

Description:	The Metropolitan Water District of Southern California (MWD) is a consortium of 26 cities and water districts that provides drinking water to nearly 18 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura Counties. The mission of MWD is to provide its service area with adequate and reliable supplies of high quality water to meet present and future need. MWD's self-defined boundary excludes location-based emissions.		
Industry:	22 - Utilities		
Address:	700 North Alameda St, Los Angeles, California, US	Contact: Jon Chang	www.mwdh2o.com

Reporting Information

Inventory Type	Self-Defined
Reporting Protocol:	GRP 3.0
GWP Standard:	SAR
Base Year:	
Scope 2 method	N/A - No Base Year reported
Reporting Year Type	Calendar Year
Consolidation Methodology:	Operational Control Only
Status:	TCR Accepted

Verification Information

Verification Body:	Scientific Certification Systems
Level of Assurance:	Reasonable

Entity Emissions | Total in metric tons of CO2e

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Stationary Combustion - Scope 1	1,118.65886	1,114.79	2.46456	1.4043	0	0	0	0
Mobile Combustion - Scope 1	6,333.848	6,289.92	3.318	40.61	0	0	0	0
Fugitive - Scope 1	114.4992	0.9729	0	0	113.5263	0	0	0
Total	7,567.00606	7,405.6829	5.78256	42.0143	113.5263	0	0	0
Applied Offsets								
Net Total	7,567.00606							

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t of CO2e)	N2O (t of CO2e)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t of CO2e)	SF6 (t of CO2e)
Purchased Electricity - Market Based - Scope 2	245,864.591	244,954.587	306.558	603.446	0	0	0	0
Total	245,864.591	244,954.587	306.558	603.446	0	0	0	0
Applied Offsets								
Net Total	245,864.591							

Entity Emissions | Total in metric tons of gas

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	1,118.65886	1,114.79	0.11736	0.00453	0	0	0	0

Mobile Combustion - Scope 1	6,333.848	6,289.92	0.158	0.131	0	0	0	0
Fugitive - Scope 1	114.4992	0.9729	0	0	113.5263	0	0	0
Total	7,567.00606	7,405.6829	0.27536	0.13553	113.5263	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC CO2e (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	245,864.591	244,954.587	14.598	1.9466	0	0	0	0
Total	245,864.591	244,954.587	14.598	1.9466	0	0	0	0

Simplified Estimation Methods (SEMs)

	Total Estimated CO2e (t)	Total Emissions (t of CO2e)	Estimated CO2e as a Percentage of Total*
Location-based	N/A	N/A	N/A
Market-based	6,693	253,432	2.64%

*Total based on Scope 1, Scope 2, & biomass emissions

Facility Emissions | Aircrafts Fleet

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
----------------------------	----------------	---------	---------	---------	-----------------	-----------------	---------	---------

Mobile Combustion - Scope 1	150.346	148.92	0	0.0046	0	0	0	0	0
Total	150.346	148.92	0	0.0046	0	0	0	0	0

Facility Emissions | Eagle Mountain Pumping Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Fugitive - Scope 1	0.0389	0.0389	0	0	0	0	0	0
Total	0.0389	0.0389	0	0	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	61,302.307	61,076.058	3.629	0.484	0	0	0	0
Total	61,302.307	61,076.058	3.629	0.484	0	0	0	0

Facility Emissions | F. E. Weymouth WTP

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	428.55858	427.486	0.03838	0.00086	0	0	0	0

Fugitive - Scope 1	14.8754	0.3892	0	0	14.4862	0	0	0
Total	443.43398	427.8752	0.03838	0.00086	14.4862	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	2,146.951	2,139.014	0.127	0.017	0	0	0	0
Total	2,146.951	2,139.014	0.127	0.017	0	0	0	0

Facility Emissions | Gene Pumping Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Fugitive - Scope 1	0.0389	0.0389	0	0	0	0	0	0
Total	0.0389	0.0389	0	0	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	43,456.241	43,295.878	2.573	0.343	0	0	0	0
Total	43,456.241	43,295.878	2.573	0.343	0	0	0	0

Facility Emissions | Greg Ave Pump Station

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	24.021	24	0.001	0	0	0	0	0
Total	24.021	24	0.001	0	0	0	0	0

Facility Emissions | Henry J. Mills WTP

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	23.21818	23.159	0.00208	0.00005	0	0	0	0
Fugitive - Scope 1	0.5584	0.0584	0	0	0.5	0	0	0
Total	23.77658	23.2174	0.00208	0.00005	0.5	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	1,137.791	1,133.594	0.067	0.009	0	0	0	0
Total	1,137.791	1,133.594	0.067	0.009	0	0	0	0

Facility Emissions | Hiram W. Wadsworth Pumping Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Fugitive - Scope 1	62.5	0	0	0	62.5	0	0	0
Total	62.5	0	0	0	62.5	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	608.947	606.62	0.037	0.005	0	0	0	0
Total	608.947	606.62	0.037	0.005	0	0	0	0

Facility Emissions | Iron Mountain Pumping Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	1.31651	1.309	0.00021	0.00001	0	0	0	0
Fugitive - Scope 1	0.0389	0.0389	0	0	0	0	0	0
Total	1.35541	1.3479	0.00021	0.00001	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	21,217.043	21,138.897	1.256	0.167	0	0	0	0
Total	21,217.043	21,138.897	1.256	0.167	0	0	0	0

