



# San Francisco Water Power Sewer

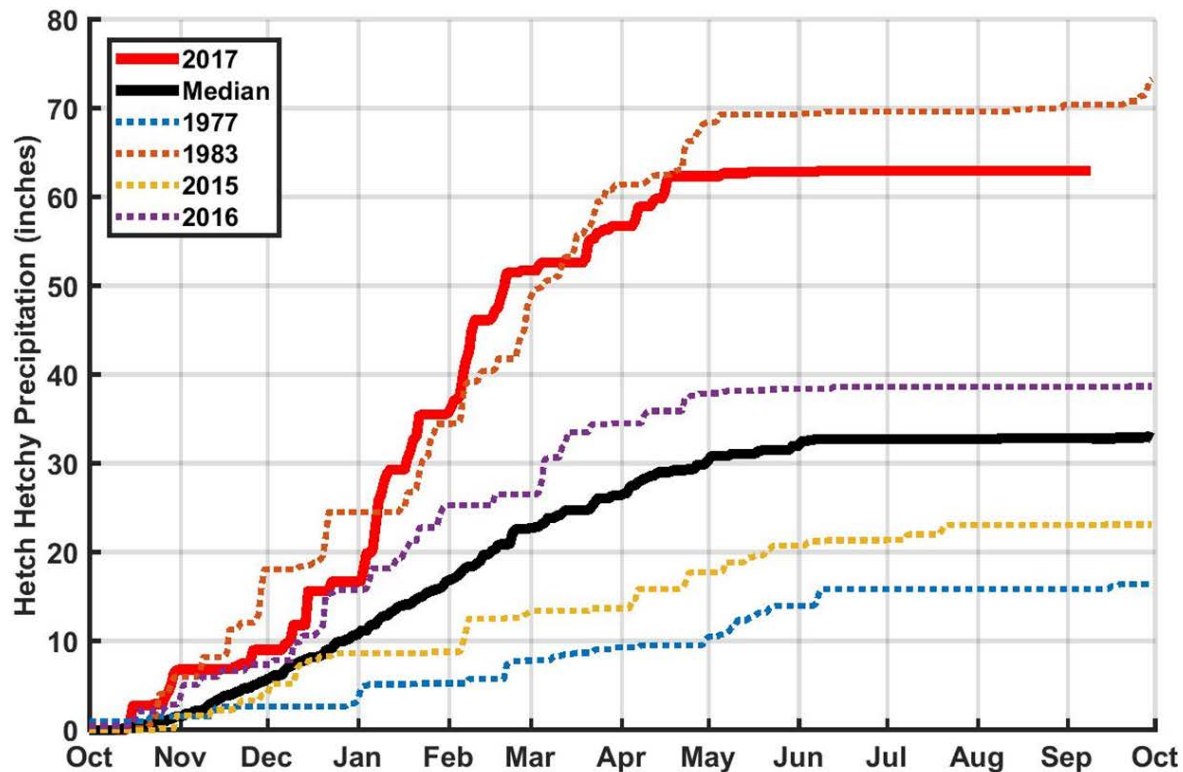
Services of the San Francisco Public Utilities Commission

# WE DELIVER

# 2017



# Precipitation at Hetch Hetchy – 2017



A new water year (WY) starts every October. The graph charts cumulative precipitation at Hetch Hetchy Reservoir as the WY progresses. Precipitation is shown as a percentage of average, and curves for the current year and past year are shown. Cumulative precipitation curves for both dry and wet years are also shown, as well as a median. Why 1977? – It is the driest year on record.

Why 1983? – It is the wettest year on record.



# Reservoir Storage Levels

An acre foot is the volume of one acre of surface area (150 by 290 feet, 10 feet shorter than a football field) to a depth of one foot, also equal to approximately 325,851 gallons.

On average, 1 acre foot of water is enough to meet the demands of 4 people for a year. Tuolumne System storage includes Hetch Hetchy, Cherry (Lloyd) and Eleanor reservoirs.

