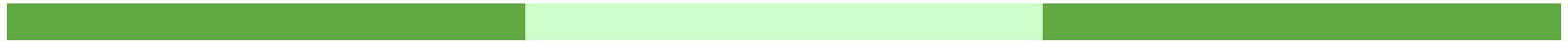


2011-12 LADWP FISCAL YEAR BASIC NEEDS BUDGET PRESENTATION

JUNE 7, 2011



APPENDICES



Los Angeles
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2011-12 Fiscal Year Basic Needs Budget Budget Discussion Overview

- ❑ Appendix 1 – Water and Power Fund Achievements
- ❑ Appendix 2 – Water and Power Budget Requirements
- ❑ Appendix 3 – Water and Power Supply and Demand
- ❑ Appendix 4 – Power Fund Fuel and Purchased Power
- ❑ Appendix 5 – Cost Reductions
- ❑ Appendix 6 – City Transfer - Historical
- ❑ Appendix 7 – Water and Power Fund Programs and Projects

Appendix 1



Water and Power Fund Achievements



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2011-12 Fiscal Year Basic Needs Budget

Water Fund

Principal Achievements for FY 2010-11

Regulatory Compliance: Water Quality

- ❑ Removed Santa Ynez Reservoir from service as an open reservoir.

- ❑ Groundbreaking for Los Angeles Aqueduct Filtration Plant Ultraviolet Treatment Plant

- ❑ Completed North Hollywood Ammoniation Plant

- ❑ Released the Draft Environmental Impact Report for the Elysian Reservoir Water Quality Improvement Project



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2011-12 Fiscal Year Basic Needs Budget

Water Fund

Principal Achievements for FY 2010-11

Regulatory Compliance: Owens Valley

90% of dust is controlled and Owens Lake is no longer in the Top Ten list of PM10 emissions. 39.5 square miles of dust control is in operation. Approximate cost to date: \$1 billion (capital, O&M, water replacement)

- Owens Valley Land Management Plan adopted by LADWP in June 2010
- LADWP secured lease from California State Lands Commission to construct Phase 8 (Owens Lake)
- Lower Owens River Project: Continued to work with Inyo/LA Technical Group to meet MOU goals
- Mono Basin: Implemented 75 restoration activities to comply with terms and conditions of water right licenses



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2011-12 Fiscal Year Basic Needs Budget

Water Fund

Principal Achievements for FY 2010-11

Infrastructure Improvements

- ❑ LADWP made strides in replacing aging water system infrastructure including the aqueduct system, distribution mainlines, pumping stations, regulator stations, and water meter/service connections.
- ❑ The Mainline Replacement Program was increased 16 percent, from 95,000 feet of mainline replaced in FY 2009-10, to 110,000 feet in FY 2010-11.



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2011-12 Fiscal Year Basic Needs Budget Water Fund Principal Achievements for FY 2010-11

Local Water Supply

- ❑ Completed the 2010 Urban Water Management Plan, which outlines water supply demands and sources through 2035.
- ❑ Increased deliveries of recycled water by 500 AF (170 Million Gallons) from FY 09-10.



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2011-12 Fiscal Year Basic Needs Budget Water Fund Principal Achievements for FY 2010-11

Local Water Supply

□ Water Recycling

- Initiated a Recycled Water Advisory Group, comprising key stakeholders from throughout the City.
- Continued preparation of a comprehensive Recycled Water Master Plan, which identifies best options to increase recycled water deliveries.
- In February 2011, the LADWP Board of Water and Power Commissioners approved an agreement to expand recycled water to major industrial customers in the Harbor Area.



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2011-12 Fiscal Year Basic Needs Budget

Water Fund

Principal Achievements for FY 2010-11

Local Water Supply

□ Water Conservation

(In June 2009, Phase III of the City of Los Angeles' Emergency Water Conservation Ordinance went into effect, limiting outdoor irrigation to two days per week)

- From June 2009 through April 2011, Los Angeles residents conserved 19 percent, or over 76 billion gallons of water. This makes Los Angeles the lowest per capita water user of any major city in the United States.
- In August 2010, the Los Angeles City Council amended the Ordinance to allow outdoor irrigation three days per week



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2011-12 Fiscal Year Basic Needs Budget

Power Fund

Principal Achievements for FY 2010-11

- Renewable Energy:
 - In calendar year 2010 LADWP became the largest utility in California to achieve 20 percent renewable generation.
 - Received Bond Buyer of the Year Award for the Milford I Wind Project for innovative public/private financing structure to lower costs

- Energy Efficiency
 - Projected energy savings of 175-190 GWH
 - Equivalent to removing 30,000 homes from the grid for 1 year
 - Avoided 101,148 metric tons of GHG emissions

- Issued the 2010 Power System Integrated Resource Plan (IRP)¹⁰



- ❑ The 480 MW Southern Transmission System (STS) upgrade was completed in December 2010 allowing for the additional transportation of renewable energy from the Milford Wind Corridor and surrounding renewable resource areas of Utah, Wyoming, and Idaho.

- ❑ Reliability
 - For the first time since 2004 the Average Interruption Frequency Index (SAIFI) was lower than PG&E, SCE, and SDG&E.
 - The System Average Interruption Duration Index (SAIDI) remained below PG&E and SDG&E.



- ❑ Initiated Customer Information System Replacement
- ❑ New LADWP Customer Bill:
 - New bill design was launched in April 2011.
 - The redesign provides a more customer-friendly, informative bill format:
 - ❑ a colorful, larger size bill
 - ❑ easy to read/understand charge summaries and payment information
 - ❑ customer usage history charts
 - ❑ an integrated customer newsletter with useful conservation tips and information
- ❑ Maintained existing high credit rating that is key to maintaining a favorable cost of debt

