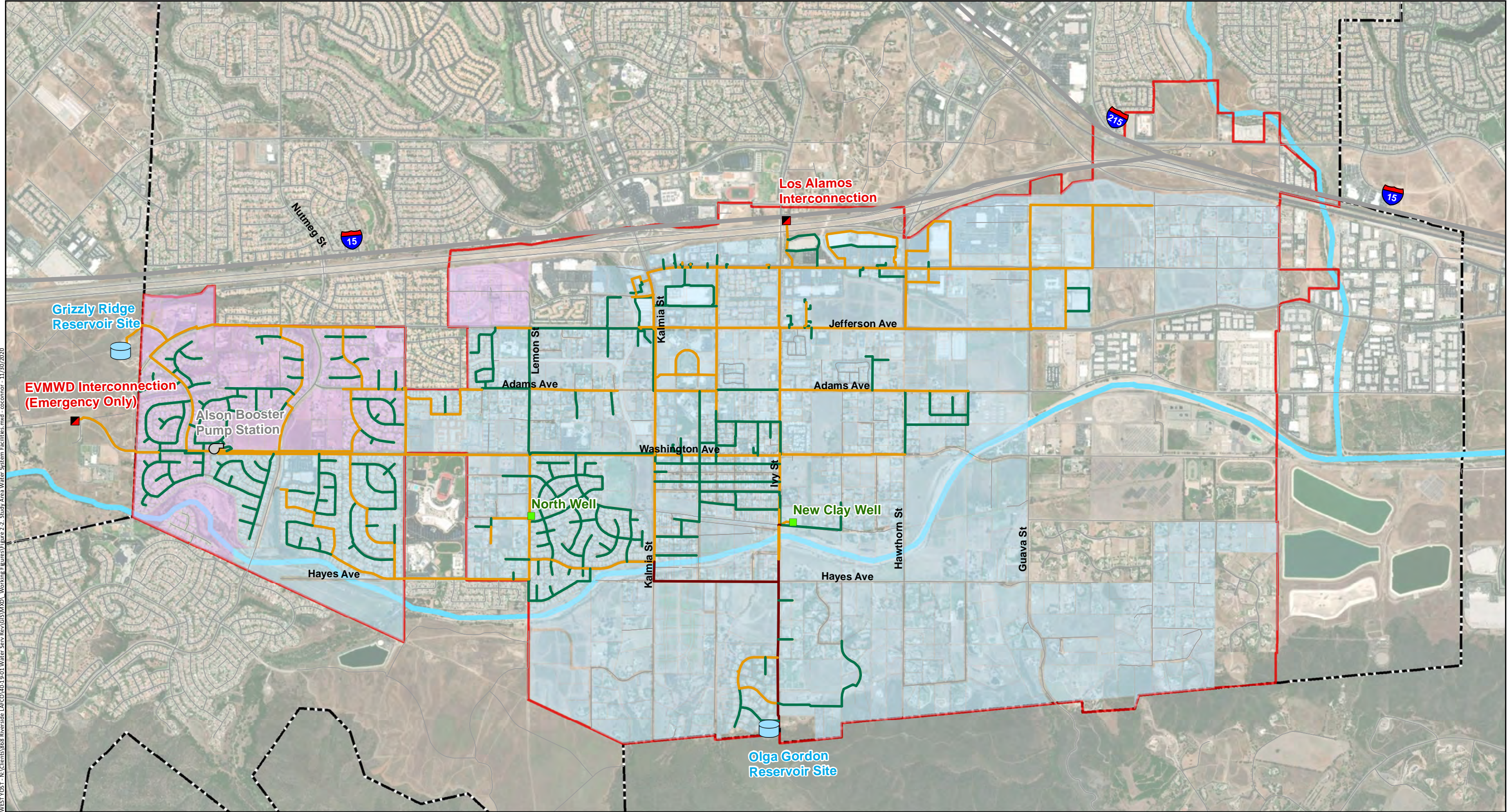
Due to elevation changes, the service area is split into two pressure zones: the 1280 Zone and the 1430 Zone. The 1280 Zone is the larger of the two zones, containing almost 42 miles of water pipelines and serving residential, commercial, and industrial connections. Two tanks, located at the Olga Gordon site on the southern edge of the system, store water for the zone. The two tanks both have a low water level of 1,250 feet, a high-water level of 1,282 feet, and a radius of 45 feet, giving them both a capacity of 1.5 million gallons (MG). The 1430 Zone serves the more elevated, northwest portion of the system. It contains almost 11 miles of water pipelines and exclusively serves residential connections. The zone currently has existing storage capable of holding 1.9 MG of potable water at the Grizzly Ridge Reservoir site.

The only source of water for Zone 1430 currently is from the lower 1280 Zone. Water must be pumped up through the existing Alson Booster Pump Station, located on Washington Ave just southeast of Alexandria Dr. The Alson Booster Pump Station currently houses three 60 HP pumps, each with a capacity to pump 800 gallons per minute (gpm). This means the stations total pumping capacity is 2,400 gpm and its firm pumping capacity is 1,600 gpm.

Only one well, New Clay Well, is currently active and producing water for the Murrieta Service Area. WMWD is currently working to bring a replacement for the North Well, a previously inactivated well, online in the near future. New Clay Well currently produces 450 gpm for the system and the North Well is expected to produce 700 gpm, making the total well production 1,150 gpm.

An intertie to EMWD where Los Alamos Rd crosses over the I-15, referred to as the “Los Alamos Interconnection,” provides the rest of the supply to the service area under existing conditions. An emergency intertie connects the system to EVMWD in the 1430 Zone on Washington Ave near Palomar street. The capacity of the Los Alamos Interconnection is limited by infrastructure in the EMWD system to 5.0 cubic feet per second (cfs), or 2,250 gpm.



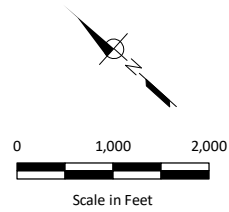


\\WEST-YOST\\N\\Clients\\668 Riverside LAFCO\\4019-01 Water Serv Rev\\GIS\\MWD Working Figures\\Figure 2-2 Study Area Water System Facilities.mxd - coconnor - 11/30/2020



- |                                                                               |                         |                                                                                                   |
|-------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------|
| <span style="border: 2px solid red; padding: 2px;"> </span> Study Area        | Booster Pump Station    | Pressure Zone                                                                                     |
| <span style="border: 2px solid black; padding: 2px;"> </span> County Boundary | Existing Reservoir Site |                                                                                                   |
| <span style="border: 2px dashed black; padding: 2px;"> </span> City Boundary  | Production Well         | <span style="background-color: lightblue; border: 1px solid black; padding: 2px;"> </span> 1280   |
| Interstate Highway                                                            | Interconnection Point   | <span style="background-color: lightpurple; border: 1px solid black; padding: 2px;"> </span> 1430 |
| State Highway                                                                 | 4 - 10 in               |                                                                                                   |
| Local Roads                                                                   | 12 - 16 in              |                                                                                                   |
| Murrieta Creek                                                                | 24 in                   |                                                                                                   |

- Notes:
1. Production Wells are labeled in green text.
  2. Booster Pump Stations are labeled in gray text.
  3. Reservoirs are labeled in blue text.
  4. Interconnections are labeled in red text.



**Figure 2-2**  
**Study Area**  
**Water System Facilities**  
 Riverside LAFCO  
 Focused Water Municipal  
 Service Review Murrieta Area



### 2.2.2 MWD Annexation

Imported water supply from the Study Area is purchased from Metropolitan Water District (MWD) through EMWD, at the Los Alamos Interconnection Point. Service areas receiving MWD water must pay an MWD Annexation Charge. The 2020 MWD Annexation Charge is \$6,151 per acre.

For most MWD customers, the Annexation Charge is paid in aggregate for the entire service area, regardless of connection status. That is, when a service area is annexed into the MWD service area, parcels with existing water service connections pay the MWD Annexation Charge, and undeveloped parcels without water service also pay the MWD Annexation Charge.

With WMWD, the situation is different. In December 1999, an agreement between MWD, EMWD, WMWD, and the Murrieta County Water District and MWD was executed. This agreement specified that the entirety of the Murrieta County Water District would be annexed into the MWD Service Area, but only the portion of the Murrieta County Water District that has paid the MWD Annexation Charge could receive water from MWD.

As a result, there are portions of the Study Area that have not yet paid the MWD Annexation Charge. In Figure 2-3, obtained from WMWD, portions of the Study Area that have not paid the MWD Annexation Charge are shown in yellow.

Section 11 of the 1999 Agreement states that the agreement shall be binding to successors, so for the purposes of this analysis, it is assumed that the 1999 Agreement would be assignable to either RCWD or EMWD. The need for some future development to pay the MWD Annexation Charges is the same under all Ownership Scenarios described in this report, and as a result, is not included in the quantitative financial analysis.

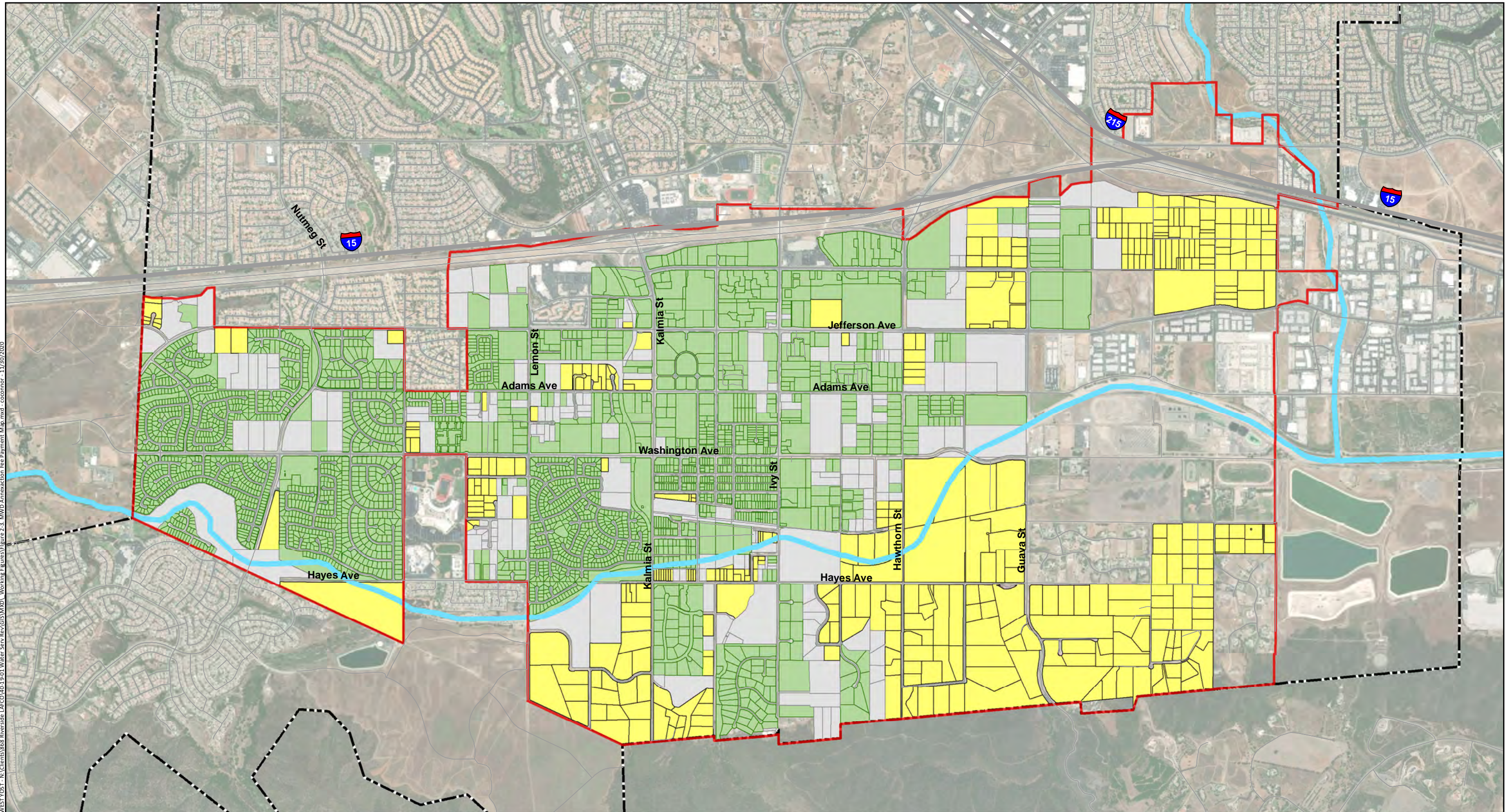
The 1999 agreement terminates in 2024. It is also assumed that regardless of the ownership scenario, the future owner will be able to extend the agreement. The current outstanding Annexation Charge balance is approximately \$12M. If the agreement is not extended, it is possible that MWD would require the outstanding balance to be paid by the owner of the water system or de-annex parcels that haven't paid the Annexation Charge, regardless of which agency owned the water system.

The current number of service connections in the Study Area, summarized by meter size, can be seen in Table 2-1. The majority of the meters currently in the Study Area are 3/4-inch meters that serve single family residential connections.

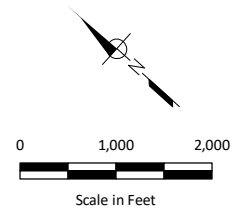
A large number of parcels in the Study Area are currently served by private wells. Therefore, land within the study area is classified as Developed-Served, if it currently has service from the distribution system, Developed-Unserved, if it currently developed but provided service by private well, or Vacant, if the land is undeveloped and available for development in the future.



\\WESTYOST\N\Clients\668 Riverside LAFCO\4019-01 Water Serv Rev\GIS\MXD Working Figures\Figure 2-3 MWD Annexation Fee Payment Map.mxd - coconnor - 11/30/2020



- |                    |          |
|--------------------|----------|
| Study Area         | No Data  |
| County Boundary    | Not Paid |
| City Boundary      | Paid     |
| Interstate Highway |          |
| State Highway      |          |
| Local Roads        |          |
| Murrieta Creek     |          |



**Figure 2-3**  
**MWD Annexation**  
**Fee Payment Map**  
  
Riverside LAFCO  
Focused Water Municipal  
Service Review Murrieta Area



**Table 2-1. Current Number of Water System Connections by Connection Type**

Meter Size	Single Family Residential	Multi Family Residential	Non-Residential	Irrigation	Fire Protection	Total
5/8"	347	2	25	3	105	482
3/4"	1,939	6	10	3	10	1,968
1"	76		51	45		172
1.5"	1		31	45		77
2"	1	41	75	44		161
3"			4	1		5
4"		2	2			4
Total	2,364	51	198	141	115	2,869

*Source: WMWD, 2/19/2020. Based on connection meter export at January 15, 2020.*

### 2.2.3 Rancho California Water District

Rancho California Water District provides service directly adjacent to the Murrieta Service Area to the south, west, and north. Large diameter transmission mains in the RCWD system traverse the Murrieta Service Area. The lowest pressure zone in the RCWD distribution system serves a hydraulic grade line (HGL) of 1,305 feet.

### 2.2.4 Eastern Municipal Water District

Eastern Municipal Water District serves parcels directly adjacent to the east of the Murrieta Service Area. EMWD's distribution system runs directly to the border of the Murrieta Service Area at the Los Alamos Interconnection, but does not traverse the service area. The EMWD pressure zone adjacent to the Murrieta Service Area serves an HGL of 1,384 feet.

### 3.0 AGENCY INFRASTRUCTURE POLICIES

The following policies and assumptions were implemented to evaluate the infrastructure requirements for service for each of the candidate agencies.

#### 3.1 Water Supply Policies

As described above, the Study Area is currently served by the New Clay Well and the Los Alamos Interconnection with EMWD. WMWD is currently developing the North Well, which is a replacement for a well of the same name that is no longer operational. This replacement well is designed to recover the capacity lost from the original North Well. Historically, WMWD was able to supply 1,452 acre feet per year (AF/year) of water supply for the study area, with original North Well and the New Clay Well operating. Therefore, it was directed that 1,452 AF/year be supplied by the replacement North Well and the New Clay well for the purposes of this analysis. Any required water supply beyond this amount is to be supplied by the candidate agency in the manner they determine to be most appropriate.

The value of 1,452 AF/year is a volume of water supply that can be sustained over a typical year. The design capacity of the New Clay Well is 450 gpm, and the design capacity of the North Well is expected to be 700 gpm. The resulting well capacity for the study area 1,150 gpm, which would result in over 1,800 AF/year of supply if both wells were run constantly for a year. Because wells cannot be run constantly for a year, the more sustainable volume of 1,452 AF/year is used for water supply purposes. However, the well capacity of 1,150 gpm is used for infrastructure analysis.

#### 3.2 Water Demand Policies

A general description of demand peaking as well as a discussion of the demand peaking policies used in this analysis are provided below. Policies concerning which parcels in the Study Area will be served in the future are provided as well.

##### 3.2.1 Demand Peaking Description

Water system demands are generally developed from average values that that can be measured reliably over time, but water system facilities are generally sized for peak demands. Therefore, it is critical to be able to calculate representative and appropriate peak demand values from average values.

The peaking conditions of most concern for water facility sizing are Maximum Day Demands (MDD) plus fire flow and peak hour demand (PHD) on the maximum day. Average Day Demand (ADD) is the average annual water use divided by the number of days in the year. MDD is the highest demand day of the year, averaged over a 24-hour period. Peak Hour Demand (PHD) is the highest demand rate occurring over a 1-hour period during the MDD. Peak water use is typically expressed as a ratio, or peaking factor. The MDD peaking factor is calculated by dividing the maximum day water use by the average daily water use and the PHD peaking factor is calculated by dividing the peak hour water use by the maximum day water use. These peaking factors are then used, along with existing or future ADD values, to project maximum day and peak hour water use for existing or future conditions.

### 3.2.2 Demand Peaking Policies

In previous master planning and hydraulic analysis for the Study Area, WMWD has used a peaking factor of 2.7 to calculate MDD from ADD. EMWD varies the MDD/ADD peaking factor according to the size pressure zone being evaluated. EMWD's peak factor would be 2.5 for a similarly sized pressure zone. RCWD uses a consistent MDD/ADD peak factor of 2.0. For the purposes of this study, a peaking factor of 2.5 was used for the MDD/ADD ratio.

All of the candidate agencies use a peaking factor of 2.0 to develop PHD from MDD. A PHD/MDD ratio of 2.0 was used in this analysis.

### 3.2.3 Build-Out Service Policies

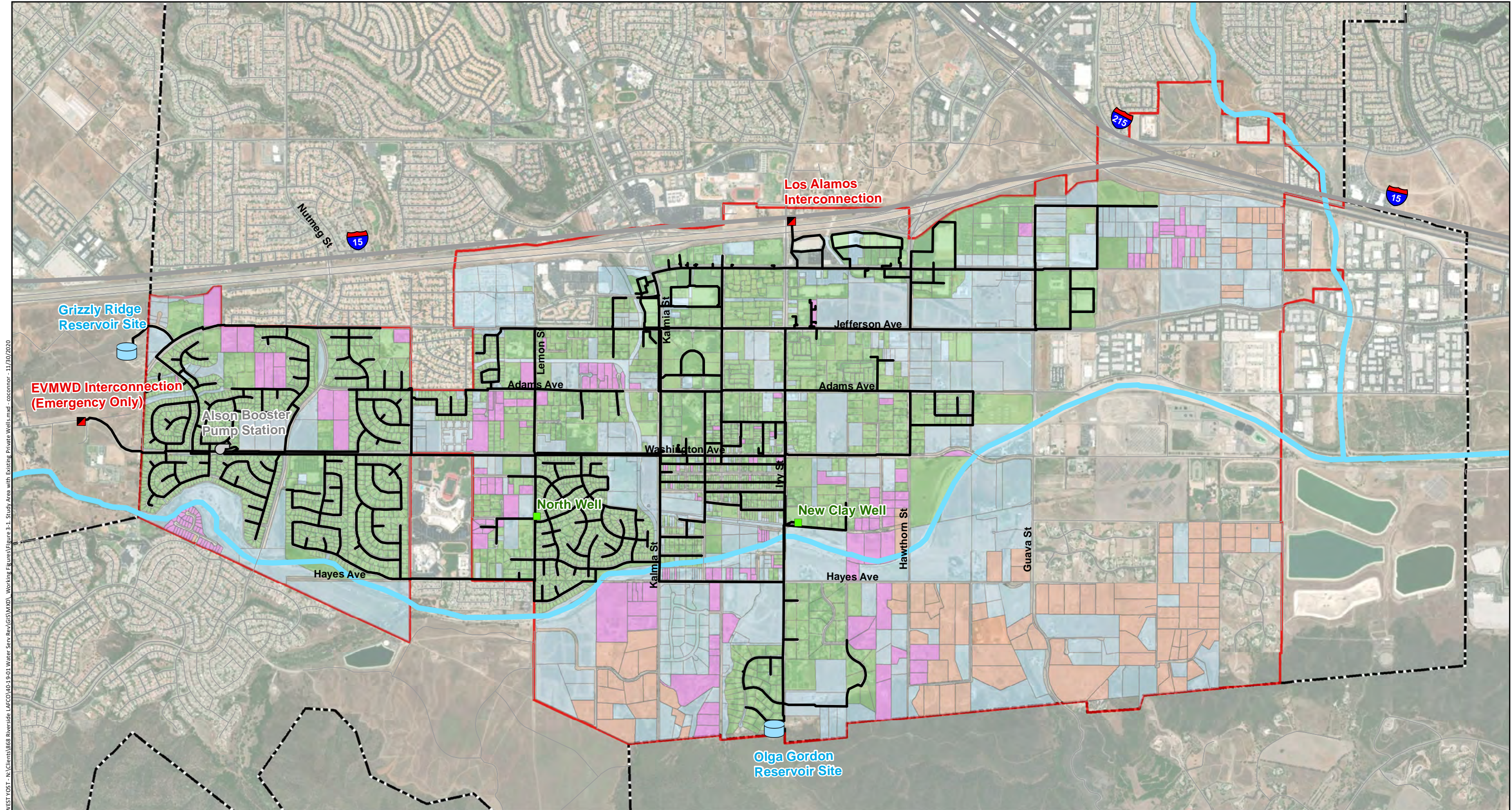
In previous master planning efforts for the Study Area, WMWD assumed full build-out conditions for future hydraulic evaluations. This assumption indicates that both Vacant parcels and Developed-Unserved parcels (parcels currently served by private wells) will be connected to and served by the distribution system at some point in the future. This assumption was conservative and designed to make sure that infrastructure and supply evaluations account for all possible future connections no matter how unlikely their potential connection, and the assumption did not reflect any potential policy decisions concerning private wells.

For this evaluation, it was directed that future demands should include parcels that are reasonably likely to connect to the distribution system, not all possible parcels in the Study Area. Vacant parcels are considered likely to connect and are assumed to connect to the distribution system. Developed-Unserved parcels within 1,000 feet of an existing or future distribution system water main are considered likely to connect because the cost to connect in such a case is considered reasonable. Therefore, Developed-Unserved parcels within 1,000 feet of an existing or future distribution system water main are assumed to connect to the distribution system in the future. Developed-Unserved parcels farther than 1,000 feet from the distribution system are considered unlikely to connect to the distribution system (they are likely to remain on private well supply) and are assumed to remain unserved in the future. None of the assumptions described above have any impact on individual parcels or on the decisions of individual property owners concerning water service. The assumptions are generalized and intended only to project water demands to correctly identify future supply requirements and correctly size future infrastructure.

Figure 3-1 provides a map of the Study Area indicating the parcel status described above. In this map:

- Purple shaded areas are parcels with existing wells (Developed-Unserved) within 1,000 feet of a distribution system pipeline. As noted above, these parcels are assumed to connect to the system for the purposes of sizing facilities.
- Pink shaded areas are parcels with existing wells (Developed-Unserved) that are not within 1,000 feet of an existing pipe and are not assumed to connect to the public water system.
- Blue shaded areas are undeveloped parcels (Vacant) which are assumed to connect to the public water system when they develop.
- Green shaded areas are parcels with existing service from the public water system, where continued service is expected.



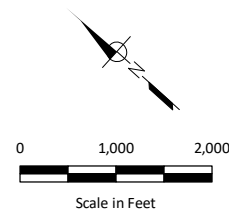


WEST YOST - N:\Clients\668 Riverside LAFCO\4019-01 Water Serv Rev\GIS\MXD Working Figures\Figure 3-1 Study Area with Existing Private Wells.mxd - coconnor - 11/30/2020



- |                                                                               |                                                          |                                                                                                                                                                                  |
|-------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <span style="border: 2px solid red; padding: 2px;"> </span> Study Area        | Booster Pump Station                                     | <span style="background-color: #FFB6C1; border: 1px solid black; padding: 2px;"> </span> Parcels with Private Wells Within 1,000 ft of Existing Pipe - Assumed Service in Future |
| <span style="border: 2px solid black; padding: 2px;"> </span> County Boundary | Existing Reservoir Site                                  | <span style="background-color: #FFDAB9; border: 1px solid black; padding: 2px;"> </span> Parcels with Private Wells - Assumed No Service in Future                               |
| <span style="border: 2px dashed black; padding: 2px;"> </span> City Boundary  | <span style="color: green;">■</span> Production Well     | <span style="background-color: #90EE90; border: 1px solid black; padding: 2px;"> </span> Parcels with Existing Service - Continued Service in Future                             |
| Interstate Highway                                                            | <span style="color: red;">■</span> Interconnection Point | <span style="background-color: #ADD8E6; border: 1px solid black; padding: 2px;"> </span> Undeveloped Parcels - Assumed Service in Future                                         |
| State Highway                                                                 | Existing Water Main                                      |                                                                                                                                                                                  |
| Local Roads                                                                   |                                                          |                                                                                                                                                                                  |
| Murrieta Creek                                                                |                                                          |                                                                                                                                                                                  |

- Notes:
1. Production Wells are labeled in green text.
  2. Booster Pump Stations are labeled in gray text.
  3. Reservoirs are labeled in blue text.
  4. Interconnections are labeled in red text.



**Figure 3-1**  
**Study Area with Existing Private Wells**  
 Riverside LAFCO  
 Focused Water Municipal Service Review Murrieta Area



### 3.3 Infrastructure Performance Criteria

In order to evaluate the water system facilities required to serve existing and future demands, the following criteria were defined and approved by the Agencies:

#### 3.3.1 Pumps

The ultimate pumping requirements used to analyze the build-out system are consistent with previous master plans. The pumping requirement states that the firm capacity of the pump station must be capable of meeting the MDD of the zone it is serving. Firm capacity of a pump station is defined as the total pumping capacity with the largest pump at the site out of service. Currently, the only pump station in the system is the WMWD Alson Booster Station that pumps water from the 1280 Zone into the 1430 Zone, which means the station must have a firm capacity to match the MDD of the 1430 Zone.

#### 3.3.2 Storage

The ultimate storage requirements used in this analysis are consistent with previous master plans. Storage for each zone must be able to meet the sum of the multiple criteria listed below.

##### 3.3.2.1 *Equalization Storage*

Pumping facilities in the system have been designed to meet build-out MDD as described below in Section 3.3.3. This means that anytime the demand in the system goes beyond MDD, the system storage must be able to provide the supply deficit. The equalization storage deemed necessary to account for these peak supply deficits was determined to be 25 percent of the MDD within each pressure zone.

##### 3.3.2.2 *Fire Flow Storage*

System storage also must account for any fire flow through the system. The fire flow storage requirements, found in Table 3-1 below, were updated by the City of Murrieta Fire Department in April of 2014.

Table 3-1. Fire Flow Criteria		
Property Classification	Flow and Time Requirement	Corresponding Volume Needed, MG
One- & two-family dwellings	1,500 gpm at 20 psi for 2 hours	0.18
Multi family dwellings	2,500 gpm at 20 psi for 2 hours	0.30
Commercial buildings/occupancies	3,000 gpm at 20 psi for 3 hours	0.54
Industrial buildings/occupancies	3,000 gpm at 20 psi for 4 hours	0.72
psi = pounds per square inch		

The 1280 Zone contains buildings in all the categories listed above, therefore the requirement that was used for the 1280 Zone was the “Industrial buildings/occupancies” requirement of 3,000 gpm at 20 psi for 4 hours which equates to 0.72 MG.

The 1430 Zone only contains residential connections, including a couple of parcels zoned for multi-family residential. Therefore the “multi family dwellings” requirement of 2,500 at 20 psi for 2 hours was used which equates to 0.30 MG.

### **3.3.2.3 Emergency Storage**

Emergency storage capacity would be needed to sustain the water needs during periods of total or partial shutdown of the water supply facilities. One-half (50 percent) of the MDD is used to calculate the emergency storage of each pressure zone.

### **3.3.2.4 Total Storage**

The total existing and build out storage required for each pressure zone is presented in Table 3-2.

<b>Table 3-2. Storage Criteria, MG</b>				
<b>Zone</b>	<b>Equalization Storage</b>	<b>Fire Flow Storage</b>	<b>Emergency Storage</b>	<b>Total Storage Required</b>
<b>Existing Conditions</b>				
1280	0.97	0.72	1.94	3.64
1430	0.29	0.24	0.57	1.16
<b>Buildout Conditions</b>				
1280	1.97	0.72	3.93	6.62
1430	0.46	0.30	0.93	1.69
<b>Total</b>	2.43	1.02	4.86	8.31

### **3.3.3 Pipelines**

The performance criteria used for pipelines is summarized below.

- Maximum velocity of 6 feet/second in transmission pipelines under replenishment conditions
- Maximum friction loss of 3.5 feet/1,000 feet of transmission line under replenishment conditions
- Maximum velocity of 7.5 feet/second in any water pipelines during PHD or MDD plus emergency fire flow conditions
- Transmission pipelines shall be no smaller than 12-in diameter
- Pressure during normal operation is to be maintained at 40 psi or above
- Residual pressure during fire flow is to be maintained at 20 psi or above

### 3.3.4 Fire Flow

Fire flow criterion for each land use was outlined in a document provided by the City of Murrieta Fire Department and summarized below in Table 3-3. The criteria for amount of flow needed at each point throughout the system is the same criteria that was used to calculate the amount of fire flow storage necessary, as described above. The system was analyzed using these criteria, which were developed in 2013. It should be noted that hydrants may have been constructed before 2013 with different criteria.

Table 3-3. Fire Flow Criteria, gpm	
Property Classification	Flow Requirements
One- & Two-Family Dwellings	1,500
Multi family dwellings	2,500
Commercial buildings / occupancies	3,000
Industrial building / occupancies	3,000

### 4.0 SYSTEM DEMANDS

Existing and future system demands for the Study Area are described below. Metered water consumption data, compiled from water meter readings is presented, as is local groundwater production and imported water purchase data.

#### 4.1 Existing

Existing demands are described below.

##### 4.1.1 Current Metered Water Consumption

Table 4-1 shows current monthly consumption by WMWD Rate Tier, representing WMWD's estimate of water demands for Calendar Year 2019. WMWD has five rate tiers linked to its budget based rate structure. Tier 1 is the water use corresponding to WMWD's Indoor Budget, and Tier 1 water use is approximately 45 percent of the Study Area total. The remaining water use is primarily outdoor water use.

Table 4-2 shows currently monthly consumption by WMWD connection class and WMWD rate tier, 100 cubic feet per year (ccf/year). Nearly 75 percent of Study Area water use is residential, approximately 10 percent is non-residential, and approximately 15 percent is irrigation. Detailed consumption data is provided as part of the financial models included in Appendix B.

**Table 4-1. Current Monthly Water Use by WMWD Rate Tier**

Tier	Monthly Water Use, ccf												Total Annual Usage
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Tier 1 - Indoor Budget	28,000	30,000	28,000	36,000	38,000	50,000	50,000	40,000	40,000	38,000	35,000	42,000	455,000
Tier 2 - Outdoor Budget	19,000	20,000	17,000	30,000	48,000	50,000	68,000	58,000	50,000	36,000	30,000	25,000	451,000
Tier 3 - Inefficient	3,000	1,500	1,300	1,700	2,800	3,500	4,200	5,000	5,300	4,500	4,200	3,800	40,800
Tier 4 - Wasteful	1,500	1,200	1,000	800	1,200	1,400	1,700	2,100	2,300	2,200	2,100	2,000	19,500
Tier 5 - Unsustainable	3,500	2,000	1,800	1,900	2,400	2,900	2,200	4,000	3,500	3,800	4,400	5,000	37,400
Total	55,000	54,700	49,100	70,400	92,400	107,800	126,100	109,100	101,100	84,500	75,700	77,800	1,003,700

Source: WMWD, 2/19/2020. Based on customer meter export at January 15, 2020.

**Table 4-2. Current Annual Water Use by WMWD Connection Class and  
WMWD Rate Tier, ccf/year**

Tier	Single Family Residential	Multi Family Residential	Non- Residential	Irrigation	Fire Protection	Total
Tier 1 - Indoor Budget	310,830	88,655	55,514	0	0	455,000
Tier 2 - Outdoor Budget	292,899	2,475	36,898	118,728	0	451,000
Tier 3 - Inefficient	13,424	1,924	5,514	19,938	0	40,800
Tier 4 - Wasteful	4,470	730	2,372	11,929	0	19,500
Tier 5 - Unsustainable	2,295	213	3,802	31,090	0	37,400
<b>Total</b>	<b>623,918</b>	<b>93,996</b>	<b>104,100</b>	<b>181,686</b>	<b>0</b>	<b>1,003,700</b>

*Source: WMWD, 2/19/2020. Based on connection meter export at January 15, 2020.*

#### 4.1.2 Current Water Demand

Water demand in this report refers to the sum of local groundwater production from WMWD wells plus imported regional water. WMWD estimates its water demand as the amount of metered consumption (shown above in Tables 4-1 and 4-2, plus 3.5 percent non-revenue water which is typically water lost through pipe leaks or water use that isn't metered.

The CY 2019 estimate water demand provided by WMWD is as follows:

- Total metered consumption: 2,304 AF/year
- Plus 3.5 percent non-revenue water: 84 AF/year
- Total demand: 2,388 AF/year

There are three sources of water for the Study Area

- North Well
- New Clay Well
- Imported Water, purchased from EMWD at the Los Alamos Interconnection

Currently, the North Well is out of service with repairs currently in construction. After the repairs are complete, WMWD anticipates local groundwater production would return to the historic amount 1,452 AF/year. WMWD's analysis was based on the production capacities of the North Well and the New Clay Well assuming the well pumps are operational no more than 90 percent of the time. Additionally, seasonal variations in water demands were recognized by WMWD. In some months, local groundwater could meet all projected Study Area demands without requiring imported water. In other months, and during the summer, imported water is necessary.

The Consultant Team was not asked to assess the local aquifer capacity to produce 1,452 AF/year and is relying on WMWD's prior assessment and production that sufficient aquifer capacity exists to produce 1,452 AF/year.

The projected demands of 2,388 acre-feet per year is approximately 15 percent higher than what was used in the infrastructure analysis (described in Sections 5 and 6 of this report) in the hydraulic analysis of the existing distribution system under existing demands.

The water demand used in the hydraulic analysis of the existing distribution system was obtained from a 2018 analysis prepared by Kennedy Jenks and does not reflect recent development in the Study Area. While it is lower than the current demands provided by WMWD, the difference in current demands is relevant to the projected buildout demands upon which the infrastructure analysis is based on.

### 4.2 Projected

Projected demands are described below.

#### 4.2.1 Projected System Development

In 2018, Kennedy Jenks prepared an assessment of buildout demands in the Study Area. This assessment produced projected buildout demands that are approximately 80 percent higher than current demands.

In 2017, Kennedy Jenks also prepared a draft assessment of demand forecasts in the Study Area. This assessment showed development projections in five-year ranges through 2040. The projected growth rates in five-year ranges were not used for the infrastructure analysis, but they were used for the financial analysis. For the purposes of this FMSR, the projected system growth rates between 2020 and 2030 were used to generate the projected growth rates in water demand and water connections needed to complete the financial analysis.

The 2017 Kennedy Jenks analysis projects annual system growth in the Study Area of 1.62 percent between 2020 and 2025, and 1.63 percent between 2025 and 2030. Table 4-3 incorporates these projected growth rates and shows the projected number of water system connections through 2030.

As of January 2020, there were 2,867 water system connections, and the number of connections is projected to increase to 3,365 by FY 29/30. On average, approximately 50 new water system connections are projected each year.



**Table 4-3. Projected Number of Water System Customers**

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	482	490	498	506	514	522	530	538	546	554	563
3/4"	1,968	1,999	2,031	2,063	2,096	2,129	2,163	2,198	2,233	2,269	2,305
1"	172	175	178	181	184	187	190	193	196	199	202
1.5"	77	79	81	83	85	87	89	91	93	95	97
2"	161	164	167	170	173	176	179	182	185	188	191
3"	5	5	5	5	5	5	5	5	5	5	5
4"	2	2	2	2	2	2	2	2	2	2	2
Total	2,867	2,914	2,962	3,010	3,059	3,108	3,158	3,209	3,260	3,312	3,365

As part of this FMSR, the Consultant Team met with the City of Murrieta to review potential known development in the Study Area. The City identified the following examples of development in the Study Area:

- A 210 unit apartment building, construction in progress
- An assisted living facility, construction in progress
- An approved four story development
- Three developments with, combined, over 440 units that are either planned or in pre-application stages

The City also mentioned that as of February 2020, the vacancy rate in the Murrieta business park is 0.5 percent, indicative of pent up demand for development.

With the above information provided by the City, it appears that future development may exceed 50 connections per year, and that the financial analysis shown in Sections 7 and 8 of this is not overly dependent on development.

### 4.2.2 Projected System Demands

The infrastructure analysis described in Sections 5 and 6 of this FMSR uses the following average demands at buildout, with the projected demands obtained from the 2018 Kennedy Jenks analysis:

- Average day demand, current: 1,295 gpm (equal to 2,090 AF/year)
- Average day demand, buildout: 2,338 gpm (approximately 80 percent higher than current)

Table 4-4 shows the projected water demands through 2030. This table shows the total demand increasing at approximately 1.62 percent per year through 2030, and also shows that local groundwater production would be 1,452 AF/year after the North Well improvements are completed. All increases in water demands resulting from development would be accommodated from increased purchases of imported water

**Table 4-4. Projected Sources of Water Supply, acre-feet per year**

Source	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
New Clay Well and North Well	363	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452
Imported	2,025	936	974	1,014	1,054	1,094	1,136	1,178	1,221	1,264	1,308
Total	2,388	2,388	2,426	2,466	2,506	2,546	2,588	2,630	2,673	2,716	2,760

### 5.0 INFRASTRUCTURE REQUIREMENTS

West Yost performed analysis of system infrastructure needs currently, and at buildout. The scope of this FMSR did not include any separate effort to identify how to accommodate immediate development along the Jefferson Avenue corridor. The phasing of any area of development would be dependent on the specific owner/developer, their funding approach for infrastructure and the water agency ultimately recommended to serve the Murrieta Study Area. However, all areas of potential development are included in our analysis of the buildout condition.

West Yost was provided an existing InfoWater model for the Murrieta Service Area by WMWD that was last updated in 2014. This model was updated to the most current geographic information system (GIS) infrastructure data and the most recent demand developments as part of the Draft 2018 WMP Update. The updated model was used as the basis of the hydraulic analysis for the infrastructure within the Murrieta Service Area. Because it was necessary to assess the hydraulic impact of supplying the Murrieta Service Area through the EMWD and RCWD distribution systems, EMWD and RCWD also supplied the most recent versions of their distribution system hydraulic models for this analysis. These models were also in the InfoWater Software platform. The following sections describe the infrastructure requirements for:

- Western Municipal Water District
- Rancho California Water District
- Eastern Municipal Water District

#### 5.1 Western Municipal Water District

For each of the candidate agency's potential Ownership Scenarios, specific infrastructure improvements are required to provide service while meeting the performance criteria described above. For each agency, these improvements are categorized by improvements required within the Study Area and improvements required outside of the Study Area to supply water to the Study Area. The improvements required for WMWD are described below. Detailed infrastructure evaluation results can be found in Appendix C.

##### 5.1.1 Required Improvements within the Murrieta Service Area

Required improvements within the Murrieta Service Area are described below.

###### 5.1.1.1 *Pump Capacity Evaluation*

The pumping requirements used to analyze the buildout system are defined above. The pumping requirement states that the firm capacity of the pumping station must be capable of meeting the MDD of the zone it is serving. Firm capacity of a pumping station is defined as the total pumping capacity with the largest pump at the site out of service. Currently, the only pump station in the system is the Alson Booster Pump Station that pumps water from the 1280 Zone into the 1430 Zone, which means the station must have a firm capacity to match the MDD of the 1430 Zone. The existing pump station contains a total of three 60 HP pumps each capable of pumping 800 gpm, giving it a firm capacity of 1,600 gpm, or 3.6 cubic feet per second (cfs). A

Variable Frequency Drive (VFD) has been recommended for the pump station to reduce the velocity in pipelines that serve the pump station.

The 1430 Zone has an existing MDD of 797 gpm, or 1.78 cfs which is below the firm capacity of the existing Alson Booster Pump Station. No upgrades to the booster station (with the exception of the VFD described above) are required for existing conditions. The 1430 Zone has a build-out MDD of 1,286 gpm, or 2.86 cfs which is below the firm capacity of the existing Alson Booster Pump Station. No upgrades to the booster station are required through build out.

### 5.1.1.2 Storage Capacity Evaluation

Table 5-1 below presents the existing storage capacity for both pressure zones along with the amount of storage required as described above.

Table 5-1. Existing Storage Summary							
Zone	Equalization Storage, MG	Fire Flow Storage, MG	Emergency Storage, MG	Storage Required, MG	Existing Storage, MG	Additional Storage Required, MG	Additional Storage Required, ft <sup>3</sup>
1280	0.97	0.30	1.94	3.22	3.00	0.22	28,778
1430	0.29	0.24	0.57	1.10	1.90	-	-
<b>Total</b>	1.26	0.54	2.52	4.32	4.90	0.22	28,778
ft <sup>3</sup> = cubic feet							

Using the existing MDD to calculate the existing storage requirements, the 1280 Zone is currently short by 0.22 MG.

Table 5-2 below presents the existing storage capacity for both pressure zones along with the amount of storage required for build out conditions as described in Section 3.

Table 5-2. Build-Out Storage Summary							
Zone	Equalization Storage, MG	Fire Flow Storage, MG	Emergency Storage, MG	Ultimate Storage Required, MG	Existing Storage, MG	Additional Storage Required, MG	Additional Storage Required, ft <sup>3</sup>
1280	1.97	0.72	3.93	6.62	3.00	3.62	484,147
1430	0.46	0.30	0.93	1.69	1.90	-	-
<b>Total</b>	2.43	1.02	4.86	8.31	4.90	3.62	484,147

Using the projected built out demands to calculate the required storage, an additional 3.62 MG of storage will be needed in the 1280 zone. The existing Olga Gordon site, however, is built out and constrained, and does not have any room for construction of the new storage. A new site approximately 4,000 ft northwest and sharing the same elevation as the Olga Gordon site was identified with the help of WMWD staff using GIS elevation data received from the County of Riverside.

The new tank proposed to be constructed is a 4 MG steel tank with radius of 73 ft and a height of 32 ft. Around 2,100 ft of 24-inch diameter pipe and 2,100 ft of 21-inch diameter pipe will be required to connect the existing Olga Gordon tanks with the proposed tank. A junction will be made halfway between the tanks and an extra 1380 ft of 24-inch pipe is required to connect the junction to the existing system. Once both of the reservoir sites are connected to the existing system, 825 ft of existing 8-inch pipe will have to be upsized to 24-inches. The proposed alignment of the recommended storage and pipelines to connect that storage to the distribution system would be difficult to permit and construct. However, there are very few sites available that meet the topographic constraints necessary for storage in the 1280 Zone.

### *5.1.1.3 Pipeline Hydraulic Evaluation*

The model was run with the existing system, existing PHD, and the status quo supply to determine if any deficiencies currently existed in the Murrieta Service Area distribution system. After running hydraulic analysis, it was found no hydraulic deficiencies exist in the current system. Under the build out hydraulic evaluation, the amount of flow required to be supplied through EMWD to the Murrieta Service Area increases from 4.65 cfs to 10.47 cfs under MDD conditions. EMWD has stated that a second interconnection near the Los Alamos interconnection on Murrieta Hot Springs Road will be constructed to supply this higher flow value. The hydraulic analysis indicates that pipeline improvements are required in the Murrieta Service Area distribution system to convey this flow because maximum velocity criteria are violated. The analysis indicates that 1,295 feet of 12-in pipeline requires improvement to 16-in pipeline.

### *5.1.1.4 Expansion of the Distribution System*

Currently, only about 40 percent of the entire service area is being served water by WMWD. Most of the area not being served is at the southeast section of the service area and is split by Murrieta Creek, which runs northwest to southeast through the city. The unserved area north of the creek is currently Vacant free space. The unserved area south of Murrieta Creek has many parcels identified as Developed-Unserved with single family homes that have their own well supply for daily use. There are also vacant parcels that are assumed to require distribution system service in the future.

The distribution system grid required to serve the areas north and south of Murrieta Creek was developed and sized using the hydraulic model. All pipelines projected in the grid were sized to handle appropriate fire flow requirements when service is provided.

### 5.1.1.5 Fire Flow Hydraulic Evaluation

A fire flow analysis was run for the Murrieta Service Area distribution system. The intention of running a fire flow analysis is to determine the system's ability to provide a given amount of flow at any specific point in the system and compare that to the City of Murrieta's fire flow criteria for the land use at that point in the system. Every location in the built-out system capable of having a fire hydrant was tested to see if it met the fire flow criteria for the type of land it is serving. The amount of flow available at each of these locations is limited by the residual pressure in the rest of the system as well as the velocity in the pipelines supplying the flow. The model measures the amount of flow that the system is capable of producing while every other connection in the system maintains a minimum residual pressure of 20 psi and the velocity in the expansion pipes is below 7.5 fps.

The fire flow analysis identified specific infrastructure in the existing distribution system unequipped to handle current fire flow values. This infrastructure is primarily small diameter legacy pipelines that do not provide sufficient capacity and require upsizing as well as dead-end sections of pipeline that require more robust looping into the distribution system.

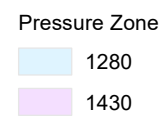
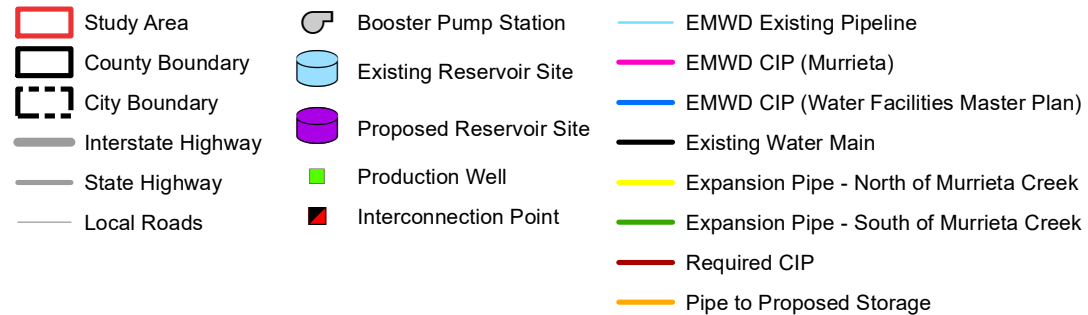
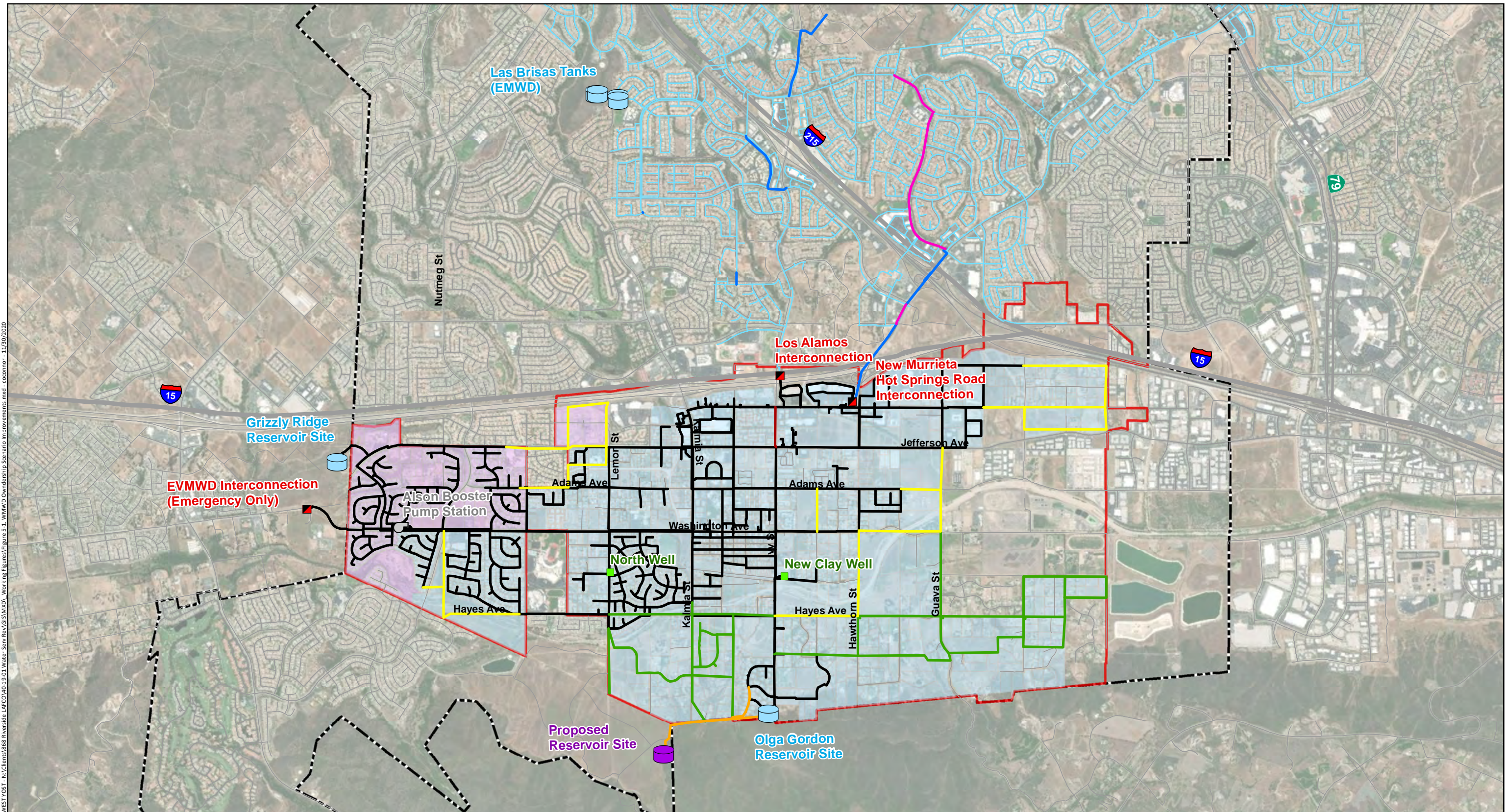
### 5.1.2 Required Offsite Improvements Outside the Murrieta Service Area

As described above, under the WMWD Ownership Scenario water supply that is not met by groundwater production is met through purchased water supplied through EMWD's distribution system. EMWD's distribution system is appropriately sized to provide a maximum flow to the Los Alamos Interconnection of 5.0 cfs. This capacity is sufficient to provide the maximum existing flow requirement of 4.65 cfs under existing MDD conditions. The future requirement is that 10.47 cfs be provided by EMWD's distribution system under MDD conditions. EMWD would provide the increased flow through a second interconnection on Murrieta Hot Springs Road. The second connection would provide greater resiliency at the higher flow rates.

EMWD's distribution system hydraulic model was used to evaluate the capacity requirements for providing 5.0 cfs of flow to the Los Alamos Interconnection and 5.47 cfs of flow to the proposed Murrieta Hot Springs Road Interconnection under future MDD conditions. Pipeline and tanks were evaluated as part of the analysis. Tanks were evaluated to make sure that storage was not drawn down during the supply of this flow. The analysis indicates that pipeline improvement projects identified in the EMWD 2015 Water Facility Master Plan will require implementation before the required flow can be supplied. In addition, newly identified projects specific to the Murrieta Service Area flow requirements will have to be implemented. In total, approximately 5,300 feet of 16-in pipeline require upgrading to 20-in pipeline, and another 2,400 feet of 16-in pipeline require improvement to 24-in. The improvements can be seen on Figure 5-1.



WEST YOST - N:\Clients\668 Riverside LAFCO\4019-01 Water Serv Rev\GIS\MXD Working Figures\Figure 5-1 WMWD Ownership Scenario Improvements.mxd - cocanor - 11/30/2020



- Notes:
1. Production Wells are labeled in green text.
  2. Booster Pump Stations are labeled in gray text.
  3. Reservoirs are labeled in blue text.
  4. Interconnections are labeled in red text.
  5. Proposed facilities are labeled in purple text.

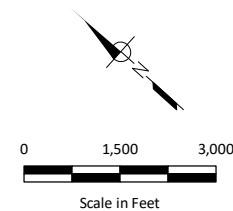


Figure 5-1

**WMWD Ownership  
Scenario Improvements**

**Riverside LAFCO**  
Focused Water Municipal  
Service Review Murrieta Area



### 5.1.3 WMWD Ownership Scenario Infrastructure Summary

In summary, the Murrieta Service Area is not contiguous with other WMWD service areas. Therefore, infrastructure storage projects in the Murrieta Service Area and pipeline improvements in the EMWD service area are required for WMWD to provide service in the future. Because it is currently providing service to the Murrieta Service Area, WMWD has a proven ability to respond to emergency infrastructure repair and service calls in the area.

## 5.2 Rancho California Water District

For each of the candidate agency's potential Ownership Scenarios, specific infrastructure improvements are required to provide service while meeting the performance criteria described above. For each agency, these improvements are categorized by improvements required within the Study Area and improvements required outside of the Study Area to supply water to the Study Area. The improvements required for RCWD are described below. Detailed infrastructure evaluation results can be found in Appendix C.

### 5.2.1 Required Improvements within the Murrieta Service Area

As described above, RCWD serves customers to the south, west, and north of the Murrieta Service Area, and has transmission mains that are within the service area. There are a variety of ways that the RCWD distribution system can be connected to the Murrieta Service Area distribution system. The RCWD pressure zone that neighbors the Murrieta Service Areas serves water at an HGL of 1,305 feet, compared to an HGL on 1,280 for the lower pressure zone in the Murrieta Service Area, so an interconnection between the Murrieta Service Area and the RCWD distribution system that includes a Pressure Reducing Valve was identified to provide service.

Several potential connection points were identified and tested. An interconnection between the two systems near the intersection of Adams Avenue and Kalmia Street was identified as the connection point that minimized the amount of infrastructure improvements required. There is a 30-in transmission main owned by RCWD in Adams Avenue. The evaluation results below all utilize this proposed interconnection.

#### 5.2.1.1 *Pump Capacity Evaluation*

The pumping evaluation described above for the WMWD Ownership Scenario does not change for RCWD ownership. No improvements to the Alson Booster Pump Station are required.

#### 5.2.1.2 *Storage Capacity Evaluation*

As described above, the Murrieta Service Area is short of storage in both existing and future conditions. RCWD requires 63.75 percent of MDD demands for operational and emergency storage, plus sufficient storage for fire flow. Currently, the RCWD 1,305 pressure zone has storage requirements of 12.14 MG compared to 22.71 MG of actual storage. There is ample storage in the RCWD 1,305 pressure zone to provide the required storage in the Murrieta Service Area. The storage requirements in the RCWD 1,305 pressure zone are projected to grow to 25.3 MG by build out. RCWD plans a 4.81 MG reservoir in this pressure zone that will provide sufficient future storage for both RCWD and Murrieta Service Area demands. Therefore,

storage specific to the Murrieta Service Area will not require construction for the RCWD Ownership Scenario.

### *5.2.1.3 Pipeline Hydraulic Evaluation*

The model was run with the existing system, existing PHD, and the Adam/Kalmia supply to determine if any deficiencies currently existed in the Murrieta Service Area distribution system. After running hydraulic analysis, it was found no hydraulic deficiencies exist in the current system. Under the build out hydraulic evaluation, the amount of flow required to be supplied through the RCWD distribution system to the Murrieta Service Area would require improvements in the Murrieta Service Area. The hydraulic analysis indicates that pipeline improvements are required in the Murrieta Service Area distribution system to convey this flow because maximum velocity criteria are violated. The analysis indicates that approximately 4,000 feet of 8-inch and 12-inch pipeline requires improvement to 16-inch pipeline.

### *5.2.1.4 Expansion of the Distribution System*

The expansion of the service area under the RCWD Ownership Scenario is identical to that under the WMWD Ownership Scenario. Currently, only about 40 percent of the entire service area is being served water by the Murrieta Service Area. Most of the area not being served is at the southeast section of the service area and is split by Murrieta Creek, which runs northwest to southeast through the city. The unserved area north of the creek is currently Vacant free space. The unserved area south of Murrieta Creek has many parcels identified as Developed-Unserved with single family homes that have their own well supply for daily use. There are also vacant parcels that are assumed to require distribution system service in the future.

The distribution system grid required to serve the areas north and south of Murrieta Creek was developed and sized using the hydraulic model. All pipelines projected in the grid were sized to handle appropriate fire flow requirements when service is provided.

### *5.2.1.5 Fire Flow Hydraulic Evaluation*

The fire flow hydraulic evaluation for the RCWD Ownership Scenario does not change from that provided above for the WMWD Ownership Scenario. A fire flow analysis was run for the Murrieta Service Area distribution system. The intention of running a fire flow analysis is to determine the system's ability to provide a given amount of flow at any specific point in the system and compare that to the City of Murrieta's fire flow criteria for the land use at that point in the system. Every location in the built-out system capable of having a fire hydrant was tested to see if it met the fire flow criteria for the type of land it is serving. The amount of flow available at each of these locations is limited by the residual pressure in the rest of the system as well as the velocity in the pipelines supplying the flow. The model measures the amount of flow that the system is capable of producing while every other connection in the system maintains a minimum residual pressure of 20 psi and the velocity in the expansion pipes is below 7.5 fps.

The fire flow analysis identified specific infrastructure in the existing distribution system unequipped to handle current fire flow values. This infrastructure is primarily small diameter legacy pipelines that do not provide sufficient capacity and require upsizing as well as dead-end sections of pipeline that require more robust looping into the distribution system.

### 5.2.2 Required Offsite Improvements Outside the Murrieta Service Area

RCWD's InfoWater hydraulic model was used to assess the hydraulic impact of supplying flow to the Murrieta Service Area. The evaluation was performed by placing the MDD of the Murrieta Service Area into the RCWD model as a point load, applying the diurnal pattern for the service area taken from the Murrieta Service Area hydraulic model, and running existing and future MDD scenarios. For these scenarios, it was assumed that the flow for the Murrieta service area would be provided by RCWD's WR26 and WR28 connections from WMWD.

The hydraulic results indicate that minor pipeline deficiencies in the area of the WR26 and WR28 connections and in Jefferson Avenue outside of the Murrieta Service Area are present in the distribution system for RCWD's 1,305 pressure zone both with and without the Murrieta Service Area connection. The deficiencies are not significantly impacted by the service connection. Improvements to RCWD's distribution system are not required for service. The improvements required for the RCWD ownership scenario can be found on Figure 5-2.

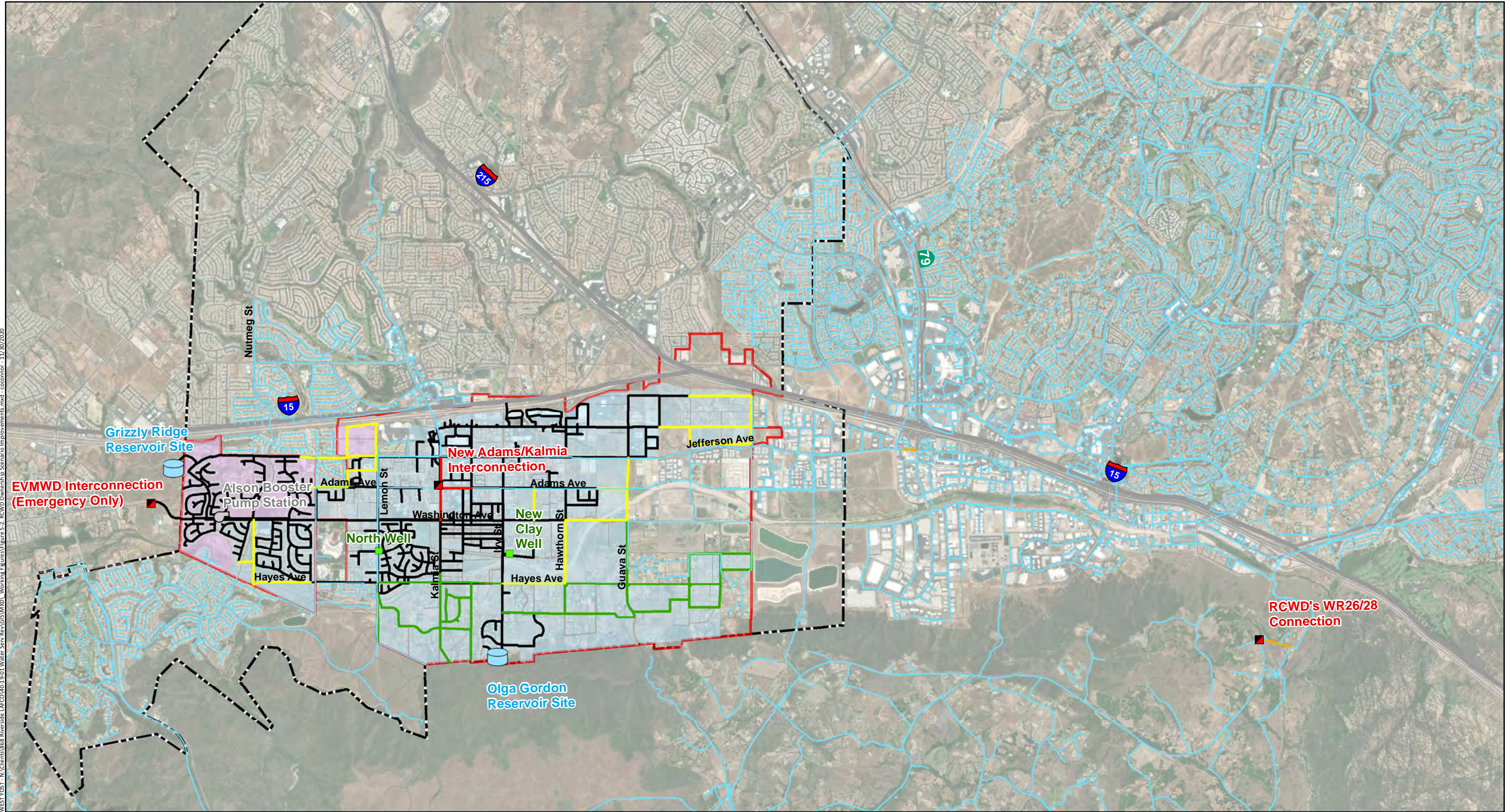
### 5.2.3 RCWD Ownership Scenario Infrastructure Summary

In summary, the Murrieta Service Area is in close proximity to areas currently provided service by RCWD, and there is RCWD transmission infrastructure that currently extends under the service area. The result of this proximity is that the Murrieta Service Area can be integrated into RCWD's 1,305 pressure zone, which has sufficient storage and pipeline capacity to provide service without extensive improvements. Furthermore, although the following elements were not quantitatively defined through hydraulic modeling, it follows logically that the RCWD transmission and storage infrastructure in the 1,305 pressure zone provides the following to the Murrieta Service Area:

- Reservoir storage provides emergency resiliency
- Local groundwater wells provide local water supply resiliency
- Multiple MWD turnouts from multiple pipelines and multiple wholesaler agencies provide imported water supply resiliency
- Potential availability of recycled water, as RCWD provides to other customers in the 1,305 pressure zone, provides water supply resiliency
- Existing transmission pipelines in the Murrieta Service Area provide potential to service specific future customers without extensive infrastructure improvements

RCWD provides emergency infrastructure and service calls to its service area in close proximity to the Murrieta Service Area, and it is assumed that it would be able to provide such service to the Murrieta Service Area.





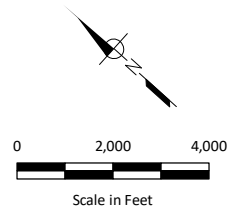
WEST YOST - N:\Clients\668 Riverside LAFCO\4019-01 Water Serv Rev\GIS\MXD Working Figures\Figure 5-2 RCWD Ownership Scenario Improvements.mxd - cocamar - 11/30/2020



- |                    |                         |                                                                            |
|--------------------|-------------------------|----------------------------------------------------------------------------|
| Study Area         | Booster Pump Station    | Recommended CIP for RCWD Supply                                            |
| County Boundary    | Existing Reservoir Site | RCWD Pipeline                                                              |
| City Boundary      | Production Well         | RCWD Pipeline with Capacity Constraint (With and Without Murrieta Service) |
| Interstate Highway | Interconnection Point   | Existing Water Main                                                        |
| State Highway      |                         | Expansion Pipe - North of Murrieta Creek                                   |
| Local Roads        |                         | Expansion Pipe - South of Murrieta Creek                                   |

- Pressure Zone
- |  |      |
|--|------|
|  | 1280 |
|  | 1430 |

- Notes:
1. Production Wells are labeled in green text.
  2. Booster Pump Stations are labeled in gray text.
  3. Reservoirs are labeled in blue text.
  4. Interconnections are labeled in red text.



**Figure 5-2**  
**RCWD Ownership Scenario Improvements**  
**Riverside LAFCO**  
Focused Water Municipal Service Review Murrieta Area



### 5.3 Eastern Municipal Water District

For each of the candidate agency's potential Ownership Scenarios, specific infrastructure improvements are required to provide service while meeting the performance criteria described above. For each agency, these improvements are categorized by improvements required within the Study Area and improvements required outside of the Study Area to supply water to the Study Area. The improvements required for EMWD are described below. Detailed infrastructure evaluation results can be found in Appendix C.

Because EMWD currently supplies water through contract with WMWD at the Los Alamos Interconnection, the EMWD Ownership Scenario provides water to the Murrieta Service Area in similar fashion to the WMWD Ownership Scenario. The analysis below includes the existing interconnection at Los Alamos Road and the future proposed connection at Murrieta Hot Springs Road.

#### 5.3.1 Required Improvements within the Murrieta Service Area

Required improvements within the Murrieta Service Area are described below.

##### 5.3.1.1 *Pump Capacity Evaluation*

The pumping evaluation described above for the WMWD Ownership Scenario does not change for EMWD ownership. No improvements to the Alson Booster Pump Station are required.

##### 5.3.1.2 *Storage Capacity Evaluation*

As described above, the Murrieta Service Area is short of storage in both existing and future conditions. The EMWD 1,384 pressure zone contains enough storage to offset the slight deficit under existing conditions. Under build-out conditions, the 1,384 pressure zone is short of storage. EMWD is planning to move the Hunter Tank to a more operationally suitable location and increase the capacity of the tank to provide storage at build-out for this pressure zone. EMWD's current Capital Improvement Program (CIP) identifies 3.0 MG of storage to serve EMWD's build out demands in this zone. Increasing the size of this proposed tank from 3.0 MG to 4.1 MG will provide the required build out storage, including the demands from the Murrieta Service Area.

##### 5.3.1.3 *Pipeline Hydraulic Evaluation*

The analysis for the EMWD Ownership Scenario does not differ from that for the WMWD scenario. The model was run with the existing system, existing PHD, and the EMWD supply to determine if any deficiencies currently existed in the Murrieta Service Area distribution system. After running hydraulic analysis, it was found no hydraulic deficiencies exist in the current system. Under the build out hydraulic evaluation, the amount of flow required to be supplied through EMWD to the Murrieta Service Area increases from 4.65 cfs to 10.47 cfs under MDD conditions. EMWD has stated that a second interconnection near the Los Alamos interconnection on Murrieta Hot Springs Road will be constructed to supply this higher flow value. The hydraulic analysis indicates that pipeline improvements are required in the Murrieta Service Area



distribution system to convey this flow because maximum velocity criteria are violated. The analysis indicates that 1,295 feet of 12-in pipeline requires improvement to 16-in pipeline.

### *5.3.1.4 Expansion of the Distribution System*

The analysis for the EMWD Ownership Scenario does not differ from that for the WMWD scenario. Currently, only about 40 percent of the entire service area is being served water by WMWD. Most of the area not being served is at the southeast section of the service area and is split by Murrieta Creek, which runs northwest to southeast through the city. The unserved area north of the creek is currently Vacant free space. The unserved area south of Murrieta Creek has many parcels identified as Developed-Unserved with single family homes that have their own well supply for daily use. There are also vacant parcels that are assumed to require distribution system service in the future.

The distribution system grid required to serve the areas north and south of Murrieta Creek was developed and sized using the hydraulic model. All pipelines projected in the grid were sized to handle appropriate fire flow requirements when service is provided.

### *5.3.1.5 Fire Flow Hydraulic Evaluation*

The analysis for the EMWD Ownership Scenario does not differ from that for the WMWD scenario. A fire flow analysis was run for the Murrieta Service Area distribution system. The intention of running a fire flow analysis is to determine the system's ability to provide a given amount of flow at any specific point in the system and compare that to the City of Murrieta's fire flow criteria for the land use at that point in the system. Every location in the built-out system capable of having a fire hydrant was tested to see if it met the fire flow criteria for the type of land it is serving. The amount of flow available at each of these locations is limited by the residual pressure in the rest of the system as well as the velocity in the pipelines supplying the flow. The model measures the amount of flow that the system is capable of producing while every other connection in the system maintains a minimum residual pressure of 20 psi and the velocity in the expansion pipes is below 7.5 fps.

The fire flow analysis identified specific infrastructure in the existing distribution system unequipped to handle current fire flow values. This infrastructure is primarily small diameter legacy pipelines that do not provide sufficient capacity and require upsizing as well as dead-end sections of pipeline that require more robust looping into the distribution system.

### 5.3.2 Required Offsite Improvements Outside the Murrieta Service Area

Identically to the WMWD Ownership Scenario described above, under the EMWD Ownership Scenario water supply that is not met by groundwater production is met through purchased water supplied through EMWD's distribution system. EMWD's distribution system is appropriately sized to provide a maximum flow to the Los Alamos Interconnection of 5.0 cfs. This capacity is sufficient to provide the maximum existing flow requirement of 4.65 cfs under existing MDD conditions. The future requirement is that 10.47 cfs be provided by EMWD's distribution system under MDD conditions. EMWD would provide the increased flow through a second interconnection on Murrieta Hot Springs Road. The second connection would provide greater resiliency at the higher flow rates.

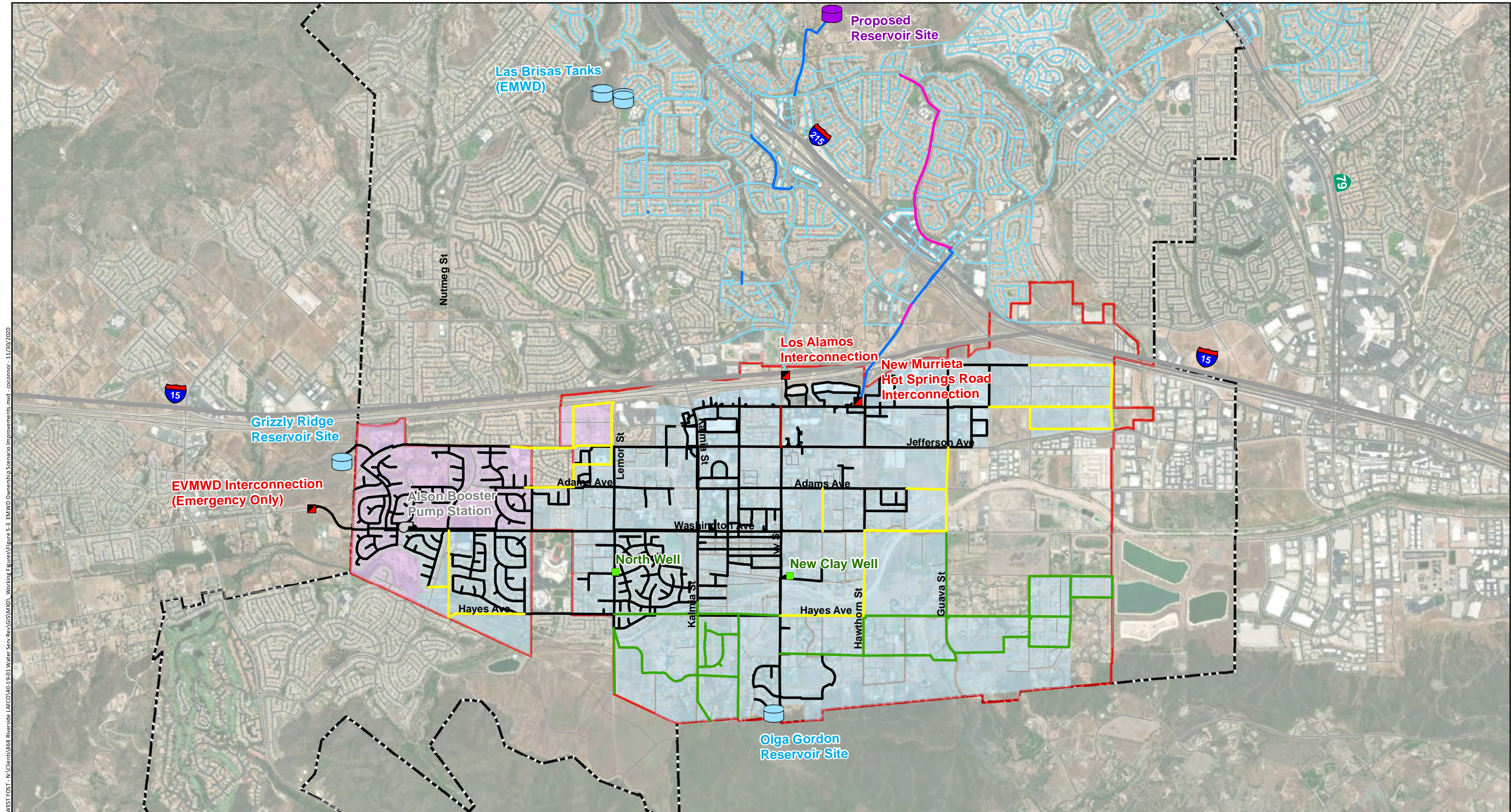
EMWD's distribution system hydraulic model was used to evaluate the capacity requirements for providing 5.0 cfs of flow to the Los Alamos Interconnection and 5.47 cfs of flow to the proposed Murrieta Hot Springs Road Interconnection under future MDD conditions. Pipeline and tanks were evaluated as part of the analysis. Tanks were evaluated to make sure that storage was not drawn down during the supply of this flow. The analysis indicates that pipeline improvement projects identified in the EMWD 2015 Water Facility Master Plan will require implementation before the required flow can be supplied. In addition, newly identified projects specific to the Murrieta Service Area flow requirements will have to be implemented. In total, approximately 5,300 feet of 16-inch pipeline require upgrading to 20-in pipeline, and another 2,400 feet of 16-inch pipeline require improvement to 24-inch. The improvements required for the EMWD ownership scenario can be found on Figure 5-3.

### 5.3.3 EMWD Ownership Scenario Infrastructure Summary

In summary, the Murrieta Service Area borders an area currently served by EMWD, and EMWD currently provides water to the Murrieta Service through the Los Alamos interconnection. The Murrieta Service Area can be integrated into EMWD's 1,384 pressure zone and be served under existing conditions with no improvements to EMWD infrastructure. Future demands will require improvements to EMWD pipelines. The storage provided in the 1,384 pressure zone eliminates the need for a storage improvement in the Murrieta Service Area and increases the emergency resiliency of the Murrieta Service Area.

EMWD provides emergency infrastructure and service calls to its service area in close proximity to the Murrieta Service Area, and it is assumed that it would be able to provide such service to the Murrieta Service Area.





WEST YOST - N:\Clients\668 Riverside LAFCO\4019-01 Water Serv Rev\GIS\MXD Working Figures\Figure 5-3 EMWD Ownership Scenario Improvements.mxd - cocomor - 11/30/2020



- |                                                                               |                         |                                          |
|-------------------------------------------------------------------------------|-------------------------|------------------------------------------|
| <span style="border: 2px solid red; padding: 2px;"> </span> Study Area        | Booster Pump Station    | EMWD Existing Pipeline                   |
| <span style="border: 2px solid black; padding: 2px;"> </span> County Boundary | Existing Reservoir Site | EMWD CIP (Murrieta)                      |
| <span style="border: 2px dashed black; padding: 2px;"> </span> City Boundary  | Proposed Reservoir Site | EMWD CIP (Water Facilities Master Plan)  |
| Interstate Highway                                                            | Production Well         | Existing Water Main                      |
| State Highway                                                                 | Interconnection Point   | Expansion Pipe - North of Murrieta Creek |
| Local Roads                                                                   |                         | Expansion Pipe - South of Murrieta Creek |
|                                                                               |                         | Required CIP                             |

Pressure Zone

- |  |      |
|--|------|
|  | 1280 |
|  | 1430 |

Notes:

1. Production Wells are labeled in green text.
2. Booster Pump Stations are labeled in gray text.
3. Reservoirs are labeled in blue text.
4. Interconnections are labeled in red text.
5. Proposed facilities are labeled in purple text.

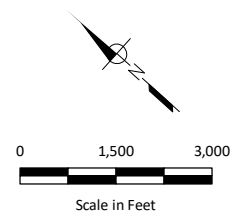


Figure 5-3

EMWD Ownership  
Scenario Improvements

Riverside LAFCO  
Focused Water Municipal  
Service Review Murrieta Area



## **6.0 COST ESTIMATES**

West Yost developed opinion of the probable construction cost for the planning and design of the recommended infrastructure identified in the sections above. The opinion of probable construction cost was developed based on a combination of data supplied by manufacturers, published industry standard cost data and curves, construction costs for similar facilities built by other public agencies, and construction costs previously estimated by West Yost for similar facilities with similar construction cost indexes.

Additionally, the costs presented in this document are for construction only and do not include uncertainties in estimation or unexpected construction costs (e.g., variations in final quantities) or specific cost estimates for engineering, legal costs, environmental review, soils investigation, surveying, construction management, and inspections and/or contract administration. Some of these additional cost items are referred to as contingency costs or mark-ups, and are further described below.

The opinion of probable construction cost has been adjusted to reflect January 2020 dollars based on an Engineering News Record (ENR) Construction Cost Index (CCI) of 11,392 (20-Cities Average). These construction costs are to be used for conceptual cost estimates only, and should be updated regularly. Construction costs are not intended to represent the lowest prices in the industry for each type of construction; rather they are representative of average or typical construction costs. These planning-level construction costs have been prepared for guidance in evaluating various facility improvement options, and are intended for budgetary purposes only, within the context of this planning effort.

The cost estimates prepared for this document are in accordance with the guidelines of the Association for the Advancement of Cost Engineering (AACE) International for a Class 5 Estimate, suitable for long-range capital planning, with an accuracy range of -50 percent to +100 percent. Construction costs were developed based on bids from other water system design projects and from standard cost estimating guides.

### **6.1 Description of Unit Costs**

Unit costs are broken down by type of infrastructure in the sections below.

#### **6.1.1 Pipeline Unit Costs**

Table 6-1 presents unit base construction costs for potable water pipelines 8 through 24-inches in diameter. These unit costs are for pipeline construction in developed areas and are representative of pipeline construction conducted under common or normal conditions, which would be significantly higher under special or difficult conditions.

The unit base construction costs presented below generally include pipeline materials, trenching, placing and jointing pipe, valves, fittings, hydrants, service connections, placing imported pipe bedding, native backfill material, and asphalt pavement replacement, if required. However, the costs presented in Table 6-1 do not include the cost of boring and jacking pipe.

<b>Table 6-1. Unit Base Construction Costs for Pipelines</b>	
Pipeline Diameter, inches	Unit Base Construction Cost, \$/linear foot
8	187
10	225
12	247
14	275
16	302
20	330
24	352
30	401

### 6.1.2 Tank Unit Costs

Table 6-2 summarizes the construction costs for water storage reservoirs for the size range of 0.1 to 6.0 MG. These costs generally include the installation of the storage tank, site piping, earthwork, paving, instrumentation, and all related sitework. Costs do not include land acquisition. It should be noted that these costs are representative of construction conducted under normal excavation and foundation conditions, and would be significantly higher for special or difficult foundation requirements. Costs also assume relatively minor earthwork and grading to level the tank site and does not include significant grading or excavation to clear a site for a tank. Cost assumptions are for above grade welded steel tanks.

<b>Table 6-2. Base Construction Costs for Welded Steel Water Storage Reservoirs</b>	
Capacity, MG	Estimated Base Construction Cost, million dollars
0.1	1.4
0.5	1.9
1.0	2.4
2.0	3.2
3.0	4.0
4.0	4.7
5.0	5.4
6.0	6.2



### 6.1.3 Contingency Costs and Mark-ups

Contingency costs or mark-ups must be reviewed on a case-by-case basis because they will vary considerably with each construction project. However, to assist District staff with budgeting for recommended water system facility improvements, the following percentages were developed.

- **Estimating Contingencies (30 percent):** The construction costs presented above are representative of the construction of wastewater collection system facilities under normal construction conditions and schedules; consequently, it is appropriate to allow for estimating and construction uncertainties unavoidably associated with the conceptual planning of projects. Factors such as unexpected construction conditions, the need for unforeseen mechanical items, and variations in design and final quantities are only a few of the items that can increase project costs.
- **Design and Construction Period Services (30 percent):** Design period services associated with new facilities include preliminary investigations and reports, right-of-way acquisition, foundation explorations, preparation of drawings and specifications for construction, surveying and staking, sampling of testing material, and start-up services. Design period services also include permitting and regulatory compliance, as well as District administration, legal, and associated activities. Construction period services cover items such as contract management and inspection during construction.

The total markup, including contingencies and professional services, is compounded, and amounts to 69 percent of the estimated construction cost. However, it must be noted that for smaller or more complicated projects, the design cost may increase by 10 to 20 percent of the estimated construction cost.

## 6.2 Conceptual Project Costs

The following lists the costs evaluated for each district; detailed cost estimates are shown in Tables 6-3 through 6-18.