Local system includes Crystal Springs, Calaveras, San Antonio, San Andreas, and Pilarcitos Reservoirs.

Current Water Storage					
San Francisco Water					
As of midnight on: 10-Sep-2017					
Reservoir	Current Storage <sup>1,2,3</sup> (AF)	Maximum Storage <sup>3,4</sup> (AF)	Available Capacity (AF)	Percent of Maximum Storage	Normal Percent of Maximum Storage <sup>5</sup>
<b>Tuolumne System</b>					
Hetch Hetchy	346,950	360,360	13,410	96.3%	82.4%
Cherry	25,044	273,500	248,456	9.2%	-
Eleanor	26,670	27,113	443	98.4%	-
Water Bank	570,000	570,000	0	100.0%	97.5%
<b>Total Tuolumne Storage</b>	<b>968,664</b>	<b>1,230,973</b>	<b>262,309</b>	<b>78.7%</b>	<b>-</b>
<b>Local System</b>					
Calaveras	28,770	96,670	67,900	29.8%	-
San Antonio	39,370	50,637	11,266	77.8%	-
Crystal Springs	49,434	58,309	8,874	84.8%	-
San Andreas	17,344	19,027	1,683	91.2%	-
Pilarcitos	2,435	3,030	595	80.3%	-
<b>Total Local Storage</b>	<b>137,353</b>	<b>227,673</b>	<b>90,320</b>	<b>60.3%</b>	<b>-</b>
<b>Total System Storage</b>	<b>1,106,017</b>	<b>1,458,646</b>	<b>352,629</b>	<b>75.8%</b>	<b>84.4%</b>
<b>Total without water bank</b>	<b>536,017</b>	<b>888,646</b>	<b>352,629</b>	<b>60.3%</b>	<b>-</b>

<sup>1</sup> Upcountry storage is average of previous day's storage from USGS website. Cherry storage is from Form 11