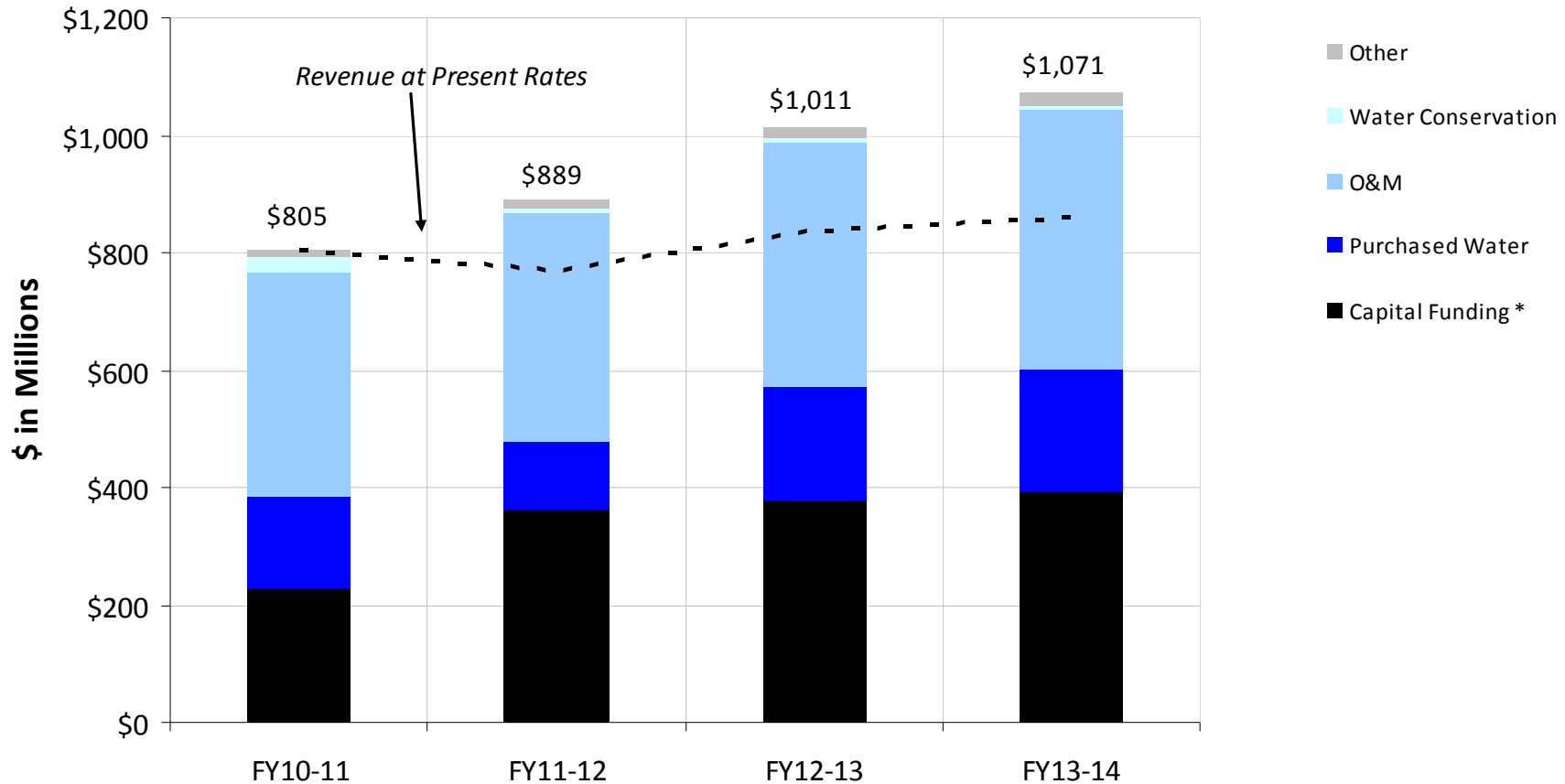
Appendix 2



Water and Power Budget Requirements



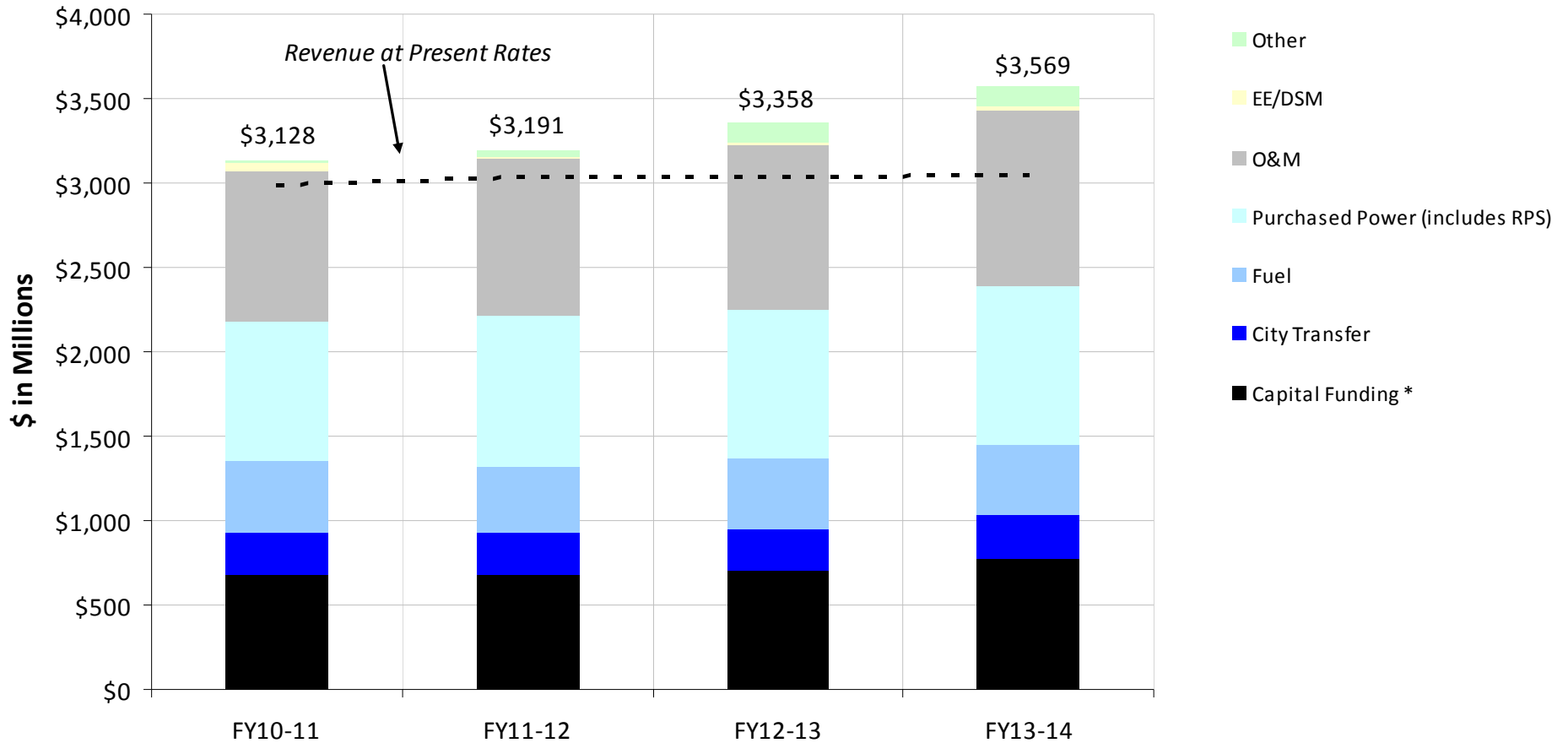
Water Revenue Requirement for Basic Business Needs



* Capital Funding includes depreciation, net interest expense, and retained earnings



Power Revenue Requirement for Basic Business Needs



* Capital Funding includes depreciation, net interest expense, and retained earnings

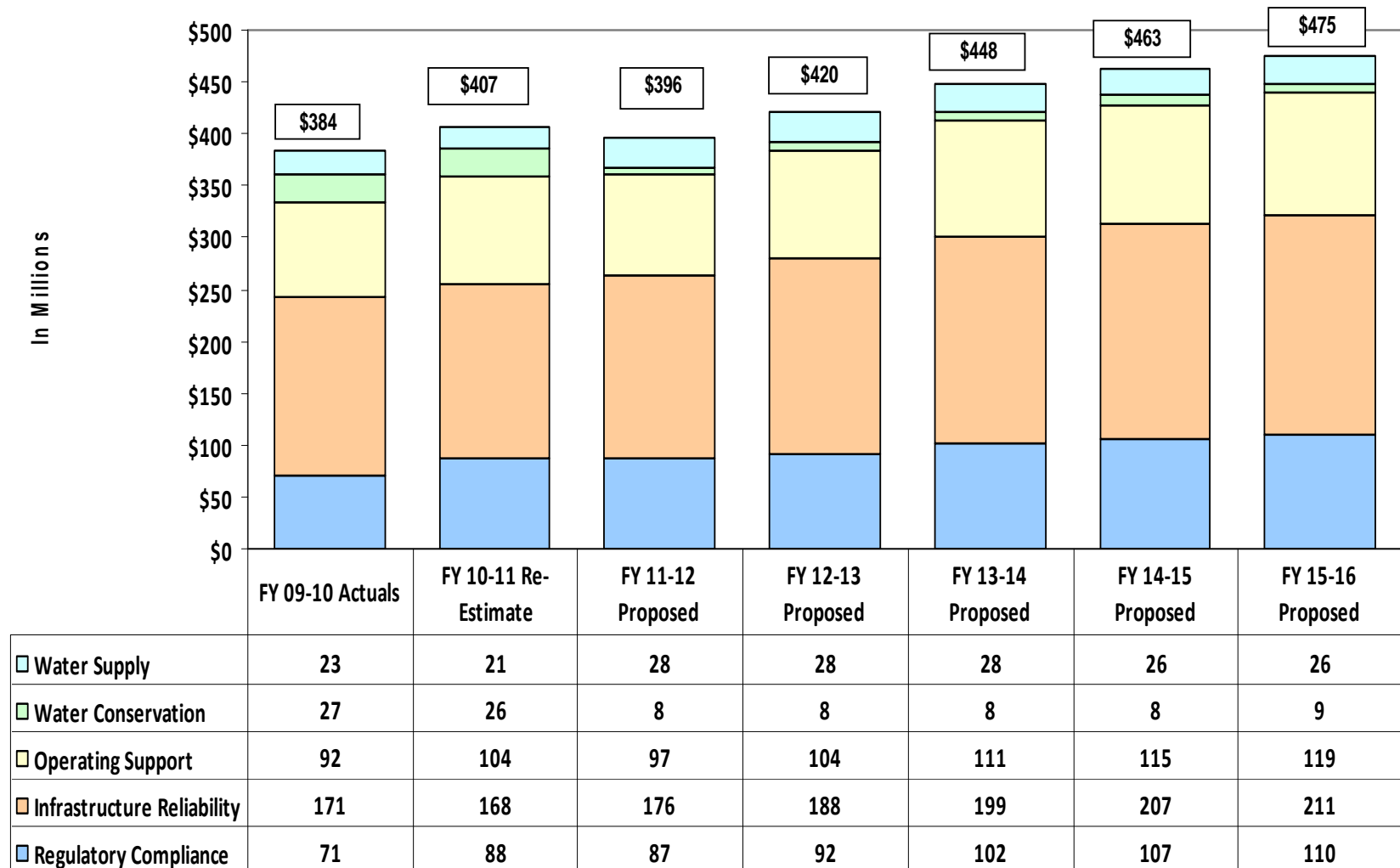


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2011-12 Fiscal Year Basic Needs Budget

Water Fund

Multi-Year Operation & Maintenance Program



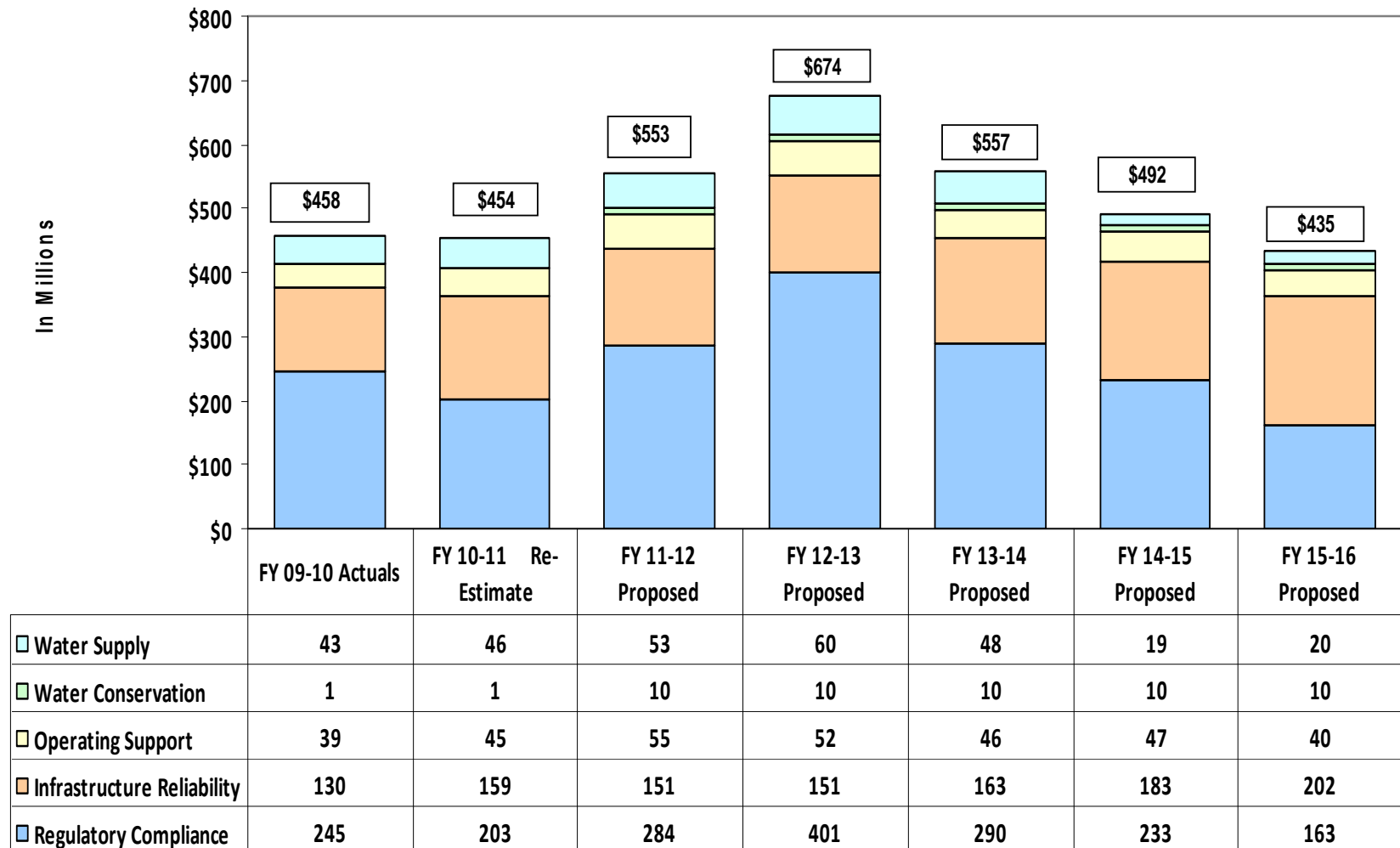


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2011-12 Fiscal Year Basic Needs Budget

