



THREE VALLEYS MUNICIPAL WATER DISTRICT WATER STANDBY CHARGE ASSESSMENT

2021/2022 ENGINEER'S ANNUAL LEVY REPORT

INTENT MEETING: APRIL 21, 2021

PUBLIC HEARING: JUNE 16, 2021

May 2021

PREPARED BY



Harris & Associates

22 Executive Park, Suite 200

Irvine, CA 92614

www.weareharris.com



TABLE OF CONTENTS

Engineer's Certification.....	i
Executive Summary.....	1
Part I – Description of the Proposed Parcels and Assessment Boundaries.....	2
Part II – Cost Estimate	3
Part III – Description of Assessments.....	5
A. Legal Requirements	5
B. Assessable Parcels.....	6
C. Equivalent Dwelling Units	7
D. Assessment Rates	10
E. Amount of Assessment	12
F. Accuracy of Data	12
Exhibit A – Sample Calculation for Various Land Uses	13
Exhibit B – Assessment Roll for Fiscal Year 2021/2022	14

ENGINEER'S CERTIFICATION

AGENCY: THREE VALLEYS MUNICIPAL WATER DISTRICT
PROJECT: WATER STANDBY CHARGE ASSESSMENTS
TO: BOARD OF DIRECTORS of THREE VALLEYS MUNICIPAL WATER DISTRICT

ENGINEER'S REPORT

Pursuant to the provisions of Section 54984 et seq. of the Government Code of the State of California, being Chapter 12.4, "Uniform Standby Charge Procedures Act" (the "Act"), and in accordance with Resolution No. 7-96-361 of the Board of Directors (the "Board") of the Three Valleys Municipal Water District (the "District"), adopted on July 10, 1996 establishing a Water Standby Charge Assessment, I, Alison Bouley, P.E., duly authorized representative of Harris & Associates Inc., consultant to the District, submit this Engineer's Report for Fiscal Year 2021/2022 consisting of the following parts and exhibits:

Part I

A description of each parcel of property and the boundaries of the area proposed to be subject to the levy of the uniform standby charge assessment.

Part II

An estimate of the costs of water services to be financed from the proceeds of the uniform standby charge assessment.

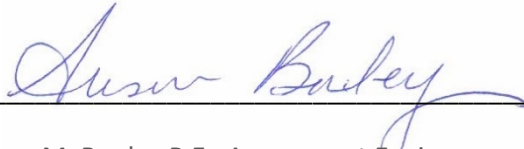
Part III

A description of the uniform standby charge assessment including:

- A description of each lot or parcel of property proposed to be subject to the assessment.
- The amount of the assessment for each lot or parcel.
- The assessment methodology describing the basis of the assessment.
- A description specifying the requirements for written and oral protests and the protest thresholds necessary for requiring a vote on, or abandonment of, the proposed assessment.

DATED this 8th day of June 2021





Alison M. Bouley P.E., Assessment Engineer
R.C.E. No. C61383
Engineer of Work
County of Riverside
State of California

EXECUTIVE SUMMARY

A. Introduction

Harris & Associates submits this Report, consisting of (3) parts, for the Water Standby Charge Assessment adopted on July 10, 1996 by the Board of Directors of Three Valleys Municipal Water District in accordance with Resolution No. 7-96-361 under the Uniform Standby charges Procedures Act, Government Code Section 54984 et seq. ("the Act). The Act gives the District the authority to fix in any given year a water standby charge on land within its jurisdiction to which water service is made available for any purpose by the District, whether the water services are used or not. The District established the standby charge in 1996 to fund the Readiness-to-Serve ("RTS") charge imposed upon the District by the Metropolitan Water District of Southern California and related administrative costs related to the standby charge. The report provides the information in the following parts:

Part I

Description of the Proposed Parcels and Assessment Boundaries.

Part II

The estimate of costs including the administration of the assessments and the Readiness-to-Serve charge imposed by the Metropolitan Water District of Southern California for the fiscal year 2021/2022.