### 6.2.1 Western Municipal Water District

The following is a list of costs evaluated for WMWD:

- Pipelines Associated with Storage, Table 6-3
- Expansion CIP North of Murrieta Creek, Table 6-4
- Expansion CIP South of Murrieta Creek, Table 6-5
- Hydraulic Improvements, Table 6-6
- Fire Flow Improvements, Table 6-7
- Supply Improvements Through EMWD, Table 6-8

### 6.2.2 [Rancho California Water District](#)

The following is a list of costs evaluated for RCWD, addressing storage needs through payment of RCWD connection fee:

- Hydraulic Improvement, Table 6-9
- Expansion CIP North of Murrieta Creek, Table 6-10
- Expansion CIP South of Murrieta Creek, Table 6-11
- Supply Improvements through RCWD, Table 6-12

### 6.2.3 [Eastern Municipal Water District](#)

The following is a list of costs evaluated for EMWD:

- Storage (Hunter Tank), Table 6-13
- Hydraulic Improvements, Table 6-14
- Expansion CIP North of Murrieta Creek, Table 6-15
- Expansion CIP South of Murrieta Creek, Table 6-16
- Fire Flow Improvements, Table 6-17
- Supply Improvements Through EMWD, Table 6-18

<b>Table 6-3. WMWD Storage CIP (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Proposed Pipe</b>		
20	2105.83	741,000
24	4284.45	1,719,000
Construction Subtotal		\$2,460,000
Contingency and Soft Cost Subtotal		\$1,697,000
Total		\$4,157,000
<b>Tank</b>		
3 MG Steel Tank		4,928,060
Construction Subtotal		\$4,928,060
Contingency and Soft Cost Subtotal		\$3,399,940
Total		\$8,328,000

<b>Table 6-4. WMWD Expansion CIP North of Murrieta Creek (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Proposed Pipe</b>		
8	6071.3	1,135,000
12	36359.2	8,995,000
Construction Subtotal		\$10,130,000
Contingency and Soft Cost Subtotal		\$6,990,000
Total		\$17,120,000

<b>Table 6-5. WMWD Expansion CIP South of Murrieta Creek (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Upsize Pipe</b>		
8	29672.77	5,546,000
12	26346.56	6,518,000
Construction Subtotal		\$12,064,000
Contingency and Soft Cost Subtotal		\$8,324,000
Total		\$20,388,000

<b>Table 6-6. WMWD Hydraulic Improvement CIP (Future)</b>		
<b>Diameter, inches</b>	<b>Length, feet</b>	<b>Cost, \$</b>
<b>Proposed Pipe</b>		
16	1294.68	391,000
Construction Subtotal		\$391,000
Contingency and Soft Cost Subtotal		\$270,000
Total		\$661,000
VFD at Alson Booster Pump Station		130,000
Construction Subtotal		\$130,000
Contingency and Soft Cost Subtotal		\$85,000
Total		\$215,000
New Connection and PRV Station		350,000
Construction Subtotal		\$350,000
Contingency and Soft Cost Subtotal		\$242,000
Total		\$592,000

<b>Table 6-7. WMWD Fire Flow Improvement CIP (Existing)</b>		
<b>Diameter, inches</b>	<b>Length, feet</b>	<b>Cost, \$</b>
<b>Proposed/Upsize Pipe</b>		
8	5988.66	1,119,380
10	848.61	190,937
12	6534.55	1,616,579
Construction Subtotal		\$2,927,000
Contingency and Soft Cost Subtotal		\$2,020,000
Total		\$4,947,000



<b>Table 6-8. Supply Improvements Through EMWD (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
Proposed/Upsize Pipe		
20	5273	2,114,473
24	2371	1,107,257
Construction Subtotal		\$3,222,000
Contingency and Soft Cost Subtotal		\$2,223,000
Total		\$5,445,000

<b>Table 6-9. RCWD Hydraulic Improvement CIP (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
Proposed Pipe		
16	3990.59	1,207,000
Construction Subtotal		\$1,207,000
Contingency and Soft Cost Subtotal		\$833,000
Total		\$2,040,000
VFD at Alson Booster Pump Station		
		130,000
Construction Subtotal		\$130,000
Contingency and Soft Cost Subtotal		\$85,000
Total		\$215,000

<b>Table 6-10. RCWD Expansion CIP North of Murrieta Creek (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
Proposed Pipe		
8	6071.3	1,135,000
12	36359.2	8,995,000
Construction Subtotal		\$10,130,000
Contingency and Soft Cost Subtotal		\$6,990,000
Total		\$17,120,000

<b>Table 6-11. RCWD Expansion CIP South of Murrieta Creek (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Upsize Pipe</b>		
8	29672.77	5,546,000
12	26346.56	6,518,000
Construction Subtotal		\$12,064,000
Contingency and Soft Cost Subtotal		\$8,324,000
Total		\$20,388,000

<b>Table 6-12. Supply Improvements Through RCWD (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Proposed/Upsize Pipe</b>		
30	0	0
Construction Subtotal		\$0
Contingency and Soft Cost Subtotal		\$0
Total		\$0

<b>Table 6-13. EMWD Storage CIP (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Hunter Tank (EMWD + Murrieta)</b>		
4.1 MG Steel Tank		4,800,000
Construction Subtotal		\$4,800,000
Contingency and Soft Cost Subtotal		\$3,312,000
Total		\$8,112,000

<b>Table 6-14. EMWD Hydraulic Improvement CIP (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Proposed Pipe</b>		
16	1294.68	391,000
Construction Subtotal		\$391,000
Contingency and Soft Cost Subtotal		\$270,000
Total		\$661,000
VFD at Alson Booster Pump Station		130,000
Construction Subtotal		\$130,000
Contingency and Soft Cost Subtotal		\$85,000
Total		\$215,000
New Connection and PRV Station		350,000
Construction Subtotal		\$350,000
Contingency and Soft Cost Subtotal		\$242,000
Total		\$592,000

<b>Table 6-15. EMWD Expansion CIP North of Murrieta Creek (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Proposed Pipe</b>		
8	6071.3	1,135,000
12	36359.2	8,995,000
Construction Subtotal		\$10,130,000
Contingency and Soft Cost Subtotal		\$6,990,000
Total		\$17,120,000



<b>Table 6-16. EMWD Expansion CIP South of Murrieta Creek (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Upsize Pipe</b>		
8	29672.77	5,546,000
12	26346.56	6,518,000
Construction Subtotal		\$12,064,000
Contingency and Soft Cost Subtotal		\$8,324,000
Total		\$20,388,000

<b>Table 6-17. EMWD Fire Flow Improvement CIP (Existing)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Proposed/Upsize Pipe</b>		
8	5988.66	1,119,380
10	848.61	190,937
12	6534.55	1,616,579
Construction Subtotal		\$2,927,000
Contingency and Soft Cost Subtotal		\$2,020,000
Total		\$4,947,000

<b>Table 6-18. Supply Improvements Through EMWD (Future)</b>		
Diameter, inches	Length, feet	Cost, \$
<b>Proposed/Upsize Pipe</b>		
20	5273	2,114,473
24	2371	1,107,257
Construction Subtotal		\$3,222,000
Contingency and Soft Cost Subtotal		\$2,223,000
Total		\$5,445,000

## **7.0 FINANCIAL ASSESSMENT METHODOLOGY AND POLICIES**

The financial assessment for this FMSR is intended to show the effect on three distinct groups in the Study Area:

- Rate payers
- Residents currently on private wells
- Development community

This section defines the Ownership Scenarios, provides an overview of the process of developing the financial analysis, and shows the financial policy direction provided by utility staff.

### **7.1 Overview**

To do this, a financial model was prepared for each Ownership Scenario. The financial model contains a year by year projection of revenues and expenses for the Study Area. Three “ownership scenarios” were created:

- WMWD Ownership Scenario. The financial model for the WMWD Ownership Scenario was prepared as if WMWD would continue to own and operate the water system.
- RCWD Ownership Scenario. The financial model for the RCWD Ownership Scenario was prepared as if RCWD would become the owner of the water system on July 1, 2020.
- EMWD Ownership Scenario. The financial model for the EMWD Ownership Scenario was prepared as if EMWD would become the owner of the water system on July 1, 2020.

The financial models developed for each Ownership Scenario are included in Appendix B, specifically Table B-3 for the WMWD Ownership Scenario, Table B-4 for the EMWD Ownership Scenario, and Table B-5 for the RCWD Ownership Scenario. The models project what the various expenses are over the next 10 years to operate and maintain the water system, including building the capital improvements described in Sections 5 and 6 of this report. The financial analysis considers whether debt would be issued to pay for capital improvements, estimates future costs for water supply, and shows how growth would pay for growth.

The financial models also show where the money comes from to pay these costs. The majority of utility revenues are from water rates. Smaller amounts of revenues are from connection fees (one time charges that development pays before connecting to the water system), and standby fees.

The following list shows key steps in completing the financial analysis:

1. Public Kick-off Meetings, held in April 2019 and July 2019
2. Data request, sent by the Consultant team to LAFCO and the three utilities
3. Development of initial assumptions to start the financial analysis. These are parameters such as inflation rates, system growth rates (that is, how many new connections to the water system each year), and the projected cost of purchasing water from the Metropolitan Water District.
4. Asked agencies for policy direction, in May 2019
5. After receipt of policy direction, develop the financial models for each Ownership Alternative
6. After receipt of final draft capital improvement costs (see Section 6 of this report), develop draft financial analysis
7. Distribute preliminary draft results to Agencies
8. Review with Agencies, in January 2020
9. Revise analysis as needed: incorporate Agency review comments; incorporate more current input data, receive revised policy direction from agencies, in February and March 2020
10. Distribute final draft results to Agencies and draft report, in April 2020
11. Review final draft results with Agencies, in April 2020
12. *Future: present final draft results at community meeting*

## 7.2 Agency Financial Policies

Agency financial policies are described in detail in the sections below.

### 7.2.1 [Introduction](#)

One of the most important steps in the development of the financial analysis is obtaining policy direction from the three utilities. The utility that will be the owner of the water system in the Study Area will decide how they want to manage it. To create a financial analysis that represents how each utility would manage the utility, the Consultant team needed to ask the utilities for policy direction.

An important distinction must be made between “policy direction” and “policy decisions”, acknowledging that utility policies are made by the respective Boards of Directors of each utility, and no such Board actions have been made regarding this Study Area.

- Policy Direction: provided by utility management, and is their best estimate of what their Board would decide.
- Policy Decision: made by a Board of Directors.



In this FMSR, the Consultant team relied on Policy Direction obtained from utility staff. The process for obtaining Policy Direction was:

1. May 2019: completed list of policy questions separately for each agency
2. June 2019: agencies responded, Consultant team reviewed responses
3. Remainder of project: policy direction used to guide financial analysis; some revision and clarification of policy direction was provided by agencies to Consultant team as the project progressed

Key Policy Directions are shown in Table 7-1. These policies are described further in the paragraphs after Table 7-1.

<b>Table 7-1. Financial Policy Direction</b>			
	<b>WMWD</b>	<b>RCWD</b>	<b>EMWD</b>
Financially Blended or Financially Distinct	Distinct	Distinct	Blended
Initial Water Rate Structure	Current WMWD Rate Structure	Current RCWD Santa Rosa Division Rate Structure	Current WMWD Rate Structure With 20% Reduction in Monthly Service Charge
Low-Income Discount	Yes. Up to \$150/year	No	No, though qualified low-income/medical payment plans are available
Standby Charge Applied	Yes. \$21/acre	Yes. \$69.92/acre	Yes \$14/acre
Ad Valorem Tax Applied?	No	Possibly. If not, then apply revenue-neutral water rate surcharge	No
Methods of Funding \$37M CIP Expansion Projects	Developers, ADs, and CFDs. CFDs can't be financed through WMWD	Developers, ADs, and CFDs	Developers, ADs, and CFDs
Connection Fee Charged?	Existing WMWD Fee. \$7,050 for ¾" Meter	Existing Santa Rosa Division Fee. \$2,537 for a ¾" meter	Existing EMWD Fee. \$5,501 for ¾" Meter
For Customers with Existing Wells, Is Connection to Public Water System Mandatory?	No	No	No
For Voluntary Connections, Can Irrigation Water Remain on Private Well?	Yes	No	Yes
AD = Assessment District CFD = Community Facilities District			

### 7.2.2 Financially Distinct or Financially Blended

This policy direction is possibly the single most significant policy direction, with the terms Financially Distinct and Financially Blended defined as follows:

*Financially Distinct: all costs to provide water service in the Study Area must come from revenues generated within the Study Area. From an accounting point of view, the Study Area is a separate entity from all other parts of the agency's operations.*

*Financially Blended: from an accounting point of view, the Study Area will be merged with another part of the agency's operations. Revenues from the Study Area would be combined with other revenues of the agency. The costs of providing water service to the Study Area would be combined with other costs of the agency.*

Under the WMWD Ownership Scenario, the Study Area would continue to be financially distinct. RCWD noted that initially, the Study Area would be financially distinct, and RCWD would complete a cost of service study to assess whether the Study Area could be financially integrated into its Santa Rosa Division. Under the EMWD Ownership Scenario, the Study Area would be financially blended with the remainder of EMWD's retail water service area.

### 7.2.3 Initial Water Rate Structure

This question was asked to understand the water rate structure that each agency would apply upon acquisition of the water system. The policy direction was different for each Ownership Scenario.

- **WMWD Ownership Scenario:** WMWD would continue to use its current water rate structure, with water rate increases as needed to continue to provide water service.
- **RCWD Ownership Scenario:** RCWD would use the water rate schedule currently applied to its Santa Rosa Division.
- **EMWD Ownership Scenario:** EMWD would apply WMWD's current water rate structure for the Study Area, except EMWD would reduce the WMWD's Fixed System Charge by 20 percent. For most Study Area connections with a ¾-inch water meter, the CY 2020 Fixed System Charge under the EMWD Ownership Scenario would be \$35.51 instead of WMWD's \$44.39.

### 7.2.4 Low-Income Discount

Some utilities offer a discount for qualifying customers that do not meet minimum income thresholds. For the purposes of this analysis, each agency's current policies are assumed to be applied in the Study Area, should they be the future water purveyor.

- **WMWD Ownership Scenario:** WMWD would retain its current policy of providing assistance for customers that also qualify for their electric or natural gas utility's California Alternate Rates for Energy (CARE) program. WMWD provides up to \$150 per year in bill payment assistance.

- **RCWD Ownership Scenario:** RCWD does not offer a low-income discount.
- **EMWD:** EMWD does not offer a low-income discount, but does offer payment plans for qualified low-income customers with documented specific medical conditions.

### 7.2.5 Standby Charge

Each agency has a Standby Charge, which is an annual charge to all parcels in their respective service areas, including those that are not connected to the water system. Each agency indicated it would continue to charge a Standby Charge to property owners in the Study Area. The amounts of the Standby Charge are expected to vary.

- **WMWD Ownership Scenario:** WMWD would continue its current Standby Charge of \$21 per acre, with a minimum charge of \$21/parcel for parcels smaller than one acre.
- **RCWD Ownership Scenario:** RCWD would apply its current Santa Rosa Division Standby Charge of \$69.92 per acre<sup>1</sup>, with a minimum charge of \$69.92/parcel for parcels smaller than one acre.
- **EMWD Ownership Scenario:** EMWD staff indicated that EMWD would apply a \$14 per acre Standby Charge, with a minimum charge of \$14 per parcel for parcels smaller than one acre.

### 7.2.6 Ad Valorem Tax

Another important policy direction is consideration of an Ad Valorem Tax. An Ad Valorem Tax is a tax based on the assessed value of an item.

A legal opinion on whether an Ad Valorem Tax could be applied in the Study Area is outside the scope of this FMSR and is not included. Further, the FMSR also does not identify the process, if any, for applying an Ad Valorem Tax in the Study Area.

The Consultant Team asked each agency whether they would apply an Ad Valorem Tax to the Study Area if they were the future water purveyor.

- **WMWD Ownership Scenario:** WMWD would not apply an Ad Valorem Tax.
- **RCWD Ownership Scenario:** RCWD staff provided policy direction to assume that, if possible, the current Ad Valorem Tax in RCWD's Santa Rosa Division would be applied. The current tax rate is \$0.50 per year per \$100 assessed value of land. An Ad Valorem Tax would be applied throughout the Study Area.

RCWD indicates that the Ad Valorem Tax revenues are used for capital improvements, including paying debt service.

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<sup>1</sup> A Standby Fee of \$69.92 per acre per year is assumed for this FMSR (and \$69.92/year for parcels smaller than one acre). RCWD's Standby Fee for its Santa Rosa Division can be found in full on RCWD's website, and lists some circumstances where the Standby Fee differs from \$69.92/acre.



If an Ad Valorem Tax is not possible, or the RCWD Board of Directors chooses not to apply it, RCWD would instead apply a Water Rate Surcharge. The Water Rate Surcharge would be applicable only to water system connections, and the Water Rate Surcharge would not be applicable to connections that are not connected to the water system. The Water Rate Surcharge would be calculated so that the surcharge would collect the same amount of money, systemwide, that the Ad Valorem Tax would collect if it were applied only to water system connections.

- **EMWD Ownership Scenario:** EMWD would not apply an Ad Valorem Tax.

### 7.2.7 Assessment Districts and Community Facilities Districts

As noted in Section 6 of this report, there are two sets of water main extensions that have a combined total cost of approximately \$37 million. These improvements, shown in Figures 5-1, 5-2, and 5-3 above, are the same for each Ownership Scenario.

For the purposes of presentation in this report, the water main extensions are consolidated into two projects: water main extensions north of the Murrieta River and water main extensions south of the Murrieta River. Given that the majority of the near-term projected development is north of the Murrieta River, it is anticipated that the pipe extensions north of the Murrieta River would be built first.

The actual schedule and timing for completion of these pipe extensions would depend on the specific timing and location of proposed development as it occurs. It is possible that the pipe extensions would be built as a series of smaller projects instead of two larger projects.

Four primary funding methods for these improvements were identified through the course of the project.

1. Funded by the utility, and the cost included in each utility's connection fee.
2. Funded by Community Facility Districts, which are a form of an Assessment District where the assessment is not based on the value of the property. These are also commonly called Mello-Roos Districts.
3. Funded by Assessment Districts, where the assessment is based on the value of the property.
4. Directly funded by developers.

Table 7-2 shows the potential funding methods and how they are applicable to each Ownership Scenario. This table shows that developer funding and Assessment District(s) are possible under all Ownership Scenarios. All agencies will allow Community Facilities Districts, though WMWD will not allow a CFD to be financed through WMWD. RCWD and EMWD have indicated they can accommodate this funding mechanism.

Table 7-2. \$37 Million Pipe Extension Funding Alternatives			
Potential Funding Method	Ownership Scenario		
	WMWD	RCWD	EMWD
Funded by Utility, Cost Incorporated into Connection Fee	No	No	No
Community Facility District Financed Through Utility	No	Possibly	Yes
Allows Community Facility District	Yes	Yes	Yes
Allows Assessment District	Yes	Yes	Yes
Funded Directly by Developers	Yes	Yes	Yes

Four primary funding methods for these improvements were identified through the course of the project.

Each agency was asked about potential funding methods for these improvements, and the results are shown in Table 7-2.

- **WMWD Ownership Scenario:** The improvements could be directly funded by developers, through an Assessment District, or through a Community Facilities District. However, a Community Facilities District could not be funded through WMWD. In 1997, WMWD adopted Resolution No. 2008, which states “The District will not finance through proceedings pursuant to the Mello-Roos Community Facilities Act of 1982”.
- **RCWD Ownership Scenario:** The improvements could be funded directly by developers, or under conditions specified by RCWD, funded using Assessment Districts or Community Facilities Districts. It is beyond the scope of this FMSR to identify the specific conditions under which RCWD would allow Assessment Districts or Community Facilities Districts.
- **EMWD Ownership Scenario:** The improvements could be funded directly by developers, or under conditions specified by EMWD, funded using Assessment Districts or Community Facilities Districts. It is beyond the scope of this FMSR to identify the specific conditions under which EMWD would allow Assessment Districts or Community Facility Districts.

### 7.2.8 Connection Fees

A connection fee is a one-time charge payable by new development prior to connection to the water system. Each agency has a connection fee, and each agency uses a different term to describe the connection fee. Throughout this report, the term connection fee refers to each agency’s similar charge, regardless of the term used by each agency. Each agency’s policy follows:

- **WMWD Ownership Scenario:** WMWD uses the term “connection fee.” The current connection fee for a ¾-inch water meter is \$7,050, and for a 2-inch water meter, the current connection fee is \$37,599. WMWD typically updates its connection fee each year for inflation, and WMWD expects to update its connection fee in 2020 or 2021 as its Water Master Plan for the Study Area is completed.

- **RCWD Ownership Scenario:** RCWD uses the term “Capacity Charge.” RCWD’s FY 19/20 Capacity Charge was \$2,537 for a ¾-inch meter and \$13,445 for a 2-inch meter. RCWD typically adjusts its Capacity Charges each year for inflation.
- **EMWD Ownership Scenario:** EMWD uses the term “Financial Participation Charge”. EMWD’s current Financial Participation Charge is \$5,501 for a ¾-inch meter. The Financial Participation Charge for a 2-inch meter depends on the type of 2-inch meter and ranges from \$44,008 to \$73,328. EMWD typically updates its Financial Participation Charge each year for inflation. EMWD notes that, for the example customer with a 2-inch meter (described in Section 8 below), the most likely 2-inch meter Financial Participation Charge would be \$44,008 and it is likely that a 1.5-inch meter would be applicable. The Financial Participation Charge for a 1.5-inch meter is \$27,505.

### 7.2.9 Mandatory Connection to Water System for Customers with Existing Private Wells

The Consultant team asked each agency if residents with existing private wells would be required to connect to the public water system.

- All three Ownership Scenarios: Policy direction given from utility staff is that no mandatory connections would be required. Anyone with a private well could voluntarily connect to the water system.

### 7.2.10 Voluntary Private Well Connections: Irrigation Use Remaining on Private Wells

For residents with existing private wells who choose to connect to the public water system, is it possible to connect only the indoor water use and have outdoor irrigation use remain on the private well? The Consultant team asked each agency.

- **WMWD Ownership Scenario:** If a resident chooses to connect to the public water system, the irrigation use could remain on the private well at the discretion of the resident. However, the resident must follow WMWD’s requirements to make sure that the well system and the public water system are physically separated to prevent contamination of the public water system.
- **RCWD Ownership Scenario:** If a resident chooses to connect to the public water system, the entire water use on the property must be connected, including irrigation use.
- **EMWD Ownership Scenario:** If a resident chooses to connect to the public water system, the irrigation use could remain on the private well at the discretion of the resident. However, the resident must follow EMWD’s requirements to make sure that the well system and the public water system are physically separated to prevent contamination of the public water system.



## 7.3 Methods of Prioritization

Table 7-3 describes the parameters that are the key outputs of the financial analysis, and the paragraphs below describe them in additional detail. Some of the key outputs are policies, and the remainder describe financial impacts.

The outputs are also described as to whether they describe the financial impact to

- Rate payers
- Residents currently on private wells
- Development community

Table 7-3. Key Parameters			
Key Financial Analysis Parameters	Part of the Financial Impact to:		
	Rate Payers	Residents on Private Wells	Development Community
<b>Key Policies</b>			
Financially Distinct or Financially Integrated?	X		
Ad Valorem Tax?	X	X	X
How are \$37M of Pipe Extensions Funded?			X
Low Income Discount?	X		
For Voluntary Connections of Private Wells, Option to Leave Irrigation Use on Private Wells?		X	
<b>Projected Total Cost to Ratepayers</b>			
Example Single-Family Residence	X		
Example Commercial Connection	X		
<b>Residents with Private Wells</b>			
Mandatory Connection of Private Wells?		X	
Standby Charge, \$/Acre	X	X	X
<b>Connection Fee Comparison</b>			
Single Family Residential		If Connected	X
2" Meter		If Connected	X

## **8.0 FINANCIAL ASSESSMENT OF THE THREE OWNERSHIP SCENARIOS**

This section describes the financial analysis in detail, and includes results for all three Ownership Scenarios. The results for each Ownership Scenario are presented individually in Sections 8.2, 8.3, and 8.4. Section 8.5 shows a side by side comparison of selected parameters for the three Ownership Scenarios.

### **8.1 Methodology and Key Assumptions**

As described above in Section 7.1, three financial models were prepared: one for each Ownership Scenario. The financial models have several elements in common:

- 10-year projection period, starting July 1, 2020 and ending June 30, 2030.
- Identifying how each utility would structure the financial tracking of revenues and expenses: utilities typically create “Funds” which house certain types of revenues and expenses. As examples, most utilities have an Operating Fund, into which water rate revenues are put, and from which operation and maintenance expenses are paid. Many utilities have a separate fund for connection fees, where the fund’s revenues are connection fees and the funds expenses are development-related capital projects funded by connection fees. Each utility would do this differently, as discussed in Sections 8.2, 8.3, and 8.4 below.
- Projections of water rate revenues, using the applicable rate structure, current number of connections and current water use, projected development, and projected increases in water rate revenues.
- Projections of other types of revenues, including connection fees, standby charges, interest income, and (if applicable) ad valorem tax revenue.
- Projections of operation and maintenance expenses. This includes projecting the cost to purchase imported water and produce local groundwater, and the remaining costs to operate and maintain the water system.
- Identification of which capital costs are related to development, and which capital costs are related to providing service to the existing customer base.
- Identification of which capital costs would be funded on a pay-as-you-go basis, and which capital costs would be debt funded.
- Projected beginning and ending year reserve balances in each utility fund.
- Projected water rates, assuming that the water rate revenue increases are distributed equally among all connections.

The following are assumptions common to the three Ownership Scenarios.

- Inflation assumptions
  - Annual inflation of 2.5 percent per year
  - Personnel (wages and benefits) inflation of 2.5 percent per year
- Current connection and water use data
  - Number of connections by meter size and connection class per WMWD as of 1/15/2020, provided on 2/19/2020.
  - Metered water consumption: by month, by connection class, and by WMWD rate tier. Source: WMWD 2/19/2020. See Appendix B, Table B-2, lines 103 and 131.
  - Projected growth rate through 2030: calculated from data in Kennedy Jenks 2017 Draft WMWD Murrieta Retail Demand Projections. See Table B-2, line 154.
  - Meter equivalent calculations done separately for each agency using respective agency meter equivalent ratios. Meter equivalents include fire service connections.
- Projected future water demands and water source production
  - FY 19/20 water supply, local plus imported: 2,304 acre-feet per year (source: WMWD, based on estimate for FY 18/19).
  - Local groundwater production capped at 1,452 acre-feet per year after the North Well Improvements are complete. This based on an analysis done by WMWD, incorporating the pumping capacities of WMWD's two existing wells at 90 percent run time, and seasonal variations in water demand.
  - Metropolitan Water District imported water costs thru FY 29/30 (\$/acre-foot) are used, based on the proposed revised MWD 10-Year Financial Forecast released by MWD in early 2020.
- Projected capital improvement spending
  - Based on capital improvements shown in Sections 5 and 6 for each respective Ownership Scenario.
  - Escalated for inflation at 2.5 percent per year.
- Calculation of total costs to ratepayers
  - Example single-family residence:  $\frac{3}{4}$ -inch water meter using 18 ccf/month, where 8 of the 18 ccf/month is indoor water use. 18 ccf/month is the value used by WMWD in monthly water bill comparisons and is assumed to approximate an average water use by single-family residences in the Study Area. Where applicable, the land value of the property is \$80,000.
  - Example commercial connection: 2-inch water meter using 125 ccf/month. 125 ccf/month is the average water use for commercial connections in the Study Area with a 2-inch water meter. Where applicable, the land value of the property is \$200,000, and for purposes of Standby Charge calculations, the parcel is one acre in size.

### 8.2 WMWD Ownership Scenario

Components of the WMWD Ownership Scenario are described below.

#### 8.2.1 Overview

WMWD tracks revenues and expenditures for the Study Area in a series of four funds:

- Fund 230: Operating Fund. Most revenues are deposited into this Fund, including water rate revenues. Most expenses are paid from this fund, including all operation and maintenance (O&M) expenses.
- Fund 231: Connection Fee Fund. Connection fee revenues are deposited into this Fund. Capital expenses that support development are paid from this Fund.
- Fund 233: Distribution Fund. This Fund is not actively used by WMWD.
- Fund 235: Asset Replacement Fund. Revenues for this fund are primarily a transfer from Fund 230. Asset replacement projects are paid for from this Fund.

Table 8-1 shows the number of current and projected number of future Study Area connections by water meter size.

Table 8-2 shows the current WMWD rate structure. WMWD has a monthly Fixed System Charge that depends on water meter size. For the majority of water system connections that have a ¾-inch water meter, the Fixed System Charge is \$44.39 per month. WMWD typically adjusts water rates on January 1 of each year.



**Table 8-1. Projected Number of Water System Customers**

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	482	490	498	506	514	522	530	538	546	554	563
3/4"	1,968	1,999	2,031	2,063	2,096	2,129	2,163	2,198	2,233	2,269	2,305
1"	172	175	178	181	184	187	190	193	196	199	202
1.5"	77	79	81	83	85	87	89	91	93	95	97
2"	161	164	167	170	173	176	179	182	185	188	191
3"	5	5	5	5	5	5	5	5	5	5	5
4"	2	2	2	2	2	2	2	2	2	2	2
<b>Total</b>	<b>2,867</b>	<b>2,914</b>	<b>2,962</b>	<b>3,010</b>	<b>3,059</b>	<b>3,108</b>	<b>3,158</b>	<b>3,209</b>	<b>3,260</b>	<b>3,312</b>	<b>3,365</b>

Table 8-2. Calendar Year 2020 WMWD Rate Structure	
Fixed Charges Depending on Water Meter Size	Fixed System Charge, \$/month
5/8" Meter	\$32.00
3/4" Meter	\$44.39
1" Meter	\$68.56
1.5" Meter	\$129.28
2" Meter	\$154.50
3" Meter	\$384.49
4" Meter	\$744.16
Variable Charges	\$/CCF
Commodity Charges	
Tier 1 - Indoor Budget	\$2.006
Tier 2 - Outdoor Budget	\$4.286
Tier 3 - Inefficient	\$5.118
Tier 4 - Wasteful	\$5.558
Tier 5 - Unsustainable	\$6.438
Pumping Charge, Power Zone 8 - Grizzly Ridge	\$0.234

WMWD has a budget-based water rate structure, and WMWD's Commodity Charges are also shown in Table 8-2 for each of the five tiers.

The residential budget-based water rate tiers are:

- **Tier 1, Efficient Indoor Use, also referred to as the Indoor Budget:** The Indoor Budget is based on 60 gallons of water use per person per day. The default household size is 3 for single-family residences and 2 for apartments and condominiums.
- **Tier 2, Efficient Outdoor Use, also referred to as the Outdoor Budget:** The Outdoor Budget is described in more detail on WMWD's website, and is based on four factors: daily localized weather data, irrigated area, a landscape factor, and the number of days in the billing period. The landscape factor measures the specific amount of irrigation water required by each type of plant in the yard. An 80 percent factor is applied for customers connected prior to January 1, 2012 and a 70 percent factor is applied to customers installing a water meter after January 1, 2012. The sum of the Indoor Budget and the Outdoor Budget is called the Total Water Budget.
- **Tier 3, Inefficient Use:** Water use exceeding the Total Water Budget by up to 25 percent of the Total Water Budget.
- **Tier 4, Wasteful Use:** Water use exceeding the Total Water Budget by between 25 and 50 percent of the Total Water Budget.
- **Tier 5, Unsustainable Use:** Water use exceeding the Total Water Budget by more than 50 percent of the Total Water Budget.

The commercial budget-based water rate tiers are:

- **Tier 1, Efficient Indoor Use, also referred to as the Indoor Budget:** The Indoor Budget is determined each month and is based on 43 percent of that month's average water use during past years.
- **Tier 2, Efficient Outdoor Use, also referred to as the Outdoor Budget:** The Outdoor Budget is determined each month and is based on the remaining 57 percent of that month's average water use during the past three years. The sum of the Indoor Budget and the Outdoor Budget is called the Total Water Budget.
- **Tier 3, Inefficient Use:** Water use exceeding the Total Water Budget by up to 25 percent of the Total Water Budget.
- **Tier 4, Wasteful Use:** Water use exceeding the Total Water Budget by between 25 and 50 percent of the Total Water Budget.
- **Tier 5, Unsustainable Use:** Water use exceeding the Total Water Budget by more than 50 percent of the Total Water Budget.

Table 8-3 shows the current connection fees. A connection fee is a one-time charge payable by new development prior to connecting to the water system. They are typically updated each January 1.

Table 8-3 Calendar Year 2020 WMWD Connection Fees	
Water Meter Size	CY 2020 Connection Fee
5/8"	\$7,050
3/4"	\$7,050
1"	\$11,750
1.5"	\$23,499
2"	\$37,599

### 8.2.2 Projected Revenues

Projected revenues categorized by revenue type are provided below.

#### 8.2.2.1 Water Rates

Water rate revenues under WMWD's Calendar Year 2020 rates were calculated by FG Solutions based on WMWD's calendar year 2020 water rate schedule, along with connection and water use data provided by WMWD.

Future water rate revenue increases were estimated by FG Solutions based on providing sufficient revenues to fund projected water system expenses through FY 29/30 and meet WMWD's minimum reserve criteria in WMWD's Operating Fund (Fund 230) and Asset Replacement Fund (Fund 235). The projected increases in water rate revenues are shown in Table 8-4 and reserves are discussed in Section 8.2.4 below.

Table 8-4. Projected Water Rate Revenue, WMWD Ownership Scenario				
Fiscal Year	% Increase in Water Rate Revenues <sup>(a)</sup>	Projected Water Rate Revenues		
		At CY 2020 Rates <sup>(b)</sup>	From Future Rate Increases <sup>(c)</sup>	Total
FY 20/21	3.3%	\$5,539,097	\$91,395	\$5,630,492
FY 21/22	3.3%	\$5,628,784	\$281,690	\$5,910,474
FY 22/23	3.3%	\$5,719,924	\$484,453	\$6,204,377
FY 23/24	3.3%	\$5,812,539	\$700,358	\$6,512,897
FY 24/25	3.3%	\$5,906,653	\$930,104	\$6,836,757
FY 25/26	3.3%	\$6,002,834	\$1,174,536	\$7,177,370
FY 26/27	3.3%	\$6,100,580	\$1,434,372	\$7,534,952
FY 27/28	3.3%	\$6,199,919	\$1,710,430	\$7,910,349
FY 28/29	0.0%	\$6,300,875	\$1,868,776	\$8,169,651
FY 29/30	0.0%	\$6,403,474	\$1,899,207	\$8,302,681
(a) Rate increases presumed effective on January 1 of each year.				
(b) Increase in rate revenues at WMWD's Calendar Year 2020 Rates are from system growth.				
(c) See Appendix B, Table B-3 for more detail.				

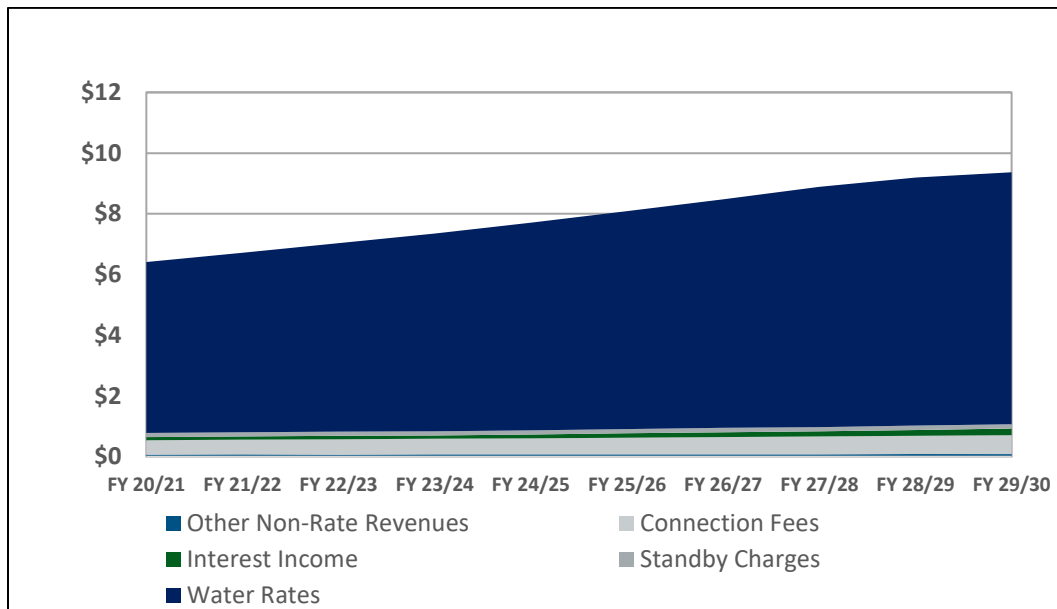
### 8.2.2.2 Other Revenues

Other revenues are from connection fee, Standby Charges, interest income, and other miscellaneous sources of revenue such as rents/leases, and delinquent penalties. Table 8-5 shows the projected average annual revenue from each revenue source over the 10-year financial planning period. Water rate revenues are projected to represent over 88 percent of total water system revenues. The next largest source of revenues are from connection fees.

Table 8-5. Average Annual Revenues, WMWD Ownership Scenario			
Type of Revenue	Projected Average Annual Revenue		
	Amount	Percentage	Note
Water Rates	\$7,019,000	88.8%	1, 2
Connection Fees	\$563,427	7.1%	2
Standby Charges	\$138,978	1.8%	2, 3
Interest Income	\$143,875	1.5%	2
Delinquent Penalties	\$53,045	0.7%	2
Other	\$6,244	0.1%	2
Total	\$7,924,568	100.0%	
Notes:			
(1) See Table 8-4.			
(2) See Appendix B, Table B-3 for more detail. Totals may not add up due to rounding.			
(3) Also referred to as Water Availability Charges by WMWD.			

Figure 8-1 shows projected annual revenues graphically, also showing that water rate revenues constitute the majority of water system revenues.





**Figure 8-1. Projected Revenues: WMWD Scenario, \$M**

### 8.2.3 Projected Expenses

#### 8.2.3.1 Source of Supply

Table 8-6 shows projected source of supply unit costs. WMWD purchases its water from EMWD at the Los Alamos interconnection point, and the projected cost per acre foot is shown below. The projected cost is based on EMWD's current cost, projected increases in MWD Tier 1 costs, and projected increases in EMWD's costs to deliver MWD water to the Los Alamos Interconnection. Also shown in Table 8-6 are WMWD's costs (excluding labor) to produce and treat local groundwater.

Projected source of supply expenses through FY 29/30 are calculated using the unit costs shown above and the projected volumes of purchased and locally produced groundwater shown in Table 8-6 above. Projected source of supply expenses are shown below in Table 8-7 along with all other O&M expenses.

#### 8.2.3.2 Other Operation and Maintenance

Table 8-7 shows projected O&M expenses, which includes the source of supply expenses as well as other components of O&M expenses. Currently, purchased water expenses and transmission & distribution system expenses (which are primarily labor and equipment expenses) are the largest components of O&M expenses. The G&A Allocation is a payment from the Operating Fund to the WMWD General Fund to cover centralized costs such as administration, human resources, payroll, accounting, legal, and Board of Directors services.

**Table 8-6. Projected Source of Supply Unit Costs, \$/acre-foot**

Description	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
MWD Tier 1 Treated Water <sup>(a)</sup>	1,078	1,131	1,183	1,237	1,270	1,306	1,336	1,370	1,403	1,442	1,486
Projected EMWD Los Alamos Rate <sup>(b)</sup>	1,350	1,409	1,469	1,532	1,573	1,618	1,656	1,699	1,741	1,789	1,843
Source of Supply <sup>(c)</sup>	224	229	235	241	247	253	259	266	273	279	286
Treatment <sup>(c)</sup>	90	92	94	96	99	101	104	106	109	112	115

(a) MWD Tier 1 Treated rate from WMWD 2/19/2020 per proposed MWD Updated 10-Year Financial Forecast. MWD costs are on a calendar year basis. The MWD cost in the FY 19/20 column is for calendar year 2020.

(b) This is the cost that EMWD charges WMWD for purchased water for the Study Area. Cost estimates were provided by WMWD on 2/19/2020.

(c) Source: WMWD, 2/19/2020, based on FY 18/19 actual expenses adjusted by rate of General Inflation for future years

**Table 8-7. Projected O&M Expenses, WMWD Ownership Scenario, \$**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Water Pumping	279,316	286,298	293,456	300,792	308,312	316,020	323,920	332,018	340,319	348,827
Transmission & Distribution	1,345,278	1,378,910	1,413,382	1,448,717	1,484,935	1,522,058	1,560,110	1,599,112	1,639,090	1,680,067
Customer Accounts	194,822	202,926	211,367	220,159	229,317	238,878	248,836	259,211	270,017	281,274
G&A Allocation	667,864	684,561	701,675	719,217	737,197	755,627	774,518	793,881	813,728	834,071
Other Operating Expenses	126,790	129,960	133,209	136,539	139,953	143,452	147,038	150,714	154,482	158,344
Purchased Water	1,318,210	1,431,664	1,553,099	1,657,486	1,769,890	1,880,495	2,000,664	2,124,645	2,261,783	2,411,685
Source of Supply	332,973	341,297	349,829	358,575	367,539	376,728	386,146	395,800	405,695	415,837
Treatment	133,284	136,616	140,031	143,532	147,120	150,798	154,568	158,432	162,393	166,453
Water Use Efficiency	51,199	52,479	53,791	55,135	56,514	57,927	59,375	60,859	62,381	63,940
Other Non-Operating Expense	3,403	3,488	3,575	3,665	3,756	3,850	3,946	4,045	4,146	4,250
<b>Total</b>	<b>\$4,453,138</b>	<b>\$4,648,199</b>	<b>\$4,853,415</b>	<b>\$5,043,818</b>	<b>\$5,244,534</b>	<b>\$5,445,832</b>	<b>\$5,659,122</b>	<b>\$5,878,718</b>	<b>\$6,114,034</b>	<b>\$6,364,748</b>

In general, all O&M expenses are escalated for inflation at a rate of 2.5 percent per year, except purchased water costs which are linked to MWD Tier 1 costs. Connection account expenses are also increased by the rate of system growth.

### 8.2.3.3 Repair and Replacement

WMWD is anticipating \$500,000 each year for infrastructure repair and replacement expenses, in addition to capital expenses described in Sections 5 and 6.

### 8.2.3.4 Capital Project Funding

Table 8-8 shows the how the capital projects shown in Sections 5 and 6 would be funded. The majority of the projected approximately \$62 million in capital investment is related to development. Some of this (approximately \$12.4 million) would be funded by WMWD and the cost incorporated into its connection fee.

Approximately \$12 million is related to improving service to existing connections, including construction of additional storage and related pipelines to connect the storage to the water system. Approximately \$5 million of the capital investment is to replace legacy small diameter pipelines.

**Table 8-8. Projected Capital Improvement Funding, WMWD Ownership Scenario**

Project	Estimated Cost, 2020 \$ (Note 1)	\$ to Existing Connections	\$ to Future Development		Note
			Funded by WMWD	Funded by Developers	
Storage	8,328,000	4,610,842	3,717,158		2
Pipelines Associated with Storage	4,157,000	2,301,546	1,855,454		2
Expansion CIP North of Murrieta Creek	17,120,000			17,120,000	3,4
Expansion CIP South of Murrieta Creek	20,388,000			20,388,000	3,4
WMWD Hydraulic Improvements	1,468,000		1,468,000		3,5
Supply Improvements Through EMWD	5,379,000		5,379,000		3,5
Legacy (Small Diameter) Improvements	4,947,000	4,947,000			6
New Well No. 3	0	0	0		2
<b>Total</b>	<b>\$61,787,000</b>	<b>\$11,859,388</b>	<b>\$12,419,612</b>	<b>\$37,508,000</b>	

**Notes:**

- (1) Costs were developed by West Yost for this analysis and are shown in Sections 5 and 6 of the report.
- (2) Project benefits both existing connections and future development. Cost division between existing connections and future development is based on the ratio of existing meter equivalents to buildout meter equivalents.
- (3) Project benefits future development only and would not be done if there was no future development.
- (4) WMWD's existing policy is to not participate finance through proceedings pursuant to the Mello-Roos Community Facilities Act of 1982. See Table 7.2 for possible funding alternatives.
- (5) For facilities of this magnitude, WMWD would fund the project, and incorporate the cost in its connection fee. Connection fee revenues, over time, would pay for the project.
- (6) These legacy (small diameter) improvements are needed to support existing development.



### 8.2.3.5 Debt Service

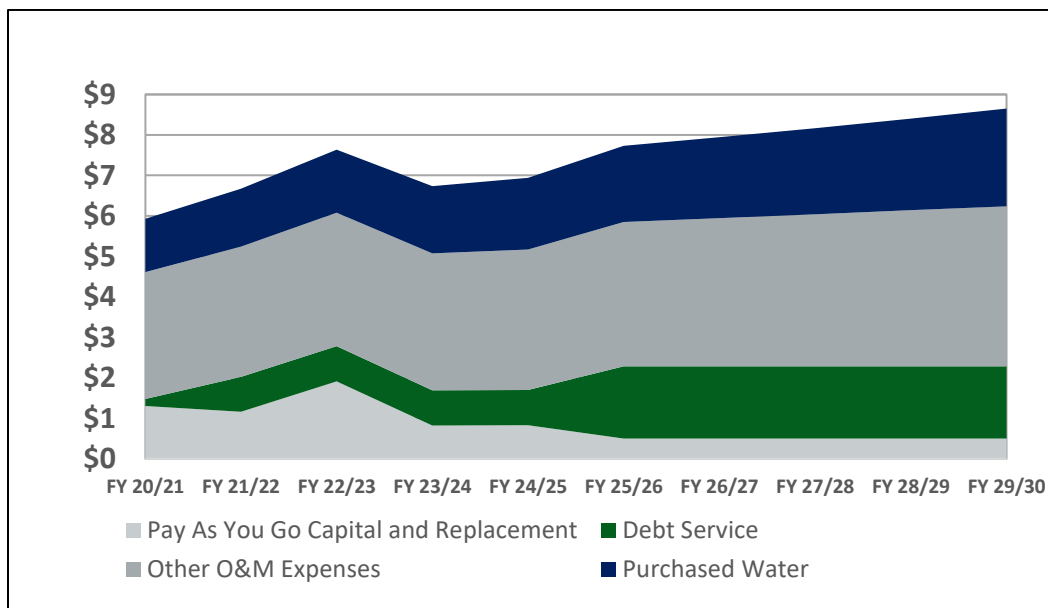
WMWD is currently making debt service payments on two loans.

- A 2010 Revenue Bond with annual debt service payments of approximately \$67,000 and an outstanding principal balance of \$998,460.
- A \$2 million interfund loan from the WMWD's General Fund to the Murrieta Water System to partially fund the construction of the North Well. The annual debt service payment is \$108,743, and the outstanding principal balance is \$2,000,000.

For the purposes of this analysis, all but one of the of the WMWD funded improvements shown in Table 8-8 would be debt financed. Anticipated debt issuance terms are levelized principal and interest payments over a 30-year term at an interest rate of 4 percent. For each project, the debt proceeds equal the estimated cost of the project plus 10 percent to cover costs of issuance and a capitalized bond reserve. Table B-3 in Appendix B shows more detailed debt service calculations.

The WMWD Hydraulic Improvements would be funded on a pay as you go basis, because the project cost (at approximately \$1.5 million) is comparatively small.

Figure 8-2 shows total projected water system expenses funded by WMWD each year through FY 29/30.



**Figure 8-2. Projected Expenses: WMWD Scenario, \$M**

### 8.2.4 Projected Utility Reserves

WMWD maintains a reserve balance in each of its four funds. As of July 1, 2020, the projected reserve balance in each fund is (rounded to the nearest \$100,000):

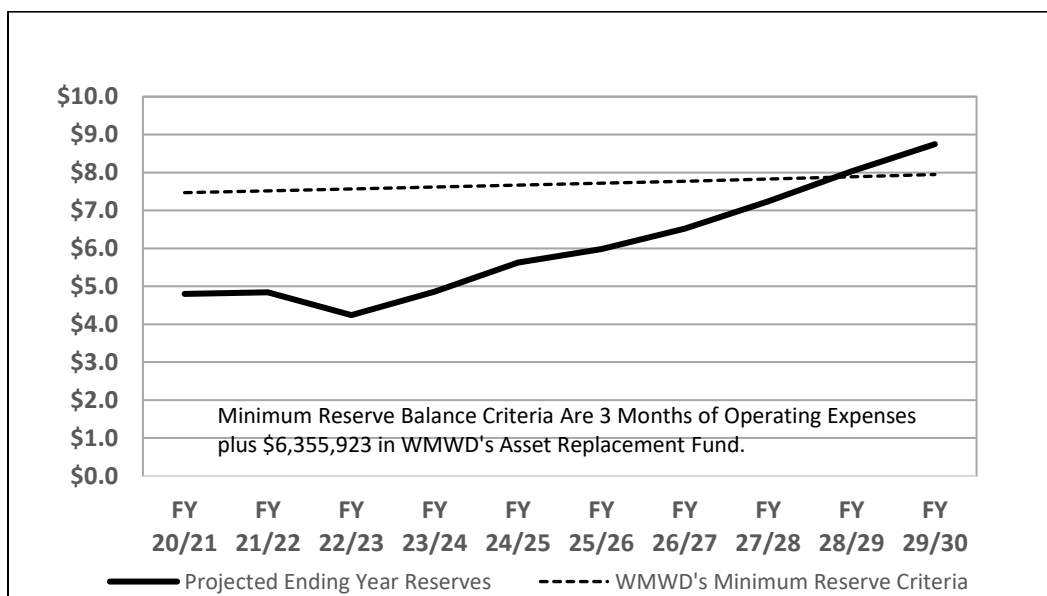
- Operating Fund (Fund 230): \$2.5 million
- Connection Fee Fund (Fund 231): -\$0.8 million
- Distribution Fund (Fund 233): \$0.3 million
- Asset Replacement Fund (Fund 235): \$2.4 million

There is currently a negative balance in the Connection Fee Fund, which implies a de facto loan from the Operating Fund to the Connection Fee Fund.

WMWD maintains the following fiscal policies related to reserve balances:

- **Operating Fund (Fund 230):** target balance of between three and six months of operating expenses
- **Connection Fee Fund (Fund 231):** no policy established
- **Distribution Fund (Fund 233):** no policy established
- **Asset Replacement Fund (Fund 235):** WMWD staff provided a target reserve balance of between \$6,355,923 and \$14,235,000

Figure 8-3 shows the projected ending year reserve balance under the WMWD Ownership Scenario. It represents the combined reserve balance in the four WMWD funds. Also shown in Figure 8-3 are the minimum reserve balances according to WMWD's reserve policies. The projected revenue impacts described above were developed to meet the reserve criteria at the end of the 10-year planning period.



**Figure 8-3. Projected Ending Year Reserve Balance: WMWD Scenario, \$M**

### 8.2.5 Projected Total Cost of Water

The projected total cost of water is the sum of the water bill and the standby charge. It is shown for two example connections in Figures 8-2 and 8-3.

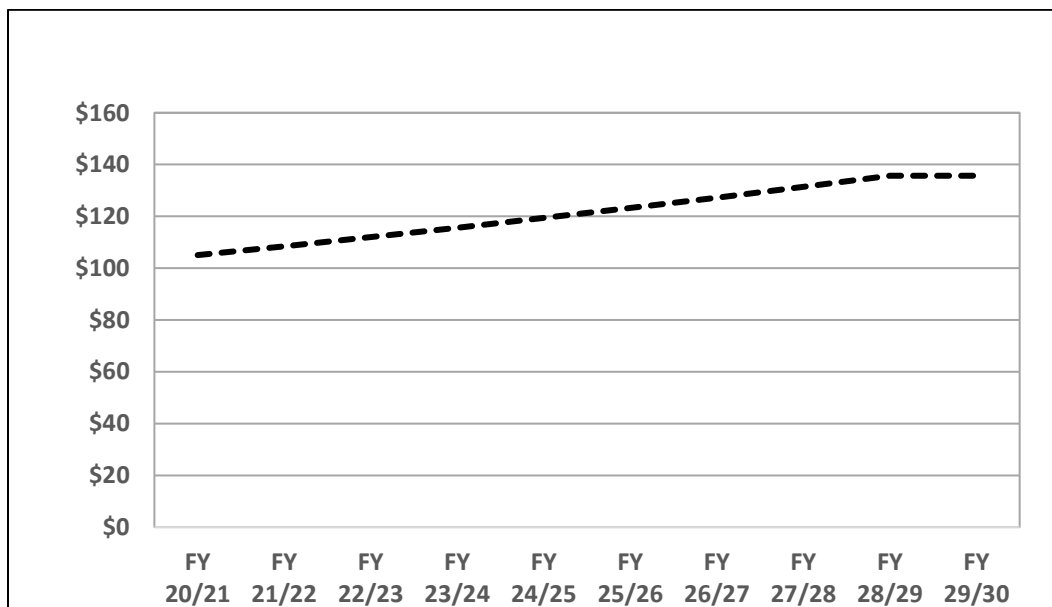
#### Example Single Family Residential Connection

- ¾-inch water meter
- Monthly water use of 18 ccf, with 8 ccf/month in Tier 1 and 10 ccf/month in Tier 2

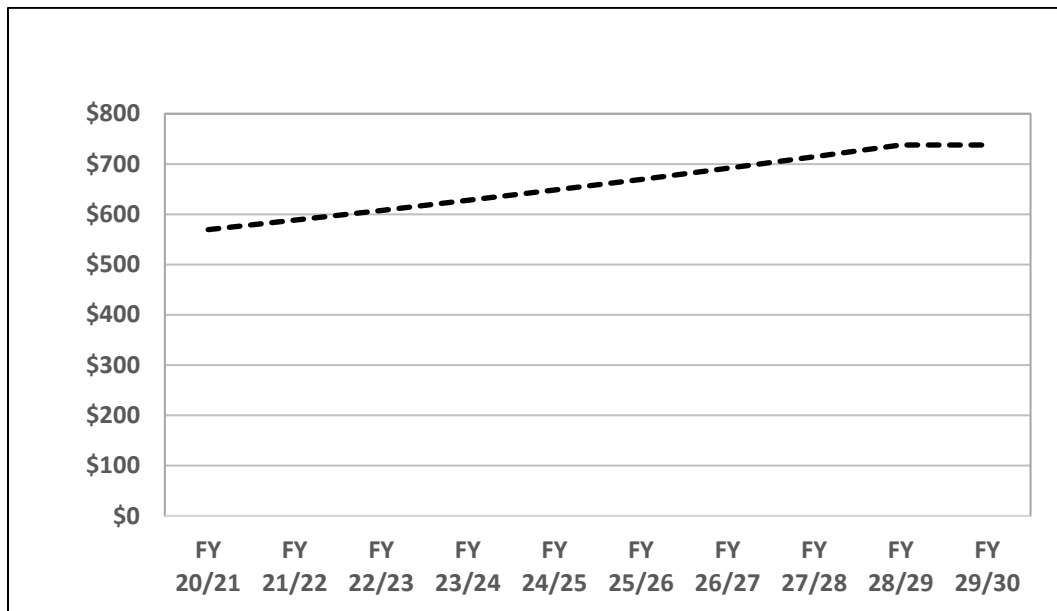
#### Example Commercial Connection

- 2-inch water meter
- Monthly water use of 125 ccf
- 1 acre parcel

The graphs below show the effect of the projected annual 3.3 percent revenue increases through FY 27/28. As described above, in this analysis, the projected annual revenue increases are applied across the board percentage increases to all connections. No changes in WMWD's rate structure are contemplated in this analysis other than applying across the board percentage increases. If WMWD remains the system owner, it may choose to adjust rate structures to reflect WMWD policies or future cost of service analyses, and the total cost of water would be different from what is shown in Figures 8-4 and 8-5.



**Figure 8-4. Projected Total Water Cost: WMWD Scenario  
(Single-Family Residence, ¾-inch Meter, 18 CCF/month, Power Zone 7)**



**Figure 8-5. Projected Total Water Cost: WMWD Scenario**  
(Commercial, 2-inch Meter, 125 CCF/month, Power Zone 7, 1 acre)

### 8.3 RCWD Ownership Scenario

Details of the RCWD Ownership Scenario are described below.

#### 8.3.1 [Overview](#)

If Rancho California Water District acquires the Study Area, from a financial perspective, it would operate the utility in a financially distinct manner. Policy direction from RCWD staff was that RCWD would do a cost of service study after acquisition to identify whether the Study Area operation, if integrated into RCWD's Santa Rosa Division, would result in any subsidies. If material subsidies were not identified, RCWD would consider an integrated operation, where the Study Area would become part of RCWD's Santa Rosa Division.

Like the WMWD Ownership Scenario described in Section 8.2, the financial projections for the RCWD Ownership Scenario cover a 10-year projection period ending in FY 29/30. Separate revenue and expense projections are made corresponding to RCWD's policy directions, and these revenue and expense projections are shown below and in Appendix B, Table B-4.



For the purposes of this analysis, the initial rate structure applied to the Study Area under the RCWD Ownership Scenario is RCWD's rate structure for its Santa Rosa Division. Table 8-9 shows RCWD's Santa Rosa Division FY 19/20 Rate Structure.

<b>Table 8-9. FY 19/20 RCWD Santa Rosa Division Rate Schedule</b>	
<b>Monthly Service Charge Depending on Water Meter Size</b>	<b>\$/month</b>
5/8" Meter <sup>(a)</sup>	\$29.51
3/4" Meter	\$44.04
1" Meter	\$66.49
1.5" Meter	\$117.50
2" Meter	\$180.79
3" Meter	\$532.49
4" Meter	\$1,047.78
6" Meter	\$1,669.23
8" Meter or Larger	\$2,358.21
<b>Commodity Charge<sup>(b)</sup></b>	<b>\$/CCF</b>
<b>Residential, Multi Family &amp; Landscape</b>	
Tier 1	\$1.286
Tier 2	\$2.255
Tier 3	\$3.235
Tier 4	\$7.597
<b>Commercial, Industrial, Ag, Domestic, and Other</b>	
Tier 1	\$2.044
Tier 2	\$3.235
Tier 3	\$7.597
<p>(a) RCWD does not have 5/8" meters and does not have a Monthly Service Charge for 5/8" meters. Under the RCWD Ownership Scenario for connections with 5/8" meters in the Study Area, RCWD would apply its 3/4" Monthly Service Charge, adjusted for the meter equivalent ratio between 5/8" meters and 3/4" meters.</p> <p>(b) RCWD has energy charges for portions of its Santa Rosa Division that are not shown in this table. RCWD's energy charges are not expected to be applicable for the majority of the Study Area.</p>	

RCWD's rate structure is similar to WMWD's. There is a Monthly Service Charge that depends on water meter size. RCWD doesn't have 5/8-inch water meters in the Santa Rosa Division, so there is no Monthly Service Charge established for a 5/8-inch water meter. Per RCWD staff, RCWD would calculate a Monthly Service Charge for 5/8-inch water meters using RCWD's meter equivalent ratios, and the rate shown in Table 8-9 reflects this calculation.

RCWD also has a budget-based water rate structure, with four tiers for single-family residences, multi-family residences, and landscape connections. A three tier budget-based rate structure is established for all other connections.

Table 8-10 compares RCWD's and WMWD's rate structures. For residential connections, the volume of water consumed in Tiers 1 and 2 will be approximately equal under RCWD's and WMWD's rate structures. For RCWD's Outdoor Water Budget (where the Tier 2 rate is applied), RCWD uses an Evapotranspiration Adjustment Factor (ETAF, equivalent to WMWD's Landscape Factor) of 75 percent for the first 30,000 square feet of irrigable area, and a 60 percent ETAF for irrigable area above 30,000 square feet.

For residential connections exceeding their water budget, RCWD's Tier 3 covers the same water use as the combination of WMWD's Tier 3 and Tier 4. In terms of water use, RCWD's Tier 4 is analogous to WMWD's Tier 5.

For commercial, industrial, and institutional connections, RCWD's Tier 1 use is approximately the combination of WMWD's Tier 1 and Tier 2 use, and RCWD's Tier 2 use is approximately the combination of WMWD's Tier 3 and Tier 4 use.

Table 8-10. Comparison of WMWD and RCWD Rate Structures				
Tier	WMWD Residential	RCWD Residential	WMWD CII	RCWD CII
Tier 1	100% IWB	100% IWB	90% TWB	100% AWB
Tier 2	100% OWB	100% OWB	10% TWB	50% AWB
Tier 3	25% TWB	50% TWB	25% TWB	Above Tier 2
Tier 4	25% TWB	Above Tier 3	25% TWB	
Tier 5	Above Tier 4		Above Tier 4	
	Residential		CII (Commercial, Industrial, Institutional)	
	RCWD Tier 1 Use = WMWD Tier 1 Use		RCWD Tier 1 Use = WMWD Tier 1 + Tier 2 Use	
	RCWD Tier 2 Use = WMWD Tier 2 Use		RCWD Tier 2 Use = WMWD Tier 3 + Tier 4 Use	
	RCWD Tier 3 Use = WMWD Tier 3 + Tier 4 Use		RCWD Tier 3 Use = WMWD Tier 5 Use	
	RCWD Tier 4 Use = WMWD Tier 4 Use			
	CII = Commercial, Industrial, Institutional IWB = Indoor Water Budget OWB = Outdoor Water Budget TWB = Total Water Budget AWB = Annual Water Budget			

Table 8-11 shows the current capacity charges for RCWD's Santa Rosa Division. The capacity charge for a new ¾-inch water meter is \$2,537 and for a new 1-inch meter, the capacity charge is \$4,313. RCWD's capacity charges are lower than WMWD's connection fees.

Table 8-11. FY 19/20 RCWD Santa Rosa Division Capacity Charges	
Water Meter Size	FY 19/20 Capacity Charge
5/8" Meter	\$1,700
¾" Meter	\$2,537
1" Meter	\$4,313
1.5" Meter	\$8,372
2" Meter	\$13,445
2" Turbine Meter	\$25,367
3" Meter	\$42,363
4" Meter	\$84,471
6" Meter	\$135,204
8" Meter or Larger	\$191,518

### 8.3.2 Projected Revenues

Projected revenues by revenue type are detailed below.

#### 8.3.2.1 Water Rates

Water rate revenues under RCWD's FY 19/20 Santa Rosa Division rates were calculated by FG Solutions based on the rate schedule shown above in Table 8-9, along with connection and water use data provided by WMWD. The connection and water use data under the RCWD Ownership Scenario are the same as under the WMWD Ownership Scenario (and shown in Section 8.2).

Future water rate revenue increases were estimated by FG Solutions based on providing sufficient revenues to fund projected water system expenses through FY 29/30 and meet RCWD's minimum reserve criteria. The projected increases in water rate revenues are shown in Table 8-12 and reserves are discussed in Section 8.3.4 below.

<b>Table 8-12. Projected Water Rate Revenue, RCWD Ownership Scenario</b>				
<b>Fiscal Year</b>	<b>% Increase in Water Rate Revenues<sup>(a)</sup></b>	<b>Projected Water Rate Revenues</b>		
		<b>At FY 19/20 Rates<sup>(b)</sup></b>	<b>Rate Increases<sup>(c)</sup></b>	<b>Total</b>
FY 20/21	2.0%	\$3,978,531	\$79,571	\$4,058,102
FY 21/22	2.0%	\$4,042,950	\$163,335	\$4,206,285
FY 22/23	2.0%	\$4,108,412	\$251,468	\$4,359,880
FY 23/24	2.0%	\$4,174,934	\$344,149	\$4,519,083
FY 24/25	2.0%	\$4,242,533	\$441,567	\$4,684,100
FY 25/26	2.0%	\$4,311,616	\$543,963	\$4,855,579
FY 26/27	2.0%	\$4,381,824	\$651,515	\$5,033,339
FY 27/28	2.0%	\$4,453,175	\$764,430	\$5,217,605
FY 28/29	0.0%	\$4,525,688	\$776,878	\$5,302,566
FY 29/30	0.0%	\$4,599,382	\$789,527	\$5,388,909
(a) Rate increases presumed effective on July 1 of each year. (b) Increase in rate revenues at RCWD's FY 19/20 Rates are from system growth. (c) See Appendix B, Table B-4 for more detail.				

### 8.3.2.2 Ad Valorem Taxes

RCWD currently charges an Ad Valorem tax to connections in its Santa Rosa Division. The current Ad Valorem tax rate is \$0.50 per year per \$100 of assessed land value. RCWD staff reports that Ad Valorem tax revenues are typically used for capital expenses, including paying debt service. RCWD's policy direction for this FMSR is that if possible, RCWD would apply an Ad Valorem tax to the Study Area as well.

FG Solutions obtained parcel data from the City of Murrieta, which contains land value for every parcel in the Study Area. With detailed calculations in Appendix B, Table B-4, the estimated annual Ad Valorem tax revenues in the Study Area for parcels currently served by WMWD is approximately \$2,040,000. If RCWD applies the Ad Valorem tax to the Study Area, then parcels not currently receiving water service from WMWD, EMWD, or RCWD in the Study Area would also pay the Ad Valorem tax. However, the revenue from these parcels was not included in this financial analysis.

In future years, the revenue from the Ad Valorem tax is assumed to increase by the rate of land inflation, assumed to be 2.5 percent per year. The Ad Valorem rate of \$0.50 per \$100 of assessed land value is not expected to change.



### 8.3.2.3 Water Rate Surcharge

If RCWD is not able to apply an Ad Valorem tax, or chooses not to, RCWD indicated (as policy direction from staff) that RCWD would apply a revenue-neutral water rate surcharge to recover the same amount of revenue as the Ad Valorem tax would have collected.

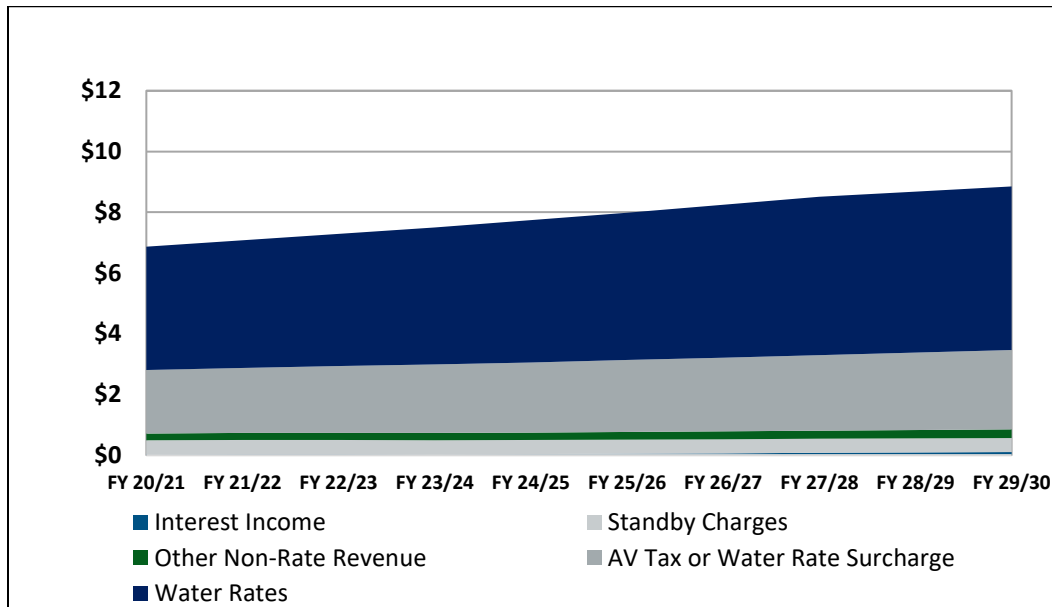
Initially, the water rate surcharge is intended to collect approximately \$2,040,000 per year, equivalent to the projected revenue from the Ad Valorem tax. This represents approximately 51.26 percent increase to the Monthly Service Charges and Commodity Charges shown in Table 8-9. In future years, the amount of revenue from the Water Rate Surcharge would increase by 2.5 percent per year, to maintain consistency with the concept of collecting the same amount of revenue that the Ad Valorem tax would have.

### 8.3.2.4 Other Revenues

Besides revenues from water rates, the Ad Valorem tax, and/or the water rate surcharge, there are additional smaller sources of utility revenue. Table 8-13 shows the projected annual revenue from each revenue source over the 10-year financial planning period. Water rate revenues and either the Ad Valorem tax or the water rate surcharge would combine for over 90 percent of total water system revenues. Smaller amounts of revenue are anticipated from Standby Charges, Capacity Charges, interest income, delinquent penalties, and other miscellaneous sources.

<b>Table 8-13. Average Annual Revenues, RCWD Ownership Scenario</b>			
Type of Revenue	Projected Average Annual Revenue		
	Amount	Percentage	Note
Water Rates	\$4,762,545	60.5%	1, 2
Ad Valorem Tax or Water Rate Surcharge	\$2,342,011	29.7%	2
Capacity Charges	\$194,761	2.5%	2
Standby Charges	\$462,731	5.9%	2
Interest Income	\$53,499	0.7%	2
Delinquent Penalties	\$53,045	0.7%	2
Other	\$4,244	0.1%	2
<b>Total</b>	<b>\$7,872,836</b>	<b>100.0%</b>	
Notes:			
(1) See Table 8-12.			
(2) See Appendix B, Table B-4 for more detail. Totals may not add up due to rounding.			

Figure 8-6 shows projected Study Area revenues for each year through FY 29/30 under the RCWD Ownership Scenario. This graph shows the relative importance of water rate revenues and the Ad Valorem Tax/Water Rate Surcharge.



**Figure 8-6. Projected Revenues: RCWD Scenario, \$M**

### 8.3.3 Projected Expenses

Projected expenses by type are described below.

#### 8.3.3.1 Source of Supply

Under the RCWD Ownership Scenario, RCWD would provide imported water without it being delivered at the Los Alamos interconnection point from EMWD. For the purposes of this analysis, the unit cost per acre foot of imported water would be equal to the MWD Tier 1 Treated Rate plus 10 percent. The 10 percent factor is to cover MWD's Capacity Charges and Ready to Serve Charges. Projected source of supply expenses are shown below in Table 8-14 along with other O&M expenses.

#### 8.3.3.2 Other Operation and Maintenance

Table 8-14 shows projected O&M expenses, which includes the source of supply expenses as well as other components of O&M expenses. Many of the projected O&M expenses shown in this RCWD Ownership Scenario are projected to be the same as under the WMWD Ownership Scenario. The exceptions are purchased water, because RCWD would supply imported water in a different manner and with a different cost structure than WMWD.

In general, all O&M expenses are escalated for inflation at a rate of 2.5 percent per year, except purchased water costs which are linked to MWD Tier 1 costs. Connection account expenses are also increased by the rate of system growth.

**Table 8.14. Projected O&M Expenses, RCWD Ownership Scenario**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Water Pumping	279,316	286,298	293,456	300,792	308,312	316,020	323,920	332,018	340,319	348,827
Transmission & Distribution	1,345,278	1,378,910	1,413,382	1,448,717	1,484,935	1,522,058	1,560,110	1,599,112	1,639,090	1,680,067
Customer Accounts	194,822	202,926	211,367	220,159	229,317	238,878	248,836	259,211	270,017	281,274
G&A Allocation	667,864	684,561	701,675	719,217	737,197	755,627	774,518	793,881	813,728	834,071
Other Operating Expenses	126,790	129,960	133,209	136,539	139,953	143,452	147,038	150,714	154,482	158,344
Purchased Water	1,136,889	1,240,134	1,349,234	1,452,788	1,550,253	1,650,218	1,752,904	1,861,616	1,978,049	2,106,981
Source of Supply	332,973	341,297	349,829	358,575	367,539	376,728	386,146	395,800	405,695	415,837
Treatment	133,284	136,616	140,031	143,532	147,120	150,798	154,568	158,432	162,393	166,453
Water Use Efficiency	51,199	53,328	55,547	57,857	60,264	62,776	65,394	68,120	70,960	73,918
Other Non-Operating Expenses	3,403	3,488	3,575	3,665	3,756	3,850	3,946	4,045	4,146	4,250
Total	\$4,271,818	\$4,457,518	\$4,651,306	\$4,841,842	\$5,028,647	\$5,220,406	\$5,417,381	\$5,622,949	\$5,838,879	\$6,070,023

## 8.3.3.3 Repair and Replacement

RCWD is anticipating \$500,000 each year for infrastructure repair and replacement expenses within the Study Area, in addition to capital expenses described in Sections 5 and 6. RCWD is also anticipating that the Study Area would contribute \$540,00 per year toward repair and replacement of RCWD facilities that will provide water source, storage, and transmission services to the Study Area.

## 8.3.3.4 Capital Project Funding

Table 8-15 shows how the capital projects shown in Sections 5 and 6 would be funded. The majority of the projected approximately \$54 million in capital investment is related to development. Some of this (approximately \$2.3 million) would be funded by RCWD and the cost incorporated into its connection fee.

Approximately \$14.6 million is related to improving service to existing connection, the majority of which is buying into RCWD's existing facilities located in its Santa Rosa Division. These existing facilities in the Santa Rosa Division that would benefit existing Study Area customers, including storage and transmission facilities. As with the WMWD Ownership Scenario, approximately \$5 million of the capital investment is to replace legacy small diameter pipelines.

## 8.3.3.5 Debt Service

For the purposes of this analysis, RCWD would issue debt to pay for all of the RCWD-funded improvements in Table 8-15.

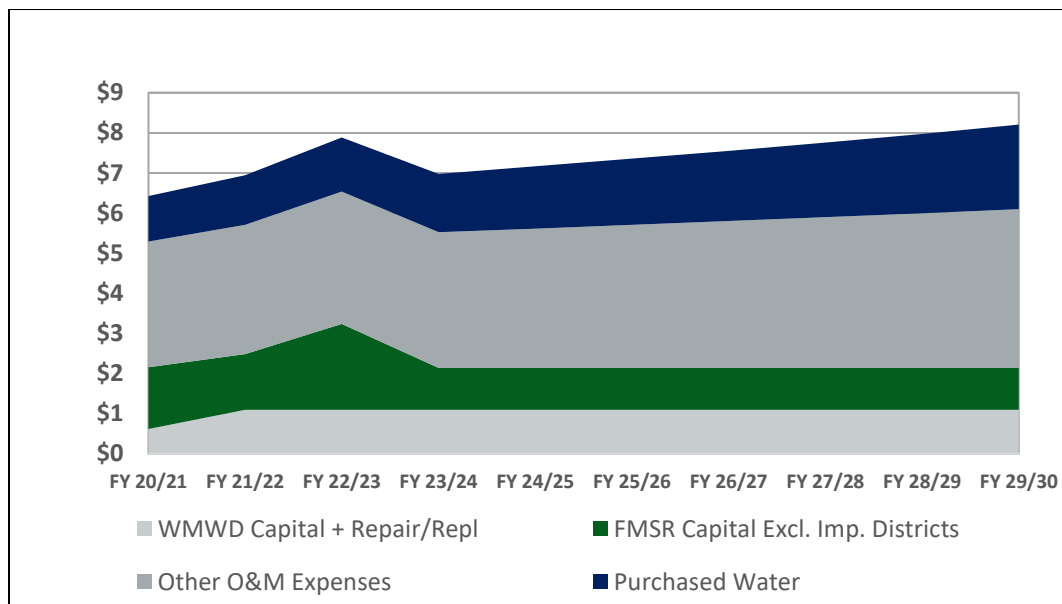
<b>Table 8-15. Projected Capital Improvement Funding, RCWD Ownership Scenario</b>				
Project	Estimated Cost, 2020 \$	Benefits Existing Customers, RCWD Funded	Benefits Future Development	
			Funded by RCWD	Funded by Developers ID, or CFD
Buy-In to RCWD for Existing Customers	9,659,628	9,659,628		
Expansion CIP North of Murrieta Creek	17,120,000			17,120,000
Expansion CIP South of Murrieta Creek	20,388,000			20,388,000
RCWD Hydraulic Improvements	2,255,000		2,255,000	
Legacy (Small Diameter) Improvements	4,947,000	4,947,000		
<b>Total</b>	<b>\$54,369,628</b>	<b>\$14,606,628</b>	<b>\$2,255,000</b>	<b>\$37,508,000</b>
<b>Notes:</b> <ol style="list-style-type: none"> <li>(1) RCWD anticipates requiring existing Murrieta Study Area customers to buy into RCWD facilities, including storage facilities, distribution facilities, and accessing MWD connections. This buy-in eliminates the need to separately build additional reservoir storage.</li> <li>(2) Project benefits future development only and would not be done if there was no future development.</li> <li>(3) Under some circumstances, RCWD would accept an Assessment District or related type of financing for these improvements. For this analysis, these improvements would be funded either directly by developers or through an Assessment District. They would not be funded directly by RCWD.</li> <li>(4) For facilities of this magnitude, RCWD would fund the project, and incorporate the cost in its Capacity Charge. Capacity Charge revenues, over time, would pay for the project.</li> </ol>				



Anticipated debt issuance terms are levelized principal and interest payments over a 30-year term at an interest rate of 4 percent. For each project, the debt proceeds equal the estimated cost of the project plus 10 percent to cover costs of issuance and a capitalized bond reserve. Table B-4 in Appendix B shows more detailed debt service calculations.

RCWD would not pay debt service on the existing WMWD debt described in Section 8.2.3. Instead, as described below, some of the existing reserves associated with the Study Area (described in Section 8.2.4 above) would be retained by WMWD to retire WMWD's existing debt.

Figure 8-7 shows projected RCWD-funded Study Area expenses under the RCWD Ownership Scenario.



**Figure 8-7. Projected Expenses: RCWD Scenario, \$M**

### 8.3.4 Projected Utility Reserves

Upon acquisition of the water system, WMWD would transfer its reserves associated with the Study Area to RCWD, less an amount needed to repay the existing two WMWD debt issuances described in Section 8.2.3. The estimated reserve amount transferred is approximately \$1.3 million, with calculations shown in Table B-4 of Appendix B.

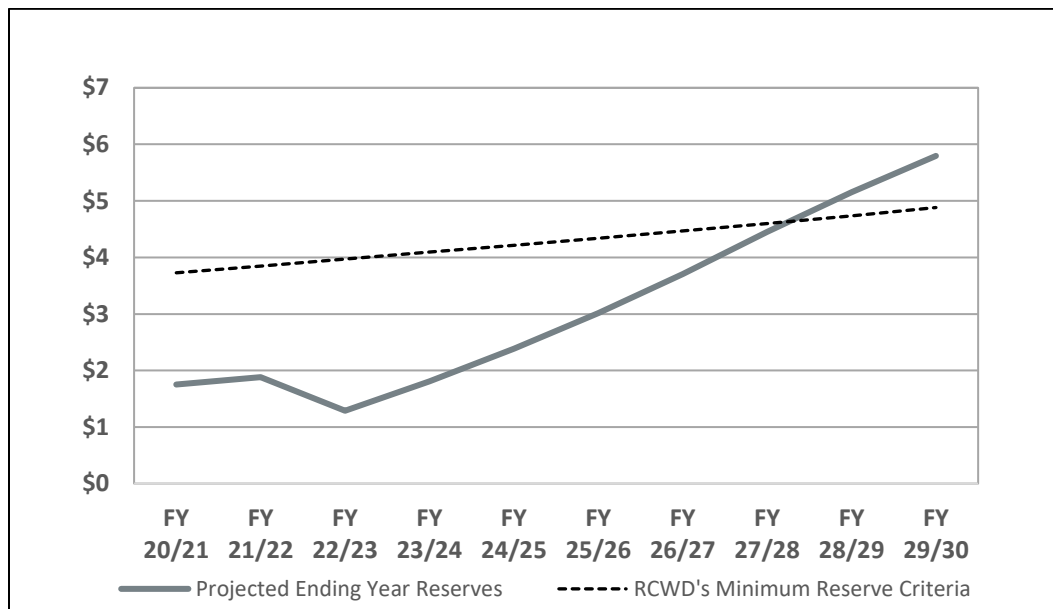
RCWD's policy direction is that it would apply its reserve criteria applicable to its Santa Rosa Division to the Study Area, acknowledging that reserves in the Study Area would accumulate over the 10-year planning period to meet reserve criteria. The reserve criteria are:

- Working capital reserve: within five years, accumulate four months' worth of the Study Area operating budget
- Drought reserve: within 10 years, accumulate 30 percent of the cost of local supply volume at MWD's Tier 1 untreated rate effective at the end of the fiscal year.

- Rate stabilization fund reserve: within 10 years, accumulate three months of Operating Budget within ten years.
- Risk management reserve: within 10 years, accumulate \$750,000 plus 1 percent of current gross plant value.

RCWD also has a water replenishment reserve, which would not be applicable to the Study Area.

Figure 8-8 shows the projected reserves associated with the Study Area under the RCWD Ownership Scenario, indicating that the cumulative reserves meet the RCWD criteria by the end of the 10-year planning period.



**Figure 8-8. Projected Ending Year Reserve Balance: RCWD Scenario, \$M**

### 8.3.5 Projected Total Cost of Water

The projected total cost of water is the sum of the water bill, the standby charge, and either the Ad Valorem Tax or the water rate surcharge. It is shown for two example connection in Figures 8-9 and 8-10.

#### Example Single Family Residential Connection

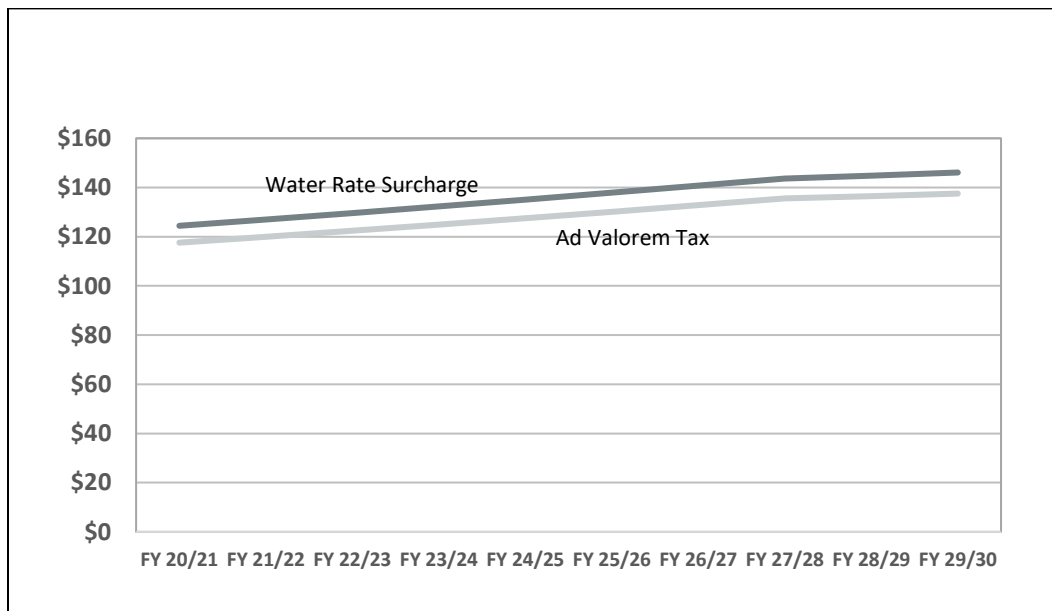
- 3/4-inch water meter
- Monthly water use of 18 ccf, with 8 ccf/month in Tier 1 and 10 ccf/month in Tier 2
- Assessed land value of \$80,000

### Example Commercial Connection

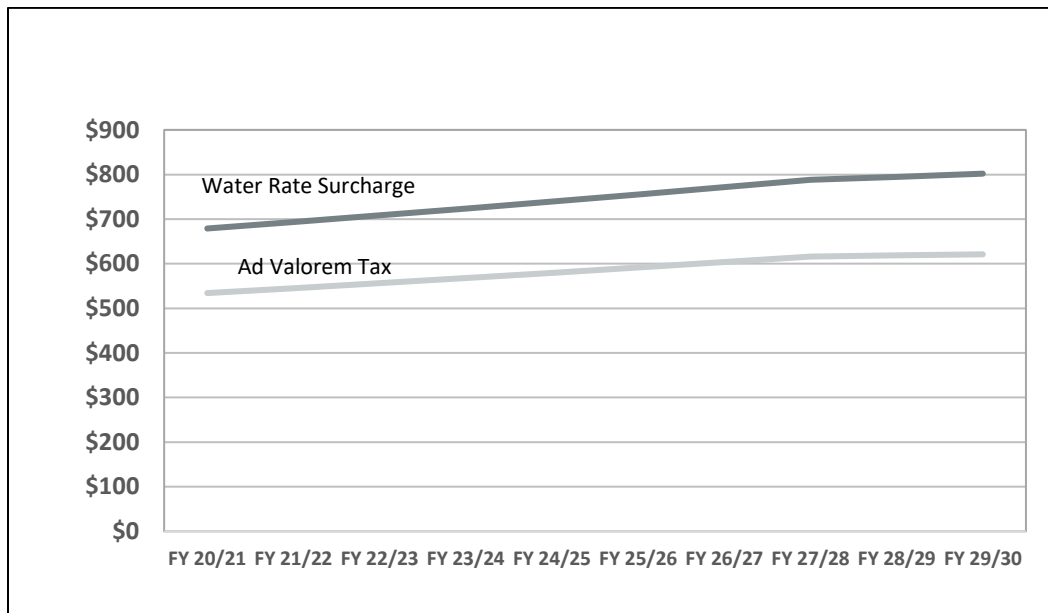
- 2-inch water meter
- Monthly water use of 125 ccf
- 1 acre parcel
- Assessed land value of \$200,000

In Figures 8-9 and 8-10, separate total cost projections are shown for (a) the scenario where RCWD applies an Ad Valorem Tax, and (b) the scenario where RCWD applies a water rate surcharge. For the examples shown, the total cost is higher under an Ad Valorem Tax, but that would not be the case for all connections. Connections with high land value relative to water use would see a higher total cost with an Ad Valorem Tax, and connections with high water use relative to land value would see a higher total cost with a water rate surcharge.

The graphs below show the effect of the projected annual 2.0 percent water rate revenue increases through FY 27/28. As described above, in this analysis, the projected annual revenue increases are applied across the board percentage increases to all connections. No changes in RCWD's rate structure are contemplated in this analysis other than applying across the board percentage increases. If RCWD acquires the water system, it may choose to adjust rate structures to reflect RCWD policies or future cost of service analyses, and the total cost of water would be different from what is shown in Figures 8-9 and 8-10.



**Figure 8-9. Projected Monthly Total Cost (Water Bill + AV Tax/Surcharge + Standby):  
RCWD Scenario (SFR, ¾-inch Meter, 18 CCF/month, \$80K Land Value)**



**Figure 8-10. Projected Monthly Total Cost (Water Bill + AV Tax/Surcharge + Standby): RCWD Scenario (Commercial, 2-inch Meter, 125 CCF/month, \$200K Land Value, 1 acre)**

## 8.4 EMWD Ownership Scenario

The components of the EMWD Ownership Scenario are described below.

### 8.4.1 Overview

If Eastern Municipal Water District acquires the Study Area, from a financial and operational perspective, it would operate the utility in a financially integrated manner. EMWD has proposed a methodology to assess revenues and expenditures in the Study Area, and to fund the capital projects identified in Sections 5 and 6.

Key aspects of this methodology are:

#### Revenues

1. Upon acquisition of the system, EMWD would retain WMWD's existing rate structure, rate tier definitions, and water budget methodology for the Study Area with one adjustment.
  - a. EMWD would reduce WMWD's Fixed System Charge by 20 percent. For the majority of Study Area connections with a ¾-inch water meter, this would reduce water bills by \$8.88 per month.
  - b. In this FMSR, the water rates that EMWD would apply in the Study Area are referred to as "Adjusted WMWD Rates"
2. EMWD would track revenues from its application of the Adjusted WMWD Rates.
3. EMWD would also track what revenues would have been, if EMWD charged its water rates that all other EMWD connections are charged.