Water Fund

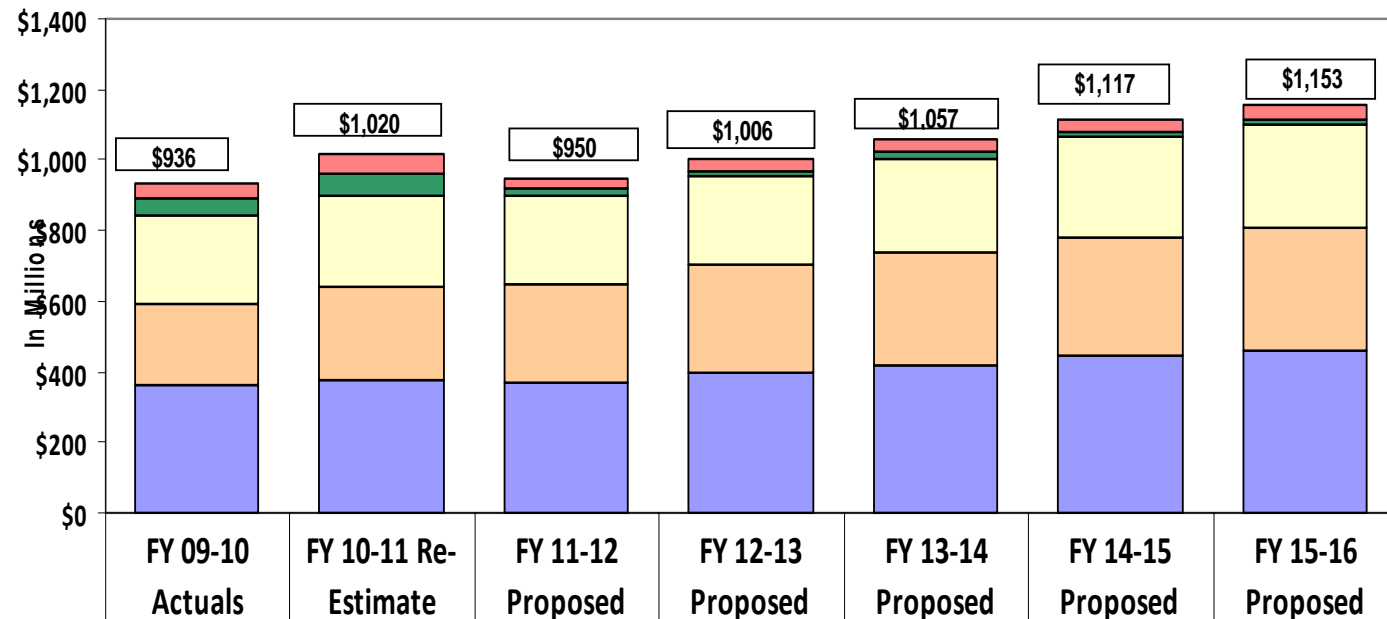
Multi-Year Capital Program



This chart reflects cash requirements for the Capital Program



2011-12 Fiscal Year Basic Needs Budget Power Fund Multi-Year Operation & Maintenance Program



■ Renewable Energy	47	61	32	35	35	36	37
■ Energy Efficiency *	45	59	18	15	16	16	18
■ Infrastructure Reliability	250	259	254	256	266	287	292
■ Operating Support	231	262	279	300	324	335	346
■ Power Reliability	363	379	367	400	416	443	460

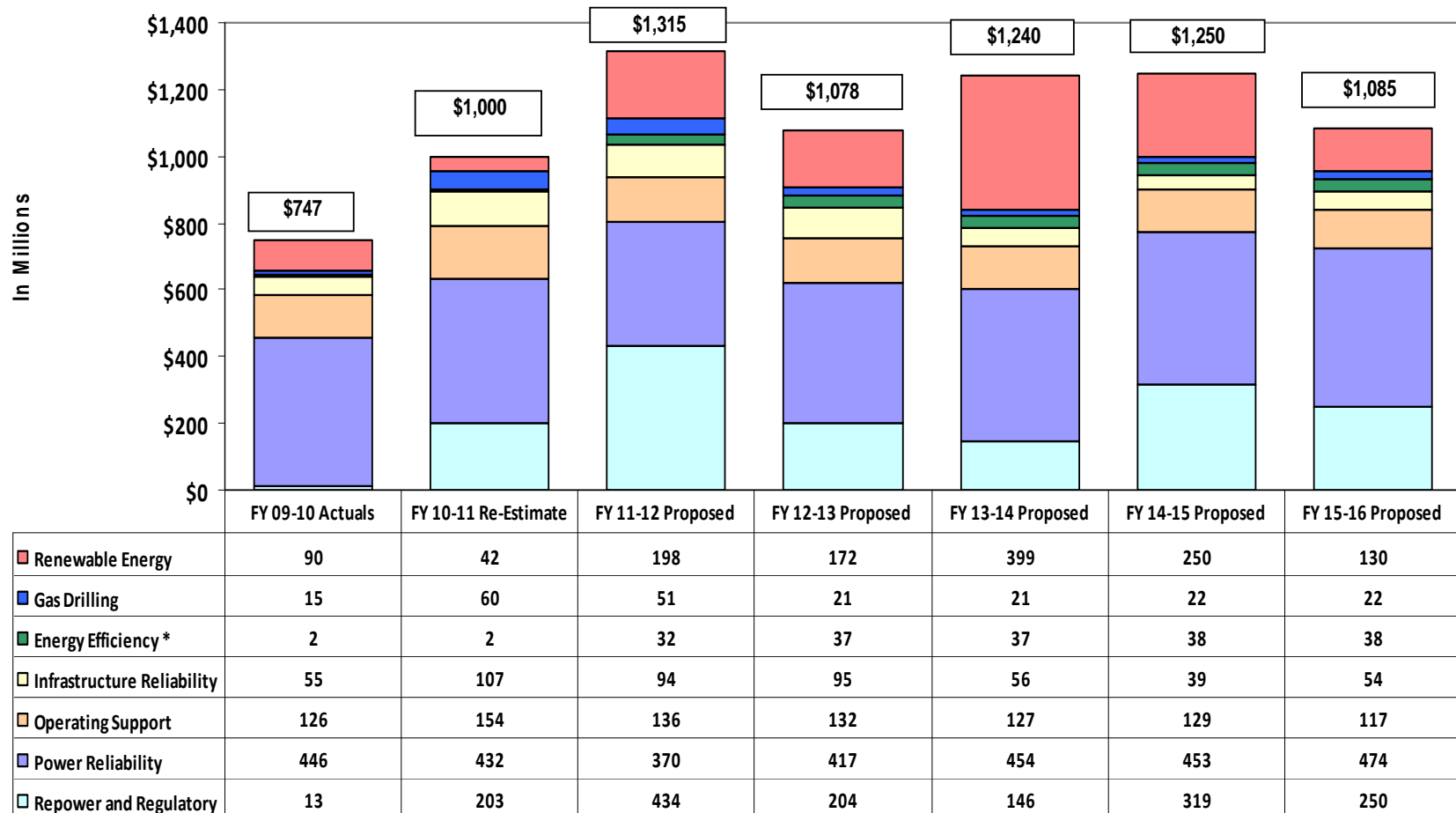
* In the above chart, proposed dollars represent only the O&M program expenditures. Effective FY 11/12, 64% of the total \$50M proposed Energy Efficiency budget is capitalized as a “regulatory asset” with a greater than 15 year life. For Fiscal Years 12/13 forward, approximately 70% of Energy Efficiency budget is being capitalized.



2011-12 Fiscal Year Basic Needs Budget

Power Fund

Multi-Year Capital Program



This chart reflects cash requirements for the Capital Program.

* Effective FY 11/12, 64% of the total \$50M proposed Energy Efficiency budget is capitalized as a “regulatory asset” with a greater than 15 year life. For Fiscal Years 12/13 forward, approximately 70% of Energy Efficiency budget is being capitalized.



2011-12 Fiscal Year Basic Needs Budget
Water Fund Key Factors
Operation & Maintenance

	Budget (in Millions)	
	FY 2010-11	FY 2011-12
Compliance with Regulatory Mandates		
Water Quality	\$ 59	\$ 63
Owens Lake	\$ 29	\$ 24
Improvements to Aging Infrastructure		
Mainlines	\$ 29	\$ 31
Development of Local Water Supply		
Recycled water	\$ 7	\$ 10
Water conservation*	\$ 26	\$ 8
Groundwater cleanup	\$ -	\$ -
Stormwater capture	\$ 4	\$ 4

* See page 20 also, reduction in O&M is partially due to major shift to capitalizing water conservation programs in FY 11-12



	Budget (in Millions)	
	FY 2010-11	FY 2011-12
Compliance with Regulatory Mandates		
Water Quality	\$ 189	\$ 222
Owens Lake	\$ 14	\$ 62
Improvements to Aging Infrastructure		
Mainlines	\$ 53	\$ 48
Development of Local Water Supply		
Recycled water	\$ 23	\$ 35
Water conservation*	\$ 1	\$ 10
Groundwater cleanup	\$ 9	\$ 9
Stormwater capture	\$ 1	\$ -

* Reflects shift in capitalizing portion of water conservation programs activities in FY 11-12



2011-12 Fiscal Year Basic Needs Budget Power Fund Key Factors Operation & Maintenance

	Budget (in Millions)	
	FY 2010-11	FY 2011-12
Reduce Ocean Water Use and Air Quality Compliance		
Replace Haynes Generation Station Units 5 and 6	\$ -	\$ -
Renewable Energy		
Construct two 22MW solar projects at Pine Tree and Adelanto	\$ 6	\$ 6
Local solar energy within Los Angeles for FIT, SIP and Munis*	\$ 32	\$ -
Feed-in-Tariff Demonstration (planning \$ in FY 10-11)	\$ 1	\$ 1
Infrastructure Improvements		
Power Reliability Program	\$ 379	\$ 367
Modernization of Castaic Power Plant	\$ 17	\$ 19
Improve Customer Service		
New Customer Information System (Funded by Water & Power Systems)	\$ -	\$ -
Energy Efficiency		
Annual energy savings from the \$50 million budget is an estimated 146 GWH	\$ 59	\$ 18

* Reflects shift in FY 11-12 to capitalize all SIP and local government solar installations.