<sup>2</sup> Water bank storage reported by HHWP for 9/10/2017

<sup>3</sup> Local data from Daily Water Report

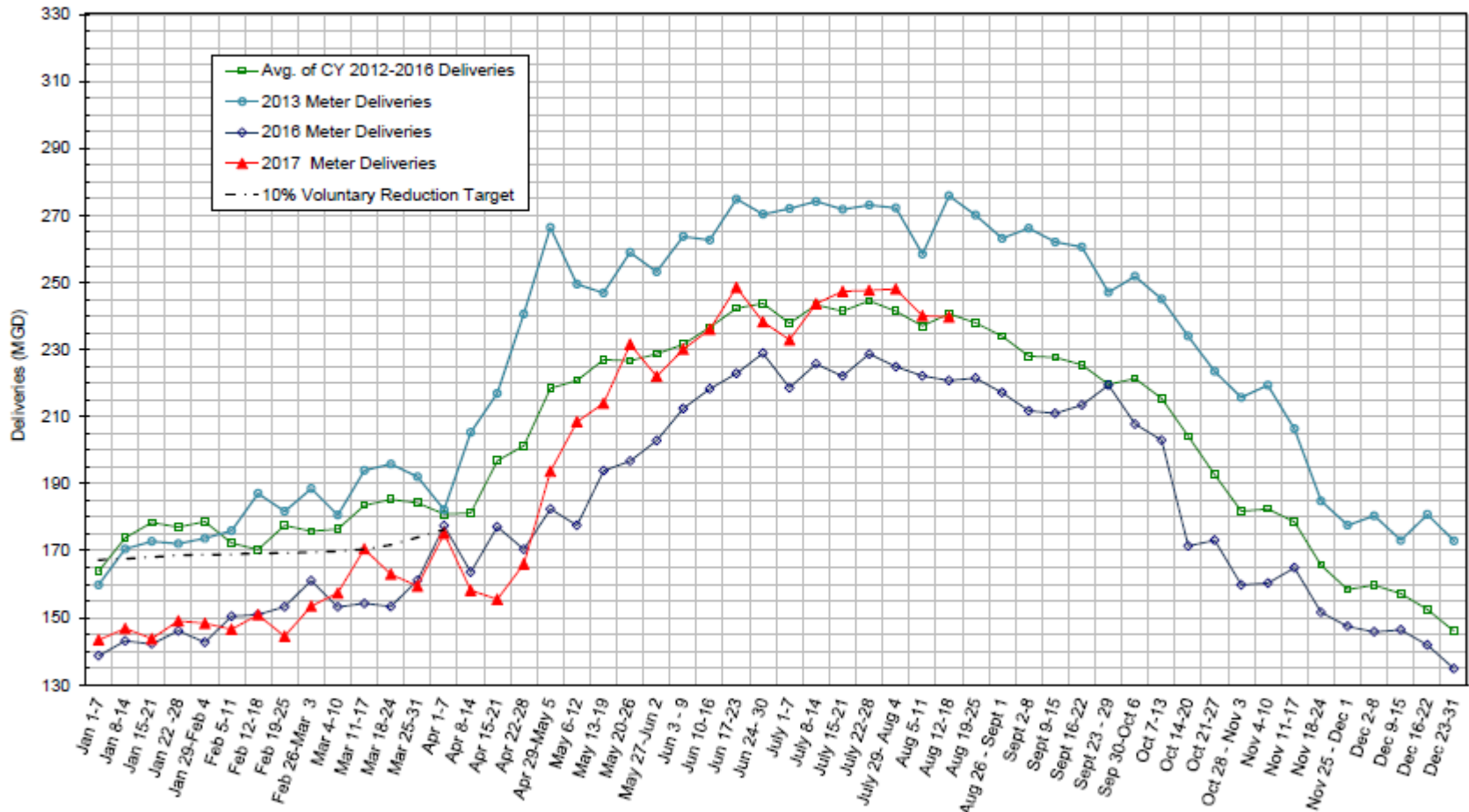
<sup>4</sup> Upcountry maximum storage is with flashboards, taken from rating curve

<sup>5</sup> The ratio of median storage for this day over maximum storage capacity. Median storage for this day is based on historical storage data from years 1982 - 2014

# Total Deliveries – Total Service Area

--- Provisional Data Subject to Revision ---

SFPUC Regional Water System - Meter Deliveries  
Total SFPUC Service Area  
Source: SFPUC Regional Water System County Meters

