

CITY OF  
**HAYWARD**  
HEART OF THE BAY

# Update on Water Supply Outlook and Water Conservation

July 16, 2014

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# Overview

## Water Supply Update

- Current Water Supply Conditions
- Voluntary Water Use Reductions

## Hayward's Response

- Water Use Reduction Goals and Progress
- Achieving further reductions

## Water Conservation

- Programs and Education
- Future activities



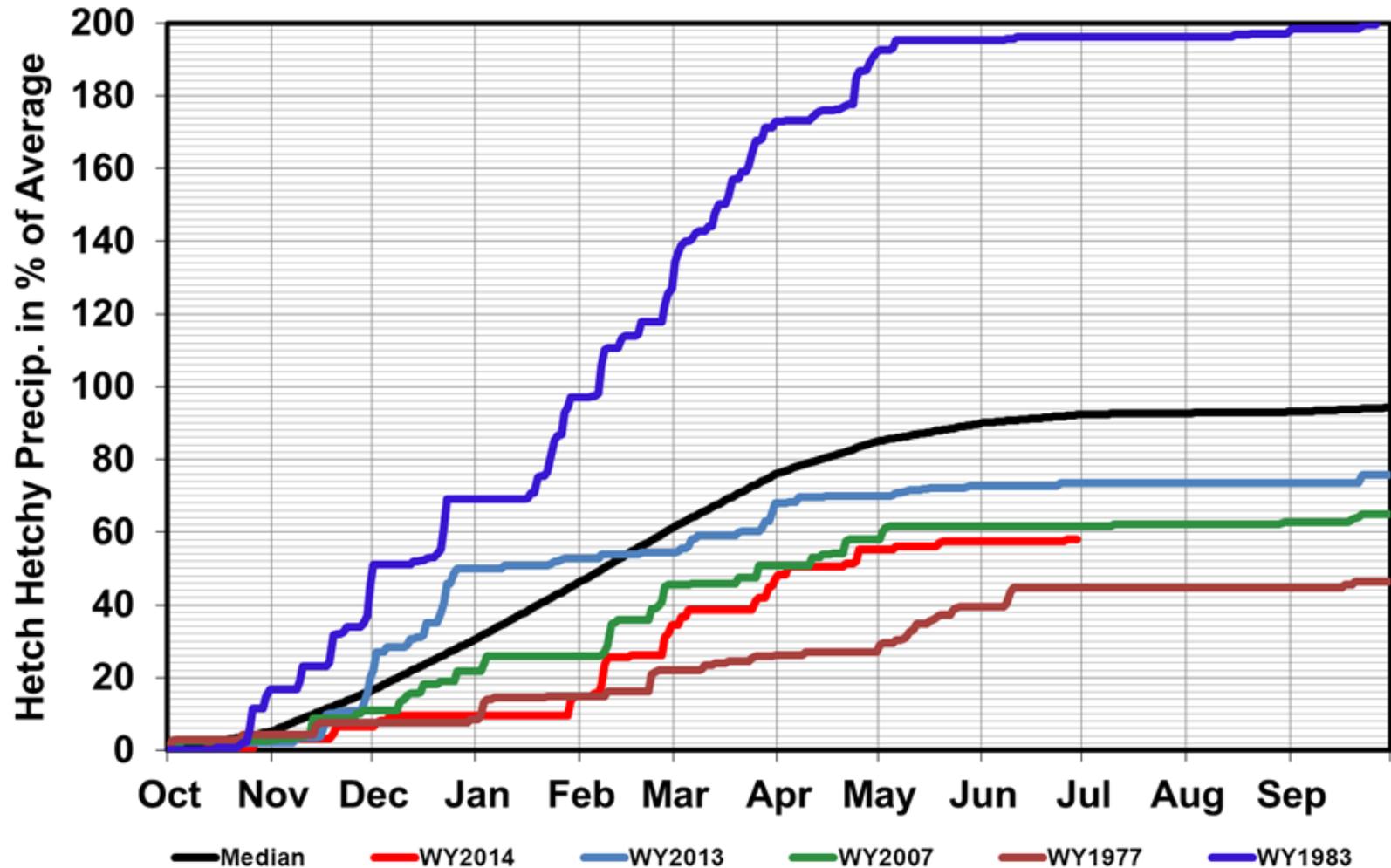
# Background

- 100% of water supply from San Francisco Public Utilities Commission (SFPUC) – dependent on precipitation
- Exceptionally dry conditions for past three years



# Cumulative Precipitation

Precipitation at Hetch Hetchy - Water Year 2014



# Water Supply Conditions

- Supplies differ from agency to agency
- Current SFPUC water supply conditions more favorable than some other water agencies:
  - ✓ Watershed in higher elevation
  - ✓ Reduced water use in recent years
  - ✓ Storage facilities
  - ✓ Water bank