2011-12 Fiscal Year Basic Needs Budget Power Fund Key Factors Capital

	Budget (in Millions)	
	FY 2010-11	FY 2011-12
Reduce Ocean Water Use and Air Quality Compliance		
Replace Haynes Generation Station Units 5 and 6	\$ 182	\$ 396
Renewable Energy		
Construct two 22MW solar projects at Pine Tree and Adelanto	\$ 8	\$ 92
Local solar energy within Los Angeles for FIT, SIP and Munis (planning \$ in FY 10-11)*	\$ 12	\$ 69
Feed-in-Tariff Demonstration	\$ -	\$ -
Infrastructure Improvements		
Power Reliability Program	\$ 432	\$ 370
Modernization of Castaic Power Plant	\$ 17	\$ 31
Improve Customer Service		
New Customer Information System (Funded by Water & Power Systems)	\$ 32	\$ 48
Energy Efficiency		
Annual energy savings from the \$50 million budget is an estimated 146 GWH	\$ 2	\$ 32

* Reflects shift in FY 11-12 to capitalize all SIP and local government solar installations.



2011-12 Fiscal Year Basic Needs Budget Public Benefits Program

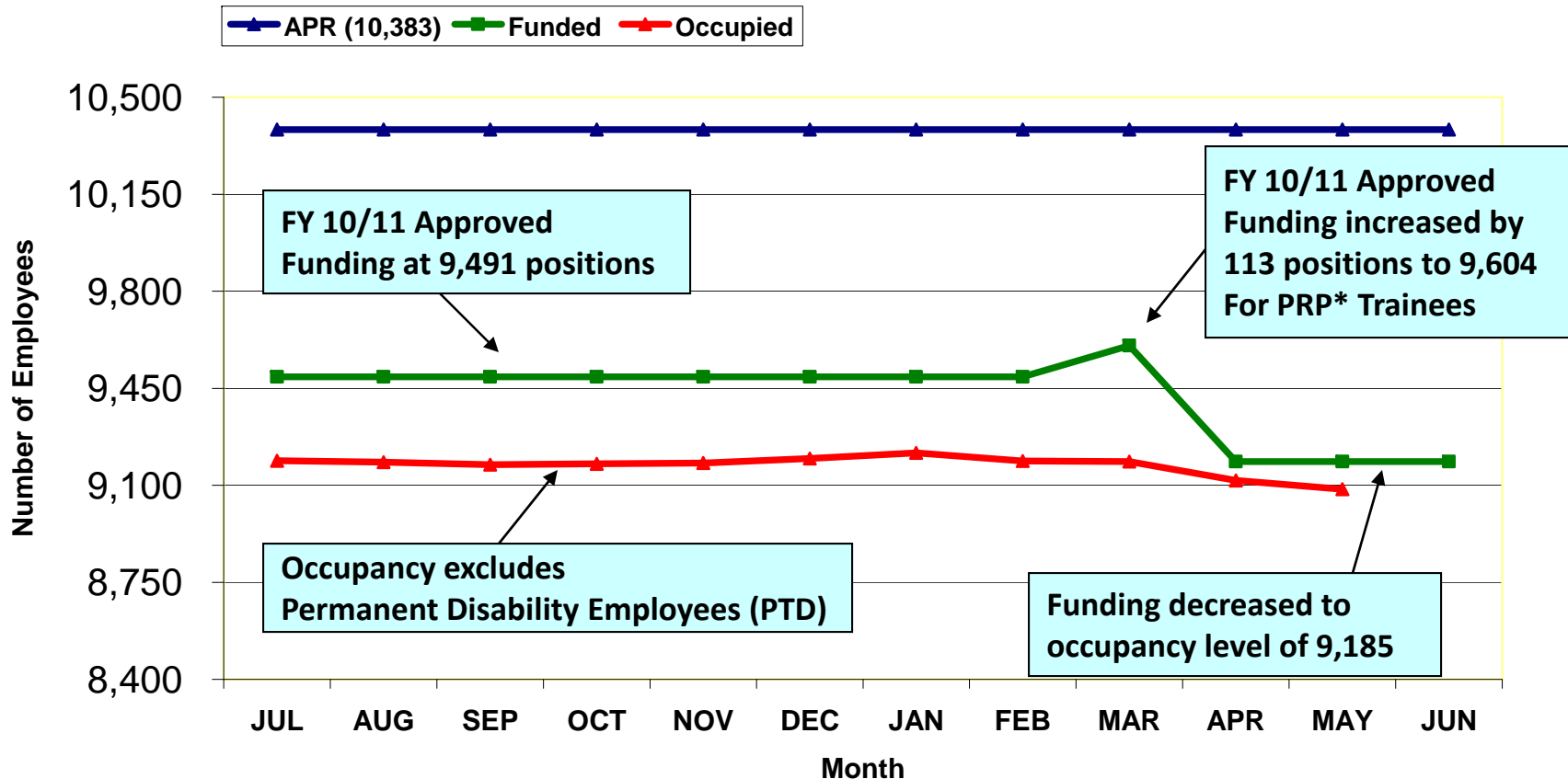
	2010-2011 (in millions)	2011-2012 (in millions) ⁽¹⁾
Demand Side Management ₍₂₎	\$ 62	\$ 25
Renewable Energy Resources	33	31
Research, Development & Demo	1	0
Low Income Program	42	20
Total Net Expenditures	<u>\$ 138</u>	<u>\$ 77</u>
Target Public Benefits Revenue (2.85% starting 2001)	<u>\$ 61</u>	<u>\$ 31</u>
Annual Under/(Over) Expenditures	(77)	(46)
Total Cumulative Program Under/(Over) Expenditures	(174)	(221)

(1) Represents first 6 months of FY 11-12. Figures in this table do not reflect full year budget for Public Benefits program elements due to the expiration of the program on January 1, 2012. Energy Efficiency programs are fully funded through the end of the fiscal year, but not reflected in FY 11-12 value here.

(2) Includes in FY 10-11, \$59 million for Energy Efficiency and \$3 million for Tree Planting program.

2011-12 Fiscal Year Basic Needs Budget APR, Funded and Occupied

“ Between March 2011 and May 2011 occupancy has decreased by 99 positions and over 400 budgeted but vacant positions were eliminated ”



* PRP – Power Reliability Program

Appendix 3

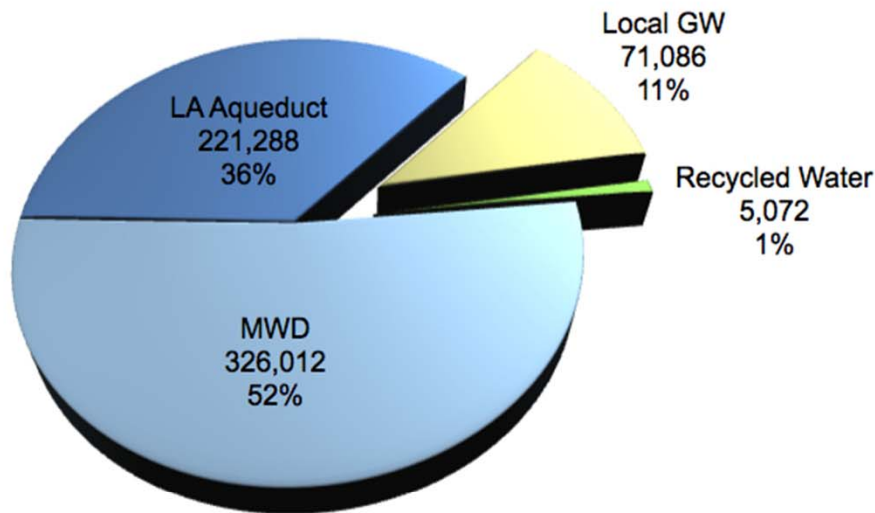


Water and Power Supply and Demand

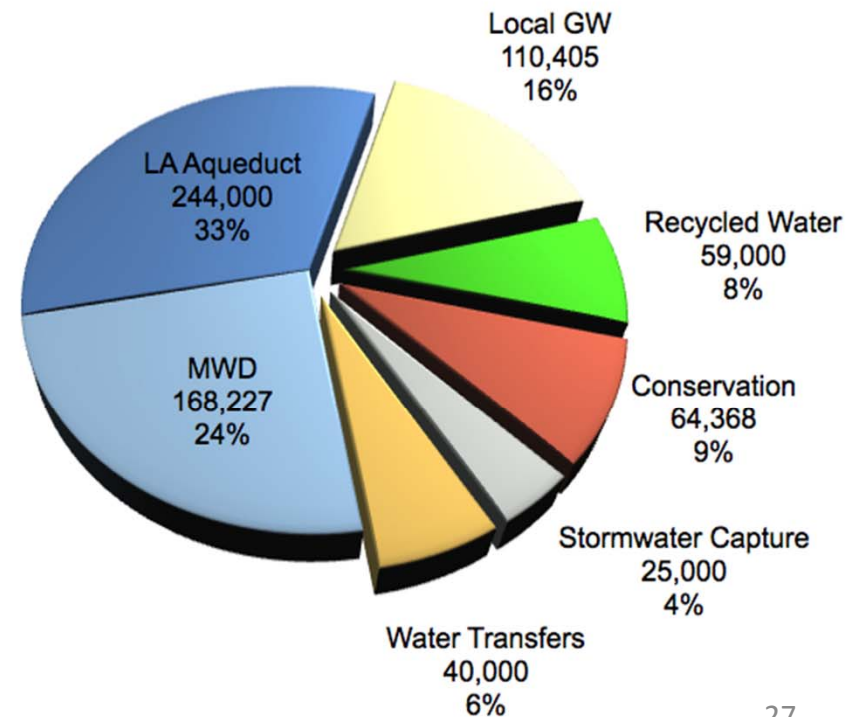


2011-12 Fiscal Year Basic Needs Budget Long-term Water Supply

FY 2006 – 2010
Average Total: 621,700 AFY*



FY 2034 – 2035
Projected Total: 646,632 AFY*
(plus 64,368 AFY new conservation = 711,000)