Part III

The description of assessments includes the methodology developed to establish the basis of assessment for apportioning the cost of providing water services, and the facilities needed to provide water services.



PART I – DESCRIPTION OF THE PROPOSED PARCELS AND ASSESSMENT BOUNDARIES

The proposed uniform standby charge assessment is entitled:

THREE VALLEYS MUNICIPAL WATER DISTRICT WATER STANDBY CHARGE ASSESSMENT

The boundaries of the area proposed to be subject to the levy of the Water Standby Charge Assessment are contiguous with the boundaries of the District. The lines and dimensions of each lot or parcel within the District Boundaries are those lines and dimensions shown on the maps of the Assessor of the County of Los Angeles for the year when this report was prepared and are incorporated herein by reference and made part of this Engineer's Report.

All future annexations to the District shall be included in the Water Standby Charge Assessment. In future years, if any new parcels are created as a result of the division or consolidation of land, re-computation of the assessments will be conducted and the new parcels will be included within the area of assessment.



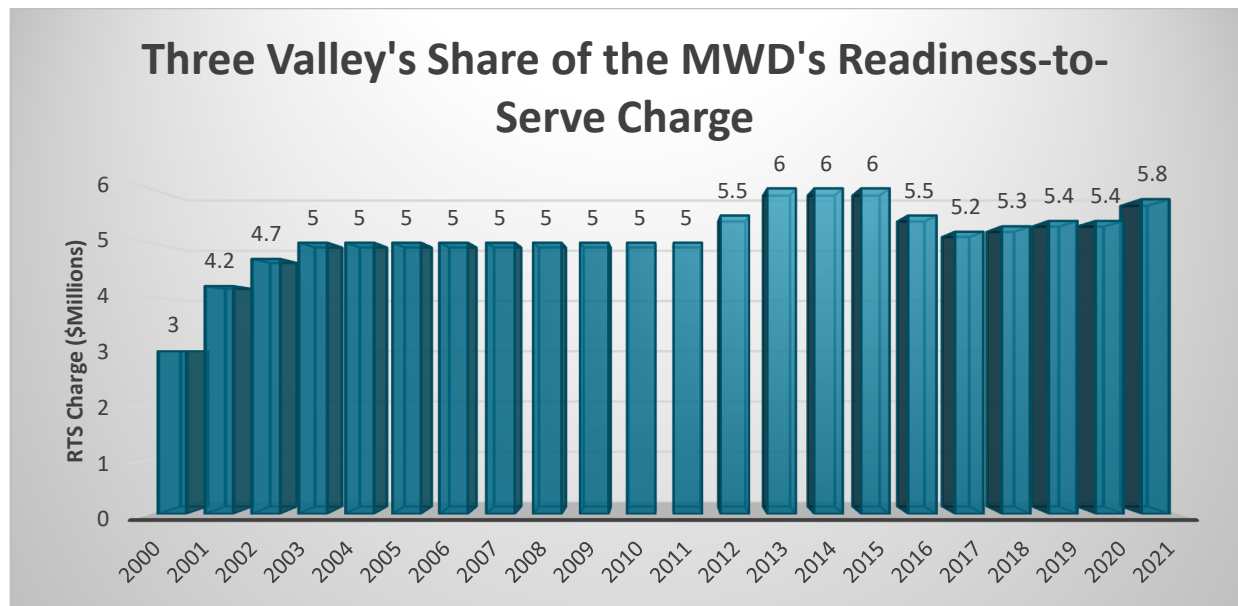
PART II – ESTIMATE OF COSTS

The Water Standby Charge Assessment revenue will be used for the purpose of meeting the Readiness-to-Serve (“RTS”) charge imposed by the Metropolitan Water District of Southern California (“MWD”), and for related administrative costs.

The following table lists the projections for the RTS Charge, Administration Cost for the Administration of the Assessment program and the Estimated Maximum Total Assessment that would be collected if the maximum assessment rate of \$29.41 is used.