4. The Adjusted WMWD Rates collect more revenue than EMWD's rates.
5. The amount of revenue that would have been collected from EMWD's rates is used to pay O&M and rate-funded capital expenses (see below)
6. The difference in revenue from the Adjusted WMWD Rates and what would have been collected from EMWD's rates will be used to pay down the "Acquisition Balance" (see below for a discussion of the Acquisition Balance).
7. After the Acquisition Balance is paid off, EMWD would apply its then-current water rates (the same rate schedule it charges other connections) to the Study Area. For most connections, water bills would decrease at this future time.

#### O&M Expenses

1. Since the Study Area is financially integrated with the remainder of EMWD's Service Area, a separate projection of expenses for the Study Area is not relevant and was not developed for this analysis.
2. Instead, the Study Area's share of the total EMWD water system expenses is calculated proportional to water demand.
3. EMWD provided EMWD's water system expenses, to enable a calculation of expenses per acre-foot of metered water demand.
4. The Study Area's share of EMWD's water system expenses is estimated on an annual basis by multiplying the projected Study Area water demand times the per acre-foot cost of EMWD's water system expenses.

#### Capital Expenses

1. Capital expenses are divided into three categories:
  - a. Those benefitting existing connections which are required to bring the Study Area up to operational parity with the remainder of EMWD's service area.
  - b. Those needed to accommodate future development that are funded by EMWD and paid for using EMWD's Facility Participation Charge revenues
  - c. Those needed to accommodate future development that are not funded by EMWD, and are funded by development.

#### Acquisition Balance

1. The Acquisition Balance is the amount of funds needed to bring the Study Area water system into operational and financial parity with the remainder of the EMWD water system. It is discussed below in more detail.

As described above, EMWD would initially apply Adjusted WMWD Rates to the Study Area. WMWD rates are shown above in Table 8-2, and EMWD would reduce the WMWD's Fixed System Charge by 20 percent.

After the Acquisition Balance is paid off, EMWD would transition the Study Area to then-current EMWD rates. EMWD's has adopted rates for CY 2020 and CY 2021, which are shown in Table 8-16. EMWD has two fixed charges: a Daily Service Charge and a Monthly Fixed Charge for Water Supply and Reliability. Both of the fixed charges depend on water meter size.

EMWD has a four tier budget-based rate structure, also shown in Table 8-16.

<b>Table 8-16. Calendar Year 2020 and Calendar Year 2021 EMWD Rate Schedule</b>				
Fixed Charges	Daily Service Charge \$/month		Monthly Fixed Charge for Water Supply and Reliability	
	CY 2020	CY 2021	CY 2020	CY 2021
5/8" Meter	\$13.38	\$13.99	\$3.95	\$4.26
3/4" Meter	\$13.38	\$13.99	\$3.95	\$4.26
1" Meter	\$18.25	\$19.16	\$5.93	\$6.39
1.5" Meter	\$50.19	\$52.62	\$19.75	\$21.30
2" Meter	\$78.17	\$81.52	\$31.60	\$34.08
3" Meter	\$152.08	\$159.08	\$63.20	\$68.16
4" Meter	\$235.12	\$245.77	\$98.75	\$106.50

	Commodity Charges, \$/CCF	
	CY 2020	CY 2021
<b>Residential</b>		
Tier 1	\$1.10	\$1.13
Tier 2	\$3.53	\$3.63
Tier 3: Excessive Use	\$5.84	\$6.01
Tier 4: Wasteful Use	\$11.94	\$12.30
<b>Non-Residential</b>		
Tier 1	\$3.66	\$3.77
Tier 2	\$7.43	\$7.65
Tier 3: Excessive Use	\$12.38	\$12.75

Table 8-17 compares EMWD's and WMWD's rate structures. EMWD has a four-tier rate structure for residential connections. EMWD calculates separate Indoor Water Budgets and Outdoor Water Budgets. The Outdoor Water Budget is based on landscaped area, the weather, and the following Evapotranspiration Adjustment Factors.

- Homes connected prior to December 31, 2010 receive 80 percent of ET
- Homes connected between January 1, 2011 and May 31, 2015 receive 70 percent of ET
- Homes connected on or after June 1, 2015 receive 50 percent of ET

Table 8-17. Comparison of WMWD and EMWD Budget-Based Rate Structure Tiers				
Tier	WMWD Residential	EMWD Residential	WMWD Non-Residential	EMWD Non-Residential
Tier 1	100% IWB	0 - 20% TWB	90% TWB	100% TWB
Tier 2	100% OWB	20 - 100% TWB	10% TWB	101-150% TWB
Tier 3	25% TWB	101-150% TWB	25% TWB	Above Tier 2
Tier 4	25% TWB	Above Tier 3	25% TWB	
Tier 5	Above Tier 4	164	Above Tier 4	
	Residential		Non-Residential	
	EMWD Tier 1 Use ~ WMWD Tier 1 Use		EMWD Tier 1 Use = WMWD Tier 1 + Tier 2 Use	
	EMWD Tier 2 Use ~ WMWD Tier 2 Use		EMWD Tier 2 Use = WMWD Tier 3 + Tier 4 Use	
	EMWD Tier 3 Use = WMWD Tier 3 + Tier 4 Use		EMWD Tier 3 Use = WMWD Tier 5 Use	
	EMWD Tier 4 Use = WMWD Tier 4 Use			
	IWB = Indoor Water Budget OWB = Outdoor Water Budget TWB = Total Water Budget			

This FMSR is based on the assumption that the Study Area will be grandfathered into an ETAF that predates connection in 2010, as many of the single-family residences in the Study Area existed prior to 2010.

The way that EMWD allocates water between Tier 1 and Tier 2 is different from WMWD or RCWD.

- RCWD and WMWD have separate calculations for Indoor Water Budgets and Outdoor Water Budgets. All the Indoor Water Budget is sold at the Tier 1 rate and all of the Outdoor Water Budget is sold at the Tier 2 rate.
- EMWD calculates separate Indoor Water Budget and Outdoor Water Budgets, and then adds them together to generate the Total Water Budget.
- 20 percent of the Total Water Budget is sold at the Tier 1 water rate, and 80 percent of the Total Water Budget is sold at the Tier 2 water rate.

It is possible, for many Study Area residential connections, that more of their water use will be sold at Tier 2 rates under the EMWD Ownership Scenario than under the RCWD and WMWD Ownership Scenarios. For the EMWD Ownership Scenario, the total water cost calculation shown later in this Section is based on 18 ccf per month water consumption, with 3.4 ccf/month occurring in Tier 1. 3.4 ccf/month is 20 percent of 18 ccf/month. This is a reasonable assumption for the EMWD Ownership Scenario if the Total Water Budget is 18 ccf/month. It is not within the scope of this FMSR for the Consultant Team to evaluate the typical Total Water Budget for the Study Area connections to test this assumption.

Table 8-18 shows CY 2020 EMWD Financial Participation Charges. The FPC for most new connections would be \$5,501.

<b>Table 8-18. CY 2020 EMWD Financial Participation Charges</b>	
<b>Meter Size</b>	<b>CY 2020 Financial Participation Charge</b>
5/8" Meter	\$5,501
3/4" Meter	\$5,501
1" Meter	\$5,501
1.5" Meter	\$27,505
2" Meter	\$44,008 - \$73,328
3" Meter	\$146,711.67 - \$183,348.33
4" Meter	\$293,368.33 - \$366,751.67
6" Meter	\$586,792
<p><b>Note:</b></p> <p>If a range of Financial Participation Charges is shown, then the charge depends on the type of meter installed. The charges for 5/8" and 3/4" meters shown are for residential customers, and assume a fire sprinkler is installed. Charges for residential customers without fire sprinklers are not shown in this table.</p> <p>EMWD notes that the closest 2-inch water meter Financial Participation Charge for the example commercial customer described above is \$44,008, and for this example commercial customer, a 1.5-inch meter might be applied.</p>	

#### **8.4.2 Projected Revenues**

Projected revenues by revenue type are described below.



#### 8.4.2.1 Water Rate Revenues

Projected water rate revenues under the EMWD Ownership Scenario are shown in Table 8-19. The table shows total rate revenues under the Adjusted WMWD Rates as (1) annual revenue increases become effective, and (2) as the system transitions to use of then-current EMWD rates after the acquisition balance is paid off.

**Table 8-19. Projected Water Rate Revenues, EMWD Ownership Scenario**

Fiscal Year	Projected Water Rate Revenues	Applicable Rate Schedule
FY 20/21	\$5,264,354	Adjusted WMWD Rates
FY 21/22	\$5,552,652	Adjusted WMWD Rates
FY 22/23	\$5,856,854	Adjusted WMWD Rates
FY 23/24	\$6,177,717	Adjusted WMWD Rates
FY 24/25	\$6,516,283	Adjusted WMWD Rates
FY 25/26	\$6,874,068	Adjusted WMWD Rates
FY 26/27	\$7,251,490	Adjusted WMWD Rates
FY 27/28	\$7,649,779	Adjusted WMWD Rates
FY 28/29	\$7,649,779	Adjusted WMWD Rates
FY 29/30	\$7,649,779	Adjusted WMWD Rates
<b>Notes:</b> (1) Rate increases presumed effective on July 1 of each year. (2) Increase in rate revenues at RCWD's FY 19/20 Rates are from system growth. (3) See Appendix B, Table B-5 for more detail.		

Through at least the ten-year planning period the Adjusted WMWD Rate Schedule would be applicable. Future increases in the Adjusted WMWD Rates were estimated by FG Solutions based on providing sufficient revenues to fund projected water system expenses through FY 29/30 and completely pay down the Acquisition Balance (described below). Annual 3.8 percent increases from the Adjusted WMWD Rates in CY 2020 are projected.

To project how fast the Acquisition Balance is paid off, FG Solutions assumed that EMWD's retail rates would increase by 2.5 percent each year.

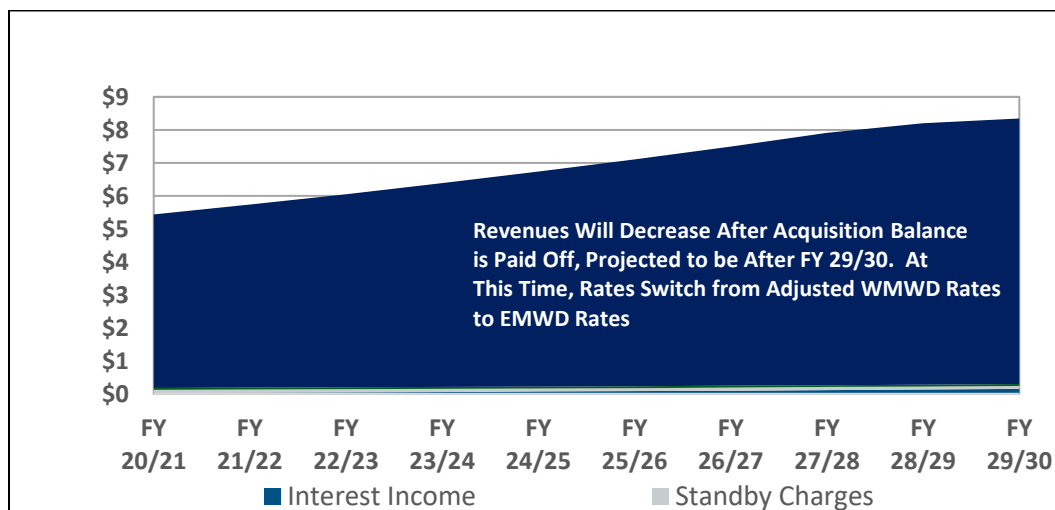
After the Acquisition Balance is paid off, EMWD would transition the Study Area to its then-current retail rate structure. This is expected to happen within approximately 12 years. Additional details of monthly water bill calculations are in Appendix B, Table B-5. For many single-family residential connections, the water rate would go down as rates are transitioned from the Adjusted WMWD Rates to EMWD Rates. It is possible that some commercial connections might see rate increases when rates are transitioned from the Adjusted WMWD Rates to EMWD Rates.

#### 8.4.2.2 Other Revenues

Other revenues are from Financial Participation Charges, Standby Charges, interest income, and other miscellaneous sources of revenue such as rents/leases, and delinquent penalties. Table 8-20 shows the projected average annual revenue from each revenue source over the 10-year financial planning period. Water rate revenues are projected to represent nearly 90 percent of total water system revenues. The next largest source of revenues is from Financial Participation Charges.

<b>Table 8-20. Projected Average Annual Revenues, EMWD Ownership Scenario</b>			
Type of Revenue	Projected Average Annual Revenue		
	Amount	Percentage	Note
Water Rates	6,487,761	89.3%	1
Financial Participation Charges	549,196	7.6%	1
Standby Charges	92,652	1.3%	1
Interest Income	78,881	1.1%	1
Delinquent Penalties	53,045	0.7%	1
Other	4,244	0.1%	1
<b>Total</b>	<b>\$7,265,778</b>	<b>100.0%</b>	
Notes:			
(1) See Appendix B, Table B-5 for more detail. Totals may not add up due to rounding.			

Figure 8-11 shows projected revenues under the EMWD Ownership Scenario. Not shown in Figure 8-11 are revenues from Financial Participation Charges. This is because of EMWD intends to integrate the Study Area with the rest of EMWD's retail system, and Financial Participation Charges revenues from the Study Area would be deposited in EMWD's Financial Participation Charge fund serving its entire system.



**Figure 8-11. Projected Revenues: EMWD Scenario, \$M**

### 8.4.3 Projected Expenses

Projected expenses by type are provided below.

#### 8.4.3.1 Study Area Share of EMWD Expenses

Table 8-21 shows how much EMWD estimates it will spend in FY 20/21 providing water service to its retail connections, on a per-acre foot basis. This unit cost, estimated at \$1,850 AF of metered water consumption, includes O&M, repair/replacement capital, debt service, and post employment benefits.

<b>Table 8-21. Estimated FY 20/21 EMWD Per Acre-Foot Cost of Water Service</b>	
<b>Category</b>	<b>EMWD System-Wide Estimated FY 20/21 Cost</b>
Purchased Water	78,021,000
Groundwater Replenishment O&M	724,417
Operations & Maintenance	20,335,266
Energy	7,729,356
Allocated Support Costs	24,850,322
General and Admin Allocation	5,054,221
Capital/Repair & Replacement	13,239,287
Debt Service	4,047,495
Post Employment Benefits	7,182,927
<b>Total</b>	<b>\$161,184,291</b>
EMWD Acre-Feet Per Year Demand	88,100
Unit Cost, \$/Acre-Foot Demand	\$1,830

Table 8-22 shows the calculation of the projected FY 20/21 Study Area share of EMWD's water system cost.

<b>Table 8-22. Projected Study Area Share of EMWD Water System Cost</b>	
FY 20/21 Unit Cost, \$/Acre-Foot Demand	\$1,830
Projected FY 20/21 Study Area Demand, AF	2,388
Projected FY 20/21 Study Area Share of EMWD Water System Cost	4,368,533

#### 8.4.3.2 Capital Project Funding

Table 8-23 shows how the capital projects shown in Sections 5 and 6 would be funded. The majority of the projected approximately \$53 million in capital investment is related to development. Approximately \$7.2 million would be included in the Acquisition Balance, and an additional approximately \$8.7 million would be funded by EMWD and paid for using Financial Participation Charge revenues.

**Table 8-23. Projected Capital Improvement Funding, EMWD Ownership Scenario**

Project	Estimated Cost, 2020 \$	\$ to Future Development			
		Acquisition Balance	Financial Participation Charges	Funded by Developers or Imp. District	Note
Storage (Hunter Tank)	4,056,000	2,245,626	1,810,374		1, 2, 3, 4
Expansion CIP North of Murrieta Creek	17,120,000			17,120,000	5
Expansion CIP South of Murrieta Creek	20,388,000			20,388,000	5
EMWD Hydraulic Improvements	1,468,000		1,468,000		3
Supply Improvements Through EMWD	5,379,000		5,379,000		3
Legacy (Small Diameter) Improvements	4,947,000	4,947,000			6
<b>Total</b>	<b>\$53,358,000</b>	<b>\$7,192,626</b>	<b>\$8,657,374</b>	<b>\$37,508,000</b>	<b>0</b>
<b>Notes:</b> <ol style="list-style-type: none"> <li>(1) The proposed improvement to the Hunter Tank would benefit existing Study Area connections, future development in the for the portion of the Hunter Tank that benefits the Study Area and excludes the portion that benefits the current EMWD retail service area.</li> <li>(2) Project benefits both existing connections and future development. Cost division between existing connections and future development is based on the ratio of existing meter equivalents to buildout meter equivalents.</li> <li>(3) The portion of the project cost that benefits existing connections would be included in the Acquisition Balance</li> <li>(4) For facilities of this magnitude, EMWD would fund the project, and incorporate the cost in its Financial Participation Charge. Financial Participation Charge revenues, over time, would pay for the project.</li> <li>(5) Under some circumstances, EMWD would accept an Assessment District or related type of financing for these improvements. For this analysis, these improvements would be funded either directly by developers or through an Assessment District(s). They would not be funded directly by EMWD.</li> <li>(6) These improvements are needed to support existing development.</li> </ol>					

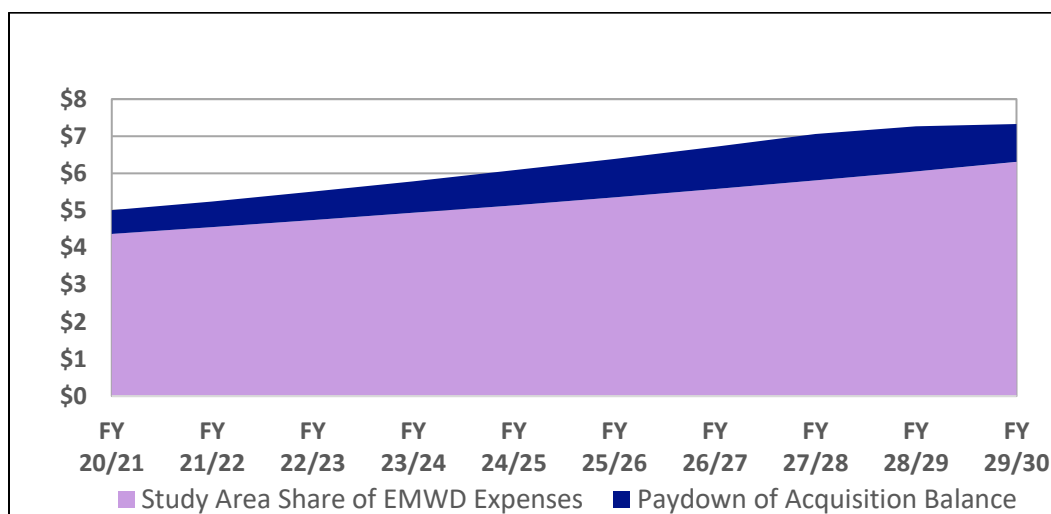


#### 8.4.3.3 Preliminary Acquisition Balance Calculation

Table 8-24 shows the preliminary calculation of the Acquisition Balance. The majority of the Acquisition Balance is related to capital improvements that benefit existing connections, shown in Table 8-22. The WMWD-identified capital improvements for the tank mixing system, GIS system, and reservoir recoating are also included. Further, \$620 per Meter Equivalent is assessed to buy in to existing EMWD facilities that would be used to supply water to the Study Area.

<b>Table 8-24. Preliminary Acquisition Balance Calculation</b>		
Component of Acquisition Balance	Amount	Note
<b>Capital Costs to Achieve Conditional and Operational Parity</b>		
Identified in FMSR	\$7,192,626	1
Identified by WMWD	\$1,950,000	2
Prospective PERS Pension & OPEB Costs for Transferred Employees; Severance	\$0	3
Replacement and Refurbishment Reserve	\$0	4
Buy-In to Imported Water Turnouts, Distribution, and Treatment	\$2,827,820	5
<b>Total</b>	<b>\$11,970,446</b>	
<b>Notes:</b> (1) See Table 8-22 (2) Includes GIS Mapping, Tank Mixing System, and Reservoir Recoating (3) Not applicable, per EMWD. EMWD does not anticipate transfer of any existing WMWD staff under the EMWD Ownership Scenario. (4) This is a charge that EMWD would normally assess, but is electing not to require because of the transfer of reserves associated with the Study Area from WMWD. (5) \$620 per meter equivalent.		

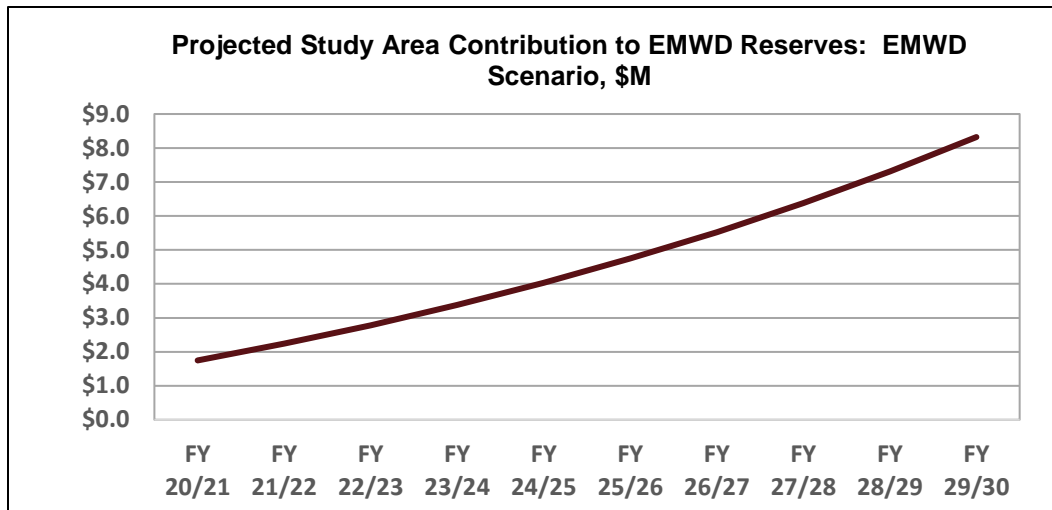
Figure 8-12 shows total expenses under the EMWD Ownership Scenario. This figure shows the Study Area share of EMWD expenses, and the paydown of the Acquisition Balance.



**Figure 8-12. Projected Expenses: EMWD Scenario, \$M**

#### 8.4.4 Projected Study Area Contribution to EMWD Reserves

Figure 8-13 shows the cumulative projected amount that the Study Area would contribute to EMWD's water system reserves. Because of the financially integrated nature of the EMWD Ownership Scenario, there would not be a separate reserve fund for the Study Area.



**Figure 8-13. Projected Study Area Contribution to EMWD Reserves: EMWD Scenario, \$M**

#### 8.4.5 Projected Total Cost of Water

The projected total cost of water is the sum of the water bill and the standby charge. It is shown for two example connections in Figures 8-14 and 8-15.

##### 8.4.5.1 *Example Single Family Residential Connection*

- ¾-inch water meter
- Monthly water use of 18 ccf, with 8 ccf/month in Tier 1 and 10 ccf/month in Tier 2

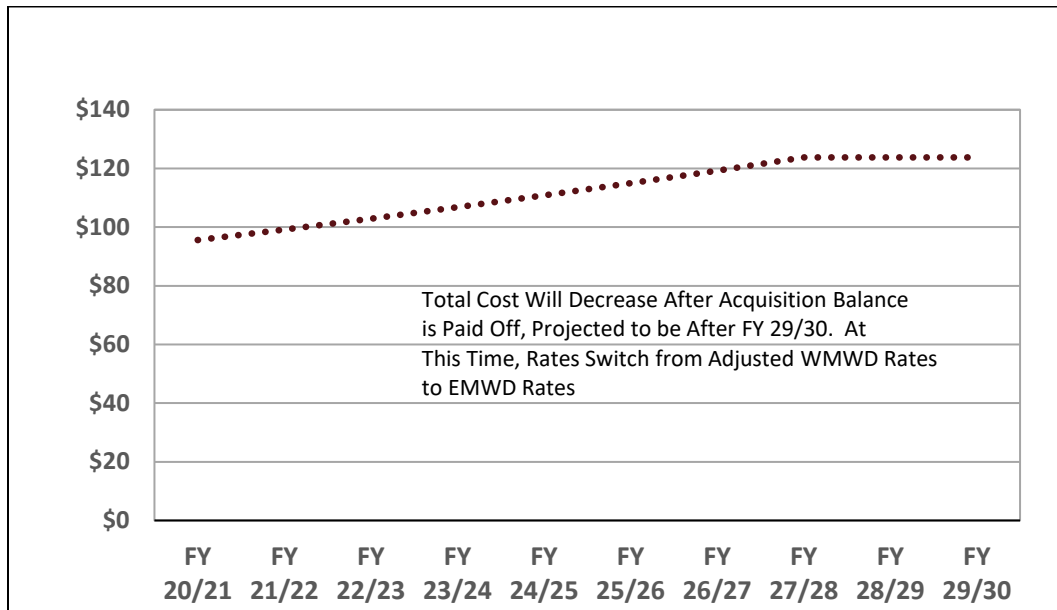
##### 8.4.5.2 *Example Commercial Connection*

- 2-inch water meter
- Monthly water use of 125 ccf
- 1 acre parcel

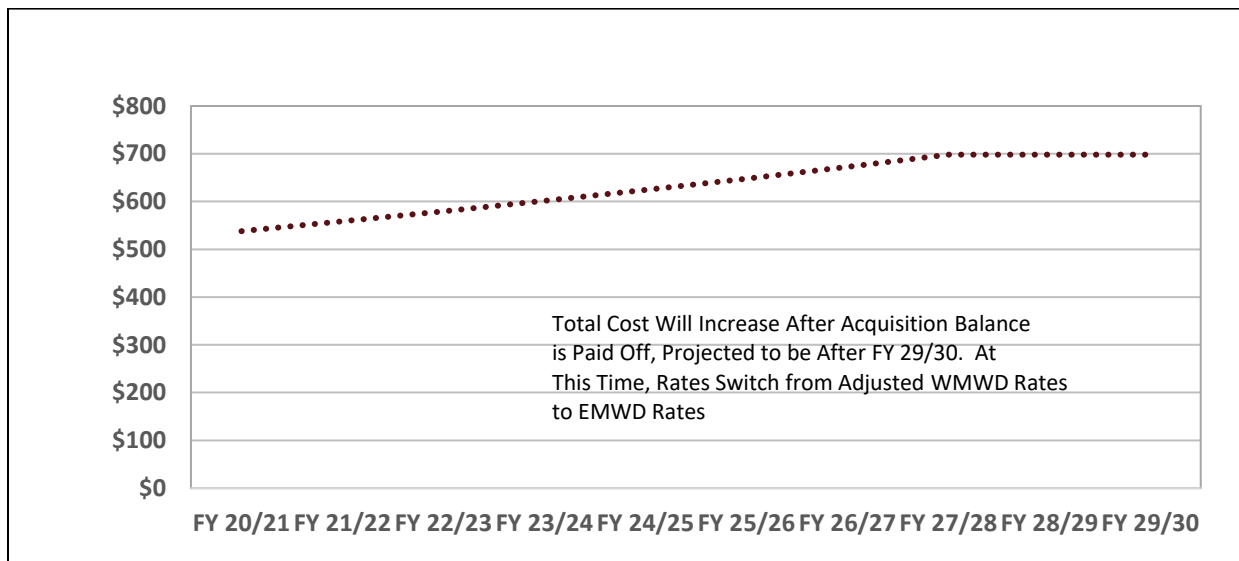
The graphs below show the effect of the projected annual 3.8 percent water rate revenue increases for the Adjusted WMWD Rates through FY 27/28.

As described above, in this analysis, the projected annual revenue increases are applied across the board percentage increases to all connections. No changes in the Adjusted WMWD Rate Structure or EMWD's rate structure are contemplated in this analysis other than applying across the board percentage increases. If EMWD acquires the water system, it may choose to adjust rate

structures to reflect EMWD policies or future cost of service analyses, and the total cost of water would be different from what is shown in Figures 8-14 and 8-15.



**Figure 8-14. Projected Monthly Total Water Cost: EMWD Scenario  
(Single-Family Residence, ¾-inch Meter, 18 CCF/month)**



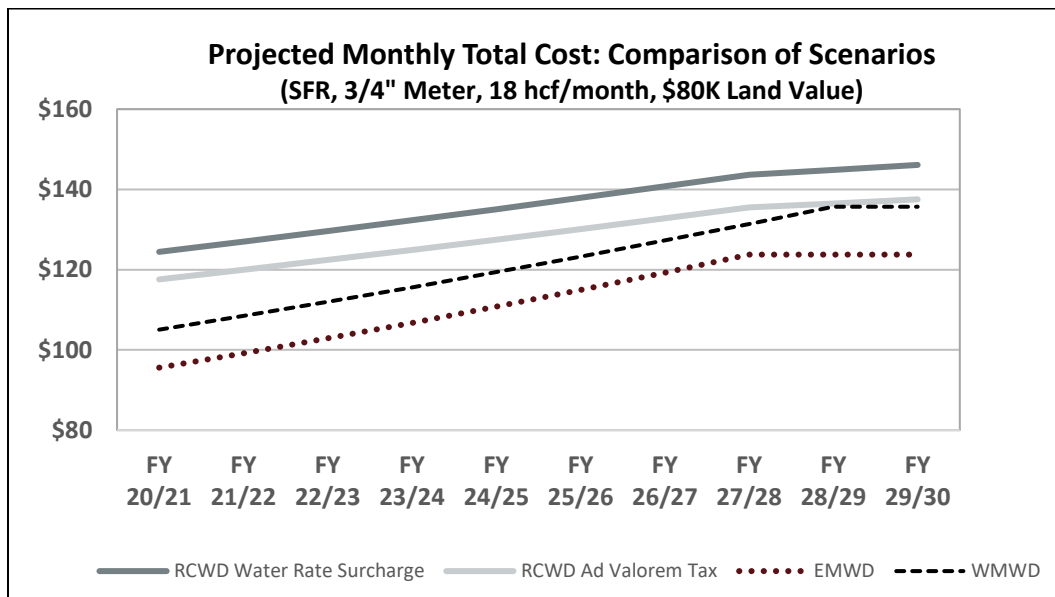
**Figure 8-15. Projected Monthly Total Water Cost: EMWD Scenario  
(Commercial, 2-inch Meter, 125 CCF/month, \$200K Land Value)**

## 8.5 Side by Side Comparisons

Side by side comparisons for the total cost to existing connections and the total impact to development are provided below.

### 8.5.1 Total Cost to Existing Connections

Figure 8-16 shows the total cost of water for the single-family residential example, for all three Ownership Scenarios.

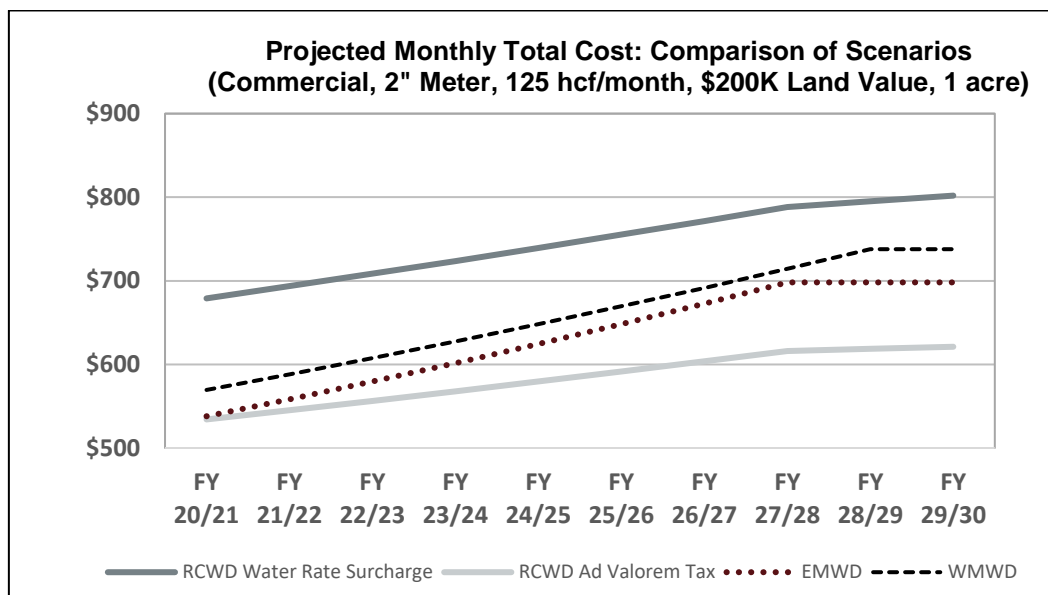


**Figure 8-16. Projected Monthly Total Cost: Comparison of Scenarios  
(SFR, 3/4-inch Meter, 18 CCF/month, \$80K Land Value)**

This graph shows that the EMWD Ownership Scenario, has the lowest total cost of water for the example single-family residence. After EMWD's Acquisition Balance is paid off (expected to be after FY 29/30), the total cost of water for the single-family residential example would decrease further. The RCWD Ownership Scenario has the highest total cost of water, though the total cost of water under the RCWD Ownership Scenario will also depend on whether an Ad Valorem tax is applied, or if RCWD applies the water rate surcharge.



Figure 8-17 shows the total cost of water for the commercial example, for all three Ownership Scenarios.



**Figure 8-17. Projected Monthly Total Cost: Comparison of Scenarios  
(Commercial, 2-inch Meter, 125 CCF/month, \$200K Land Value, 1 acre)**

Figure 8-17 shows that the implementation of the Ad Valorem Tax results in the RCWD Ownership Scenario providing the lowest total cost of water for the land value assumption shown. If RCWD does not implement an Ad Valorem Tax, until the EMWD Acquisition Balance is paid off, the total cost of water for this commercial example will be lowest under the EMWD Ownership Scenario. There is a wide range of projected total cost under the RCWD Ownership Scenario, depending on whether an Ad Valorem Tax or Water Rate Surcharge is applied. After the EMWD's Acquisition Balance is paid off (expected to be after FY 29/30), the total cost of water under the EMWD Ownership Scenario is expected to increase, because EMWD's commercial water rates are generally higher than WMWD's commercial water rates.

### 8.5.2 [Financial Impact to Development](#)

The financial impact to development can be measured according to two factors:

1. How the \$37 million in CIP Expansion improvements can be funded, and
2. The Magnitude of connection fees

#### 8.5.2.1.1 CIP Expansion Improvement Funding

**Developer Funding:** In all Ownership Scenarios, Developer Funding is possible. This FMSR does not speculate on the capacity or willingness of developers to fund all or part of the \$37 million of CIP Expansion improvements.

**Community Facilities District and Assessment Funding:** In all Ownership Scenarios, formation of one or more Community Facility District(s) or Assessment District(s) is possible. This FMSR does not speculate on how likely it is for a Community Facility District or Assessment District to successfully form.

Table 8-25 outlines a comparison CFD and AD activity among the agencies. It should be noted that each agency has its own policies and procedures in place that reflects that agency's development demands, with some agencies more built out prior to this FMSR. RCWD did note that their low capacity fees and presence of existing RCWD water infrastructure near areas of development has allowed developers to proceed with projects without the need for CFDs or ADs, which is reflective of their total number of CFDs/ADs or requests to form them. Additionally, WMWD also noted they do not currently allow CFDs to be financed through the District, though they are a participant in CFDs/ADs.

**Table 8-25. Comparison of CFD and AD Activity<sup>(a)</sup>**

Agency	Total Overall CFDs/Ads in Program	Total CFDs/Ads In Process of Being Formed or Amended <sup>(e)</sup>	Total CFDs/Ads Formed in Past Five Years	Total CFDs as Participant in Past Five Years	Total CFDs/Ads as Lead Agency or Participant in Past Five Years
EMWD	83 <sup>(b)</sup>	5	17	42	59
RCWD	4 <sup>(c)</sup>	0	0	0	0
WMWD	19 <sup>(d)</sup>	0	0	6	6

(a) Information gathered via available public records and requested of agencies.  
 (b) EMWD has issued or refinanced bonds for 38 of its total 83 ADs/CFDs in the past five years.  
 (c) RCWD has refinanced bonds for 3 of its total 4 ADs/CFDs.  
 (d) WMWD has not led the issuance or refinancing of bonds for any of its CFDs/ADs within the past five years. Lead agencies were the Murrieta Valley and Riverside Unified School Districts.  
 (e) Application and deposit received. Formation in progress but not complete.

#### 8.5.2.1.2 Connection Fee Comparison

Future development will be required to pay a connection fee (or an equivalent charge with a different name) under all Ownership Scenarios. A comparison of CY 2020 connection fees for ¾-inch and 2-inch meters is shown below:

- **¾-inch Water Meter**
  - WMWD: \$7,050
  - RCWD: \$2,537
  - EMWD: \$5,501
- **2-inch Water Meter**
  - WMWD: \$37,599
  - RCWD: \$13,445

- EMWD: Ranges between \$44,008 - \$73,328, depending on the type of 2-inch meter. The closest comparative fee appears to be the low end of the range at \$44,008

For both meter sizes shown, RCWD has the lowest Connection Fees. Each agency calculates its connection fee differently, and RCWD's lower fees acknowledge that Ad Valorem tax revenues are also used to pay for water system infrastructure.

WMWD's Connection Fee for a ¾-inch meter is the highest, and EMWD's Connection Fee for a 2-inch meter is highest. EMWD's fee for a 2-inch meter is shown as a range because EMWD has multiple 2-inch meter Connection Fees for different types of 2-inch meters. Separately, in the example Total Cost to Ratepayers calculation, a customer with a 2-inch water meter and water consumption of 125 ccf/month is used for comparison. EMWD noted that this customer with water consumption of 125 ccf/month would likely require a 1.5-inch water meter. EMWD's Connection Fee for a 1.5-inch meter is \$27,505.

### 8.6 Summary of Financial Analysis

Table 8-26 summarizes the key parameters associated with this FMSR.

**Table 8-26. Key Parameters and Comparison of Ownership Scenarios**

Parameter <sup>(a)</sup>	WMWD	RCWD	EMWD
<b>Key Policies</b>			
Financially Distinct or Financially Integrated	Distinct	Distinct <sup>(b)</sup>	Integrated
Ad Valorem Tax	No	Possibly <sup>(c)</sup>	No
<b>Possible Funding Sources for \$37M of Pipe Extensions</b>			
Developers	Yes	Yes	Yes
Assessment Districts <sup>(d)</sup>	Yes	Yes	Yes
Community Facility Districts <sup>(d)</sup>	Yes, but can't be financed through WMWD	Yes	Yes
Low Income Discount	Yes	No	No
<b>Projected Total Cost to Ratepayers</b>			
Example Single-Family Residence	Middle	Highest	Lowest
Example Commercial Customer	Middle, but higher than EMWD Scenario.	If water rate surcharge then highest. If ad valorem tax then lowest.	Middle, but less than WMWD Scenario.
<b>Residents with Private Wells</b>			
Mandatory Connection of Private Wells	No	No	No
Standby Charge, \$/Acre/year	\$21	\$69.92	\$14
Voluntary Connection to Public Water System for Customers Currently Using Private Wells	Option to Convert Indoor Use Only. May reduce meter size and connection fee.	Must Convert Indoor and Irrigation Use.	Option to Convert Indoor Use Only. May reduce meter size and connection fee.
<b>Connection Fee Comparison<sup>(e)</sup></b>			
Single Family Residential <sup>(f)</sup>	\$7,050	\$2,537	\$5,501
2" Meter <sup>(g)</sup>	\$37,599	\$13,445	\$44,008 - \$73,328
<p>(a) Please refer to Section 8 for more detail on these parameters.</p> <p>(b) RCWD indicated that this policy would be reevaluated after RCWD has experience operating the system.</p> <p>(c) The decision of whether to adopt an ad valorem tax under the RCWD Ownership Scenario will be made by the RCWD Board of Directors. If RCWD decides not to adopt an ad valorem tax, then RCWD would adopt a water rate surcharge that collects the same amount of money.</p> <p>(d) Section 8.5.2 contains additional detail, including a comparison of how frequently each agency has used these funding mechanisms in the recent past.</p> <p>(e) RCWD connection fees are lower because of revenue from Ad Valorem property taxes that reduce reliance on connection fees.</p> <p>(f) The Connection Fee for a ¾-inch meter is shown to provide a standard for comparison. It is acknowledged that future single-family residences may require a 1-inch meter depending on fire sprinkler requirements inside the home.</p> <p>(g) A 2-inch meter is shown for comparative purposes. Separately, in the example Total Cost to Ratepayers calculation, a customer with a 2-inch water meter and water consumption of 125 ccf/month is used for comparison. EMWD noted that this customer with water consumption of 125 ccf/month would likely require a 1.5-inch water meter. EMWD's Connection Fee for a 1.5-inch meter is \$27,505</p>			



## **9.0 RAINBOW AND ROCK MOUNTAIN SERVICE AREA**

At the outset of the FMSR for the Murrieta Study Area, several questions have come up regarding the analysis of the Rainbow and Rock and Mountain Study Areas. The questions center on how the analysis differs for the Rainbow and Rock Mountain Study Areas versus the Murrieta Study Area. It is correct that the Rainbow and Rock Mountain Study Areas were originally contemplated for analysis in the Request for Proposal. However, several key distinctions were identified that eliminated the need for such a detailed analysis of the Rainbow and Rock and Mountain Study Areas.

The most significant distinction is the physical infrastructure. Currently, the Rainbow and Rock Mountain Study Areas are WMWD customers. However, WMWD does not have physical facilities in the Rock Mountain Service Area. WMWD does have a storage reservoir, distribution pipelines and Metropolitan Water District (MWD) turnout in the Rainbow Service Area. The water operations for both service areas are provided under contract through RCWD. Because of this existing arrangement, a detailed analysis of the Rainbow and Rock Mountain areas would be largely duplicative. It was determined that a duplicate effort was not warranted under this Municipal Service Review. As a result, that detailed analysis was ultimately eliminated from the scope of work. However, West Yost was asked to include the key considerations, distinctions and rationale for this decision. These are outlined below:

- The Rainbow and Rock Mountain areas are physically served by WMWD through a contract with RCWD.
- WMWD does not have any physical facilities in the Rock Mountain Service Area.
- WMWD owns a storage reservoir, distribution pipelines and Metropolitan Water District (MWD) turnout in the Rainbow Service Area.
- Because of the existing infrastructure, RCWD could serve these areas directly, without the need for any significant infrastructure modifications or cost.
- The WMWD infrastructure in the Rainbow Service Area would require ownership transfer to RCWD.
- Continued WMWD ownership would require continuation of the contracted operation currently in place with RCWD.
- EMWD does not have any physical facilities in this area.
- EMWD ownership would also likely require contracted operation with RCWD.
- Rainbow study area's rate structure is a fixed monthly charge, plus commodity and elevation charges which depend on water use. The water rate structure is called a "uniform block" structure, meaning that all metered water consumption is sold at the same price. Rainbow does not have a budget-based water rate structure. If the ownership of the system is transferred from WMWD to EMWD or RCWD, either EMWD or RCWD will have to decide whether to retain the current rate structure, or change the rate structure to be consistent with what is charged to the agency's other customers.

Given the size and remote nature of the Rainbow and Rock Mountain Study Areas, the cost to build or extend infrastructure distinctly separate from RCWD's system, would impact those rates, and would likely make any other transfer scenario cost prohibitive.

### 10.0 DETERMINATIONS

The comparison of three potential water purveyors, each with distinct policy drivers, revenue approaches, and physical infrastructure in proximity to the study area, leads to a complex analysis. In conducting our analysis in this FMSR, West Yost carefully evaluated:

- The community input received by residents in the Murrieta Study Area, received at two community outreach meetings. The input we received was considered and included in our requests to each agency for specific policy directions. This included important community issues such as the potential use of Ad Valorem taxes, private well owners, rate implication and future development (growth paying for growth).
- Existing Facilities and Supply Sources, including MWD Annexation Fee considerations.
- Agency infrastructure policies, including anticipated water supply policies, current and future water demands, system peaking factors, build-out services policies, infrastructure performance criteria and corresponding infrastructure improvements required
- Numerous hydraulic model simulations were performed to simulate service from WMWD, RCWD and EMWD to meet current and future needs. This includes recommended improvements to the existing system and to serve potential future expansions. Detailed costs for improvements under all Ownership Scenarios were prepared and reviewed by the agencies.

After compiling the information and performing our analysis, we can offer the following overall conclusions regarding Infrastructure, Future Development and the Total Cost to Ratepayers.

### 10.1 Infrastructure

The cost of infrastructure to serve the Study Area's supply needs is one of the important factors in determining the most cost-effective approach to serve the area. The proximity of the Study Area to existing infrastructure has a significant impact on the cost of future or expanded infrastructure. The closer the Study Area is to existing infrastructure, the less infrastructure would be anticipated. We also analyzed potential impacts to connections with their own private wells:

- Due to its closer proximity to the Study Area and the presence of current infrastructure, RCWD has the lowest infrastructure costs associated with extending their facilities to provide service to future development.
- Under all Ownership Scenarios, nearly \$5 million is anticipated to replace legacy small diameter water lines in the Study Area. For purposes of this FMSR, these improvements are projected to be done over the next 10 years.
- Both EMWD and WMWD offer an option for residents who currently use private wells. If a resident chooses to connect to the public water system, EMWD and WMWD offer the option of converting indoor use only, and would allow connections to leave their irrigation demands connected to their private well.
- EMWD offers existing private well users the lowest standby charges.

### 10.2 Future Development

Several important factors are important to accommodate potential development in the Study Area. These include connection fees for agencies, future extension of facilities, policies regarding growth paying for growth, and the funding mechanisms for infrastructure required to serve future development

- RCWD has the lowest connection fees of the three agencies
- The pipe extensions required to extend water service to facilitate development would not be funded directly by the utility. All agencies would allow developers to build and fund them.
- All agencies would allow formation of one or more Assessment Districts where the assessment is based on the value of the property.
- All agencies would allow formation of one or more CFDs, though WMWD does not allow CFDs to be financed through WMWD.
- This FMSR did not specifically assess the ability to immediately serve projected development in the Jefferson Avenue Corridor. That being said, it is likely the RCWD Ownership Scenario would allow some development in the Jefferson Avenue Corridor with less up front cost to developers than the other agencies. This is due to the closer proximity of existing RCWD infrastructure. However, depending on the location of the development, and the timing of future development, some of this developer-funded investment might be redundant or stranded in the long-term.

### 10.3 Total Cost to Ratepayers:

- Figure 8-16 shows that the EMWD Ownership Scenario, has the lowest total cost of water for the example single-family residence. After EMWD's Acquisition Balance is paid off (expected to be after FY 29/30), the total cost of water for the single-family residential example would decrease further. This anticipated reduction would occur after this FMWR's study threshold of ten years and is therefore not reflective in the report Figures.
- The total cost to connections under the RCWD scenario will depend on the specifics of each connection and whether RCWD chooses to (and is able to) adopt an Ad Valorem tax or pursue a water rate surcharge. Both RCWD alternatives were evaluated and are reflected in the single-family connection comparison and the commercial connection comparison.
- Figure 8-17 shows that until the Acquisition Balance is paid off (expected to be after FY 29/30), the total cost of water for this commercial example will be lowest under the EMWD Ownership Scenario. There is a wide range of projected total cost under the RCWD Ownership Scenario, depending on whether an Ad Valorem Tax or Water Rate Surcharge is applied. After the EMWD's Acquisition Balance is paid off (expected to be after FY 29/30), the total cost of water under the EMWD Ownership Scenario is expected to increase, because EMWD's commercial water rates are generally higher than WMWD's commercial water rates.

- It should be noted that EMWD believes its rate structure and policies may result in further commercial conservation. EMWD provided records for commercial connections nearest the Murrieta Study Area which indicated an average of 59 CCF/month for similar 2-inch water meters. Based on the EMWD data, the overall cost of the representative commercial connection would decrease due to the lower volume. The trend would be the same as described above. Initially, EMWD is likely to offer the lowest cost to commercial connections. After the Acquisition Balance is paid off (expected to be after FY 29/30, commercial connections may pay more under the EMWD Ownership Scenario than had WMWD retained water system ownership.

As stated at the outset of this report, there are several complex considerations that often overlap, but also compete for consideration in determining which agency should serve the Murrieta Retail Area. These include competing interest for existing and future customers. This includes both residential and retail/commercial customers. Some factors attributing to the complexity include the costs and efficiencies of system improvements serving existing customers or combined with expansion for future customers, proximity of existing infrastructure compared to rates and an agency's overall cost of service, availability of existing storage versus the feasibility of expanding storage facilities, etc. Nowhere do these issues appear to converge more than in the Murrieta Retail Service Area. This focused MSR specifically considered these competing issues in determining the hydraulic, infrastructure and financial implications for existing and future customers. The City of Murrieta also has a desire to facilitate the needs of future customers that will come from growth, through the potential build out of the region.

Because of these complexities and competing interests, this report established a methodology to allow each agency reasonable flexibility in their approaches and policies, while requesting those at the outset of this project. Each agency had respective input and control of their own financial models. However, only after each agency reviewed their model, were the cumulative results shared with all agencies. The objective was to minimize modifications to agreed assumptions or chosen policies, which would result in an iterative financial modeling process. This is not to say that any agencies policies are better. It is simply a reflection of applicability to the unique circumstances within the Murrieta Retail Area.

Based on the agreed key assumptions and the agencies respective policy approaches, the desired agency will likely depend on the customer perspectives. While some existing customers have expressed a desire to remain with WMWD, regardless of cost, the following general conclusions may be drawn. The representative existing and future residential customer would experience lower water bills under the EMWD ownership scenario. The representative existing and future commercial customer would experience lower water bills through at least FY 29/30 under the EMWD ownership scenario and potentially higher bills after but would depend on EMWD's conservation rate structure at that time. Existing landowners who wish to develop their properties may prefer the lower connection fees and closer proximity to existing RCWD infrastructure.

During the financial modeling process, all agencies have agreed with the process. However, when the consolidated financial model was shared among the three agencies, there was some indication that the agencies may wish to incorporate additional considerations. For purposes of this FMSR, those substantive modifications to the agreed key assumptions and policy decisions were not included, but may be submitted during the public comment period for this report and submitted to LAFCO for consideration.



## Appendix A

### Public Comment Summary

**Appendix A: Public Comment Summary <sup>(1)</sup>**

Public Comment/ Topic #	Provided Comment and/or Statement <sup>(2)</sup>	Response
1	A West Murrieta resident and member of Ad Hoc committee that was recently disbanded by the city. Attended meeting in July 2017, regarding annexing Murrieta into Rancho California's service area to share fixed costs, \$135M in debt, that will retire in 2047.	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria.
2	Comment expressed concerns over the development in the Jefferson Corridor.	The FMSR has many areas of consideration for the three participating water agencies. The City of Murrieta is also a participant in the study, with the desire to evaluate the water infrastructure required to serve the study area through buildout. The detailed results can be found in Section 5 of the FMSR. The FMSR does not provide assessment of the development policies within the General Plan, only the required water infrastructure to serve development.
3	Concern was expressed that fire flow is an issue.	Fire flow analyses were conducted under the existing and ultimate buildout conditions for all three water agencies. See Sections 3 and 5 in the FMSR.
4	Resident expressed a general concern with the Murrieta study area changing service from WMWD to RCWD	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria.
5	The commenter wants assurances from LAFCO for 1.) A complete story from City and Districts 2.) If a change is anticipated, requests the boundary change be thoroughly evaluated, and 3.) A public forum to discuss the potential change.	The FMSR does provide a through evaluation of the issues facing each agency and any potential de-annexation. LAFCO has stated it's intent to hold a public forum, in addition to any regular board meeting.
6	Comment was focused on the need for another study, the \$260k cost. Commenter directed their comment to City representatives that development is the intent behind the study.	The FMSR has many technical areas for consideration in the scope of work, to consider the three participating water agencies. The City of Murrieta is also a participant in the study, with the desire to evaluate the water infrastructure required to serve the study area through buildout.
7	What will the cost be to join RCWD and the Ad Valorem Tax implications.	To respond the residents concerns, RCWD had two scenarios analyzed. One funding mechanism would utilize a water rate surcharge, the other is an Ad Valorem Tax. The results of the RCWD analysis it address in detail in Section 8.3 of the FMSR.
8	Resident as lived in Murrieta his entire life and can remember fire hydrants wrapped in black plastic when agencies do not work cooperatively.	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria, to help resolve the type of concern the resident raised. See Section 5 in the FMSR.
9	Resident was thankful for the community attendance and voicing their concerns and expressed concerns that private well owners will be forced to connect to the agency systems and abandon their wells or have their wells metered. The resident indicated this was the case in in French Valley and Temecula. Lots of money. The resident wanted written assurances in the report.	Each agency was specifically asked to address this concern with their respective policies. Sections 7.2.9, 7.2.10, Table 7-3 and Table 8-25 outlines each agencies' policy.
10	Room is too small.	Comment was noted and larger accommodations will be sought in the future.
11	Is Wildomar being considered as part of the study area.	The Wildomar area is not a part of this FMSR.
12	No information sent to residents about this meeting, I heard about it on social media. Meeting should have been advertised.	Comment has been noted by the participating agencies. WMWD indicated notifications were sent and will look into why some residents may not have received a notice.
13	Community member residence is on a well and has concerns if access to City water would jeopardize use of their well. Also felt too many permits are issued for multi-family developments.	Each agency was specifically asked to address this concern with their respective policies. Sections 7.2.9, 7.2.10, Table 7-3 and Table 8-26 outlines each agencies' policy. The specific land use types utilized in this study rely on the City's General Plan. Modifications to the General Plan are not part of the FMSR project.
14	Community member expressed concerns the is not enough water to serve current homes.	The agencies have all expressed an ability to provide sufficient water, consistent with reliability requirements.
15	Community member expressed their belief a pre-decision has been made and nothing can be done to change it.	No pre-decision was ever made, regarding which agencies will serve the Murrieta Study Area. The results of the study differ from some of the beliefs expressed in the community meetings.
16	Community member expressed their concern if there is sufficient groundwater for existing, let alone future demands.	Comment is noted by the agencies. The scope of the FMSR looked at the financial implication across the agencies. The amount of water currently used by existing customers is not expected to change, independent of the agency serving the Murrieta Study Area. Future growth would require further evaluation of future demands and sources, before development could occur.
17	Community member reinforced a prior comment, stating that issuance of building permits for high density development and apartment complexes is too significant.	The specific land use types utilized in this study rely on the City's General Plan. Modifications to the General Plan and approvals by the City are not part of the FMSR project.

**Appendix A: Public Comment Summary <sup>(1)</sup>**

Public Comment/ Topic #	Provided Comment and/or Statement <sup>(2)</sup>	Response
18	Several resident of raised concerns over paying connection fees and feel they do not receive any benefit.	The basis and benefits why WMWD assesses its Standby Charges (or Assessment Charge) are outline on the District's website and Resolution 3126.
19	Long time resident of Murrieta indicated he was not notified about the community meeting.	Comment has been noted by the participating agencies. WMWD indicated notifications were sent and will look into why some residents may not have received a notice.
20	Long time resident expressed his distrust of RCWD and the LAFCO process, particularly since some members in the community live on a fixed income.	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria, to help resolve the type of concern the resident raised. See Section 5 in the FMSR.
21	Long time resident has lived in Murrieta since 1984. This would be the 3rd water district change he has seen.	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria, to help resolve the type of concern the resident raised.
22	Long time resident expressed concerns on the existing condition and long term sustainability of the existing water system.	The residents concern is noted. The FMSR does evaluate improvements to the existing water system. Please see Section 5.0 of the FMSR.
23	Long time resident indicated that WMWD recently installed new water meter, and felt a leak and sinkhole was caused by the meter or nearby aging infrastructure.	Comment has been noted. We can not provide any context if the construction work caused a leak. However, the FMSR dose evaluate the magnitude of aging infrastructure that should be considered for replacement.
24	Resident who lives in Old Town Murrieta, on a well expressed his concern a meter will be put on his well.	Each agency was specifically asked to address this concern with their respective policies. Sections 7.2.9, 7.2.10, Table 7-3 and Table 8-25 outlines each agencies' policy.
25	Resident who lives in Old Town Murrieta expressed concerns about the amount of development.	The FMSR has many areas of consideration for the three participating water agencies. The City of Murrieta is also a participant in the study, with the desire to evaluate the water infrastructure required to serve the study area through buildout. The detailed results can be found in Section 5 of the FMSR. The FMSR does not provide assessment of the development policies within the General Plan, only the required water infrastructure to serve development.
26	Resident who lives in Old Town Murrieta expressed concerns that aquifer drawdown could result in his need to drill a deeper well, at a cost of \$50K to \$60k.	Comment is noted by the agencies. The scope of the FMSR looked at the financial implication across the agencies. The amount of water currently used by existing customers is not expected to change, independent of the agency serving the Murrieta Study Area. Future growth would require further evaluation of future demands and sources, before development could occur.
27	Resident who lives in Old Town Murrieta expressed he had no desire to receive City.	Comment has been noted. Each agency was specifically asked to address this concern with their respective policies. Sections 7.2.9, 7.2.10, Table 7-3 and Table 8-26 outlines each agencies' policy.
28	Community member indicated they are in a disagreement with RCWD regarding ownership of groundwater rights and is in discussion with the Watermaster. County Kennels "the Window".	Comment has been noted. Specific disputes between a participating agency and customer are not within the scope of the FMSR.
29	A resident of Murrieta since 1957 expressed concerns of over pumped aquifer and potential lost capacity.	Comment is noted by the agencies. The scope of the FMSR looked at the financial implication across the agencies. The amount of water currently used by existing customers is not expected to change, independent of the agency serving the Murrieta Study Area. Future growth would require further evaluation of future demands and sources, before development could occur.
30	A resident of Murrieta since 1957 expressed his resistance to be annexed into RCWD's service area.	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria.
31	Resident has lived in Murrieta since 1983. She has had disagreements with WMWD over meters, but would like the system to remain with WMWD. She feels WMWD will address the aging infrastructure over time.	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria, including improvements to existing infrastructure.
32	Several long term Murrieta resident expressed objections to growth and change in the community.	The FMSR has many areas of consideration for the three participating water agencies. The City of Murrieta is also a participant in the study, with the desire to evaluate the water infrastructure required to serve the study area through buildout.
33	Resident has lived in Murrieta since 1983 and objections to any agency impacting her ability to continue to use her well.	Each agency was specifically asked to address this concern with their respective policies. Sections 7.2.9, 7.2.10, Table 7-3 and Table 8-25 outlines each agencies' policy.

**Appendix A: Public Comment Summary <sup>(1)</sup>**

Public Comment/ Topic #	Provided Comment and/or Statement <sup>(2)</sup>	Response
34	A recent resident of Murrieta inquired which City representatives and elected officials were present for the meetings. He wants the FMSR to be clear in it's conveying of information.	City representatives identified themselves in the meeting. The comments on clarity of the report have been noted. The FMSR provides detailed analysis of infrastructure needs, cost and the financial and rate implications to customers, for each of the participating agencies.
35	How is Murrieta paying for this?	The \$255k project cost are equally split between the City of Murrieta, EMWD, RCWD and WMWD.
36	Resident question how will conflicts with existing agency policies be handled, if identified.	The process implemented for the FSMR was intended to address this concern. From the outset of the FMSR, each agency was asked to provide the necessary policy inputs, prior to the analysis being performed. This would reduce the opportunity for policy changes as the results were developed. The policy input provided to West Yost are included within the FMSR.
37	How will ongoing contact with public? Will there be another public meeting ? When WY provides findings to LAFCO, will the meeting be held in Murrieta at a good time when the public can attend, and in a place that will hold everyone?	Ongoing public interface will be handled by LAFCO and WMWD, for their customers and residents. Subsequent to this comment, a third public kickoff meeting was requested by residents and held at the Murrieta Community Center. LAFCO has stated it's intent to hold a public forum, in addition to any regular board meeting. The location is not yet determined due to COVID-19 requirements, but is anticipated to occur in the Murrieta area, at a convenient time for the residents.
38	Resident expressed appreciation that multiple community kickoff meetings were held. Thank you for doing the meeting twice. Resident also stated they participated in a meeting 22 months ago where developers expressed concerns over the cost it would take to get water to their development sites.	Comment is appreciated and noted. The required infrastructure and costs are outlined in Section 6 of this FMSR. It should be noted the consistent policy from the agencies has been growth will pay for growth.
39	Resident expressed a WMWD turning district over to RCWD. Developers and city hall are together.	Comment has been noted. This Murrieta Focused Municipal Service Review (FMSR) will independently consider Eastern Municipal Water District, Rancho California Water District and Western Municipal Water District based on equally evaluated criteria. There are no pre-determined conclusions in the FMSR.
40	Resident expressed concerns over an RCWD annexation to share in existing fixed costs and debt.	The RCWD analysis in the FMSR treated the study area as financially distinct.
41	Resident asked West Yost to look into the Ad Valorem Tax carefully and expressed concerns that if study area is given to RCWD and they became part of Santa Rosa, they would have to pay the Ad Valorem Tax.	To respond the residents concerns, RCWD had two scenarios analyzed. One funding mechanism would utilize a water rate surcharge, the other is an Ad Valorem Tax. The results of the RCWD analysis it address in detail in Section 8.3 of the FMSR.
42	Resident stated that EMWD also has the authority to charge an Ad Valorem Tax	EMWD did not request an Ad Valorem Tax financial analysis to be considered in the FMSR.
43	A resident requested clarification of the structure and authority of the LAFCO Commission.	LAFCO provided an explanation at the meeting.
44	Resident indicated they moved to the are because it was less expensive. Resident indicated that water is becoming more scarce. They have a pool, and are concerned about their financial ability to keep it filled.	Comment has been noted. Sections 7 and 8 of the FMSR will assist the resident in assessing the cost implication of service from any of the three water districts.
45	Resident asked if there will be time to review the final FMSR, prior to any LAFCO Commission meeting?	LAFCO has stated it's intent to hold a public forum, in addition to any regular board meeting. The location is not yet determined due to COVID-19 requirements, but is anticipated to occur in the Murrieta area, at a convenient time for the residents. LAFCO plans to release the report prior to any public meeting and the subsequent commission meeting.
46	Residents asked what initiated looking at this study?	The FMSR was initiated by a request from the City of Murrieta to LAFCO to evaluate the long term infrastructure, cost and financial implications for water service in the Murrieta Retail Area.
47	Resident stated they have lived in the Murrieta area most of their life, but lives outside of boundary of the study area and is on a well, Santa Rosa area. Concerns were raised over the Ad Valorem Tax and RCWD's history with the Murrieta community.	To respond the residents concerns, RCWD had two scenarios analyzed. One funding mechanism would utilize a water rate surcharge, the other is an Ad Valorem Tax. The results of the RCWD analysis it address in detail in Section 8.3 of the FMSR.
48	Comment was provided that developers have to install interior sprinklers.	Generally, this is true. However, the FMSR does not analyze the interior plumbing requirements for any given home or unit.
49	Resident questioned why they were not notified of the meeting and requested advanced notification for future meetings.	Comment has been noted by the participating agencies. WMWD indicated notifications were sent and will look into why some residents may not have received a notice.
50	Resident expressed concerns the AV tax would not be taken into account the.	To respond the residents concerns, RCWD had two scenarios analyzed. One funding mechanism would utilize a water rate surcharge, the other is an Ad Valorem Tax. The results of the RCWD analysis it address in detail in Section 8.3 of the FMSR.
51	Resident expressed concerns over an Ad Valorem Tax and wanted assurances it would be analyzed in the FMSR.	To respond the residents concerns, RCWD had two scenarios analyzed. One funding mechanism would utilize a water rate surcharge, the other is an Ad Valorem Tax. The results of the RCWD analysis it address in detail in Section 8.3 of the FMSR.
52	why was study commissioned? Was it at developers request? What was the process? How to object?	



**Appendix A: Public Comment Summary <sup>(1)</sup>**

Public Comment/ Topic #	Provided Comment and/or Statement <sup>(2)</sup>	Response
53	Why did the water districts and the City agree to pay for the study?	All four agencies mutually agreed an analysis through LAFCO was the best course of action to preserve the necessary independence of a study, for the agencies and the public.
54	Member of the community commented the State can re-adjust agency territories.	Agency boundary adjustments are under the authority of the Riverside LAFCO, who initiated the Murrieta FMSR.
55	Resident commented that well owners may not have received a notice of the meeting because they are not a customer.	Comment has been noted by the participating agencies. WMWD indicated notifications were sent and will look into why some residents may not have received a notice.
56	Residents asked West Yost to look at differences between the water districts regarding metering of private wells.	Each agency provided their respective policies regarding any proposed connection and metering of private wells. Please see Section 8 and Table 8-26 for those policy positions.
57	Resident asked if the community would get to vote on any proposed RCWD Ad Valorem Tax.	Responses were given at the public comments meeting that residents would have an opportunity to vote on an Ad Valorem Tax. However, West Yost are not attorneys who can advise the community on legal or voting matters. To respond the residents concerns, RCWD did request the Ad Valorem tax scenario to be included in the FMSR.
58	Self sustaining questions regarding the study area. Will it be financially distinct from growth projections.	The sustainability of the study area's existing customers was considered. The FMSR evaluated the necessary infrastructure from each agencies perspective. All growth related infrastructure components/increases will be paid for by those future customers. Growth pays for growth.
59	How will LAFCO maintain contact with public? Will public be able to observe meetings? I just want to observe, I wont talk.	Ongoing public interface will be handled by LAFCO and WMWD, for their customers and residents. Subsequent to this comment, a third public kickoff meeting was requested by residents and held at the Murrieta Community Center. LAFCO has stated it's intent to hold a public forum, in addition to any regular board meeting. The location is not yet determined due to COVID-19 requirements, but is anticipated to occur in the Murrieta area, at a convenient time for the residents. Regular project meetings were not open to the public.
60	Murrieta resident of 40 years asked if fees are all going to be based on lot size? Resident commented that large parcels could pay 5 times than homeowners and 5 acres is more than a residential parcel. Resident feels this is unfair and could force people to sell or subdivide. Fees should be based on house size and not parcel size.	Comment is noted by the agencies. The scope of the FMSR looked at the financial implication across the agencies. The fees based on assessed land values must be consistent with state and local laws for land versus improvement valuations.
61	A community member identified themselves as a real estate developer for 30 years. He expressed concerns about the availability, cost and quality of water.	Comment is noted. The FMSR analyzes each of these issues throughout the report.
62	Several additional residents expressed significant concerns about any agency requiring the metering of their well. The well owners requested for policy clarification within the FMSR.	Each agency was specifically asked to address this concern with their respective policies. Sections 7.2.9, 7.2.10, Table 7-3 and Table 8-25 outlines each agencies' policy.
63	Question was raised if West Yost project dollars for WMWD infrastructure, and if stays with WMWD, who will pay for the infrastructure upgrade?	Yes, the infrastructure and costs for WMWD was analyzed, and also for RCWD and EMWD. Please see Section 5.0 (5.1 for WMWD) for the identified infrastructure and Section 6.0 (6.2.1 for WMWD) of the FMSR.
64	Resident requested a detail analysis of the financial implications.	Detailed financial analysis were completed for the FMSR. Please see Sections 7 and 8 of the FMSR.
65	Resident raised concerns that apartments should have to pay the same fees.	For the FMSR, water rates and fees are applied based on the policies of the respective agency. Modifications to rates and fees are not contemplated within the purview of the FMSR.
66	Resident expressed concerns they will be paying for developers to come in and expressed that anyone interested in buying property should do their homework.	As stated above, the sustainability of the study area's existing customers was considered. The FMSR evaluated the necessary infrastructure from each agencies perspective. All growth related infrastructure components/increases will be paid for by those future customers. Growth pays for growth.
67	Resident indicated they were told the FMSR would include all costs, also taking into consideration infrastructure costs.	That is correct. The infrastructure and costs for EMWD, RCWD and WMWD were analyzed. Please see Section 5.0 for the identified infrastructure and Section 6.0 for respective cost within the FMSR.

Appendix A: Public Comment Summary <sup>(1)</sup>

Public Comment/ Topic #	Provided Comment and/or Statement <sup>(2)</sup>	Response
68	Resident asked how far into future are bills projected? Resident stated they read online they project out to 2050.	While agencies look at long range forecasting, the threshold for this FMSR is ten years. This covers (2) five year Proposition 218 cycles.
69	Resident asked if it is part of the FMSR scope of work to look at adding catch basins? Resident's pond is filled much of the year. Concerns were also expressed over any lining of natural creeks.	The FMSR focuses only on domestic water service only. Stormwater flows, storm drains, creeks and catch basins are not part of the FMSR.
70	Assessment district is okay.	
71	Resident expressed concerns over their property taxes increasing under an Ad Valorem Tax.	To respond the residents concerns, RCWD had two scenarios analyzed. One funding mechanism would utilize a water rate surcharge, the other is an Ad Valorem Tax. The results of the RCWD analysis it address in detail in Section 8.3 of the FMSR.

Notes:

- (1) Several members of the public expressed similar comments throughout the public meetings. Where comments and topics overlapped, responses were consolidated within this summary of responses.
- (2) The "Provided Comment and/or Statements" column is not intended to provide a verbatim representation or meeting minutes of any particular comment. It is intended to capture the essence of a comment or statement, in order to provide clarity or location where it is covered in the FMSR.



## Appendix B

### Detailed Financial Models

# RIVERSIDE LAFCO

## Murrieta Focused Municipal Service Review: Financial Analysis



OCTOBER 2020

### Appendix B - Financial Analysis Calculations

Table B-1	General Assumptions and Parameters
Table B-2	Customer and Water Use Data

#### Table B-3 WMWD Scenario Calculations

Table B-3a	Projected Operating Statement: Sources of Funds
Table B-3b	Projected Operating Statement: Uses of Funds and Financial Performance Criteria
Table B-3c	Revenue Calculations
Table B-3d	FMSR Capital Improvements and Cost Allocation to Existing Customers or Development
Table B-3e	Projected Pay-As-You-Go Capital Expenses and Projected Debt Service Expenses
Table B-3f	Development Capital Funding
Table B-3g	Projected Monthly Water Bill Calculation

#### Table B-5 EMWD Scenario Calculations

Table B-5a	Projected Operating Statement: Sources of Funds
Table B-5b	Projected Operating Statement: Uses of Funds and Projected Payoff of Acquisition Balance
Table B-5c	Revenue Calculations
Table B-5d	Preliminary Cost Per Equivalent Meter to Provide Water Service

#### Table B-4 RCWD Scenario Calculations

Table B-4a	Projected Operating Statement: Sources of Funds
Table B-4b	Projected Operating Statement: Uses of Funds and Financial Performance Criteria
Table B-4c	Revenue Calculations
Table B-4d	FMSR Capital Improvements and Cost Allocation to Existing Customers or Development
Table B-4e	Projected Pay-As-You-Go Capital Expenses and Projected Debt Service Expenses
Table B-4f	Potential Capital Funding for Facilities That Benefit Future Development
Table B-4g	Projected Monthly Total Water Cost Calculation
Table B-5e	Preliminary Acquisition Balance Calculation
Table B-5f	FMSR Capital Improvements and Cost Allocation to Existing Customers or Development
Table B-5g	Projected Pay-As-You-Go Capital Expenses and Projected Debt Service Expenses
Table B-5h	Projected Monthly Water Bill Calculation



**Table B-1**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**General Assumptions and Parameters**

**Line General Assumptions and Parameters**

1												
2	Gross Plant Value of WMWD Assets, \$M					\$14.60	Source: WMWD CY 2020 Model, "Assets" tab					
3												
4			FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5	General Inflation		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
7	CIP Escalation		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
8	Change in per capita water consumption		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9												
10		CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025	CY 2026	CY 2027	CY 2028	CY 2029	CY 2030
11	MWD Unit Costs (1)											
12	Full Service Treated Volumetric Cost (\$/AF)											
13	Tier 1	\$1,078	\$1,131	\$1,183	\$1,237	\$1,270	\$1,306	\$1,336	\$1,370	\$1,403	\$1,442	\$1,486
14	Tier 2	\$1,165	\$1,178	\$1,196	\$1,218	\$1,236	\$1,269	\$1,278	\$1,299	\$1,321	\$1,354	\$1,388
15	Full Service Untreated Volumetric Cost (\$/AF)											
16	Tier 1	\$755	\$781	\$807	\$836	\$860	\$889	\$916	\$945	\$974	\$998	\$1,023
17	Tier 2	\$842	\$855	\$873	\$895	\$913	\$936	\$955	\$976	\$998	\$1,023	\$1,049
18												
19	Projected EMWD Los Alamos Rate, \$/AF (2)	\$1,350.48	\$1,408.72	\$1,469.26	\$1,532.11	\$1,573.13	\$1,617.53	\$1,655.87	\$1,698.66	\$1,740.64	\$1,789.20	\$1,843.29
20												
21												
22		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
23	Projected Source Production and Treatment Unit Costs (3)											
24	Source of Supply / AF	\$223.73	\$229.32	\$235.05	\$240.93	\$246.95	\$253.13	\$259.45	\$265.94	\$272.59	\$279.40	\$286.39
25	Treatment / AF	\$89.55	\$91.79	\$94.09	\$96.44	\$98.85	\$101.32	\$103.86	\$106.45	\$109.11	\$111.84	\$114.64
26	Total	\$313.28	\$321.11	\$329.14	\$337.37	\$345.80	\$354.45	\$363.31	\$372.39	\$381.70	\$391.25	\$401.03
27												
28	Water Supply in Acre-feet, per FY (4) (5)	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
29	Local	363	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452	1,452
30	Additional Local Production from New Well No. 3						0	0	0	0	0	0
31	Imported	2,025	936	974	1,014	1,054	1,094	1,136	1,178	1,221	1,264	1,308
32	Total	2,388	2,388	2,426	2,466	2,506	2,546	2,588	2,630	2,673	2,716	2,760
33												
34	% Change in Imported Water Volumes			4.1%	4.0%	3.9%	3.9%	3.8%	3.7%	3.6%	3.6%	3.5%

### Table B-1 Notes:

- (1) Tier 1 Treated rate from WMWD 2/19/2020 per proposed MWD Updated 10-Year Financial Forecast. Others: From MWD 10-Year Financial Forecast, 2018 (Page 5)
- (2) Source: WMWD 2/19/2020
- (3) Source: WMWD, 2/19/2020, based on FY 18/19 actual expenses adjusted by rate of General Inflation for future years
- (4) FY 19/20 and FY 20/21 equals WMWD's water consumption data plus 3.5% non-revenue water
- (5) Groundwater production assumed to remain at 1,452 acre-feet per year, therefore all increase in water supply is from an increase in imported water. FY 19/20 value is lower. because North Well is out of service. Source: WMWD, 2/19/2020.

**Table B-2**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**Customer and Water Use Data**

**This Table Contains:**

Line Number	Subject
1	FY 19/20 Number of Murrieta Study Area Accounts
18	FY 19/20 Number of Murrieta Study Area Meter Equivalents
37	Projected Number of Single-Family Residential Connections
50	Projected Number of Multi-Family Residential Connections
63	Projected Number of Commercial Connections
76	Projected Number of Irrigation Connections
89	Projected Number of Fire Protection Connections
115	Monthly Water Use in Murrieta Study Area, All Customer Classes
130	Murrieta Study Area Single Family Residential Usage (ccf, 2013-2014 Average)
142	Annual Usage by Tier for Each Customer Class, ccf
175	Projected Water Demands from 2017 Kennedy Jenks Draft Western Murrieta Retail Demand Projection
203	Projected Annual Growth Rate from 2017 Kennedy Jenks Draft Western Murrieta Retail Demand Projection
232	Projected Buildout Meter Equivalents

**FY 19/20 Number of Murrieta Study Area Accounts**

Meter Size	SFR	MFR	COM	IRR	Schools	Fire Protection	Total (1)
5/8"	347	2	25	3	0	105	482
3/4"	1,939	6	10	3	0	10	1,968
1"	76		51	45	0		172
1.5"	1		31	45	0		77
2"	1	41	75	44	0		161
3"			4	1	0		5
4"		2	2				4
<b>Total</b>	<b>2,364</b>	<b>51</b>	<b>198</b>	<b>141</b>	<b>0</b>	<b>115</b>	<b>2,869</b>

Notes:

(1) Source: WMWD, 2/19/2020. Based on customer meter export at January 15, 2020. Commercial accounts include schools

**FY 19/20 Number of Murrieta Study Area Meter Equivalents**

Meter Size	No. of Accounts	Using WMWD Meter Equivalent Ratios		Using EMWD Meter Equivalent Ratios		Using RCWD Meter Equivalent Ratios	
		Ratio (1)	No. of Meter Equivalents(2)	Ratio (3)	No. of Meter Equivalents(2)	Ratio (4)	No. of Meter Equivalents(2)
5/8"	482	1.00	482.00	1.00	482.00	0.67	322.94
3/4"	1,968	1.00	1,968.00	1.00	1,968.00	1.00	1,968.00
1"	172	1.67	287.24	1.50	258.00	1.70	292.40
1.5"	77	3.33	256.41	5.00	385.00	3.30	254.10
2"	161	5.33	858.13	8.00	1,288.00	5.30	853.30
3"	5	11.67	58.35	16.00	80.00	16.70	83.50
4"	4	21.00	84.00	25.00	100.00	33.30	133.20
<b>Total</b>	<b>2,869</b>		<b>3,994.13</b>		<b>4,561.00</b>		<b>3,907.44</b>

(1) Source: WMWD Connection Fee Study, Table B-2

(2) Meter Equivalent calculation is based on the number of connections from WMWD's CY 2020 Rate Model

(3) Source: EMWD Cost of Service Study, Table 1-1.

(4) Source: RCWD email 11/25/19

**Table B-2**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**Customer and Water Use Data**

**Projected Number of Single-Family Residential Connections**

(refer to line: 216 below for annual percent growth rates.)

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	347	353	359	365	371	377	383	389	395	401	408
3/4"	1,939	1,970	2,002	2,034	2,067	2,100	2,134	2,169	2,204	2,240	2,276
1"	76	77	78	79	80	81	82	83	84	85	86
1.5"	1	1	1	1	1	1	1	1	1	1	1
2"	1	1	1	1	1	1	1	1	1	1	1
3"	0	0	0	0	0	0	0	0	0	0	0
4"											
<b>Total</b>	<b>2,364</b>	<b>2,402</b>	<b>2,441</b>	<b>2,480</b>	<b>2,520</b>	<b>2,560</b>	<b>2,601</b>	<b>2,643</b>	<b>2,685</b>	<b>2,728</b>	<b>2,772</b>

**Projected Number of Multi-Family Residential Connections**

(refer to line: 216 below for annual percent growth rates.)

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	2	2	2	2	2	2	2	2	2	2	2
3/4"	6	6	6	6	6	6	6	6	6	6	6
1"	0	0	0	0	0	0	0	0	0	0	0
1.5"	0	0	0	0	0	0	0	0	0	0	0
2"	41	42	43	44	45	46	47	48	49	50	51
3"	0	0	0	0	0	0	0	0	0	0	0
4"											
<b>Total</b>	<b>49</b>	<b>50</b>	<b>51</b>	<b>52</b>	<b>53</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>58</b>	<b>59</b>

**Projected Number of Commercial Connections**

(refer to line: 216 below for annual percent growth rates.)

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	25	25	25	25	25	25	25	25	25	25	25
3/4"	10	10	10	10	10	10	10	10	10	10	10
1"	51	52	53	54	55	56	57	58	59	60	61
1.5"	31	32	33	34	35	36	37	38	39	40	41
2"	75	76	77	78	79	80	81	82	83	84	85
3"	4	4	4	4	4	4	4	4	4	4	4
4"	2	2	2	2	2	2	2	2	2	2	2
<b>Total</b>	<b>198</b>	<b>201</b>	<b>204</b>	<b>207</b>	<b>210</b>	<b>213</b>	<b>216</b>	<b>219</b>	<b>222</b>	<b>225</b>	<b>228</b>

**Projected Number of Irrigation Connections**

(refer to line: 216 below for annual percent growth rates.)

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	3	3	3	3	3	3	3	3	3	3	3
3/4"	3	3	3	3	3	3	3	3	3	3	3
1"	45	46	47	48	49	50	51	52	53	54	55
1.5"	45	46	47	48	49	50	51	52	53	54	55
2"	44	45	46	47	48	49	50	51	52	53	54
3"	1	1	1	1	1	1	1	1	1	1	1
4"	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>141</b>	<b>144</b>	<b>147</b>	<b>150</b>	<b>153</b>	<b>156</b>	<b>159</b>	<b>162</b>	<b>165</b>	<b>168</b>	<b>171</b>

**Table B-2**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**Customer and Water Use Data**

87 **Projected Number of School Connections** Note: WMWD includes usage for schools in its Commercial customer class

88

89 **Projected Number of Fire Protection Connections** (refer to line: 216 below for annual percent growth rates.)

90

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	105	107	109	111	113	115	117	119	121	123	125
3/4"	10	10	10	10	10	10	10	10	10	10	10
1"	0	0	0	0	0	0	0	0	0	0	0
1.5"	0	0	0	0	0	0	0	0	0	0	0
2"	0	0	0	0	0	0	0	0	0	0	0
3"	0	0	0	0	0	0	0	0	0	0	0
4"	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>115</b>	<b>117</b>	<b>119</b>	<b>121</b>	<b>123</b>	<b>125</b>	<b>127</b>	<b>129</b>	<b>131</b>	<b>133</b>	<b>135</b>

100

101

102 **Total Projected Number of Connections**

103

Meter Size	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8"	482	490	498	506	514	522	530	538	546	554	563
3/4"	1,968	1,999	2,031	2,063	2,096	2,129	2,163	2,198	2,233	2,269	2,305
1"	172	175	178	181	184	187	190	193	196	199	202
1.5"	77	79	81	83	85	87	89	91	93	95	97
2"	161	164	167	170	173	176	179	182	185	188	191
3"	5	5	5	5	5	5	5	5	5	5	5
4"	2	2	2	2	2	2	2	2	2	2	2
<b>Total</b>	<b>2,867</b>	<b>2,914</b>	<b>2,962</b>	<b>3,010</b>	<b>3,059</b>	<b>3,108</b>	<b>3,158</b>	<b>3,209</b>	<b>3,260</b>	<b>3,312</b>	<b>3,365</b>

112

113

114

115 **Monthly Water Use in Murrieta Study Area, All Customer Classes**

116

Monthly Water Use, ccf													Total Annual Usage
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Tier 1	28,000	30,000	28,000	36,000	38,000	50,000	50,000	40,000	40,000	38,000	35,000	42,000	455,000
Tier 2	19,000	20,000	17,000	30,000	48,000	50,000	68,000	58,000	50,000	36,000	30,000	25,000	451,000
Tier 3	3,000	1,500	1,300	1,700	2,800	3,500	4,200	5,000	5,300	4,500	4,200	3,800	40,800
Tier 4	1,500	1,200	1,000	800	1,200	1,400	1,700	2,100	2,300	2,200	2,100	2,000	19,500
Tier 5	3,500	2,000	1,800	1,900	2,400	2,900	2,200	4,000	3,500	3,800	4,400	5,000	37,400
<b>Total</b>	<b>55,000</b>	<b>54,700</b>	<b>49,100</b>	<b>70,400</b>	<b>92,400</b>	<b>107,800</b>	<b>126,100</b>	<b>109,100</b>	<b>101,100</b>	<b>84,500</b>	<b>75,700</b>	<b>77,800</b>	<b>1,003,700</b>

125

126 Source: WMWD, 2/19/2020

127 Total in AFY

2,304

128 Compare to current total demand, per West Yost, AFY

2,090

129

130 **Murrieta Study Area Single Family Residential Usage (ccf, 2013-2014 Average)**

131 Source: WMWD CY 2020 Rate Model, get tab and cell range

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Annual
Tier 1. Efficient Indoor Use	22,680	22,592	22,465	22,146	21,883	21,548	18,572	17,380	20,464	21,603	22,233	22,528	256,092
Tier 2. Efficient Outdoor Use	36,572	36,748	34,623	28,042	22,795	17,251	6,399	9,368	12,966	19,636	31,661	38,928	294,987
Tier 3. Inefficient Use	786	808	1,492	1,355	1,028	894	307	296	368	202	698	953	9,187
Tier 4. Excessive Use	203	211	660	520	470	412	117	89	88	64	184	327	3,345
Tier 5. Unsustainable Use	69	81	561	417	303	354	501	100	30	75	124	202	2,817
<b>Total</b>	<b>60,309</b>	<b>60,440</b>	<b>59,801</b>	<b>52,480</b>	<b>46,479</b>	<b>40,459</b>	<b>25,895</b>	<b>27,232</b>	<b>33,916</b>	<b>41,580</b>	<b>54,899</b>	<b>62,938</b>	<b>566,428</b>

138

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141



**Table B-2**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**Customer and Water Use Data**

**142 Annual Usage by Tier for Each Customer Class, ccf**

143 Step 1. Use Previously Provided Data from WMWD's CY 2020 Rate Model, As Percent of Total. Assume Fire Protection Account Use is 0.