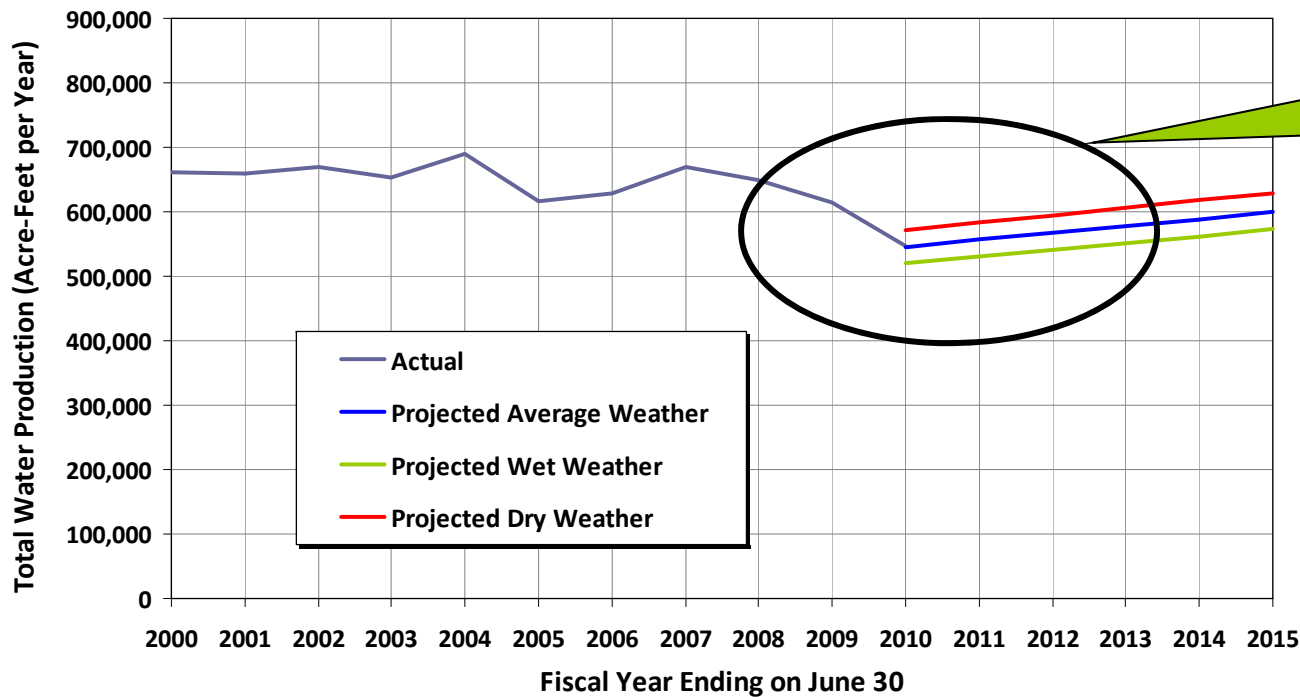


* Includes 100,000 AFY existing conservation



2011-12 Fiscal Year Basic Needs Budget Water Demand Forecast - Annual

LADWP Water Demand Forecast with Average Weather Variability



The next slide will show the monthly variability of the Demand Forecast



2011-12 Fiscal Year Basic Needs Budget Water Demand Forecast - Monthly

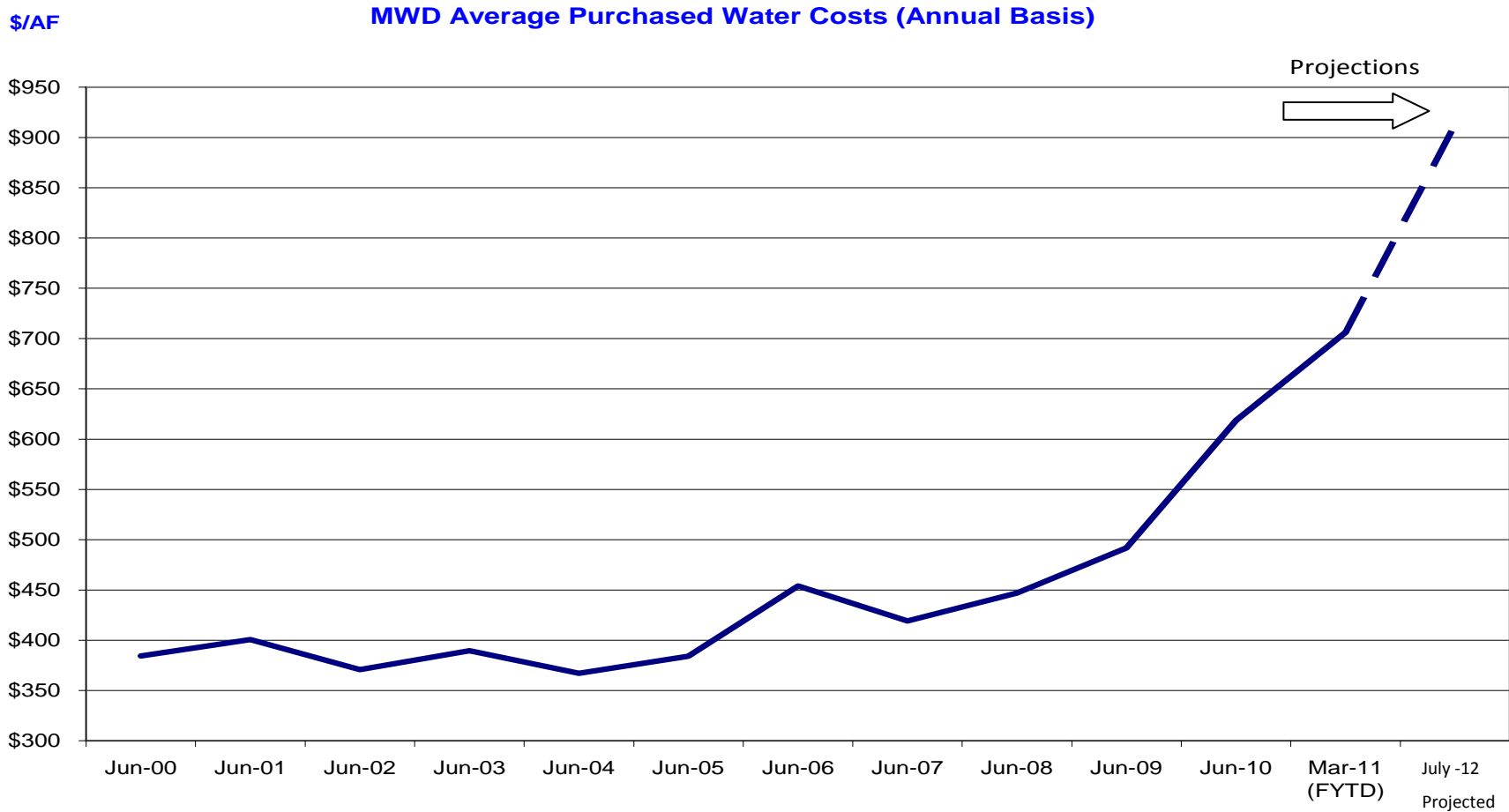
Monthly Water Demand is Highly Variable

LADWP Water Demand with Average Weather Variability





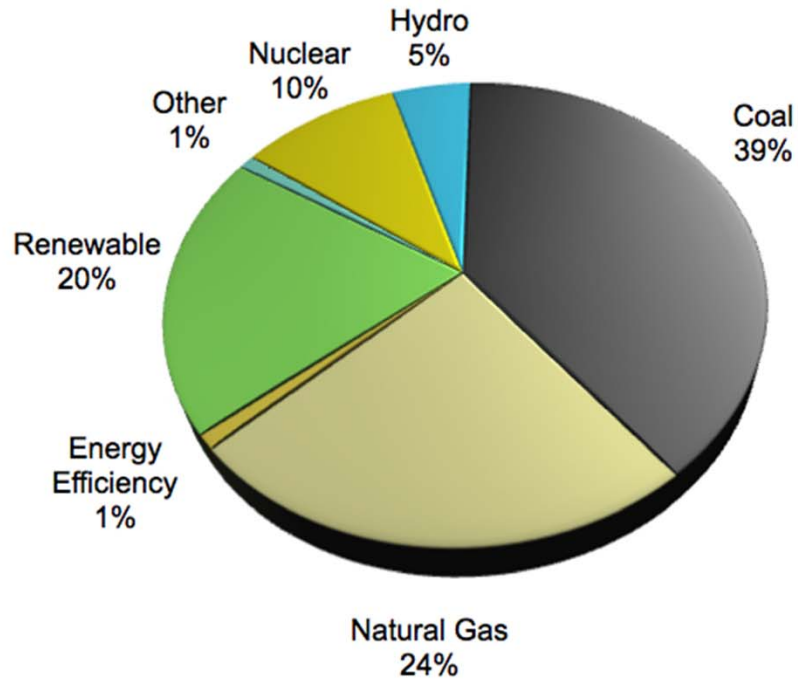
2011-12 Fiscal Year Basic Needs Budget Volatility of Purchased Water