	FY 2012/2013	FY 2013/2014	FY 2014/2015	FY 2015/2016	FY 2016/2017	FY 2017/2018	FY 2018/2019	FY 2019/2020	FY 2020/2021	FY 2021/2022
RTS Charge	\$5,541,364	\$6,022,555	\$6,371,116	\$6,074,192	\$5,537,230	\$5,233,954	\$5,274,931	\$5,363,969	\$5,494,518	\$5,872,377
Assessment Administration	\$49,832	\$50,332	\$51,056	\$51,675	\$52,057	\$52,709	\$53,383	\$52,074	\$51,635	\$64,024
Est. Maximum Assessment	\$5,379,146	\$5,374,162	\$5,375,222	\$5,441,758	\$5,445,359	\$5,443,845	\$5,425,678	\$5,431,833	\$5,450,397	\$5,867,266

The estimated RTS charge through the year 2002 was based on the schedule provided by MWD shown in the chart below. Years 2003 through 2011 were based on the projected RTS charge of \$5 million. The 2012 through 2021 RTS charges are based on the amount approved by the Southern California Metropolitan Water District Board for each year.



The Metropolitan Water District (MWD) RTS charge will be \$5,872,377. With the anticipated MWD collections anticipated to be \$1,860,137, the Three Valleys MWD requirement should be \$4,012,240. The assessment rate will be adopted to generate Three Valleys MWD requirement. The amount budgeted to be generated by the assessment for FY 2021/2022 is \$4,075,749.87 as calculated in Section III.

Administration of the assessment is performed annually. This administration includes updating the annual assessment roll to ensure consistency with the assessment methodology detailed in this Engineer's Report. The administration also includes an analysis of the revenues and expenditures from the previous Fiscal Year and preparation of an annual report for submittal to the Board of Directors for approval of the proposed Fiscal Year's assessments and expenditures. The table below provides a comparison of the assessment between fiscal years.

	FY 2020/2021 ⁽¹⁾	FY 2021/2022	Difference ⁽²⁾	Percentage Difference
Parcels	135,607	136,443	836	.62%
EDU's	186,373	199,499	13,126	7.04%
Rate/EDU	\$19.90	\$20.43	\$0.53	2.66%
Est. Revenue	\$3,708,519.36	\$4,075,749.87	\$367,230.51	9.90%

(1) Totals for FY 2020/2021 are based on the final applied levy by the Los Angeles County Auditor-Controller's Office.

(2) Note: Difference between Revenue, EDUs and parcels resulted from audit of parcels and land use designations.



PART III – DESCRIPTION OF ASSESSMENTS

This section of the report describes the methodology developed to establish the basis of assessment for apportioning the cost of providing water services, and the facilities needed to provide water services, to each lot or parcel based upon the type of use or potential use of each property. The basis of assessment was developed by Berryman & Henigar based upon information provided by the District, standard and member agency design criteria, and the requirements of Section 54984.2 of the Uniform Standby Charge Procedures Act. The following sections review the requirements of the California Government Code and describe the recommended assessment methodology.

A. LEGAL REQUIREMENTS

Chapter 12.4 "Uniform Standby Charge Procedures Act" of the California Government Code states that any local agency that provides water services may, by resolution adopted after notice and hearing, determine and levy an assessment for water services pursuant to this chapter.

The California Government Code further requires that the agency establish a methodology, which is related to the benefit received from the water services for calculating the assessment to be levied on each parcel. Section 54984.2 provides that:

"...The governing body of the agency which fixes the charge may establish schedules varying the charge according to land uses, benefit derived or to be derived from the use or availability of facilities to provide water, sewer, or water and sewer service, or the degree of availability or quantity of the use of the water, sewer, or water and sewer services to the affected lands, and may restrict the assessment to one or more improvement districts or zones of benefit established within the jurisdiction of the agency. The charge may be imposed on an area, frontage, or parcel basis, or a combination thereof."