	Single-Family Residential		Multi-Family Residential		Irrigation	All Other (CII)		Fire Prot.	Total	
	Annual	% of Tier	Annual	% of Tier	Annual	% of Tier	Annual	% of Tier	Annual	% of Total
	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage	Usage
147 Tier 1	256,092	68.31%	73,043	19.48%	0	0.00%	45,738	12.20%	0	374,873 41%
148 Tier 2	295,675	64.94%	2,498	0.55%	119,854	26.33%	37,248	8.18%	0	455,274 50%
149 Tier 3	8,729	32.90%	1,251	4.72%	12,965	48.87%	3,586	13.51%	0	26,531 3%
150 Tier 4	3,203	22.92%	523	3.74%	8,549	61.17%	1,700	12.16%	0	13,975 2%
151 Tier 5	2,728	6.14%	253	0.57%	36,963	83.13%	4,520	10.17%	0	44,464 5%
152 Total	566,428		77,568		178,331		92,791		0	915,118 100%
153 % of Usage	62%		8%		19%		10%		0%	

155 Step 1. Multiply Percentages from Previously Provided Data from CY 2020 Rate Model (which is a projection) by Total Demand by Tier Data Provided by WMWD 2/19/2020.

	SFR	MFR	Irrigation	All Other (CII)	Fire Prot.	Total
	Annual	Annual	Annual	Annual	Annual	Annual
	Usage	Usage	Usage	Usage	Usage	Usage
159 Tier 1	310,830	88,655	0	55,514	0	455,000
160 Tier 2	292,899	2,475	118,728	36,898	0	451,000
161 Tier 3	13,424	1,924	19,938	5,514	0	40,800
162 Tier 4	4,470	730	11,929	2,372	0	19,500
163 Tier 5	2,295	213	31,090	3,802	0	37,400
164 Total	623,918	93,996	181,686	104,100	0	1,003,700

**166 Annual Source of Supply, Current (Data is Superseded by Data Found in Table B-1)**

167 Current Average Source of Supply

168 Unit of GPM	1,295	gpm	Source: West Yost, 12/20/19
169 Units of GPD	1,864,800	gpd	
170 Units of Cubic Feet per Day	249,305	cf per day	
171 Units of Cubic Feet per Year	91,058,583	cf per year	
172 Units of Acre Feet Per Year	2,090	afy	

**Table B-2**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**Customer and Water Use Data**

**175 Projected Water Demands from 2017 Kennedy Jenks Draft Western Murrieta Retail Demand Projection**

176 Source: Kennedy/Jenks DRAFT Western Murrieta Retail Demand Projection July 2017, Table 3-2, page 25 of 31 (Scenario 2a, Recommended Scenario; units = AFY)

177

179 Category	Year						
	2010	2015	2020	2025	2030	2035	2040
180 Single Family Indoor (1)	313	395	440	477	517	560	577
181 Single Family Outdoor (2)	940	1,184	1,320	1,430	1,550	1,680	1,732
182 Single Family Total (3)	1,254	1,578	1,760	1,907	2,067	2,240	2,309
183 Commercial/Multi-Family Indoor (4)	253	319	355	385	417	452	466
184 Commercial/Multi-Family Outdoor (5)	309	389	434	470	510	553	570
185 Commercial/Multi-Family Total (6)	562	708	789	855	927	1,005	1,036
186 Landscape Potable (7)	640	806	899	974	1,056	1,144	1,179
187 Temporary	5	7	8	9	10	11	11
188 Total	2,461	3,099	3,456	3,745	4,060	4,400	4,535
189 Annual Percent Growth				1.62%	1.63%		

190 Notes from Kennedy Jenks report:

191 Note: Assumes 2016 SCAG growth rate plus an additional 0.5% increment of annual growth. Differences in totals between Table 3-3 and Table 2-12 due to rounding.

192 (1) Assumes indoor water use 25% of total water use.

193 (2) Assumes outdoor water use 75% of total water use.

194 (3) Years 2010-2015 based on Western Meter Data, Cost Center 270, Single Family Category.

195 (4) Assumes indoor water use 45% of total water use.

196 (5) Assumes outdoor water use 55% of total water use.

197 (6) Years 2010-2015 based on Western Meter Data, Cost Center 270. Commercial/Multi-Family includes Commercial, Multi-Family, Religious Organizations, Restaurants, Schools, and Park Restrooms.

198 (7) Years 2010-2015 based on Western Meter Data, Cost Center 270. Landscape includes Landscape Potable, Hydrant, and Fire Protection.

199

200 Use of this data in the financial analysis: Not directly used in calculations, but used for comparison of growth rates.

201

202

**203 Projected Annual Growth Rate from 2017 Kennedy Jenks Draft Western Murrieta Retail Demand Projection**

204 Source: Kennedy/Jenks DRAFT Western Murrieta Retail Demand Projection July 2017, page 25

205

206

207 Category	2020-2025	2025-2030
208 Single Family Indoor (1)	1.63%	1.62%
209 Single Family Outdoor (2)	1.61%	1.62%
210 Single Family Total (3)	1.62%	1.62%
211 Commercial/Multi-Family Indoor (4)	1.64%	1.61%
212 Commercial/Multi-Family Outdoor (5)	1.61%	1.65%
213 Commercial/Multi-Family Total (6)	1.62%	1.63%
214 Landscape Potable (7)	1.62%	1.63%
215 Temporary	2.38%	2.13%
216 Total	1.62%	1.63%

217

218

219 Notes from Kennedy Jenks report:

220 Note: Assumes 2016 SCAG growth rate plus an additional 0.5% increment of annual growth. Differences in totals between Table 3-3 and Table 2-12 due to rounding.

221 (1) Assumes indoor water use 25% of total water use.

222 (2) Assumes outdoor water use 75% of total water use.

223 (3) Years 2010-2015 based on Western Meter Data, Cost Center 270, Single Family Category.

224 (4) Assumes indoor water use 45% of total water use.

225 (5) Assumes outdoor water use 55% of total water use.

226 (6) Years 2010-2015 based on Western Meter Data, Cost Center 270. Commercial/Multi-Family includes Commercial, Multi-Family, Religious Organizations, Restaurants, Schools, and Park Restrooms.

227 (7) Years 2010-2015 based on Western Meter Data, Cost Center 270. Landscape includes Landscape Potable, Hydrant, and Fire Protection.

228

229 Use of this data in the financial analysis: The total percent growth rates in the last line of this table are used as the projected water system growth rates.

**Table B-2**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**Customer and Water Use Data**

230 These annual growth rates are used to project water rate revenues, certain O&M expenses, the number of service connections, and connection fee revenues.

231

232 **Projected Buildout Meter Equivalents**

233

234 Methodology: Use West Yost Water Demand Projections

235

236	Current Average Day Demand, gpm	1,295
-----	---------------------------------	-------

237	Projected Buildout Average Day Demand, gpm	2,339 Note 1
-----	--------------------------------------------	--------------

238	% Increase in Average Day Demand at Buildout	80.62%
-----	----------------------------------------------	--------

239	% Increase in Meter Equivalents at Buildout	80.62%
-----	---------------------------------------------	--------

240	Increase in Meter Equivalents at Buildout	3,219.98
-----	-------------------------------------------	----------

241	Number of Meter Equivalents at Buildout	7,214.11
-----	-----------------------------------------	----------

242

243 Notes:

244 (1) Scenario: Build-Out Demand With Parcels Served by Existing Private Well Within 1,000' of

245 Existing Pipeline Converted to Municipal Service. Note that any such connections of customers on existing

246 private wells to municipal service is voluntary. Inclusion of these customers connecting is how the

247 facilities are being planned for, in the event they connect in the future.

**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

**Table B-3a**  
**WMWD SCENARIO Projected Operating Statement: Sources of Funds**

Line		WMWD				Projected								Notes
		Fund	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
1	Beginning Reserve Balance as of 7/1													
2	Operating Fund 230	230	\$3,109,336	\$2,493,163	\$2,796,455	\$2,454,184	\$2,443,753	\$2,651,231	\$2,986,003	\$3,266,784	\$3,597,474	\$4,090,579	\$4,517,531	1, 2
3	Connection Fee Fund 231	231	(\$1,223,311)	(\$820,381)	(\$706,630)	(\$940,411)	(\$1,169,367)	(\$1,385,570)	(\$1,596,515)	(\$1,864,512)	(\$2,109,889)	(\$2,340,461)	(\$2,547,054)	1, 2
4	Distribution Fund 233	233	\$256,807	\$261,943	\$267,182	\$272,526	\$277,976	\$283,536	\$289,206	\$294,991	\$300,890	\$306,908	\$313,046	1, 2
5	Asset Replacement Fund 235	235	\$4,049,899	\$2,378,668	\$2,439,691	\$3,057,860	\$2,688,391	\$3,311,534	\$3,947,139	\$4,285,518	\$4,730,664	\$5,184,713	\$5,747,844	1, 2
6														
7	Sources of Funds													
8	Customer Rates (CY 2019 and CY 2020 Rates)	230	5,061,033											3
9	Customer Rates (CY 2020 Rates)	230		5,539,097	5,628,784	5,719,924	5,812,539	5,906,653	6,002,834	6,100,580	6,199,919	6,300,875	6,403,474	4
10														
11	Additional Rate Revenues (Rate Increases CY 2021 and Subsequent Years)													5
12	Fiscal	% of Water	Months											
13	Year	Rate Revenue	of Revenue											
14	FY 19/20	N/A	N/A	230										
15	FY 20/21	3.3%	6	230	91,395	185,750	188,757	191,814	194,920	198,094	201,319	204,597	211,315	
16	FY 21/22	3.3%	6	230		95,940	194,986	198,144	201,352	204,631	207,963	211,349	214,791	218,288
17	FY 22/23	3.3%	6	230			100,710	204,682	207,997	211,383	214,825	218,324	221,879	225,492
18	FY 23/24	3.3%	6	230				105,718	214,860	218,359	221,915	225,528	229,201	232,933
19	FY 24/25	3.3%	6	230					110,975	225,565	229,238	232,971	236,764	240,620
20	FY 25/26	3.3%	6	230						116,504	236,803	240,659	244,577	248,560
21	FY 26/27	3.3%	6	230							122,309	248,600	252,649	256,763
22	FY 27/28	3.3%	6	230								128,402	260,986	265,236
23	FY 28/29		6	230									0	0
24	FY 29/30		6	230										0
25	Total Additional Rate Revenue		\$0	\$91,395	\$281,690	\$484,453	\$700,358	\$930,104	\$1,174,536	\$1,434,372	\$1,710,430	\$1,868,776	\$1,899,207	
26														
27	Total Customer Rate Revenues, Fund 230		\$5,061,033	\$5,630,492	\$5,910,474	\$6,204,377	\$6,512,897	\$6,836,757	\$7,177,370	\$7,534,952	\$7,910,349	\$8,169,651	\$8,302,681	
28														
29	Non-Rate Revenue													
30	Non-Operating Revenues													
31	Property Tax	230	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
32	Operating Revenues													
33	Interest Income	230	62,187	49,863	55,929	49,084	48,875	53,025	59,720	65,336	71,949	81,812	90,351	
34	Interest Income	231	0	0	0	0	0	0	0	0	0	0	0	
35	Interest Income	233	5,136	5,239	5,344	5,451	5,560	5,671	5,784	5,900	6,018	6,138	6,261	
36	Interest Income	235	80,998	47,573	48,794	61,157	53,768	66,231	78,943	85,710	94,613	103,694	114,957	
37	Delinquent Penalties	230	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	
38	Water Availability Charge Revenue	230	138,978	138,978	138,978	138,978	138,978	138,978	138,978	138,978	138,978	138,978	138,978	
39	Other - New Service Set Up & Meter Repair	230	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	
40	Water Reliability Charge Revenue	230	0	0	0	0	0	0	0	0	0	0	0	
41	Connection Fees	231	469,995	481,745	501,196	513,726	534,351	547,709	569,578	592,198	607,002	630,982	655,781	6
43	Debt Proceeds, FMSR Capital, Existing Customers	235			5,197,442				8,016,251					12
44	Debt Proceeds, FMSR Capital, Development	231			5,651,312				6,462,522					12
45	Debt Proceeds, New Well No. 3	235					0							
46	Total Non-Rate Revenue		\$2,816,583	\$782,688	\$11,658,283	\$827,684	\$840,820	\$870,902	\$15,391,064	\$947,410	\$977,850	\$1,020,893	\$1,065,617	
47														
48	Total Revenues		\$7,877,616	\$6,413,180	\$17,568,757	\$7,032,061	\$7,353,717	\$7,707,659	\$22,568,434	\$8,482,363	\$8,888,199	\$9,190,544	\$9,368,298	
49	Table Notes for this table are found after Table B-3b													

**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

**Table B-3b**  
**WMWD SCENARIO Projected Operating Statement: Uses of Funds and Financial Performance Criteria**

		WMWD	Projected											
		Fund	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	Notes
50	Uses of Funds													
51	O&M Expenditures	Source of Data: FY 19/20 from WMWD, 2/19/2020												7
52	Water Pumping	230	272,503	279,316	286,298	293,456	300,792	308,312	316,020	323,920	332,018	340,319	348,827	8
53	Transmission & Distribution	230	1,312,466	1,345,278	1,378,910	1,413,382	1,448,717	1,484,935	1,522,058	1,560,110	1,599,112	1,639,090	1,680,067	
54	Customer Accounts	230	187,042	194,822	202,926	211,367	220,159	229,317	238,878	248,836	259,211	270,017	281,274	8
55	G&A Allocation	230	651,575	667,864	684,561	701,675	719,217	737,197	755,627	774,518	793,881	813,728	834,071	
56	Other Operating Expenses	230	123,698	126,790	129,960	133,209	136,539	139,953	143,452	147,038	150,714	154,482	158,344	
57														
58	Other Expenditures													
59	Purchased Water	230	\$2,734,384	\$1,318,210	\$1,431,664	\$1,553,099	\$1,657,486	\$1,769,890	\$1,880,495	\$2,000,664	\$2,124,645	\$2,261,783	\$2,411,685	8
60	Source of Supply	230	81,213	332,973	341,297	349,829	358,575	367,539	376,728	386,146	395,800	405,695	415,837	13
61	Treatment	230	32,508	133,284	136,616	140,031	143,532	147,120	150,798	154,568	158,432	162,393	166,453	13
62	Water Use Efficiency	230	49,950	51,199	52,479	53,791	55,135	56,514	57,927	59,375	60,859	62,381	63,940	
63	Other Non-Operating Expense	230	3,320	3,403	3,488	3,575	3,665	3,756	3,850	3,946	4,045	4,146	4,250	
64														
65	Other Expenditures (Other than O&M)													
66	Capital (GIS Mapping, Tank Mixing System)	230	\$0	\$500,000	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	9
67	Debt Service, Interfund Loan for North Well	230	0	108,743	108,743	108,743	108,743	108,743	108,743	108,743	108,743	108,743	108,743	
68	Capital Project Funding - 231	231	0	0	0	0	0	0	0	0	0	0	0	
69	Debt Service - 231	231	67,065	67,054	67,016	67,009	66,976	66,976	66,976	66,976	66,976	66,976	66,976	
70	Capital Project Funding - 233	233	0	0	0	0	0	0	0	0	0	0	0	
71	Debt Service - 233	233	0	0	0	0	0	0	0	0	0	0	0	
72	Capital Projects - 235	235	4,241,229	0	0	1,100,000		0	0	0	0	0	0	9
73	Study Area Repair & Replacement	235		500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	10
74														
75	FMSR Capital Projects													
76	PAYG Capital, Existing Customers	235		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
77	PAYG Capital, Future Development	231		\$300,940	\$308,464	\$316,175	\$324,079	\$332,181	\$0	\$0	\$0	\$0	\$0	
78	PAYG, Annual Debt Svc, Existing Customers	235		\$0	\$330,625	\$330,625	\$330,625	\$330,625	\$840,564	\$840,564	\$840,564	\$840,564	\$840,564	11
79	PAYG, Annual Debt Svc, Future Development	231		\$0	\$359,498	\$359,498	\$359,498	\$359,498	\$770,599	\$770,599	\$770,599	\$770,599	\$770,599	11
80	FMSR Capital Projects, Existing Customers	235			5,197,442				8,016,251					11
81	FMSR Capital Projects, Future Development	231			5,651,312				6,462,522					11
82	New Well No. 3	235					0							11
83														
84	Total Uses of Funds		\$9,756,953	\$5,929,875	\$17,521,298	\$7,635,465	\$6,733,739	\$6,942,557	\$22,211,486	\$7,946,004	\$8,165,600	\$8,400,915	\$8,651,630	
85														
86	Interfund Transfer: 230 to 235		489,000	513,450	1,400,000	1,500,000	1,400,000	1,400,000	1,600,000	1,700,000	1,700,000	1,800,000	1,850,000	12
87														
88	End of Year Balance													
89	Operating Fund 230		\$2,493,163	\$2,796,455	\$2,454,184	\$2,443,753	\$2,651,231	\$2,986,003	\$3,266,784	\$3,597,474	\$4,090,579	\$4,517,531	\$4,785,339	
90	Connection Fee Fund 231		(\$820,381)	(\$706,630)	(\$940,411)	(\$1,169,367)	(\$1,385,570)	(\$1,596,515)	(\$1,864,512)	(\$2,109,889)	(\$2,340,461)	(\$2,547,054)	(\$2,728,847)	
91	Distribution Fund 233		\$261,943	\$267,182	\$272,526	\$277,976	\$283,536	\$289,206	\$294,991	\$300,890	\$306,908	\$313,046	\$319,307	
92	Asset Replacement Fund 235		\$2,378,668	\$2,439,691	\$3,057,860	\$2,688,391	\$3,311,534	\$3,947,139	\$4,285,518	\$4,730,664	\$5,184,713	\$5,747,844	\$6,372,236	
93	Math Check, should equal \$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
94														



**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

**95 Financial Performance Criteria**

96	Operating Reserve: Target 3 - 6 months of Operating Expenses (2013 Reserve Policies, Page 7 as found in Appendix to 2018 - 2020 Budget)												
97	Operating Expenses (230 expenses less capital)	\$5,448,659	\$4,453,138	\$4,648,199	\$4,853,415	\$5,043,818	\$5,244,534	\$5,445,832	\$5,659,122	\$5,878,718	\$6,114,034	\$6,364,748	
98	3 Months Operating Expenses	\$1,362,165	\$1,113,284	\$1,162,050	\$1,213,354	\$1,260,954	\$1,311,134	\$1,361,458	\$1,414,781	\$1,469,679	\$1,528,508	\$1,591,187	
99	6 Months Operating Expenses	\$2,724,330	\$2,226,569	\$2,324,099	\$2,426,707	\$2,521,909	\$2,622,267	\$2,722,916	\$2,829,561	\$2,939,359	\$3,057,017	\$3,182,374	
100	Projected EOY 230+231 Reserve Balance	\$1,672,783	\$2,089,825	\$1,513,773	\$1,274,386	\$1,265,662	\$1,389,488	\$1,402,272	\$1,487,585	\$1,750,117	\$1,970,477	\$2,056,491	13
101	OK?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
102													
103	Asset Replacement Fund Reserve: Target between \$6,355,923 and \$14,235,000 per WMWD 2/5/2020												
104	Projected EOY 235 Reserve Balance	\$2,378,668	\$2,439,691	\$3,057,860	\$2,688,391	\$3,311,534	\$3,947,139	\$4,285,518	\$4,730,664	\$5,184,713	\$5,747,844	\$6,372,236	
105	OK?	No	No	No	No	No	No	No	No	No	No	Yes	
106													
107													

**108 Notes to Tables A-3a and A-3b:**

- 109 (1) FY 19/20 Beginning Balance per WMWD, 2/4/2020
- 110 (2) WMWD has four funds used to separately track water system revenues and expenses
- 111 (3) Source: WMWD Calendar Year 2020 Rate Model
- 112 (4) Calculated by FG Solutions based on WMWD's CY 2020 Rates and Customer, Water Use data contained in WMWD's CY 2020 Rate Model. See Table A3-c. ~1.6% annual system growth is also included in the calculations (See Table B-2)
- 113 (5) Projected rate increases are calculated by FG Solutions based on meeting the cash needs of the utility.
- 114 (6) Connection Fee revenues are included in this analysis and they will be used to pay for Development Capital. See Table B-3c.
- 115 (7) FY 19/20 expenses from WMWD's FY 19/20 budget. All expenses except debt service and capital improvements are escalated for inflation.
- 116 (8) Projected expenses are also adjusted for system growth in addition to inflation. Purchased Water expenses based on imported acre-feet times EMWD's per acre-foot cost (see Table B-1).
- 117 FY 19/20 imported water deliveries and costs are higher than typical because the North Well has been out of service, which reduces local groundwater production.
- 118 (9) Source: \$500K for GIS Mapping and \$1.1M for Reservoir Recoating. Schedule per WMWD 2/4/2020. FY 19/20 North Well \$ from WMWD, 2/19/2020. \$5M for 3rd Well, FY 23/24, per WMWD 2/04/2020.
- 119 \$350K for tank mixing system and schedule from WMWD 2/19/2020.
- 120 (10) Per WMWD, 2/5/2020
- 121 (11) See Tables A-3d and A-3e.
- 122 (12) Transfers estimated by FG Solutions based on meeting the minimum reserve criteria (Operating Reserve exceeding of 3 months of expenses and Asset Replacement Fund reserve within WMWD's specified range.
- 123 (13) Projected local production times local production unit cost. See Table B-1
- 124 (14) The 230 and 231 Reserve Balances are combined for the purposes of this reserve balance criteria calculation because the negative balance in the 231 Fund must be covered by the 230 Fund.

**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

**Table B-3c**  
**WMWD SCENARIO: Revenue Calculations**

**This Table Contains:**

Line Number	Subject
125	Number of Connections per Meter Size (See Table B-2)
134	Projected Water Use by WMWD Tier, ccf/year (See Table B-2)
142	Seasonal Distribution of Water Use, ccf/year (Calculated from Data in Table B-2)
152	CY 2019 and CY 2020 Rate Revenue Back calculation Under WMWD Rates
204	WMWD Adopted Water Rates Through Calendar Year 2020, and Projected Rates through FY 29/30. Projected Based on % Increases in Operating Statement Shown Above in Table B-3a
229	Projected Connection Fee Revenues

		Projected										
		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
125	Number of Connections per Meter Size (See Table B-2)											
126	5/8"	482	490	498	506	514	522	530	538	546	554	563
127	3/4"	1,968	1,999	2,031	2,063	2,096	2,129	2,163	2,198	2,233	2,269	2,305
128	1"	172	175	178	181	184	187	190	193	196	199	202
129	1.5"	77	79	81	83	85	87	89	91	93	95	97
130	2"	161	164	167	170	173	176	179	182	185	188	191
131	3"	5	5	5	5	5	5	5	5	5	5	5
132	4"	2	2	2	2	2	2	2	2	2	2	2
133	Total	2,867	2,914	2,962	3,010	3,059	3,108	3,158	3,209	3,260	3,312	3,365
134	Projected Water Use by WMWD Tier, ccf/year (See Table B-2)											
135	Tier 1	455,000	462,367	469,853	477,461	485,192	493,048	501,077	509,236	517,528	525,955	534,519
136	Tier 2	451,000	458,302	465,723	473,264	480,927	488,714	496,672	504,760	512,979	521,332	529,821
137	Tier 3	40,800	41,461	42,132	42,814	43,507	44,211	44,931	45,663	46,407	47,163	47,931
138	Tier 4	19,500	19,816	20,137	20,463	20,794	21,131	21,475	21,825	22,180	22,541	22,908
139	Tier 5	37,400	38,006	38,621	39,246	39,881	40,527	41,187	41,858	42,540	43,233	43,937
140	Total	1,003,700	1,019,952	1,036,466	1,053,248	1,070,301	1,087,631	1,105,342	1,123,342	1,141,634	1,160,224	1,179,116
141												
142	Seasonal Distribution of Water Use, ccf/year (Calculated from Data in Table B-2)											
143		July - Dec	Jan - June	What this table means: according to data provided by WMWD, 54% of Tier 1 water use occurs between July and December, 61% of Tier 5 water use occurs between July and December, and 57% of total water use occurs between January and June.								
144	Tier 1	54%	46%									
145	Tier 2	59%	41%									
146	Tier 3	66%	34%									
147	Tier 4	64%	36%									
148	Tier 5	61%	39%									
149	Total	57%	43%									
150												
151												

**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

152 **CY 2019 and CY 2020 Rate Revenue Back calculation Under WMWD Rates**

153 Fixed System Charge, CY 2019 and CY 2020 Rates

	CY 2019	CY 2020
155 5/8" Meter	\$29.05	\$32.00
156 3/4" Meter	\$40.11	\$44.39
157 1" Meter	\$61.68	\$68.56
158 1.5" Meter	\$115.87	\$129.28
159 2" Meter	\$138.43	\$154.50
160 3" Meter	\$344.39	\$384.49
161 4" Meter	\$665.06	\$744.16

162 Fixed System Charge Revenues

	FY 19/20	FY 20/21
164 5/8" Meter	\$176,557	\$188,160
165 3/4" Meter	997,776	1,064,827
166 1" Meter	134,408	143,976
167 1.5" Meter	113,259	122,557
168 2" Meter	282,970	304,056
169 3" Meter	21,866	23,069
170 4" Meter	16,911	17,860
171 Subtotal, Fixed System Charge Revenues	\$1,743,747	\$1,864,506

172 Commodity Charge and Pumping Charges (per HCF, 1 HCF = 748 gallons)

174 Water delivered for fire protection services will be billed at the Tier 2 rate.

Commodity Charge Tiers	CY 2019	CY 2020
177 Tier 1 - Indoor Budget	\$1.919	\$2.006
178 Tier 2 - Outdoor Budget	\$4.115	\$4.286
179 Tier 3 - Inefficient	\$4.932	\$5.118
180 Tier 4 - Wasteful	\$5.372	\$5.558
181 Tier 5 - Unsustainable	\$6.252	\$6.438

182 Pumping Charge (per HCF)

184 Power Zone 8 - Grizzly Ridge	\$0.225	\$0.234
----------------------------------	---------	---------

Commodity Charge Revenues	FY 19/20	CY 2020
187 Tier 1 - Indoor Budget	\$891,415	\$920,687
188 Tier 2 - Outdoor Budget	1,887,329	1,951,514
189 Tier 3 - Inefficient	203,792	211,053
190 Tier 4 - Wasteful	106,075	109,498
191 Tier 5 - Unsustainable	236,522	243,170
192 Subtotal Commodity Charge Revenues	\$3,325,133	\$3,435,923

194 Pumping Charge Revenues	\$233,177	\$238,669
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196 Total Calculated Rate Revenues	\$5,302,057	\$5,539,097
------------------------------------	-------------	-------------

198 Compare with FY 19/20 revenues in WMWD Budget (see Table B-3a above)

\$5,061,033 Conclusion: FY 19/20 revenues should be lower than calculated CY 2020 revenues, given projected system growth between 2019 and 2020, and that the calculated CY 2020 rates have a full year of the CY 2020 rate increases in effect. The CY 2020 rate revenues are based on a different set of customer data, with more customers and higher water use resulting from growth.

8.63% percent difference between calculated and FY 19/20 WMWD Budget.

**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

204 **WMWD Adopted Water Rates Through Calendar Year 2020, and Projected Rates through FY 29/30. Projected Based on % Increases in Operating Statement Shown Above in Table B-3a**

	Adopted CY 2020	Projected CY 2021	Projected CY 2022	Projected CY 2023	Projected CY 2024	Projected CY 2025	Projected CY 2026	Projected CY 2027	Projected CY 2028	Projected CY 2029	Projected CY 2030
208 Fixed System Charge											
209 5/8" Meter	\$32.00	\$33.06	\$34.15	\$35.27	\$36.44	\$37.64	\$38.88	\$40.17	\$41.49	\$41.49	\$41.49
210 3/4" Meter	\$44.39	\$45.85	\$47.37	\$48.93	\$50.55	\$52.21	\$53.94	\$55.72	\$57.56	\$57.56	\$57.56
211 1" Meter	\$68.56	\$70.82	\$73.16	\$75.57	\$78.07	\$80.64	\$83.31	\$86.05	\$88.89	\$88.89	\$88.89
212 1.5" Meter	\$129.28	\$133.55	\$137.95	\$142.51	\$147.21	\$152.07	\$157.08	\$162.27	\$167.62	\$167.62	\$167.62
213 2" Meter	\$154.50	\$159.60	\$164.87	\$170.31	\$175.93	\$181.73	\$187.73	\$193.92	\$200.32	\$200.32	\$200.32
214 3" Meter	\$384.49	\$397.18	\$410.29	\$423.82	\$437.81	\$452.26	\$467.18	\$482.60	\$498.53	\$498.53	\$498.53
215 4" Meter	\$744.16	\$768.72	\$794.08	\$820.29	\$847.36	\$875.32	\$904.21	\$934.05	\$964.87	\$964.87	\$964.87
216											
217											
218 Commodity Charge Tiers (per HCF)											
219 Tier 1 - Indoor Budget	\$2.006	\$2.07	\$2.14	\$2.21	\$2.28	\$2.36	\$2.44	\$2.52	\$2.60	\$2.60	\$2.60
220 Tier 2 - Outdoor Budget	\$4.286	\$4.43	\$4.57	\$4.72	\$4.88	\$5.04	\$5.21	\$5.38	\$5.56	\$5.56	\$5.56
221 Tier 3 - Inefficient	\$5.118	\$5.29	\$5.46	\$5.64	\$5.83	\$6.02	\$6.22	\$6.42	\$6.64	\$6.64	\$6.64
222 Tier 4 - Wasteful	\$5.558	\$5.74	\$5.93	\$6.13	\$6.33	\$6.54	\$6.75	\$6.98	\$7.21	\$7.21	\$7.21
223 Tier 5 - Unsustainable	\$6.438	\$6.65	\$6.87	\$7.10	\$7.33	\$7.57	\$7.82	\$8.08	\$8.35	\$8.35	\$8.35
224											

225 Pumping Charge (per HCF)

226 Power Zone 8 - Grizzly Ridge \$0.234 \$0.242 \$0.250 \$0.258 \$0.266 \$0.275 \$0.284 \$0.294 \$0.303 \$0.303 \$0.303

227 Note: the majority of the WMWD Service Area is in Power Zone 7, so this Pumping Charge is not applicable.

228

229 **Projected Connection Fee Revenues** Additional growth rate if desired, to make Fund 231 balance = \$0 at end of FY 29/30 0.0% Included in model per 3/26/2020 direction from WMWD; removed per 4/2/2020 direction from WMWD

	Projected										
	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
233 Number of New Meters											
234 5/8"	8	8	8	8	8	8	8	8	8	8	9
235 3/4"	31	31	32	32	33	33	34	35	35	36	36
236 1"	3	3	3	3	3	3	3	3	3	3	3
237 1.5"	2	2	2	2	2	2	2	2	2	2	2
238 2"	3	3	3	3	3	3	3	3	3	3	3
239 3"	0	0	0	0	0	0	0	0	0	0	0
240 4"	0	0	0	0	0	0	0	0	0	0	0
241 Total	47	47	48	48	49	49	50	51	51	52	53
242											

243 Connection Fee (Assume any new meters larger than 2" pay the 2" Connection Fee). Connection Fees increased with rate of CIP escalation per WMWD, 2/4/2020

244 5/8"	\$7,050	\$7,226	\$7,407	\$7,592	\$7,782	\$7,976	\$8,176	\$8,380	\$8,590	\$8,804	\$9,025
245 3/4"	\$7,050	\$7,226	\$7,407	\$7,592	\$7,782	\$7,976	\$8,176	\$8,380	\$8,590	\$8,804	\$9,025
246 1"	\$11,750	\$12,043	\$12,344	\$12,653	\$12,969	\$13,294	\$13,626	\$13,967	\$14,316	\$14,674	\$15,041
247 1.5"	\$23,499	\$24,087	\$24,689	\$25,306	\$25,939	\$26,587	\$27,252	\$27,933	\$28,632	\$29,347	\$30,081
248 2"	\$37,599	\$38,539	\$39,503	\$40,490	\$41,503	\$42,540	\$43,604	\$44,694	\$45,811	\$46,956	\$48,130
249											

250 Projected Connection Fee Revenues

251 5/8"	\$56,400	\$57,810	\$59,255	\$60,737	\$62,255	\$63,811	\$65,407	\$67,042	\$68,718	\$70,436	\$81,221
252 3/4"	218,550	224,014	237,021	242,947	256,802	263,222	277,979	293,308	300,641	316,961	324,885
253 1"	35,249	36,130	37,033	37,959	38,908	39,881	40,878	41,900	42,947	44,021	45,122
254 1.5"	46,999	48,173	49,378	50,612	51,878	53,175	54,504	55,866	57,263	58,695	60,162
255 2"	112,798	115,618	118,508	121,471	124,508	127,620	130,811	134,081	137,433	140,869	144,391
256 Total	\$469,995	\$481,745	\$501,196	\$513,726	\$534,351	\$547,709	\$569,578	\$592,198	\$607,002	\$630,982	\$655,781
257											

**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

**Table B-3d**  
**WMWD SCENARIO: FSMR Capital Improvements and New Well No. 3; Possible Cost Allocation to Existing Customers or Future Development**

Project	Estimated Cost, 2020 \$ (See Note 1)	Benefits Existing Customers or Development?	\$ to Existing Customers	\$ to Future Development Funded by WMWD	Funded by Developers	Basis for Existing/ Development Allocation	Projected Schedule
258							
259 Storage	\$8,328,000	Both	\$4,610,842	\$3,717,158		Note 2	Note 5
260 Pipelines Associated with Storage	\$4,157,000	Both	\$2,301,546	\$1,855,454		Note 2	Note 5
261 Expansion CIP North of Murrieta Creek	\$17,120,000	Future Only			\$17,120,000	Note 3	Note 3
262 Expansion CIP South of Murrieta Creek	\$20,388,000	Future Only			\$20,388,000	Note 3	Note 3
263 WMWD Hydraulic Improvements	\$1,468,000	Future Only		\$1,468,000		Note 4	Note 4
264 Supply Improvements Through EMWD	\$5,379,000	Future Only		\$5,379,000		Note 4	Note 4
265 Legacy (Small Diameter) Improvements	\$4,947,000	Existing Only	\$4,947,000			Note 6	Note 6
266							
267 Total	\$61,787,000		\$11,859,388	\$12,419,612	\$37,508,000		
268							
269 New Well No. 3	\$0	Both	\$0	\$0		Note 2	Note 7
270							
271 Notes:							
272 (1) Source: West Yost, October 2019, except for New Well No. 3. Costs for New Well No. 3 are in FY 23/24 dollars.							
273 (2) Project serves both existing and new EDUs. % to existing EDUs is based on ratio of existing EDUs to buildout EDUs.							
274 (3) Expansion of water system. Project is not needed unless there is development. Schedule depends on when development occurs.							
275 (4) Needed to accommodate future water demands from growth. Improvement is not needed unless there is development. Schedule depends on when development occurs but assumed FY 21/22 in this analysis.							
276 (5) Assume that this improvement will be completed between 2025 and 2030. Anticipate that permitting and siting of the reservoir will require additional time and could occur before 2025.							
277 (6) These improvements are required even if there is no future development. Assume improvements will be completed between 2020 and 2025.							
278 (7) Not Used							



**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

**Table B-3e**  
**WMWD SCENARIO: Potential Pay-As-You-Go Capital Expenses and Potential Debt Service Expenses**

	Potential Funding	Projected Pay-As-You-Go Expenditures and/or Debt Service Expenditures										
FMSR Capital Projects	Method (1)	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	Note
279 Storage, Portion for Existing Customers	Debt 235						\$340,150	\$340,150	\$340,150	\$340,150	\$340,150	2
280 Storage, Portion for Future Development	Debt 231						\$274,221	\$274,221	\$274,221	\$274,221	\$274,221	2
281 Pipelines Associated with Storage, Existing Customers	Debt 235						\$169,789	\$169,789	\$169,789	\$169,789	\$169,789	2
282 Pipelines Associated with Storage, Future Development	Debt 231						\$136,880	\$136,880	\$136,880	\$136,880	\$136,880	2
283 Expansion CIP North of Murrieta Creek	Developer											1
284 Expansion CIP South of Murrieta Creek	Developer											1
285 WMWD Hydraulic Improvements	PAYG 231	\$300,940	\$308,464	\$316,175	\$324,079	\$332,181						3
286 Supply Improvements Through EMWD	Debt 231		\$359,498	\$359,498	\$359,498	\$359,498	\$359,498	\$359,498	\$359,498	\$359,498	\$359,498	4
287 Legacy (Small Diameter) Improvements	Debt 235		\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	4
288 Total		\$300,940	\$998,586	\$1,006,298	\$1,014,202	\$1,022,304	\$1,611,163	\$1,611,163	\$1,611,163	\$1,611,163	\$1,611,163	
289												
290												
291 Existing WMWD Debt Service and Future Debt Service for 3rd Well		FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
292 2010 A&B Revenue Bond Debt Service	Fund 231	\$67,054	\$67,016	\$67,009	\$66,976	\$66,976	\$66,976	\$66,976	\$66,976	\$66,976	\$66,976	
293 Interfund Loan for North Well	Fund 230	\$108,743	\$108,743	\$108,743	\$108,743	\$108,743	\$108,743	\$108,743	\$108,743	\$108,743	\$108,743	
294 Well No. 3, Portion for Existing Customers	Fund 235				\$0	\$0	\$0	\$0	\$0	\$0	\$0	
295 Well No. 3, Portion for Future Development	Fund 231				\$0	\$0	\$0	\$0	\$0	\$0	\$0	
296 Total		\$175,797	\$175,759	\$175,752	\$175,719	\$175,719	\$175,719	\$175,719	\$175,719	\$175,719	\$175,719	

297 Table B-3d Notes:

299 (1) Decisions on how to fund improvement projects will be made by the WMWD Board of Directors. Information is provided here to indicate a potential funding method, and is subject to review and modification by WMWD staff and/or Board.

300 WMWD's resolutions state that the "District will not finance through proceedings pursuant to the Mello-Roos Community Facilities Act of 1982". Therefore, Improvement Districts are not assumed to be an option.

301 (2) Assumes 30 year debt at interest rate of 4%, starting in FY 25/26, with 10% added to project cost to cover capitalized bond reserve and issuance costs. Project cost escalated for inflation from 2019 dollars to 2025 dollars.

302 (3) Project cost spread evenly between FY 20/21 and FY 24/25 and adjusted for inflation.

303 (4) Assumes 30 year debt (per WMWD 2/4/2020) at interest rate of 4%, starting in FY 21/22, with 10% added to project cost to cover capitalized bond reserve and issuance costs. Project cost escalated for inflation from 2019 dollars to 2021 dollars.

**Table B-3f**  
**WMWD SCENARIO: Potential Capital Funding for Facilities That Benefit Future Development**

Capital Projects	How Growth Pays for Growth
304 Storage	WMWD funds growth portion using debt; cost incorporated into Connection Fee. Future development pays Connection Fees.
305 Pipelines Associated with Storage	WMWD funds growth portion using debt; cost incorporated into Connection Fee. Future development pays Connection Fees.
306 Expansion CIP North of Murrieta Creek	Developer
307 Expansion CIP South of Murrieta Creek	Developer
308 WMWD Hydraulic Improvements	WMWD funds project; cost incorporated into Connection Fee. Future development pays Connection Fees.
309 Supply Improvements Through EMWD	WMWD funds project; cost incorporated into Connection Fee. Future development pays Connection Fees.
310 Fireflow Improvements	Not applicable. Not growth related
311 New Well No. 3	Not applicable. Project not planned

**Table B-3**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**WMWD SCENARIO TABLES**

**Table B-3g**  
**WMWD SCENARIO: Projected Total Cost of Water**

		Projected										
		FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	Notes
312	Single Family Residence, 3/4" Meter, 18 ccf/month, Power Zone 7											1
313	Fixed System Charge, \$/month	\$44.39	\$45.85	\$47.37	\$48.93	\$50.55	\$52.21	\$53.94	\$55.72	\$57.56	\$57.56	
314	Tier 1 Volume Charge, \$/hcf	\$2.01	\$2.07	\$2.14	\$2.21	\$2.28	\$2.36	\$2.44	\$2.52	\$2.60	\$2.60	
315	Tier 2 Volume Charge, \$/hcf	\$4.29	\$4.43	\$4.57	\$4.72	\$4.88	\$5.04	\$5.21	\$5.38	\$5.56	\$5.56	
316	Pumping Charge, \$/hcf (N/A to the majority of the Study Area)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
317	Standby Charge, \$/month	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	
318	Projected Total Cost of Water	\$105.05	\$108.46	\$111.98	\$115.62	\$119.37	\$123.25	\$127.26	\$131.41	\$135.69	\$135.69	
319												
320	Commercial Account, 2" Meter, 1,500 ccf/year (125 ccf/month)											2
321	Fixed System Charge, \$/month	\$154.50	\$159.60	\$164.87	\$170.31	\$175.93	\$181.73	\$187.73	\$193.92	\$200.32	\$200.32	
322	Tier 1 Volume Charge, \$/hcf	\$2.01	\$2.07	\$2.14	\$2.21	\$2.28	\$2.36	\$2.44	\$2.52	\$2.60	\$2.60	
323	Tier 2 Volume Charge, \$/hcf	\$4.29	\$4.43	\$4.57	\$4.72	\$4.88	\$5.04	\$5.21	\$5.38	\$5.56	\$5.56	
324	Pumping Charge, \$/hcf (N/A to the majority of the Study Area)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
325	Standby Charge, \$/month	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	
326	Projected Total Cost of Water	\$569.45	\$588.18	\$607.54	\$627.53	\$648.18	\$669.51	\$691.55	\$714.31	\$737.82	\$737.82	

## Notes:

(1) For single-family residential customers, estimate 8 ccf/month in Tier 1 and remainder of water use in Tier 2. No Tier 3 or Tier 4 use. (8 ccf/month in Tier 1 per WMWD, 2/4/2020)

3.28 household size yields 8 ccf/month in Tier 1, at 60 gpcd.

For the commercial account example, 1,500 ccf/year is the average water use for WMWD's customers in the Study Area with 2" meters, as reported by WMWD (1/21/2020)

(2) WMWD's commercial budget formula is for any given month, 43% of that month's three-year historical average water use is in Tier 1, and the remaining 57% is in Tier 2. For the purposes of this monthly bill calculation, Tier 1 water use is 53.75 ccf, and Tier 2 water use is 71.25 ccf.

Source: WMWD staff, 8/20/2020.

**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

**Table B-4a**  
**RCWD SCENARIO: Projected Operating Statement: Sources of Funds**

Line	Projected										Notes
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
1 <b>Beginning Reserve Balance</b>											
2 Working Capital	\$1,314,934	\$1,423,939	\$1,485,839	\$1,287,861	\$1,613,947	\$1,676,216	\$1,740,135	\$1,805,794	\$1,874,316	\$1,946,293	
3 Drought Reserve	\$0	\$325,890	\$351,529	\$0	\$197,016	\$387,248	\$399,010	\$411,642	\$424,274	\$434,881	
4 Rate Stabilization	\$0	\$0	\$46,287	\$0	\$0	\$320,172	\$873,699	\$1,354,345	\$1,405,737	\$1,459,720	
5 Water Replenishment: Not Applicable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
6 Risk Management	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$130,710	\$746,032	\$895,951	
7 Unrestricted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$415,914	
8											
9 <b>Sources of Funds</b>											
10 Rate Revenues Under Existing Santa Rosa Division Rate Schedule											
11 Monthly Service Charges	\$1,862,904	1,893,067	1,923,719	1,954,867	1,986,520	2,018,867	2,051,741	2,085,151	2,119,104	2,153,610	
12 Commodity Charges	\$2,115,628	2,149,883	2,184,693	2,220,067	2,256,014	2,292,749	2,330,083	2,368,025	2,406,584	2,445,772	
13											
14 Additional Rate Revenues (Rate Increases for Monthly Service Charges and Commodity Charges)											
15 Fiscal Year		% of Water Rate Revenue	Months of Revenue								
16											
17 FY 20/21	79,571	2.0%	12	82,168	83,499	84,851	86,232	87,636	89,064	90,514	91,988
18 FY 21/22		2.0%	12	83,812	85,169	86,548	87,957	89,389	90,845	92,324	93,827
19 FY 22/23		2.0%	12	85,488	86,872	88,279	89,716	91,177	92,662	94,171	95,704
20 FY 23/24		2.0%	12		88,609	90,044	91,510	93,001	94,515	96,054	97,618
21 FY 24/25		2.0%	12			91,845	93,341	94,861	96,405	97,975	99,570
22 FY 25/26		2.0%	12				95,207	96,758	98,333	99,935	101,562
23 FY 26/27		2.0%	12					98,693	100,300	101,933	103,593
24 FY 27/28		2.0%	12						102,306	103,972	105,665
25 FY 28/29			12							0	0
26 FY 29/30			12								0
27 Total Additional Rate Revenue (Monthly Service Charges, Commodity Charges)	\$79,571	\$163,335	\$251,468	\$344,149	\$441,567	\$543,963	\$651,515	\$764,430	\$776,878	\$789,527	
28											
29 Energy Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
30 Ad Valorem Equivalent Rate Surcharge (assume land values increases with inflation)	\$2,090,450	2,142,711	2,196,279	2,251,186	2,307,466	2,365,152	2,424,281	2,484,888	2,547,010	2,610,686	
31											
32 Subtotal Rate Revenues	\$6,148,552	\$6,348,997	\$6,556,159	\$6,770,269	\$6,991,566	\$7,220,732	\$7,457,620	\$7,702,493	\$7,849,577	\$7,999,595	
33											
34 Non-Rate Revenue											
35 Non-Operating Revenues											
36 Property Tax (1% Share) Assume WMWD's small property tax revenue does not transfer	0	0	0	0	0	0	0	0	0	0	
37 Operating Revenues											
38 Interest Income	26,299	34,997	37,673	25,757	36,219	47,673	60,257	74,050	89,007	103,055	
39 Delinquent Penalties (Assumed Same as WMWD)	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	
40 Standby Charge Revenues	462,731	462,731	462,731	462,731	462,731	462,731	462,731	462,731	462,731	462,731	
41 Other - New Service Set Up & Meter Repair	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	
42 Other Revenues											
43 Connection Fees	166,322	173,145	177,474	184,711	189,329	197,004	204,945	210,068	218,489	226,127	
44 Total Non-Rate Revenue	\$712,640	\$728,161	\$735,166	\$730,488	\$745,568	\$764,696	\$785,221	\$804,138	\$827,515	\$849,202	
45											
46 Total Revenues	\$6,861,192	\$7,077,158	\$7,291,326	\$7,500,757	\$7,737,134	\$7,985,428	\$8,242,842	\$8,506,631	\$8,677,092	\$8,848,796	
47											
48											

**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

**Table B-4b**  
**RCWD SCENARIO: Projected Operating Statement: Uses of Funds and Financial Performance Criteria**

	Projected										Notes
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
49 <b>Uses of Funds</b>											
50 O&M Expenditures											1
51 Water Pumping	279,316	286,298	293,456	300,792	308,312	316,020	323,920	332,018	340,319	348,827	
52 Transmission & Distribution	1,345,278	1,378,910	1,413,382	1,448,717	1,484,935	1,522,058	1,560,110	1,599,112	1,639,090	1,680,067	
53 Customer Accounts	194,822	202,926	211,367	220,159	229,317	238,878	248,836	259,211	270,017	281,274	
54 G&A Allocation	667,864	684,561	701,675	719,217	737,197	755,627	774,518	793,881	813,728	834,071	3
55 Other Operating Expenses	126,790	129,960	133,209	136,539	139,953	143,452	147,038	150,714	154,482	158,344	
56											
57 Other Expenditures											
58 Purchased Water	\$1,136,889	\$1,240,134	\$1,349,234	\$1,452,788	\$1,550,253	\$1,650,218	\$1,752,904	\$1,861,616	\$1,978,049	\$2,106,981	8
59 Source of Supply	332,973	341,297	349,829	358,575	367,539	376,728	386,146	395,800	405,695	415,837	
60 Treatment	133,284	136,616	140,031	143,532	147,120	150,798	154,568	158,432	162,393	166,453	
61 Water Use Efficiency	51,199	53,328	55,547	57,857	60,264	62,776	65,394	68,120	70,960	73,918	
62 Other Non-Operating Expenses	3,403	3,488	3,575	3,665	3,756	3,850	3,946	4,045	4,146	4,250	
63											
64 Other Expenditures											
65 WMWD Identified Capital Project Funding (GIS Mapping and Tank Mixing System)	\$500,000	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
68 WMWD-Identified Capital Project Funding (Reservoir Recoating)	0	0	1,100,000	0	0	0	0	0	0	0	
69 Study Area Repair and Replacement	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	4
70 RCWD "Backbone" Repair and Replacement	540,000	540,000	540,000	540,000	540,000	540,000	540,000	540,000	540,000	540,000	5
71 FMSR Capital Excluding Improvement Districts	\$614,479	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	6
72											
73 Total Uses of Funds	\$6,426,297	\$6,943,332	\$7,887,120	\$6,977,656	\$7,164,461	\$7,356,220	\$7,553,195	\$7,758,763	\$7,974,693	\$8,205,837	
74											
75 <b>End of Year Balance</b>											
76 Working Capital	\$1,423,939	\$1,485,839	\$1,287,861	\$1,613,947	\$1,676,216	\$1,740,135	\$1,805,794	\$1,874,316	\$1,946,293	\$2,023,341	
77 Drought Reserve	\$325,890	\$351,529	\$0	\$197,016	\$387,248	\$399,010	\$411,642	\$424,274	\$434,881	\$445,753	
78 Rate Stabilization	\$0	\$46,287	\$0	\$0	\$320,172	\$873,699	\$1,354,345	\$1,405,737	\$1,459,720	\$1,517,506	
79 Water Replenishment: Not Applicable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
80 Risk Management	\$0	\$0	\$0	\$0	\$0	\$0	\$130,710	\$746,032	\$895,951	\$895,951	
81 Unrestricted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$415,914	\$913,168	
82 Math Check, should equal \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
83											
84 <b>Financial Performance Criteria</b>											
85 Working Capital Reserve: Four Months of Operating Budget Within Five Years											
86 Criteria, \$	\$1,423,939	\$1,485,839	\$1,550,435	\$1,613,947	\$1,676,216	\$1,740,135	\$1,805,794	\$1,874,316	\$1,946,293	\$2,023,341	
87 Reserve Criteria Met?					Yes	Yes	Yes	Yes	Yes	Yes	
88 Drought Reserve: 30% of Local Supplies @MWD Tier 1 Untreated Rate Effective at End of FY											7
89 Criteria, \$	\$340,204	\$351,529	\$364,162	\$374,616	\$387,248	\$399,010	\$411,642	\$424,274	\$434,881	\$445,753	
90 Reserve Criteria Met?	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	
91 Rate Stabilization Fund: Three Months of Operating Budget Within Ten Years											
92 Criteria, \$	\$1,067,954	\$1,114,380	\$1,162,826	\$1,210,460	\$1,257,162	\$1,305,101	\$1,354,345	\$1,405,737	\$1,459,720	\$1,517,506	
93 Reserve Criteria Met?										Yes	
94 Water Replenishment Reserve: not applicable per RWS 1/22/2020											
95 Reserve Criteria Met?											
96 Risk Management Reserve: \$750,000 plus 1% of current gross plant											
97 Criteria, \$	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	
98 Reserve Criteria Met?	No	No	No	No	No	No	No	No	Yes	Yes	
99											

**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

100 Table B-4a and A-5b Notes:

- 101 (1) Source: Western Municipal Water District FY 2020 for the expenses in this table except for purchased water.  
 102 (2) Debt service payments under a WMWD Scenario will be discontinued under a RCWD scenario because WMWD's outstanding debt will be refunded as part of a service area transfer.  
 103 (3) RCWD reviewed this projected General and Administrative expense projected by WMWD and for the purposes of this analysis, determined that it was a reasonable estimate.  
 104 (4) Estimated, starting FY 20/21, per WMWD 2/5/2020. FY 20/21 and 21/22 WMWD-identified capital expenses also represent repair/replacement expenditures.  
 105 (5) Per RCWD staff, 1/22/2020. Represents repair/replacement expenditures in RCWD's system that will provide water source, storage, and transmission services to the Study Area.  
 106 (6) See Table B-4d for more details.  
 107 (7) Criteria for Drought Reserve per RCWD staff, January 22, 2020.  
 108 (8) Purchased Water = MWD Tier 1 Rate \* 1.1 \* Imported AF/Year. 10% factor for MWD Capacity and RTS Charges, based on review of EMWD's charges to WMWD

**Table B-4c**  
**RCWD SCENARIO: Revenue Calculations**

This Table Contains:

Line Number	Subject
109	Number of Connections per Meter Size (See Table B-2)
118	Comparison of RCWD and WMWD Budget-Based Rate Tiers
137	Projected Water Use by RCWD Tier, ccf/year (See Table B-2), All Customers Except CII (Commercial, Industrial, Institutional)
158	FY 19/20 Rate Revenue Back calculation Under RCWD's Santa Rosa Rate Schedule
212	RCWD Adopted Water Rates Through FY 19/20, and Projected Rates through FY 29/30. Projected Based on % Increases in Operating Statement Shown Above.
237	Existing Santa Rosa Division Capacity Charge Schedule
253	Projected Capacity Charge Revenues
277	Projected Standby Charge Revenues
287	Projected Ad Valorem Tax Revenues and Projected Revenue-Neutral Rate Surcharge Calculation
337	Projected Reserve Balance Transferred From WMWD to RCWD

		Projected										
		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
109	Number of Connections per Meter Size (See Table B-2)											
110	5/8"	482	490	498	506	514	522	530	538	546	554	563
111	3/4"	1,968	1,999	2,031	2,063	2,096	2,129	2,163	2,198	2,233	2,269	2,305
112	1"	172	175	178	181	184	187	190	193	196	199	202
113	1.5"	77	79	81	83	85	87	89	91	93	95	97
114	2"	161	164	167	170	173	176	179	182	185	188	191
115	3"	5	5	5	5	5	5	5	5	5	5	5
116	4"	2	2	2	2	2	2	2	2	2	2	2
117												

118 **Comparison of RCWD and WMWD Budget-Based Rate Tiers**

119 - WMWD has five tiers, RCWD has four tiers. For CII, WMWD has five tiers, RCWD has three. Projecting revenues from Santa Rosa Division rates requires estimating water sales by RCWD tiers.

120 - Over 60% of Murrieta Division Water Use is Single-Family. A comparison of tier definitions is as follows:

121 - Also, from Table B-2, 91% of Murrieta Division water use is in either Tier 1 or Tier 2

	WMWD	RCWD	WMWD	RCWD
	SFR	SFR	CII	CII
124 Tier				
125 Tier 1	100% IWB	100% IWB	43% TWB	100% AWB
126 Tier 2	100% OWB	100% OWB	57% TWB	50% AWB
127 Tier 3	25% TWB	50% TWB	25% TWB	Above Tier 2
128 Tier 4	25% TWB	Above Tier 3	25% TWB	
129 Tier 5	Above Tier 4		Above Tier 4	

130

131 SFR Conclusions:

- 132 RCWD Tier 1 Use = WMWD Tier 1 Use  
 133 RCWD Tier 2 Use = WMWD Tier 2 Use  
 134 RCWD Tier 3 Use = WMWD Tier 3 + Tier 4 Use  
 135 RCWD Tier 4 Use = WMWD Tier 4 Use

136

CII (Commercial, Industrial, Institutional) Conclusions:  
 RCWD Tier 1 Use = WMWD Tier 1 + Tier 2 Use  
 RCWD Tier 2 Use = WMWD Tier 3 + Tier 4 Use  
 RCWD Tier 3 Use = WMWD Tier 5 Use



Table B-4  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

137 Projected Water Use by RCWD Tier, ccf/year (See Table B-2), All Customers Except CII (Commercial, Industrial, Institutional)

138		Projected										
139		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
140	Tier 1	399,486	405,954	412,527	419,206	425,994	432,892	439,941	447,105	454,385	461,784	469,303
141	Tier 2	414,102	420,807	427,621	434,545	441,581	448,731	456,038	463,464	471,011	478,681	486,476
142	Tier 3	52,414	53,263	54,125	55,001	55,892	56,797	57,722	58,662	59,617	60,588	61,575
143	Tier 4	33,598	34,142	34,695	35,257	35,828	36,408	37,001	37,604	38,216	38,838	39,470
144	Total	899,600	914,166	928,968	944,009	959,295	974,828	990,702	1,006,835	1,023,229	1,039,891	1,056,824

147 Projected Water Use by RCWD Tier, ccf/year (See Table B-2), CII

148		Projected										
149		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
150	Tier 1	92,412	93,909	95,430	96,975	98,545	100,141	101,772	103,429	105,113	106,825	108,564
151	Tier 2	7,886	8,013	8,143	8,275	8,409	8,545	8,684	8,825	8,969	9,115	9,263
152	Tier 3	3,802	3,863	3,926	3,990	4,055	4,121	4,188	4,256	4,325	4,395	4,467
153	Total	104,100	105,785	107,499	109,240	111,009	112,807	114,644	116,510	118,407	120,335	122,294
154												
155	Total Murrieta Division Water Use	1,003,700	1,019,951	1,036,467	1,053,249	1,070,304	1,087,635	1,105,346	1,123,345	1,141,636	1,160,226	1,179,118

158 FY 19/20 Rate Revenue Back calculation Under RCWD's Santa Rosa Rate Schedule

		Effective
160	Monthly Service Charge	7/1/2019
161	5/8" Meter	\$29.51
162	3/4" Meter	\$44.04
163	1" Meter	\$66.49
164	1.5" Meter	\$117.50
165	2" Meter	\$180.79
166	3" Meter	\$532.49
167	4" Meter	\$1,047.78
168	6" Meter	\$1,669.23
169	8" Meter or Larger	\$2,358.21

Per RCWD 1/22/2020: RCWD doesn't have this charge because they don't use 5/8" meters. They would scale the 3/4" charge per their meter equivalent ratio.

171 Source: Rancho California Water District: Customer Guide Rates & Charges 2019-2020

Monthly Service Charge Revenues	FY 19/20
174 5/8" Meter	\$170,667
175 3/4" Meter	\$1,040,049
176 1" Meter	\$137,235
177 1.5" Meter	\$108,570
178 2" Meter	\$349,286
179 3" Meter	\$31,949
180 4" Meter	\$25,147
181 Total	\$1,862,904

**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

184 Commodity Charge and Pumping Charges (\$ per HCF, 1 HCF = 748 gallons)

185 Assume that standard rates apply, as Tier 1 water will be available from MWD via the MWD wholesaler (EMWD)

186

		Effective 7/1/2019	
		Standard	Pre & Post 2003 Annex
190	Residential, Multi-Family & Landscape		
191	Tier 1	\$1.286	\$2.548
192	Tier 2	\$2.255	\$2.548
193	Tier 3	\$3.235	\$3.235
194	Tier 4	\$7.597	\$7.597
195	Commercial, Industrial, Ag, Domestic, and Other		
196	Tier 1	\$2.044	\$2.548
197	Tier 2	\$3.235	\$3.235
198	Tier 3	\$7.597	\$7.597

199 Energy Rates: Assume Most of System in RCWD 1305 with no energy charge zone

200

201 Source: Rancho California Water District: Customer Guide Rates & Charges 2019-2020

		FY 19/20	
		All Customers	FY 19/20
		Except CII	CII
204	Commodity Charge Revenues		
205	Tier 1	\$513,739	\$188,891
206	Tier 2	933,800	25,510
207	Tier 3	169,560	28,883
208	Tier 4	255,245	N/A
209	Subtotal Commodity Charge Revenues	\$1,872,344	\$243,284

210

211

212 **RCWD Adopted Water Rates Through FY 19/20, and Projected Rates through FY 29/30. Projected Based on % Increases in Operating Statement Shown Above.**

213

214		Adopted	Projected									
215		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
216	Monthly Service Charge											
217	5/8" Meter	\$29.51	\$30.10	\$30.70	\$31.31	\$31.94	\$32.58	\$33.23	\$33.89	\$34.57	\$34.57	\$34.57
218	3/4" Meter	\$44.04	\$44.92	\$45.82	\$46.74	\$47.67	\$48.62	\$49.60	\$50.59	\$51.60	\$51.60	\$51.60
219	1" Meter	\$66.49	\$67.82	\$69.18	\$70.56	\$71.97	\$73.41	\$74.88	\$76.38	\$77.90	\$77.90	\$77.90
220	1.5" Meter	\$117.50	\$119.85	\$122.25	\$124.69	\$127.19	\$129.73	\$132.32	\$134.97	\$137.67	\$137.67	\$137.67
221	2" Meter	\$180.79	\$184.41	\$188.09	\$191.86	\$195.69	\$199.61	\$203.60	\$207.67	\$211.82	\$211.82	\$211.82
222	3" Meter	\$532.49	\$543.14	\$554.00	\$565.08	\$576.38	\$587.91	\$599.67	\$611.66	\$623.90	\$623.90	\$623.90
223	4" Meter	\$1,047.78	\$1,068.74	\$1,090.11	\$1,111.91	\$1,134.15	\$1,156.83	\$1,179.97	\$1,203.57	\$1,227.64	\$1,227.64	\$1,227.64
224												
225	Commodity Charge											
226	Residential, Multi-Family & Landscape											
227	Tier 1	\$1.286	\$1.312	\$1.338	\$1.365	\$1.392	\$1.420	\$1.448	\$1.477	\$1.507	\$1.507	\$1.507
228	Tier 2	\$2.255	\$2.300	\$2.346	\$2.393	\$2.441	\$2.490	\$2.539	\$2.590	\$2.642	\$2.642	\$2.642
229	Tier 3	\$3.235	\$3.300	\$3.366	\$3.433	\$3.502	\$3.572	\$3.643	\$3.716	\$3.790	\$3.790	\$3.790
230	Tier 4	\$7.597	\$7.749	\$7.904	\$8.062	\$8.223	\$8.388	\$8.555	\$8.727	\$8.901	\$8.901	\$8.901
231	Commercial, Industrial, Ag, Domestic, and Other											
232	Tier 1	\$2.044	\$2.085	\$2.127	\$2.169	\$2.212	\$2.257	\$2.302	\$2.348	\$2.395	\$2.395	\$2.395
233	Tier 2	\$3.235	\$3.300	\$3.366	\$3.433	\$3.502	\$3.572	\$3.643	\$3.716	\$3.790	\$3.790	\$3.790
234	Tier 3	\$7.597	\$7.749	\$7.904	\$8.062	\$8.223	\$8.388	\$8.555	\$8.727	\$8.901	\$8.901	\$8.901

235

236

**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

**237 Existing Santa Rosa Division Capacity Charge Schedule**

238		Projected									
239											
240 Capacity Charge											
241 5/8" Meter											
242 3/4" Meter											
243 1" Meter											
244 1.5" Meter											
245 2" Meter											
246 2" Turbine Meter											
247 3" Meter											
248 4" Meter											
249 6" Meter											
250 8" Meter or Larger											
251											
252											

**253 Projected Capacity Charge Revenues**

255		Projected										
256		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
257	Number of New Meters											
258	5/8"	8	8	8	8	8	8	8	8	8	8	9
259	3/4"	31	31	32	32	33	33	34	35	35	36	36
260	1"	3	3	3	3	3	3	3	3	3	3	3
261	1.5"	2	2	2	2	2	2	2	2	2	2	2
262	2"	3	3	3	3	3	3	3	3	3	3	3
263	3"	0	0	0	0	0	0	0	0	0	0	0
264	4"	0	0	0	0	0	0	0	0	0	0	0
265	Total	47	47	48	48	49	49	50	51	51	52	53
266												
267	Projected Capacity Charge Revenues											
268	5/8"		\$13,940	\$14,289	\$14,646	\$15,012	\$15,387	\$15,772	\$16,166	\$16,570	\$16,985	\$19,585
269	3/4"		\$80,613	\$85,294	\$87,426	\$92,412	\$94,723	\$100,033	\$105,549	\$108,188	\$114,061	\$116,913
270	1"		\$13,262	\$13,594	\$13,934	\$14,282	\$14,639	\$15,005	\$15,380	\$15,765	\$16,159	\$16,563
271	1.5"		\$17,163	\$17,592	\$18,031	\$18,482	\$18,944	\$19,418	\$19,903	\$20,401	\$20,911	\$21,434
272	2"		\$41,343	\$42,377	\$43,436	\$44,522	\$45,635	\$46,776	\$47,946	\$49,144	\$50,373	\$51,632
273	3"		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
274	4"		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
275			\$166,322	\$173,145	\$177,474	\$184,711	\$189,329	\$197,004	\$204,945	\$210,068	\$218,489	\$226,127

**277 Projected Standby Charge Revenues**

278	Methodology: RCWD Standby Charge Revenue = WMWD Standby Charge Revenue * (RCWD Standby Fee / WMWD Standby Fee)	
279		
280	\$138,978	WMWD Standby Charge Revenue (Source: WMWD CY 2020 Water Rate Model)
281	\$21	WMWD Standby Charge, \$/acre or \$/parcel if less than one acre (Source: 5/15/19 letter from WMWD GM to WMWD Board)
282	\$69.92	RCWD Standby Charge, \$/acre or \$/parcel if less than one acre (Source: RCWD Customer Guide - Rates & Charges)
283		
284	\$462,730.56	RCWD Standby Charge Revenue

**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

**287 Projected Ad Valorem Tax Revenues and Projected Revenue-Neutral Rate Surcharge Calculation**

288 Methodology: Ad Valorem Tax Revenue = Ad Valorem Rate \* Assessed Value of Land. Ad valorem tax applied to entirety of service area, regardless of whether it is served by RCWD or not.

289

290 \$0.50 Ad Valorem Rate, \$/ \$100 assessed land value (Source: RCWD Customer Guide - Rates & Charges)

291 \$407,892,695 Assessed Value of Land (Source: City of Murrieta, spreadsheet filename StudyAreaLandValue20190423, analyzed by West Yost to include customers served by WMWD.

292

293 \$2,039,463 Annual Ad Valorem Tax Revenue

294

295 Check of Water Rate Revenues and Ad Valorem Revenues from RCWD (Entire District and Santa Rosa Division) to compare magnitude of Ad Valorem vs water rates

296

297

Water Rate Revenue (Santa Rosa Rates Applied to Murrieta Study Area)		FY 19/20 Budget	Entire RCWD District
Monthly Service Charge	\$1,862,904	Water Revenue + Monthly Service Charges	\$61,973,719 pdf page 61
Commodity Charge	\$2,115,628	Reclass from Non-Operating	\$10,381,868 pdf page 61
Standby Charge	\$462,731	Energy Charges	\$3,010,786 pdf page 64
Total	\$4,441,262	Ad Valorem Assessments	\$25,957,000 page 213
		1% Assessments	\$17,951,900 District's share of the 1% property tax that is levied by the County based on land value and distributed to agencies

304

305

306

		FY 19/20 Budget	Santa Rosa Division
		Water Revenue + Monthly Service Charges	\$27,969,071 page 67
		Reclass from Non-Operating	\$3,909,256 page 67
		Energy Charges	\$1,735,144 page 67
		Ad Valorem Assessments	\$8,834,000 page 213
		1% Assessments	\$2,741,100 District's share of the 1% property tax that is levied by the County based on land value and distributed to agencies

312

313

314 Conclusion: in the Murrieta Study Area, ad valorem revenues would be about 87% of monthly service charge + commodity charge revenues.

315 In RCWD's Santa Rosa Division, ad valorem revenues are ~1/3 of water rate revenues. RCWD district as a whole, ad valorem revenues are ~40% of water rate revenues.

316 Why for Murrieta Study Area are ad valorem revenues a higher % of water rate revenues than in the RCWD service area? Is there more land value in the Murrieta Study Area that is not connected to the water system? Thereby subject to an ad valorem fee but not paying water rates?

317

318

319

320

321 Note: In the event an ad valorem tax is not adopted, RCWD staff indicated that RCWD would adopt a revenue-neutral rate surcharge. Any such decision is a policy decision that must be made by the RCWD Board of Directors, and that decision has not yet been made. For the purposes of this analysis, RCWD staff indicated that a revenue-neutral rate surcharge would be charged to water system customers.

324

325 \$0.50 Ad Valorem Rate, \$/ \$100 assessed land value (Source: RCWD Customer Guide - Rates & Charges)

326 \$407,892,695 Assessed Value of Land by Customers Currently Served by WMWD (Source: City of Murrieta, spreadsheet filename StudyAreaLandValue20190423, as analyzed by West Yost)

327

328 \$2,039,463 Annual Ad Valorem Tax Revenue from Customers Currently Served by WMWD

329

330

Monthly Service Charge Revenue	\$1,862,904
Commodity Charge Revenues	\$2,115,628
Ad Valorem Tax Revenue as a % of Monthly Service Charge and Commodity Charge Revenue	51.26% this is the percentage that Monthly Service Charges and Commodity Charges would need to go up
Ad Valorem Tax Revenue as a % of Monthly Service Charge Revenue	109.48% % increase to Monthly Service Charges if surcharge is not applied to Commodity Charges

335

336

Table B-4  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

337 Projected Reserve Balance Transferred From WMWD to RCWD

338

339 Methodology: value of projected WMWD reserves as of 7/1/20, less outstanding debt principal.

340

341 Projected WMWD Reserves as of 7/1/20

342 WMWD Fund 230	\$2,493,163
343 WMWD Fund 231	(\$820,381)
344 WMWD Fund 233	\$261,943
345 WMWD Fund 235	\$2,378,668
346 Less Outstanding Debt	(998,460) Source: WMWD
347 Less Outstanding Interfund Loan	(2,000,000) Source: WMWD
348 Total	\$1,314,934

349

350

Table B-4d  
RCWD SCENARIO: FSMR Capital Improvements and Possible Cost Allocation to Existing Customers or Future Development

Project	Estimated Cost, 2020 \$ (See Note 1)	Benefits Existing Customers or Development?	\$ to Existing Customers	\$ to Future Development Funded by RCWD	Funded by Developers or Imp. District	Basis for Existing/ Development Allocation	Projected Schedule
351							
352 Buy-in to RCWD for Existing Customers (Note 2)	\$9,659,628	Existing Only	\$9,659,628			Note 3	
353 Expansion CIP North of Murrieta Creek	\$17,120,000	Future Only			\$17,120,000	Note 4	Note 4
354 Expansion CIP South of Murrieta Creek	\$20,388,000	Future Only			\$20,388,000	Note 4	Note 4
355 RCWD Hydraulic Improvement	\$2,255,000	Future Only		\$2,255,000		Note 5	Note 8
356 Not Used. Previously Supply Improvements Through RCWD	\$0	Future Only				Note 5	Note 8
357 Legacy (Small Diameter) Improvements	\$4,947,000	Existing Only	\$4,947,000			Note 6	Note 8
358							
359 Total	\$54,369,628		\$14,606,628	\$2,255,000	\$37,508,000		
360							
361 New Well No. 3, Not Included in Infrastructure Review	\$0		\$0	\$0		Note 9	

364 Notes:

- 365 (1) Source: West Yost, October 2019
- 366 (2) RCWD anticipates requiring existing Murrieta Study Area customers to buy into RCWD facilities, including storage facilities, distribution facilities,
- 367 and accessing MWD connections. This buy-in eliminates the need to separately build storage. Calculation of the buy-in is as follows (effective 7/1/19 to 6/30/2020):
- 368

Meter Size	Number of Connections	Capacity Fee per Connection	Buy-In Charge
371 5/8"	482	\$1,700	\$819,400
372 3/4"	1,968	\$2,537	\$4,992,816
373 1"	172	\$4,313	\$741,836
374 1.5"	77	\$8,372	\$644,644
375 2"	161	\$13,445	\$2,164,645
376 3"	5	\$25,367	\$126,835
377 4"	4	\$42,363	\$169,452
378 Total			\$9,659,628

379

- 380 (3) No cost is assigned to future development. Storage needs for future development will be provided by RCWD and funded via Capacity Fees paid by future development.
- 381 (4) Expansion of water system. Project is not needed unless there is development. Schedule depends on when development occurs.
- 382 (5) Needed to accommodate future water demands from growth. Project is not needed unless there is development.
- 383 (6) These improvements are required even if there is no future development. Assume improvements will be completed between 2020 and 2025.
- 384 (7) Schedule depends on development, but assume improvements will be completed between 2020 and 2025.
- 385 (8) Assume improvements will be completed between 2020 and 2025.
- 386 (9) Project Identified by WMWD but RCWD would not complete this project (RCWD, 2/18/2020). However, since the local water production is increased, it is assumed
- 387 for the purposes of this analysis that RCWD would in fact include this project.



**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

**Table B-4e**  
**RCWD SCENARIO: Potential Pay-As-You-Go Capital Expenses and Potential Debt Service Expenses**

Infrastructure Review Projects + RCWD System Buy-In + New Well No. 3	Potential Funding Method (1)	Projected										Note
		FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
388 Buy-In to RCWD for Existing Customers	Debt	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	2
389 Expansion CIP North of Murrieta Creek	Developer or Improvement District											1
390 Expansion CIP South of Murrieta Creek	Developer or Improvement District											1
391 RCWD Hydraulic Improvement	Debt		\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	3
392 Not Used. Previously Supply Improvements Through RCWD	Pay-As-You-Go	\$0	\$0	\$0	\$0	\$0						3
393 Legacy (Small Diameter) Improvements	Debt		\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	4
394 New Well No. 3, Not Included in Infrastructure Review	Debt				\$0	\$0	\$0	\$0	\$0	\$0	\$0	4
395 Total		\$614,479	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	

- (1) Decisions on how to fund improvement projects would be made by the RCWD Board of Directors. Information is provided here to indicate a potential funding method, and is subject to review and modification by RCWD staff and/or Board.  
 Use of improvement districts is listed as a potential source for Expansion CIP projects based on input from staff.  
 (2) Assumes 30 year debt at interest rate of 4%, starting in FY 25/26, with 10% added to project cost to cover capitalized bond reserve and issuance costs. Project cost escalated for inflation from 2019 dollars to 2025 dollars.  
 (3) Project cost spread evenly between FY 20/21 and FY 24/25 and adjusted for inflation. Supply Improvements Through RCWD No Longer Proposed, due to RCWD's Opinion that Pipe Velocities Without This Improvement Being Acceptable.  
 (4) Assumes 30 year debt at interest rate of 4%, starting in FY 21/22, with 10% added to project cost to cover capitalized bond reserve and issuance costs. Project cost escalated for inflation from 2019 dollars to 2021 dollars, except New Well 3 (FY 23/24 \$)

**Table B-4f**  
**RCWD SCENARIO: Potential Capital Funding for Facilities That Benefit Future Development**

FMSR Capital Projects	How Growth Pays for Growth
396 Expansion CIP North of Murrieta Creek	Developer or Improvement District
397 Expansion CIP South of Murrieta Creek	Developer or Improvement District
398 Hydraulic Improvement, Pipelines	RCWD funds project; cost incorporated into Connection Fee. Future development pays Connection Fees.
399 Hydraulic Improvement, VFD @ Alson BPS	RCWD funds project; cost incorporated into Connection Fee. Future development pays Connection Fees.
400 Supply Improvements Through RCWD	Not Applicable. No Supply Improvements Needed
401 Fireflow Improvements	Not applicable. Not growth related

**Table B-4**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**RCWD SCENARIO TABLES**

**Table B-4g**  
**RCWD Scenario: Projected Total Water Cost Calculation**

	Projected										Notes
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	1, 2, 3
402 Single Family Residence (3/4" Meter; 18 ccf/month; \$80,000 land value)											
403 Monthly Service Charge	\$44.92	\$45.82	\$46.74	\$47.67	\$48.62	\$49.60	\$50.59	\$51.60	\$51.60	\$51.60	
404 Tier 1 Commodity Charge, \$/hcf	\$1.31	\$1.34	\$1.36	\$1.39	\$1.42	\$1.45	\$1.48	\$1.51	\$1.51	\$1.51	
405 Tier 2 Commodity Charge, \$/hcf	\$2.30	\$2.35	\$2.39	\$2.44	\$2.49	\$2.54	\$2.59	\$2.64	\$2.64	\$2.64	
406											
407 Monthly Water Bill (Service Charge + 8*Tier 1 Charge + 10*Tier 2 Charge)	\$78.42	\$79.98	\$81.58	\$83.22	\$84.88	\$86.58	\$88.31	\$90.07	\$90.07	\$90.07	
408											
409 Standby Charge, \$/month	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	
410											
411 Ad Valorem Tax Calculation											
412 Valuation (FY 20/21 Dollars, Adjusted for Inflation in Subsequent Years)	\$80,000	\$82,000	\$84,050	\$86,151	\$88,305	\$90,513	\$92,775	\$95,095	\$97,472	\$99,909	
413 Annual Ad Valorem Rate (\$ per \$100 land value)	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
414 Ad Valorem Tax per Month	\$33.33	\$34.17	\$35.02	\$35.90	\$36.79	\$37.71	\$38.66	\$39.62	\$40.61	\$41.63	
415											
416 Revenue Neutral Rate Surcharge											
417 % Rate Surcharge (applied to FY 19/20 Bill)	51.26%										
418 \$ Rate Surcharge (55.42% of FY 19/20 Monthly Bill, Increased for Inflation in Subsequent Yrs)	\$40.20	\$41.20	\$42.23	\$43.29	\$44.37	\$45.48	\$46.62	\$47.78	\$48.98	\$50.20	
419 Inflation is due to projected inflationary increase in property values											
420											
421 Commercial Account (2" Meter; 125 ccf/month; \$200,000 land value, 1 acre)											2, 4, 5
422 Monthly Service Charge, \$/month	\$184.41	\$188.09	\$191.86	\$195.69	\$199.61	\$203.60	\$207.67	\$211.82	\$211.82	\$211.82	
423 Tier 1 Commodity Charge, \$/hcf	\$2.08	\$2.13	\$2.17	\$2.21	\$2.26	\$2.30	\$2.35	\$2.39	\$2.39	\$2.39	
424 Monthly Water Bill (Service Charge + 100*Tier 1 Charge)	\$445.02	\$453.92	\$462.99	\$472.25	\$481.70	\$491.33	\$501.16	\$511.18	\$511.18	\$511.18	
425											
426 Standby Charge, \$/month	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	
427											
428 Ad Valorem Tax Calculation											
429 Valuation (FY 20/21 Dollars, Adjusted for Inflation in Subsequent Years)	\$200,000	\$205,000	\$210,125	\$215,378	\$220,763	\$226,282	\$231,939	\$237,737	\$243,681	\$249,773	
430 Annual Ad Valorem Rate (\$ per \$100 land value)	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
431 Ad Valorem Tax per Month	\$83.33	\$85.42	\$87.55	\$89.74	\$91.98	\$94.28	\$96.64	\$99.06	\$101.53	\$104.07	
432											
433 Revenue Neutral Rate Surcharge											
434 % Rate Surcharge (applied to FY 19/20 Bill)	51.26%										
435 \$ Rate Surcharge (89.32% of FY 19/20 Monthly Bill, Increased for Inflation in Subsequent Yrs)	\$228.12	\$233.83	\$239.67	\$245.66	\$251.80	\$258.10	\$264.55	\$271.17	\$277.95	\$284.89	

**Notes:**

- (1) Both RCWD and WMWD use budget based rates. For single-family residences, of the 18 ccf/month use, estimate 8 ccf/month in Tier 1 and remainder of water use in Tier 2. No Tier 3 or Tier 4 use.  
For the commercial account example, 1,500 ccf/year (125 ccf/month) is the average water use for WMWD's customers in the Study Area with 2" meters, as reported by WMWD (1/21/2020)
- (2) RCWD adjusts rates on July 1 of each year. The monthly bills shown in this table are for the entire fiscal year.
- (3) \$80,000 is used as an example land value for single-family residences based on qualitative review of assessor data provided by the City of Murrieta.
- (4) WMWD and RCWD have different tier structures for non-residential customers. For RCWD, all water use is projected to be in Tier 1.
- (5) \$200,000 is used as an example land value for commercial property based on qualitative review of assessor data provided by the City of Murrieta.

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**Table B-5a**  
**EMWD SCENARIO: Projected Operating Statement: Sources of Funds**

Line	Projected										Notes			
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30				
1	Beginning Reserve Balance	\$1,314,934	\$1,746,478	\$2,240,672	\$2,783,083	\$3,377,960	\$4,029,623	\$4,742,899	\$5,523,053	\$6,375,447	\$7,306,146	1		
2														
3	Sources of Funds													
4	Methodology: Initially, transferred customers will be charged WMWD's rate schedule. WMWD's rates are higher than EMWD's rates. The difference in rate revenues between WMWD's and EMWD's rates will be used to pay off the acquisition balance.													
5	After the acquisition balance is paid off, transferred customers will be charged EMWD's rate schedule.													
6														
7	Step 1: Rate Revenues WMWD Rate Schedule as Adjusted by EMWD													
8	Water Rate Revenues at WMWD CY 2020 Rates	5,539,097	5,628,784	5,719,924	5,812,539	5,906,653	6,002,834	6,100,580	6,199,919	6,300,875	6,403,474	1		
9	Less Rate Discount Offered by EMWD (20% of WMWD's Fixed Charge)	(372,901)	(379,151)	(385,401)	(391,758)	(398,115)	(404,578)	(411,148)	(417,717)	(424,394)	(431,147)	2		
10														
11	Additional Rate Revenues from Future EMWD Increases to Adjusted WMWD Rates													
12	Fiscal Year	% of Water Rate Revenue	Months of Revenue											
13														
14	FY 20/21	3.8%	6	98,158	199,486	202,712	205,990	209,324	212,734	216,198	219,724	223,306	226,948	3
15	FY 21/22	3.8%	6		103,533	210,415	213,817	217,279	220,818	224,414	228,073	231,792	235,572	
16	FY 22/23	3.8%	6			109,205	221,942	225,535	229,209	232,942	236,740	240,600	244,524	
17	FY 23/24	3.8%	6				115,188	234,106	237,919	241,793	245,736	249,743	253,816	
18	FY 24/25	3.8%	6					121,501	246,960	250,982	255,074	259,233	263,461	
19	FY 25/26	3.8%	6						128,172	260,519	264,767	269,084	273,473	
20	FY 26/27	3.8%	6							135,209	274,828	279,309	283,865	
21	FY 27/28	3.8%	6								142,636	289,923	294,651	
22	FY 28/29	0.0%	6									0	0	
23	FY 29/30	0.0%	6										0	
24	Total Additional Rate Revenue (Monthly Service Charges, Commodity Charges)	\$98,158	\$303,019	\$522,332	\$756,937	\$1,007,745	\$1,275,812	\$1,562,057	\$1,867,578	\$2,042,990	\$2,076,310			
25														
26	Subtotal Rate Revenues: WMWD Rate Schedule as Adjusted by EMWD	\$5,264,354	\$5,552,652	\$5,856,854	\$6,177,717	\$6,516,283	\$6,874,068	\$7,251,490	\$7,649,779	\$7,919,471	\$8,048,638			
27														
28	Step 2: Rate Revenues, EMWD Rates	\$4,623,838	\$4,859,573	\$5,087,179	\$5,325,945	\$5,576,181	\$5,839,134	\$6,115,057	\$6,404,315	\$6,707,890	\$7,026,520			
29	Methodology: Use EMWD Rates That Have Been Adopted Thru CY 2021. In Subsequent Years Include Projected Inflationary Rate Increases. See line 182 below:													
30														
31	Step 3: Determine Whether to Use WMWD or EMWD Rates, Based on Whether the Acquisition Balance is Paid Off													
32	Beginning Year Acquisition Balance	\$11,970,446	\$11,329,930	\$10,636,851	\$9,867,176	\$9,015,403	\$8,075,300	\$7,040,367	\$5,903,934	\$4,658,469	\$3,446,888			
33	Define Which Rate Structure to Use	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj			
34														
35	Step 4: Determine the Projected Rate Revenue													
36	Projected Rate Revenue Under EMWD Rates Used to Pay Expenses	\$4,623,838	\$4,859,573	\$5,087,179	\$5,325,945	\$5,576,181	\$5,839,134	\$6,115,057	\$6,404,315	\$6,707,890	\$7,026,520			
37	(Delta Between Adjusted WMWD Rates and EMWD Rates Used to Pay Acquisition Balance Down)													
38														
39	Non-Rate Revenue													
40	Non-Operating Revenues													
41	Property Tax (1% Share) Assume WMWD's small property tax rev does not transfer	0	0	0	0	0	0	0	0	0	0			
42	Operating Revenues													
43	Interest Income	26,299	34,930	44,813	55,662	67,559	80,592	94,858	110,461	127,509	146,123			
44	Delinquent Penalties (Assumed Same as WMWD)	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045			
45	Standby Charge Revenues	92,652	92,652	92,652	92,652	92,652	92,652	92,652	92,652	92,652	92,652			
46	Other - New Service Set Up & Meter Repair	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244			
47	Other Revenues													
48	Total Non-Rate Revenue	\$176,240	\$184,871	\$194,754	\$205,603	\$217,500	\$230,533	\$244,799	\$260,402	\$277,450	\$296,064			
49														
50	Total Revenues Excluding Paydown of Acquisition Balance	\$4,800,078	\$5,044,443	\$5,281,933	\$5,531,547	\$5,793,681	\$6,069,667	\$6,359,856	\$6,664,717	\$6,985,340	\$7,322,584			

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**Table B-5b**  
**EMWD SCENARIO Projected Operating Statement: Uses of Funds, Projected Payoff of Acquisition Balance, and Cumulative FPC Revenues**

	Projected									
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
<b>Uses of Funds</b>										
Estimated Cost to Provide Water Service, Including O&M, Debt Service, Capital, and OPEB (Excludes Capital Required to Bring System to Operational Parity)										
Capital required to bring system to operational parity assumed for the purposes of this analysis to be the portion of the West Yost identified capital improvements that benefits existing customers.										
Cost to Provide Water Service, \$/AF (see below)	\$1,830	\$1,875	\$1,922	\$1,970	\$2,019	\$2,070	\$2,122	\$2,175	\$2,229	\$2,285
Number of AF	2,388	2,426	2,466	2,506	2,546	2,588	2,630	2,673	2,716	2,760
Cost to provide water services	\$4,368,533	\$4,550,249	\$4,739,523	\$4,936,670	\$5,142,018	\$5,356,391	\$5,579,702	\$5,812,323	\$6,054,641	\$6,307,062
Total Uses of Funds	\$4,368,533	\$4,550,249	\$4,739,523	\$4,936,670	\$5,142,018	\$5,356,391	\$5,579,702	\$5,812,323	\$6,054,641	\$6,307,062
<b>End of Year Balance</b>	\$1,746,478	\$2,240,672	\$2,783,083	\$3,377,960	\$4,029,623	\$4,742,899	\$5,523,053	\$6,375,447	\$7,306,146	\$8,321,667
Math Check, should equal \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Projected Payoff of Acquisition Balance</b>										
Beginning Year Acquisition Balance	\$11,970,446	\$11,329,930	\$10,636,851	\$9,867,176	\$9,015,403	\$8,075,300	\$7,040,367	\$5,903,934	\$4,658,469	\$3,446,888
Calculation of Acquisition Balance Paydown Amount										
Rate Revenues Under WMWD Rates (Including EMWD Discount and Rate Increases)	\$5,264,354	\$5,552,652	\$5,856,854	\$6,177,717	\$6,516,283	\$6,874,068	\$7,251,490	\$7,649,779	\$7,919,471	\$8,048,638
Less Rate Revenues Under EMWD Rates (See Table A4-b Below)	(\$4,623,838)	(\$4,859,573)	(\$5,087,179)	(\$5,325,945)	(\$5,576,181)	(\$5,839,134)	(\$6,115,057)	(\$6,404,315)	(\$6,707,890)	(\$7,026,520)
Acquisition Balance Paydown Amount	\$640,516	\$693,079	\$769,675	\$851,773	\$940,102	\$1,034,934	\$1,136,433	\$1,245,465	\$1,211,581	\$1,022,118
Ending Year Acquisition Balance	\$11,329,930	\$10,636,851	\$9,867,176	\$9,015,403	\$8,075,300	\$7,040,367	\$5,903,934	\$4,658,469	\$3,446,888	\$2,424,771
<b>Cumulative FPC Revenues</b>										
Annual FPC Revenues	\$473,692	\$491,314	\$503,597	\$522,259	\$535,316	\$555,078	\$575,494	\$589,881	\$611,498	\$633,827
Cumulative FPC Revenues	\$473,692	\$965,007	\$1,468,604	\$1,990,863	\$2,526,179	\$3,081,257	\$3,656,751	\$4,246,632	\$4,858,130	\$5,491,958

## Notes:

- (1) Calculation of reserve balance to be transferred is shown below and represents projected 7/1/2020 WMWD reserves less outstanding WMWD debt.
- (2) EMWD is proposing an initial rate discount of 20% of WMWD's fixed charge. See line 337 below for the calculation of this revenue adjustment.
- (3) Both EMWD and WMWD adjust rates on January 1 of each year. The first increase for future EMWD increases to Adjusted WMWD rates would occur on January 1, 2021.
- (4) FY 20/21 per Acre Foot demand expense estimated in Table B-5c below. Subsequent years adjusted for inflation per assumptions in Table B-1.
- (5) FY 20/21 number of Meter Equivalents estimated in Table B-2. Subsequent years adjusted for growth per assumptions in Table B-2.