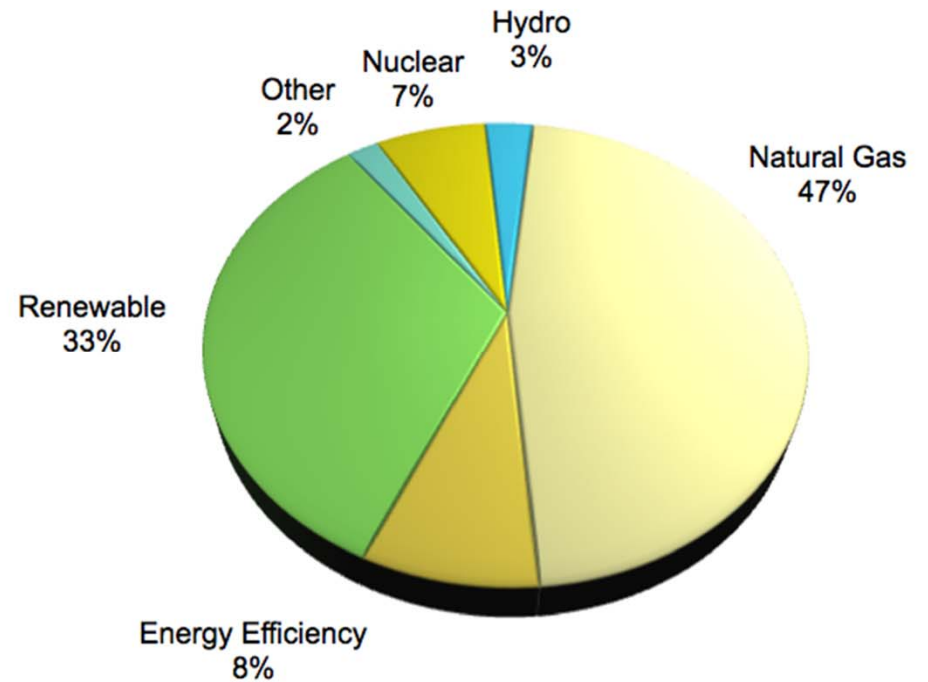


2011-12 Fiscal Year Basic Needs Budget Long-term Power Supply

2010



2030

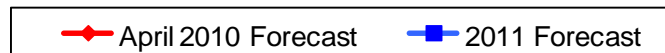
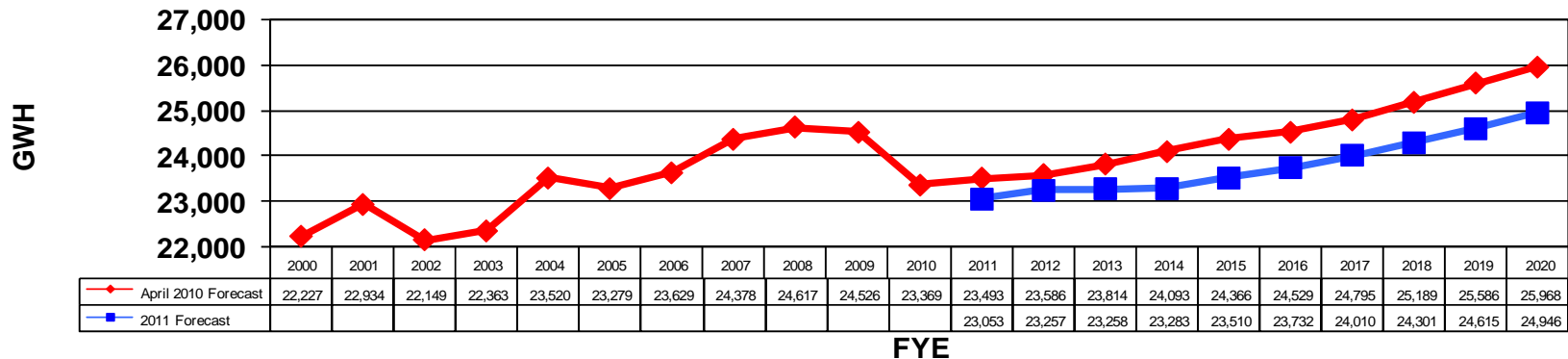


33% Renewable by 2020



2011-12 Fiscal Year Basic Needs Budget Retail Sales Forecast

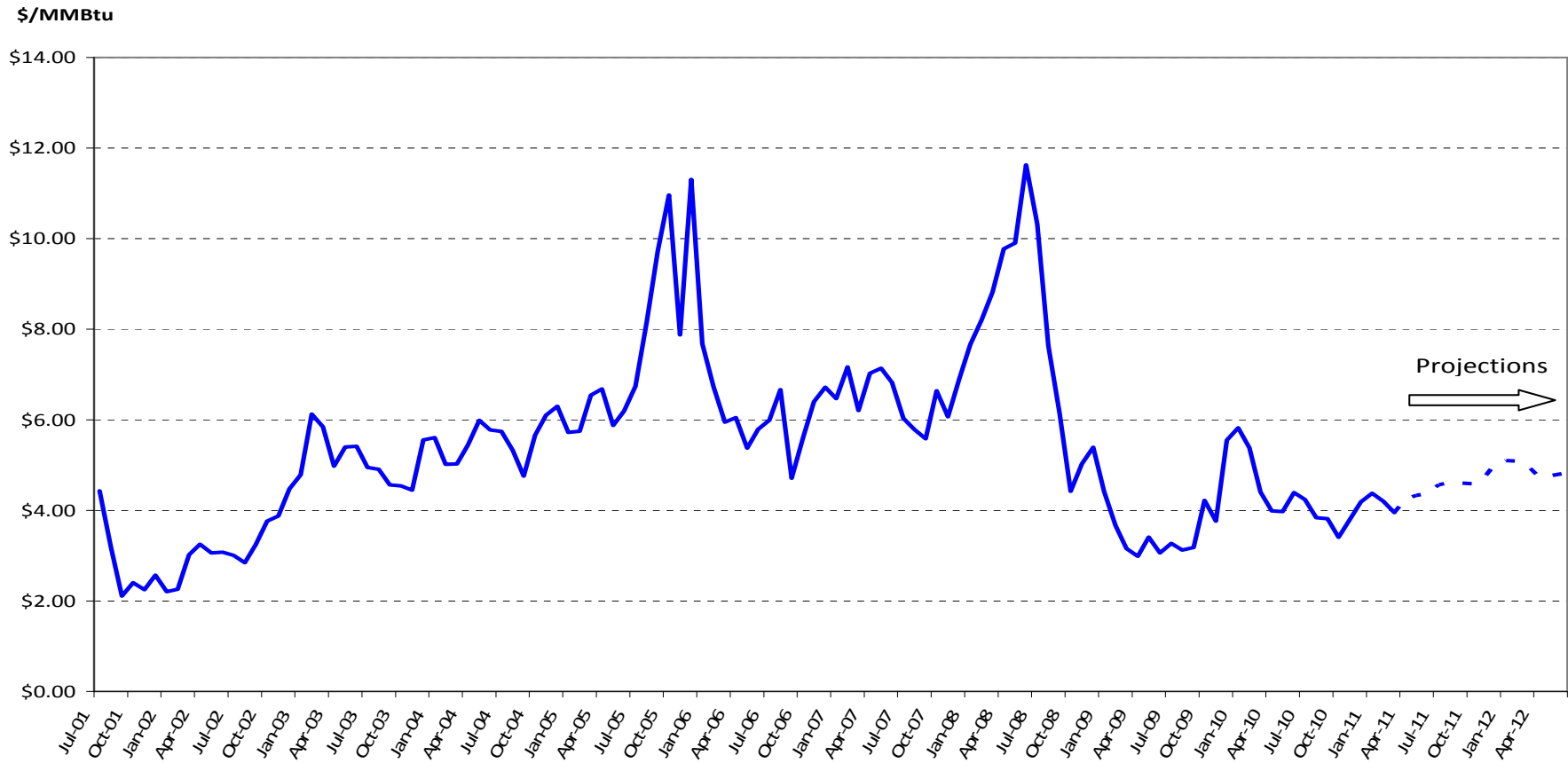
- Key Change Factors from April 2010 to 2011
 - Balance Sheet Recession means lengthy recovery period.
 - California is considered a mature economy. 20th century growth patterns are unlikely to repeat.
 - Construction activity remains at low level for extended period. Most jobs lost were construction so workers need to retrain or we could see significant migration.
 - Higher electric prices to meet 33% renewable goal.



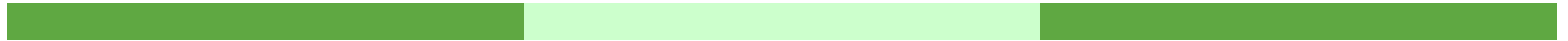


2011-12 Fiscal Year Basic Needs Budget Volatility of Natural Gas

SoCal Border Natural Gas Price (Monthly Basis)