Facility Emissions | Joseph P. Jensen WTP

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	37.91005	37.818	0.00335	0.00007	0	0	0	0
Fugitive - Scope 1	9.5203	0.0584	0	0	9.4619	0	0	0
Total	47.43035	37.8764	0.00335	0.00007	9.4619	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	1,638.94	1,632.873	0.097	0.013	0	0	0	0
Total	1,638.94	1,632.873	0.097	0.013	0	0	0	0

Facility Emissions | Julian Hinds Pumping Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	1.53635	1.528	0.00025	0.00001	0	0	0	0
Fugitive - Scope 1	0.0389	0.0389	0	0	0	0	0	0
Total	1.57525	1.5669	0.00025	0.00001	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	61,831.623	61,603.483	3.66	0.488	0	0	0	0
Total	61,831.623	61,603.483	3.66	0.488	0	0	0	0

Facility Emissions | Misc Energy use

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	1.23831	1.236	0.00011	0	0	0	0	0
Fugitive - Scope 1	0	0	0	0	0	0	0	0
Total	1.23831	1.236	0.00011	0	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
---	----------------	---------	---------	---------	-----------------	-----------------	---------	---------

Purchased Electricity - Market Based - Scope 2	109.877	109.42	0.007	0.001	0	0	0	0
Total	109.877	109.42	0.007	0.001	0	0	0	0

Facility Emissions | OC-88 Pumping Facility

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	832.076	828.73	0.056	0.007	0	0	0	0
Total	832.076	828.73	0.056	0.007	0	0	0	0

Facility Emissions | Other Facilities

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	124.11767	123.816	0.01097	0.00023	0	0	0	0
Fugitive - Scope 1	2.3778	0.0778	0	0	2.3	0	0	0
Total	126.49547	123.8938	0.01097	0.00023	2.3	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
---	----------------	---------	---------	---------	-----------------	-----------------	---------	---------

Purchased Electricity - Market Based - Scope 2	1,421.128	1,415.56	0.088	0.012	0	0	0	0
Total	1,421.128	1,415.56	0.088	0.012	0	0	0	0

Facility Emissions | Power Plants & Pressure Control Structures

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	0.67426	0.673	0.00006	0	0	0	0	0
Fugitive - Scope 1	0	0	0	0	0	0	0	0
Total	0.67426	0.673	0.00006	0	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	57.4096	55.87	0.0246	0.0033	0	0	0	0
Total	57.4096	55.87	0.0246	0.0033	0	0	0	0

Facility Emissions | Reservoirs

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
----------------------------	----------------	---------	---------	---------	-----------------	-----------------	---------	---------

Stationary Combustion - Scope 1	99.61527	99.315	0.00987	0.0003	0	0	0	0
Fugitive - Scope 1	5.017	0.0778	0	0	4.9392	0	0	0
Total	104.63227	99.3928	0.00987	0.0003	4.9392	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	333.52	331.65	0.03	0.004	0	0	0	0
Total	333.52	331.65	0.03	0.004	0	0	0	0

Facility Emissions | Robert A. Skinner WTP

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	1.77929	1.767	0.00029	0.00002	0	0	0	0
Fugitive - Scope 1	12.1704	0.0584	0	0	12.112	0	0	0
Total	13.94969	1.8254	0.00029	0.00002	12.112	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	2,011.359	2,003.9	0.119	0.016	0	0	0	0

Total	2,011.359	2,003.9	0.119	0.016	0	0	0	0
--------------	-----------	---------	-------	-------	---	---	---	---

Facility Emissions | Robert B. Diemer WTP

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	39.68641	39.591	0.00351	0.00007	0	0	0	0
Fugitive - Scope 1	1.0854	0.0584	0	0	1.027	0	0	0
Total	40.77181	39.6494	0.00351	0.00007	1.027	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	1,864.203	1,857.222	0.111	0.015	0	0	0	0
Total	1,864.203	1,857.222	0.111	0.015	0	0	0	0

Facility Emissions | T&D Losses for 230 kV System

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	4,600.9734	4,584	0.2724	0.0363	0	0	0	0

Total	4,600.9734	4,584	0.2724	0.0363	0	0	0	0
--------------	------------	-------	--------	--------	---	---	---	---

Facility Emissions | Vehicle Fleet

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	357.9091	356	0.0481	0.0029	0	0	0	0
Mobile Combustion - Scope 1	6,183.502	6,141	0.158	0.1264	0	0	0	0
Fugitive - Scope 1	6.2	0	0	0	6.2	0	0	0
Total	6,547.6111	6,497	0.2061	0.1293	6.2	0	0	0

Facility Emissions | Whitsett Intake Pumping Plant

Equity share - 100.00 | Entity controls the facility emissions - Yes

Scope 1 - Direct Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Stationary Combustion - Scope 1	1.09888	1.092	0.00018	0.00001	0	0	0	0
Fugitive - Scope 1	0.0389	0.0389	0	0	0	0	0	0
Total	1.13778	1.1309	0.00018	0.00001	0	0	0	0

Scope 2 - Market Based - Indirect Emissions	Total CO2e (t)	CO2 (t)	CH4 (t)	N2O (t)	HFC (t of CO2e)	PFC (t of CO2e)	NF3 (t)	SF6 (t)
Purchased Electricity - Market Based - Scope 2	41,270.181	41,117.818	2.443	0.326	0	0	0	0
Total	41,270.181	41,117.818	2.443	0.326	0	0	0	0