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**Table B-5c**  
**EMWD SCENARIO: Revenue Calculations**

**This Table Contains:**

Line Number	Subject
94	Number of Connections per Meter Size (See Table B-2)
102	Comparison of EMWD and WMWD Budget-Based Rate Tiers
124	Seasonal Use of Water in Murrieta Study Area (Source: WMWD Water Use Data, See Table B-3)
134	Projected Water Use by Tier, ccf/year, All Residential Customers, When Calculating Revenues Under Adjusted WMWD Rates and Monthly Bills Under Adjusted WMWD Rates
152	Projected Water Use by EMWD Tier, ccf/year, Non-Residential
163	EMWD Adopted Water Rates Through Calendar Year 2021, Projected Rates through FY 29/30, and Rate Revenue Calculation Through Calendar Year 2021
309	Projected Rate Revenues Under EMWD Rates
337	Adjustment to Revenues Where EMWD Applies WMWD Rates with 20% Discount on Fixed Charge
379	Reserve Balance Transferred Over
393	Projected Financial Participation Charge Revenue Calculation
430	Standby Charge Revenue Calculation

		Projected										
		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
93	Number of Connections per Meter Size (See Table B-2)											
94	5/8"	482	490	498	506	514	522	530	538	546	554	563
95	3/4"	1,968	1,999	2,031	2,063	2,096	2,129	2,163	2,198	2,233	2,269	2,305
96	1"	172	175	178	181	184	187	190	193	196	199	202
97	1.5"	77	79	81	83	85	87	89	91	93	95	97
98	2"	161	164	167	170	173	176	179	182	185	188	191
99	3"	5	5	5	5	5	5	5	5	5	5	5
100	4"	2	2	2	2	2	2	2	2	2	2	2
101												
102	Comparison of EMWD and WMWD Budget-Based Rate Tiers											
103	- WMWD has five tiers, EMWD has four tiers. For CII, WMWD has five tiers, EMWD has three. Projecting revenues from EMWD rates requires estimating water sales by EMWD tiers.											
104	- Over 60% of Murrieta Division Water Use is Single-Family. A comparison of tier definitions is as follows:											
105	- Also, from Table B-2, 91% of Murrieta Division water use is in either Tier 1 or Tier 2											
106												
107		WMWD	EMWD									
108	Tier	Residential	Residential	WMWD	EMWD							
109	Tier 1	100% IWB	0 - 20% TWB	Non-Residential	Non-Residential							
110	Tier 2	100% OWB	20 - 100% TWB	43% TWB	100% TWB							
111	Tier 3	25% TWB	101-150% TWB	57% TWB	101-150% TWB							
112	Tier 4	25% TWB	Above Tier 3	25% TWB	Above Tier 2							
113	Tier 5	Above Tier 4		25% TWB								
114				Above Tier 4								
115	Residential			Non-Residential								
116	EMWD Tier 1 Use ~ WMWD Tier 1 Use											
117	EMWD Tier 2 Use ~ WMWD Tier 2 Use											
118	EMWD Tier 3 Use = WMWD Tier 3 + Tier 4 Use											
119	EMWD Tier 4 Use = WMWD Tier 4 Use											
120												
121	EMWD Source: <a href="https://www.emwd.org/sites/default/files/file-attachments/emwd_prop_218_2019_residential_final_web.pdf">https://www.emwd.org/sites/default/files/file-attachments/emwd_prop_218_2019_residential_final_web.pdf</a> , downloaded July 25, 2019											
122												
123												



**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**Seasonal Use of Water in Murrieta Study Area (Source: WMWD Water Use Data, See Table B-3)**

WMWD Tier	July - Dec	Jan - June	
Tier 1	54%	46%	What this table means: according to data provided by WMWD, 54% of Tier 1 water use occurs between July and December, 61% of Tier 5 water use occurs between July and December, and 57% of total water use occurs between January and June.
Tier 2	59%	41%	
Tier 3	66%	34%	
Tier 4	64%	36%	
Tier 5	61%	39%	
Total	57%	43%	

**Projected Water Use by Tier, ccf/year, All Residential Customers, When Calculating Revenues Under Adjusted WMWD Rates and Monthly Bills Under Adjusted WMWD Rates**

		Projected										
		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
136												
137	Tier 1	399,486	405,954	412,527	419,206	425,994	432,892	439,941	447,105	454,385	461,784	469,303
138	Tier 2	414,102	420,807	427,621	434,545	441,581	448,731	456,038	463,464	471,011	478,681	486,476
139	Tier 3	52,414	53,263	54,125	55,001	55,892	56,797	57,722	58,662	59,617	60,588	61,575
140	Tier 4	33,598	34,142	34,695	35,257	35,828	36,408	37,001	37,604	38,216	38,838	39,470
141	Total	899,600	914,166	928,968	944,009	959,295	974,828	990,702	1,006,835	1,023,229	1,039,891	1,056,824

**Projected Water Use by Tier, ccf/year, All Residential Customers, When Calculating Revenues Under EMWD Rates and Monthly Bills Under EMWD Rates**

144		Projected										
145		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
146	Tier 1	162,718	165,352	168,030	170,750	173,515	176,325	179,196	182,114	185,079	188,093	191,156
147	Tier 2	650,870	661,409	672,118	683,001	694,060	705,298	716,783	728,455	740,317	752,372	764,623
148	Tier 3	52,414	53,263	54,125	55,001	55,892	56,797	57,722	58,662	59,617	60,588	61,575
149	Tier 4	33,598	34,142	34,695	35,257	35,828	36,408	37,001	37,604	38,216	38,838	39,470
150	Total	899,600	914,166	928,968	944,009	959,295	974,828	990,702	1,006,835	1,023,229	1,039,891	1,056,824

**Projected Water Use by EMWD Tier, ccf/year, Non-Residential**

153		Projected										
154		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
155	Tier 1	92,412	93,909	95,430	96,975	98,545	100,141	101,772	103,429	105,113	106,825	108,564
156	Tier 2	7,886	8,013	8,143	8,275	8,409	8,545	8,684	8,825	8,969	9,115	9,263
157	Tier 3	3,802	3,863	3,926	3,990	4,055	4,121	4,188	4,256	4,325	4,395	4,467
158	Total	104,100	105,785	107,499	109,240	111,009	112,807	114,644	116,510	118,407	120,335	122,294

Total Murrieta Division Water Use	1,003,700	1,019,951	1,036,467	1,053,249	1,070,304	1,087,635	1,105,346	1,123,345	1,141,636	1,160,226	1,179,118
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**EMWD Adopted Water Rates Through Calendar Year 2021, Projected Rates through FY 29/30, and Rate Revenue Calculation Through Calendar Year 2021**

**EMWD Daily Service Charge**

Sources of Data:

[https://www.emwd.org/sites/default/files/file-attachments/emwd\\_prop\\_218\\_2019\\_residential\\_final\\_web.pdf](https://www.emwd.org/sites/default/files/file-attachments/emwd_prop_218_2019_residential_final_web.pdf)

[https://www.emwd.org/sites/default/files/file-attachments/emwd\\_prop\\_218\\_2019\\_commercial\\_final\\_web.pdf](https://www.emwd.org/sites/default/files/file-attachments/emwd_prop_218_2019_commercial_final_web.pdf)

Daily Service Charge Schedule (\$/day)	Adopted CY 2017	Adopted CY 2018	Adopted CY 2019	Adopted CY 2020	Adopted CY 2021
5/8" Meter	\$0.39	\$0.39	\$0.42	\$0.44	\$0.46
3/4" Meter			\$0.42	\$0.44	\$0.46
1" Meter			\$0.57	\$0.60	\$0.63
1.5" Meter			\$1.58	\$1.65	\$1.73
2" Meter			\$2.45	\$2.57	\$2.68
3" Meter			\$4.77	\$5.00	\$5.23
4" Meter			\$7.38	\$7.73	\$8.08
6" Meter			\$14.63	\$15.33	\$16.02

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

Daily Service Charge Revenues Through FY 21/22 (See Notes 1 and 2)	1st Half of FY FY 19/20	2nd Half of FY FY 19/20	Total FY FY 19/20	1st Half of FY FY 20/21	2nd Half of FY FY 20/21	Total FY FY 20/21	1st Half of FY FY 21/22	2nd Half of FY FY 21/22	Total FY FY 21/22
5/8" Meter	\$36,945	\$38,705	\$75,650	\$39,347	\$41,136	\$80,483	\$41,807	\$41,807	\$83,614
3/4" Meter	\$150,847	\$158,030	\$308,878	\$160,520	\$167,816	\$328,336	\$170,502	\$170,502	\$341,005
1" Meter	\$17,892	\$18,834	\$36,726	\$19,163	\$20,121	\$39,283	\$20,466	\$20,466	\$40,931
1.5" Meter	\$22,203	\$23,187	\$45,390	\$23,789	\$24,942	\$48,731	\$25,574	\$25,574	\$51,147
2" Meter	\$71,987	\$75,513	\$147,500	\$76,920	\$80,212	\$157,133	\$81,680	\$81,680	\$163,359
3" Meter	\$4,353	\$4,563	\$8,915	\$4,563	\$4,772	\$9,335	\$4,772	\$4,772	\$9,545
4" Meter	\$2,694	\$2,821	\$5,515	\$2,821	\$2,949	\$5,771	\$2,949	\$2,949	\$5,898
<b>Total</b>			<b>\$628,574</b>			<b>\$669,071</b>			<b>\$695,500</b>

## Notes:

(1) Annual revenues are the daily charge multiplied by 365 times the projected number of customers.

(2) EMWD has adopted rate increases only through CY 2021, which covers the first half of FY 21/22. This table projects FY 21/22 revenues at the CY 2021 rate.

Rate adjustments effective for CY 2022 are projected in Table B-5a above.

Daily Service Charge Schedule (\$/month)	Adopted CY 2020	Adopted CY 2021	Projected CY 2022	Projected CY 2023	Projected CY 2024	Projected CY 2025	Projected CY 2026	Projected CY 2027	Projected CY 2028	Projected CY 2029	Projected CY 2030
5/8" Meter	\$13.38	\$13.99	\$14.34	\$14.70	\$15.07	\$15.44	\$15.83	\$16.23	\$16.63	\$17.05	\$17.47
3/4" Meter	\$13.38	\$13.99	\$14.34	\$14.70	\$15.07	\$15.44	\$15.83	\$16.23	\$16.63	\$17.05	\$17.47
1" Meter	\$18.25	\$19.16	\$19.64	\$20.13	\$20.64	\$21.15	\$21.68	\$22.22	\$22.78	\$23.35	\$23.93
1.5" Meter	\$50.19	\$52.62	\$53.94	\$55.28	\$56.67	\$58.08	\$59.54	\$61.02	\$62.55	\$64.11	\$65.72
2" Meter	\$78.17	\$81.52	\$83.55	\$85.64	\$87.78	\$89.98	\$92.23	\$94.53	\$96.90	\$99.32	\$101.80
3" Meter	\$152.08	\$159.08	\$163.06	\$167.13	\$171.31	\$175.59	\$179.98	\$184.48	\$189.10	\$193.82	\$198.67
4" Meter	\$235.12	\$245.77	\$251.91	\$258.21	\$264.66	\$271.28	\$278.06	\$285.01	\$292.14	\$299.44	\$306.93
6" Meter	\$466.29	\$487.28	\$499.46	\$511.94	\$524.74	\$537.86	\$551.31	\$565.09	\$579.22	\$593.70	\$608.54

Projected Daily Service Charge Revenues	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8" Meter	\$80,483	\$84,659	\$88,170	\$91,803	\$95,563	\$99,453	\$103,478	\$107,642	\$111,950	\$116,612
3/4" Meter	\$328,336	\$345,267	\$359,475	\$374,356	\$389,756	\$405,880	\$422,759	\$440,228	\$458,508	\$477,428
1" Meter	\$39,283	\$41,443	\$43,195	\$45,008	\$46,886	\$48,829	\$50,840	\$52,921	\$55,074	\$57,302
1.5" Meter	\$48,731	\$51,787	\$54,392	\$57,095	\$59,900	\$62,809	\$65,826	\$68,954	\$72,198	\$75,561
2" Meter	\$157,133	\$165,401	\$172,582	\$180,018	\$187,718	\$195,691	\$203,945	\$212,490	\$221,334	\$230,487
3" Meter	\$9,335	\$9,664	\$9,906	\$10,153	\$10,407	\$10,667	\$10,934	\$11,207	\$11,488	\$11,775
4" Meter	\$5,771	\$5,972	\$6,121	\$6,274	\$6,431	\$6,592	\$6,757	\$6,926	\$7,099	\$7,276
<b>Total</b>	<b>\$669,071</b>	<b>\$704,194</b>	<b>\$733,841</b>	<b>\$764,709</b>	<b>\$796,661</b>	<b>\$829,921</b>	<b>\$864,538</b>	<b>\$900,368</b>	<b>\$937,650</b>	<b>\$976,442</b>

**EMWD Fixed Charge for Water Supply and Reliability Capital Projects**

## Sources of Data:

[https://www.emwd.org/sites/default/files/file-attachments/emwd\\_prop\\_218\\_2019\\_residential\\_final\\_web.pdf](https://www.emwd.org/sites/default/files/file-attachments/emwd_prop_218_2019_residential_final_web.pdf)

[https://www.emwd.org/sites/default/files/file-attachments/emwd\\_prop\\_218\\_2019\\_commercial\\_final\\_web.pdf](https://www.emwd.org/sites/default/files/file-attachments/emwd_prop_218_2019_commercial_final_web.pdf)

The charge is shown on the EMWD website as "per Equivalent Meter Size". EMWD Equivalent Meter factors are shown in Table B-2

Monthly Fixed Charge for Water Supply and Reliability	Adopted CY 2019	Adopted CY 2020	Adopted CY 2021	Projected CY 2022	Projected CY 2023	Projected CY 2024	Projected CY 2025	Projected CY 2026	Projected CY 2027	Projected CY 2028	Projected CY 2029	Projected CY 2030
5/8" Meter	\$3.65	\$3.95	\$4.26	\$4.37	\$4.48	\$4.59	\$4.70	\$4.82	\$4.94	\$5.06	\$5.19	\$5.32
3/4" Meter	\$3.65	\$3.95	\$4.26	\$4.37	\$4.48	\$4.59	\$4.70	\$4.82	\$4.94	\$5.06	\$5.19	\$5.32
1" Meter	\$5.48	\$5.93	\$6.39	\$6.55	\$6.71	\$6.88	\$7.05	\$7.23	\$7.41	\$7.60	\$7.79	\$7.98
1.5" Meter	\$18.25	\$19.75	\$21.30	\$21.83	\$22.38	\$22.94	\$23.51	\$24.10	\$24.70	\$25.32	\$25.95	\$26.60
2" Meter	\$29.20	\$31.60	\$34.08	\$34.93	\$35.81	\$36.70	\$37.62	\$38.56	\$39.52	\$40.51	\$41.52	\$42.56
3" Meter	\$58.40	\$63.20	\$68.16	\$69.86	\$71.61	\$73.40	\$75.24	\$77.12	\$79.04	\$81.02	\$83.05	\$85.12
4" Meter	\$91.25	\$98.75	\$106.50	\$109.16	\$111.89	\$114.69	\$117.56	\$120.49	\$123.51	\$126.60	\$129.76	\$133.00

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

Revenues, Monthly Fixed Charge for Capital Through FY 21/22 (See Notes 1 and 2)	1st Half of FY FY 19/20	2nd Half of FY FY 19/20	Total FY FY 19/20	1st Half of FY FY 20/21	2nd Half of FY FY 20/21	Total FY FY 20/21	1st Half of FY FY 21/22	2nd Half of FY FY 21/22	Total FY FY 21/22
5/8" Meter	\$10,556	\$11,423	\$21,979	\$11,613	\$12,524	\$24,137	\$12,729	\$12,729	\$25,458
3/4" Meter	\$43,099	\$46,642	\$89,741	\$47,376	\$51,094	\$98,471	\$51,912	\$51,912	\$103,825
1" Meter	\$5,650	\$6,115	\$11,765	\$6,221	\$6,710	\$12,931	\$6,825	\$6,825	\$13,649
1.5" Meter	\$8,432	\$9,125	\$17,556	\$9,362	\$10,096	\$19,458	\$10,352	\$10,352	\$20,704
2" Meter	\$28,207	\$30,526	\$58,733	\$31,094	\$33,535	\$64,629	\$34,148	\$34,148	\$68,296
3" Meter	\$1,752	\$1,896	\$3,648	\$1,896	\$2,045	\$3,941	\$2,045	\$2,045	\$4,090
4" Meter	\$1,095	\$1,185	\$2,280	\$1,185	\$1,278	\$2,463	\$1,278	\$1,278	\$2,556
Total			\$205,702			\$226,030			\$238,577

Notes:

(1) Annual revenues are the monthly charge multiplied by 12 times the projected number of customers.

(2) EMWD has adopted rate increases only through CY 2021, which covers the first half of FY 21/22. This table projects FY 21/22 revenues at the CY 2021 rate.

Rate adjustments effective for CY 2022 are projected in Table B-5a above.

Projected Monthly Fixed Charge for Capital Projects Revenues	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8" Meter	\$24,137	\$25,776	\$26,845	\$27,951	\$29,096	\$30,280	\$31,506	\$32,773	\$34,085	\$35,505
3/4" Meter	\$98,471	\$105,123	\$109,448	\$113,979	\$118,668	\$123,577	\$128,716	\$134,035	\$139,601	\$145,361
1" Meter	\$12,931	\$13,820	\$14,404	\$15,009	\$15,635	\$16,283	\$16,953	\$17,647	\$18,365	\$19,108
1.5" Meter	\$19,458	\$20,962	\$22,017	\$23,111	\$24,246	\$25,424	\$26,645	\$27,911	\$29,224	\$30,586
2" Meter	\$64,629	\$69,150	\$72,152	\$75,261	\$78,480	\$81,813	\$85,264	\$88,836	\$92,534	\$96,361
3" Meter	\$3,941	\$4,141	\$4,244	\$4,350	\$4,459	\$4,571	\$4,685	\$4,802	\$4,922	\$5,045
4" Meter	\$2,463	\$2,588	\$2,653	\$2,719	\$2,787	\$2,857	\$2,928	\$3,001	\$3,076	\$3,153
Total	\$226,030	\$241,559	\$251,763	\$262,380	\$273,371	\$284,804	\$296,697	\$309,006	\$321,807	\$335,118

#### EMWD Commodity Charge

Residential Commodity Charge	Adopted CY 2019	Adopted CY 2020	Adopted CY 2021	Projected CY 2022	Projected CY 2023	Projected CY 2024	Projected CY 2025	Projected CY 2026	Projected CY 2027	Projected CY 2028	Projected CY 2029	Projected CY 2030
Tier 1	\$1.07	\$1.10	\$1.13	\$1.16	\$1.19	\$1.22	\$1.25	\$1.28	\$1.31	\$1.34	\$1.38	\$1.41
Tier 2	\$3.43	\$3.53	\$3.63	\$3.72	\$3.81	\$3.91	\$4.01	\$4.11	\$4.21	\$4.31	\$4.42	\$4.53
Tier 3: Excessive Use	\$5.67	\$5.84	\$6.01	\$6.16	\$6.31	\$6.47	\$6.63	\$6.80	\$6.97	\$7.14	\$7.32	\$7.51
Tier 4: Wasteful Use	\$11.59	\$11.94	\$12.30	\$12.61	\$12.92	\$13.25	\$13.58	\$13.92	\$14.26	\$14.62	\$14.99	\$15.36
Non-Residential Commodity Charge	Adopted CY 2019	Adopted CY 2020	Adopted CY 2021	Projected CY 2022	Projected CY 2023	Projected CY 2024	Projected CY 2025	Projected CY 2026	Projected CY 2027	Projected CY 2028	Projected CY 2029	Projected CY 2030
Tier 1	\$3.55	\$3.66	\$3.77	\$3.86	\$3.96	\$4.06	\$4.16	\$4.27	\$4.37	\$4.48	\$4.59	\$4.71
Tier 2	\$7.21	\$7.43	\$7.65	\$7.84	\$8.04	\$8.24	\$8.44	\$8.66	\$8.87	\$9.09	\$9.32	\$9.55
Tier 3: Excessive Use	\$12.02	\$12.38	\$12.75	\$13.07	\$13.40	\$13.73	\$14.07	\$14.43	\$14.79	\$15.16	\$15.53	\$15.92

Commodity Charge Revenues	1st Half of FY FY 19/20	2nd Half of FY FY 19/20	Total FY FY 19/20	1st Half of FY FY 19/20	2nd Half of FY FY 19/20	Total FY FY 19/20
Tier 1	\$93,750	\$82,610	\$176,361	\$176,650	\$156,106	\$332,756
Tier 2	\$1,321,670	\$937,368	\$2,259,039	\$33,660	\$23,904	\$57,564
Tier 3	\$196,669	\$103,534	\$300,202	\$30,241	\$15,920	\$46,161
Tier 4	\$247,620	\$146,064	\$393,684			
Subtotal Commodity Charge Revenues			\$3,129,286			\$436,481

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

	1st Half of FY FY 20/21	2nd Half of FY FY 20/21	Total FY FY 20/21	1st Half of FY FY 20/21	2nd Half of FY FY 20/21	Total FY FY 20/21
<b>Commodity Charge Revenues</b>	<b>Residential</b>	<b>Residential</b>	<b>Residential</b>	<b>Non-Residential</b>	<b>Non-Residential</b>	<b>Non-Residential</b>
Tier 1	\$97,939	\$86,238	\$184,177	\$185,073	\$163,402	\$348,475
Tier 2	\$1,382,227	\$979,530	\$2,361,757	\$35,247	\$25,009	\$60,256
Tier 3	\$205,846	\$108,273	\$314,119	\$31,648	\$16,176	\$47,824
Tier 4	\$259,227	\$152,904	\$412,131			
<b>Subtotal Commodity Charge Revenues</b>			<b>\$3,272,184</b>			<b>\$456,554</b>

	1st Half of FY FY 21/22	2nd Half of FY FY 21/22	Total FY FY 21/22	1st Half of FY FY 21/22	2nd Half of FY FY 21/22	Total FY FY 21/22
<b>Commodity Charge Revenues</b>	<b>Residential</b>	<b>Residential</b>	<b>Residential</b>	<b>Non-Residential</b>	<b>Non-Residential</b>	<b>Non-Residential</b>
Tier 1	\$102,240	\$87,634	\$189,873	\$193,723	\$166,048	\$359,771
Tier 2	\$1,444,399	\$995,391	\$2,439,790	\$36,879	\$25,415	\$62,294
Tier 3	\$215,266	\$110,025	\$325,291	\$33,126	\$16,931	\$50,057
Tier 4	\$271,368	\$155,380	\$426,749			
<b>Subtotal Commodity Charge Revenues</b>			<b>\$3,381,703</b>			<b>\$472,122</b>

**Projected Rate Revenues Under EMWD Rates**

		Projected									
		FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Already Adopted EMWD Rates Through CY 2021 and Projected Rates											
Residential Commodity Charges		\$3,272,184	\$3,381,703	\$3,436,456	\$3,492,102	\$3,548,646	\$3,606,432	\$3,665,161	\$3,724,839	\$3,785,494	\$3,847,135
Non-Residential Commodity Charges		\$456,554	\$472,122	\$479,768	\$487,537	\$495,434	\$503,501	\$511,697	\$520,028	\$528,496	\$537,099
Daily Service Charge		\$669,071	\$704,194	\$733,841	\$764,709	\$796,661	\$829,921	\$864,538	\$900,368	\$937,650	\$976,442
Fixed Charge for Capital Projects		\$226,030	\$241,559	\$251,763	\$262,380	\$273,371	\$284,804	\$296,697	\$309,006	\$321,807	\$335,118
Revenue from Projected EMWD Rate Increases after CY 2021											
Fiscal Year	% of Water Rate Revenue	Months of Revenue									
FY 21/22	2.5%	6	CY 2022	59,995	122,546	125,168	127,853	130,616	133,452	136,356	139,336
FY 22/23	2.5%	6	CY 2023		62,805	128,297	131,049	133,882	136,789	139,765	142,820
FY 23/24	2.5%	6	CY 2024			65,752	134,325	137,229	140,208	143,259	146,390
FY 24/25	2.5%	6	CY 2025				68,842	140,660	143,714	146,841	150,050
FY 25/26	2.5%	6	CY 2026					72,088	147,306	150,512	153,801
FY 26/27	2.5%	6	CY 2027						75,495	154,274	157,646
FY 27/28	2.5%	6	CY 2028							79,066	161,587
FY 28/29	2.5%	6	CY 2029								82,813
FY 29/30	2.5%	6	CY 2030								86,747
Total Additional Rate Revenue (Monthly Service Charges, Commodity Charges)		\$0	\$59,995	\$185,351	\$319,217	\$462,069	\$614,475	\$776,964	\$950,073	\$1,134,443	\$1,330,726
Total Projected Rates Under EMWD Rate Structure		\$4,623,838	\$4,859,573	\$5,087,179	\$5,325,945	\$5,576,181	\$5,839,134	\$6,115,057	\$6,404,315	\$6,707,890	\$7,026,520

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**Adjustment to Revenues Where EMWD Applies WMWD Rates with 20% Discount on Fixed Charge**

Methodology: EMWD would charge the Murrieta Study Area customers WMWD's CY 2020 rates but would lower the fixed charge by 20%.  
This information is used to calculate revenues based on the EMWD's Adjusted WMWD rates in Table B-5a, Line 9 above

		Projected									
		FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Initial Reduction in WMWD Meter Charge, percent	20%										
Meter Size		WMWD's Calendar Year 2020 Meter Charge									
5/8" Meter		\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00
3/4" Meter		\$44.39	\$44.39	\$44.39	\$44.39	\$44.39	\$44.39	\$44.39	\$44.39	\$44.39	\$44.39
1" Meter		\$68.56	\$68.56	\$68.56	\$68.56	\$68.56	\$68.56	\$68.56	\$68.56	\$68.56	\$68.56
1.5" Meter		\$129.28	\$129.28	\$129.28	\$129.28	\$129.28	\$129.28	\$129.28	\$129.28	\$129.28	\$129.28
2" Meter		\$154.50	\$154.50	\$154.50	\$154.50	\$154.50	\$154.50	\$154.50	\$154.50	\$154.50	\$154.50
3" Meter		\$384.49	\$384.49	\$384.49	\$384.49	\$384.49	\$384.49	\$384.49	\$384.49	\$384.49	\$384.49
4" Meter		\$744.16	\$744.16	\$744.16	\$744.16	\$744.16	\$744.16	\$744.16	\$744.16	\$744.16	\$744.16
Meter Size		Initial Difference Between EMWD's Adjusted WMWD Fixed Charge and WMWD's Fixed Charge (CY 2020 Rates)									
5/8" Meter		\$6.40	\$6.40	\$6.40	\$6.40	\$6.40	\$6.40	\$6.40	\$6.40	\$6.40	\$6.40
3/4" Meter		\$8.88	\$8.88	\$8.88	\$8.88	\$8.88	\$8.88	\$8.88	\$8.88	\$8.88	\$8.88
1" Meter		\$13.71	\$13.71	\$13.71	\$13.71	\$13.71	\$13.71	\$13.71	\$13.71	\$13.71	\$13.71
1.5" Meter		\$25.86	\$25.86	\$25.86	\$25.86	\$25.86	\$25.86	\$25.86	\$25.86	\$25.86	\$25.86
2" Meter		\$30.90	\$30.90	\$30.90	\$30.90	\$30.90	\$30.90	\$30.90	\$30.90	\$30.90	\$30.90
3" Meter		\$76.90	\$76.90	\$76.90	\$76.90	\$76.90	\$76.90	\$76.90	\$76.90	\$76.90	\$76.90
4" Meter		\$148.83	\$148.83	\$148.83	\$148.83	\$148.83	\$148.83	\$148.83	\$148.83	\$148.83	\$148.83
Change in Revenues Resulting from EMWD's Adjustment to WMWD Rates		\$372,901	\$379,151	\$385,401	\$391,758	\$398,115	\$404,578	\$411,148	\$417,717	\$424,394	\$431,147

Meter Size		Proposed EMWD Adjusted WMWD Meter Charge									
5/8" Meter		\$25.60	\$26.57	\$27.58	\$28.63	\$29.72	\$30.85	\$32.02	\$33.24	\$33.24	\$33.24
3/4" Meter		\$35.51	\$36.86	\$38.26	\$39.72	\$41.23	\$42.79	\$44.42	\$46.11	\$46.11	\$46.11
1" Meter		\$54.85	\$56.93	\$59.10	\$61.34	\$63.67	\$66.09	\$68.60	\$71.21	\$71.21	\$71.21
1.5" Meter		\$103.42	\$107.35	\$111.43	\$115.67	\$120.06	\$124.63	\$129.36	\$134.28	\$134.28	\$134.28
2" Meter		\$123.60	\$128.30	\$133.17	\$138.23	\$143.49	\$148.94	\$154.60	\$160.47	\$160.47	\$160.47
3" Meter		\$307.59	\$319.28	\$331.41	\$344.01	\$357.08	\$370.65	\$384.73	\$399.35	\$399.35	\$399.35
4" Meter		\$595.33	\$617.95	\$641.43	\$665.81	\$691.11	\$717.37	\$744.63	\$772.93	\$772.93	\$772.93

**Reserve Balance Transferred Over**

Methodology: value of projected WMWD reserves as of 7/1/20, less outstanding debt principal.

Projected WMWD Reserves and Outstanding Debt as of 7/1/20

WMWD Fund 230	\$2,493,163	
WMWD Fund 231	(\$820,381)	
WMWD Fund 233	\$261,943	
WMWD Fund 235	\$2,378,668	
Less Outstanding 2010 A&B Revenue Bond Principal	(998,460)	Source: WMWD via email, 11/20/19
Less Outstanding Interfund Loan	(2,000,000)	
Total	\$1,314,934	Represents amount transferred over to EMWD



**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**393 Projected Financial Participation Charge Revenue Calculation**

394					Source: EMWD, per <a href="https://www.emwd.org/sites/main/files/file-attachments/fees_dsr_mtrms_ems_backflow.pdf?1577750076">https://www.emwd.org/sites/main/files/file-attachments/fees_dsr_mtrms_ems_backflow.pdf?1577750076</a>		
395	Current Financial Participation Charges					Range depending on type of meter, if applicable	
396	Meter Size	7/1/2019					
397	5/8" Meter	\$5,501	Assume 5/8" meters are single-family residences with fire sprinklers that would be a 1" meters under EMWD ownership			\$5,501	
398	3/4" Meter	\$5,501	Assume 3/4" meters are single-family residences with fire sprinklers that would be a 1" meters under EMWD ownership			\$5,501	
399	1" Meter	\$5,501	Assume 1" meters are single-family residences with fire sprinklers that would be a 1" meters under EMWD ownership			\$5,501	
400	1.5" Meter	\$27,505	Master Meter Multi-Jet			\$27,505	
401	2" Meter	\$58,696	Sensus OMNI C2 meter			\$44,008 - \$73,328	
402	3" Meter	\$146,712	Sensus OMNI C2 meter			\$146,711.67 - \$183,348.33	
403	4" Meter	\$293,368	Sensus OMNI C2 meter			\$293,368.33 - \$366,751.67	
404	6" Meter	\$586,792	Sensus OMNI C2 meter			\$586,792	

405  
 406 EMWD indexes its Financial Participation Charges to inflation, per page 55 of the EMWD Consolidated Schedule of Rates, Fees, and Charges (June 19, 2019). Projected FPC revenues in table below assume inflationary increases in EMWD's FPC.

407												
408												
409			Projected									
			FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
410	Number of New Meters											
411	5/8"		8	8	8	8	8	8	8	8	8	9
412	3/4"		31	32	32	33	33	34	35	35	36	36
413	1"		3	3	3	3	3	3	3	3	3	3
414	1.5"		2	2	2	2	2	2	2	2	2	2
415	2"		3	3	3	3	3	3	3	3	3	3
416	3"		0	0	0	0	0	0	0	0	0	0
417	4"		0	0	0	0	0	0	0	0	0	0
418	Total		47	48	48	49	49	50	51	51	52	53
419												
420	Projected Financial Participation Charge Revenues											
421	5/8"		\$45,108	\$46,236	\$47,392	\$48,577	\$49,791	\$51,036	\$52,312	\$53,619	\$54,960	\$63,376
422	3/4"		\$174,794	\$184,944	\$189,567	\$200,378	\$205,388	\$216,902	\$228,864	\$234,585	\$247,320	\$253,503
423	1"		\$16,916	\$17,338	\$17,772	\$18,216	\$18,672	\$19,138	\$19,617	\$20,107	\$20,610	\$21,125
424	1.5"		\$56,385	\$57,795	\$59,240	\$60,721	\$62,239	\$63,795	\$65,390	\$67,024	\$68,700	\$70,417
425	2"		\$180,489	\$185,001	\$189,626	\$194,367	\$199,226	\$204,207	\$209,312	\$214,545	\$219,909	\$225,406
426	3"		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
427	4"		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
428			\$473,692	\$491,314	\$503,597	\$522,259	\$535,316	\$555,078	\$575,494	\$589,881	\$611,498	\$633,827

**429 Standby Charge Revenue Calculation**

430	Methodology: EMWD Standby Charge Revenue = WMWD Standby Charge Revenue * (EMWD Standby Fee / WMWD Standby Fee)	
431		
432		
433	\$138,978	WMWD Standby Charge Revenue (Source: WMWD CY 2020 Water Rate Model)
434	\$21	WMWD Standby Charge, \$/acre or \$/parcel if less than one acre (Source: 5/15/19 letter from WMWD GM to WMWD Board)
435	\$14.00	Proposed EMWD Standby Charge, \$/acre (Source: policy question response from EMWD, 6/26/19)
436		
437	\$92,652	Projected EMWD Standby Charge Revenue

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**Table B-5d**  
**EMWD SCENARIO: Preliminary Cost per Equivalent Meter to Provide Water Service**

	Water	Sewer	Recycled	Consolidated	
Cost of Service (Funded by rates) FY 2020-21					
Operating Expense					
Purchased Water	\$78,021,000			\$78,021,000	Source: EMWD, 1/23/2020
Groundwater Replenishment O&M	\$724,417			\$724,417	Source: EMWD, 1/23/2020
Operations & Maintenance	\$20,335,266	\$38,350,816	\$2,608,412	\$61,294,494	Source: EMWD, 1/23/2020
Energy	\$7,729,356	\$4,980,895	\$1,051,860	\$13,762,111	Source: EMWD, 1/23/2020
Allocated Support Costs	\$24,850,322	\$13,522,294	\$4,036,068	\$42,408,684	Source: EMWD, 1/23/2020
General and Admin Allocation	\$5,054,221	\$9,387,048		\$14,441,269	Source: EMWD, 1/23/2020
Subtotal	\$136,714,582	\$66,241,053	\$7,696,340	\$210,651,975	
Non-Operating Expense					
Capital (R&R) (1)	\$13,239,287	\$15,803,052	\$1,327,997	\$30,370,336	Source: EMWD, 1/23/2020
Debt Service (2)	\$4,047,495	\$5,830,660	\$1,279,880	\$11,158,035	Source: EMWD, 1/23/2020
OPEB (ARC)	\$7,182,927	\$11,817,073		\$19,000,000	Source: EMWD, 1/23/2020
Subtotal	\$24,469,709	\$33,450,786	\$2,607,876	\$60,528,371	
Total Cost of Service by Operating Service	\$161,184,291	\$99,691,839	\$10,304,216	\$271,180,346	
EMS/EDU	155,000	255,000	NA	NA	Source: EMWD, 1/23/2020
Acre-Foot Supply	98,830	NA	48,000	146,830	Source: EMWD, 1/23/2020
Acre-Foot Demand	88,100		36,000	124,100	Source: EMWD, 1/23/2020
Cost per EMS/EDU	\$1,040	\$391			
Cost per Acre-Foot Supply	\$1,631		\$215	\$1,847	
<b>Cost per Acre-Foot Demand</b>	<b>\$1,830</b>				<b>&lt;== Use this calculation; use demand as a denominator because it is applied to metered water consumption to determine costs.</b>
(1) Capital (R&R)					
5-Year CIP (FY 2020-21 through FY 2024-25)					
Replacement CIP	\$66,196,437	\$79,015,261	\$6,639,983	\$151,851,681	Source: EMWD, 1/23/2020
Expansion CIP	\$166,930,603	\$61,361,321	\$18,121,516	\$246,413,440	Source: EMWD, 1/23/2020
Total CIP	\$233,127,040	\$140,376,582	\$24,761,499	\$398,265,120	
Average Annual CIP					
Replacement CIP	\$13,239,287	\$15,803,052	\$1,327,997	\$30,370,336	
Expansion CIP	\$33,386,121	\$12,272,264	\$3,624,303	\$49,282,688	
Total CIP	\$46,625,408	\$28,075,316	\$4,952,300	\$79,653,024	
(2) Debt Service Allocation					
Expansion Funded (FPC)	\$7,510,459	\$39,493,423	\$1,689,083	\$48,692,965	
Replacement Funded (Rates)	\$4,047,495	\$5,830,660	\$1,279,880	\$11,158,035	
Total Debt Service	\$11,557,954	\$45,324,083	\$2,968,963	\$59,851,000	

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

EMWD Funded Replacement Capital TOTAL

Row Labels	Replacement FY 19/20	Replacement FY 20/21	Replacement FY 21/22	Replacement FY 22/23	Replacement FY 23/24	Replacement Total	
General	(\$16,328)	(\$42,540)	(\$22,508)	(\$39,806)	(\$3,011)	(\$124,193)	Source: EMWD, 1/23/2020
Recycled	\$2,689,323	\$1,336,640	\$1,187,239	\$847,322	\$579,459	\$6,639,983	Source: EMWD, 1/23/2020
Sewer	\$16,764,995	\$17,995,688	\$20,654,386	\$12,212,995	\$11,511,391	\$79,139,454	Source: EMWD, 1/23/2020
Water	\$11,906,016	\$18,733,954	\$16,968,825	\$8,900,259	\$9,687,384	\$66,196,437	Source: EMWD, 1/23/2020
Total	\$31,344,005	\$38,023,741	\$38,787,942	\$21,920,769	\$21,775,223	\$151,851,681	

EMWD Funding Capital TOTAL

Row Labels	EMWD Funding FY 19/20	EMWD Funding FY 20/21	EMWD Funding FY 21/22	EMWD Funding FY 22/23	EMWD Funding FY 23/24	EMWD Funding Total	
General	\$2,858,032	\$3,748,317	\$1,363,761	\$2,511,342	\$519,313	\$11,000,765	Source: EMWD, 1/23/2020
Recycled	\$8,804,919	\$5,078,620	\$4,860,067	\$3,586,049	\$2,431,844	\$24,761,499	Source: EMWD, 1/23/2020
Sewer	\$21,220,233	\$24,267,184	\$31,731,100	\$31,073,504	\$21,083,797	\$129,375,817	Source: EMWD, 1/23/2020
Water	\$38,016,267	\$50,913,956	\$58,824,723	\$41,878,430	\$43,493,665	\$233,127,040	Source: EMWD, 1/23/2020
Total	\$70,899,450	\$84,008,077	\$96,779,651	\$79,049,326	\$67,528,618	\$398,265,120	

EMWD Debt Service TOTAL

	Debt Service FY 2021		
Water Expansion	\$7,510,459		Source: EMWD, 1/23/2020
Water Replacement & Refurbishment (R & R)	\$4,047,495		Source: EMWD, 1/23/2020
Sewer Expansion	\$39,493,423		Source: EMWD, 1/23/2020
Sewer R & R	\$5,830,660		Source: EMWD, 1/23/2020
Recycled Water Expansion	\$1,689,083		Source: EMWD, 1/23/2020
Recycled Water R & R	\$1,279,880		Source: EMWD, 1/23/2020
Total	\$59,851,000		

**Table B-5e**  
**EMWD SCENARIO: Preliminary Acquisition Balance Calculation**

Component of Acquisition Balance	Amount	
Capital Costs to Achieve Conditional and Operational Parity		
Identified in FMSR	\$7,192,626	See Table B-5f
Identified by WMWD	\$1,950,000	GIS Mapping, Tank Mixing System, Reservoir Recoating
Prospective PERS Pension & OPEB Costs for		
Transferred Employees; Severance	\$0	N/A per EMWD, December 2019 email. No staff anticipated to be transferred over.
Replacement and Refurbishment Reserve	\$0	Normally \$220 per Equivalent Meter, 12/4/19 email from EMWD. Not applicable per EMWD 1/23/2020, as amount would be ~offset by transferred reserves.
Buy-In to Imported Water Turnouts, Distribution, and Treatment	\$2,827,820	\$620 per Equivalent Meter, 12/4/19 email from EMWD
Total	\$11,970,446	

Note: WMWD outstanding debt is considered as part of the reserve balance transferred over calculation, where WMWD will retain part of its reserves to refund its outstanding debt.

**Table B-5**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**EMWD SCENARIO TABLES**

**Table B-5f**  
**EMWD SCENARIO: FSMR Capital Improvements and Possible Cost Allocation to Existing Customers or Future Development**

Project	Estimated Cost, 2020 \$ (See Note 1)	How Funded Existing Customers or Development?	Acquisition Balance	Financial Participation Charges	Improvement District or Developer Funded	Basis for Existing/ Development Allocation	Projected Schedule
522 Storage for Existing Customers (Hunter Tank)	\$2,245,626	Existing Only	\$2,245,626			Note 2	Note 3
523 Storage for Development (Hunter Tank)	\$1,810,374	Future Only		\$1,810,374		Note 2	Note 3
524 Expansion CIP North of Murrieta Creek	\$17,120,000	Future Only			\$17,120,000	Note 3	Note 4
525 Expansion CIP South of Murrieta Creek	\$20,388,000	Future Only			\$20,388,000	Note 3	Note 4
526 EMWD Hydraulic Improvements	\$1,468,000	Future Only		\$1,468,000		Note 4	Note 4
527 Supply Improvements Through EMWD	\$5,379,000	Future Only		\$5,379,000		Note 4	
528 Legacy (Small Diameter) Improvements	\$4,947,000	Existing Only	\$4,947,000			Note 2	Note 5
529 Well No. 3	\$0		\$0	\$0			
530 Total	\$53,358,000		\$7,192,626	\$8,657,374	\$37,508,000		
531							
532							
533 Notes:							
534 (1) Source: West Yost, October 2019							
535 (2) Per West Yost, these projects are required to address deficiencies in the existing system. Cost of the project to be included in the Acquisition Balance.							
536 Reservoir serves both Study Area and EMWD retail service area. 50/50 split of costs between existing Study Area customers and existing EMWD retail customers based on anticipated storage needs.							
537 For cost applicable to Study Area, division of cost between existing and future customers based on ratio of existing to buildout Meter Equivalents.							
538 (3) Expansion of water system. Project is not needed unless there is development. Schedule depends on when development occurs.							
539 (4) Needed to accommodate future water demands from growth. Project is not needed unless there is development. Schedule depends on when development occurs.							
540 (5) Assume that this project will be completed between 2025 and 2030. Anticipate that permitting and siting of the reservoir will require additional time and could occur before 2025.							
541 (6) Assume improvements will be completed between 2020 and 2025.							

**Table B-5g**  
**EMWD SCENARIO: Funding for Capital Projects Not Funded by Improvement Districts or Acquisition Balance**

Infrastructure Review Project	Potential Funding Method (1)
542 Storage for Existing Customers (Hunter Tank)	Acquisition Balance
543 Storage for Development (Hunter Tank)	FPC Funded
544 Expansion CIP North of Murrieta Creek	Improvement District or Developer Contribution
545 Expansion CIP South of Murrieta Creek	Improvement District or Developer Contribution
546 EMWD Hydraulic Improvements	FPC Funded
547 Supply Improvements Through EMWD	FPC Funded
548 Fireflow Improvements	Acquisition Balance
549 Total	
550	
551 Compare FPC Funded Costs with FPC Revenues Over the 10-Year Planning Period	
552	
553 FPC Funded Projects	\$8,657,374
554 FPC Revenues, 10-Year Total	\$5,491,958
555 FPC Funded Projects Cost More than Projected FPC Revenues. This means that FPC revenues after FY 29/30 would also be used to fund	
556 Alternatively, a higher growth rate than the 1.6% (approximately 50 connections per year) would provide more FPC revenues than what is shown here.	

Table B-5  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
EMWD SCENARIO TABLES

Table B-5h  
Projected Monthly Water Bill Calculations

	Projected										Notes
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
557 Applicable Rate Schedule	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	WMWD Adj	
558											
559 Single Family Residence, 3/4" Meter, 18 ccf/month											1, 2
560 Fixed System Charge (Adjusted WMWD), \$/month	\$35.51	\$36.86	\$38.26	\$39.72	\$41.23	\$42.79	\$44.42	\$46.11	\$46.11	\$46.11	3
561 Tier 1 Commodity Charge (WMWD), \$/hcf	\$2.01	\$2.08	\$2.16	\$2.24	\$2.33	\$2.42	\$2.51	\$2.60	\$2.60	\$2.60	
562 Tier 2 Commodity Charge (WMWD), \$/hcf	\$4.29	\$4.45	\$4.62	\$4.79	\$4.98	\$5.16	\$5.36	\$5.56	\$5.56	\$5.56	
563 Standby Charge	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	
564 WMWD Rates: Water Bill Calculation	\$95.59	\$99.17	\$102.90	\$106.76	\$110.78	\$114.94	\$119.27	\$123.75	\$123.75	\$123.75	
565											
566 Service Charge (EMWD), \$/month	\$13.38	\$13.99	\$14.34	\$14.70	\$15.07	\$15.44	\$15.83	\$16.23	\$16.63	\$17.05	4
567 Fixed Charge for Water Supply and Reliability (EMWD), \$/month	\$3.95	\$4.26	\$4.37	\$4.48	\$4.59	\$4.70	\$4.82	\$4.94	\$5.06	\$5.19	
568 Tier 1 Volume Charge (EMWD), \$/hcf	\$1.10	\$1.13	\$1.16	\$1.19	\$1.22	\$1.25	\$1.28	\$1.31	\$1.34	\$1.38	
569 Tier 2 Volume Charge (EMWD), \$/hcf	\$3.53	\$3.63	\$3.72	\$3.81	\$3.91	\$4.01	\$4.11	\$4.21	\$4.31	\$4.42	
570 Standby Charge	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	
571 EMWD Rates: Water Bill Calculation	\$62.60	\$64.76	\$66.35	\$67.98	\$69.65	\$71.36	\$73.11	\$74.91	\$76.76	\$78.65	
572											
573 Monthly Water Bill	\$95.59	\$99.17	\$102.90	\$106.76	\$110.78	\$114.94	\$119.27	\$123.75	\$123.75	\$123.75	
574											
575											
576 Commercial Account, 2" Meter, 1,500 ccf/year (125 ccf/month)											1, 2, 3, 4
577 Fixed System Charge (Adjusted WMWD), \$/month	\$123.60	\$128.30	\$133.17	\$138.23	\$143.49	\$148.94	\$154.60	\$160.47	\$160.47	\$160.47	
578 Tier 1 Commodity Charge (WMWD), \$/hcf	\$2.01	\$2.08	\$2.16	\$2.24	\$2.33	\$2.42	\$2.51	\$2.60	\$2.60	\$2.60	
579 Tier 2 Commodity Charge (WMWD), \$/hcf	\$4.29	\$4.45	\$4.62	\$4.79	\$4.98	\$5.16	\$5.36	\$5.56	\$5.56	\$5.56	
580 Standby Charge	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	
581 WMWD Rates: Water Bill Calculation	\$537.97	\$558.37	\$579.54	\$601.52	\$624.33	\$648.01	\$672.59	\$698.10	\$698.10	\$698.10	
582											
583 Service Charge (EMWD), \$/month	\$78.17	\$81.52	\$83.55	\$85.64	\$87.78	\$89.98	\$92.23	\$94.53	\$96.90	\$99.32	
584 Fixed Charge for Water Supply and Reliability (EMWD), \$/month	\$31.60	\$34.08	\$34.93	\$35.81	\$36.70	\$37.62	\$38.56	\$39.52	\$40.51	\$41.52	
585 Tier 1 Volume Charge (EMWD), \$/hcf	\$3.66	\$3.77	\$3.86	\$3.96	\$4.06	\$4.16	\$4.27	\$4.37	\$4.48	\$4.59	
586 Tier 2 Volume Charge (EMWD), \$/hcf	\$7.43	\$7.65	\$7.84	\$8.04	\$8.24	\$8.44	\$8.66	\$8.87	\$9.09	\$9.32	
587 Standby Charge	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	\$1.17	
588 EMWD Rates: Water Bill Calculation	\$568.44	\$588.01	\$602.68	\$617.72	\$633.14	\$648.94	\$665.13	\$681.73	\$698.74	\$716.18	
589											
590 Monthly Water Bill	\$537.97	\$558.37	\$579.54	\$601.52	\$624.33	\$648.01	\$672.59	\$698.10	\$698.10	\$698.10	

## Notes:

(1) Both EMWD and WMWD use budget based rates. For single-family residences, of the 18 ccf/month use, estimate 8 ccf/month in Tier 1 and remainder of water use in Tier 2. No Tier 3 or Tier 4 use.

For the commercial account example, 1,500 ccf/year is the average water use for WMWD's customers in the Study Area with 2" meters, as reported by WMWD (1/21/2020)

(2) Switch from WMWD rates to EMWD projected to begin as noted in Table B-5a above

(3) WMWD's pumping surcharge is not applicable to most of the Study Area, because the pumping surcharge is for pumping zone 8, and most of the Study Area is in pumping zone 7.

(4) WMWD and EMWD adjust rates on January 1 of each year. The monthly bills shown in this table are for the July - December portion of each fiscal year.

(5) WMWD and EMWD have different tier structures for non-residential customers. For EMWD, all water use is projected to be in Tier 1. For WMWD, 90% of water use is Tier 1 and 10% is Tier 2.

(6) WMWD's commercial budget formula is for any given month, 90% of that month's two-year historical average water use is in Tier 1, and the remaining 10% is in Tier 2. For the purposes of this monthly bill calculation, Tier 1 water use is 90%\*125 ccf/month, and Tier 2 water use is 10%\*125 ccf/month.

Source: <https://www.wmwd.com/337/Water-Budget-Chart-Commercial>

EMWD's commercial budget formula is shown above. For the purposes of this calculation, all commercial water use is Tier 1.



Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs

1 **WMWD Scenario: Projected Revenues, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
4 Water Rate Revenues	\$5.63	\$5.91	\$6.20	\$6.51	\$6.84	\$7.18	\$7.53	\$7.91	\$8.17	\$8.30
5 Standby Charges	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
6 Interest Income	0.10	0.11	0.12	0.11	0.12	0.14	0.16	0.17	0.19	0.21
7 Connection Fees	0.47	0.48	0.50	0.51	0.53	0.55	0.57	0.59	0.61	0.63
8 Other Non-Rate Revenues	0.07	0.08	0.07	0.08	0.07	0.08	0.08	0.07	0.08	0.08
9 Total	\$6.41	\$6.72	\$7.03	\$7.35	\$7.71	\$8.09	\$8.48	\$8.89	\$9.19	\$9.37
10 math check, should = \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

12 **WMWD Scenario: Projected Expenses, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
15 Purchased Water	\$1.32	\$1.43	\$1.55	\$1.66	\$1.77	\$1.88	\$2.00	\$2.12	\$2.26	\$2.41
16 Other O&M	3.13	3.22	3.30	3.39	3.47	3.57	3.66	3.75	3.85	3.95
17 Debt Service	0.18	0.87	0.87	0.87	0.87	1.79	1.79	1.79	1.79	1.79
18 Pay as You Go Capital, Repair/Repl.	1.30	1.16	1.92	0.82	0.83	0.50	0.50	0.50	0.50	0.50
19 Total	\$5.93	\$6.67	\$7.64	\$6.73	\$6.94	\$7.73	\$7.95	\$8.17	\$8.40	\$8.65
20 math check, should = \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

22 **WMWD Scenario: Projected Ending Year Reserves, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
25 Projected Ending Year Reserve Balance	\$4.80	\$4.84	\$4.24	\$4.86	\$5.63	\$5.98	\$6.52	\$7.24	\$8.03	\$8.75
26 WMWD's Minimum Reserve Balance	\$7.47	\$7.52	\$7.57	\$7.62	\$7.67	\$7.72	\$7.77	\$7.83	\$7.88	\$7.95

28 **WMWD Scenario: Projected Total Water Cost, SFR, 3/4" Meter, 18 ccf/month, Tier 1 Usage 8 ccf/month, Power Zone 7**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
31 Total Water Cost	\$105.05	\$108.46	\$111.98	\$115.62	\$119.37	\$123.25	\$127.26	\$131.41	\$135.69	\$135.69

34 **WMWD Scenario: Projected Total Water Cost, Commercial, 2" Meter, 125 ccf/month, Power Zone 7, 1 acre**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
37 Total Water Cost	\$569.45	\$588.18	\$607.54	\$627.53	\$648.18	\$669.51	\$691.55	\$714.31	\$737.82	\$737.82

Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs

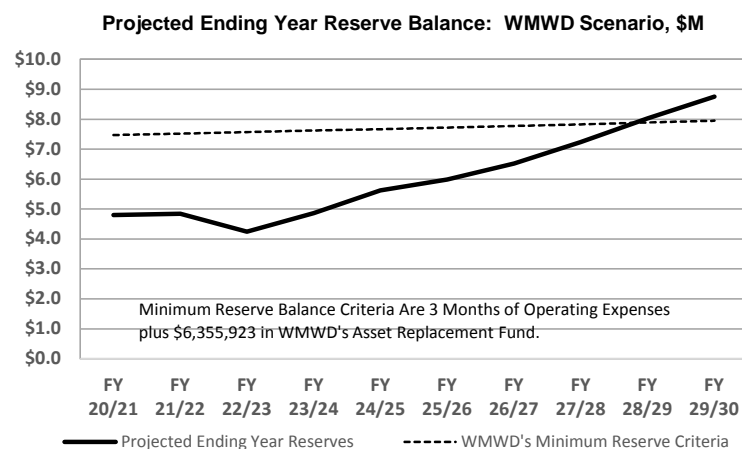
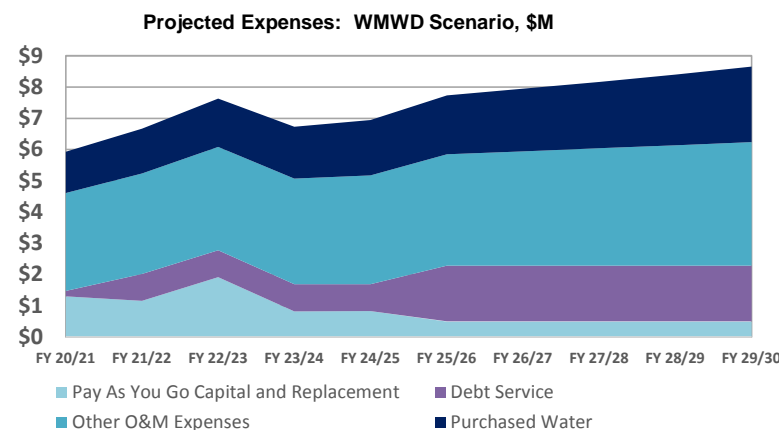
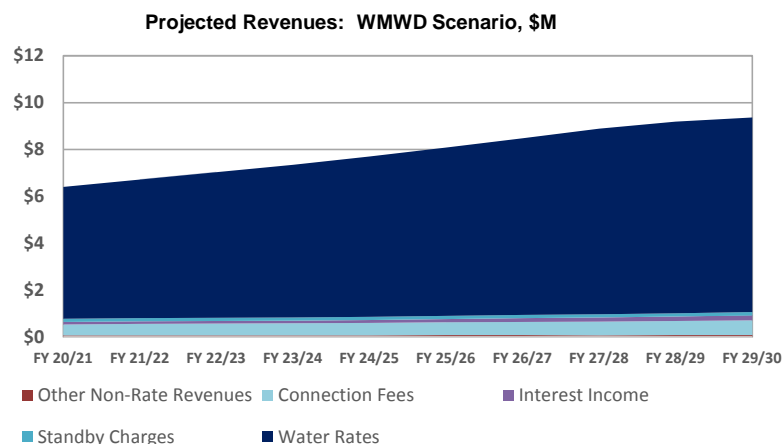
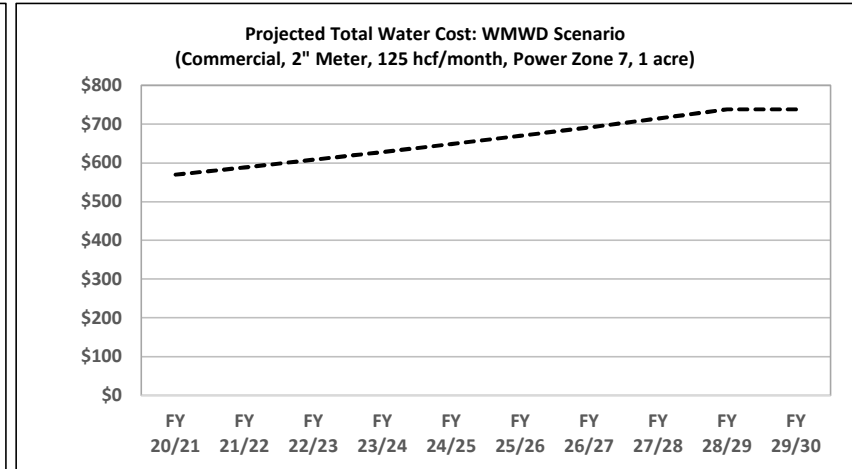
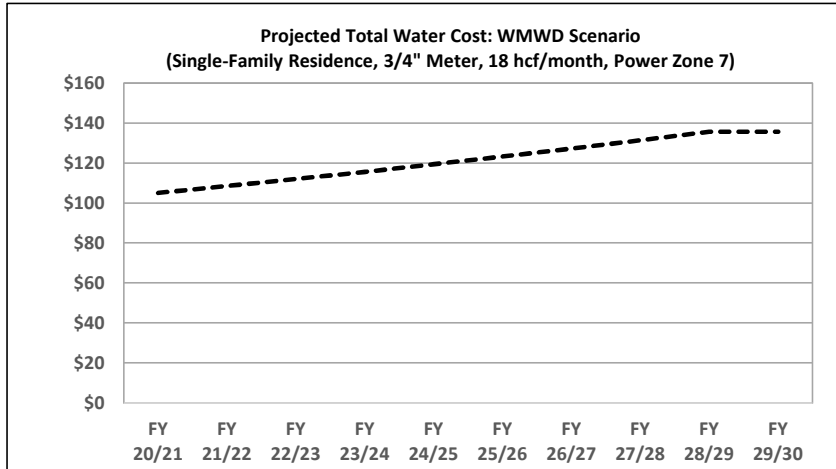


Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs



**Table B-6**  
**RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis**  
**Graph Data and Graphs**

99 **EMWD Scenario: Projected Revenues, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
102 Water Rate Revenues	\$5.26	\$5.55	\$5.86	\$6.18	\$6.52	\$6.87	\$7.25	\$7.65	\$7.92	\$8.05
103 Standby Charges	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
104 Interest Income	0.03	0.03	0.04	0.06	0.07	0.08	0.09	0.11	0.13	0.15
105 Other Non-Rate Revenues	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
106 Total	\$5.44	\$5.74	\$6.05	\$6.38	\$6.73	\$7.10	\$7.50	\$7.91	\$8.20	\$8.34
107 math check, should = \$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

109 **EMWD Scenario: Projected Expenses, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
112 Paydown of Acquisition Balance	\$0.64	\$0.69	\$0.77	\$0.85	\$0.94	\$1.03	\$1.14	\$1.25	\$1.21	\$1.02
113 Study Area Share of EMWD Expenses	\$4.37	\$4.55	\$4.74	\$4.94	\$5.14	\$5.36	\$5.58	\$5.81	\$6.05	\$6.31
114 Total	\$5.01	\$5.24	\$5.51	\$5.79	\$6.08	\$6.39	\$6.72	\$7.06	\$7.27	\$7.33

117 **EMWD Scenario: Projected Ending Year Reserves, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
120 Projected Ending Year Reserve Balance	\$1.75	\$2.24	\$2.78	\$3.38	\$4.03	\$4.74	\$5.52	\$6.38	\$7.31	\$8.32

123 **EMWD Scenario: Projected Total Water Cost, SFR, 3/4" Meter, 17 ccf/month**

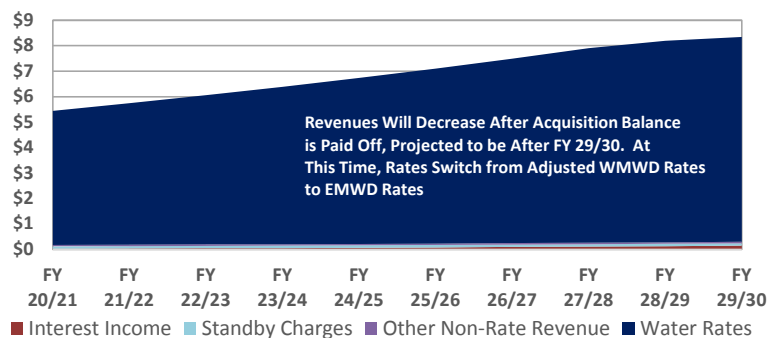
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
126 Total Water Cost	\$95.59	\$99.17	\$102.90	\$106.76	\$110.78	\$114.94	\$119.27	\$123.75	\$123.75	\$123.75

129 **EMWD Scenario: Projected Total Water Cost, Commercial, 2" Meter, 125 ccf/month**

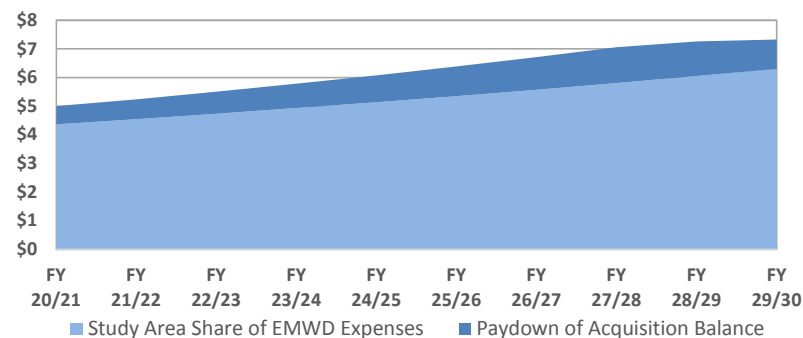
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
132 Total Water Cost	\$537.97	\$558.37	\$579.54	\$601.52	\$624.33	\$648.01	\$672.59	\$698.10	\$698.10	\$698.10

Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs

Projected Revenues: EMWD Scenario, \$M



Projected Expenses: EMWD Scenario, \$M



Projected Study Area Contribution to EMWD Reserves: EMWD Scenario, \$M

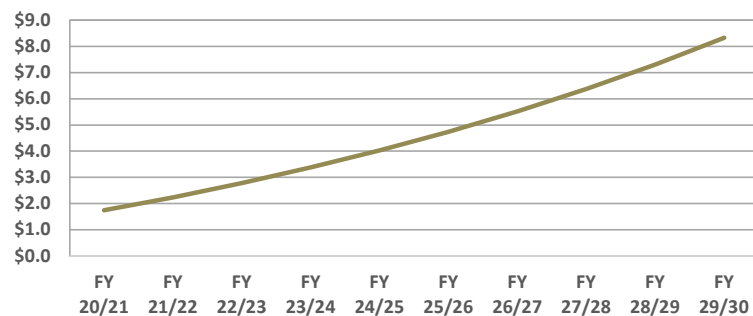


Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs

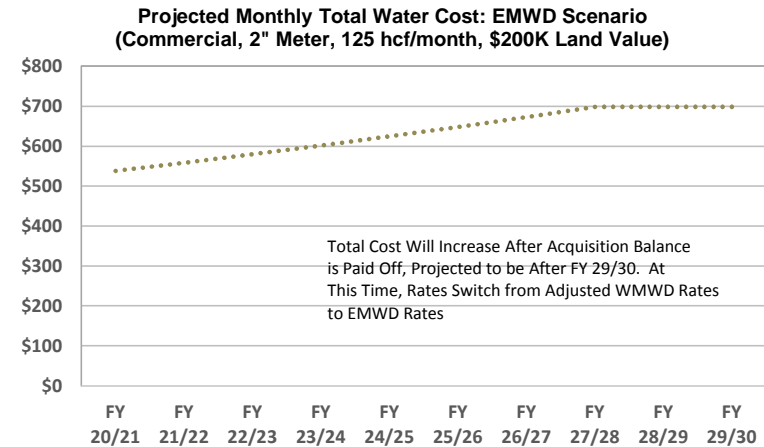
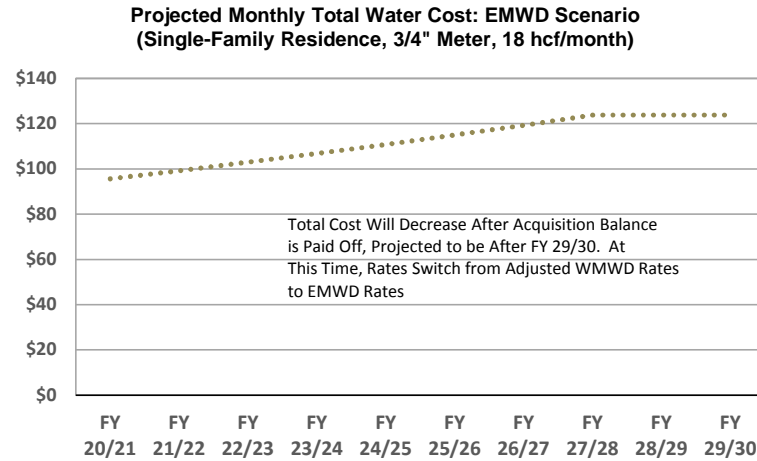




Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs

187 **RCWD Scenario: Projected Revenues, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
190 Water Rate Revenues	\$4.06	\$4.21	\$4.36	\$4.52	\$4.68	\$4.86	\$5.03	\$5.22	\$5.30	\$5.39
191 Ad Valorem or Equivalent Rate Surcharge	2.09	2.14	2.20	2.25	2.31	2.37	2.42	2.48	2.55	2.61
192 Standby Charges	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
193 Interest Income	0.03	0.03	0.04	0.03	0.04	0.05	0.06	0.07	0.09	0.10
194 Other Non-Rate Revenues	0.22	0.23	0.23	0.24	0.25	0.25	0.26	0.27	0.28	0.28
195 Total	\$6.86	\$7.08	\$7.29	\$7.50	\$7.74	\$7.99	\$8.24	\$8.51	\$8.68	\$8.85
196 % from Ad Valorem	30%	30%	30%	30%	30%	30%	29%	29%	29%	30%
197 math check, should = \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

199 **RCWD Scenario: Projected Expenses, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
202 Purchased Water	\$1.14	\$1.24	\$1.35	\$1.45	\$1.55	\$1.65	\$1.75	\$1.86	\$1.98	\$2.11
203 Other O&M	3.13	3.22	3.30	3.39	3.48	3.57	3.66	3.76	3.86	3.96
204 WMWD-Initiated Capital and Repair/Replacem	1.54	1.39	2.14	1.04	1.04	1.04	1.04	1.04	1.04	1.04
205 FMSR Capital Excluding Improvement Districts,	0.61	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
206 Total	\$6.43	\$6.94	\$7.89	\$6.98	\$7.16	\$7.36	\$7.55	\$7.76	\$7.97	\$8.21
207 math check, should = \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

209 **RCWD Scenario: Projected Reserves, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
212 Projected Ending Year Reserve Balance	\$1.75	\$1.88	\$1.29	\$1.81	\$2.38	\$3.01	\$3.70	\$4.45	\$5.15	\$5.80
213 RCWD's Minimum Reserve Balance	\$3.73	\$3.85	\$3.97	\$4.09	\$4.22	\$4.34	\$4.47	\$4.60	\$4.74	\$4.88

215 **RCWD Scenario: Projected Total Water Cost, SFR, 3/4" Meter, 18 ccf/month, \$80,000 land value**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
218 Total Water Cost										
219 Revenue Neutral Surcharge	\$124.44	\$127.01	\$129.64	\$132.33	\$135.08	\$137.88	\$140.75	\$143.68	\$144.88	\$146.10
220 Ad Valorem Tax	\$117.58	\$119.98	\$122.43	\$124.94	\$127.50	\$130.12	\$132.79	\$135.52	\$136.51	\$137.53

223 **RCWD Scenario: Projected Total Water Cost, Commercial, 2" Meter, 125 ccf/month, \$200,000 land value, 1 acre**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
226 Total Water Cost										
227 Revenue Neutral Surcharge	\$678.97	\$693.57	\$708.49	\$723.74	\$739.33	\$755.26	\$771.54	\$788.18	\$794.96	\$801.90
228 Ad Valorem Tax	\$534.18	\$545.16	\$556.37	\$567.82	\$579.51	\$591.44	\$603.63	\$616.07	\$618.54	\$621.08

Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs

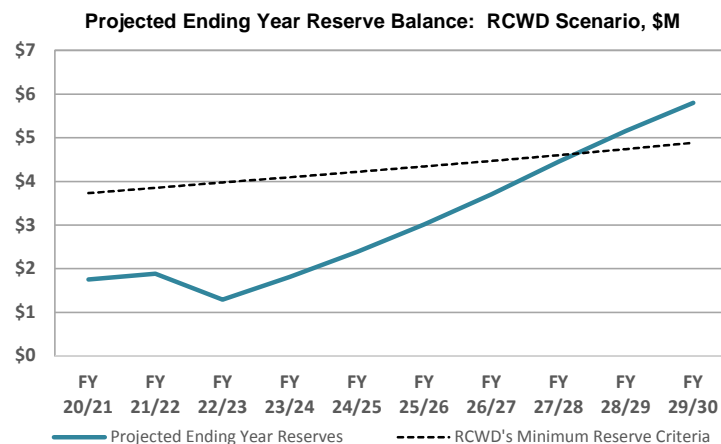
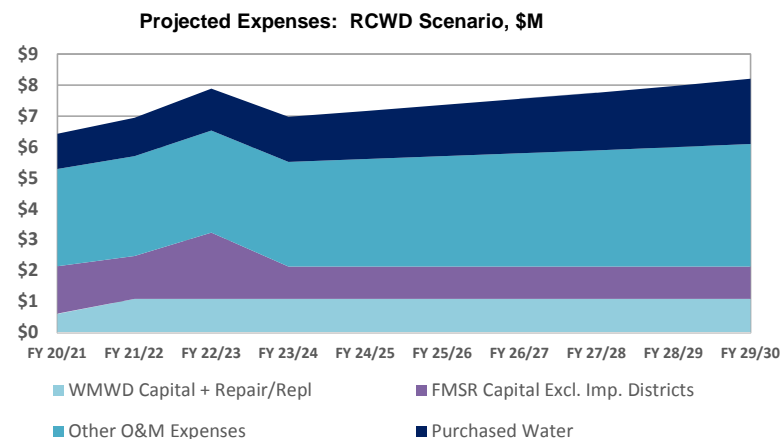
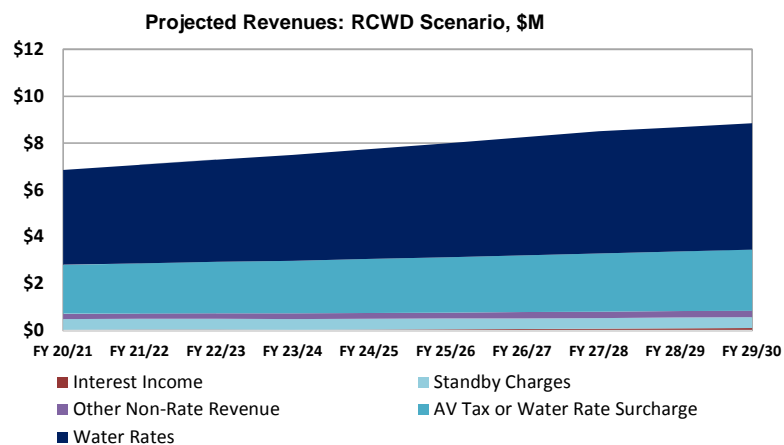


Table B-6  
RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
Graph Data and Graphs

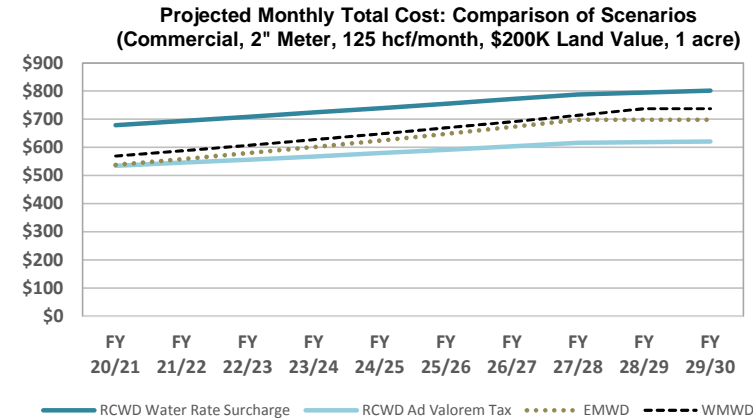
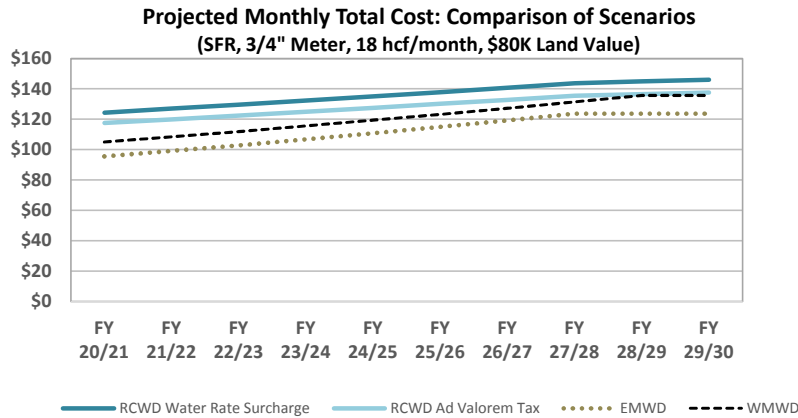
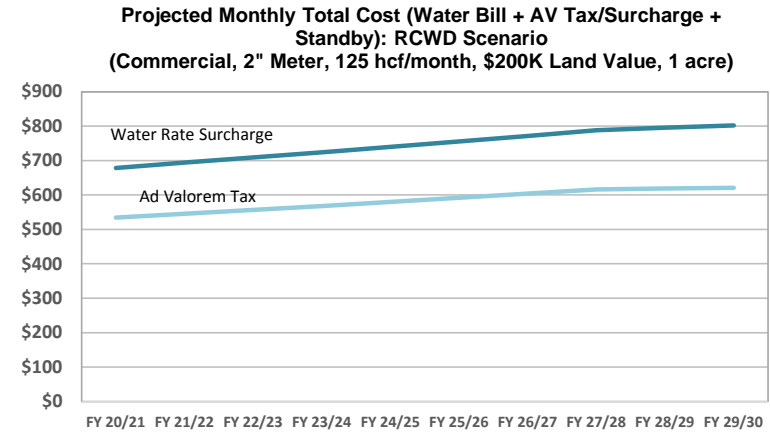
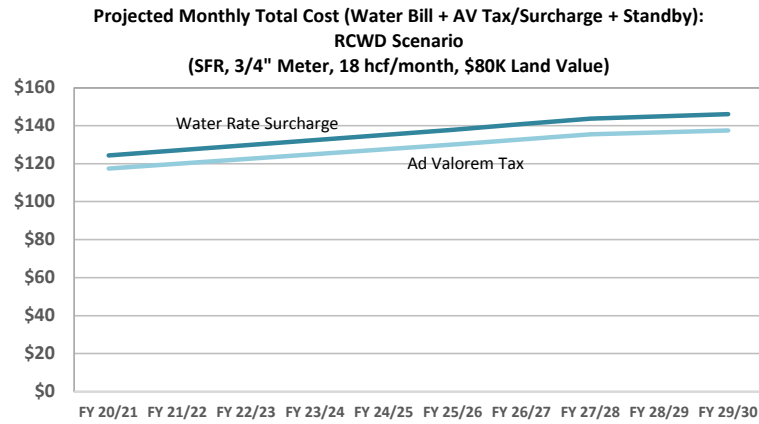
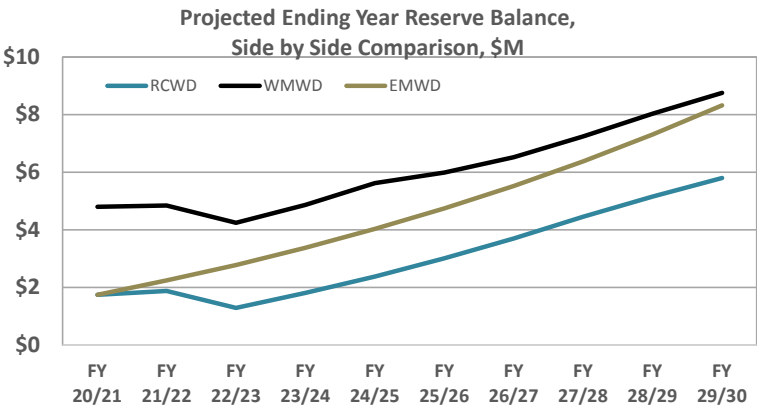


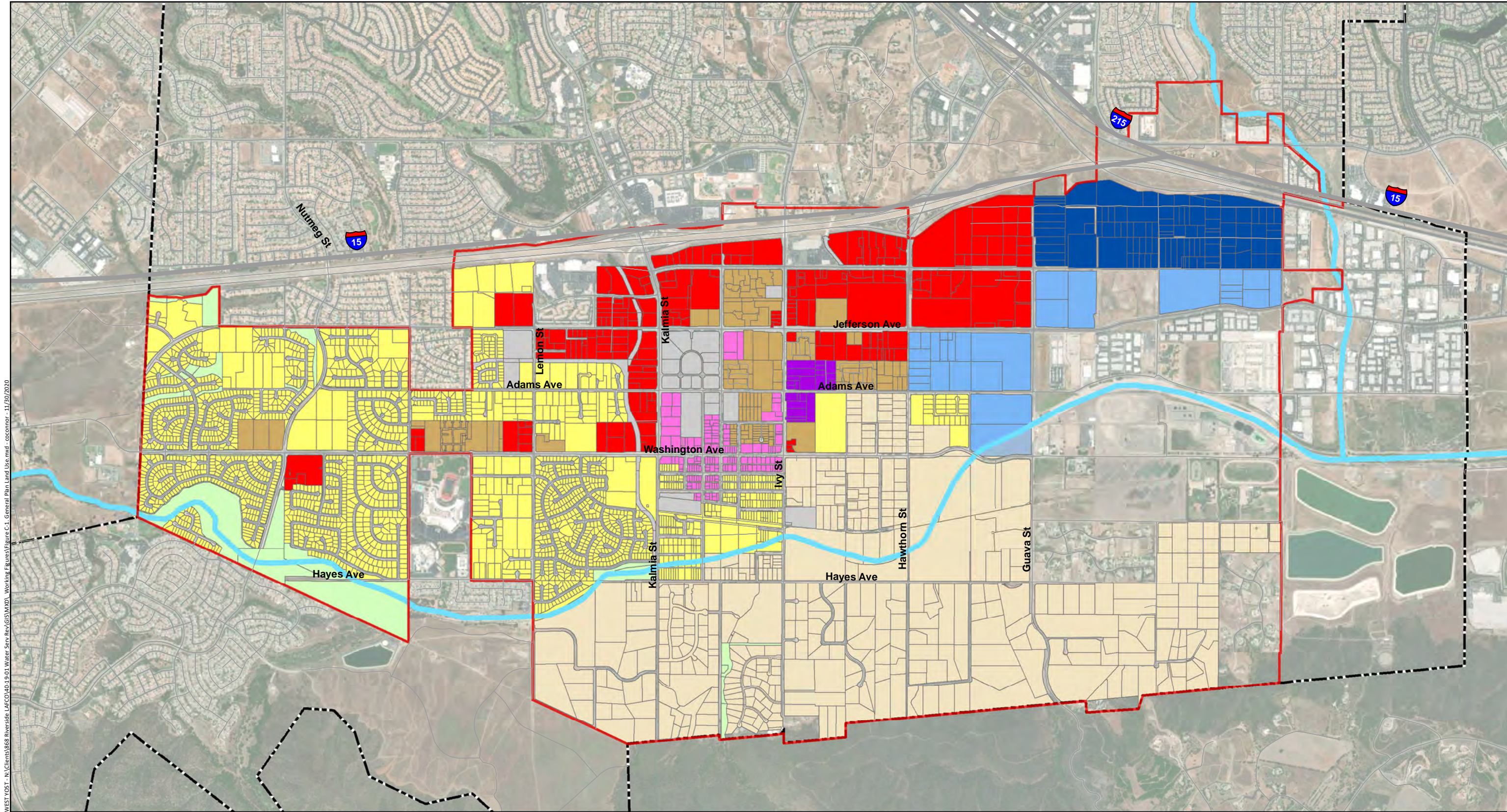
Table B-6  
 RIVERSIDE LAFCO - Murrieta Focused Municipal Service Review: Financial Analysis  
 Graph Data and Graphs