All assessments described in this Report and approved by the Board are prepared in accordance with the Act and are in compliance with the provisions of the *California Constitution Article XIID* (enacted by the passage of Proposition 218 in November 1996).

Pursuant to the *California Constitution Article XIID Section 5*, certain assessments that were existing on July 1, 1997, the effective date of *Article XIID*, are exempt from the substantive and procedural requirements of *Article XIID Section 4* and property owner balloting for the assessments is not



required until such time that the assessments are increased. Exempt are any assessments imposed exclusively to finance the capital costs or maintenance and operation expenses for sidewalks, streets, sewers, water, flood control, drainage systems, or vector control.

In May of 2005, Senate Bill 376, was enacted to add Article 2.7 (commencing with Section 71639) to Chapter 2 of Part 5 of Division 20 of the Water Code, relating to water. This bill authorizes the agency to adopt the standby charge rate with a schedule of annual adjustments, and to adjust the standby charge rate in relation to the change of the MWD imposed RTS charge, subject to the maximum assessment amount of twenty-nine dollars and forty-one cents (\$29.41) per Equivalent Dwelling Unit (“EDU”).

B. ASSESSABLE PARCELS

The table below summarizes the number of parcels and the total acreage by land use type. This information is based on the records of the Assessor of the County of Los Angeles.

Land Use Category	Number of Parcels	Dwelling Units (DU's)	Acres
Single-Family Residential (SFR)	108,766	108,663	N/A
Multi-Family Residential and Condominiums	18,085	42,959	N/A
Mobile Homes	91	7,055	N/A
Commercial	3,784	N/A	5,658.96
Churches	259	N/A	483.36
Industrial	2,065	N/A	5,493.34
Recreational Camping Facilities	2	N/A	8.13
Vacant Residential	2,487	N/A	7,519.13
Vacant Non-Residential	904	N/A	1,574.45
Exempt	0	N/A	0.00
Total	136,443		

The land use classifications are defined as follows:

Single-Family Residential - parcels designated as single-family residential per the Los Angeles County Assessor's Roll.

Multi-Family Residential (including Condominiums) - parcels designated as multi-family residential, which includes duplexes, apartments, condominiums or other dwelling units with common party walls, per the Los Angeles County Assessor's Roll.

Mobile Homes - parcels designated as mobile homes per the Los Angeles County Assessor's Roll.



Commercial (including Churches) - parcels designated as commercial, institutional or recreational per the Los Angeles County Assessor's Roll.

Industrial - parcels designated as industrial, utility or other miscellaneous uses, per the Los Angeles County Assessor's Roll.

Recreational Camping Facilities - parcels designated as camps per the Los Angeles County Assessor's Roll.

Vacant - parcels designated as vacant residential that have no dwelling units, or parcels designated as vacant commercial/industrial that have no commercial/industrial structures on them, per the Los Angeles County Assessor's Roll.

Exempt - Exempted from the assessment would be any parcel owned by a public agency or within the area of public streets and other public properties, utility easements, right-of-way, public schools, public parks, and common areas or un-developable parcels of land.

C. EQUIVALENT DWELLING UNITS

To determine the benefit to the individual parcels with their varying land uses, an equivalent dwelling unit system was established. Each parcel is assigned equivalent dwelling units (EDUs) in proportion to the estimated benefit the parcel receives from the availability of water services. The total number of EDUs is then divided into the annual revenue requirement to determine the cost per EDU. The assessment for each parcel is then determined by multiplying the number of EDUs for each parcel by the cost per EDU.

Since the assessment is based upon the use of the property and the potential water usage of the property, the assessment methodology has been developed based on land use. The assessment methodology developed determines the number of EDUs to be assigned to each parcel. In determining the number of EDUs assigned, three factors are considered: parcel size, land use (intent of development), and the water use design factor of the land use of the property.

Equivalent Dwelling Unit (EDU) factors have been established to indicate the estimated benefit received by each parcel within the District. This method of assessment has established the single- family residential parcel as the basic unit for calculation of the assessment and is defined as one EDU. All other parcels within the District are assigned a proportional EDU based on a formula that equates the property's specific development status (land use) and size to that of the single- family parcel.