# June 30 Reservoir Storage Levels

Reservoir	Current Storage <sup>1,2,3</sup> (AF)	Maximum Storage <sup>3,4</sup> (AF)	Available Capacity (AF)	Percent of Maximum Storage
<u>Tuolumne System</u>				
Hetch Hetchy	350,700	360,360	9,660	97.3%
Cherry	222,760	273,500	50,740	81.4%
Eleanor	23,700	27,113	3,413	87.4%
Water Bank	196,350	570,000	373,650	34.4%
<b>Total Tuolumne Storage</b>	<b>793,510</b>	<b>1,230,973</b>	<b>437,463</b>	<b>64.5%</b>
<u>Local System</u>				
Calaveras	16,553	96,670	80,117	17.1%
San Antonio	49,203	50,637	1,433	97.2%
Crystal Springs	54,254	58,309	4,055	93.0%
San Andreas	17,818	19,027	1,209	93.6%
Pilarcitos	2,465	3,069	604	80.3%
<b>Total Local Storage</b>	<b>140,294</b>	<b>227,711</b>	<b>87,418</b>	<b>61.6%</b>
<b>Total System Storage</b>	<b>933,804</b>	<b>1,458,684</b>	<b>524,881</b>	<b>64.0%</b>
<b>Total without water bank</b>	<b>737,454</b>	<b>888,684</b>	<b>151,231</b>	<b>83.0%</b>

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

<sup>2</sup> Water bank storage reported by HHWP for 6/29/2014

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

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

# Voluntary 10% Reductions

- SFPUC asked for 10% system-wide reductions in January from all wholesale and retail customers
- May avoid mandatory rationing next year
- Progress tracked monthly
  - ✓ Monthly targets based on historical use patterns
  - ✓ Accounts for seasonal variation



# How is Hayward Doing?

- Hayward's per capita residential water use among lowest in Bay Area
- Customers have exceeded target reductions - 45% of overall reduction goal achieved
  - ✓ Target savings through June = - 216 million gallons
  - ✓ Actual savings through June = 263 million gallons
- Hayward customers continue to be excellent stewards of water resources



# Hayward's Progress To Date



- Water Use Baseline 1
- Agency Reported Water Purchase 3
- Water Use Target 2
- SFPUC Metered Data 4



# Emergency Water Conservation Regulations

- Adopted by State Water Resources Control Board on July 15
- Mandates specific common-sense restrictions on outdoor use
  - ✓ Runoff from landscape irrigation
  - ✓ Use of hoses without shut-off nozzle
  - ✓ Using water to clean sidewalks, driveways and patio
  - ✓ Using water in non-recirculating fountains
- Requires implementation of Water Shortage Contingency Plan
- Staff evaluating regulations to determine specific needed actions
- Need to set the example in our municipal operations



# Going Forward...

- Implement State Water Board requirements
- Reductions during summer months will be challenging
- Continued focus on outdoor use
  - ✓ Mandated restrictions
  - ✓ Water efficient landscape classes
  - ✓ Website information
  - ✓ Local and regional outreach campaign
- Continue to monitor progress



# Water Conservation Programs

- Consumer Programs
  - ✓ Rebates and Fixture Replacements
  - ✓ Conservation-Oriented Water and Wastewater Rates
  - ✓ Education
- City conservation activities
- Ordinances



# Rebates and Fixture Replacements

- Rebates
  - ✓ High Efficiency Toilets
  - ✓ Energy Star Clothes Washing Machines
  - ✓ Lawn Replacement
- Free fixture replacements



# Conservation-Oriented Rates

- Tiered Water Usage Rates
  - ✓ Inclining block structure – four tiers for residential use
  - ✓ Discourages high water consumption
- Low Service (Fixed) Fee
  - ✓ Among the lowest in Bay Area
  - ✓ Gives customers greater control over water bill
- Wastewater Charges
  - ✓ Three residential rates
  - ✓ Automatic lower rates based on water consumption



# Education

- School education programs
  - ✓ In-class curriculum
  - ✓ Assembly programs
- Water efficient landscape classes
- Large landscape water budgets
- Special events and presentations
- Billing inserts and website



# City Conservation Actions & Ordinances

- City Conservation – Sets the Example!
  - ✓ City landscape irrigation monitoring and equipment
  - ✓ Leak detection survey and repair
  - ✓ Facility fixture upgrades – Certified Green Businesses
- Landscape Ordinances
  - ✓ Bay-Friendly focus
  - ✓ Exceeds State requirements
- Indoor Water Use Efficiency Standards



# Future Opportunities

- Advanced Metering Infrastructure (AMI)
  - ✓ Provides customers with real-time water use data
  - ✓ Powerful tool in managing water use
  - ✓ Three systems to be pilot tested

- Recycled Water

- ✓ Drought-proof resource
- ✓ Potential for irrigation and cooling tower use – annual average 250,000 gpd
- ✓ Environmental assessment getting underway
- ✓ Funding opportunities



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Questions/Discussion