Appendix 4

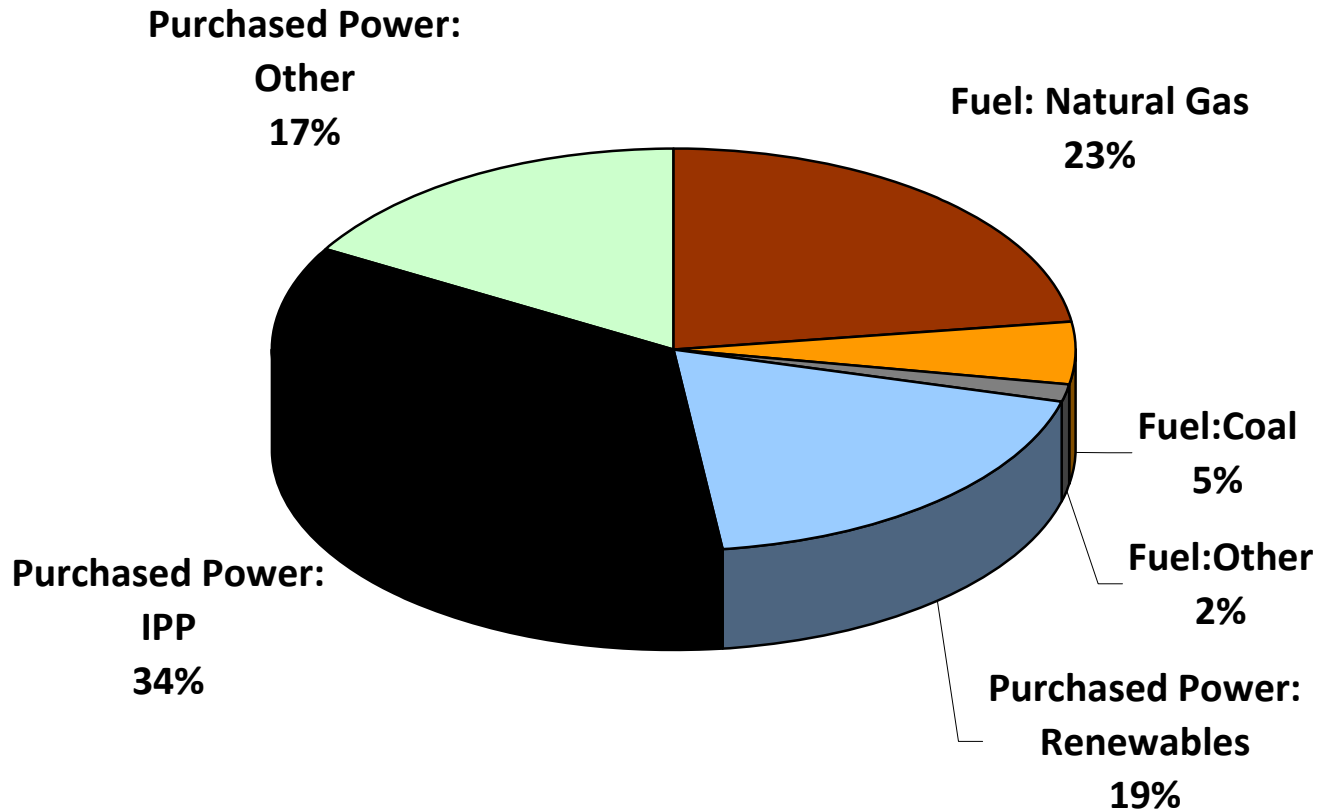


Power Fund Fuel and Purchased Power



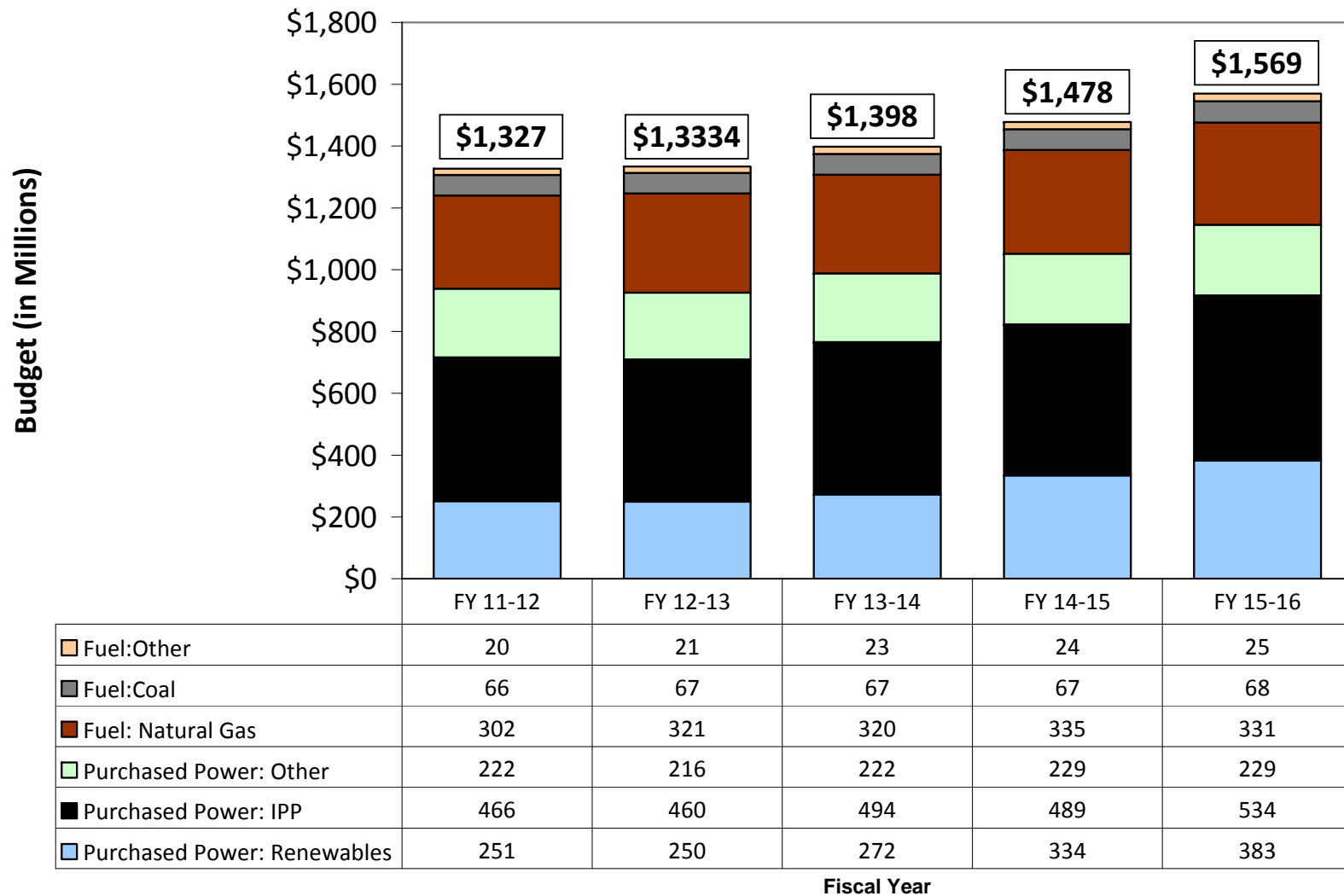
2011-12 Fiscal Year Basic Needs Budget Fuel and Purchased Power Budget

Total Fuel and Purchased Power Budget - \$1.327 Billion

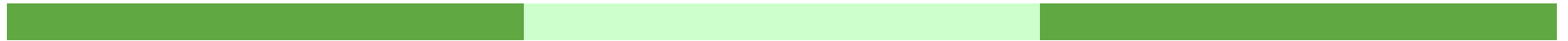




2011-12 Fiscal Year Basic Needs Budget Fuel and Purchased Power Budget



Appendix 5



Cost Reductions



2011-12 Fiscal Year Basic Needs Budget Previously Adopted Cost Reductions

Non-Labor Operation Savings (in Millions)	FY 11-12 Savings	3-Year Total
Eliminate all executive and non-field senior management take-home vehicles	\$ 1.0	\$ 3.0
Reduce travel costs	1.0	4.6
Reduce new computer purchases, stretch out life to 5 year cycle	2.7	8.9
Suspend office remodels and furniture purchases	0.5	1.6
Reduce incremental security technology investment	2.2	9.0
Reduce office supplies	0.6	1.8
Reduce training	4.4	10.2
Eliminate corporate travel credit cards	-	-
Eliminate funding for Holiday Light Festival	1.0	3.0
Eliminate Facility Refurbishments	6.9	49.1
Increased Collections	1.5	4.5
Healthcare Cut	8.4	8.4
Total	\$ 30.2	\$ 104.1

Labor & Overtime Savings (in Millions)	FY 11-12 Savings	3-Year Total
Labor	\$ 60.8	\$ 207.0
Overtime	25.0	73.0
Total	\$ 85.8	\$ 280.0

Capital Savings (in Millions)	Multi-Year Savings
Bond Refinancing	\$ 55.0
Cancelled Property Purchase	17.0
Cancel Incremental New Truck Purchases	3.0
Total	\$ 75.0

Cost Reduction Summary (in Millions)	3-Year Total
Labor and Overtime	\$ 280.0
Capital	75.0
Non-Labor Operations	104.1
Total	\$ 459.1

Appendix 6



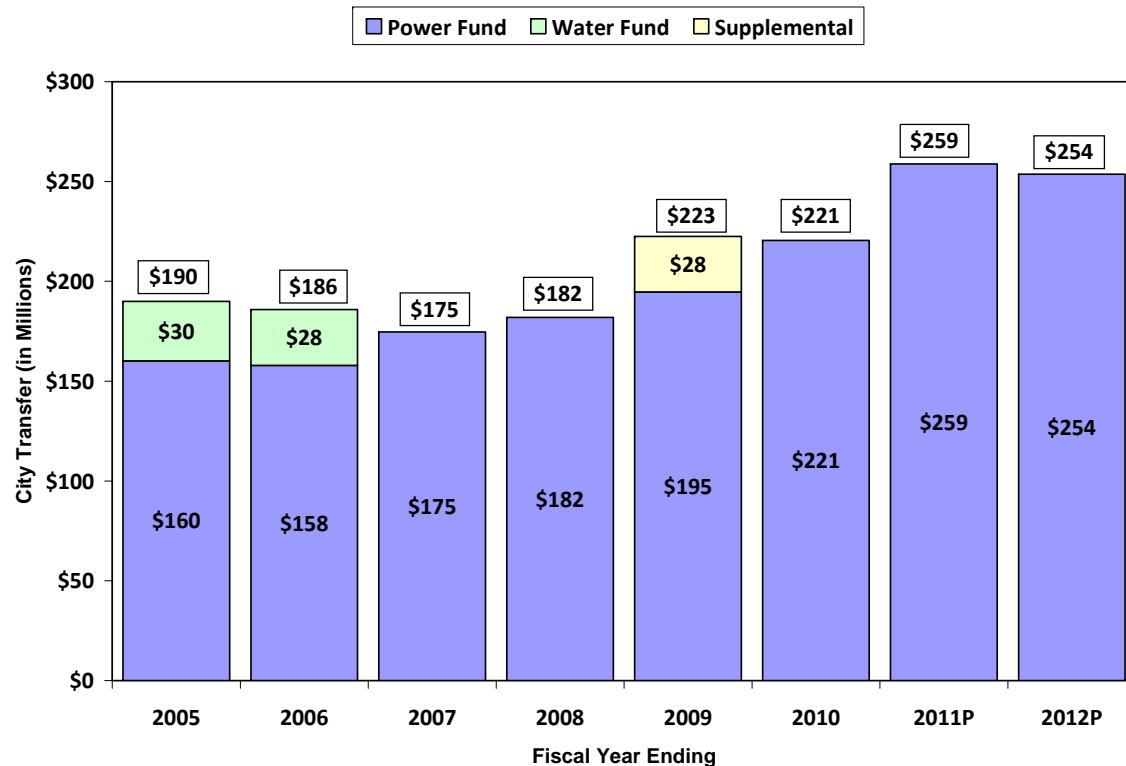
City Transfer - Historical



2011-12 Fiscal Year Budget

City Transfer

- ❑ Transfer is based on prior fiscal year's actual financial performance
- ❑ The transfer of LADWP revenues to the City General Fund is predicated on factors that are in part beyond the control of LADWP.
- ❑ Factors such as:
 - Sales volume
 - Expenditures required due to regulatory requirements
 - Costs for replacement of aging infrastructure
- ❑ LADWP management plans for annually the transfer of 8 percent of revenue. This level is included and planned for in our Financial Planning Parameters 40



Appendix 7



Water and Power Fund Key Programs and Projects



2011-12 Fiscal Year Basic Needs Budget Water Fund Programs and Projects

- Regulatory Mandates
 - Ultraviolet Treatment Plants
 - Headworks Reservoir
 - Santa Ynez Reservoir
 - Owens Lake Dust Mitigation

- Reliability Improvements
 - Mainlines
 - Meters
 - Pump and Regulator Stations

- Local Supplies
 - Harbor Recycling Water Pipeline
 - Water Conservation



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2011-12 Fiscal Year Basic Needs Budget

Water Quality: Ultraviolet Treatment Plants

- Two ultraviolet (UV) treatment plants are proposed at the Los Angeles Aqueduct (LAA) Reservoir Complex, reflecting a savings of \$280 million from prior estimates
 - In April 2011, the Water System broke ground for the construction of the first LAAUV Treatment Plant.
 - By the end of 2011, complete design of the first LAAUV Treatment Plant and begin design of the second Plant





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2011-12 Fiscal Year Basic Needs Budget

Water Quality: Santa Ynez Reservoir

- ❑ Complete the Santa Ynez Reservoir Water Quality Improvement Project in Fall 2011
 - Groundbreaking started in August 2009 with construction set for completion in September 2011.
 - Total cost of project at completion estimated at \$32 Million with \$20.6 Million approved in Clean Water State Revolving Fund (SRF) and American Recovery and Reinvestment Act (ARRA) funding. \$9 Million of ARRA grant monies have been received to date.
 - Santa Ynez is the first of the 6 reservoirs that will come into compliance with the Long Term 2 Enhanced Surface Water Treatment Rule.