The assignment of EDUs to each of the different land uses is as follows:



Single-Family Residential (SFR). The single-family parcel has been defined as being 1.0 EDU.

Multi-Family Residential. Multi-family or condominium parcels are converted to EDUs based on the number of dwelling units on each parcel. Due to population density and size of structure relative to the typical single-family residence, each dwelling unit defined as multi-family residential, including condominiums is **0.75 EDU**. Water availability benefit does not increase proportionately as the number of units increase on a multi-family parcel. By decreasing the equivalency as the number of units increase, a reasonable benefit assessment is achieved. Therefore, the equivalency is reduced to **0.5 EDU** per dwelling unit, on the 5th unit or above for apartment buildings with 5 units or more. Parcels with 5 or more units are considered "high density" as opposed to the "medium density" of duplexes, triplexes and four-plexes, and the Los Angeles County Assessor's land use codes segregate these parcels out.

Mobile Homes. Mobile home parks, and mobile homes located within mobile home parks, are converted to EDUs based on the population density and size of structure relative to a single-family residence. Therefore, mobile home parks and mobile homes located in mobile home parks are assessed **0.5 EDU** per mobile home. No decrease is applied to this factor, as mobile homes are all separate dwellings with no common walls.

Studies have consistently shown that the average apartment unit impacts infrastructure approximately 75% as much as a single-family residence, and the average mobile home unit impacts infrastructure approximately 50%, (Sources: Institute of Transportation Engineers Informational Report [Trip Generation](#), Fifth Edition, 1991; Metcalf and Eddy, [Wastewater Engineering Treatment, Disposal, Reuse](#), Third Edition, 1991). Trip generation and wastewater usage are functions of population density. It is concluded that other infrastructure will be similarly impacted at a reduced level. The smaller average unit size of multiple residential and mobile homes and their reduced impact on water use result in a lesser benefit per unit to property.

Commercial/Industrial. Commercial and industrial parcels are converted to EDUs based on the lot size of each parcel of land. The number of equivalent dwelling units per acre for commercial/industrial property has been equated to the average single-family residential lot size of approximately 8,700 square feet, or 5 lots per acre. All properties that are developed for commercial/ industrial uses are therefore assigned **5.0 EDU's** per acre for the first five acres, with a minimum of 1 EDU per parcel. Based upon a review of large non-residential parcels within the District, as the parcel size increases above five acres, the development density on the parcel generally decreases due to requirements to provide on-site circulation, allow for the storage of materials or equipment, provide buffers to adjacent land uses and other factors associated with the types of development which require larger



parcels. Therefore, after the first 5 acres, each additional acre will be charged as vacant land as further described below; 25% of 5.0 EDU's, or 1.25 EDU's per acre.

Additionally, a water use factor is applied to both the commercial and industrial parcels as follows, based on relative average water usage as compared to single-family residential developments:

- Commercial Water Use Factor = 1.4
- Industrial Water Use Factor = 1.1

Recreational Camping Facilities. Recreational camping facilities typically have large land areas comprised of mostly park-like open space and only a few buildings. Therefore, to more accurately assign EDUs to these parcels, a "theoretical area" will be calculated for each of them. The typical developed commercial parcel has 1/3 of its lot area covered by improvements. Using this standard, the "theoretical area" is computed by multiplying the improvement area of each camping parcel by 3. This "theoretical area" is then converted to acreage, and the Equivalent Dwelling Unit factor of 5 EDU per acre is applied.

Vacant. Vacant property receives a benefit from water services availability. Water availability allows the parcel to develop to its maximum use in the future. Based upon the opinions of professional appraisers who appraise current market property values for real estate in Southern California, the land value portion of a property typically ranges from 20 to 30 percent; in the Three Valleys Municipal Water District, the average is about 25 percent. Additionally, the utilization of vacant property is significantly less than improved property. Consequently, vacant property shall be assessed at the rate of 25% of improved property. Therefore, vacant single-family residential parcels are assessed 25% of a developed SFR parcel, or **0.25 EDU** per parcel, and vacant non-SFR parcels are assessed at the rate of 25% of the developed commercial/industrial properties, or **1.25 EDUs** per acre or any portion thereof, up to a maximum of 5 acres per parcel.