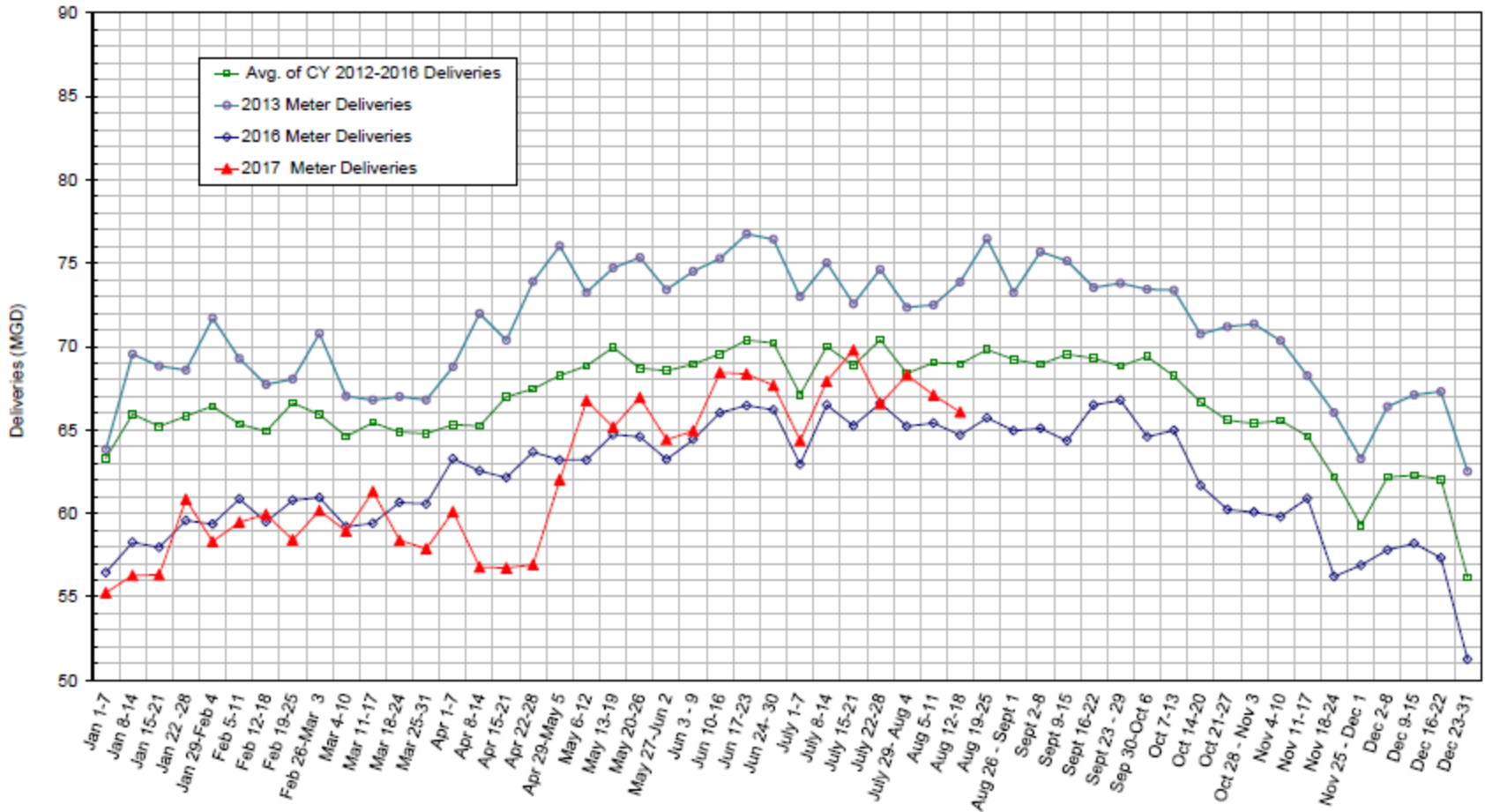


We provide water to 2.6 million residents in the greater Bay Area. Our total service area includes customers in the City and County of San Francisco, as well as Wholesale customers in the Peninsula, South Bay and East Bay Communities