## Appendix C

### Infrastructure and Land Use

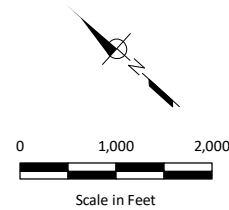




\\WESTYOST\\N\\Clients\\668 Riverside LAFCO\\4019-01 Water Serv Rev\\GIS\\MWD Working Figures\\Figure C-1 General Plan Land Use.mxd - cocompar - 11/30/2020

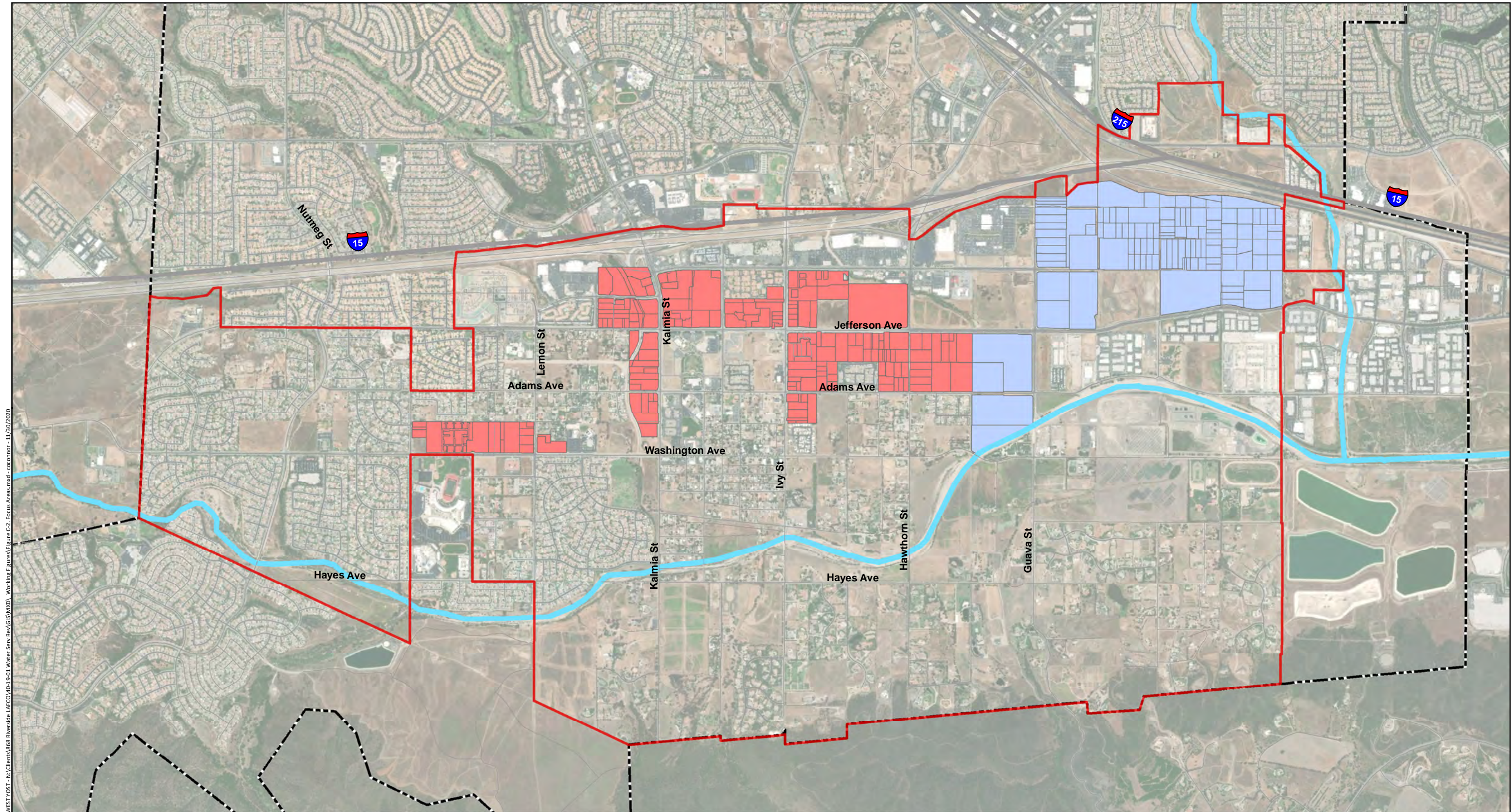


- |                    |                              |                             |
|--------------------|------------------------------|-----------------------------|
| Study Area         | <b>General Plan Land Use</b> | Large Lot Residential       |
| County Boundary    | Business Park                | Mixed Use                   |
| City Boundary      | Civic/Institutional          | Multiple Family Residential |
| Interstate Highway | Commercial                   | Parks and Open Space        |
| State Highway      | Industrial                   | Professional and Office     |
| Local Roads        | Innovation                   | Single Family Residential   |
| Murrieta Creek     |                              |                             |



**Figure C-1**  
**Land Use**  
**2035 General Plan**  
 Riverside LAFCO  
 Focused Water Municipal  
 Service Review Murrieta Area

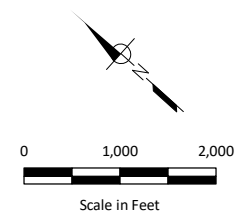




\\WEST-YOST-N\\Clients\\668 Riverside LAFCO\\4019-01 Water Serv Rev\\GIS\\MWD Working Figures\\Figure C-2 Focus Areas.mxd - cocomor - 11/30/2020

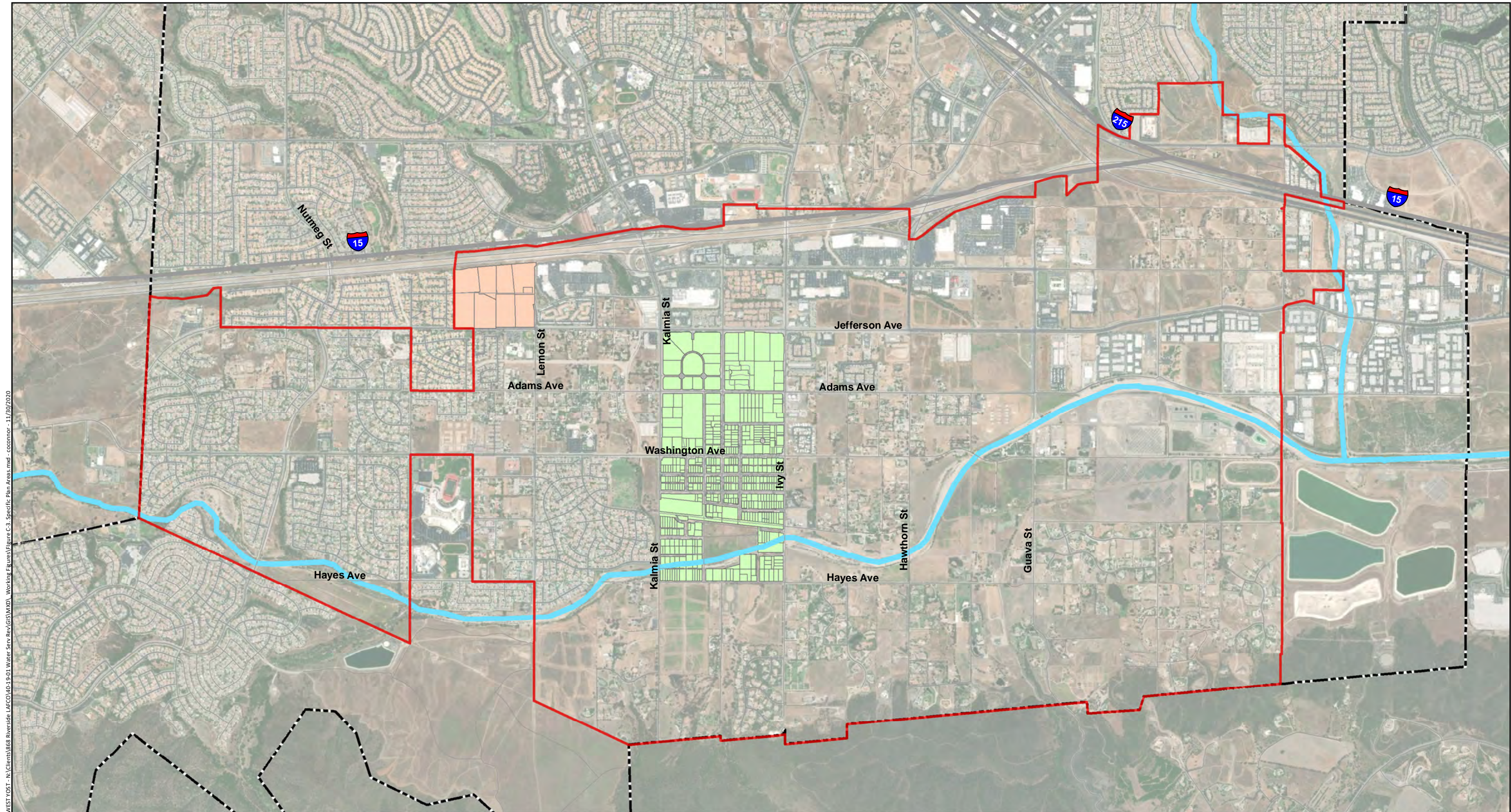


- |                                                                                                              |                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <span style="border: 2px solid red; padding: 2px;"> </span> Study Area                                       | <b>Focus Area</b>                                                                                                           |
| <span style="border: 1px solid black; padding: 2px;"> </span> County Boundary                                | <span style="background-color: red; border: 1px solid black; padding: 2px;"> </span> Multiple Use Areas (MU-3)              |
| <span style="border: 1px dashed black; padding: 2px;"> </span> City Boundary                                 | <span style="background-color: lightblue; border: 1px solid black; padding: 2px;"> </span> South Murrieta Business Corridor |
| <span style="border-bottom: 2px solid gray; width: 20px; display: inline-block;"></span> Interstate Highway  |                                                                                                                             |
| <span style="border-bottom: 2px solid gray; width: 20px; display: inline-block;"></span> State Highway       |                                                                                                                             |
| <span style="border-bottom: 1px solid gray; width: 20px; display: inline-block;"></span> Local Roads         |                                                                                                                             |
| <span style="border-bottom: 2px solid lightblue; width: 20px; display: inline-block;"></span> Murrieta Creek |                                                                                                                             |



**Figure C-2**  
**Focus Areas**  
**2035 General Plan**  
 Riverside LAFCO  
 Focused Water Municipal  
 Service Review Murrieta Area

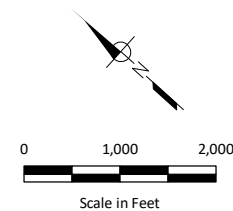




\\WESTYOST\\N\\Clients\\668 Riverside LAFCO\\4019-01 Water Serv Rev\\GIS\\MXD Working Figures\\Figure C-3 Specific Plan Areas.mxd - coconnor - 11/30/2020

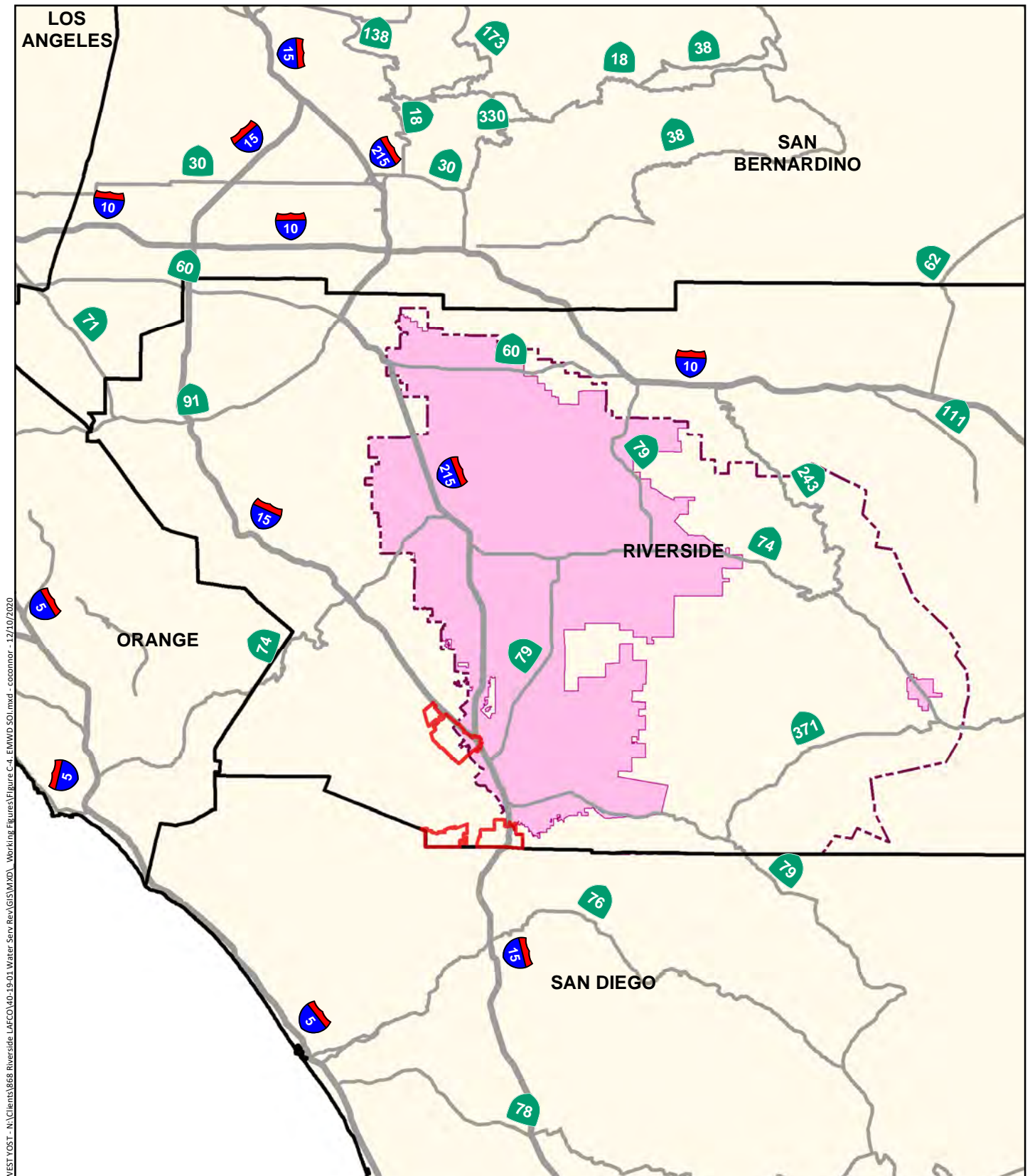


- |                    |                      |
|--------------------|----------------------|
| Study Area         | <b>Specific Plan</b> |
| County Boundary    | Downtown Murrieta    |
| City Boundary      | Santa Rosa Highlands |
| Interstate Highway |                      |
| State Highway      |                      |
| Local Roads        |                      |
| Murrieta Creek     |                      |



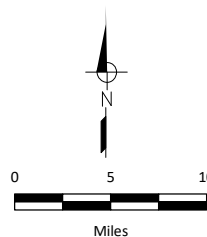
**Figure C-3**  
**Specific Plan Areas**  
**2035 General Plan**  
 Riverside LAFCO  
 Focused Water Municipal  
 Service Review Murrieta Area





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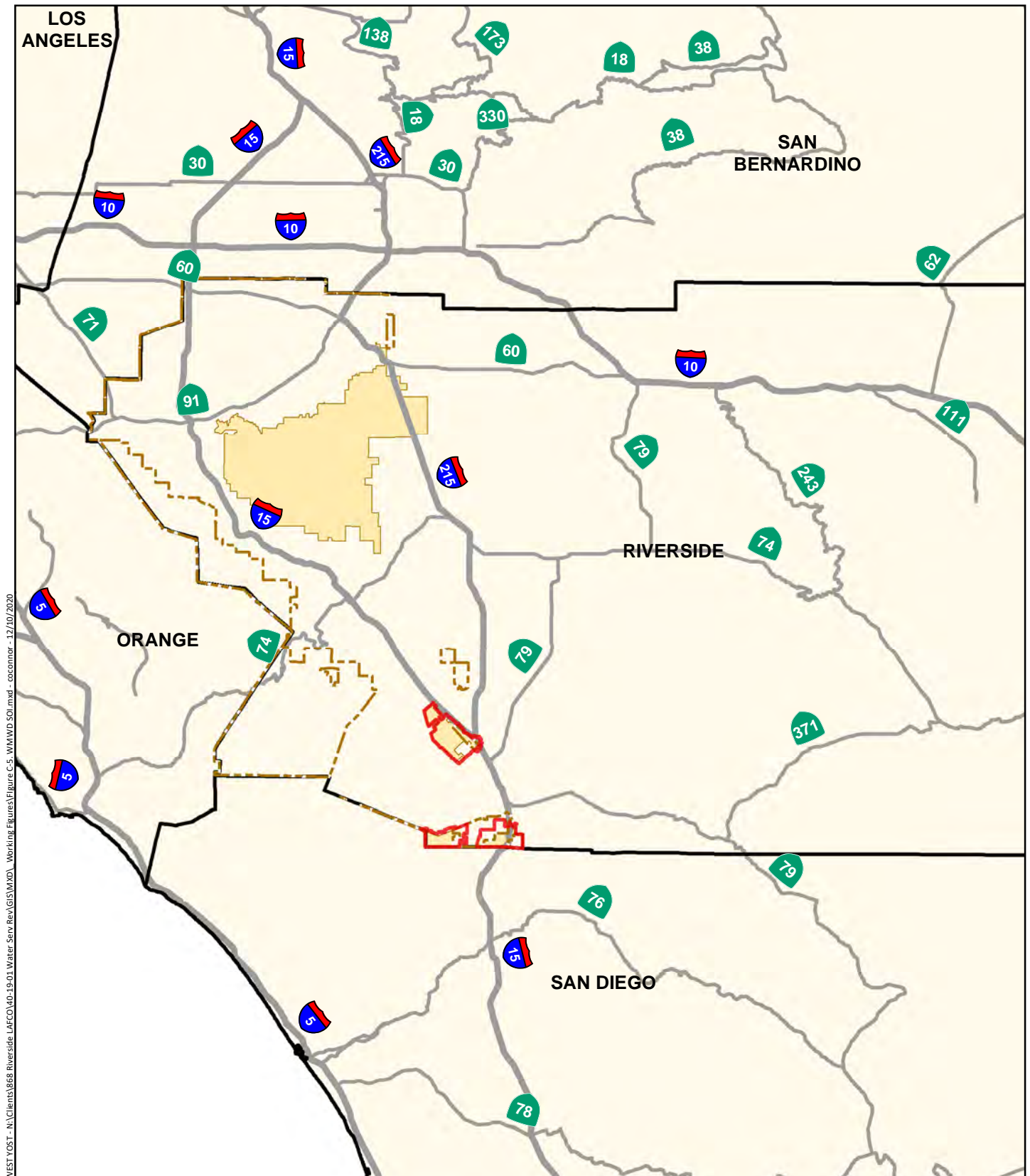
- Study Areas
- County Boundary
- Interstate Highway
- State Highway
- EMWD Service Area
- EMWD SOI



**Figure C-4**

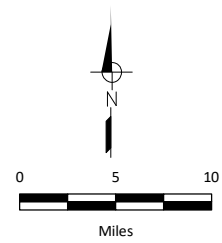
**EMWD  
Service Area & SOI**

**Riverside LAFCO**  
Focused Water MSR  
Murrieta Area

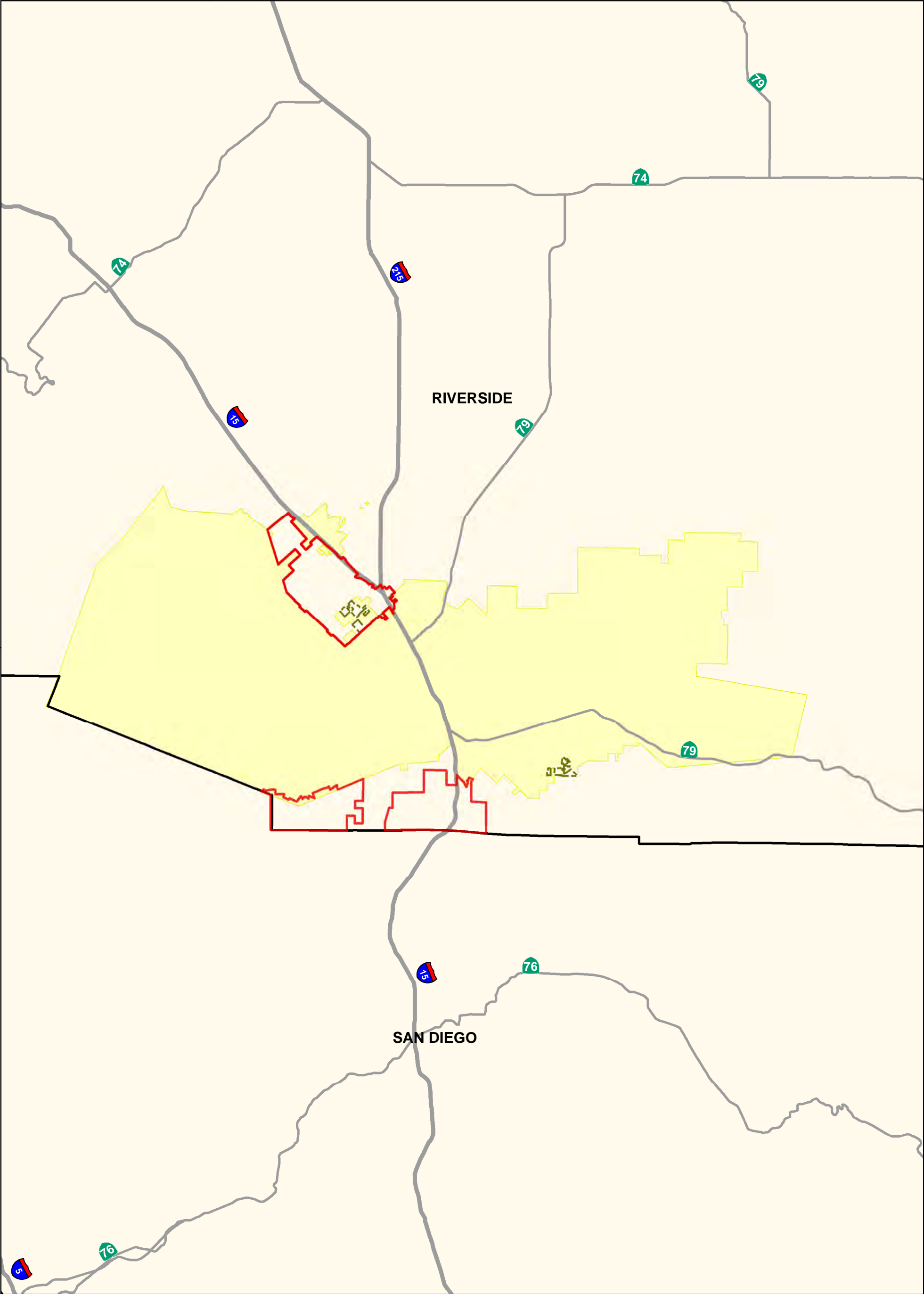


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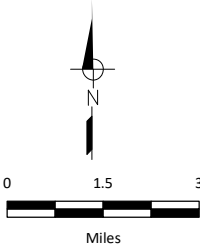
- Study Areas
- County Boundary
- Interstate Highway
- State Highway
- WMWD Service Area
- WMWD SOI



**Figure C-5**  
**WMWD**  
**Service Area & SOI**  
**Riverside LAFCO**  
**Focused Water MSR**  
**Murrieta Area**

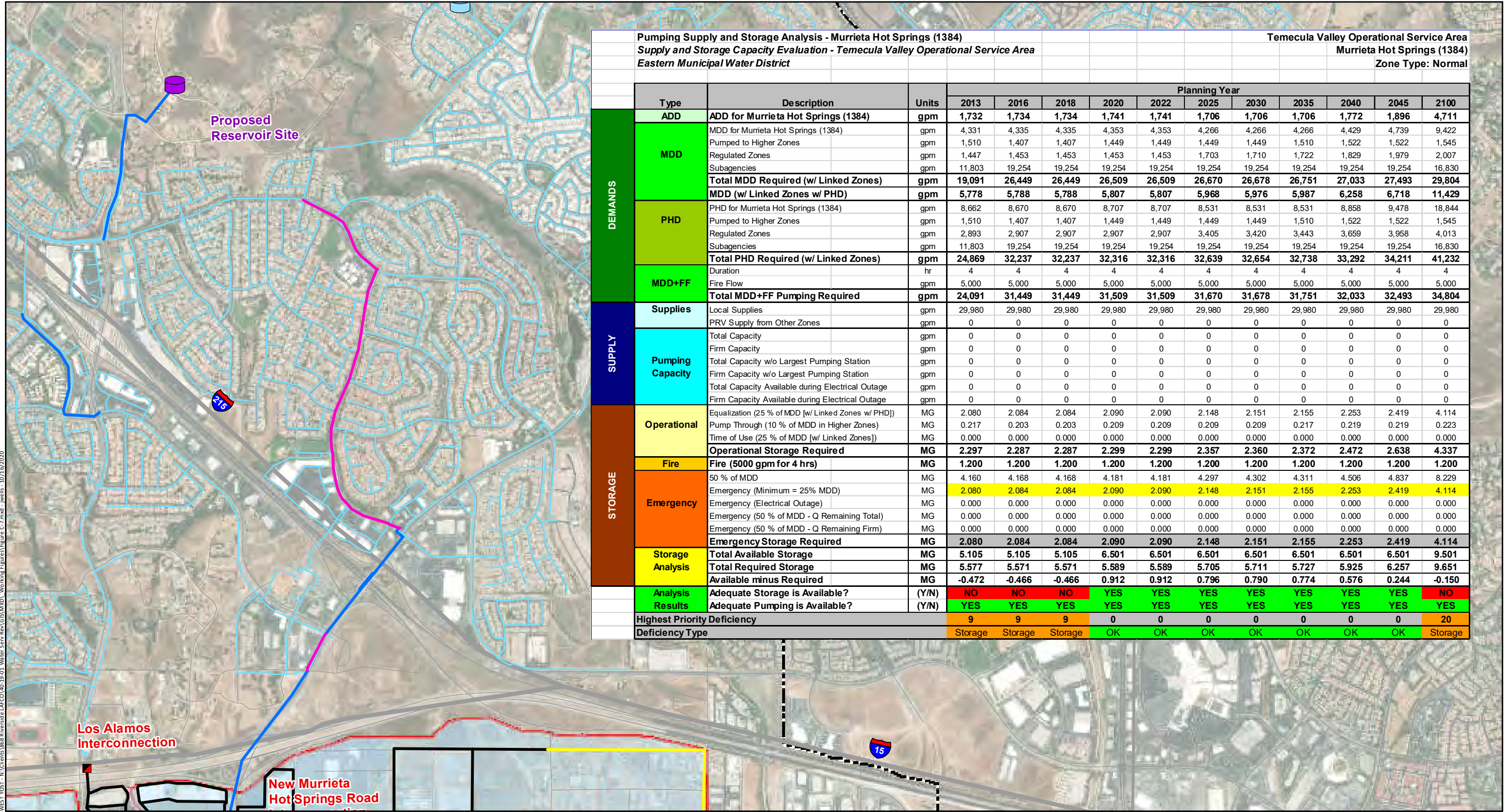


- Study Areas
- County Boundary
- Interstate Highway
- State Highway
- RCWD Service Area
- RCWD SOI



**Figure C-6**  
**RCWD**  
**Service Area & SOI**  
  
**Riverside LAFCO**  
Focused Water MSR  
Murrieta Area





- Study Area

County Boundary

City Boundary

Interstate Highway

State Highway

Local Roads

Booster Pump Station

Existing Reservoir Site

Proposed Reservoir Site

Production Well

Interconnection Point

EMWD Existing Pipeline

EMWD CIP (Murrieta)

EMWD CIP (Water Facilities Master Plan)

Existing Water Main

Expansion Pipe - North of Murrieta Creek

Expansion Pipe - South of Murrieta Creek

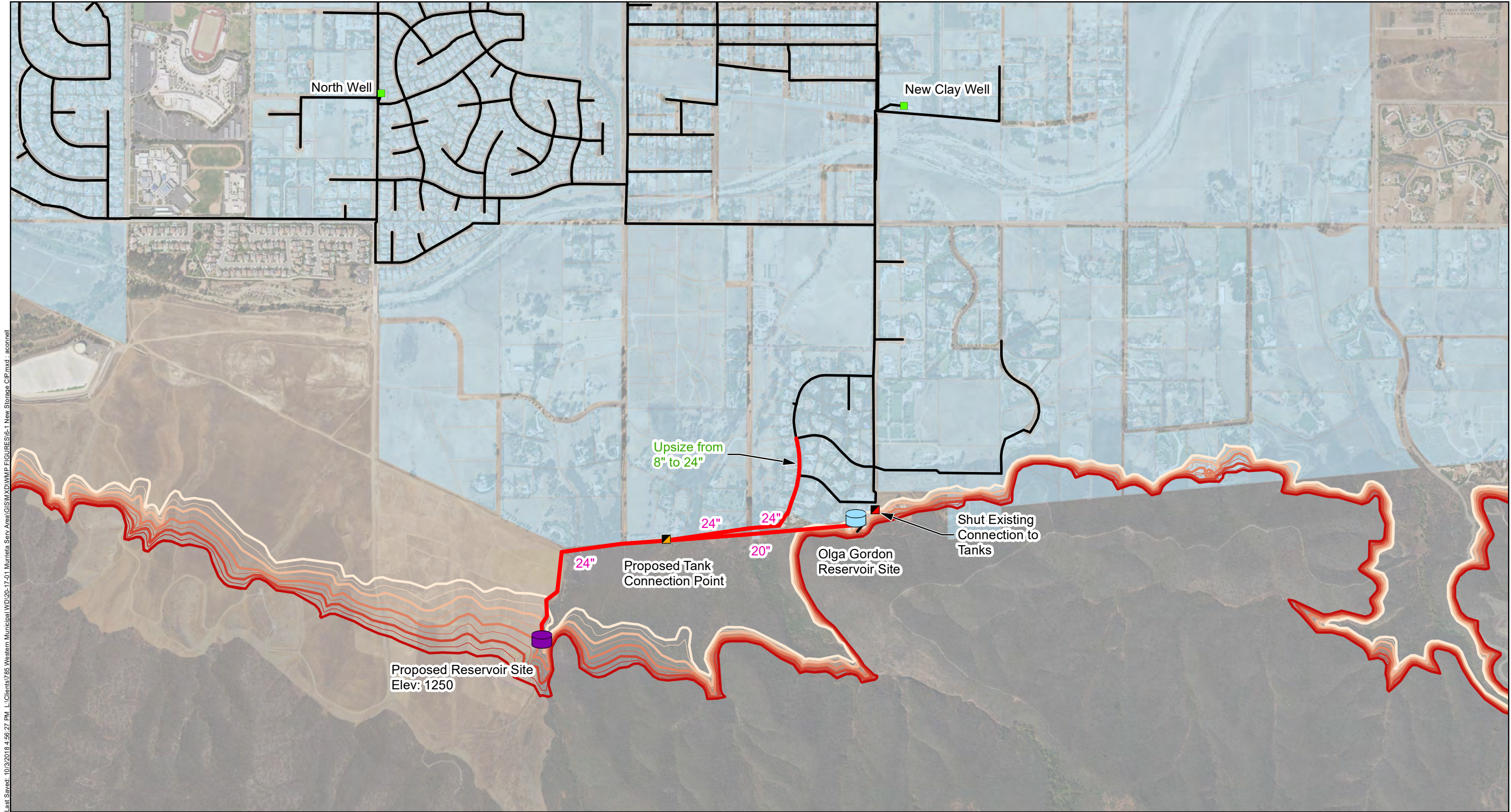
Required CIP
- Pressure Zone

1280

1430
- Notes:








  1. Production Wells are labeled in green text.
  2. Booster Pump Stations are labeled in gray text.
  3. Reservoirs are labeled in blue text.
  4. Interconnections are labeled in red text.
  5. Proposed facilities are labeled in purple text.
- 
- 
- Figure C-7  
EMWD Ownership  
Scenario Hydraulic Details  
Riverside LAFCO  
Focused Water Municipal  
Service Review Murrieta Area














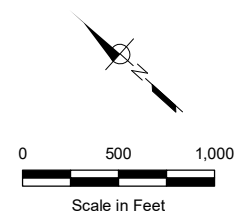


Last Saved: 10/3/2018 4:56:27 PM L:\Clients\765 Western Municipal\WD20-17-01 Murrieta Serv Area\GIS\XDWMP FIGURES\6-1 New Storage CIP.mxd - aconelli

**Symbology**

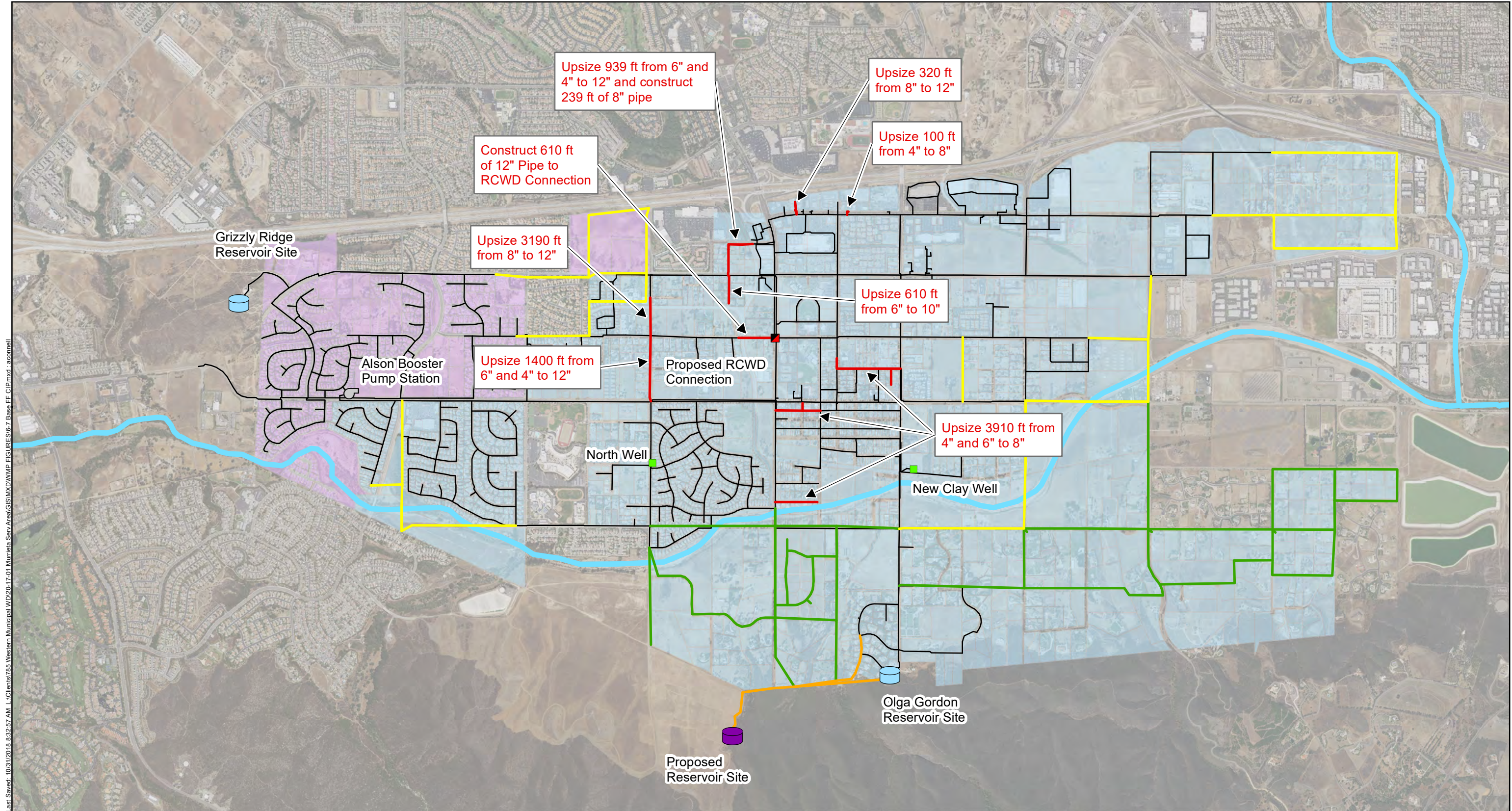
- |                                                                                                                  |                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
|  Proposed Reservoir Site      |  Required Pipe to Proposed Reservoir |
|  Existing Reservoir Site      |  Existing Pipe                       |
|  Production Well              |                                                                                                                         |
|  Existing Connection to Tanks |                                                                                                                         |
|  Proposed Connection to Tanks |                                                                                                                         |

Pressure Zone	Elevation
	1280
	1430
	1240
	1245
	1250
	1255
	1260
	1265
	1270
	1275
	1280



**Figure C-8**  
**Detailed WMWD**  
**Proposed Storage**  
 Riverside LAFCO  
 Focused Water Mun.  
 Service Review MSA

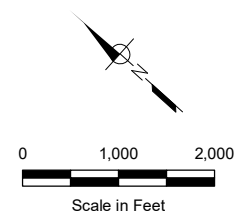




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**Symbology**

- |                         |                                          |                      |
|-------------------------|------------------------------------------|----------------------|
| Proposed Reservoir Site | Existing Water Main                      | Murrieta Creek       |
| Existing Reservoir Site | Pipe to Proposed Storage                 | <b>Pressure Zone</b> |
| Interconnection         | Expansion Pipe - North of Murrieta Creek | 1280                 |
| Production Well         | Expansion Pipe - South of Murrieta Creek | 1430                 |
| Booster Pump Station    | Fire Flow CIP Pipe                       |                      |

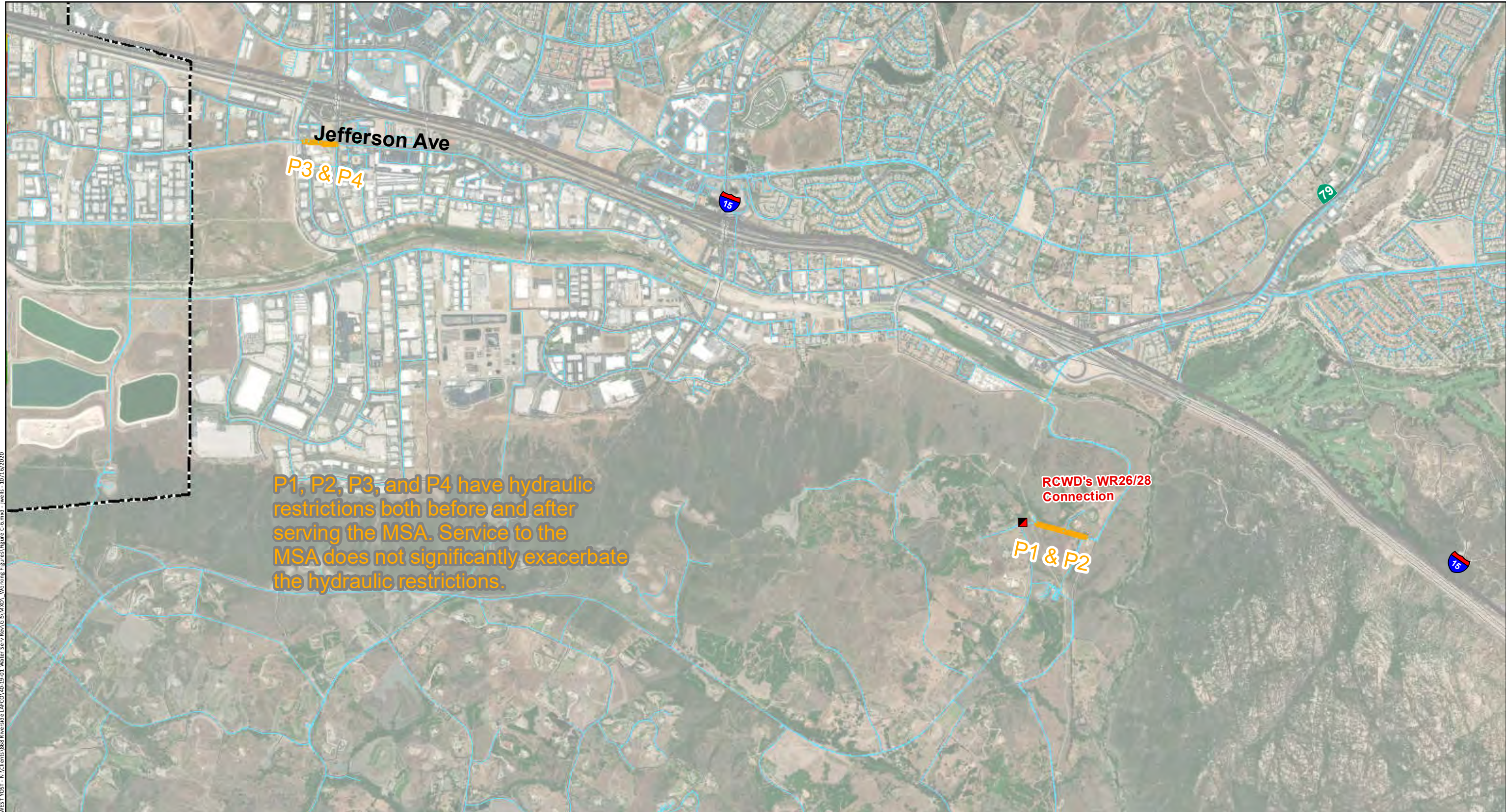


**Figure C-9**

**Fire Flow Upgrades**

**Riverside LAFCO**  
Focused Water Municipal  
Service Review MSA



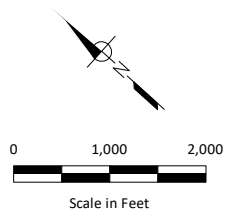


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- Study Area
- County Boundary
- City Boundary
- Interstate Highway
- State Highway
- Local Roads
- RCWD Pipeline
- RCWD Pipeline with Capacity Constraint (With and Without Murrieta Service)

Pressure Zone  
1280



**Fig. C-10**  
**RCWD Ownership**  
**Hydraulic Restriction Details**  
  
**Riverside LAFCO**  
Focused Water Municipal  
Service Review Murrieta Area



#### Concord

1001 Galaxy Way, Suite 310  
Concord CA 95420  
925-949-5800

#### Davis

2020 Research Park Drive, Suite 100  
Davis CA 95618  
530-756-5905

#### Eugene

1650 W 11th Ave. Suite 1-A  
Eugene OR 97402  
541-431-1280

#### Irvine

6 Venture, Suite 290  
Irvine CA 92618  
949-517-9060

#### Lake Oswego

5 Centerpointe Drive, Suite 130  
Lake Oswego OR 97035  
503-451-4500

#### Oceanside

804 Pier View Way Suite 100  
Oceanside CA 92054  
760-795-0365

#### Phoenix

4505 E Chandler Boulevard, Suite 230  
Phoenix AZ 85048  
602-337-6110

#### Pleasanton

6800 Koll Center Parkway, Suite 150  
Pleasanton CA 94566  
925-426-2580

#### Sacramento

8950 Cal Center Drive, Bldg. 1, Suite 363  
Sacramento CA 95826  
916-306-2250

#### San Diego

11939 Rancho Bernardo Road Suite 100  
San Diego CA 92128  
858-505-0075

#### Santa Rosa

2235 Mercury Way, Suite 105  
Santa Rosa CA 95407  
707-543-8506

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**Final FMSR Report Errata**  
**September 10, 2021**

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## **Murrieta Focused Municipal Service Review**

**LAFCO- 2019-11-3**

# **Final Errata Document**

**September 10, 2021**

The following pages contain corrections related to the comments received through July 12, 2021 for the Murrieta Focused Municipal Service Review (FMSR) report dated December 10, 2020.

The Errata Document identifies the page number in the report for each line item that has been noted for correction or revision.

**There were no additional Errata items identified for inclusion in the Errata Document after July 12, 2021.**

# Murrieta FMSR Report Errata Document

## Murrieta FMSR Report Revisions and Clarifications

### Map Updates/Revisions

On Page 14 of the report- Replace Figure 1-1 with the attached revised Figure 1-1.  
 On Page 19 of the report- Replace Figure 2-1 with the attached revised Figure 2-1.  
 On Page 21 of the report- Replace Figure 2-2 with the attached revised Figure 2-2.  
 On Page 23 of the report- Refer to the attached MWD unpaid parcels map marked as Figure 2-3-A for clarification of Figure 2-3.  
 In Appendix "C" of the report- Replace Figure C-4 with the attached revised Figure C-4.  
 In Appendix "C" of the report- Replace Figure C-5 with the attached revised Figure C-5.  
 In Appendix "C" of the report- "Replace Figure C-6 with the attached revised Figure C-6".

### Technical Revisions/Clarifications

On Page 2 of the report, 2nd paragraph, 1st bullet point, end of last sentence- Insert the following- "All parcels within the Study Area are included in the analysis whether receiving service or not."

On Page 8 of the report, under "Findings and Conclusions", line 6, change "Table ES1-1" to read "Table ES-1".

On Page 13 of the report, Section 1.0, 3rd paragraph, 1st bullet point, end of last sentence- Insert the following- "All parcels within the Study Area are included in the analysis whether receiving service or not."

On Page 16 of the report, Section 1.2.2, 3rd paragraph 6th line- Revise the word "as" to "has".

On Page 17 of the report, 1st paragraph, 6th line- Revise "the RCWD as" to "EMWD has".

On Page 22 of the report, 6th paragraph- Replace "\$12 million" with "\$9.28 million, not including any one-time annexation processing fees separately charged by MWD".

On Page 22 of the report- "Replace Section 2.2.2 with the attached revised Section 2.2.2".

On Page 23 of the report, Figure 2-3- Revise the "no data" designation to "not paid". Additionally, A revised unpaid parcel map has been provided by MWD and has been included as Figure 2-3-A

On page 59 of the report- Insert attached Table 6.12-A to reflect RCWD fire flow investment requirements.

On Page 64 of the report, Table 7-1, in the "Ad Valorem Tax Applied?" and "RCWD" Column, add the following after the word "surcharge": " Ad Valorem tax to be used to fund capital improvements (including debt service)"

On Page 67 of the report, Section 7.2.7, 2nd paragraph, lines 2, 3 and 4- Revise "River" to "Creek".

On Page 71 of the report, Table 7-3, "Key Parameters" section- Insert a new row-"Rate Surcharge in Lieu of Ad Valorem Tax". Insert "X" in the column under "Rate Payers".

On Page 84 of the report, Section 8.2.5- Revise Figures 8-2 and 8-3 to Figures 8-4 and 8-5 respectively.

On Page 87 of the report, Table 8-9, Table note (b)- Revise the second line to read "RCWD's Energy Charge is not applicable to the Study Area"

On Page 93 of the report, Table 8-15-

- A. The first row heading should read "Buy-In to RCWD for Existing Customers (1)"
- B. The second row heading should read "Expansion CIP North of Murrieta Creek (2) (3)"
- C. The third row heading should read "Expansion CIP South of Murrieta Creek (2) (3)"
- D. The fourth row heading should read "RCWD Hydraulic Improvements (4)"

On Page 93 of the report, Section 8.3.3.3, lines 3- Revise "\$540,00" to "\$540,000".

On Page 100 of the report, 3 bullet points below the 1st paragraph- Revise "ET" to "ETAF" in each bullet point".

On Page 100 of the report, Table 8-17- The table entry in the row "Tier 5" and the column "EMWD Residential" should be blank.

On Page 102 of the report, Table 8-19, Table Footnote 2- Revise to read "(2) Increase in rate revenues at EMWD's FY 19/20 Rates are from system growth".

On Page 103 of the report- Insert attached Table 8-11-A.

On Page 106, in the second sentence of the first paragraph- Replace "Table 8-22" with "Table 8-23".

On Page 116 of the report, Section 10.3, 1st bullet point, 5th line- Revise "FMWR" to "FMSR".

On Page 116, Section 10.3, 3rd bullet, Line 5- Insert after the sentence ending in "applied", the following sentence- "Under the Ad Valorem application scenario, RCWD would be the lowest cost for commercial customers as reflected in Table 8-17."

In Appendix B of the report on Page 23, Table B-4c- Revise Line 199 to read "RCWD's Energy Charge is not applicable to the Study Area"

In Appendix B of the report on Page 28, Table B-4g- Replace line 418 with: "\$ Rate Surcharge (51.26% of FY 19/20 Monthly Bill, the amount collected by the surcharge increased for inflation in Subsequent Years)"

In Appendix B of the report on Page 40, Table B-5f:

- Lines 522 and 523- Remove reference to "Note 3" in the Projected Schedule column.
- Line 528- Remove reference to "Note 5" in the Projected Schedule column.
- Lines 540 and 541- Delete Table Notes 5 and 6 at the beginning of each entry.

### 2.2.2 MWD Annexation

Imported water supply to the Study Area is purchased wholesale from Metropolitan Water District (MWD) and delivered via EMWD, at the Los Alamos Interconnection Point. Areas annexing into MWD are annexed on behalf of one of MWD's 26 member agencies and must pay a MWD annexation fee of \$5,000 and a MWD Per-Acre Annexation Charge. The 2020 MWD Per-Acre Annexation Charge is \$6,151 per acre.

The annexation policy of MWD requires an annexation processing fee and an annexation per-acre charge to be paid in full in advance for the entire area being annexed. However, **MWD** may waive with terms and conditions these fees and charges to prevent or to close a service "window" in an existing member public agency service area. The Murrieta Study Area largely consists of such a window area within two of MWD's member agencies, WMWD and EMWD.

In December 1999, an annexation agreement between MWD, EMWD, WMWD, and the Murrieta County Water District was executed. This agreement specified that the Murrieta window area consisting of the entirety of the Murrieta County Water District, approximately 5.8 square miles, would be annexed into the MWD service area by charging a one-time annexation processing fee and allowing, over the twenty five year term of the agreement, for unconnected parcels to pay the MWD Per-Acre Annexation Charge in order to become eligible to be physically connected to receive imported water.

Approximately 2.9 square miles of the Study Area have not yet paid the **MWD** Per-Acre Annexation Charge. In Figure 2-3, obtained from **WMWD**, portions of the Study Area that have not paid the MWD Annexation Per-Acre Charge are shown in yellow.

Section 11 of the 1999 Agreement states that the agreement shall be binding to successors, so for the purposes of this analysis, it is assumed that the 1999 Agreement would be assignable to either RCWD or EMWD. The need for some future development to pay the MWD Annexation Per-Acre Charges is the same under all Ownership Scenarios described in this report, and as a result, is not included in the quantitative financial analysis.

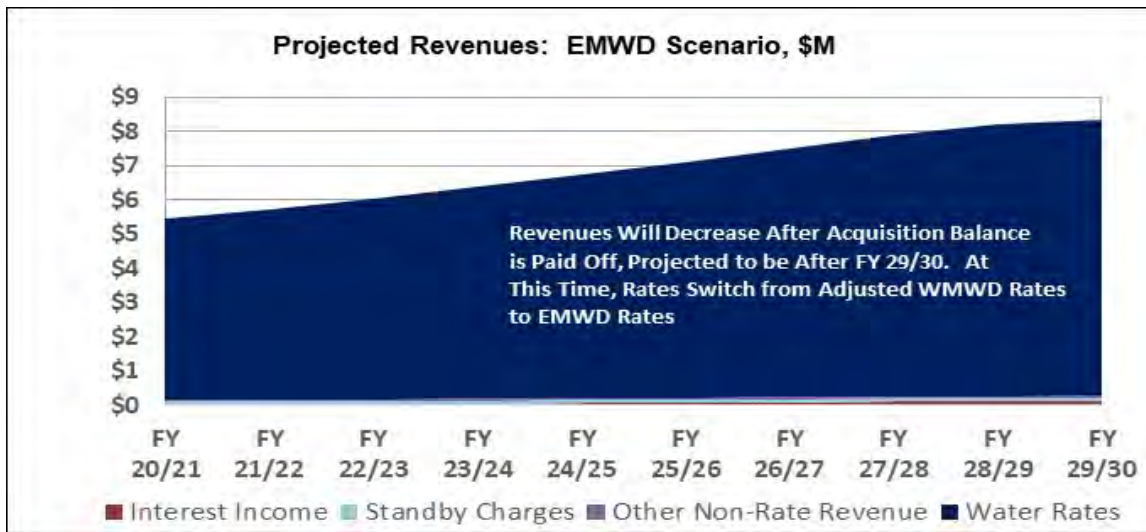
The 1999 agreement terminates in December 2024. The current outstanding Annexation Per-Acre Charge balance is approximately \$12M. Under the agreement, if the balance has not been paid or other provisions for payment have not been made, for example, extension of the agreement, then MWD may pursue the detachment of unpaid parcels through LAFCO that haven't paid the Annexation Charge, regardless of which agency owned the water system.

The current number of service connections in the Study Area, summarized by meter size, can be seen in Table 2-1. The majority of the meters currently in the Study Area are ¾-inch meters that serve single family residential connections.

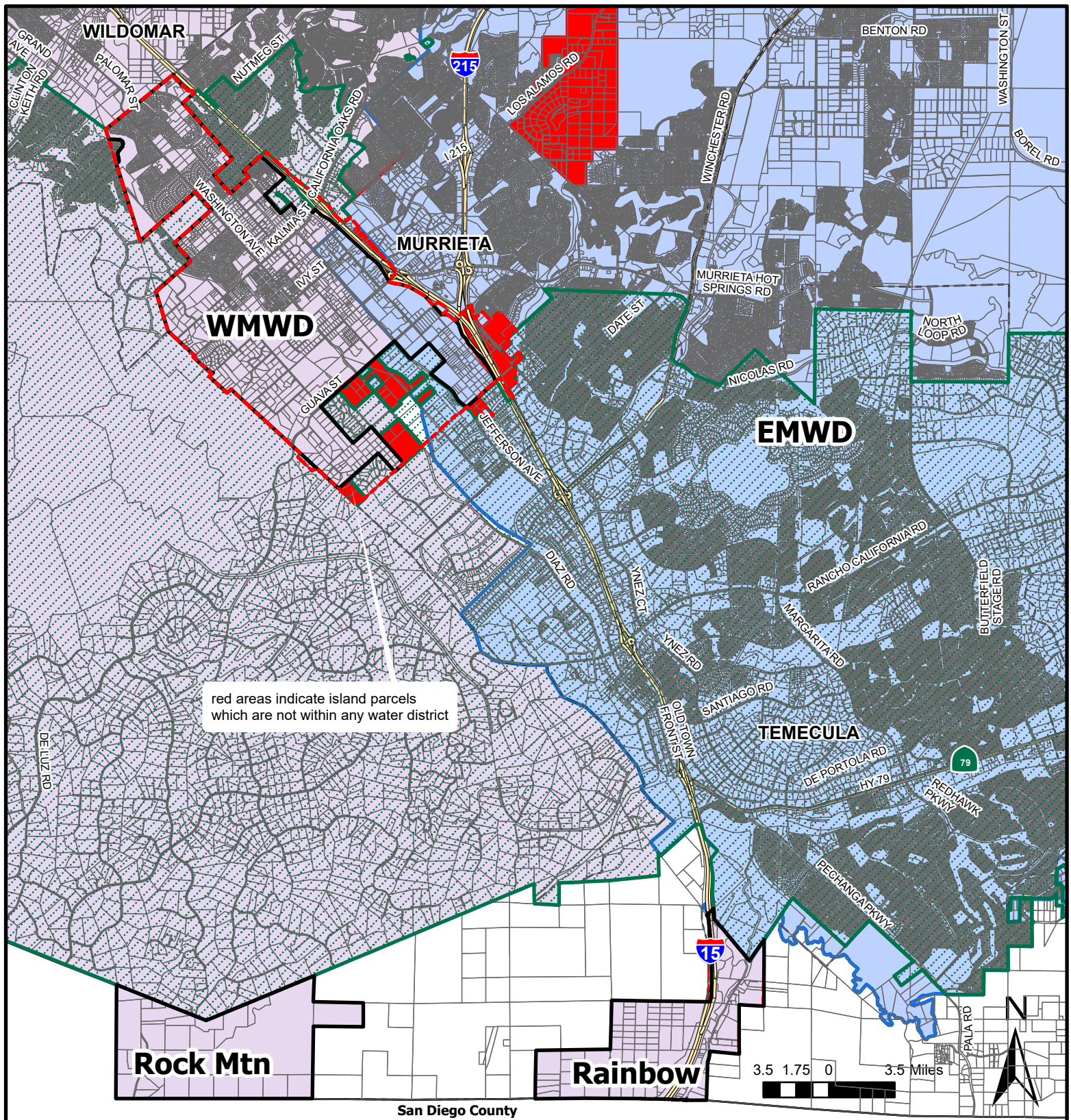
A large number of parcels in the Study Area are currently served by private wells. Therefore, land within the study area is classified as Developed-Served, if it currently has imported water service from the distribution system, Developed-Unserved, if it currently developed but provided service by private well, or Vacant, if the land is undeveloped and available for development in the future.

<b>Table 6.12-A RCWD Fire Flow Improvements CIP (Existing)</b>		
<b>Diameter</b>	<b>Length</b>	<b>Cost</b>
<b>Proposed/Upsize Pipe</b>		
8	5,989	\$ 1,119,380
10	849	\$ 190,937
12	6,535	\$ 1,616,579
Construction Subtotal		\$ 2,927,000
<b>Contingency and Soft Cost Subtotal</b>		<b>\$ 2,020,000</b>
<b>Total</b>		<b>\$ 4,947,000</b>

**Figure 8-11-A**







- Murrieta Study Area
- Rock Mtn & Rainbow Study Areas
- Islands - Not within any water district
- Cities

- Eastern Municipal Water District Wholesale
- Western Municipal Water District Wholesale
- Western Municipal Water District Retail
- Rancho California Water District Service Boundary

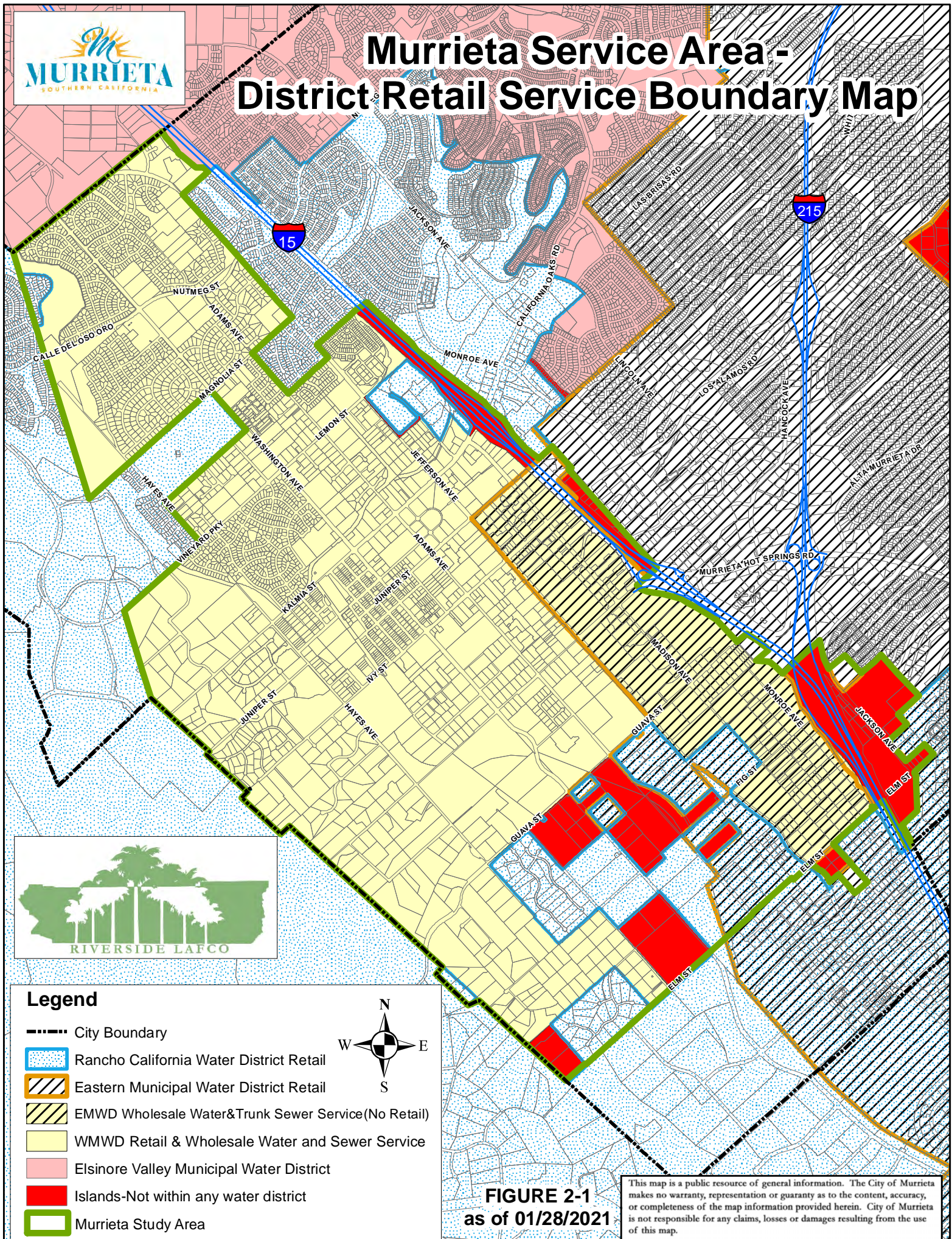


**Figure 1-1 as of 6/24/21**  
**Murrieta, Rainbow &**  
**Rock Mountain Study Areas**  
**Focused Water MSR**  
**Murrieta Area**

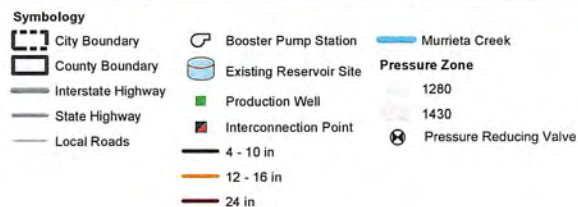
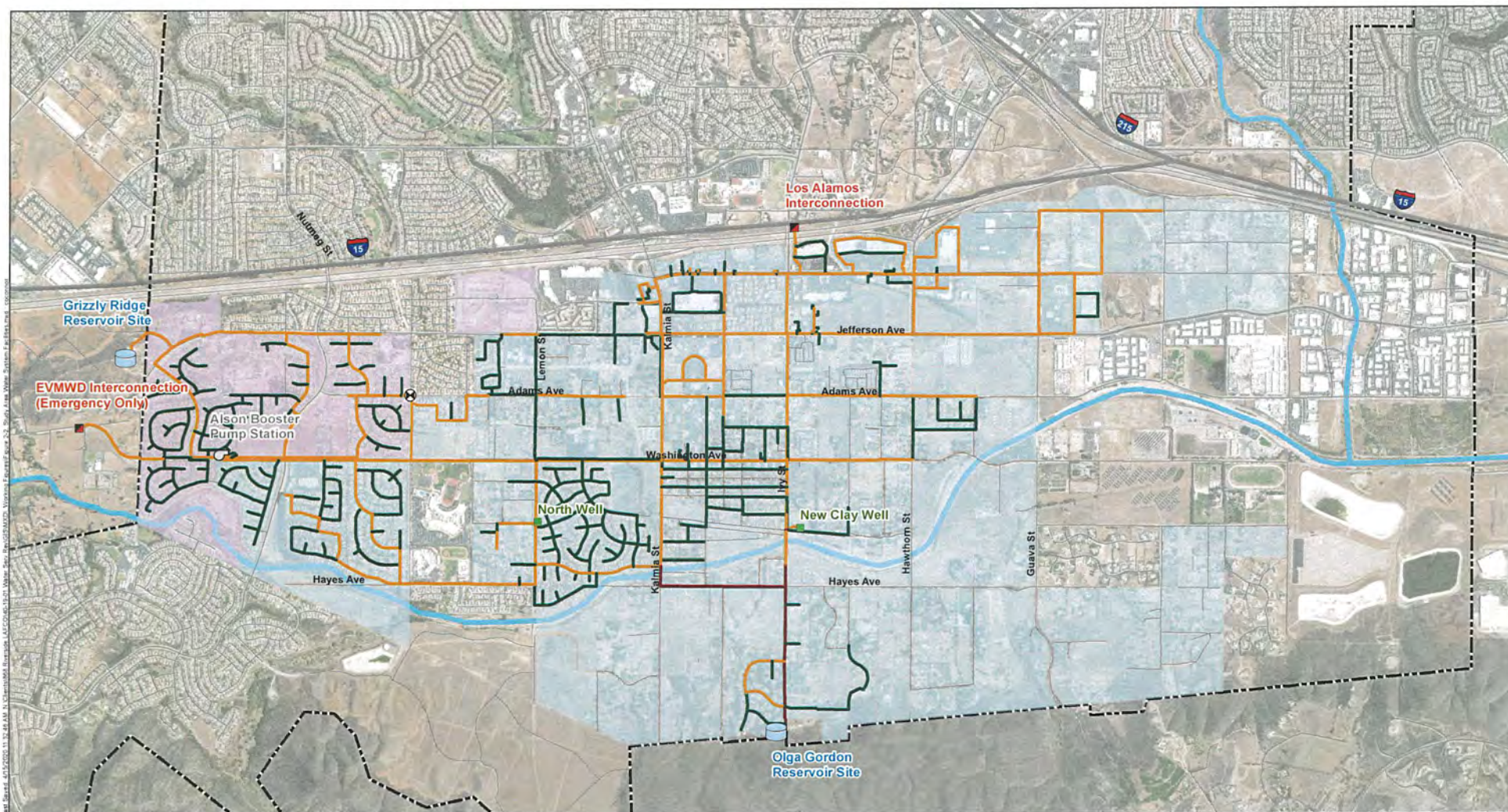




# Murrieta Service Area - District & Retail Service Boundary Map

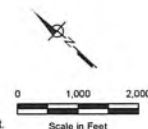






Notes:

1. Production Wells are labeled in green text.
2. Booster Pump Stations are labeled in gray text.
3. Reservoirs are labeled in blue text.
4. Interconnections are labeled in red text.



Dopudja & Wells  
CONSULTING



**Figure 2-2  
(Errata)**

**Study Area  
Water System Facilities**

Riverside LAFCO  
Focused Water Municipal  
Service Review Murrieta Area



# Attachment I

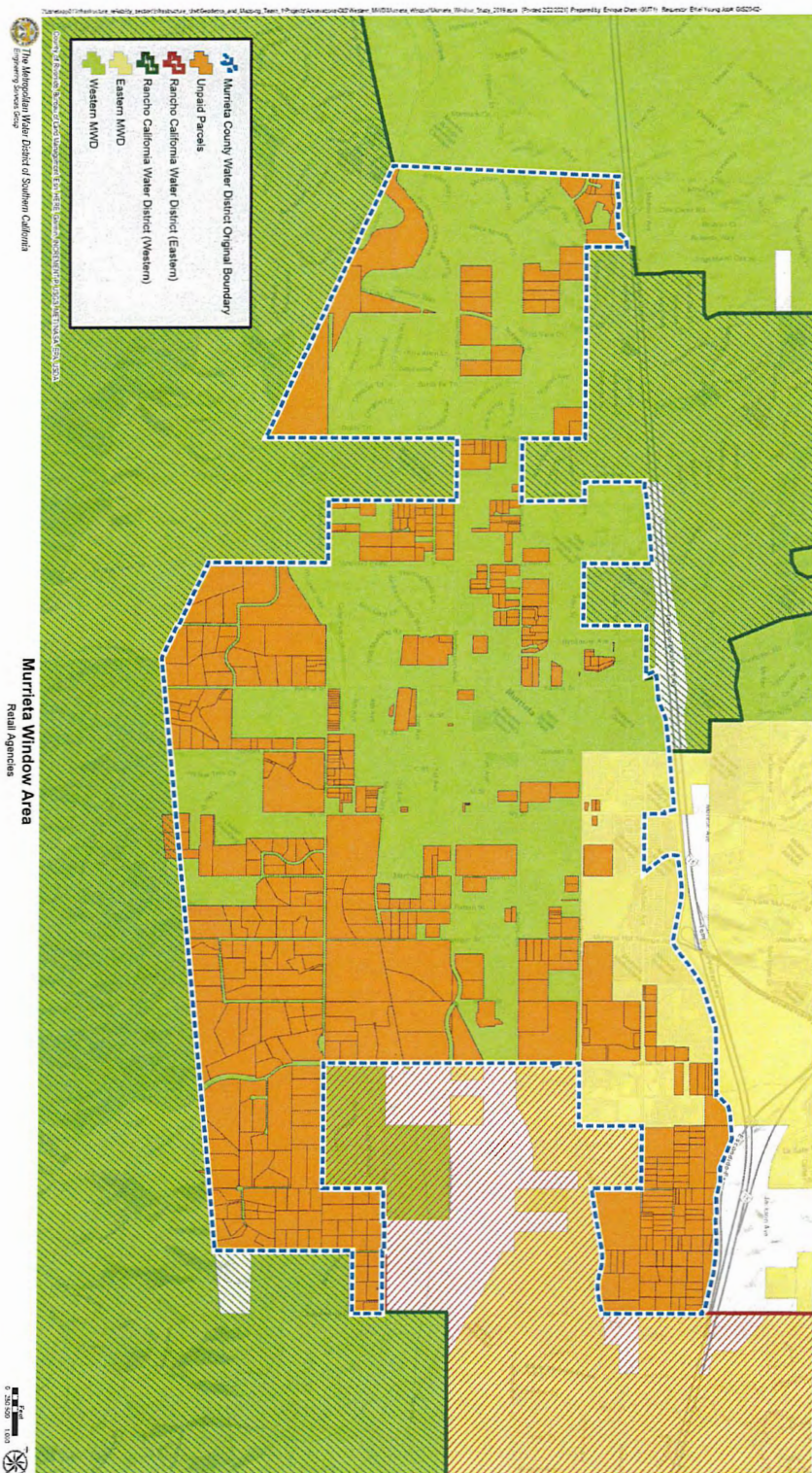
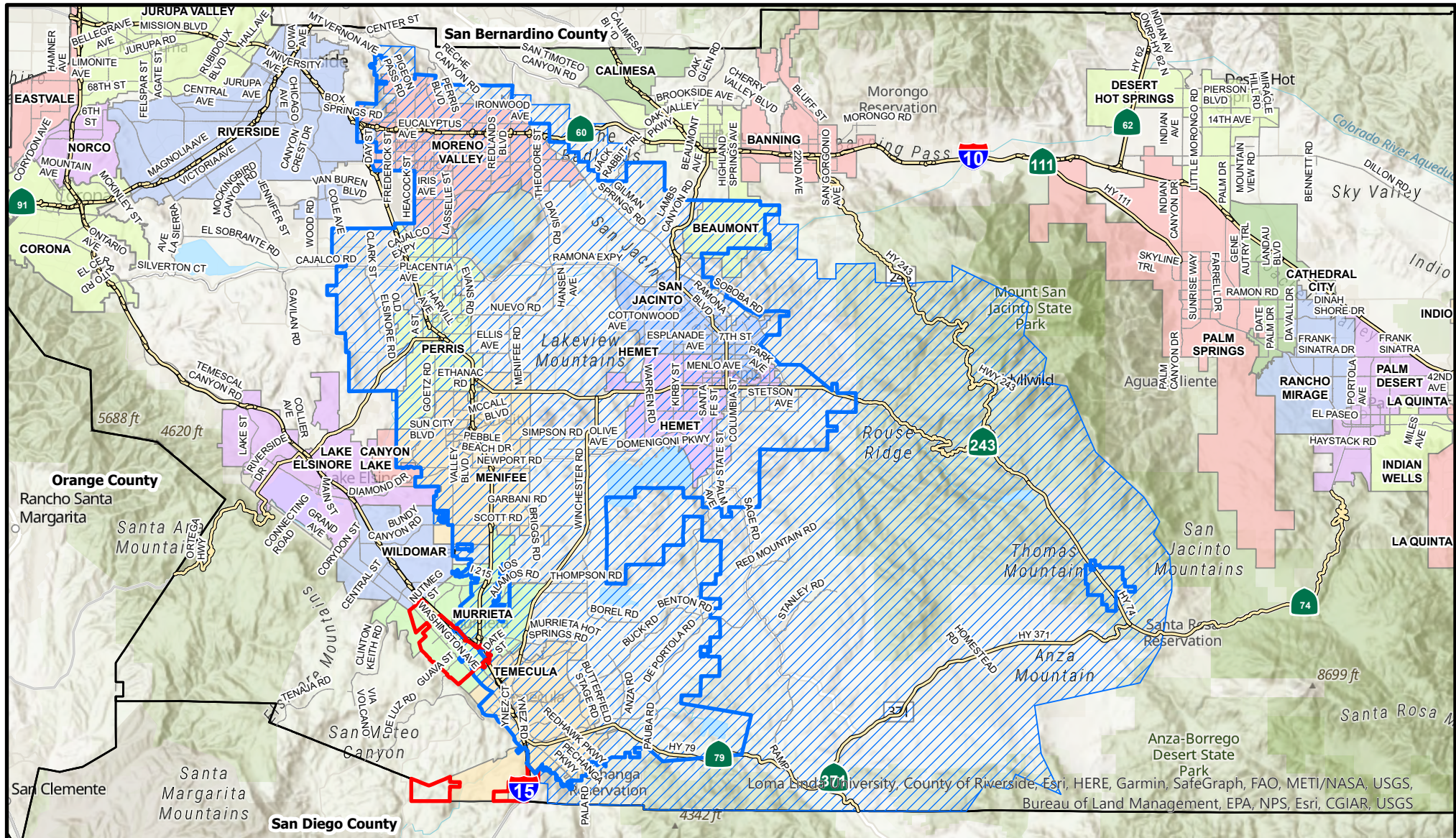


Figure 2-3-A  
Supplement to Figure 2-3



# Eastern Municipal Water District Service Area & Sphere of Influence



Data Sources: County of Riverside; Districts, LAFCO

3.5 1.75 0 3.5 Miles



**Figure C-4 as of 6/24/21**  
**EMWD**  
**Service Area & SOI**  
**Focused Water MSR**  
**Murrieta Area**

Water & Sewer  
provided by District

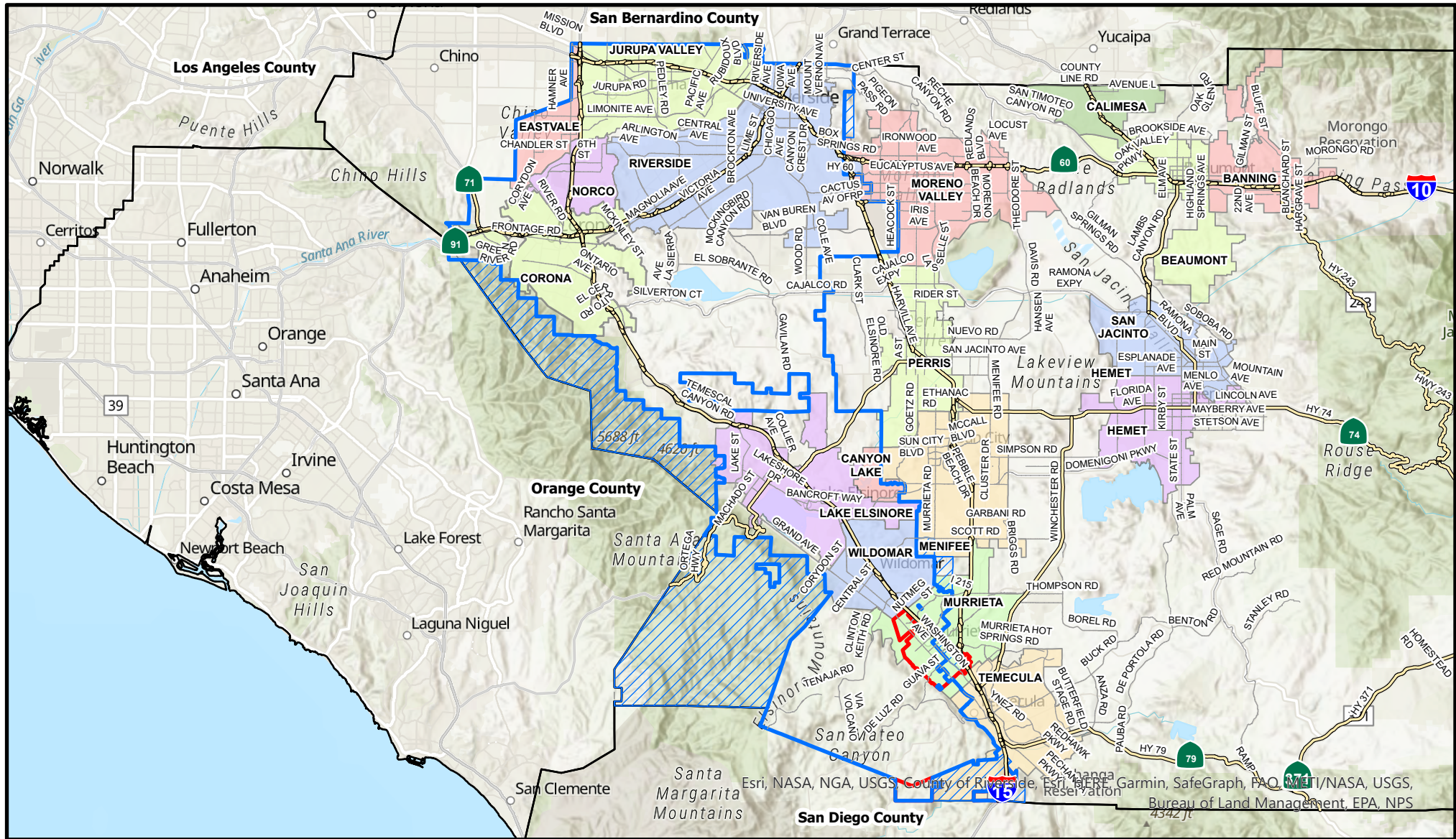


- Murrieta Study Area
- Rock Mtn & Rainbow Study Areas
- Eastern Municipal Water District (EMWD) Service Area
- EMWD Sphere of Influence as of 10-22-20

Author: Crystal M. Craig



# Western Municipal Water District Service Area & Sphere of Influence



Data Sources: County of Riverside; Districts, LAFCO

3.5 1.75 0 3.5 Miles



**Figure C-5 as of 6/24/21**  
**WMWD**  
**Service Area & SOI**  
**Focused Water MSR**  
**Murrieta Area**

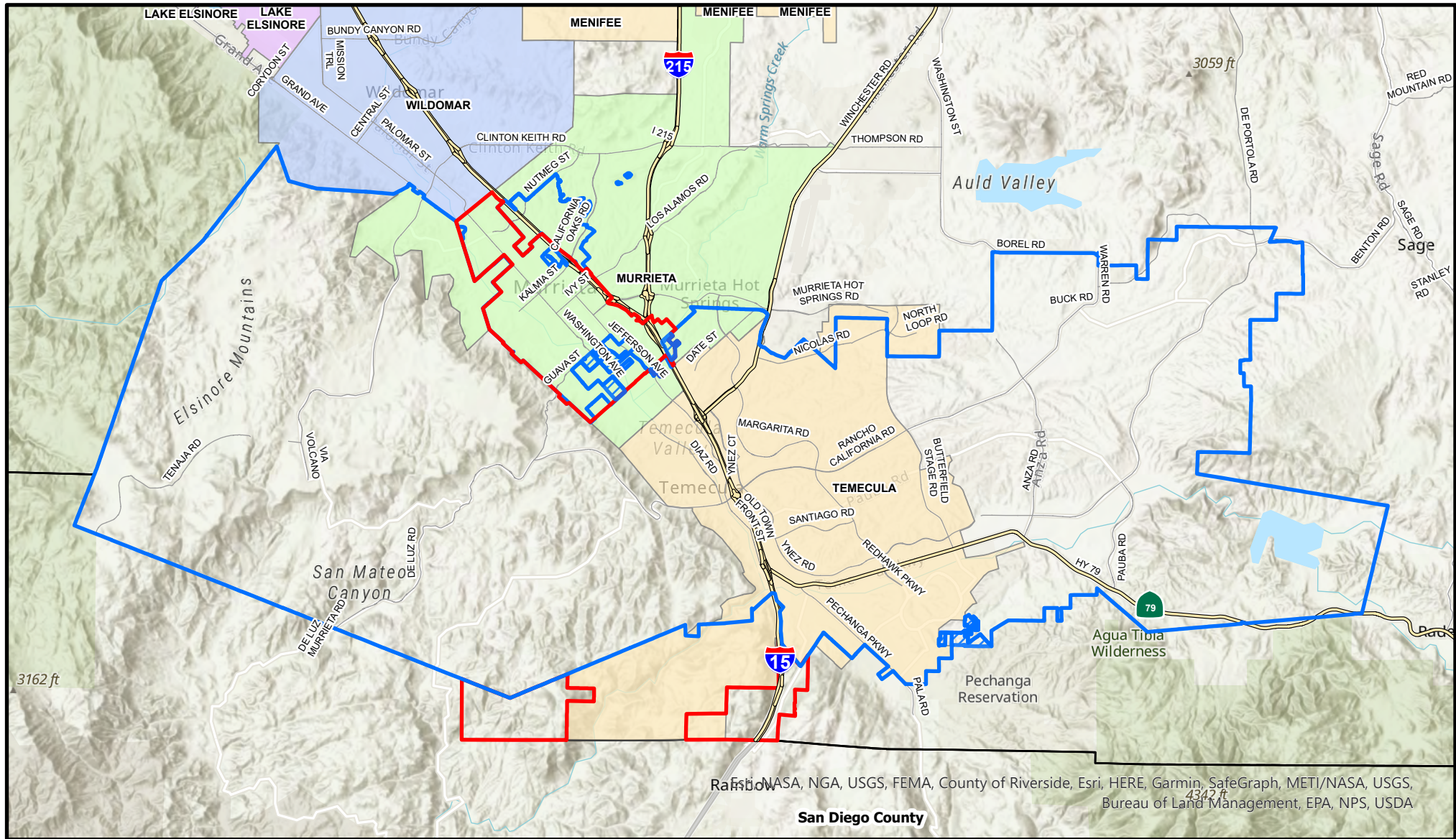
Water & Sewer  
provided by District

- Murrieta Study Area
- Rock Mtn & Rainbow Study Areas
- Western Municipal Water District (WMWD) Service Area
- WMWD Sphere of Influence

Author: Crystal M. Craig



# Rancho California Water District Service Area & Sphere of Influence



Data Sources: County of Riverside; Districts, LAFCO

3.5 1.75 0 3.5 Miles



**Figure C-6 as of 6/24/21**  
**RCWD**  
**Service Area & SOI**  
**Focused Water MSR**  
**Murrieta Area**

Water & Sewer  
 provided by District

- Murrieta Study Area
- Rock Mtn & Rainbow Study Areas
- Rancho California Water District (RCWD) Service Boundary
- RCWD Sphere of Influence

Author: Crystal M. Craig

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**Response to Comments**  
**July 12, 2021**

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## **Murrieta Focused Municipal Service Review**

**LAFCO- 2019-11-3**

# **Response to Comments**

**July 12, 2021**

**The following pages contain responses to all comments received through July 12, 2021 for the Murrieta Focused Municipal Service Review (FMSR) report dated December 10, 2020. Responses are for comments from members of the public, LAFCO, and affected public agencies that submitted comments.**

**A separate “Errata Document” will be published notating any corrections or clarification to the FMSR report deemed appropriate.**

**Additional comments to the FMSR report, the Response to Comments and the Errata Document (when published) will continue to be accepted for the public record and addressed.**



## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #1- Recv'd- 01/19/2021- Kathryn Elliot (email)

Pages 2 and 13 of the study state that the Study Area is "the portion of the City of Murrieta currently receiving water service from WMWD." That implies that undeveloped properties and those served by wells aren't actually in the Study Area.
Maps, esp Figure 2-1, show that the Study Area includes areas served by WMWD, EMWD, RCWD, and unserved areas (I assume that is what is shown in white, but please confirm)
Please clarify, in text, the extent of the study area so there is no confusion for residents.
Figure 3-1- At least two light blue parcels have already been developed and are receiving service - Santa Rosa Highlands on Jefferson and the Solera condos on Washington. Has the City had the opportunity to confirm that the maps are correct?
Figure 3-1- Why do some portions have no color? The satellite view shows that part of the uncolored area is already developed and part is not. How is/will water service to this area be provided? Is any water demand for this portion of the study area included in the demand analyses?