A summary of Equivalent Dwelling Units and Benefit Factors is shown on the following table:

EQUIVALENT DWELLING UNITS						
LAND USE	BASIC UNIT		EDU FACTOR		USE FACTOR	EDU RATES
Single-Family Res. (SFR)	1 DU	x	1	x	1	= 1.0 EDU/DU
Multi-Family Res. and Condominiums	1 DU	x	0.75	x	1	0.75 EDU/DU for the first 4 DU's
	1 DU	x	0.5	x	1	= 0.5 EDU/DU after the 4 th DU
Mobile Homes	1 DU	x	0.5	x	1	= 0.5 EDU/DU
Commercial	1 acre	x	5	x	1.4	= 7.0 EDU/acre for the first 5 acres (min. 1 EDU/parcel)
	1 acre	x	1.25	x	1.4	= 1.75 EDU/acre after the 5 th acre
Industrial	1 acre	x	5	x	1.1	= 5.5 EDU/acre for the first 5 acres (min. 1 EDU/parcel)
	1 acre	x	1.25	x	1.1	= 1.375 EDU/acre after the 5 th acre
Recreational Camping Facilities	1 acre*	x	5	x	1	= 5.0 EDU/acre
Vacant SFR	1 parcel	x	0.25	x	1	= 0.25 EDU/parcel
Vacant Non-SFR	1 acre	x	1.25	x	1	= 1.25 EDU/acre (min. 0.25 EDU/parcel; max of 5 acres/parcel)

D. ASSESSMENT RATES

The total number of Equivalent Dwelling Units (EDUs) has been calculated for the District based upon current land use data as shown on the latest assessor's roll for Los Angeles County and the methodology described above. The number of EDUs by land use type is shown in the table below:

Land-Use Type	Equivalent Dwelling Units
SFR	108,766.00
MFR and Condominium	27,772.75
Mobile Home Parks	4,027.50
Commercial	31,607.68
Churches	3,164.51
Industrial	22,633.42
Recreational Camping Facilities	0.86
Vacant SFR	621.75
Vacant Non-SFR	904.68
Total:	199,499.15

Based upon the budget of \$4,075,749.87 as shown in Section II of this report, the Assessment Rate for FY 2021/2022 per Equivalent Dwelling Unit (EDU) is **\$20.43/EDU**, as calculated below.

FY 2020/2021 Total Assessment Revenue	Total Equivalent Dwelling Units	Applied Assessment Rate/EDU
\$4,075,749.87	199,499.15	\$20.43

Note: Difference in Total Assessment and EDUs multiplied by the Rate is due to rounding.

The following table, Summary of Assessment Rates, provides the proposed Maximum Assessment and Applied Assessment Rates for the ten-year period beginning with FY 2012/2013. The Board may continue to levy the Assessment in future years (i.e. beyond FY 2021/2022) so long as MWD continues to impose the RTS charge upon the District. However, the maximum Assessment Rate per EDU shall never be greater than \$29.41, nor shall the total amount assessed be greater than the sum of the RTS charge and administrative costs.



SUMMARY OF MAXIMUM AND APPLIED ASSESSMENT RATES

Fiscal Year	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Maximum Assessments Rate/EDU	\$29.41	\$29.41	\$29.41	\$29.41	\$29.41	\$29.41	\$29.41	\$29.41	\$29.41	\$29.41
Applied Assessments Rate/EDU	\$20.46	\$23.22	\$25.02	\$23.09	\$20.16	\$18.51	\$18.79	\$19.23	\$19.90	\$20.43

E. AMOUNT OF ASSESSMENT

The amount of the proposed assessment for FY 2021/2022, based on EDUs as apportioned to each parcel shown on the latest roll of the Los Angeles County Assessor, is contained in the Assessment Roll on file in the office of the Secretary of the Three Valleys Municipal Water District. The description of each parcel is part of the records of the County Assessor and these records are, by reference, made a part of this Engineers Report.