# Total Deliveries – SF Customers

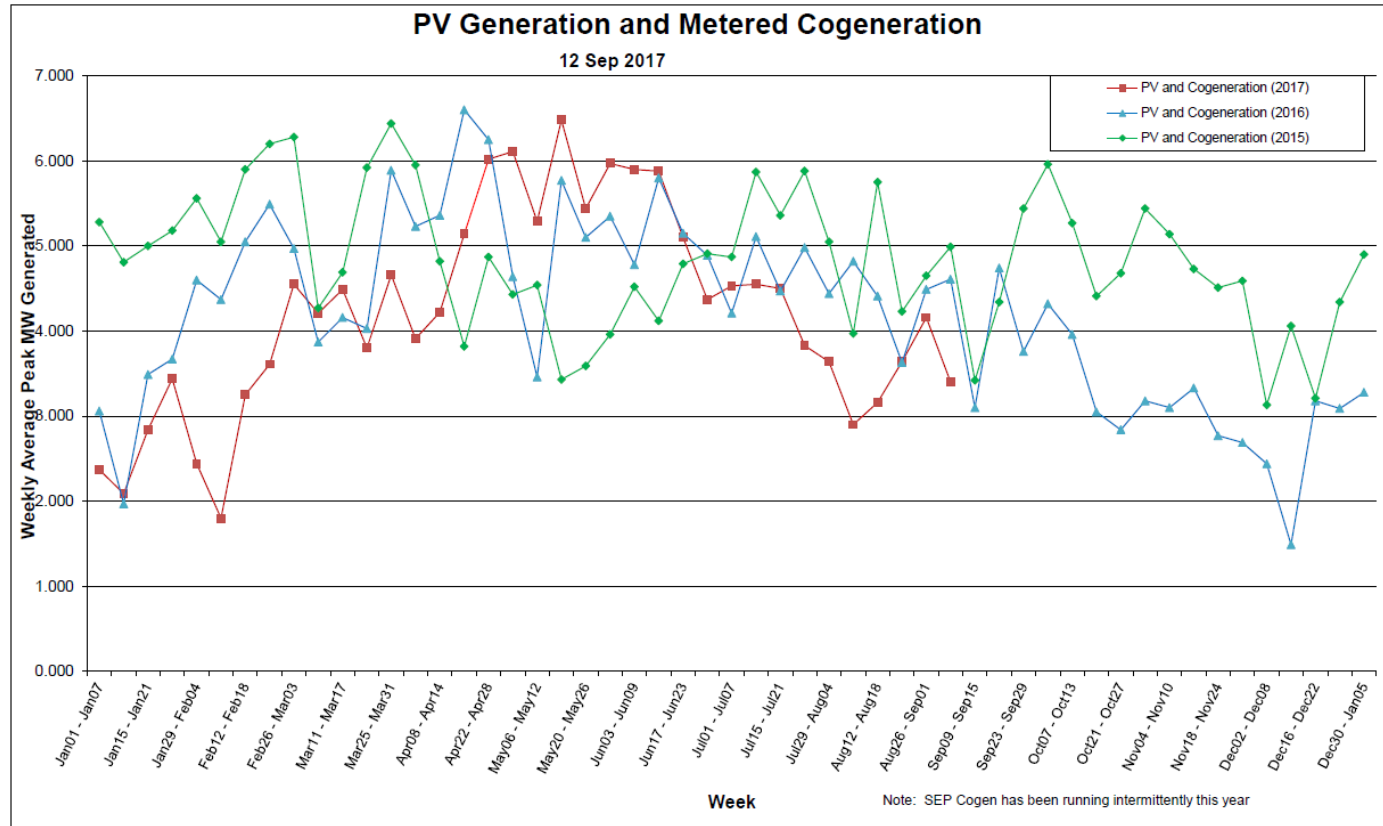
— Provisional Data Subject to Revision —

SFPUC Regional Water System - Meter Deliveries  
San Francisco Customers  
Source: SFPUC Regional Water System County Meters