### Response to Comment

All parcels within the boundaries as depicted on the study area map (Figure 1-1) are included in the analysis. The report on pages 2 and 13 will be clarified in the Errata Document.
Figure 2-1 has been revised and is posted on the LAFCO website for review. The revised map will be included in the Errata Document.
See previous response to comments regarding clarification of the the Study Area.
The City of Murrieta has received the report and all maps and has not provided comments. Note that the analysis includes all relevant data concerning the status of each parcel based on County Assessor data as noted for the base year. Any development that has occurred since that data date has been included in the growth projections utilized in the analysis.
Several large parcels in the study area have small portions that have been developed while the majority of the parcel is undeveloped. It was a judgement call as to how to treat these parcels. In general, because the existing demand is small compared to future potential, demand was included in future projections, but not existing.

### Comment Submittal #2- Recv'd- 01/21-2021- MB Chapman (email)

Based on the report Rancho has the highest total cost of water for single family residents. Its cost is higher because Rancho will either assess an ad valorem tax on our property tax bill or add a water rate surcharge (equal to the ad valorem tax) to our monthly bill. The report says the decision to charge the ad valorem or the water rate surcharge will not be made until Rancho assumes ownership of the area. Either of these two options will cost homeowners more money for the same water.
The report also says that Rancho has the lowest cost for commercial development because Rancho has pipelines in the vicinity of the vacant parcels in west Murrieta. The developers will pay lower connection fees with Rancho. If Rancho becomes our water provider, and we are charged the ad valorem or a water rate surcharge, we will be subsidizing the developers.
Our city council needs to work with the water districts to find an equitable solution that does not financially damage homeowners while supporting growth in the west Murrieta area.

### Response to Comment

Comment Noted. The decision to implement the Ad Valorem tax or rate surcharge would be a policy decision for RCWD.
Comment Noted. The decision to implement the Ad Valorem tax or rate surcharge and the applicability to new development would be a policy decision for RCWD
Comment Noted.

### Comment Submittal #3- Recv'd- 01/22/2-021- Christine Rios (email)

The report says Rancho has the highest cost. Why should residents pay more for the same service we currently get from Western?
Does the entire study area have to change water systems or can the vacant parcels in the south be transferred to Rancho and the homes in the north be transferred to Eastern or stay with Western?
Are you going to send out this information to ALL the residents in Murrieta affected by this possible maneuver?

### Response to Comment

The purpose of the analysis in part is to provide the information for each ratepayer to make their own assessment on how it will directly impact their own situation.
The analysis assumes all parcels within the study area would be subject to the same service provider. However, if any change were initiated by any of the service providers, it would be up to those service providers to make a policy decision regarding actual boundaries which may or may not be different than the study area. Any boundary change would have to go through the LAFCO application and adjudication process.
The report is located on the Riverside LAFCO website for viewing by the public. Additionally, each agency participating has been requested to place the report on their respective websites. A mailed notice to all property owners within the study area will be sent out several weeks prior to the public presentation once it is scheduled.

## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #4- Recv'd- 01/23/2021- H Daniels (email)

Why does RCWD have a 30" water line in the middle of Western's service area?
With the report complete in April, 2020 why was the release delayed until December, 2020? I thought this was all resolved and we would stay with WMWD.
I am confused... What is the difference to residents if RCWD were to assume this area as financially BLENDED and not financially DISTINCT? How is that decided? Who decides if they do the ad valorum or surcharge? When? Why don't they have a plan?
Is the City still pushing RCWD and they assume they will get us so they don't have to develop a plan since the back door negotiations have already happened?
EMWD has a plan and it looks good to me. If we have to change lets go with EMWD.

### Comment Submittal #5- Recv'd- 01/28/2021- Kathryn Elliot (email)

How were the different assumptions for daily indoor water usage (the amount that gets the least expensive water rates) taken into consideration? The text and appendix notes only refer to WMWD's 60 gallons/person/day but the other water district websites show only 55 gallons/person/day for RCWD and EMWD.
It appears that RCWD was assumed to use the 60 gallon budget figure that WMWD uses, a change which is significant for large families. Did RCWD provide information on how long this change (an 8% increase in the lower priced Tier 1 allotment) would remain in effect? Would it only be if the Study Area remains a distinct district, since the Santa Rosa district has the lower budget? What other policies would change if the Study Area were no longer a distinct district within RCWD? Would the higher "Pre & Post 2003 Annex" rates be applied to us?
Why was no increase in rates assumed for 3 years (FY 27/28 – FY 29/30) for EMWD and both RCWD scenarios (but only for the last 2 years for WMWD)? Why weren't consistent increases assumed for all 10 years? I see that EMWD does assume an increase in the fixed charges, (Table B-5, lines 227-235) and the commodity charges, (Table B-5, lines 268-273) for current EMWD customers but not for the Study Area.
Although most of the study area isn't subject to the Zone 8 pumping charge under WMWD, would customers subject to that charge also be subject to RCWD's energy charge? (\$0.06 in addition to the \$0.234 WMWD charges per HCF)
Based on what I read in Appendix B, it appears there will be a dramatic (more than 30%) decrease in water bill costs with EMWD once the Acquisition Balance is paid off in 12 years. Is this correct?

### Comment Submittal #6- Recv'd- 01/29/2021- Denae Rios (email)

The study uses \$80,000 land value for a single- family residence in the study area and \$200,000 for commercial property. How were these figures determined? Please include your assumptions and the source of your information.
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### Response to Comment

The Murrieta area has a complicated history of water service. RCWD as it exists today was formed from two agencies, one north and one south of the historical Murrieta County Water District. These two agencies were connected along the most direct route through the Murrieta County Water District. When the Murrieta County Water District was integrated into the Western Service area, the result was RCWD transmission lines in the Western Service Area.
The April 30, 2020 report was a first draft for internal review by LAFCO and the agencies involved. Additional analysis was requested by all three water districts, and other corrections/modifications to the draft report were made during the next several months based on agency and LAFCO review prior to the release of the December 10, 2020 report to the public. No decision has been made on any change in service provider, and any change would have to be initiated by one of the public agencies. LAFCO has no authority to initiate a boundary change of this nature.
Maintaining the area distinct, or blending it with the Santa Rosa Division would be a policy decision for RCWD. RCWD has indicated that if they were to acquire the area to serve it, they would start as a distinct area, then perform a study to determine the economic feasibility of blending with the Santa Rosa Division. See P. 9, Table ES-1, Note (b), and P. 65 in the report. Application of the Ad Valorem tax or surcharge would also be a policy decision for RCWD. The "surcharge" scenario was developed to reflect an alternative to the Ad Valorem tax. See P. 9, Table ES-1, Note (c) in the report.
This is a question that should be directed to the City of Murrieta and RCWD. The consultant team and LAFCO are unaware of any "negotiations" taking place between the City and RCWD, thus there is nothing in the analysis that would reflect any unknown negotiations.
Comment Noted.

### Response to Comment

The WMWD gpcd was established using existing customer consumption data for current conditions. The 55 gpcd goal by other agencies is separate from actual current conditions. During the execution of the study, all of the agencies agreed to use consistent assumptions for water use so that differing assumptions would not impact results.
The analysis is based on comparison using current demands not a prediction of future behavior and consumption. RCWD did not provide information as to how long a 60 gallons per capita per day (gpcd) budget for indoor tier water use would remain in effect. RCWD indicated the study area would remain financially distinct. RCWD provided no information on any alternative rate structure based on the Santa Rosa district, and this FMSR did not evaluate that alternative policy decision which is the responsibility of RCWD. The "Pre and Post 2003 Annex" rates do not apply to the Murrieta study area.
The size and timing of rate increases were determined so that the utility would collect sufficient revenues to pay expenses and build reserves to meet reserve criteria. If there was no rate increase projected in any given year, it is because a rate increase wasn't necessary to pay expenses and meet reserve criteria.
Under the RCWD Ownership Alternative, customers would not be subject to RCWD's energy charge, per RCWD's policy instruction.
Yes that is correct. Under the EMWD Ownership Scenario, projected water bills for residential customers would decrease after the Acquisition Balance is paid off. The amount of the projected decrease in water bills would depend on the water use of the individual customer.

### Response to Comment

For this FMSR, land values were obtained from the City, for the 2,364 single-family residential water connections in the Study Area. An approximated average was used to develop an \$80,000 land value for use in the study. Land values only were used in the FMSR and building values were not used. These values are used only for the study. There was no available data to define the average land value for a commercial customer with a 2" water meter. The value of \$200,000 was proposed to the agencies and the City. After review of draft results of the FMSR with the agencies and the City, the conclusion reached by the Consultant Team was that this was a reasonable value for the purposes of this calculation.
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## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #7- Recv'd- 01/30/2021- Daphne Grigsby (email)

The following questions reference Table B-4g RCWD Scenario: Projected Total Water Cost Calculation which is a sample monthly water bill for a single-family residence. The exhibit lists the Tier 1 and Tier 2 rates as \$1.31and \$2.30 respectively for FY 20/21.
Several pages in the report reference using the Santa Rosa Division water billing rates for the study. Rancho's "Customer Guide and Rate Charges Effective July 1, 2020," shows both a "Standard" and "Pre & Post 2003 Annex" rate for Tiers 1 and 2 for Rancho's Santa Rosa Division. The "Pre & Post 2003 Annex" Tier 1 rate is double the "Standard" rate. The Tier 2 rate is also higher than the "Standard" rate.
The rates mentioned above and shown in Table B-4g for Tiers 1 and 2 appear to be the "Standard" rate. Table B-4g does not show the cost for "Pre & Post 2003 Annex" rates for Tiers 1 and 2.
What is meant by the term "Pre & Post 2003 Annex" rates?
What is the purpose of the "Pre & Post 2003 Annex" billing rates?
What properties do these rates apply to?
Will the "Pre & Post 2003 Annex" rates be applied to properties in the study area if the area operates as a distinct financial district?
Will the "Pre & Post 2003 Annex" rates apply if the study area is integrated into the Santa Rosa Division?
Why doesn't the sample monthly water bill include both the "Standard" and the "Pre & Post 2003 Annex" rates so that the study area residents have a complete picture of their potential total water cost?
Will the ratepayers in Western's higher-pressure zone, that currently pay Western's pumping charge, pay additional Rancho energy charges?

### Comment Submittal #8- Recv'd- 01/30/2021- Louise B (email)

The report states that Rancho uses the ad valorem to help finance capital expenses including paying debt service. The report also acknowledges that Rancho's connection fees for new development are lower because the ad valorem taxes are used to pay for water system infrastructure.
The report "...identifies potential system improvements for existing and future customers separately to ensure that 'growth pays for growth,' which ensures neither customer types [residential and commercial] subsidize the other."
If an ad valorem tax is assessed on the west Murrieta study area, it would appear that the property owners and private well owners would help underwrite new development. This seems in conflict to the "growth pays for growth" statement in the study.
Please explain why residents should bear this burden through an ad valorem tax?

### Comment Submittal #9- Recv'd- 02/1/2021- Kathryn Elliot (email)

I had some questions about the surcharge that RCWD proposes charging if they cannot charge the ad valorem to the Study Area.
What rate of property value increase was assumed for future calculation of ad valorem revenue for the area as a whole? I assume that it exceeds both the Proposition 13 2% limit and the 2.5% inflation value used elsewhere since land and home prices have gone up significantly.

### Response to Comment

Comment Noted. Answers to related questions follow.
Comment Noted. Answers to related questions follow.
Comment Noted. Answers to related questions follow.
The Murrieta study area is not subject to the "Pre and Post 2003 Annex" rates.
The Murrieta study area is not subject to the "Pre and Post 2003 Annex" rates.
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The Murrieta study area is not subject to the "Pre and Post 2003 Annex" rates.
The Murrieta study area is not subject to the "Pre and Post 2003 Annex" rates.
The Murrieta study area is not subject to the Pre and Post 2003 Annex rates. Therefore, a comparison is not applicable.
No. Under the RCWD Ownership Scenario, ratepayers in Western's higher-pressure zone would not pay additional Rancho energy charges.

### Response to Comment

Comment Noted. This is the current practice for RCWD. Application to the study area would be a policy decision for RCWD.
Comment Noted.
Comment Noted.
The analysis makes no recommendation nor conclusion concerning rate setting or implementation of an Ad Valorem tax by any of the utilities.

### Response to Comment

Comment Noted. Questions addressed below.
A 2.5% annual increase in <u>land</u> values was used in calculations of future ad valorem revenue. Note that only land values are used, not buildings and land.

## Murrieta FMSR Comments - Response to Comments

My understanding of Section 8.3.2.3 “Water Rate Surcharge” is that as the overall land value increases, the revenue due to the \$0.50/\$100 land value ad valorem increases. This means that the revenue raised from a surcharge would need to increase as well. Is that correct? To achieve this revenue increase the % of the water bill that would be added as a surcharge would increase up from the original 51.26% as well. Is this understanding correct?	Correct, the revenue generated from the surcharge would increase. The surcharge percentage could change from year to year, depending on the overall amount of ad valorem tax that would have been collected.
In Table B-4, row 417, the RCWD rate surcharge % for 2019/20 is estimated to be 51.26%. Row 418 refers to a \$ Rate Surcharge (55.42% of FY 19/20 Monthly Bill, increased for inflation in Subsequent Yrs). Please explain this note and that different %.	The 55.42% is a typo. The correct value should be 51.26%. This will be clarified in the Errata Document
The ad valorem is mentioned as a key parameter/part of the key assumptions on pages 70 and 71. Why isn't the surcharge mentioned there as well? Is there something different about it?	The base assumption for the analysis is that RCWD would apply the Ad Valorem tax since it is an existing revenue source. However because RCWD did not provide a policy decision for applying it, the surcharge scenario was developed to reflect the revenue requirements to offset the Ad Valorem tax. Although not specifically a "key parameter" it will be added in the Errata Document referencing pages 70 and 71 to ensure clarity.

### **Comment Submittal #10- Recv'd- 2/07/2021- Daphne Grigsby (email)**

The study states that if Rancho assumes ownership of the study area, they will either assess an ad valorem tax on all property owners or add a water rate surcharge to the monthly bill. The report describes the water rate surcharge as revenue neutral to Rancho – meaning it will “recover the same amount of revenue as the ad valorem tax would have collected.”	Comment Noted.
How is the water rate surcharge revenue neutral to Rancho? The ad valorem tax will change based on the County Assessor’s assessment of land value or the Rancho Board decides to change the \$0.50 per year per \$100 assessed value of land. Will the water rate surcharge be adjusted each year?	The surcharge is revenue neutral. It is calculated to generate the same amount of revenue as the ad valorem tax would have generated. The water rate surcharge will be adjusted every year.
Our monthly water bill is variable based on water usage. Is there a minimum surcharge amount to be added to the bill, regardless of the amount of the monthly water bill?	No, there is not a minimum surcharge added to customer bills. The surcharge is added as a percentage of the entire water bill.
If the surcharge results in collecting more than the revenue neutral amount for the year will the customer be refunded or credited the overage?	The analysis does not assume any refunds. Refunds would be a policy decision for RCWD under this scenario.
There are two percentages referred to for the surcharge. Line 417 on Table B-4g “RCWD Scenario: Projected Total Water Cost Calculation” and the text of the study says that the surcharge would start at 51.26%, but line 418 states “\$ Rate Surcharge (55.42% of FY 19/20 Monthly Bill, Increased for Inflation in Subsequent Years.)” What is the meaning of the 55.42%?	The 55.42% is a typo. The correct value should be 51.26%. This will be clarified in the Errata Document
Table 8-9 FY “19/20 RCWD Santa Rosa Division Rate Schedule” and Line 199 on Table B-4a “RCWD Scenario: Projected Operating Statement: Sources of Funds” both state that RCWD’s energy charges are not expected to be applicable for the majority of the study area. What part of the study area is subject to them? Will residents currently paying Western’s pumping charge be subject to Rancho’s energy charge?	RCWD’s energy charge would not be applicable to the Study Area under the RCWD Ownership Scenario. This will be addressed in the Errata Document to ensure clarity.
If the water rate surcharge is only applied on retail customers’ bills won’t retail customers be paying more than our fair share since the amount to be collected will be spread among a smaller number of properties?	Theoretically actual retail customers would be paying for parcels not receiving retail water service under the analysis model. However, actual surcharge rate structure, and how it is applied, would be a policy decision for RCWD.

### **Comment Submittal #11- Recv'd- 2/18/21- Annette Bell (email)**

If we are annexed by Rancho, they will add an ad valorem tax on our property taxes or a surcharge on our monthly water bill, and they can’t tell us which one it will be until after they take ownership. Personally, I don’t like either of these options as it will cost my family more money for the same water we are receiving from Western without either of these extra costs.	Comment Noted.
A second thing that bothers me about Rancho is that they will not decide if we will be a separate service area, as we are with Western, or if we will be blended with their Santa Rosa District. Again, Rancho says it will not make this decision until after they take ownership.	Comment Noted.

### **Response to Comment**

### **Response to Comment**



## Murrieta FMSR Comments - Response to Comments

The fact that Rancho cannot definitively state how it will treat us, after participating in a nearly 2-year study, raises a lot of questions in my mind about their ability to operate the area in a manner that is beneficial to the residents.
A third issue that I do not like is that regardless of whether we remain separate or we are blended into Rancho's Santa Rosa District, under Rancho ownership, we will not have a Director from this area on Rancho's Board. Rancho's Board members are elected at-large and currently none of the seven Board members reside in west Murrieta or in Rancho's nearby Santa Rosa District.
With Western we have a local representative. I believe Eastern operates similarly to Western in this regard. I do not want to give up local representation.
Can Rancho explain how we will receive the appropriate level of attention and representation under their ownership?

### **Comment Submittal #12- Recv'd- 2/22/21- Polly Filanc (email)**

I, Polly Jane Filanc, being a member of the district vote to stay with Western Municipal WD. Their service has been superior for the last umpteen years.
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### **Comment Submittal #13- Recv'd- 2/23/21- Kathryn Elliot (email)**

I wanted to let you know that some of the maps in the study are still causing confusion. I know I brought this up with the RFP etc. but the Study Area/Service Area Maps aren't clear. Perhaps the City of Murrieta and the Water Districts can help clarify who serves what area from a <u>retail customer</u> (not wholesaler and not sewer) perspective so we can avoid the confusion.
Also, as I mentioned in a prior comment, the "blank" area in the south part of the study area (West of Jefferson) is causing questions. What is going on with this area? Aren't there some businesses there getting water? Who are they getting it from? Having an area without any color seems odd.
In reviewing the Study I found a few places where I think there are typos that are more than just grammatical. I have listed the ones that I recorded here: Pages 57 & 61- WMWD and EMWD show \$5m investments needed for fire flow improvements but RCWD does not. Why not? Their total \$ for legacy improvements reflects the \$5m.
Page 93- The footnote numbers in Table 8-15 aren't shown above.
Page 102- I assume the footnote in Table 8-19 is EMWD, not RCWD
Page 103- Why does Figure 8-11 only show interest and standby charge income? The revenue total is similar to other ownership scenarios...
Page 106- The second sentence references the Acquisition Balance shown in Table 8-22. But 8-22 shows the project share of EMWD water system cost. Should the reference be 8-24?
App B, Pg 40, Row 541- This is Note 6 but no reference in the table above references Note 6. Row 528, legacy pipe improvements, references Note 5 but Note 5 refers to a reservoir, not legacy pipes. I therefore assume that Note 6 refers to Row 528. Row 527 has no note shown so perhaps Note 6 belongs there.

### **Comment Submittal #14- Recv'd- 2/23/21- R. Adams (email)**

I am a longtime resident in Murrieta. I am concerned about our wells and having a safe water system. I have some question for you.
Can someone explain what is meant by the legacy historic downtown improvements and the fire flow upgrades shown throughout the area - what does the \$5m include?
What is up with this 3rd well? It is referred to but it's inconsistent. \$5m in note for WMWD buried in an appendix a few times but not shown in the doc. What is the significance of the 3rd well?

Comment Noted.
Comment Noted.
Comment Noted.
Comment Noted. Question should be addressed directly to RCWD.

### **Response to Comment**

Comment Noted.
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### **Response to Comment**

Maps have been revised to clarify the retail service areas of each water district and are posted on the LAFCO website, and will be included in the Errata Document.
The scope was to evaluate detachment of the WMWD service are only, not detachment of RCWD service areas.
Comment Noted. Comments are addressed below.
Correction noted. RCWD fire flow was included in the financial analysis for total CIP. An appropriate table for RCWD Fire Flow will be added in the Errata Document
This will be clarified in the Errata Document
Correct, the footnote should read EMWD instead RCWD. This will be clarified in the Errata Document
Figure 8-11 is missing some details and will be corrected in the Errata Document.
The reference should be to Table 8-23. This will be clarified in the Errata Document.
Table Notes 5 and 6 should be deleted. In the Projected Schedule Column of Table B-5f, references to Notes 3 and 5 should be deleted. This will be clarified in the Errata Document.

### **Response to Comment**

Comment Noted. Answers to questions follow below.
The replacement and upsizing of older/undersized pipeline, as well as system looping to meet current fire flow standards.
The 3rd well was a stated desire by WMWD, but would need further evaluation. The cost of a 3rd well was similar to other/offsetting supplies.

## Murrieta FMSR Comments - Response to Comments

How do the different districts approach on groundwater compare? It matters to well owners.	Groundwater approach is covered in the policy decisions portion of the report, Section 3 on Page 25. Future water supplies in the area are subject to change and can't be predicted with certainty. Therefore, simplifying assumptions had to be made for this study. As explained in Section 3.1, 1,452 AF/year of local groundwater was agreed upon as a historically sustainable value. For the purposes of this study, all supply above this amount was assumed to be imported water. It should be noted that all agencies expressed the intent to use the maximum amount of local groundwater possible for future supplies in the study area. However because there is some dispute about the maximum value, the assumption described above was utilized and agreed upon.
Do the various ways of funding the pipes in undeveloped area impact current residents?	No, the new water distribution pipes in undeveloped areas will be paid for by the developer, Assessment Districts, or Community Facilities Districts.
I've heard that the AV is used to pay down RCWD debt for pipes they built years ago. Do they have more debt than the other 2 agencies? How does their debt compares between the 3?	The scope of the FMSR did not include comparing the amount of debt held by the three water utilities.
Both WMWD and RCWD assume they have to borrow the \$5m for legacy improvements. (30 yrs at 4% interest plus fees!) But I don't see EMWD assuming any debt service. Why not?	EMWD has proposed a financially integrated approach. The Murrieta Study Area would not be financially distinct, it would be financially blended with the rest of EMWD's service area. Because of EMWD's financially integrated approach, it was not necessary to know whether EMWD would issue debt to cover the cost of the legacy improvements. EMWD would use the rate revenue generated by the EMWD's rates to pay for all operating expenses and the cost of the legacy improvements, regardless of whether debt is issued.

### **Comment Submittal #15- Recv'd- 2/25/21- Rancho California Water District (letter)**

Please see the attached comment letter from Rancho regarding the Final Report approved by our Board today in order to meet your requested March 1, 2021 deadline for comments by the participating agencies. (Attached)

### **Response to Comment**

See attached Comment Letter and responses to comments attached thereto.

### **Comment Submittal #16- Recv'd- 2/26/21- Brian Bielatowicz (email)**

In response the Murrieta focused service review, without doubt I support the transition to RCWD. The infrastructure is already in place with RCWD and has excess capacity. This ultimately reduces the impact to the environment required for any other service provider.

We understand there is availability of reclaimed infrastructure, not available in WMWD, less negative impacts on domestic water supply.

As a former Murrieta resident, the service area is physically separated from the rest of Western's District area by a great distance, response times in emergencies cannot compare to RCWD who has a local presence. This will play into lower overall cost for water and connections for customers.

Lack of WMWD infrastructure stifling industrial development severely needed in Murrieta, no plans to provide.

Study notes that fire protection is substandard, significant system upgrades would be necessary to provide required fire flow. Existing RCWD lines have ability to provide immediately. This is a public safety issue.

Its time for WMWD to give up this area as it is the right thing to do and is hindering progress. Thank you for your consideration to the forgoing.

### **Response to Comment**

Comment Noted.

Comment Noted.

WMWD has provided emergency service to the area historically, and there have been no demonstrated history of that concern.

WMWD has not provided any information stating that they will not provide the necessary infrastructure to support development. The financial analysis quantifies the costs for future infrastructure regardless of the provider.

The analysis includes the costs for upgrades necessary for meeting all/CURRENT fire flow requirements. RCWD/ALL AGENCIES have agreed that those costs are necessary and upgrades will be necessary to meet fire flow requirements. It is speculative to assume that RCWD can meet fire flow requirements immediately. This is an issue of small pipes, regardless of agency.

Comment Noted.

### **Comment Submittal #17- Recv'd- 2/26/21- Metropolitan Water District of So. Cal. (letter)**

The Metropolitan Water District of Southern California is pleased to submit the attached comments for consideration by the Riverside Local Agency Formation Commission in the above-referenced matter. We appreciate the opportunity to comment and look forward to working with your agency. (Attached)

### **Response to Comment**

See attached Comment Letter and responses to comments attached thereto.

## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #18- Recv'd- 2/26/21- Eastern Municipal Water District (letter)

Comments submitted by letter. (attached)

### Comment Submittal #19- Recv'd- 2/27/21- Sherrie Munroe (email)

Thank you for taking public comments on the West Yost study for the Murrieta Service Area of WMWD District. I am a 33 year resident of the City of Murrieta. I have supported the investment in this study since it's inception, have attended every community meeting on the subject, spoken to residents and developers alike, and attended all water district board meetings when the subject was on agenda. I've also read and absorbed the full report.

My primary issue with the existing Murrieta Service Area is it's inability to meet the needs of the Service Area. The District has neither the capacity nor the infrastructure to not only meet the demands of Murrieta's General Plan buildout condition, but it's needs as a city today.

Page 41 of the report states that an additional 3.62 million gallons of storage are needed to support the city's water supply demands, and also states that the ability to provide that storage is near impossible.

Additionally, Section 5.1.1.3 goes on to state that the maximum velocity criteria are violated now and under build-out. What that means under an extreme fire condition is broken pipelines; no water getting to the hydrants. That's what happens under high velocity conditions.

Significant upgrades are required, as identified on figure 5.1, to provide adequate fire protection to the city.

Lastly, Section 5.1.1.5 summarizes that "the existing distribution system is unequipped to handle even current fire flow values". While it is noted that these are "primarily small diameter legacy pipelines", I'm sure the residents relying on those pipes for fire flow would have concerns. They certainly should.

This is, and always has been first and foremost a life / safety issue for me as a resident. We live in a wildfire susceptible area, the ability to provide reliable fire protection for the safety of our residents and first responders should be a major priority. For this reason, RCWD, who has both excess capacity and existing infrastructure within the city (as stated in the report) should be the only consideration for this service area. Especially since their comment letter submitted 2-25-21 rectifies and corrects the previous inaccurate financial impacts to customers identified in the report.

Additionally, the following factors should be given high consideration:

Distance from District headquarters in the event of an emergency

Environmental impacts to community from construction of multiple parallel distribution lines

Lower overall cost for water supply and connections for customers

Availability of reclaimed water supply to further reduce the demands on our domestic water supply in drought conditions.

Ability to provide needed development in the city's southwest corridor

LAFCO needs to take all of these factors into consideration, and provide clear and decisive direction. Residents need to have a solution that protects them both today and long term. It is clear from the report that the existing service provider cannot meet our needs without significant upgrades, and our collective safety should not depend on some possible future improvements. This needs to be addressed and resolved now.

### Response to Comment

See attached Comment Letter and responses to comments attached thereto.

### Response to Comment

Comment Noted.

Comment Noted.

There is no reference in the study that states that "the ability to provide the storage is nearly impossible". In fact, on P. 41, a specific location has been identified to install the additional storage capacity.

The study does not state that velocity criteria are violated "now", on the contrary the analysis states that no deficiencies exist now. The analysis clearly acknowledges in Section 5.1.1.3 that improvements to the existing pipelines will be necessary to support of future development to build out.

Comment Noted.

Comment Noted. The analysis provides for all upgrades necessary for the existing systems, and future infrastructure to meet all fire flow requirements.

Comment Noted.

Comment Noted.

Comment Noted.

Comment Noted.

Comment Noted.

Comment Noted.

Comment Noted.

The responsibility of any current deficiencies or service issues are the responsibility of the service provider and not LAFCO. LAFCO has no authority to initiate a change to a service provider. The purpose of the study is to provide information to all the service providers, the city and the public concerning future service provision within the study area. Any change to a service provider requires an application from another public agency to LAFCO for consideration.

## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #20- Recv'd- 2/28/21- Christine Rios (email)

I would like to make a comment about how Rancho Water District plans to run the study area. The report shows that Rancho will not make a decision on how to operate the area until after they have experience operating the system. That means that they will decide LATER whether to keep the area separate (distinct) or integrate it. Under either scenario (distinct or Integrated) Rancho is the most expensive option for residents.
Rancho will either ad a surcharge on to our water bills or an ad-valorem assessment on our tax bill. Realistically, Rancho would want an ad valorem because it can generate more income for them to help pay down their debt and for new development.
If Rancho is awarded the contract they will decide to financially integrate the study area and then collect ad valorem from customers who use their water or well water.
Why would we, as residents, want to roll the dice with a company that won't be up front about the cost of water until AFTER they acquire the study area?
The scenarios presented in LAFCO's study show that both Western and Eastern Water Districts would be more financially friendly to the residents in the study area.

### Comment Submittal #21- Recv'd- 2/28/21- Elizabeth Chavez (email)

I have a comment about some information I found in the report. According to the study's information on the Key Parameters Table ES-1 (also Table 8-26) and Section 10.0 called Determinations, I saw that Rancho could result in higher costs to residents. I am concerned about this. If residents have to pay more, that affects family finances.
The report showed that Eastern could result in lower water costs which would help our family budgets.
Given that information, along with other factors shown in the study, Eastern may be the water district that could solve these water issues.

### Comment Submittal #22- Recv'd- 2/28/21- Barbara Ankele (email)

I have a question regarding Figure 3-1 "Study Area with Existing Private Wells". The assumptions regarding future service do not seem to make sense. As an example: Definitions on the map: purple (private wells within 1000 ft of pipe/will connect), pink (private wells/will not connect) and blue (undeveloped land/will connect).
Area: South Murrieta Business Corridor (Figure C-2 Focus Areas 2035 General Plan Map)
Zoning: Business Park and Innovation (Figure C-1 Land Use 2035 General Plan Map)
Why did the study assume that, in a Business Park/Innovation area, the pink parcels, surrounded by purple and blue parcels, would NOT connect to water service?

### Comment Submittal #23- Recv'd- 3/1/21- Kay Prior (email)

The study also says that Rancho uses the ad valorem tax they collect on customers' property tax bills to help finance capital expenses and that Rancho's connection fees for new development are lower because the ad valorem tax is used to pay for water system infrastructure. If an ad valorem tax is assessed, it appears that homeowners would be helping to underwrite new development.
This seems to be in conflict with the consultant's statement in the report that says "growth pays for growth." Can you explain to me why residents should bear this burden through an ad valorem tax?

### Response to Comment

Comment Noted.
Comment Noted.
This scenario would be subject to a policy decision by RCWD. RCWD has not provided any information regarding this scenario.
Comment Noted.
Comment Noted.

### Response to Comment

Comment Noted.
Comment Noted.
Comment Noted.

### Response to Comment

Comment Noted.
Comment Noted.
Comment Noted.
Comment Noted.
Pink parcels do connect.

### Response to Comment

Comment Noted.
The analysis makes no recommendation nor conclusion concerning rate setting or implementation of an Ad Valorem tax by any of the utilities. Those decisions are all policy decisions to be made by the specific agency.



## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #24- Recv'd- 3/1/21- Denae Rios (email)

As a follow up to my last question about land value for single family residences and commercial property: Table 4g footnote #3 says “\$80,000 is used for an example land value for single family residences based on qualitative review of assessor data provided by the City of Murrieta”. I would have expected a “quantitative” calculation to determine the number. So could you please explain what a “qualitative review” is?

### Comment Submittal #25- Recv'd- 3/1/221- Maria Harkins (email)

I have questions about Rancho's ad valorem tax and water rate surcharge.

It was stated in the study that Rancho will either add an assessment to our property tax bill (the ad valorem tax) or will add a water rate surcharge to our monthly water bill. It said the surcharge will be equal to the amount that would have been collected from the ad valorem tax. So it looks like we would pay more in property taxes regardless of the amount of water we use or don't use. But then it talks about putting a surcharge on the water bill, so then the amount of water we use affects the amount that is collected.

What if we conserve even more? Does that mean that they will raise the surcharge percentage so they can collect what they would have collected in ad valorem?

My family is very concerned about this added expense.

### Comment Submittal #26- Recv'd- 3/9/21- Maria Harkins (email)

In further reading the report I see that Eastern will lower residential rates by a few dollars based on how they calculate their Fixed Costs on the monthly water bill. Based on the information in the study, it further looks like they have a plan to lower residential water bills in the future (about 12 years) once infrastructure improvements are paid for. I found this on page 102.

Given the information in the study, Eastern is the least expensive alternative for residents, gets done what needs to be done and should be given serious consideration for becoming our new water district.

### Comment Submittal #27- Recv'd- 3/29/21- Annette Bell (email)

Western looks like it is in the middle for future costs for families. It is not the most expensive, but it is also not the least expensive going forward.

So, keeping things the same does not result in any savings for residents, given all of the things that need to be done in the area.

It looks like Eastern can get it done and does not financially harm the families in the process.

### Comment Submittal #28- Recv'd- 3/29/21- Christine Rios (email)

I have more questions about Rancho's water rate surcharge and ad valorem. The report says if Rancho assumes ownership of Western's west Murrieta area, they will either assess an ad valorem tax on our property taxes or add a water rate surcharge to our monthly water bill. It states the water rate surcharge will collect the same amount the ad valorem would have collected.

1. The amount collected each year through ad valorem typically increases due to the increases in land value. Will the water rate surcharge be increased every year to account for the corresponding increase in ad valorem?

### Response to Comment

The assessors data did not differentiate whether parcels are residential or commercial. Therefore, a quantitative calculation was not possible, given our scope. The term "qualitative review" was used to describe the methodology that required professional judgement, in addition to calculations.

### Response to Comment

Comment Noted.

Comment Noted. The water surcharge scenario was developed since RCWD has provided a policy decision regarding implementing the Ad Valorem tax. The model reflects one or the other, but not both at the same time.

If RCWD implements a policy decision to utilize the rate surcharge, any specifics of how the surcharge is applied would be a policy decision for RCWD.

Comment Noted.

### Response to Comment

Comment Noted.

Comment Noted.

### Response to Comment

Comment Noted.

Comment Noted.

Comment Noted.

### Response to Comment

Comment Noted.

The model assumes an annual increase in the revenue collected from the water rate surcharge over the projection period. Any increase of the water rate surcharge would be a policy decision for RCWD to determine.

## Murrieta FMSR Comments - Response to Comments

2. The ad valorem collects a fixed amount for the tax year. The water rate surcharge collects a different amount depending on water usage. Will there be an accounting for each customer at the end of the year comparing the amount collected through the rate surcharge vs. what would have been collected through ad valorem?	Any detailed accounting or development of comparative data would be a policy decision for RCWD. RCWD has not provided any information regarding a comparative annual analysis per customer.
3. If the water rate surcharge collects more than the amount that would have been collected through the ad valorem in any given year, will the customer be refunded the excess amount collected from the surcharge for that year?	Any refund based on an analysis of water rate surcharge versus Ad-Valorem would be a policy decision for RCWD. RCWD has not provided any information regarding refunds based on such an analysis.
4. If the answer to #3 is "no," then what will Rancho do to maintain the "revenue neutral" aspect of these charges?	This scenario would be subject to a policy decision by RCWD. RCWD has not provided any information regarding this scenario.

### Comment Submittal #29- Recv'd- 3/31/21- Kathryn Elliot (email)

P. 21 On Figure 2-2, where is the existing pressure reducing valve (PRV)?
P. 21 Is the existing excess storage capacity at the Grizzly Ridge Reservoir site available to meet the CURRENT storage needs for the entire service area, even in the lower pressure zone? If not, what would it cost to make it available to provide current customers in the lower pressure area with that additional storage?
P. 44 What portion of the additional build out storage that RCWD would need will be funded by current customers, by developers, and by future customers of the Study Area?
P. 46 What are the implications of the 2nd paragraph - RCWD hydraulic deficiencies? Is it only the pipes near the proposed Adams/Kalmia Interconnection?
P. 46 If it is elsewhere, why is RCWD's distribution system not requiring improvements to address these minor pipeline deficiencies? Is it valid to assume at build-out, where demand is assumed to be 80% higher than present demand, that these deficiencies would remain minor? If so, why?
P. 55 What does "addressing storage needs through payment of RCWD connection fee" mean? Would developer connection fees be sufficient to pay for Murrieta's part of the new storage RCWD has planned?
P. 55 Why is there no table or cost listed for the connection tie-in that RCWD will require at Adams/Kalmia?
P. 64/66 On page 66, RCWD AV is used to fund capital improvements (including debt service). However Table 7-1 on page 64 does not show this. Why is it not shown?
P. 81 WMWD needs additional storage at build out, but using the excess capacity in the Grizzly Ridge tank means that the storage isn't needed for current customers. However, Table 8-8 shows that current customers are expected to pay \$4.6m of the \$8.3m cost for this new storage, and \$2.3m of the \$4.2m in new pipelines needed for the storage tank. Future development will only pay \$3.7m and \$1.9m, respectively. Similarly, why are current customers paying the full cost for EMWD supply improvements when the current connection is sufficient for our demand? Why are current customers subsidizing growth, violating the principle of "growth pays for growth"?
P. 93 "RCWD anticipates requiring existing Murrieta Study Area customers to buy into RCWD facilities, including storage facilities... The buy-in eliminates the need to separately build additional reservoir storage."
P. 93 Since additional storage is almost entirely needed for future customer demand, why are current customers subsidizing growth, violating the principle of "growth pays for growth"?
P. 105 EMWD estimates that the Study Area's share of a new Hunter Storage Tank will be \$4.1m. Only \$1.8m will be funded by new customers but the Acquisition Balance (which needs to be paid by current customers over ~12 years) includes \$2.25m for the tank, even though it is scarcely needed for current customer demand.

### Response to Comment

Figure 2-2 has been revised to show the pressure reducing valve and will be included in the Errata Document.
Storage for the lower pressure zone cannot be provided at the Grizzly Ridge site, because the elevation is incorrect and there is no way to provide hydraulic control to the lower pressure zone. Pressure Reducing Valves can supply pressure support for limited areas, but cannot provide the volume of storage needed for the entire zone.
Future infrastructure would be funded by future development or conversion of existing customers to RCWD's system. Future RCWD customers would similarly pay.
That is correct. Only the pipes near the Adams/Kalmia interconnection.
Under existing status quo conditions, there are minor pipeline violations of design criteria in the RCWD system. They do not impact operations, and they are acceptable to RCWD. With the addition of the existing and potential future Study Area flows, the design criteria violations remain minor because the existing and future Study Area flows are small compared to the RCWD flows.
"addressing storage needs through payment of an RCWD connection fee" means that existing customers would pay RCWD's connection fee, and RCWD would provide the storage needs for existing development. This is a policy decision by RCWD. The scope of work for the FSMR did not include an analysis of whether developer connection fees would be sufficient to pay for Murrieta's part of the new storage RCWD has planned.
It is included in the pipeline costs.
Clarification to Table 7-1 is included will be included in the Errata Document.
Excess storage at Grizzly Ridge cannot be used for the lower pressure zone. Storage is required in the lower pressure zone under existing conditions. Regarding the cost of supply improvements through EMWD, Table 8-8 shows that the cost of \$5.379 M is allocated entirely to future development. Note 5 in Table 8-8 states "WMWD would fund the project and incorporate the cost in it's connection fee. Connection fee revenues, over time, would pay for the project.
Comment Noted.
It is correct that the existing storage deficit is smaller than the future storage deficit. RCWD has sufficient existing storage to offset the storage deficit in the Study Area. RCWD's policy direction for the evaluation is that: 1) Existing customers pay for their storage deficit by paying RCWD's Connection Fee, which allows them to access existing excess capacity in RCWD's system. 2) Future development pays for their storage needs by paying RCWD's Connection Fee. 3) RCWD is responsible for constructing sufficient storage to serve the future needs of the Study Area.
Comment Noted.

## Murrieta FMSR Comments - Response to Comments

P. 105 Similarly, why are current customers paying the full cost for EMWD supply improvements when the current connection is sufficient for our demand? Doesn't this violate the principle of "growth pays for growth"?
P. 112 "RCWD lower connection fees acknowledge that AV tax revenues are also used to pay for water system infrastructure."
P. 112 Once again it appears that current property owners subsidize new development since RCWD can lower connection fees for new development because current property owners underwrite a portion of those connection fees through payment of Ad Valorem. In fact, current customers don't actually need to use the excess capacity in RCWD's stranded asset pipelines that run through and around Western's service area. How is this not violating the agreement that "growth pays for growth"?

### Comment Submittal #30- Recv'd- 4/5/21- Chrisitne Rios (email)

I have questions about Rancho's water rate surcharge and ad valorem. The report says if Rancho assumes ownership of Western's west Murrieta area, they will either assess an ad valorem tax on our property taxes or add a water rate surcharge to our monthly water bill. It states the water rate surcharge will collect the same amount the ad valorem would have collected.
1. The amount collected each year through ad valorem typically increases due to increases in land value. Will the water rate surcharge be increased every year to account for the corresponding increase in ad valorem?
2. The ad valorem collects a fixed amount for the tax year. The water rate surcharge collects a different amount depending on water usage. Will there be an accounting for each customer at the end of the year comparing the amount collected through the rate surcharge vs. what would have been collected through ad valorem?
3. If the water rate surcharge collects more than the amount that would have been collected through the ad valorem in any given year, will the customer be refunded the excess amount collected from the surcharge for that year?
4. If the answer to #3 is no, then what will Rancho do to maintain the "revenue neutral" aspect of these charges?

### Comment Submittal #31- Recv'd- 5/3/21- Kathryn Elliot (email)

As the west side approaches buildout, the water demand from new customers is likely to far exceed the increased capacity from the wells. As a result, a higher % of MWD water will be needed. How was this considered in the Study?
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Table 8-23 on page 105 shows that the cost of Supply Improvements Through EMWD is allocated entirely to future development. Note 3 in Table 8-23 says "the portion of the project cost that benefits existing connections would be included in the Acquisition Balance. There is no cost noted in the Acquisition Balance in Table 8-23, therefore there is no cost allocated to existing customers.
Comment Noted.
Comment noted. The analysis makes no recommendation nor conclusion concerning rate setting or implementation of an Ad Valorem tax by any of the utilities. These are policy decisions to be made by each agency.

### Response to Comment

See response to Comment #28 (Duplicate Question)
See response to Comment #28 (Duplicate Question)
See response to Comment #28 (Duplicate Question)
See response to Comment #28 (Duplicate Question)
See response to Comment #28 (Duplicate Question)

### Response to Comment

Future water supplies in the area are subject to change and can't be predicted with certainty. Therefore, simplifying assumptions had to be made for this study. As explained in Section 3.1, 1,452 AF/year of local groundwater was agreed upon as a historically sustainable value. For the purposes of this study, all supply above this amount was assumed to be imported water. It should be noted that all agencies expressed the intent to use the maximum amount of local groundwater possible for future supplies in the study area. However because there is some dispute about the maximum value, the assumption described above was utilized and agreed upon. Thus, in all three of the Ownership Scenarios, the volume of locally produced groundwater was held constant at 1,452 acre-feet per year. The increased system wide water demands resulting from growth were assumed to come from increased amounts of imported MWD water. Projections of locally produced groundwater and imported MWD water are found in Appendix B, Table B-1, lines 28 through 32. A 10-year financial projection was prepared. The financial projection did not extend to the time period where the west side approaches buildout.
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## Murrieta FMSR Comments - Response to Comments

What funds do the different districts get from our property taxes? Ad Valorem is explained in the study as are standby fees. However I see that RCWD also has a line in the financials for 1% share of Property Tax, noting that WMWD's small amount of revenue wouldn't transfer. It shows up here with \$0 (Table B-4a, line 36), but Table B-4, line 303 shows that for 2019/20 all of RCWD had nearly \$18m from these assessments and the Santa Rosa division alone had \$2.7m.) EMWD has the same reference to 1% (line 41, Table B-5a) with \$0 but no other references to it appear for EMWD nor anywhere for WMWD. What is it and why does it differ between districts? Why does RCWD access these funds but other districts don't? What does this mean to the customer?

For the question regarding what funds do the different districts get from our property taxes and the definition of the 1% ad valorem property tax levy. RCWD and EMWD do not collect the 1% ad valorem property tax levy from the Study Area. WMWD does collect property tax revenue from the Study Area. In the Study Area, WMWD receives revenue from the 1% ad valorem property tax levy. When Murrieta County Water District (MCWD) was merged into Western via LAFCO action in 2006, MCWD was receiving a small amount of revenue from the 1% Ad Valorem property tax levy placed on the tax rolls by the County of Riverside. This revenue has continued to be received. It is a small amount, approximately \$2,000 per year for the entire Study Area. This revenue is shown in Appendix B, Table B-3A, line 31, is applied exclusively for the benefit of water customers in Western's Murrieta Service Area. In addition to the 1% ad valorem property tax levy, Western has a General District Levy that applies to all parcels within its General District boundary (the General District boundary includes WMWD's entire wholesale service area). That revenue goes into WMWD's because it is does not fund Murrieta water system expenses.

For the question of why does the 1% ad valorem tax revenues differ between districts: Because the \$2,000 per year collected from the 1% ad valorem property tax levy is very small compared with the overall cost of providing water service, the \$2,000 per year was not incorporated into the RCWD or EMWD Ownership Scenarios.

For the question related to RCWD's property tax revenue collected from their retail service area: The scope of the FMSR did not evaluate the various property tax levies assessed by RCWD and EMWD in their respective service areas.

For the question regarding what does this mean to the consumer: The \$2,000/year revenues for the entirety of the Study Area would continue to be collected. If ownership of the water system in the Study Area changes, WMWD's General District Levy could also continue, because the Study Area would remain within the WMWD General District boundary.



## Murrieta FMSR Comments - Response to Comments

### LAFCO Comments- 4/26/21

Report map revisions/clarifications required. Figures 1-1 and 2-1 require revision. Figure 2-3 to include the MWD unconnected parcels map.
Appendix "C" map revisions required- Figures C-4, C-5 and C-6 require revision.
Please clarify the impact of Standby Charges and Ad Valorem on properties not connected to the existing WMWD sytem, in particular parcels on wells.
For RCWD, two scenarios are identified in the reveue analysis regarding Ad Valorem tax versus rate surcharges. Under the Ad Valorem scenario, all parcels within the study area will be assessed regardless of receiving service or not. Under the rate surcharge scenario, only those customers receiving existing or new service will be charged with the surcharge. Please clarify that in order to raise the same level of revenue annually that the Ad Valorem scenario would generate, rate surcharges would accordingly adjust annually.
Table ES-1- If RCWD utilizes a portion of Ad Valorem tax for offsetting future new development infrastrucutre costs, thus reduced connection fees, then wouldn't it follow that those parcels within the Study Area currently receiving service from WMWD, and those parcels not receiving service, would be subsidizing new development?
Page 8- Under Findings and Conclusions, 6th line, Table ES-1 is mis-labeled
Page 11, last paragraph & Page 12, Table ES-2- Regarding the EMWD lower commercial ccf/month usage (59 versus 125). Please clarify that the same reduced cost assumption would apply for the other service providers if the 59 ccf assumption were applied.
Page 84, Section 8.2.5, Figures 8-2 & 8-3 are mis-labeled.
Page 100, 3 bullet points under the 1st paragraph- ET or ETAF?
Page 100, Table 8-17, EMWD Residential Tier 5- What is 164?
Page 102, Table 8-19, Note #2- RCWD listed incorrectly.
Page 116, Section 10.3, first bullet, fifth line- FMWR is a typo.
Page 117, last paragraph requires clarification.

### Response to Comment

Maps have been revised for clarity and incorporated in the Errata Document.
Maps have been revised for clarity and incorporated in the Errata Document.
All parcels within the Study Area will continue to pay Standby Charges at the rate charged by the service provider for the area. If Ad Valorem tax is invoked, all parcels in the Study Area would also be assessed the Ad Valorem tax regardless of being connected or not for service.
Rate surcharges would adjust annually to match the Ad Valorem increase that would occur if Ad Valorem were applied. Any rate increase for rate surcharges would be a policy decision for RCWD.
How RCWD would apply the Ad Valorem tax collected in the Study Area to new development would be a policy decision for RCWD. Under RCWD's current process that reduces connection fees, some portion of the Ad Valorem collected would pay a portion of future capital improvements that benefit future development and that benefit existing WMWD customers.
Correction will be included in the Errata Document
Yes the same assumption and conclusion would apply to each service provider. Reducing water consumption to 59 ccf/month would reduce the total cost under all Ownership Scenarios.
Correction will be included in the Errata Document
Correction will be included in the Errata Document
The table entry with "164" should be blank and a correction will be included in the Errata Document.
Correction will be included in the Errata Document
Correction will be included in the Errata Document
The general assumptions used in the analysis were agreed upon by all three agencies at the early stages of the process. As agency staff policy "directions" were given by each agency, those policy "directions" were included. At no time were any policy "decisions", ie Board of Directors offical policy "decisions", provided (See Section 7.2.1 starting on Page 63 of the report regarding policy "directions" and "decisions"). During the internal agency review process, several iterations and comments were evaluated and included as deemed appropriate while maintaining the essence of attempting as close to an apples to apples evaluation as possible based on the policy "directions". The report stands based on the agreed upon assumptions and the "directions" provided. It was determined by LAFCO staff that when any agency decided that they wanted to provide such a substantial policy "direction" change, or an alternative proposal that would substantially alter the agreed upon assumptions, that any substantial analysis of substance would incur additional cost and delays. It was not conducive to the process to engage in a series of analysis of alternatives and assumption revisions endlessly. As such, LAFCO instructed the consultant to release the report as currently published. LAFCO staff also advised each agency that as part of the public comment process, they could submit any alternative proposal, rebuttal, or any other issue they deemed appropriate for their agency for the public record, and for the public to evaluate. It should be noted that no change to the current service provider within the study area can occur unless an application is submitted to LAFCO for consideration of such a change.

## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #15- Recv'd- 2/25/21- Rancho California Water District

See Attached Letter and Comment "A"- General Comments
See Attached Letter and Comment "B"- Alternative Analysis- Includes Exhibit A
See Attached Letter and Comment "C"- General Comment
See Attached Letter and Comment "D"- Figure 1-1
See Attached Letter and Comment "E"- Section 1.0- Figure 1.1 and Narrative
See Attached Letter and Comment "F"- Section 1.2.2- Typo
See Attached Letter and Comment "G"- Section 1.2.3 Typo
See Attached Letter and Comment "H"- Figure 2-1
See Attached Letter and Comment "I"- Figure 2-3
See Attached Letter and Comment "J"- Section 7.2.7 Name Error
See Attached Letter and Comment "K"- Section 8.3.3.3 Typo
See Attached Letter and Comment "L"- Section 10.3 total Cost to Ratepayers
See Attached Letter and Comment "M"- General Comment

### Response to Comment

Comments Noted. Although the alternative analysis is presented, validation and specific policy decisions by RCWD regarding rate structuring, and assumptions regarding inflation and operational costs, are not included. Although the RCWD alternative model reflects dramatic differences from the consultant model, no justificative analysis is provided to support operational costs so significantly less than the current service provider. Lacking specific justifications to vary from the agreed upon assumptions that the consultant model was based upon, no modifications will be made to the consultant model. It is noted that any future action by any service provider that would necessitate a boundary change through LAFCO will have the opportunity to present the specific plan for services and financial analyses they deem appropriate as part of that process.
Comment Noted. Figure 1-1 has been revised for clarification and included in the Errata Document.
Section 2.2.2 on P.22 as revised in the Errata Document discusses and clarifies MWD annexation charges and the requirements for annexation into MWD when connecting to WMWD.
Correction has been incorporated in the Errata Document.
Correction has been incorporated in the Errata Document.
Figure 2-1 has been revised for clarification and is included in the Errata Document.
Confirmation was received from WMWD that the "No Data" designation indicates not paid status. WMWD has affirmative proof that the "Paid" parcels were paid. All others are not paid. Figure 2-3 will be revised to clarify in the Errata Document.
Correction has been incorporated in the Errata Document.
Correction has been incorporated in the Errata Document.
Clarification has been incorporated in the Errata Document.
Comment Noted.



February 25, 2021

VIA EMAIL: [GThompson@lafco.org](mailto:GThompson@lafco.org)

Gary Thompson  
Executive Officer  
RIVERSIDE LAFCO  
6216 Brockton Avenue, Suite 111-B  
Riverside, CA 92506

**SUBJECT: COMMENTS FOR THE PUBLIC REVIEW REPORT – MURRIETA  
FOCUSED MUNICIPAL SERVICE REVIEW FINAL REPORT, 12-10-  
2020 PREPARED FOR THE RIVERSIDE LOCAL AGENCY FORMATION  
COMMISSION**

Dear Mr. Thompson:

The purpose of this letter is to provide comments from Rancho California Water District (Rancho Water/Rancho/District/RCWD) regarding the *Focused Municipal Service Review for the Murrieta Study Area Final Report, 12-10-2020, LAFCO 2019-11-3 (Final Report)*. Rancho Water appreciates LAFCO's commitment to transparency with the public, and the opportunity to provide its comments.

There has been a significant effort and resources expended among the multiple public entities these last two years to address the primary question of which agency could most effectively service the Murrieta Study Area (MSA) at the most efficient cost. Although the Final Report did not offer a definitive answer to who would *best* serve the MSA as many had hoped, it did shed light on an important conclusion. Primarily, that all three agencies are projected to be able to meet the water service needs of both current and future customers in the MSA with only relatively minor overall cost differences, especially when compared to the significant disparity of the water service cost that exists in the various regions in California. All three agencies are experienced water districts with clear records on their technical, managerial, and financial capacity to ensure clean, reliable, and affordable water service to the area.

Rancho Water's Board has made it clear both from the beginning, and again now in the conclusion of this effort, that the District's intention is to do what is best for both the stakeholders in the MSA, and its own current customers. This commitment was demonstrated recently with Rancho's Board approving an agreement with Western Municipal Water District (Western/WMWD), as part of a mutually beneficial solution leveraging existing Rancho Water infrastructure to transport water on behalf of Western. This agreement lowers costs for the

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Sauer Property development project in Western's service area, brings reimbursement revenue back to the benefit of Rancho's customers, and helps to cooperatively address one of the very types of development concerns raised at the beginning of this process, and as addressed in the Final Report. Although we believe the information is clear that there are distinct cost and service advantages to every class of customer if Rancho Water served the MSA, the District appreciates the concerns expressed by the public during the Focused Municipal Service Review (FMSR) process. It also respects if the conclusion of this effort is for the MSA to remain receiving water service from Western.

Rancho Water's principal desire with this letter and its comments to the Final Report is to ensure that the most accurate information is before the public and incorporated into the record, so that any stakeholder relying on this Final Report would have the best information currently available. The District's comments are broken into two main categories: 1) the need for more accurate financial and customer cost projections, and 2) specific edits.

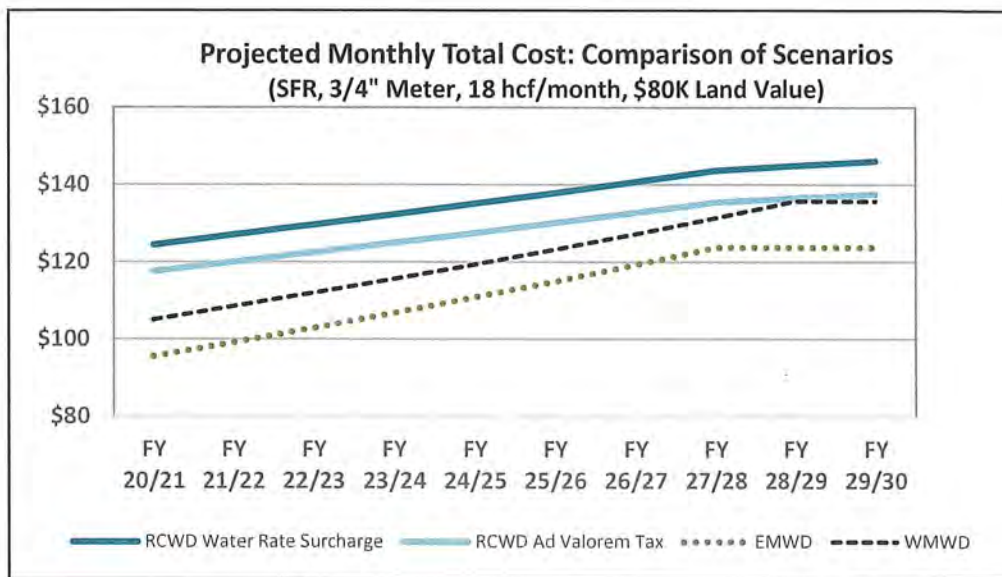
Rancho Water believes the Final Report currently materially misrepresents the projected cost for Rancho to provide service to the MSA, and therefore, materially misrepresents the overall customer cost conclusions of the Final Report. The Final Report included a simplistic assumption in its financial projection that Rancho Water's operation and maintenance expenses (O&M) would be the same as Western's. Although the intent of the FMSR was to show the distinctions in service and cost between the agencies, the study did not investigate into any distinctions in operating cost for Rancho. It does however reflect the relative operating efficiencies of both Western and Eastern Municipal Water District (Eastern/EMWD), as Western's projections are based on its operating history with the service area, and Eastern's approach is based on its current blended-average operating costs extrapolated to the amount of water demand in the MSA.

The District first had its opportunity to begin reviewing the draft financial information in the FMSR in January 2020, and completed its own study of projected O&M costs after reviewing operating, financial, and infrastructure information from Western to see if the study's results revealed whether Rancho's O&M costs would be significantly different than Western's. Rancho provided the results of its own financial analysis on May 5, 2020, revealing that its O&M costs were projected to be approximately \$1.2 million lower in the first year than what was being reflected in the FMSR. To verify the reasonableness of the analysis, these projected O&M costs were within 8 percent of the average operating cost per equivalent meter for Rancho's current customers, reflecting the relatively simpler infrastructure and maintenance requirements in the MSA. Against Rancho's request, LAFCO ultimately decided to use the original simplistic assumption as the basis for Rancho's projected O&M costs in the final report out of a reported concern over potentially delaying the completion of the final report.

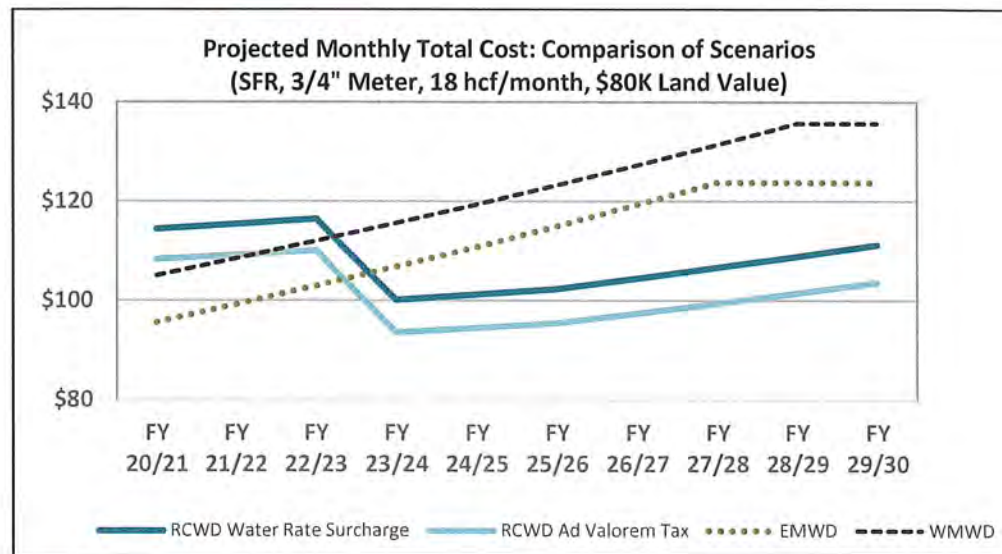
Attached as Exhibit A to this letter are the financial schedules and tables included in the Final Report revised to reflect the use of Rancho Water specific O&M costs, and the correspondingly significantly lower, required water rates for the Rancho Ownership Scenario. The updated FMSR model shows that Rancho would be able to lower average water rates from its current base line Santa Rosa Division water rates by 10 percent in the first year, another 25 percent in the fourth year, and then begin inflationary increases beginning in the seventh year, in order to meet the necessary target reserve levels by year ten. This results in Rancho Water having the lowest projected average total water costs for residential and commercial customers, for both the Ad Valorem and Water Rate Surcharge scenarios. Likewise, the Final Report already concluded that Rancho would have the lowest cost to new customers through development, due to its lower capacity fees. The updated rate projections reflecting Rancho Water specific O&M costs, as compared to what is in the Final Report, are shown on the next two pages.



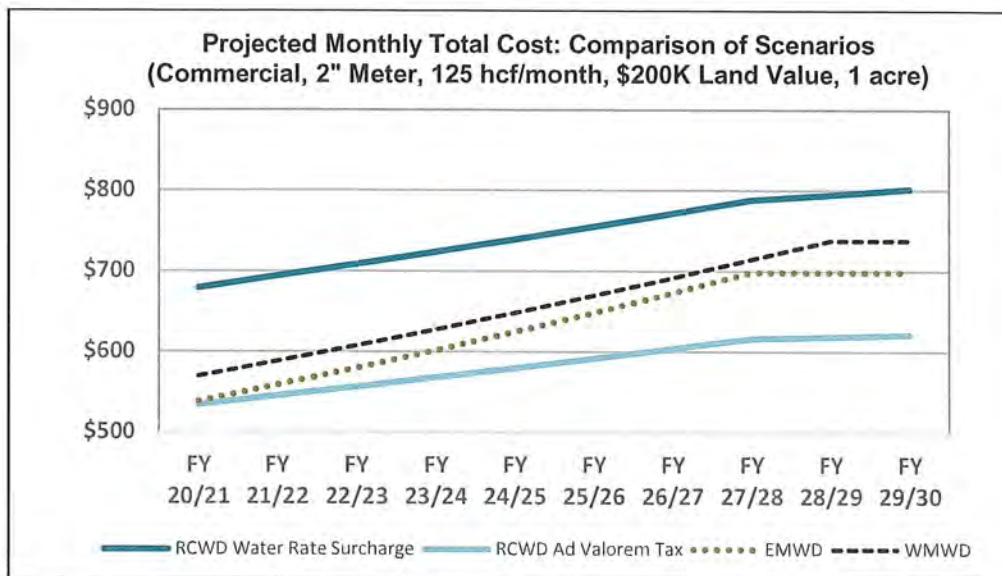
**Per LAFCO Final Report – Residential Customers – Average Monthly Costs**



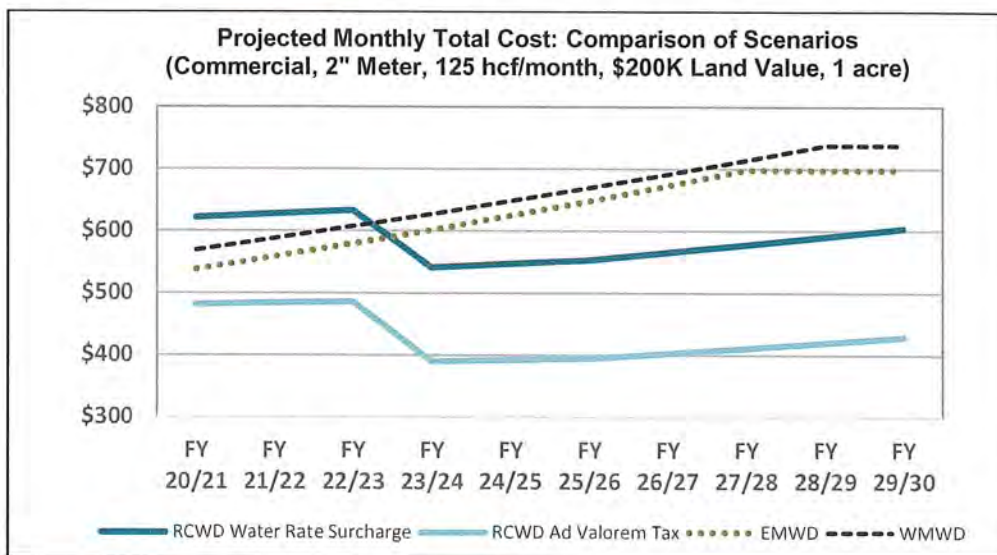
**Final Report with RCWD *Corrected* Projections – Residential Customers – Average Monthly Costs**



**Per LAFCO Final Report – Commercial Customers – Average Monthly Costs**



**Final Report with RCWD *Corrected* Projections – Commercial Customers – Average Monthly Costs**





This second set of comments focus on specific edits within the Final Report. These comments include the following:

- Figure 1-1 – Please note that there are a number of inaccuracies in this exhibit. This is typical of most of the exhibits. The exhibit shows wholesale/sewer boundaries and not retail boundaries, and is not labeled as such in the legend. A number of other exhibits conflate the two. Retail and wholesale service areas are different for the two agencies providing wholesale water from Metropolitan. Please correct on all exhibits. In addition, areas within the study area that are currently within the Rancho Water service area and sphere of influence should be labeled as such. C
- Section 1.0 Introduction and Background – Figure 1-1 and the paragraph describing the figure need to address that only parcels within Western's service area that paid the Metropolitan connection fee are eligible for service. Figure 1-1 should be adjusted to reflect that. D
- Section 1.2.2 Rancho California Water District, last sentence – grammatical error. E
- Section 1.2.3 Eastern Municipal Water District, second paragraph – it should be EMWD instead of RCWD in the last sentence. F
- Figure 2-1 – please see comment for Figure 1-1. The retail and wholesale/sewer areas for the providers are mixed up. Please only show retail service area. Areas in pink in the southern end should be yellow, as they are in RCWD's retail area not EMWD's. The same for some pink areas within the study area. G
- Figure 2-3 – the no data areas should be resolved to provide a complete understanding of areas that are within the Metropolitan wholesale delivery. H
- Section 7.2.7 Assessment Districts and Community Facility Districts – the proper name is Murrieta Creek, not Murrieta River. I
- Section 8.3.3.3 – There is a typo in the reference to repair and replacement costs. The figure should read \$540,000 not \$540,00. J
- Section 10.3 Total Cost to Ratepayers – Section references that EMWD existing and future customers would have lower rates; however, Figure 8-17 shows the RCWD Ad Valorem scenario with the lowest rates for commercial customers. K

Rancho Water appreciates this opportunity to provide comments on the Final Report. Please contact me at (951) 296-6935 if you should have any questions or need any additional information. L

Sincerely, M

**RANCHO CALIFORNIA WATER DISTRICT**



Richard R. Aragon

Interim Co-General Manager &

Assistant General Manager-CFO/Treasurer

cc: Eva Plajzer, Assistant General Manager-Engineering & Operations  
Jeff Kirshberg, Water Resources Manager



# Exhibit A to RCWD Comment Letter to LAFCO Re: Murrieta Study Area Municipal Service Review

Updated Financial Analysis - Per RCWD

RCWD Scenario

Table B-4 (Updated per RCWD Specific O&M Analysis)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

Table B-4a (Updated)  
RCWD SCENARIO: Projected Operating Statement: Sources of Funds

Line	Projected										Notes
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
1 Beginning Reserve Balance											
2 Working Capital	\$1,314,934	\$1,035,894	\$1,064,032	\$1,117,217	\$1,168,997	\$1,219,202	\$1,270,713	\$1,323,611	\$1,379,012	\$1,437,494	
3 Drought Reserve	\$0	\$289,160	\$351,529	\$364,162	\$374,616	\$387,248	\$399,010	\$411,642	\$424,274	\$434,881	
4 Rate Stabilization	\$0	\$0	\$798,024	\$837,913	\$876,748	\$914,402	\$953,035	\$992,708	\$1,034,259	\$1,078,120	
5 Water Replenishment: Not Applicable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
6 Risk Management	\$0	\$0	\$60,004	\$122,349	\$313,184	\$459,412	\$559,537	\$668,125	\$779,267	\$893,606	
7 Unrestricted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
8											
9 Sources of Funds											
10 Rate Revenues Under Existing Santa Rosa Division Rate Schedule											
11 Monthly Service Charges	\$1,862,904	1,893,067	1,923,719	1,954,867	1,986,520	2,018,867	2,051,741	2,085,151	2,119,104	2,153,610	
12 Commodity Charges	\$2,115,628	2,149,883	2,184,693	2,220,067	2,256,014	2,292,749	2,330,083	2,368,025	2,406,584	2,445,772	
13											
14 Additional Rate Revenues (Rate Increases for Monthly Service Charges and Commodity Charges)											
15 Fiscal Year											
16 % of Water Rate Revenue											
17 Months of Revenue											
18 FY 20/21	(397,853)	(404,295)	(410,841)	(417,493)	(424,253)	(431,162)	(438,182)	(445,318)	(452,569)	(459,938)	3
19 FY 21/22	0.0%	0	0	0	0	0	0	0	0	0	3
20 FY 22/23	0.0%	0	0	0	0	0	0	0	0	0	3
21 FY 23/24	25.0%	0	0	(939,360)	(954,570)	(970,114)	(985,911)	(1,001,964)	(1,018,280)	(1,034,861)	3
22 FY 24/25	0.0%	0	0	0	0	0	0	0	0	0	3
23 FY 25/26	0.0%	0	0	0	0	0	0	0	0	0	3
24 FY 26/27	2.0%	0	0	0	0	0	59,155	60,118	61,097	62,092	3
25 FY 27/28	2.0%	0	0	0	0	0	0	61,320	62,319	63,333	3
26 FY 28/29	2.0%	0	0	0	0	0	0	0	63,565	64,600	3
27 FY 29/30	2.0%	0	0	0	0	0	0	0	0	65,892	3
28 Total Additional Rate Revenue (Monthly Service Charges, Commodity Charges)	(\$397,853)	(\$404,295)	(\$410,841)	(\$1,356,853)	(\$1,378,823)	(\$1,401,276)	(\$1,364,938)	(\$1,325,844)	(\$1,283,868)	(\$1,238,882)	
29 Energy Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
30 Ad Valorem Equivalent Rate Surcharge (assume land values increases with inflation)	\$2,090,450	2,142,711	2,196,279	2,251,186	2,307,466	2,365,152	2,424,281	2,484,888	2,547,010	2,610,686	
31 Subtotal Rate Revenues	\$5,671,128	\$5,781,367	\$5,893,850	\$5,069,267	\$5,171,176	\$5,275,493	\$5,441,167	\$5,612,219	\$5,788,831	\$5,971,186	
32											
33 Non-Rate Revenue											
34 Non-Operating Revenues											
35 Property Tax (1% Share) Assume WMWD's small property tax revenue does not transfer	0	0	0	0	0	0	0	0	0	0	
36 Operating Revenues											
37 Interest Income	26,299	26,501	45,472	48,833	54,671	59,605	63,646	67,922	72,336	76,882	
38 Delinquent Penalties (Assumed Same as WMWD)	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	53,045	
39 Standby Charge Revenues	462,731	462,731	462,731	462,731	462,731	462,731	462,731	462,731	462,731	462,731	
40 Other - New Service Set Up & Meter Repair	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	4,244	
41 Other Revenues											
42 Connection Fees	166,322	173,145	177,474	184,711	189,329	197,004	204,945	210,068	216,489	226,127	
43 Total Non-Rate Revenue	\$712,640	\$719,666	\$742,965	\$753,563	\$764,019	\$776,629	\$788,610	\$798,010	\$810,844	\$823,029	
44											
45 Total Revenues	\$6,383,768	\$6,501,032	\$6,636,816	\$5,822,831	\$5,935,195	\$6,052,122	\$6,229,778	\$6,410,229	\$6,599,675	\$6,794,214	
46											
47											
48											

Note- Red text are updated inputs into the FMSR financial model based on RCWD's specific O&M cost projections.



Table B-4 (Updated per RCWD Specific O&M Analysis)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

Table B-4b (Updated)  
RCWD SCENARIO: Projected Operating Statement: Uses of Funds and Financial Performance Criteria

	Projected										Notes
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
49 Uses of Funds											
50 O&M Expenditures											1
51 Water Pumping	61,094	52,621	64,187	65,792	67,436	69,122	70,850	72,622	74,437	76,298	3
52 Transmission & Distribution	489,506	501,744	514,287	527,144	540,323	553,831	567,677	581,869	596,416	611,326	3
53 Customer Accounts	52,975	55,179	57,474	59,865	62,355	64,954	67,662	70,483	73,422	76,483	3
54 G&A Allocation	677,669	694,611	711,976	729,775	748,020	766,720	785,888	805,535	825,674	846,316	3
55 Engineering OH Allocation	112,474	115,288	118,168	121,122	124,150	127,254	130,435	133,696	137,039	140,465	3
56											
57 Other Expenditures											
58 Purchased Water	\$1,136,889	\$1,240,134	\$1,349,234	\$1,452,788	\$1,550,253	\$1,650,218	\$1,752,904	\$1,861,616	\$1,978,049	\$2,106,981	8
59 Source of Supply	400,963	341,297	349,829	358,575	367,539	376,728	386,146	395,800	405,695	415,837	3
60 Treatment	133,284	136,616	140,031	143,532	147,120	150,798	154,568	158,432	162,393	166,453	9
61 Water Use Efficiency	42,828	44,609	46,465	48,398	50,411	52,513	54,702	56,983	59,358	61,833	3
62 Other Non-Operating Expenses	0	0	0	0	0	0	0	0	0	0	3
63											
64 Other Expenditures											
65 WMWD Identified Capital Project Funding (GIS Mapping and Tank Mixing System)	\$500,000	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
66 WMWD-Identified Capital Project Funding (Reservoir Recoating)	\$0	\$0	\$1,100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
69 Study Area Repair and Replacement	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	4
70 RCWD "Backbone" Repair and Replacement	407,980	414,587	421,300	428,122	435,054	442,138	449,338	456,654	464,090	471,647	5
71 FMSR Capital Excluding Improvement Districts	\$1,857,986	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	6
72											
73 Total Uses of Funds	\$6,373,648	\$5,552,497	\$6,468,765	\$5,530,926	\$5,688,475	\$5,850,091	\$6,015,986	\$6,189,504	\$6,372,386	\$6,569,452	
74											
75 End of Year Balance											
76 Working Capital	\$1,035,894	\$1,064,032	\$1,117,217	\$1,168,997	\$1,219,202	\$1,270,713	\$1,323,611	\$1,379,012	\$1,437,494	\$1,500,664	
77 Drought Reserve	\$289,160	\$351,529	\$364,162	\$374,616	\$387,248	\$399,010	\$411,642	\$424,274	\$434,881	\$445,753	
78 Rate Stabilization	\$0	\$798,024	\$837,913	\$876,748	\$914,402	\$953,035	\$992,708	\$1,034,259	\$1,078,120	\$1,125,498	
79 Water Replenishment: Not Applicable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
80 Risk Management	\$0	\$60,004	\$122,349	\$313,184	\$459,412	\$559,537	\$668,125	\$779,267	\$893,606	\$895,951	
81 Unrestricted	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,998	
82 Math Check, should equal \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
83											
84 Financial Performance Criteria											
85 Working Capital Reserve: Four Months of Operating Budget Within Five Years											
86 Criteria, \$	\$1,035,894	\$1,064,032	\$1,117,217	\$1,168,997	\$1,219,202	\$1,270,713	\$1,323,611	\$1,379,012	\$1,437,494	\$1,500,664	
87 Reserve Criteria Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
88 Drought Reserve: 30% of Local Supplies @MWD Tier 1 Untreated Rate Effective at End of FY											7
89 Criteria, \$	\$340,204	\$351,529	\$364,162	\$374,616	\$387,248	\$399,010	\$411,642	\$424,274	\$434,881	\$445,753	
90 Reserve Criteria Met?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
91 Rate Stabilization Fund: Three Months of Operating Budget Within Ten Years											
92 Criteria, \$	\$776,921	\$798,024	\$837,913	\$876,748	\$914,402	\$953,035	\$992,708	\$1,034,259	\$1,078,120	\$1,125,498	
93 Reserve Criteria Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
94 Water Replenishment Reserve: not applicable per RWS 1/22/2020											
95 Reserve Criteria Met?											
96 Risk Management Reserve: \$750,000 plus 1% of current gross plant											
97 Criteria, \$	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	\$895,951	
98 Reserve Criteria Met?	No	No	No	No	No	No	No	No	No	Yes	
99											

Table B-4 (Updated per RCWD Specific O&M Analysis)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

100 Table B-4a and A-5b Notes:

101 (1) Source: Western Municipal Water District FY 2020 for the expenses in this table except for purchased water.

102 (2) Debt service payments under a WMWD Scenario will be discontinued under a RCWD scenario because WMWD's outstanding debt will be refunded as part of a service area transfer.

103 (3) Data revised per focused analysis on RCWD specific Operations & Maintenance (O&M) Expenses. Corresponding rate increases adjusted to reflect lower O&M costs while still meeting reserve target requirements. Analysis based on RCWD specific staffing needs, payroll and benefit costs, and overhead allocations.

104 (4) Estimated, starting FY 20/21, per WMWD 2/5/2020. FY 20/21 and 21/22 WMWD-identified capital expenses also represent repair/replacement expenditures.

105 (5) Represents repair/replacement expenditures in RCWD's system that will provide water source, storage, and transmission services to the Study Area. Updated in RCWD specific analysis to reflect O&M and capital replacement rate of \$0.40 per HCF of demand.

106 (6) See Table B-4d for more details.

107 (7) Criteria for Drought Reserve per RCWD staff, January 22, 2020.

108 (8) Purchased Water = MWD Tier 1 Rate \* 1.1 \* Imported AF/Year. 10% factor for MWD Capacity and RT5 Charges, based on review of EMWD's charges to WMWD

Table B-4c (Updated)  
RCWD SCENARIO: Revenue Calculations

This Table Contains:

Line Number	Subject
109	Number of Connections per Meter Size (See Table B-2)
118	Comparison of RCWD and WMWD Budget-Based Rate Tiers
137	Projected Water Use by RCWD Tier, ccf/year (See Table B-2), All Customers Except CII (Commercial, Industrial, Institutional)
158	FY 19/20 Rate Revenue Backcalculation Under RCWD's Santa Rosa Rate Schedule
212	RCWD Adopted Water Rates Through FY 19/20, and Projected Rates through FY 29/30. Projected Based on % increases in Operating Statement Shown Above.
237	Existing Santa Rosa Division Capacity Charge Schedule
253	Projected Capacity Charge Revenues
277	Projected Standby Charge Revenues
287	Projected Ad Valorem Tax Revenues and Projected Revenue-Neutral Rate Surcharge Calculation
337	Projected Reserve Balance Transferred From WMWD to RCWD

		Projected										
		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
109	Number of Connections per Meter Size (See Table B-2)											
110	5/8"	482	490	498	506	514	522	530	538	546	554	563
111	3/4"	1,968	1,999	2,031	2,063	2,096	2,129	2,163	2,198	2,233	2,269	2,305
112	1"	172	175	178	181	184	187	190	193	196	199	202
113	1.5"	77	79	81	83	85	87	89	91	93	95	97
114	2"	161	164	167	170	173	176	179	182	185	188	191
115	3"	5	5	5	5	5	5	5	5	5	5	5
116	4"	2	2	2	2	2	2	2	2	2	2	2

118 Comparison of RCWD and WMWD Budget-Based Rate Tiers

119 - WMWD has five tiers, RCWD has four tiers. For CII, WMWD has five tiers, RCWD has three. Projecting revenues from Santa Rosa Division rates requires estimating water sales by RCWD tiers.

120 - Over 60% of Murrieta Division Water Use is Single-Family. A comparison of tier definitions is as follows:

121 - Also, from Table B-2, 91% of Murrieta Division water use is in either Tier 1 or Tier 2

122

Tier	WMWD SFR	RCWD SFR
125 Tier 1	100% IWB	100% IWB
126 Tier 2	100% OWB	100% OWB
127 Tier 3	25% TWB	50% TWB
128 Tier 4	25% TWB	Above Tier 3
129 Tier 5	Above Tier 4	

130

131 SFR Conclusions:

132 RCWD Tier 1 Use = WMWD Tier 1 Use

133 RCWD Tier 2 Use = WMWD Tier 2 Use

134 RCWD Tier 3 Use = WMWD Tier 3 + Tier 4 Use

135 RCWD Tier 4 Use = WMWD Tier 4 Use

136

WMWD CII	RCWD CII
125 43% TWB	100% AWB
126 57% TWB	50% AWB
127 25% TWB	Above Tier 2
128 25% TWB	
129 Above Tier 4	

CII (Commercial, Industrial, Institutional) Conclusions:

RCWD Tier 1 Use = WMWD Tier 1 + Tier 2 Use

RCWD Tier 2 Use = WMWD Tier 3 + Tier 4 Use

RCWD Tier 3 Use = WMWD Tier 5 Use

Table B-4 (Updated per RCWD Specific O&M Analysis)  
 RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
 RCWD SCENARIO TABLES

137 Projected Water Use by RCWD Tier, ccf/year (See Table B-2), All Customers Except CII (Commercial, Industrial, Institutional)

		Projected										
		FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
139												
140	Tier 1	399,486	405,954	412,527	419,206	425,994	432,892	439,941	447,105	454,385	461,784	469,303
141	Tier 2	414,102	420,807	427,621	434,545	441,581	448,731	456,038	463,464	471,011	478,681	486,476
142	Tier 3	52,414	53,263	54,125	55,001	55,892	56,797	57,722	58,662	59,617	60,588	61,575
143	Tier 4	33,598	34,142	34,695	35,257	35,828	36,408	37,001	37,604	38,216	38,838	39,470
144	Total	899,600	914,166	928,968	944,003	959,295	974,828	990,702	1,006,835	1,023,229	1,039,891	1,056,824

147 Projected Water Use by RCWD Tier, ccf/year (See Table B-2), CII

148			Projected										
149			FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
150	Tier 1		92,412	93,909	95,430	96,975	98,545	100,141	101,772	103,429	105,113	106,825	108,564
151	Tier 2		7,886	8,013	8,143	8,275	8,409	8,545	8,684	8,825	8,969	9,115	9,263
152	Tier 3		3,802	3,863	3,926	3,990	4,055	4,121	4,188	4,256	4,325	4,395	4,467
153	Total		104,100	105,785	107,499	109,240	111,009	112,807	114,644	116,510	118,407	120,335	122,294

155 Total Murrieta Division Water Use 1,003,700 1,019,951 1,036,467 1,053,249 1,070,304 1,087,635 1,105,346 1,123,345 1,141,636 1,160,226 1,179,118

158 FY 19/20 Rate Revenue Backcalculation Under RCWD's Santa Rosa Rate Schedule

159	Effective	
	7/1/2019	
160	Monthly Service Charge	
161	5/8" Meter	\$29.51 Per RCWD 1/22/2020: RCWD doesn't have this charge because they don't use 5/8" meters. They would scale the 3/4" charge per their meter equivalent ratio.
162	3/4" Meter	\$44.04
163	1" Meter	\$66.49
164	1.5" Meter	\$117.50
165	2" Meter	\$180.79
166	3" Meter	\$532.49
167	4" Meter	\$1,047.78
168	6" Meter	\$1,669.23
169	8" Meter or Larger	\$2,358.21

171 Source: Rancho California Water District: Customer Guide Rates & Charges 2019-2020

172	Monthly Service Charge Revenues	FY 19/20
174	5/8" Meter	\$170,667
175	3/4" Meter	\$1,040,049
176	1" Meter	\$137,235
177	1.5" Meter	\$108,570
178	2" Meter	\$349,286
179	3" Meter	\$31,949
180	4" Meter	\$25,147
181	Total	\$1,862,904

Table B-4 (Undated per RCWD Specific O&M Analysis)  
 RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
 RCWD SCENARIO TABLES

184 Commodity Charge and Pumping Charges (\$ per HCF, 1 HCF = 748 gallons)

185 Assume that standard rates apply, as Tier 1 water will be available from MWD via the MWD wholesaler (EMWD)

	Effective 7/1/2019	
	Standard	Pre & Post 2003 Annex
190 Residential, Multi-Family & Landscape		
191 Tier 1	\$1,286	\$2,548
192 Tier 2	\$2,255	\$2,548
193 Tier 3	\$3,235	\$3,235
194 Tier 4	\$7,597	\$7,597
195 Commercial, Industrial, Ag, Domestic, and Other		
196 Tier 1	\$2,044	\$2,548
197 Tier 2	\$3,235	\$3,235
198 Tier 3	\$7,597	\$7,597

199 Energy Rates: Assume Most of System is RCWD 1305 with no energy charge zone

200 Source: Rancho California Water District: Customer Guide Rates & Charges 2019-2020

	FY 19/20 All Customers Except CHI	FY 19/20 CHI
204 Commodity Charge Revenues		
205 Tier 1	\$513,739	\$188,891
206 Tier 2	933,800	25,510
207 Tier 3	169,560	28,883
208 Tier 4	255,245	N/A
209 Subtotal Commodity Charge Revenues	\$1,872,344	\$243,284

210  
211  
212 RCWD Adopted Water Rates Through FY 19/20, and Projected Rates through FY 29/30. Projected Based on % Increases in Operating Statement Shown Above.

