Update on State Water Project Activities
Municipal Water District of Orange County
Board Workshop
April 5, 2017

Demetri Polyzos
Resources Implementation Section

SWP By The Numbers

>700 Miles of canals, tunnels, and pipelines

20 Pumping plants

5 Hydroelectric power plants

4 Pumping generating plants

34 Storage facilities

~1,200 Employees needed to operate
State Water Contractors
By Region

Regions:
- Feather River
- North Bay
- South Bay
- San Joaquin Valley
- Central Coastal
- Southern California
- Metropolitan
- Everyone Else

Lakes:
- Shasta
- Lake Oroville
- San Luis Reservoir

Metropolitan's Total Water Use: 911,000 AF

Metropolitan's Contractors:
- Metropolitan
- Mojave Water Agency
- Palmdale Water District
- San Bernardino Valley MWD
- San Gorgonio Pass WA
- Ventura County WPD

State Water Contractors
By Contract Amounts (Table A)

Region
- Feather River
- North Bay
- South Bay
- San Joaquin Valley
- Central Coastal
- Southern California
- Metropolitan
- Everyone Else

Contractors:
- County of Butte
- Plumas County FC&WCD
- City of Yuba City
- Napa County FC&WCD
- Solano County WA
- Alameda County FC&WCD Zone 7
- Alameda County WD
- Santa Clara Valley WD
- Oak Flat WD
- County of Kings
- Dudely Ridge WD
- Empire West Side ID
- Kern County WA
- Tulare Lake Basin WSD
- Antelope Valley East Kern WA
- Castaic Lake WA
- Coachella Valley WED
- Crestline Lake Arrowhead WA
- Desert Water Agency
- Littlefork Creek ID
- Metropolitan
- Mojave Water Agency
- Palmdale Water District
- San Bernardino Valley MWD
- San Gabriel Valley MWD
- San Gorgonio Pass WA
- Ventura County WPD

Contractor Percentages:
- Metropolitan: 46%
- Kern County WA: 24%
- Everyone Else: 31%
SWP – MWD’s Largest Annual Expenditure
FY 2016-2017

- **27%** Capital Financing
- **24%** O&M
- **34%** SWP
- **5%** Supply Program
- **3%** Supply Power
- **7%** Demand Management

Recovery of Water System Costs

- Contractual obligation to repay actual costs
- No commodity charge for water
- Two types of charges:
  - Conservation
    - Capital - O&M
  - Transportation
    - Capital – O&M – Power

Lake Oroville
San Luis Reservoir
Thermalito
Hyatt
Gianelli
Castaic
Edmonston
Allocation of Water System Costs

Conservation
Table A

Transportation
Proportional Use of Facilities Factor (PUFF)

Power
Energy/AF

Projected Water Delivery @ 1.24 MAF

Current FY 2016/17 SWP Net Charges Projection
($ millions)

$513

$ 152
Variable

$ 225
O&M

$ 137
Capital
**Actions to Control Cost Growth**

- **Improved annual budget & project cost control processes**
  - Operations Maintenance and Engineering Committee
  - Richardson Audit

- **Increased oversight of regulatory compliance and habitat restoration activities**
  - Delta Compliance Programs Committee
Opportunities to Influence Decisions

- Reimbursement Agreement
- Value Engineering
- Joint Powers Authority
- Design Const. Enterprise
- Perris Recovery Wells

California WaterFix
Proposed Conveyance

Sacramento
Tunnels
SWP Pumps
CVP Pumps
Sac River
SWP Allocation Continues to be 60%

DWR working to finalize operations for the remainder of the year

San Joaquin Flows

Other Factors Considered in SWP Allocation

Delta Operations

Delta Map

OMR (negative) flows

Exports

Sacramento River Flow

San Joaquin River Flow

Direct flow to pumps

Banks and Jones PP

Sacramento

Stockton
San Joaquin River Flows

Flows expected to remain high through Spring

- Above Normal Snowpack
- CVP Reservoirs already making flood control releases
- Similar conditions as 2011 where high flows continued into July

Article 21 Supply Availability

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<td>Meet Contractor Demands</td>
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- Metropolitan has received ~43,000 AF of Article 21 supplies
- Limited during Clifton Court outage in April
- Anticipate ~100,000 AF of additional deliveries starting in May
2017 Estimated Storage Puts

- 60% SWP Allocation: ~722 TAF
- 70% SWP Allocation: ~913 TAF

- 1.0 – 1.2 MAF Estimated Storage Put Capacity
- ~100 TAF Anticipated Additional A21 Supplies
- 700 TAF Max Historic Put (2011)

Metropolitan is Forecasting an Increase in Storage Reserves this Year

End of Year Balances

- Emergency Storage
- Dry-Year Storage

- 2007: 1.8 MAF
- 2008: 1.1 MAF
- 2009: 1.0 MAF
- 2010: 1.7 MAF
- 2011: 2.4 MAF
- 2012: 2.7 MAF
- 2013: 2.3 MAF
- 2014: 1.2 MAF
- 2015: 0.9 MAF
- 2016: 1.3 MAF
- 2017: 2.0 MAF
- 2018: 2.2 MAF
Summary

- SWP is not perfect, but it delivers
- Metropolitan stands ready to assist the Department of Water Resources
- Continue to look for opportunities to influence decision making and reduce costs
- Focus is on water supply reliability and smart water management