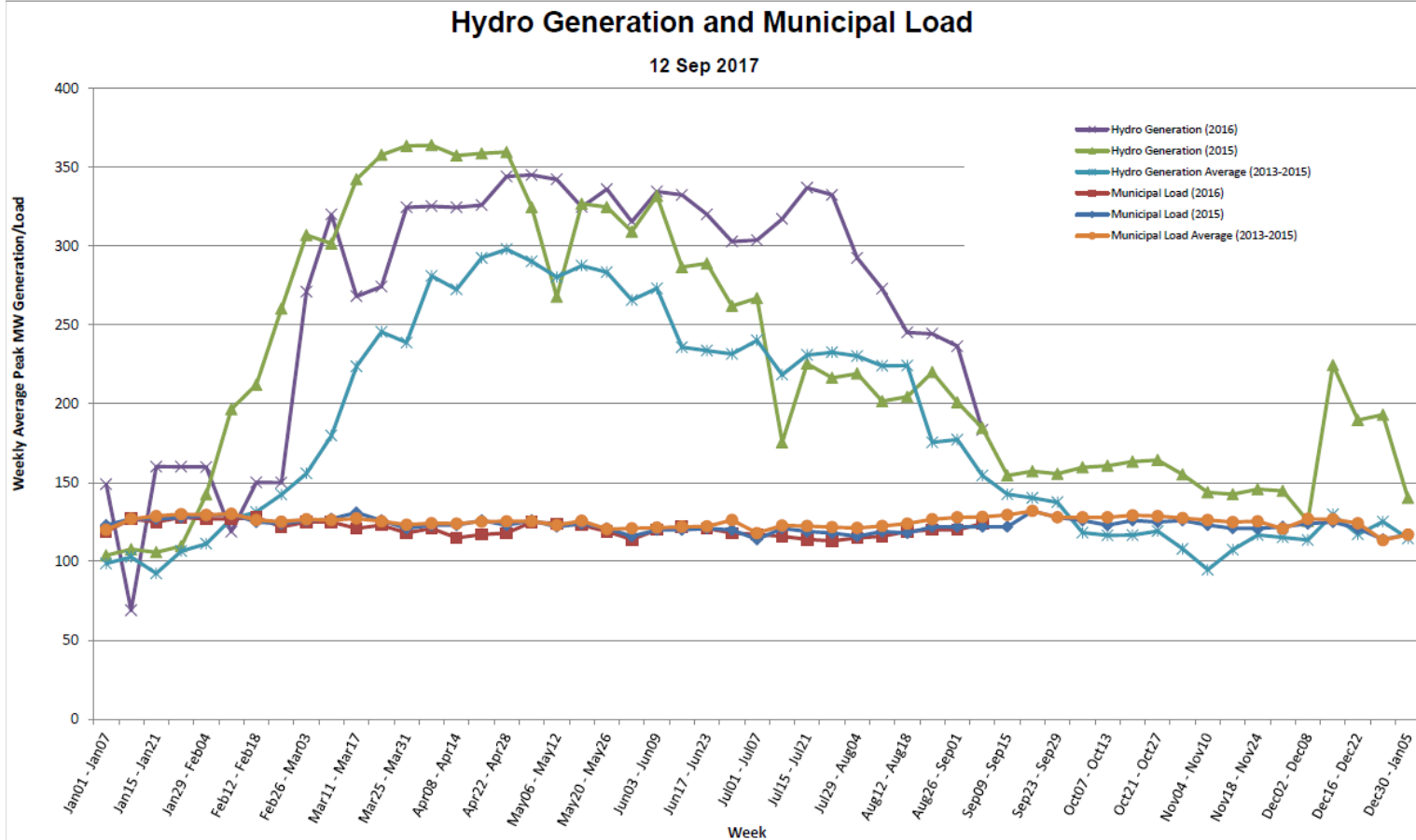
We provide water to 2.6 million residents in the greater Bay Area. "San Francisco Customers" include water metered at the San Francisco County Line which serves customers in the City and County of San Francisco.

# Photovoltaic Gen & Metered Cogeneration



**Solar Photovoltaic (PV) technology uses semiconductors to convert solar radiation into DC Electricity. Cogeneration is the process of capturing and using the by-products of electrical generation or wastewater treatment facilities. In the case of wastewater treatment facilities, cogeneration systems use the anaerobic digester gas to generate electricity. Rather than directly releasing these by-products back into the environment, they can be used to generate electricity for the facility. MW=megawatts**

# Hydro Generation and Municipal Load



**Municipal load is the amount of energy needed to power our municipal facilities. On average that is about 120 MW. These facilities include the San Francisco Municipal Railway, SF General Hospital, SF Unified School District, SFO, SFPD, SFFD, the Port of SF and the SFPUC's regional and local water and wastewater systems. Hydropower is produced at Kirkwood, Moccasin and Holm powerhouses.**