	Adopted	Projected									
	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
216 Monthly Service Charge											
217 5/8" Meter	\$29.51	\$26.56	\$26.56	\$26.56	\$19.92	\$19.92	\$19.92	\$20.32	\$20.72	\$21.14	\$21.56
218 3/4" Meter	\$44.04	\$39.64	\$39.64	\$39.64	\$29.73	\$29.73	\$29.73	\$30.32	\$30.93	\$31.55	\$32.18
219 1" Meter	\$66.49	\$59.84	\$59.84	\$59.84	\$44.88	\$44.88	\$44.88	\$45.78	\$46.69	\$47.63	\$48.58
220 1.5" Meter	\$117.50	\$105.75	\$105.75	\$105.75	\$79.31	\$79.31	\$79.31	\$80.90	\$82.52	\$84.17	\$85.85
221 2" Meter	\$180.79	\$162.71	\$162.71	\$162.71	\$122.03	\$122.03	\$122.03	\$124.47	\$126.96	\$129.50	\$132.09
222 3" Meter	\$532.49	\$479.24	\$479.24	\$479.24	\$359.43	\$359.43	\$359.43	\$366.62	\$373.95	\$381.43	\$389.06
223 4" Meter	\$1,047.78	\$943.00	\$943.00	\$943.00	\$707.25	\$707.25	\$707.25	\$721.40	\$735.82	\$750.54	\$765.55
224											
225 Commodity Charge											
226 Residential, Multi-Family & Landscape											
227 Tier 1	\$1,286	\$1,157	\$1,157	\$1,157	\$0,868	\$0,868	\$0,868	\$0,885	\$0,903	\$0,921	\$0,940
228 Tier 2	\$2,255	\$2,030	\$2,030	\$2,030	\$1,522	\$1,522	\$1,522	\$1,553	\$1,584	\$1,615	\$1,648
229 Tier 3	\$3,235	\$2,912	\$2,912	\$2,912	\$2,184	\$2,184	\$2,184	\$2,227	\$2,272	\$2,317	\$2,364
230 Tier 4	\$7,597	\$6,837	\$6,837	\$6,837	\$5,128	\$5,128	\$5,128	\$5,231	\$5,335	\$5,442	\$5,551
231 Commercial, Industrial, Ag, Domestic, and Other											
232 Tier 1	\$2,044	\$1,840	\$1,840	\$1,840	\$1,380	\$1,380	\$1,380	\$1,407	\$1,435	\$1,464	\$1,493
233 Tier 2	\$3,235	\$2,912	\$2,912	\$2,912	\$2,184	\$2,184	\$2,184	\$2,227	\$2,272	\$2,317	\$2,364
234 Tier 3	\$7,597	\$6,837	\$6,837	\$6,837	\$5,128	\$5,128	\$5,128	\$5,231	\$5,335	\$5,442	\$5,551



Table B-4 (Updated per RCWD Specific O&M Analysis)  
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 RCWD SCENARIO TABLES

## 237 Existing Santa Rosa Division Capacity Charge Schedule

Capacity Charge	Santa Rosa District 7/1/2019	Projected									
		FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
5/8" Meter	\$1,700	\$1,742.50	\$1,786.06	\$1,830.71	\$1,876.48	\$1,923.39	\$1,971.48	\$2,020.77	\$2,071.28	\$2,123.07	\$2,176.14
3/4" Meter	\$2,537	\$2,600.43	\$2,665.44	\$2,732.07	\$2,800.37	\$2,870.38	\$2,942.14	\$3,015.70	\$3,091.09	\$3,168.37	\$3,247.57
1" Meter	\$4,313	\$4,420.83	\$4,531.35	\$4,644.63	\$4,760.74	\$4,879.76	\$5,001.76	\$5,126.80	\$5,254.97	\$5,386.35	\$5,521.00
1.5" Meter	\$8,372	\$8,581.30	\$8,795.85	\$9,015.73	\$9,241.12	\$9,472.15	\$9,708.95	\$9,951.68	\$10,200.47	\$10,455.48	\$10,716.87
2" Meter	\$13,445	\$13,781.13	\$14,125.65	\$14,478.79	\$14,840.76	\$15,211.78	\$15,592.08	\$15,981.88	\$16,381.43	\$16,790.96	\$17,210.74
2" Turbine Meter	\$25,367	\$26,001.18	\$26,651.20	\$27,317.48	\$28,000.42	\$28,700.43	\$29,417.94	\$30,153.39	\$30,907.23	\$31,679.91	\$32,471.90
3" Meter	\$42,363	\$43,422.08	\$44,507.63	\$45,620.32	\$46,760.83	\$47,929.85	\$49,128.09	\$50,356.29	\$51,615.20	\$52,905.58	\$54,228.22
4" Meter	\$84,471	\$86,582.78	\$88,747.34	\$90,966.03	\$93,240.18	\$95,571.18	\$97,960.46	\$100,409.47	\$102,919.71	\$105,492.70	\$108,130.02
6" Meter	\$135,204	\$138,584.10	\$142,048.70	\$145,599.92	\$149,239.92	\$152,970.92	\$156,795.19	\$160,715.07	\$164,732.95	\$168,851.27	\$173,072.55
8" Meter or Larger	\$191,518	\$196,305.95	\$201,213.60	\$206,243.94	\$211,400.04	\$216,685.04	\$222,102.16	\$227,654.72	\$233,346.09	\$239,179.74	\$245,159.23

## 253 Projected Capacity Charge Revenues

255			Projected										
256			FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
257	Number of New Meters												
258	5/8"	8	8	8	8	8	8	8	8	8	8	8	9
259	3/4"	31	31	32	32	33	33	34	35	35	36	36	36
260	1"	3	3	3	3	3	3	3	3	3	3	3	3
261	1.5"	2	2	2	2	2	2	2	2	2	2	2	2
262	2"	3	3	3	3	3	3	3	3	3	3	3	3
263	3"	0	0	0	0	0	0	0	0	0	0	0	0
264	4"	0	0	0	0	0	0	0	0	0	0	0	0
265	Total	47	47	48	48	49	49	50	51	51	52	52	53

## 267 Projected Capacity Charge Revenues

5/8"	\$13,940	\$14,289	\$14,646	\$15,012	\$15,387	\$15,772	\$16,166	\$16,570	\$16,985	\$17,585
3/4"	\$80,613	\$85,294	\$87,426	\$92,412	\$94,723	\$100,033	\$105,549	\$108,188	\$114,061	\$116,913
1"	\$13,262	\$13,594	\$13,934	\$14,282	\$14,639	\$15,005	\$15,380	\$15,765	\$16,159	\$16,563
1.5"	\$17,163	\$17,592	\$18,031	\$18,482	\$18,944	\$19,418	\$19,903	\$20,401	\$20,911	\$21,434
2"	\$41,343	\$42,377	\$43,436	\$44,522	\$45,635	\$46,776	\$47,946	\$49,144	\$50,373	\$51,642
3"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4"	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$166,322	\$173,145	\$177,474	\$184,711	\$189,329	\$197,004	\$204,945	\$210,068	\$218,489	\$226,127

## 277 Projected Standby Charge Revenues

Methodology:	RCWD Standby Charge Revenue = WMWD Standby Charge Revenue * (RCWD Standby Fee / WMWD Standby Fee)
	\$138,978 WMWD Standby Charge Revenue (Source: WMWD CY 2020 Water Rate Model)
	\$21 WMWD Standby Charge, \$/acre or \$/parcel if less than one acre (Source: 5/15/19 letter from WMWD GM to WMWD Board)
	\$69.92 RCWD Standby Charge, \$/acre or \$/parcel if less than one acre (Source: RCWD Customer Guide - Rates & Charges)
	\$462,730.56 RCWD Standby Charge Revenue

Table B-4 (Updated per RCWD Specific O&M Analysis)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

# 287 Projected Ad Valorem Tax Revenues and Projected Revenue-Neutral Rate Surcharge Calculation

288 Methodology: Ad Valorem Tax Revenue = Ad Valorem Rate \* Assessed Value of Land. Ad valorem tax applied to entirety of service area, regardless of whether it is served by RCWD or not.

289 \$0.50 Ad Valorem Rate, \$/ \$100 assessed land value (Source: RCWD Customer Guide - Rates & Charges)  
290 \$407,892,695 Assessed Value of Land (Source: City of Murrieta, spreadsheet filename StudyAreaLandValue20190423, analyzed by West Yost to include customers served by WMWD)  
291  
292  
293 \$2,039,463 Annual Ad Valorem Tax Revenue

## 294 Check of Water Rate Revenues and Ad Valorem Revenues from RCWD (Entire District and Santa Rosa Division) to compare magnitude of Ad Valorem vs. water rates

Water Rate Revenue (Santa Rosa Rates Applied to Murrieta Study Area)		FY 19/20 Budget	Entire RCWD District
Monthly Service Charge	\$1,862,904	Water Revenue + Monthly Service Charges	\$61,973,719 pdf page 61
Commodity Charge	\$1,717,775	Reclass from Non-Operating	\$10,381,868 pdf page 61
Standby Charge	\$462,731	Energy Charges	\$3,010,786 pdf page 64
Total	\$4,043,409	Advalorem Assessments	\$25,957,000 page 213
		1% Assessments	\$17,951,900 District's share of the 1% property tax that is levied by the County based on land value and distributed to agencies
		FY 19/20 Budget	Santa Rosa Division
		Water Revenue + Monthly Service Charges	\$27,969,071 page 67
		Reclass from Non-Operating	\$3,909,256 page 67
		Energy Charges	\$1,735,144 page 67
		Advalorem Assessments	\$8,834,000 page 213
		1% Assessments	\$2,741,100 District's share of the 1% property tax that is levied by the County based on land value and distributed to agencies

314 Conclusion: in the Murrieta Study Area, ad valorem revenues would be about 87% of monthly service charge + commodity charge revenues.  
315 In RCWD's Santa Rosa Division, ad valorem revenues are ~1/3 of water rate revenues. RCWD district as a whole, ad valorem revenues are ~40% of water rate revenues.  
316 Why for Murrieta Study Area are ad valorem revenues a higher % of water rate revenues than in the RCWD service area? Is there more land value in the Murrieta Study Area that is  
317 not connected to the water system? Thereby subject to an ad valorem fee but not paying water rates?

## 318 Calculation of Revenue-Neutral Rate Surcharge

319 Note: In the event an ad valorem tax is not adopted, RCWD staff indicated that RCWD would adopt a revenue-neutral rate surcharge. Any such decision is a policy  
320 decision that must be made by the RCWD Board of Directors, and that decision has not yet been made. For the purposes of this analysis, RCWD staff indicated that a revenue-neutral rate surcharge would be  
321 charged to water system customers.

322 \$0.50 Ad Valorem Rate, \$/ \$100 assessed land value (Source: RCWD Customer Guide - Rates & Charges)  
323 \$407,892,695 Assessed Value of Land by Customers Currently Served by WMWD (Source: City of Murrieta, spreadsheet filename StudyAreaLandValue20190423, as analyzed by West Yost)  
324  
325  
326  
327  
328 \$2,039,463 Annual Ad Valorem Tax Revenue from Customers Currently Served by WMWD

Monthly Service Charge Revenue	\$1,862,904
Commodity Charge Revenues	\$1,717,775
Ad Valorem Tax Revenue as a % of Monthly Service Charge and Commodity Charge Revenue	56.96% this is the percentage that Monthly Service Charges and Commodity Charges would need to go up
Ad Valorem Tax Revenue as a % of Monthly Service Charge Revenue	109.48% this is the percentage that Monthly Service Charges would need to go up (surcharge not applied to Commodity Ch

Table B-4 (Updated per RCWD Specific O&M Analysis)  
 RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
 RCWD SCENARIO TABLES

## 337 Projected Reserve Balance Transferred From WMWD to RCWD

338

339 Methodology: value of projected WMWD reserves as of 7/1/20, less outstanding debt principal.

340

## 341 Projected WMWD Reserves as of 7/1/20

342 WMWD Fund 230	\$2,493,163
343 WMWD Fund 231	(5820,381)
344 WMWD Fund 233	\$261,943
345 WMWD Fund 235	\$2,378,668
346 Less Outstanding Debt	(998,460) Source: WMWD
347 Less Outstanding Interfund Loan	(2,000,000) Source: WWMWD
348 Total	\$1,314,934

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Table B-4d (Updated)  
 RCWD SCENARIO: FSMR Capital Improvements and Possible Cost Allocation to Existing Customers or Future Development

Project	Estimated Cost, 2020 \$ (See Note 1)	Benefits Existing Customers or Development?	\$ to Existing Customers	\$ to Future Development Funded by RCWD	Funded by Developers or Imp. District	Basis for Existing/ Development Allocation	Projected Schedule
351 Buy-In to RCWD for Existing Customers (Note 2)	\$9,659,628	Existing Only	\$9,659,628			Note 3	
352 Expansion CIP North of Murrieta Creek	\$17,120,000	Future Only			\$17,120,000	Note 4	Note 4
353 Expansion CIP South of Murrieta Creek	\$20,388,000	Future Only			\$20,388,000	Note 4	Note 4
354 RCWD Hydraulic Improvement	\$2,255,000	Future Only		\$2,255,000		Note 5	Note 8
355 Not Used. Previously Supply Improvements Through RCWD	\$0	Future Only				Note 5	Note 8
356 Legacy (Small Diameter) Improvements	\$4,947,000	Existing Only	\$4,947,000			Note 6	Note 8
357 Meter conversion to AMI	\$1,243,507	Existing Only	\$1,243,507			Note 10	Note 10
358 Total	\$55,613,135		\$15,850,135	\$2,255,000	\$37,508,000		
359 New Well No. 3, Not Included in Infrastructure Review	\$0		\$0	\$0		Note 9	

## 364 Notes:

365 (1) Source: West Yost, October 2019

366 (2) RCWD anticipates requiring existing Murrieta Study Area customers to buy into RCWD facilities, including storage facilities, distribution facilities,

367 and accessing MWD connections. This buy-in eliminates the need to separately build storage. Calculation of the buy-in is as follows (effective 7/1/19 to 6/30/2020):

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Meter Size	Number of Connections	Capacity Fee per Connection	Buy-In Charge
5/8"	482	\$1,700	\$819,400
3/4"	1,968	\$2,537	\$4,992,816
1"	172	\$4,313	\$741,836
1.5"	77	\$8,372	\$644,644
2"	161	\$13,445	\$2,164,645
3"	5	\$25,367	\$126,835
4"	4	\$42,363	\$169,452
Total			\$9,659,628

380 (3) No cost is assigned to future development. Storage needs for future development will be provided by RCWD and funded via Capacity Fees paid by future development.

381 (4) Expansion of water system. Project is not needed unless there is development. Schedule depends on when development occurs.

382 (5) Needed to accommodate future water demands from growth. Project is not needed unless there is development.

383 (6) These improvements are required even if there is no future development. Assume improvements will be completed between 2020 and 2025.

384 (7) Schedule depends on development, but assume improvements will be completed between 2020 and 2025.

385 (8) Assume improvements will be completed between 2020 and 2025.

386 (9) Project identified by WMWD but RCWD would not complete this project (RCWD, 2/18/2020). However, since the local water production is increased, it is assumed

387 for the purposes of this analysis that RCWD would in fact include this project.

388 (10) Updated per RCWD specific O&amp;M analysis. Additional project to upgrade all meters to remote reading technology to be on par with RCWD current customers and allow for customer access to water usage data on "MyWaterTracks"

389 and more efficient billing. Assumed would be done in first year.

Table B-4 (Updated per RCWD Specific O&M Analysis)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

Table B-4e (Updated)  
RCWD SCENARIO: Potential Pay-As-You-Go Capital Expenses and Potential Debt Service Expenses

	Potential Funding Method (1)	Projected										Note
		FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	
Infrastructure Review Projects + RCWD System Buy-In + New Well No. 3												
388 Buy-In to RCWD for Existing Customers	Debt	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	\$614,479	2
389 Expansion CIP North of Murrieta Creek	Developer or Improvement District											1
390 Expansion CIP South of Murrieta Creek	Developer or Improvement District											1
391 RCWD Hydraulic Improvement	Debt		\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	\$150,710	3
392 Not Used. Previously Supply Improvements Through RCWD	Pay-As-You-Go	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	3
393 Legacy (Small Diameter) Improvements	Debt		\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	\$330,625	4
394 Meter conversion to AMI	Pay-As-You-Go	\$1,243,507	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	5
395 Total		\$1,857,986	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	\$1,095,814	

(1) Decisions on how to fund improvement projects would be made by the RCWD Board of Directors. Information is provided here to indicate a potential funding method, and is subject to review and modification by RCWD staff and/or Board.

Use of improvement districts is listed as a potential source for Expansion CIP projects based on input from staff.

(2) Assumes 30 year debt at interest rate of 4%, starting in FY 25/26, with 10% added to project cost to cover capitalized bond reserve and issuance costs. Project cost escalated for inflation from 2019 dollars to 2025 dollars.

(3) Project cost spread evenly between FY 20/21 and FY 24/25 and adjusted for inflation. Supply Improvements Through RCWD No Longer Proposed, due to RCWD's Opinion that Pipe Velocities Without This Improvement Being Acceptable.

(4) Assumes 30 year debt at interest rate of 4%, starting in FY 21/22, with 10% added to project cost to cover capitalized bond reserve and issuance costs. Project cost escalated for inflation from 2019 dollars to 2021 dollars, except New Well 3 (FY 23/24 \$)

(5) Updated per RCWD specific O&M analysis. Additional project to upgrade all meters to remote reading technology to be on par with RCWD current customers and allow for customer access to water usage data on "MyWaterTracker" and more efficient billing.

Table B-4f (Updated)  
RCWD SCENARIO: Potential Capital Funding for Facilities That Benefit Future Development

FMSR Capital Projects	How Growth Pays for Growth
396 Expansion CIP North of Murrieta Creek	Developer or Improvement District
397 Expansion CIP South of Murrieta Creek	Developer or Improvement District
398 Hydraulic Improvement, Pipelines	RCWD funds project; cost incorporated into Connection Fee. Future development pays Connection Fees.
399 Hydraulic Improvement, VFD @ Alton BPS	RCWD funds project; cost incorporated into Connection Fee. Future development pays Connection Fees.
400 Supply Improvements Through RCWD	Not Applicable. No Supply Improvements Needed
401 Fireflow Improvements	Not applicable. Not growth related



Table B-4 (Updated per RCWD Specific O&M Analysis)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
RCWD SCENARIO TABLES

Table B-4g (Updated)  
RCWD Scenario: Projected Total Water Cost Calculation

	Projected										Notes
	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	1, 2, 3
402 Single Family Residence (3/4" Meter; 18 ccf/month; \$80,000 land value)											
403 Monthly Service Charge	\$39.64	\$39.64	\$39.64	\$29.73	\$29.73	\$29.73	\$30.32	\$30.93	\$31.55	\$32.18	
404 Tier 1 Commodity Charge, \$/hcf	\$1.16	\$1.16	\$1.16	\$0.87	\$0.87	\$0.87	\$0.89	\$0.90	\$0.92	\$0.94	
405 Tier 2 Commodity Charge, \$/hcf	\$2.03	\$2.03	\$2.03	\$1.52	\$1.52	\$1.52	\$1.55	\$1.58	\$1.62	\$1.65	
406											
407 Monthly Water Bill (Service Charge + 8*Tier 1 Charge + 10*Tier 2 Charge)	\$69.19	\$69.19	\$69.19	\$51.89	\$51.89	\$51.89	\$52.93	\$53.99	\$55.07	\$56.17	
408											
409 Standby Charge, \$/month	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	
410											
411 Ad Valorem Tax Calculation											
412 Valuation (FY 20/21 Dollars, Adjusted for Inflation in Subsequent Years)	\$80,000	\$82,000	\$84,050	\$86,151	\$88,305	\$90,513	\$92,775	\$95,095	\$97,472	\$99,909	
413 Annual Ad Valorem Rate (\$ per \$100 land value)	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
414 Ad Valorem Tax per Month	\$33.33	\$34.17	\$35.02	\$35.90	\$36.79	\$37.71	\$38.66	\$39.62	\$40.61	\$41.63	
415											
416 Revenue Neutral Rate Surcharge											
417 % Rate Surcharge (applied to FY 19/20 Bill)	\$6.96%										
418 \$ Rate Surcharge (55.42% of FY 19/20 Monthly Bill, Increased for Inflation in Subsequent Yrs)	\$39.41	\$40.39	\$41.40	\$42.44	\$43.50	\$44.59	\$45.70	\$46.84	\$48.02	\$49.22	
419 Inflation is due to projected inflationary increase in property values											
420											
421 Commercial Account (2" Meter; 125 ccf/month; \$200,000 land value, 1 acre)											2, 4, 5
422 Monthly Service Charge, \$/month	\$162.71	\$162.71	\$162.71	\$122.03	\$122.03	\$122.03	\$124.47	\$126.96	\$129.50	\$132.09	
423 Tier 1 Commodity Charge, \$/hcf	\$1.84	\$1.84	\$1.84	\$1.38	\$1.38	\$1.38	\$1.41	\$1.44	\$1.46	\$1.49	
424 Monthly Water Bill (Service Charge + 100*Tier 1 Charge)	\$392.66	\$392.66	\$392.66	\$294.50	\$294.50	\$294.50	\$300.39	\$306.39	\$312.52	\$318.77	
425											
426 Standby Charge, \$/month	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	\$5.83	
427											
428 Ad Valorem Tax Calculation											
429 Valuation (FY 20/21 Dollars, Adjusted for Inflation in Subsequent Years)	\$200,000	\$205,000	\$210,125	\$215,378	\$220,763	\$226,282	\$231,939	\$237,737	\$243,681	\$249,773	
430 Annual Ad Valorem Rate (\$ per \$100 land value)	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	
431 Ad Valorem Tax per Month	\$83.33	\$85.42	\$87.55	\$89.74	\$91.98	\$94.28	\$96.64	\$99.06	\$101.53	\$104.07	
432											
433 Revenue Neutral Rate Surcharge											
434 % Rate Surcharge (applied to FY 19/20 Bill)	\$6.96%										
435 \$ Rate Surcharge (89.32% of FY 19/20 Monthly Bill, Increased for Inflation in Subsequent Yrs)	\$223.65	\$229.24	\$234.97	\$240.85	\$246.87	\$253.04	\$259.37	\$265.85	\$272.50	\$279.31	

## Notes:

- (1) Both RCWD and WMWD use budget based rates. For single-family residences, of the 18 ccf/month use, estimate 8 ccf/month in Tier 1 and remainder of water use in Tier 2. No Tier 3 or Tier 4 use.  
For the commercial account example, 1,500 ccf/year (125 ccf/month) is the average water use for WMWD's customers in the Study Area with 2" meters, as reported by WMWD (1/21/2020).
- (2) RCWD adjusts rates on July 1 of each year. The monthly bills shown in this table are for the entire fiscal year.
- (3) \$80,000 is used as an example land value for single-family residences based on qualitative review of assessor data provided by the City of Murrieta.
- (4) WMWD and RCWD have different tier structures for non-residential customers. For RCWD, all water use is projected to be in Tier 1.
- (5) \$200,000 is used as an example land value for commercial property based on qualitative review of assessor data provided by the City of Murrieta.

**Table B-6 (Updated)**  
**RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis**  
**Graph Data and Graphs**

**RCWD Scenario: Projected Revenues, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Water Rate Revenues	\$3.58	\$3.64	\$3.70	\$2.82	\$2.86	\$2.91	\$3.02	\$3.13	\$3.24	\$3.36
Ad Valorem or Equivalent Rate Surcharge	2.09	2.14	2.20	2.25	2.31	2.37	2.42	2.48	2.55	2.61
Standby Charges	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Interest Income	0.03	0.03	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08
Other Non-Rate Revenues	0.22	0.23	0.23	0.24	0.25	0.25	0.26	0.27	0.28	0.28
Total	\$6.38	\$6.50	\$6.64	\$5.82	\$5.94	\$6.05	\$6.23	\$6.41	\$6.60	\$6.79
% from Ad Valorem	33%	33%	33%	39%	39%	39%	39%	39%	39%	38%
math check, should = \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**RCWD Scenario: Projected Expenses, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Purchased Water	\$1.14	\$1.24	\$1.35	\$1.45	\$1.55	\$1.65	\$1.75	\$1.86	\$1.98	\$2.11
Other O&M	1.97	1.95	2.00	2.05	2.11	2.16	2.22	2.28	2.33	2.40
WMWD-Initiated Capital and Repair/Replacen	1.41	1.26	2.02	0.93	0.94	0.94	0.95	0.96	0.96	0.97
FMSR Capital Excluding Improvement Districts	1.86	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Total	\$6.37	\$5.55	\$6.47	\$5.53	\$5.69	\$5.85	\$6.02	\$6.19	\$6.37	\$6.57
math check, should = \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**RCWD Scenario: Projected Reserves, \$M**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Projected Ending Year Reserve Balance	\$1.33	\$2.27	\$2.44	\$2.73	\$2.98	\$3.18	\$3.40	\$3.62	\$3.84	\$4.07
RCWD's Minimum Reserve Balance	\$3.05	\$3.11	\$3.22	\$3.32	\$3.42	\$3.52	\$3.62	\$3.73	\$3.85	\$3.97

**RCWD Scenario: Projected Total Water Cost, SFR, 3/4" Meter, 18 ccf/month, \$80,000 land value**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Total Water Cost										
Revenue Neutral Surcharge	\$114.43	\$115.41	\$116.42	\$100.16	\$101.22	\$102.31	\$104.46	\$106.66	\$108.91	\$111.21
Ad Valorem Tax	\$108.35	\$109.18	\$110.04	\$93.62	\$94.51	\$95.43	\$97.41	\$99.44	\$101.51	\$103.63

**RCWD Scenario: Projected Total Water Cost, Commercial, 2" Meter, 125 ccf/month, \$200,000 land value, 1 acre**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Total Water Cost										
Revenue Neutral Surcharge	\$622.14	\$627.73	\$633.46	\$541.17	\$547.19	\$553.36	\$565.58	\$578.07	\$590.84	\$603.91
Ad Valorem Tax	\$481.82	\$483.90	\$486.04	\$390.06	\$392.31	\$394.61	\$402.85	\$411.28	\$419.88	\$428.67

Table B-6 (Updated)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
Graph Data and Graphs

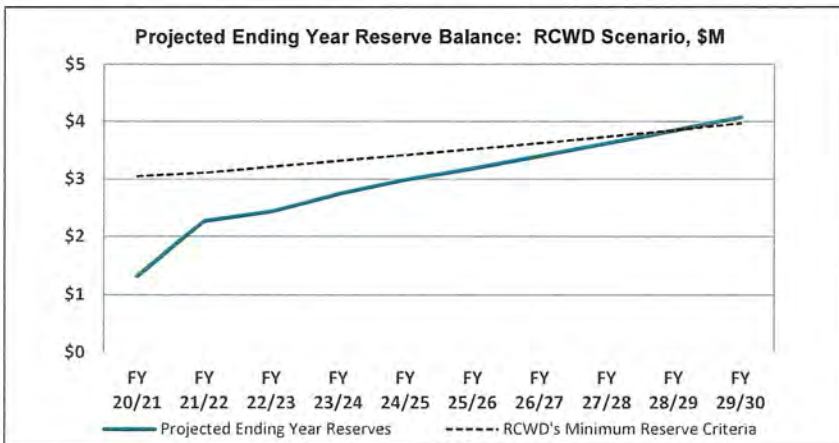
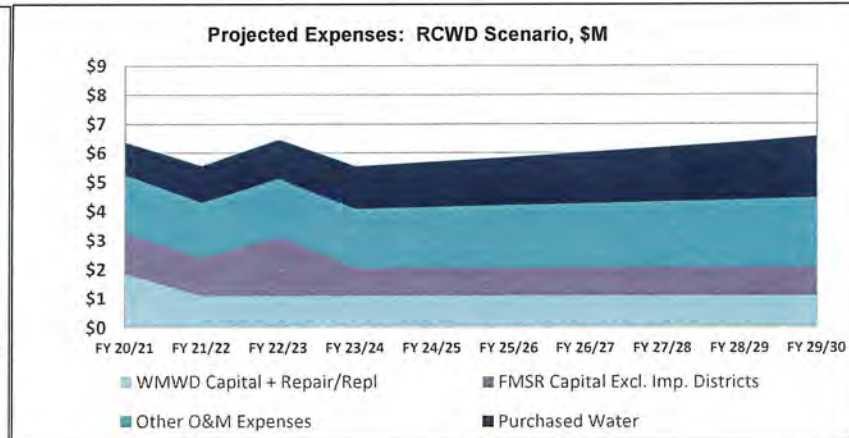
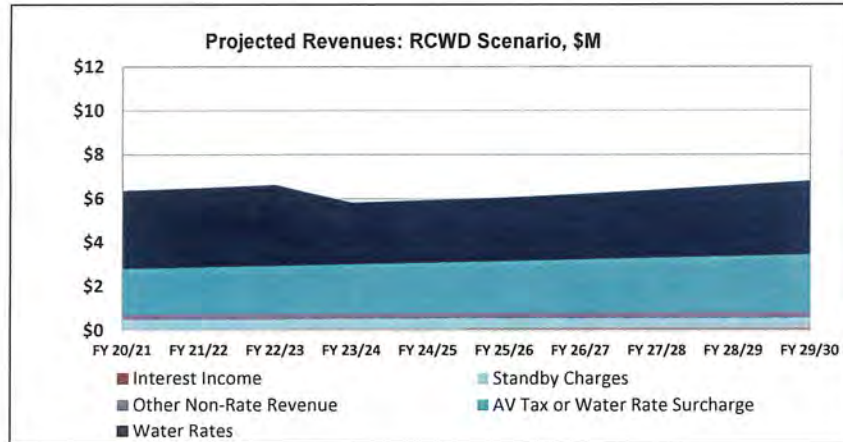


Table B-6 (Updated)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
Graph Data and Graphs

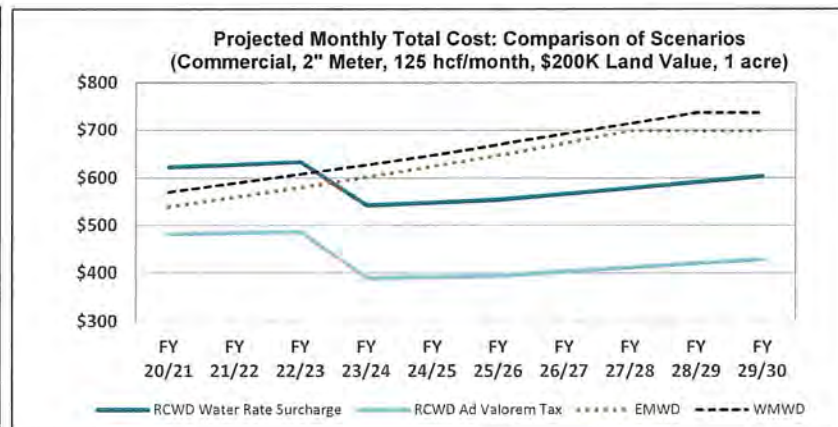
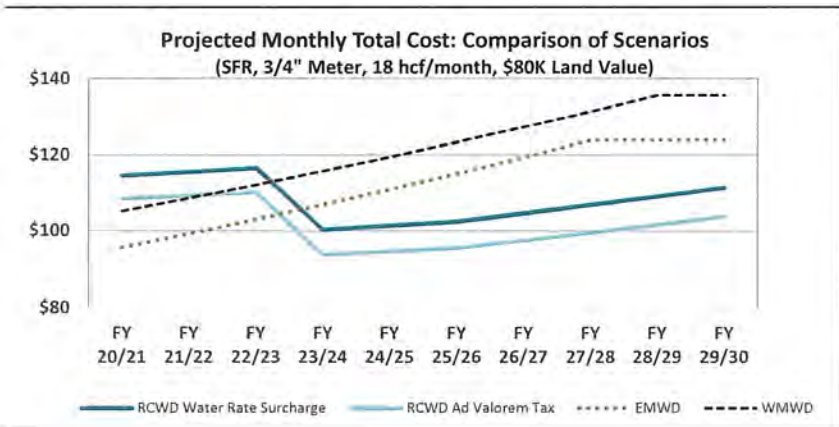
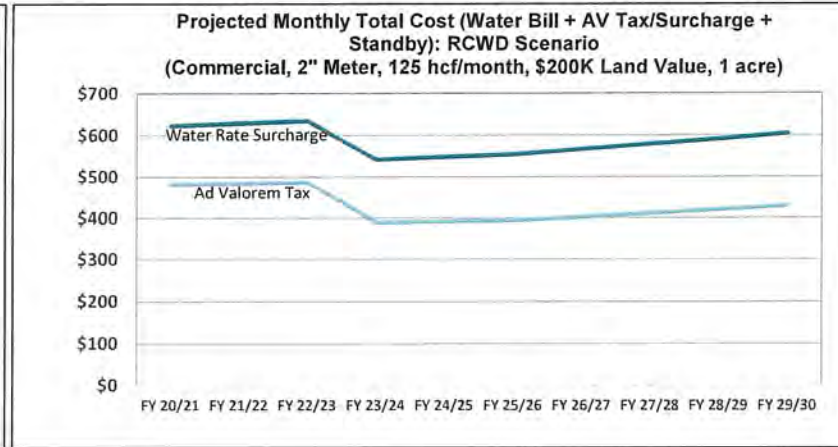
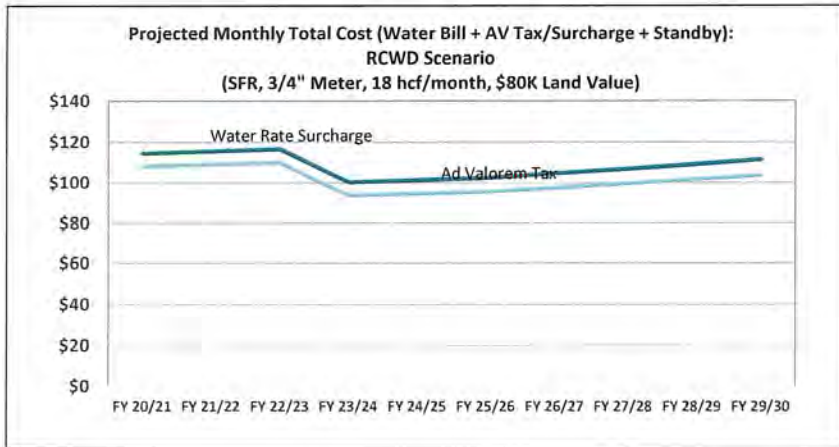




Table B-6 (Updated)  
RIVERSIDE LAFCO - Murrieta Focused Water Municipal Service Review: Financial Analysis  
Graph Data and Graphs

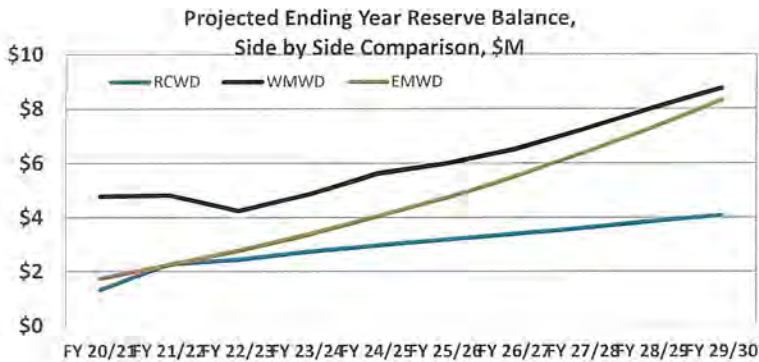


Table 8.12 (Updated). Projected Water Rate Revenue, RCWD Ownership Scenario				
Fiscal Year	% Increase in Water Rate Revenues <sup>(a)</sup>	Projected Water Rate Revenues		
		At FY 19/20 Rates <sup>(b)</sup>	Rate Changes <sup>(c)</sup>	Total
FY 20/21	-10.0%	\$3,978,531	(\$397,853)	\$3,580,678
FY 21/22	0.0%	\$4,042,950	(\$404,295)	\$3,638,655
FY 22/23	0.0%	\$4,108,412	(\$410,841)	\$3,697,571
FY 23/24	-25.0%	\$4,174,934	(\$1,356,853)	\$2,818,081
FY 24/25	0.0%	\$4,242,533	(\$1,378,823)	\$2,863,710
FY 25/26	0.0%	\$4,311,616	(\$1,401,276)	\$2,910,340
FY 26/27	2.0%	\$4,381,824	(\$1,364,938)	\$3,016,886
FY 27/28	2.0%	\$4,453,175	(\$1,325,844)	\$3,127,331
FY 28/29	2.0%	\$4,525,688	(\$1,283,868)	\$3,241,820
FY 29/30	2.0%	\$4,599,382	(\$1,238,882)	\$3,360,500
Notes:				
(a) Rate increases presumed effective on July 1 of each year.				
(b) Increase in rate revenues at RCWD's FY 19/20 Rates are from system growth.				
(c) See Appendix B, Table B-4 for more detail.				

<b>Table 8.13 (Updated). Average Annual Revenues, RCWD Ownership Scenario</b>			
Type of Revenue	Projected Average Annual Revenue		
	Amount	Percentage	Note
Water Rates	\$3,225,557	50.9%	1, 2
Ad Valorem Tax or Water Rate Surcharge	\$2,342,011	37.0%	2
Capacity Charges	\$194,761	3.1%	2
Standby Charges	\$462,731	7.3%	2
Interest Income	\$54,217	0.9%	2
Delinquent Penalties	\$53,045	0.8%	2
Other	\$4,244	0.1%	2
<b>Total</b>	<b>\$6,336,566</b>	<b>100.0%</b>	
Notes:			
(1) See Table 8.12.			
(2) See Appendix B, Table B-4 for more detail. Totals may not add up due to rounding.			

**Table 8.14 (Updated). Projected O&M Expenses, RCWD Ownership Scenario**

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30
Water Pumping	61,094	62,621	64,187	65,792	67,436	69,122	70,850	72,622	74,437	76,298
Transmission & Distribution	489,506	501,744	514,287	527,144	540,323	553,831	567,677	581,869	596,416	611,326
Customer Accounts	52,975	55,179	57,474	59,865	62,355	64,954	67,662	70,483	73,422	76,483
G&A Allocation	677,669	694,611	711,976	729,775	748,020	766,720	785,888	805,535	825,674	846,316
Other Operating Expenses	112,474	115,286	118,168	121,122	124,150	127,254	130,435	133,696	137,039	140,465
Purchased Water	1,136,889	1,240,134	1,349,234	1,452,788	1,550,253	1,650,218	1,752,904	1,861,616	1,978,049	2,106,981
Source of Supply	400,963	341,297	349,829	358,575	367,539	376,728	386,146	395,800	405,695	415,837
Treatment	133,284	136,616	140,031	143,532	147,120	150,798	154,568	158,432	162,393	166,453
Water Use Efficiency	42,828	44,609	46,465	48,398	50,411	52,513	54,702	56,983	59,358	61,833
Other Non-Operating Expenses	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>\$3,107,682</b>	<b>\$3,192,096</b>	<b>\$3,351,651</b>	<b>\$3,506,991</b>	<b>\$3,657,607</b>	<b>\$3,812,139</b>	<b>\$3,970,834</b>	<b>\$4,137,036</b>	<b>\$4,312,482</b>	<b>\$4,501,991</b>



Table 8-15 (Updated). Projected Capital Improvement Funding, RCWD Ownership Scenario				
Project	Estimated Cost, 2020 \$	Benefits Existing Customers, RCWD Funded	Benefits Future Development	
			Funded by RCWD	Funded by Developers ID, or CFD
Buy-In to RCWD for Existing Customers	9,659,628	9,659,628		
Expansion CIP North of Murrieta Creek	17,120,000			17,120,000
Expansion CIP South of Murrieta Creek	20,388,000			20,388,000
RCWD Hydraulic Improvements	2,255,000		2,255,000	
Legacy (Small Diameter) Improvements	4,947,000	4,947,000		
Meter conversion to AMI	1,243,507	1,243,507		
Total	\$55,613,135	\$15,850,135	\$2,255,000	\$37,508,000
Notes:				
(1) RCWD anticipates requiring existing Murrieta Study Area customers to buy into RCWD facilities, including storage facilities, distribution facilities, and accessing MWD connections. This buy-in eliminates the need to separately build additional reservoir storage.				
(2) Project benefits future development only and would not be done if there was no future development.				
(3) Under some circumstances, RCWD would accept an improvement district or related type of financing for these improvements. For this analysis, these improvements would be funded either directly by developers or through an improvement district. They would not be funded directly by RCWD.				
(4) For facilities of this magnitude, RCWD would fund the project, and incorporate the cost in its Capacity Charge. Capacity Charge revenues, over time, would pay for the project.				

## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #17- Recv'd- 2/26/21- Metropolitan Water District

See Attached Letter and Comment "A"- General Comments & Background Information and Attachment 1.
See Attached Letter and Comment "B"- Annexation fees clarification
See Attached Letter and Comment "C"- \$12 million balance of annexation per acre charge
See Attached Letter and Comment "D"- General Comments & Attachment 2 related to Section 2.2.2
See Attached Letter and Comment "E"- Figure 1-1
See Attached Letter and Comment "F"- Figure 2-1
See Attached Letter and Comment "G"- Figure 2-3
See Attached Letter and Comment "H"- General Comments

### Response to Comment

Comments Noted. Submitted map reflecting current Unpaid Parcels within the Murrieta Window Area has been included in the Errata Document in <u>conjunction with the revised Figure 2-3.</u>
Comments Noted.
In its 2/26/21 Comment Submittal, MWD indicates that (a) there is 2.9 square miles in the Study Area that has not paid MWD's per-acre charge, and (b) the 2020 per-acre charge is \$6,151. The balance of MWD's per-acre charge is \$9.28 million (equal to 2.9 square miles times \$6,151 per acre). This balance does not <u>include any one-time annexation processing fees separately charged by MWD. This will be clarified in the Errata Document.</u>
Comments Noted. MWD's suggested revised Section 2.2.2 has been included as a replacement narrative the Errata Document.
Map has been revised for clarity and incorporated in the Errata Document.
Map has been revised for clarity and incorporated in the Errata Document.
MWD Map for Unpaid Parcels has been included in the Errata Document for clarity.
Comments Noted.



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

February 26, 2021

**Via Electronic Delivery**

Gary Thompson  
Executive Officer  
Riverside Local Agency Formation Commission  
6216 Brockton Avenue, Suite 111-B  
Riverside, CA 92506

**Focused Municipal Service Review for the Murrieta Service Area (LAFCO 2019-11-3)**

Dear Mr. Thompson:

The Metropolitan Water District of Southern California ("Metropolitan") reviewed the Focused Municipal Service Review for the Murrieta Service Area, dated December 10, 2020 ("Murrieta Focused MSR" or "the report"). Metropolitan is pleased to submit comments for consideration by the Riverside Local Agency Formation Commission ("Riverside LAFCO") during the public comment period for the report. Metropolitan's interest in the Murrieta Focused MSR arises from its prior annexation of over three-quarters of the Murrieta Study Area, located in the City of Murrieta, that is the main subject of the report.

**BACKGROUND**

As a regional water wholesaler, Metropolitan delivers water to 26 member agencies (including 14 cities, 11 municipal water districts, and one county water authority) that in turn, directly or through their sub-agencies, provide water to approximately 19 million people in six counties in Southern California, including Riverside County. Metropolitan's mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Annexation is the formal process by which Metropolitan is able to expand water delivery to places outside its existing service area. Annexation has been an integral part of Metropolitan's history since the state enacted the Metropolitan Water District Act in 1927. The Act authorized Metropolitan to annex the corporate area of any public agency upon terms and conditions fixed by Metropolitan's Board of Directors, including the assessment of ad valorem taxes and standby charges. Metropolitan annexation policies advance the orderly extension of water delivery to its

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member agencies, who provide water service in support of planned development, improved water quality, and avoidance of “window areas” or service gaps within their service boundaries.

Metropolitan charges a one-time annexation fee and a per-acre annexation charge. Charges shall be paid in full prior to completion of the annexation except where the Metropolitan Board of Directors approves payments over time or security which will guarantee payment. The completion of any annexation is conditioned upon the approval of the LAFCO within whose jurisdiction the proposed annexation lies. Accordingly, Metropolitan routinely coordinates with each of the six county LAFCOs within its service area, including Riverside LAFCO, which approved the aforementioned Murrieta annexation into Metropolitan in 2000. Metropolitan has only approved a few agreements to pay annexation fees over time, and the one applicable to the Murrieta Service Area is the only outstanding one and the only done in the past 30 years.

On December 14, 1999, Metropolitan’s Board of Directors approved the annexation of the area coinciding with boundaries of the Murrieta County Water District (“MCWD”). The area covers approximately 5.8 square miles, encompasses approximately 1,153 parcels, and is commonly referred to as the “Murrieta Window Area.” The Murrieta Window Area was concurrently annexed into our member agencies, Western Municipal Water District (“WMWD”) and Eastern Municipal Water District (“EMWD”). WMWD’s section is referred to as the 41<sup>st</sup> Fringe Area and EMWD’s section is the 65<sup>th</sup> Fringe Area. Notably, the Murrieta Focused MSR analyzes ownership scenarios under each of these water districts. The purpose of the annexation was to close a window area in Riverside County. In addition, because the area was a groundwater dependent, older rural community undergoing rapid growth and development, the annexation was also widely viewed as a hedge against potential water quality degradation.

Metropolitan entered into the annexation agreement with WMWD, EMWD, and the subsequently-dissolved MCWD. The key terms and conditions of the annexation agreement were as follows:

- (1) Charged a one-time annexation processing fee of \$5,000 for the entire Murrieta Window Area;
- (2) Allowed for parcels, over the term of the agreement, to pay the then-current per-acre annexation charge in order to become eligible to be physically connected to receive water service;
- (3) Assessed the existing ad valorem tax;

A



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- (4) Created a ministerial, administrative staff level approval mechanism thus allowing for efficient inclusion of parcels into Metropolitan upon payment of the per-acre annexation charge;
- (5) Provided that if all parcels had not paid and connected to the system at the expiration of the agreement, December 14, 2024, Metropolitan would pursue the detachment of unpaid parcels; and
- (6) Requires the parties to commence negotiations five years out from expiration of the agreement or December 14, 2019, to attempt to resolve the status of the unpaid parcels.

As of the date of this letter, approximately 2.9 square miles, encompassing approximately 585 parcels, have yet to pay or connect to receive water service. A map of the unconnected parcels is shown in Attachment 1.

Metropolitan's most recent per annexation charge is for 2021 and is set at \$6,155 per acre.

Metropolitan and WMWD began informal discussions on the reconciliation of the unpaid parcels in late 2019 and intend to continue these discussions going forward.

#### **THE MURRIETA FOCUSED MSR**

The City of Murrieta initiated the request to Riverside LAFCO to prepare the Murrieta Focused MSR. The report was jointly funded by the City of Murrieta, WMWD, EMWD, and Rancho California Water District (RCWD). Riverside LAFCO hired engineering consultants West Yost Associates to prepare the report. The report was completed and submitted on December 10, 2020.

The purpose of the report is to provide a fact-based analysis of service delivery, infrastructure capacity and financial requirements, and reliable water service necessary to support existing and future customers. The report analyzes future ownership scenarios under each of the three participating water districts, WMWD, EMWD, and RCWD, including the financial impacts on rate payers, residents on private wells, and the development community over the next ten years, through 2030.

The report examines the retail water component of WMWD's Murrieta Service Area, which includes future residential and commercial connections and includes the portion of the City of Murrieta currently receiving water from WMWD. The Murrieta Study Area is 6.5 square miles and fully encompasses the Murrieta Window Area.

A

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The report makes certain assumptions relevant to Metropolitan. It makes a critical assumption about the Murrieta Window Area regarding annexation, that developed parcels farther than 1,000 feet from a water connection are never likely to annex. It makes boundary assumptions based on information provided by the three participating water districts. It assumes the need for some future development to entirely close the Murrieta Window Area.

A

### **MURRIETA ANNEXATION SECTION 2.2.2**

The report at Section 2.2.2. characterizes the annexation of the Murrieta Window Area into Metropolitan. To provide a clearer understanding of its role as a water supplier and as a party to the Murrieta Window Annexation agreement, Metropolitan offers the following comments for your consideration.

Metropolitan is a regional wholesaler supplier to its member agencies who in turn provide retail water service to their customers. As such, Metropolitan provides water to WMWD and EMWD. It does not directly serve their residential, commercial, or industrial water customers.

B

Metropolitan requires an annexation processing fee and a per-acre annexation charge, as stated previously. The annexation fee is a one-time processing fee currently set at \$5,000. The per-acre annexation charge is separate and is set annually by Metropolitan's Board of Directors. The Murrieta Focused MSR correctly states the 2020 was set at \$6,151 per acre. The distinction between annexation fees and per-acre charges is important to understand the financial aspects of the Murrieta Window Annexation agreement. As stated earlier, it only required one annexation processing fee for the entire annexation, for the approximately 1,153 parcels.

The Murrieta Focused MSR concludes that the annexation per-acre charge balance is approximately \$12 million. It is not clear how this figure was calculated, and Metropolitan requests an explanation of it.

C

Metropolitan also prepared more detailed comments set forth in Attachment 2.

### **FIGURES AND MAPS**

Metropolitan houses a professional Geodetics and Mapping team within its Engineering and Services group. This team closely monitors and tracks all boundary changes and the annexation and detachment of parcels throughout Metropolitan's entire 5,181 square mile service area. In

D

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January 2020, at Riverside LAFCOs' request, Metropolitan provided a GIS map and associated parcel data of the Murrieta Study Area prepared by the mapping team.

Accordingly, Metropolitan would like to offer its observations with regards to the boundaries and the status of annexed parcels within the Murrieta Window Area as presented in the report.

Figure 1-1 is labeled "Murrieta, Rainbow & Rock Mountain Study Areas." The boundaries and areas within the Murrieta Study Area showing water service by WMWD and EMWD differ from the boundaries and areas of the 41<sup>st</sup> and 65<sup>th</sup> Fringe Areas. These boundaries and areas should be reconciled.

Figure 2-1 is labeled "Study Area Water System Facilities" and appears to exhibit similar inconsistencies as Figure 1-1 and should be similarly reconciled.

Figure 2-3 is labeled "MWD Annexation Fee Payment Map" and purports to show parcels that have paid Metropolitan's per-acre annexation charge. Although the accompanying text attributes the map to WMWD, the title might confuse decision makers and the public that the map originated with Metropolitan. It did not and it is therefore suggested the name of Figure 2-3 should be changed. Data gaps in Figure 2-3 are illustrated in gray. Metropolitan attached its map of the Murrieta Window Area showing the parcels that remain to become eligible to be physically connected. See Attachment 1. There appear to be discrepancies between the Figure 2-3 and Metropolitan's map. Again, these discrepancies should be reconciled.

We appreciate the opportunity to comment and look forward to working with you and Metropolitan's member agencies to address the gaps in Murrieta Window Area. Please feel free to contact Ethel Young at (213) 217- 7677 or [eyoung@mwadh2o.com](mailto:eyoung@mwadh2o.com) with any questions, or contact our Real Property mainline at (213) 217-7750 or [Annexations@mwadh2o.com](mailto:Annexations@mwadh2o.com).

Sincerely,



Lilly L. Shraibati  
Group Manager  
Real Property Group

Attachments:

1. Map of unpaid parcels
2. Detailed Comments

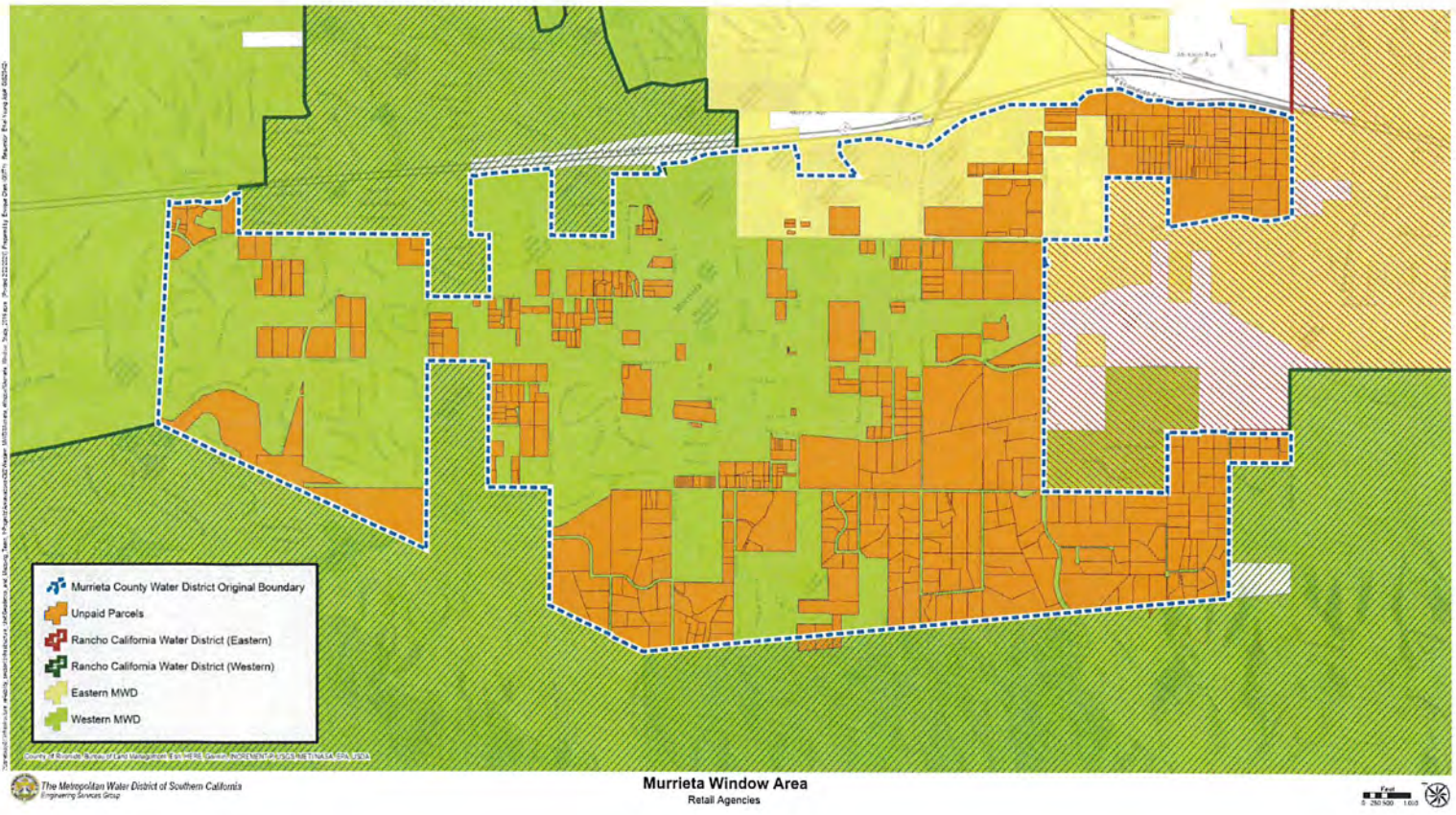
Mr. Thompson  
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cc: Derek Kawaii, WMWD  
[dkawaii@wmwd.com](mailto:dkawaii@wmwd.com)

Chris Teague, EMWD  
[teaguech@emwd.org](mailto:teaguech@emwd.org)



# Attachment 1



## Attachment 2

### MWD LAFCO FMSR Comment Letter - Detailed Comments

Set forth below are Metropolitan's proposed detailed revisions to Section 2.2.2 of the Murrieta Focused MSR starting at page 22, both redlined and clean versions. Metropolitan respectfully requests that Riverside LAFCO incorporate these suggestions in the report and record.

#### Redline Revision

Imported water supply ~~from~~ to the Study Area is purchased wholesale from Metropolitan Water District (MWD) and delivered via ~~through~~ EMWD, at the Los Alamos Interconnection Point. ~~Service areas receiving~~ Areas annexing into MWD are annexed on behalf of one of MWD's 26 member agencies and must pay a MWD annexation fee of \$5,000 and an MWD Per-Acre Annexation Charge. The 2020 MWD Per-Acre Annexation Charge is \$6,151 per acre.

~~For most MWD customers, the Annexation Charge is paid in full aggregate for the entire service area, regardless of connection status. That is, when a service area is annexed into the MWD service area, parcels with existing water service connections pay the MWD Annexation Charge, and undeveloped parcels without water service also pay the MWD Annexation Charge.~~

The annexation policy of MWD requires an annexation processing fee and an annexation per-acre charge to be paid in full in advance for the entire area being annexed. However, MWD may waive with terms and conditions these fees and charges to prevent or to close a service "window" in an existing member public agency service area. The Murrieta Study Area largely consists of such a window area within two of MWD's member agencies, WMWD and EMWD.

~~With WMWD, the situation is different. In December 1999, an annexation agreement between MWD, EMWD, and WMWD, and the Murrieta County Water District and MWD was executed. This agreement specified that the Murrieta window area consisting of the entirety of the Murrieta County Water District, approximately 5.8 square miles, would be annexed into the MWD service area but only the portion of the Murrieta County Water District that has by charging a one-time annexation processing fee and allowing, over the twenty-five year term of the agreement, for unconnected parcels to pay the MWD Per-Acre Annexation Charge could in order to become eligible to be physically connected to receive imported water. from MWD.~~

~~As a result, there are portions~~ Approximately 2.9 square miles of the Study Area ~~that~~ have not yet paid the MWD Per-Acre Annexation Charge. In Figure 2-3, obtained from WMWD, portions of the Study Area that have not paid the MWD Annexation Per-Acre Charge are shown in yellow.

Section 11 of the 1999 Agreement states that the agreement shall be binding to successors, so for the purposes of this analysis, it is assumed that the 1999 Agreement would be assignable to either RCWD or EMWD. The need for some future development to pay the MWD Annexation Per-Acre Charges is the same under all Ownership Scenarios described in this report, and as a result, is not included in the quantitative financial analysis.

The 1999 agreement terminates in December 2024. ~~It is also assumed that regardless of the ownership scenario, the future owner will be able to extend the agreement.~~ The current outstanding Annexation Per-Acre Charge balance is approximately \$12M. ~~If the agreement is not extended, it is possible that MWD~~

~~would require the outstanding balance to be paid by the owner of the water system or~~ Under the agreement, if the balance has not been paid or other provisions for payment have not been made, for example, extension of the agreement, then MWD may pursue de-annex the detachment of unpaid parcels through LAFCO that haven't paid the Annexation Charge, regardless of which agency owned the water system.

The current number of service connections in the Study Area, summarized by meter size, can be seen in Table 2-1. The majority of the meters currently in the Study Area are ¾-inch meters that serve single family residential connections.

A large number of parcels in the Study Area are currently served by private wells. Therefore, land within the study area is classified as Developed-Served, if it currently has imported water service from the distribution system, Developed-Unserved, if it currently developed but provided service by private well, or Vacant, if the land is undeveloped and available for development in the future.

### **Clean Revision**

Imported water supply to the Study Area is purchased wholesale from Metropolitan Water District (MWD) and delivered via EMWD, at the Los Alamos Interconnection Point. Areas annexing into MWD are annexed on behalf of one of MWD's 26 member agencies and must pay a MWD annexation fee of \$5,000 and a MWD Per-Acre Annexation Charge. The 2020 MWD Per-Acre Annexation Charge is \$6,151 per acre.

The annexation policy of MWD requires an annexation processing fee and an annexation per-acre charge to be paid in full in advance for the entire area being annexed. However, MWD may waive with terms and conditions these fees and charges to prevent or to close a service "window" in an existing member public agency service area. The Murrieta Study Area largely consists of such a window area within two of MWD's member agencies, WMWD and EMWD.

In December 1999, an annexation agreement between MWD, EMWD, WMWD, and the Murrieta County Water District was executed. This agreement specified that the Murrieta window area consisting of the entirety of the Murrieta County Water District, approximately 5.8 square miles, would be annexed into the MWD service area by charging a one-time annexation processing fee and allowing, over the twenty-five year term of the agreement, for unconnected parcels to pay the MWD Per-Acre Annexation Charge in order to become eligible to be physically connected to receive imported water.

Approximately 2.9 square miles of the Study Area have not yet paid the MWD Per-Acre Annexation Charge. In Figure 2-3, obtained from WMWD, portions of the Study Area that have not paid the MWD Annexation Per-Acre Charge are shown in yellow.

Section 11 of the 1999 Agreement states that the agreement shall be binding to successors, so for the purposes of this analysis, it is assumed that the 1999 Agreement would be assignable to either RCWD or EMWD. The need for some future development to pay the MWD Annexation Per-Acre Charges is the same under all Ownership Scenarios described in this report, and as a result, is not included in the quantitative financial analysis.

The 1999 agreement terminates in December 2024. The current outstanding Annexation Per-Acre Charge balance is approximately \$12M. Under the agreement, if the balance has not been paid or other provisions for payment have not been made, for example, extension of the agreement, then MWD may pursue the

detachment of unpaid parcels through LAFCO that haven't paid the Annexation Charge, regardless of which agency owned the water system.

The current number of service connections in the Study Area, summarized by meter size, can be seen in Table 2-1. The majority of the meters currently in the Study Area are ¾-inch meters that serve single family residential connections.

A large number of parcels in the Study Area are currently served by private wells. Therefore, land within the study area is classified as Developed-Served, if it currently has imported water service from the distribution system, Developed-Unserved, if it currently developed but provided service by private well, or Vacant, if the land is undeveloped and available for development in the future.



## Murrieta FMSR Comments - Response to Comments

### Comment Submittal #18- Recv'd- 2/26/21- Eastern Municipal Water District

See Attached Letter and Comment "A"- General Comments
See Attached Letter and Comment "B"- Key Parameters & Comparisons- Ownership Scenarios-Table ES-1, P.9
See Attached Letter and Comment "C"- Executive Summary- Total Cost to Ratepayers- P.11
See Attached Letter and Comment "D"- Executive Summary- Total Cost to Ratepayers- P.12
See Attached Letter and Comment "E"-Comparison of CFD/AD Activity- Table 8-25, P.111
See Attached Letter and Comment "F"- Figure 2-1, P.19, and Appendix C.
See Attached Letter and Comment "G"- General Comment

### Response to Comment

Comments Noted.
The connection fee comparison is for a 2" water meter. Regardless of the average water consumption for existing customers in Study Area, a comparison of connection fees for a 2" water meter is provided. No change in the connection fee comparison is proposed. It should also be noted that footnote (g) in Table ES-1 provides the context requested by EMWD.
EMWD has revised how it allocates water supply costs to the Study Area. This revision significantly reduces EMWD's allocation of water supply costs to the Study Area during the period when the Acquisition Balance is being paid off. EMWD's revision is a revision to its policy direction, compared with the policy direction provided during the preparation of the report. The revision in the policy direction is noted. No change in the FMSR is made to reflect this revised policy direction. Please see the response to LAFCO comments (reference: comment on page 117) for clarification of how policy direction was incorporated into the FMSR.
The comparison of the total cost to ratepayers uses the average water consumption for commercial customers with 2" water meters in the Study Area. EMWD's comment that the water consumption patterns for commercial customers with 2" water meters in EMWD's Service Area differs from the Study Area is noted. No change in the total cost to ratepayers comparison is proposed.
Comment noted. The data in the table reflects the depth of each agencies experience. LAFCO feels further elaboration is not necessary beyond the presented data.
Maps have been revised for clarity and incorporated in the Errata Document.
Comment Noted.



February 24, 2021

Mr. Gary Thompson  
Riverside LAFCO  
6216 Brockton Avenue, Suite 111-B  
Riverside, CA 92506

**Subject: Murrieta Focused Municipal Service Review (FMSR) Final Report**

Dear Mr. Thompson:

Eastern Municipal Water District (EMWD) is in receipt of the Murrieta FMSR Final Report prepared by West Yost Associates for the Riverside Local Agency Formation Commission (LAFCO).

Over the past two years, LAFCO has engaged the community and various stakeholders including EMWD, Rancho California Water District, Western Municipal Water District, and the City of Murrieta ("participating agencies") to develop and complete a thorough analysis of future water service alternatives for the study area. We appreciate LAFCO's goal to provide information in the FMSR that will allow the residential and business communities along with the City of Murrieta to determine the optimum water service provider. We also commend LAFCO's efforts to solicit input from the stakeholders and the participating agencies throughout each step of the FMSR development process.

As part of the initial development of the FMSR framework, LAFCO established consensus among the participating agencies on a common approach and set of assumptions that enabled a fair evaluation and comparison of financial, infrastructure, and governance issues associated with each so-called Ownership Scenario. The approach agreed upon by the stakeholders helped ensure an independent comparative analysis and formed the basis for the findings presented in the FMSR Final Report.

EMWD supports the overarching findings of the FMSR Final Report based on the analysis performed for each Ownership Scenario. We appreciate the opportunity to offer the following final comments for LAFCO's consideration and note our comments do not conflict with the findings of the study but are instead provided to further illuminate and explain information presented in the FMSR Final Report.

Board of Directors  
Philip J. Martin, President; Randy A. Brown, Vice President; Jeff Armstrong, Chairman; J. Lawrence; David J. Shaw

2270 Trumble Road • P.O. Box 8300 • Perris, CA 92572-8300

T 951.928.3777 • F 951.928.6177 [www.emwd.org](http://www.emwd.org)

1. Table ES-1, Key Parameters and Comparison of Ownership Scenarios, Page 9: footnote (g) states "A 2-inch meter is shown for comparative purposes. Separately, in the example Total Cost to Ratepayers calculation, a customer with a 2-inch water meter and water consumption of 125 ccf/month is used for comparison. EMWD noted that this customer with water consumption of 125 ccf/month would likely require a 1.5-inch water meter. EMWD's Connection Fee for a 1.5-inch meter is \$27,505". Table ES-1 should reflect the correct figure of \$27,505 for the Connection Fee Comparison presented. B

2. Executive Summary (ES), Page 11, Total Cost to Ratepayers: Figure ES-1 presents a comparison of each Ownership Scenario Total Cost to Ratepayers for single-family residence. It is noted that "After EMWD's Acquisition Balance is paid off (expected to be after FY 29-30), the total cost of water for the single-family residential example would decrease further." To better represent the timing and amount of the further decrease in the Total Cost to Ratepayers beyond FY 29-30, please see attached Exhibit A. C

3. Executive Summary (ES), Page 12, Total Cost to Ratepayers: Figure ES-2 presents a comparison of Total Cost to Ratepayers for Commercial accounts. It is stated that "It should be noted that EMWD believes its rate structure and policies may result in further commercial conservation. EMWD provided records for commercial connections nearest the Murrieta Study Area which indicated an average of 59 CCF/month for similar 2-inch water meters. Based on the EMWD data, the overall cost of the representative commercial connection would decrease due to the lower volume." To more accurately represent the lower Total Cost to Ratepayers for Commercial accounts under an EMWD Ownership Scenario, please see attached Exhibit B. D

4. Comparison of CFD and AD Activity, Table 8-25, Page 111: The table presents a comparison CFD and AD activity among the agencies but does not explain the benefits and relevance of the information as it pertains to each agencies' capacity and willingness to implement this financing mechanism for infrastructure improvements by developers. The advantages of EMWD's extensive experience with CFD and AD formation and sponsorship and its benefit to the development community should be more thoroughly explained in the FMSR report. E

5. Figure 2-1, Page 19: The exhibit does not accurately reflect EMWD's boundary which extends to Jefferson Avenue per LAFCO No. 2000-13-1 and completed per resolution No. 3417. Additionally, all remaining exhibits that reflect EMWD's current boundary and sphere of influence (Appendix C) need to be revised to reflect the correct boundaries. The F

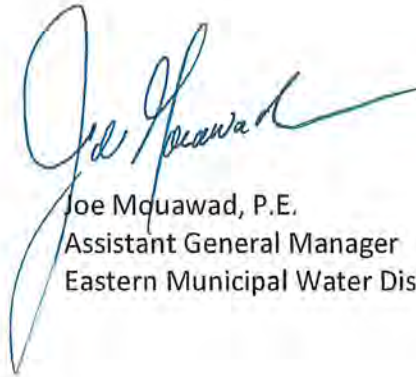
boundary between WMWD and EMWD appears to overlap for one square mile along the east edge of Jefferson Avenue. | F

Again, we appreciate the professional work of LAFCO and its consultants in completing the FMSR Final Report and the opportunity to provide input throughout the process. We look forward to working with LAFCO and the other stakeholders on this matter in the future. If you have any questions or need any additional information, please do not hesitate to contact us. | G

Sincerely,



Paul D. Jones II, P.E.  
General Manager  
Eastern Municipal Water District



Joe Mquawad, P.E.  
Assistant General Manager  
Eastern Municipal Water District

c: Mr. Ivan Holler, City of Murrieta

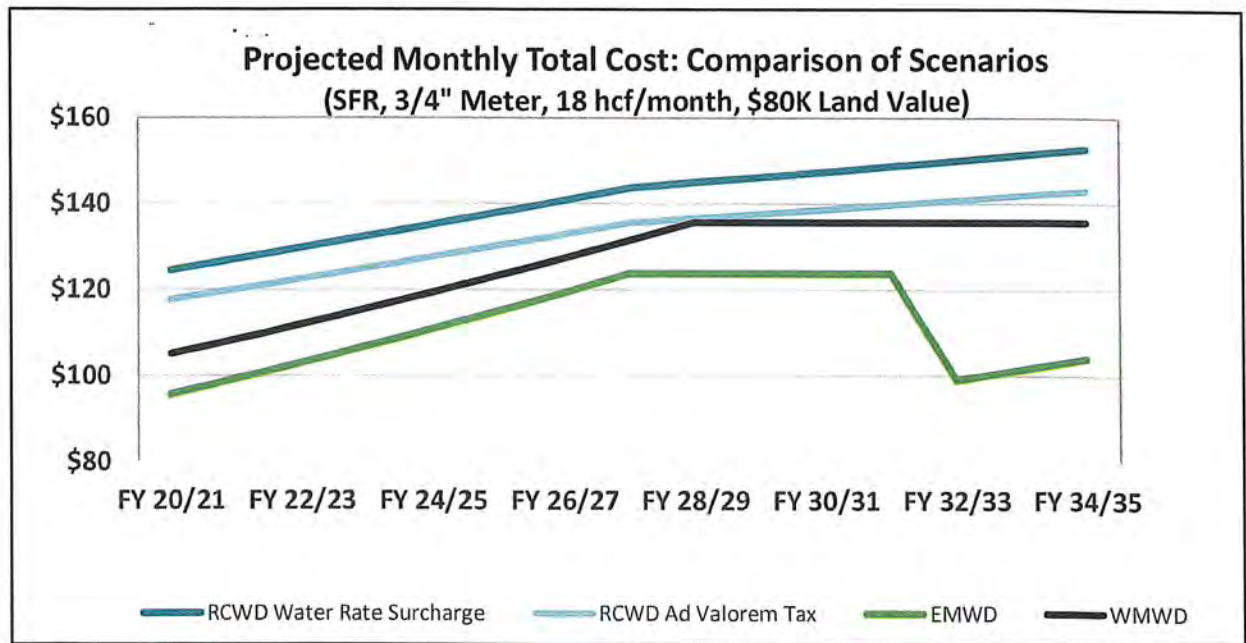
*Attachments:*

*Exhibit A*

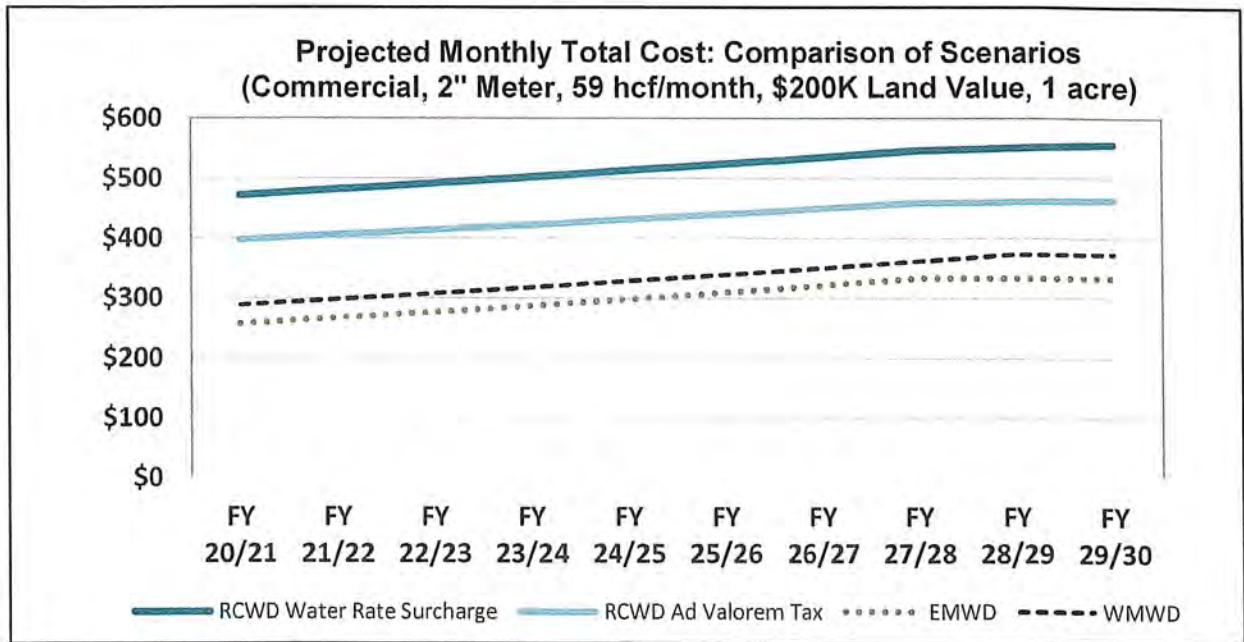
*Exhibit B*



## Exhibit A



## Exhibit B



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**Supplemental Response to  
Comments  
September 10, 2021**

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**Murrieta Focused Municipal Service Review**

**LAFCO- 2019-11-3**

**Supplemental Response to  
Comments**

**September 13, 2021**

The following pages contain responses to all comments received from July 13 2021 through September 10, 2021 for the Murrieta Focused Municipal Service Review (FMSR) report dated December 10, 2020. Responses are for comments from members of the public and affected public agencies that submitted comments and/or provided comments at the August 26, 2021 public presentation.



## Supplemental Murrieta FMSR Comments

7/13/21-9/10/21

### Comment Submittal #32- Recv'd- 7/13/21- Polly Filanc

I, Polly Filanc, who lives within the sphere of influence of the "Study", am after careful study is in favor of staying with Western Municipal Water District.

I am extremely opposed to any other waters districts trying to take over for what has been good service to me and my neighbors.

### Response to Comment

Comment Noted.

Comment Noted.

### Comment Submittal #33- Recv'd- 8/11/21- Doug Burroughs

I have reviewed the report and would like to give my opinion. The decision seems to boil down to who should be paying the cost of future improvement for future growth / development. Please note that I am a retired Developer / Contractor and understand development cost. As a developer, it was never my goal to have existing residents pay for development. All cost, including water meter connection fee's and upgrades to the infrastructure were paid for by developer and figured into the budgets/cost of the projects.

It seems that the local developers and potentially the City of Murrieta wants the study area to be absorbed by Ranch Water District as this district has existing infrastructure they can tie into and has lower meter connection fees. Great for the Developer and not so good for existing customers. The City likes this since it will encourage development which will benefit the City with higher tax revenues. Once again, not good for existing customers. Rancho Water District keeps the meter connection fee lower than Western or Eastern by imposing an Ad Valorem tax. This tax makes everyone, including existing water users pay for their infrastructure which reduces the cost to the Developer and raises the cost to existing consumers. This does not seem to be a fair resolution for existing customers. As property values increase, so will the cost of water due to the Ad Valorem tax being tied to land value.

I am not a well owner, but I do not see how switch to Rancho would be at all fair to existing well owners. They are not customers of the water district in the first place and to have to pay an Ad Valorem or surcharge fee to Ranch seems ridiculous. Neither Western or Eastern impose these ridiculous high fees on well owners. This is another reason NOT to switch to Rancho.

In looking at the existing service areas for all three water districts, it makes sense to me to have Eastern Water district absorb the study area. Their service area is adjacent to the study area and is the least expensive for existing customers now and in the future.

Developers need to take responsibility for their development and pay the cost. They are the ones the reap the rewards of profit when leasing or selling what they develop. I have never heard of a Developer sharing their profits with those in the community that are made to pay for their development infrastructure.

My opinion is the have "EASTERN WATER DISTRICT" absorb the Murrieta Study Area. At a minimum, have it remain Western Municipal Water District, but by NO MEANS, allow Rancho Water District to take this area over.

### Response to Comment

Comment Noted.

Comment Noted.

Comment Noted.

Comment Noted.

Comment Noted.

Comment Noted.

### Comment Submittal #34- Recv'd- 8/17/21- James Kelly

RANCHO WATER DISTRICT, IS NOT THE RIGHT CHOICE FOR OLD TOWN MURRIETA. THEY WILL ADD ASSESMENT TO OUR TAXES !! THIS WILL RAISE OUR TAXES. THEY ARE THE ONLY DISTRICT IN THE STATE THAT DOES THIS !! MANY RETIRED PEOPLE, CAN NOT AFFORD ANY MORE TAXES, I'M ONE OF THOSE PEOPLE, 72 YEARS OF AGE. THIS NEW TAX, WILL FORCE ME TO MOVE, OUT OF THE STATE !! KEEP IT THE WAY IT IS !! THEY HAVE ONLY BEEN IN SERVICE, ONLY A FEW YEARS.

### Response to Comment

Comment Noted.

# Supplemental Murrieta FMSR Comments

7/13/21-9/10/21

## Public Presentation Comments- 8/26/21

### Public Agency Comments

#### Western Municipal Water District

Craig Miller, WMD General Manager- The study is challenging to the customers and community to understand. Moving forward WMWD will continue to provide best service to our customers. Spent \$5 mil. on new North Well, no increase in customer cost and was subsidized by customer reserves. Money spent cleaning pipes and on technical equipment for better service to customers. Years of study to see who and how to serve the area. There is no way to do a straight forward comparison between districts as they are not all the same. The study provided opportunity for collaboration and to look at each districts systems and capabilities. RCWD may have reservoir capacity they could sell WMWD without having to build new. Use potential existing pipelines in RCWD and not duplicate infrastructure. Entered MOU with RCWD to look at where to improve and share infrastructure and cut costs for customers. Will work with the agencies for solutions. WMWD Board President Member Brenda Dennstedt thanked everyone attending. Asked council members and board members in room to stand to show level of commitment to make solution happen.

#### Response to Comment

Comments Noted.

#### Eastern Municipal Water District

Phile Paule, EMWD Board President- Introduced district General Manager and board members in attendance. City of Murrieta will come out ahead of all districts – the study should be able to determine the most optimal service to benefit this area. EMWD will respond to inter-agency partnerships to figure ways to best serve customers. EMWD looks to opportunity to work with agencies.

#### Response to Comment

Comments Noted.

#### Rancho California Water District

Robert Grantham, RCWD General Manager- Thanked staff and community – value partnership with agencies. Opportunity for partnership to come up with good solution for community. A lot of time spent on this study. RCWD will not take over private water wells. Cost of services recovered only on what used, no subsidy. Ad valorem property tax clarity - 6 mil to service community the RCWD will recover 6 mil. Part of it used as financial tool, not in addition to. City objective/plan to move development. RCWD has capacity in current system. Values partnership with the agencies, and acknowledged MOU with WMWD.

#### Response to Comment

Comments Noted.

#### City of Murrieta

Ivan Holler, Murrieta Assistant City Manager-In 2018 the City asked LAFCO for the FMSR to be conducted. Proposed development had challenges moving forward – inadequate water pressure and related to lack of infrastructure. Agreed to fund portion of the study even though City is not a water purveyor. Study confirmed deficiencies in infrastructure. Study was invaluable process valuable to all agencies, city and residents. Important to complete process with opportunity to comment tonight & at LAFCO meeting. Important to the city to have water to develop – downtown area providing benefits with additional shops, restaurants, and creating local jobs. City will work with whomever can make improvements in study area to adequately provide services.

#### Response to Comment

Comments Noted.

## Supplemental Murrieta FMSR Comments

7/13/21-9/10/21

### Members of the Public Comments

#### Commentor #1- Doug Burroughs

Thanked staff and WMWD for report. Stay with Western or EMWD for the area. Not a well owner. Ad Valorem tax - how long would it last? And additional fees by RCWD would be a burden to well owners for services rendered.

#### Response to Comment

Comments Noted.

#### Commentor #2- Connie McConnell

Well owner – concerned about fees & potential metering of wells. Will neighbors and herself be treated the same as far as standby fees regardless of well size? Still have concerns about the taking over wells. Concerned about trunking and development in downtown Murrieta lack of water holding up projects. Do they have to dig up the trunking or is there something else that can be done?

#### Response to Comment

Comments Noted.

#### Commentor #3- Kay Prior

Thanked for the meeting and report. Not wealthy. Bought property 2 yrs ago and mentioned there was not enough water for a car wash permit. 2 years ago talked about not being able to enlarge reservoirs -why not? Mentioned at that time she has a catch basin on property why is that type of use, capturing runoff for storage, not being explored rather than continuing the same type of planning.

#### Response to Comment

Comments Noted.

#### Commentor #4- Anthony G.

Why 3 water districts in 1 city? Anything to store water? Lives on Fig and there was no water for fire. Importing water – Where are they importing it from?

#### Response to Comment

Comments Noted.

#### Commentor #5- Warnie Enochs

WMWD doesn't like customers even since the take over of Murrieta County WD. RCWD will put meter on wells. RCWD not nice people – gave LAFCO too much money to pay for study. RCWD – put in fire hydrants in Murrieta, painted them black and didn't turn them on.

#### Response to Comment

Comments Noted.

#### Commentor #6- Chris Rios

The report was confusing and a community group was formed to help residents understand it. RCWD – ad valorem or surcharge made in future, would not know in advance of them taking over service in the area, need to be open and up front with residents. All agencies stated tonight committed to cooperation. Developers in community and citizens are important so decisions should be made in the city that help all the citizens with no burden on one part of the community.

#### Response to Comment

Comments Noted.

## Supplemental Murrieta FMSR Comments

7/13/21-9/10/21

### Commentor #7- Daphne Grigsby

Thanked everyone for meeting and WMWD for publicizing the meeting, and residents for coming in person and on Zoom. Response to Comments Document – not all answers deferred to water districts have been answered. Need details in timeline what comes next. Disappointed that after 2 years and \$300K no recommendation made in study. Consider the issue with cost - Why should she pay more than what she is receiving? Wants transparency with RCWD - to much uncertainty.

### Response to Comment

Comments Noted.

### Commentor #8- No Name

Spent money on his wells and septic system and water, and if taxed on his acreage, then should be reimbursed for his cost of building the wells. Trouble building in Murrieta. Already pay taxes to the districts - Meter on wells?. What will come from this? No benefit for the residents. City doesn't own it – water belongs to the people. Not in favor of it.

### Response to Comment

Comments Noted.

### Commentor #9- Patty B.

RCWD put in black hydrants not turned on and house burned down. District tax people by acreage. Taxed for 1 home on parcel size not dwelling size – not fair. People are on fixed incomes cannot afford to be taxed and taxed.

### Response to Comment

Comments Noted.

### Commentor #10- Margarete Harkins

Ad valorem tax – not fair residents live on large parcels for longtime, taxed at current levels could lose house. What happens to North Well – Will they benefit that in Western area? Told if goes to RCWD then lose that benefit and will be taxed higher. RCWD will be looking to use us to subsidize them due to large district debt. Why are there 3 water districts not 1? 1 company would lower operating costs. Concerned for long term residents that love the area, property values going up not making money on the property and will not be able to pay ad valorem taxes.

### Response to Comment

Comments Noted.

### Commentor #11- Paul Lipsohn

Growth pays for growth will that take care of pipe extensions north and south - the creek, Kamia??. downtown business development??

### Response to Comment

Comments Noted.

### Commentor #12- Kathryn Elliot

Thanked everyone. Was one of the residents on water committee before going to LAFCO with request for study. Appreciate Ivan Holler – good development and local jobs are vital and they benefit to the entire city. Concern for residents, jobs are ok but not ad valorem targeting a few residents and outsized burden for infrastructure - burden should be shared by the entire city not just a small minority. Legacy pipes benefit and upsizing is a benefit – to supply water to area and any new infrastructure to the area should be paid for by new residents. Not outside residents - they should not have to pay for new growth if they aren't using it.

### Response to Comment

Comments Noted.