F. ACCURACY OF DATA

The data utilized in developing the assessment rate calculations has been taken directly from the Los Angeles County Assessor's Roll.

Some parcels that are partially improved often will appear on the Assessor's roll as improved. These parcels that are brought to the attention of the District, and are found to be so classified after field review, will have their assessment revised per this report: for that portion of the property which is improved, the developed land use benefit formula will apply; for that portion of the property which is unimproved, the vacant land use benefit formula will apply.

Should a property owner find a discrepancy regarding a parcel, it is recommended that the owner notify the Three Valleys Municipal Water District by contacting the Secretary of the Three Valleys Municipal Water District. If warranted, the District will assist the owner in processing a correction with the County Assessor's Office. The District will be responsible for revisions to the Water Standby Charge Assessment for the property for the current Fiscal Year if the change in amount is greater than five



percent (5%). If the change is less than or equal to five percent, then the adjustment for the following year will be made at the time that the annual assessments are determined for the next Fiscal Year, and no refund will be made for the previous year's assessment.

EXHIBIT A

SAMPLE CALCULATIONS FOR VARIOUS LAND USES

Land Use	Benefit Calculation (EDU) x (Use Factor)				EDUs	\$20.43/EDU
Single Family Res.	(1 DU x 1 EDU/DU)	x	1.0	=	1	\$20.43
Triplex	(3 DU x 0.75 EDU/DU)	x	1.0	=	2.25	\$45.97
10-Unit Apartment	[(4 DU x 0.75 EDU/DU) + (6 DU x 0.5EDU/DU)]	x	1.0	=	6	\$122.58
90-Unit Apartment	[(4 DU x 0.75 EDU/DU) + (86 DU x 0.5EDU/DU)]	x	1.0	=	46	\$939.78
Store ¼ acre parcel	(¼ acre x 5.0 EDU/acre)	x	1.4	=	1.75	\$35.75
Bank/Office Bldg. ½ acre parcel	(½ acre x 5.0 EDU/acre)	x	1.4	=	3.5	\$71.51
Office Building 2 acre parcel	(2 acre x 5.0 EDU/acre)	x	1.4	=	14	\$286.02
Service Station ½acre parcel	(½ acre x 5.0 EDU/acre)	x	1.4	=	2.33	\$47.66
Light Manufacturing ¼ acre parcel	(¼ acre x 5.0 EDU/acre)	x	1.1	=	1.38	\$28.09
Heavy Manufacturing 7 acre parcel	[(5 ac x 5.0 EDU/ac) + (2 ac x 1.25 EDU/ac)]	x	1.1	=	30.25	\$618.01
Recreational Camping Facility	[(2,500 sf x 3) ÷ 43,560 sf/ac] x 5.0 EDU/ac	x	1.0	=	0.86	\$17.59
Vacant SFR	(1 parcel x 0.25 EDU/parcel)	x	1.0	=	0.25	\$5.11
Vacant Non-SFR 1 acre parcel	(1 acre x 1.25 EDU/acre)	x	1.0	=	1.25	\$25.54
Vacant Non-SFR 5+ acre parcel	(5 acre x 1.25 EDU/acre)	x	1.0	=	6.25	\$127.69

Note: Total Assessment EDU may not calculate exactly due to rounding.



EXHIBIT B

ASSESSMENT ROLL FOR FY 2021/2022

Each Assessor Parcel Number and its assessment to be levied for FY 2021/2022 is shown on the Assessment Roll on file in the office of the Secretary of the Three Valleys Municipal Water District and is incorporated herein by reference. Reference is made to the Los Angeles County Assessor's office for further description of the parcels in the District.