2011-12 Fiscal Year Basic Needs Budget Water - Owens Valley: Great Basin Unified Air Pollution District

- Owens Lake
 - To implement agreements with Great Basin Unified Air Pollution Control District, LADWP will begin construction of additional dust control measures:
 - Six square miles of hybrid dust control measures (Phase 7a)
 - FY 10-11 expenditures: \$0.4M FY 11-12 budget: \$17.8M
 - Two square miles of gravel (Phase 8)
 - FY 10-11 expenditures: \$1.1M FY 11-12 budget: \$37.5M



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2011-12 Fiscal Year Basic Needs Budget

Water Reliability Improvements: Mainlines, Meters and Stations

- ❑ Replace 95,000 feet of distribution mainline (reduced from 110,000 feet in the current fiscal year)
 - FY 10-11 expenditures: \$52.6M FY 11-12 budget: \$48.4M

- ❑ Install 25,000 water meters (reduced from the current year level of 35,000)
 - FY 10-11 expenditures: \$37.0M FY 11-12 budget: \$35.7M

- ❑ Replace or rehabilitate pumping stations and regulator stations at a reduced level of expenditure.
 - FY 10-11 expenditures: \$6.2M FY 11-12 budget: \$9.3M



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2011-12 Fiscal Year Basic Needs Budget

Water Local Supply Development: Harbor Recycled Water Pipeline

- The Harbor Recycled Water Pipeline, to provide water to large industrial customers, will continue in FY 2011-12
- By 2014-15 more than double recycled water deliveries.
- Water to be supplied from Hyperion via West Basin Municipal WD treatments plants.



- ❑ Capital budget has been increased to fund long-life water conservation measures (\$10M) – “Regulatory Asset” life greater than 15 years
 - Shift from O&M expense to capital funding reduces annual cost on rates

- ❑ Capital budget will fund the following programs and associated labor:
 - Business/Industrial/Institutional
 - ❑ “Save Water, Save A Buck” Rebate Program City Park Irrigation Efficiency Program
 - ❑ Commercial Turf Reduction Program



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2011-12 Fiscal Year Budget Regulatory Mandates: Haynes Units 5 and 6

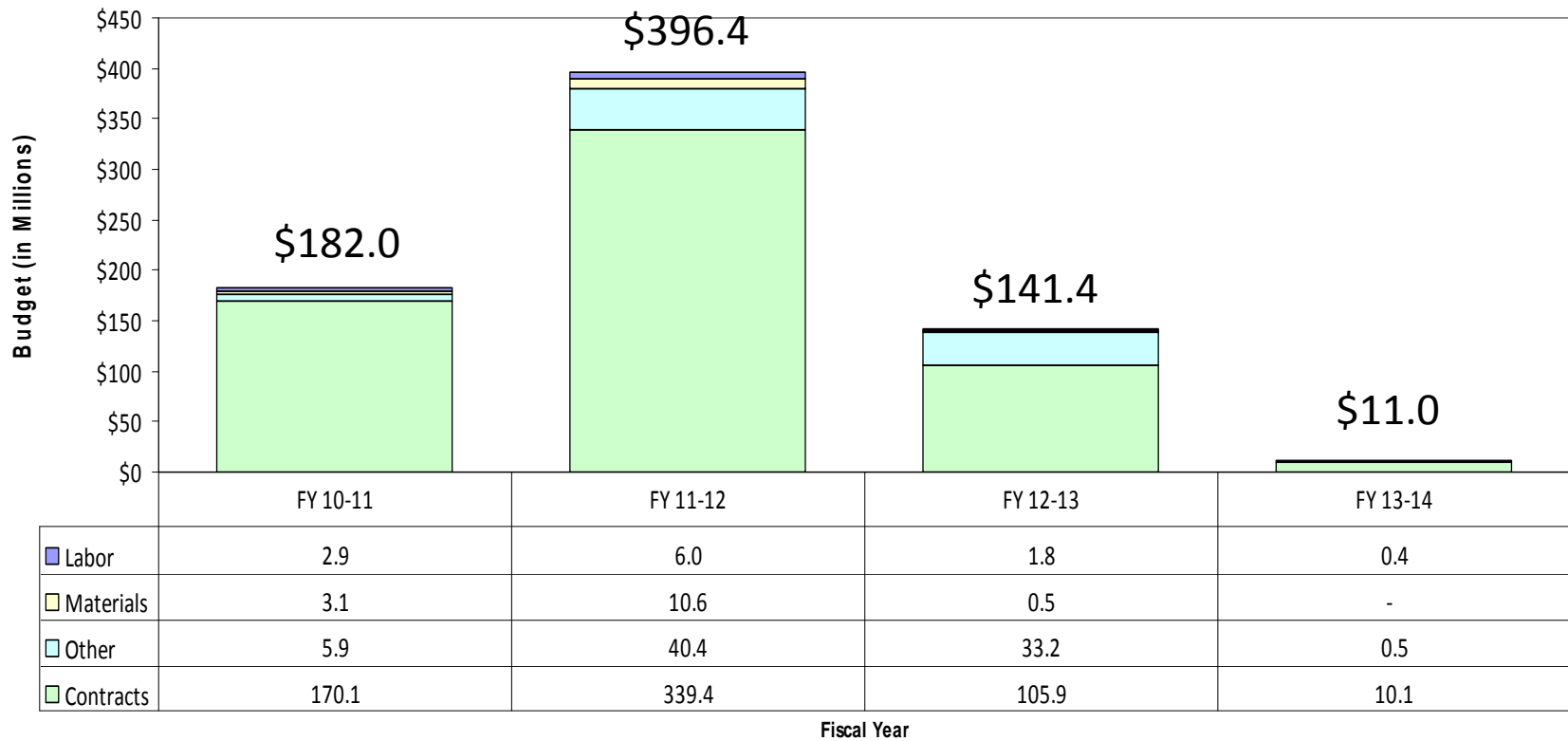
- ❑ Install six combustion turbines that reduce ocean water for cooling
- ❑ Integrate intermittent renewable energy projects with fast-start capabilities
- ❑ Provide overall better fuel performance with flexible operation capability
- ❑ Reduce emissions





2011-12 Fiscal Year Basic Needs Budget Regulatory Mandates: Haynes Units 5 and 6

Total Project Cost: \$ 729 M





2011-12 Fiscal Year Basic Needs Budget Energy Efficiency

- The level of Energy Efficiency funding will be considered further, pending outcome of the revenue requirement public process, the proposed budget provides:
 - Annual energy savings from the \$50 million budget is an (combined capital and O&M funding) estimated 146 GWH
 - Provides funding at a level sufficient for pending rebates associated with existing approved customer applications
 - Provides for continuation of O&M funded programs on a limited basis
 - Increased Capital budget to fund long-life energy efficiency measures



2011-12 Fiscal Year Basic Needs Budget Energy Efficiency

- ❑ Increased Capital budget to fund long-life energy efficiency measures (\$32M) – “Regulatory Asset” life greater than 15 years

- ❑ Capital budget will fund the following programs and associated labor:
 - Residential
 - ❑ Low Income Refrigerator Exchange Program
 - ❑ Consumer Rebate Program (rebates for high efficiency air conditioning, windows, refrigerators)
 - Business
 - ❑ Custom Performance Program (incentives for high efficiency motors, motor controls, CO sensors)
 - ❑ Chiller Efficiency Program
 - ❑ New Construction Program
 - ❑ Commercial Lighting Efficiency Program (rebates for limited list of lighting measures)



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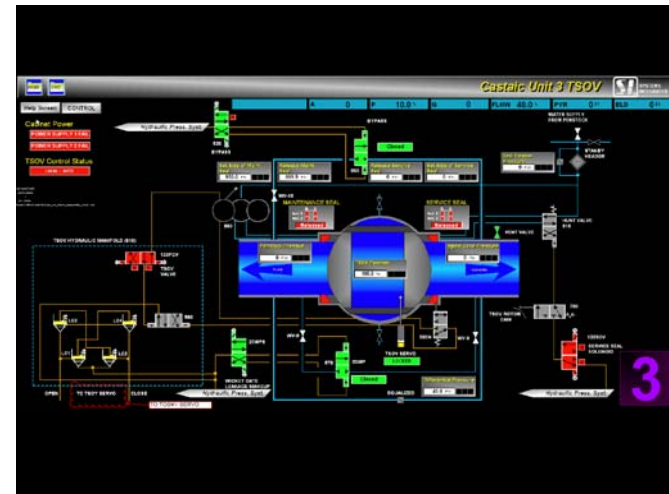
2011-12 Fiscal Year Basic Needs Budget

Legal Mandates: Renewable Portfolio Standard

- ❑ Imperial Valley Geothermal project development in conjunction with SCPA
- ❑ Pilot program level demonstration of a local 5MW Feed-in tariff program
- ❑ Installation of 30MWs of local solar in Los Angeles from both utility projects on City facilities and Customer projects utilizing the Solar Incentive Program
- ❑ Install total of 22 MW of Solar on existing sites at Pine Tree Wind Farm and Adelanto Converter Station
- ❑ Re-instate Solar Incentive Program at \$60 million/yr FY 11/12 – double the prior plan, but finance to reduce annual cost



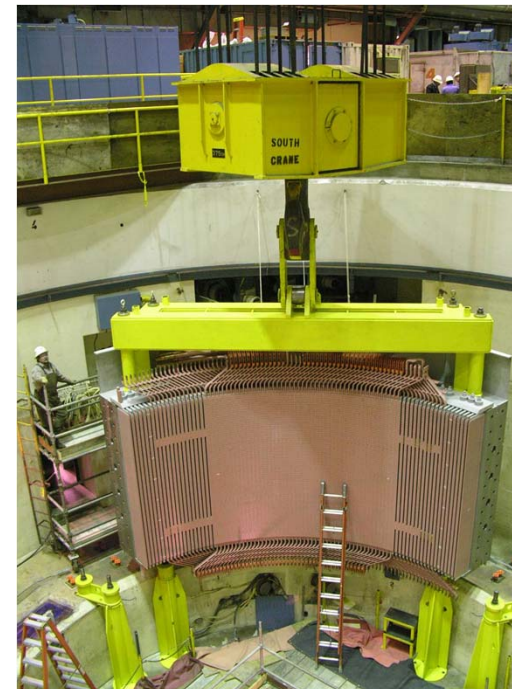
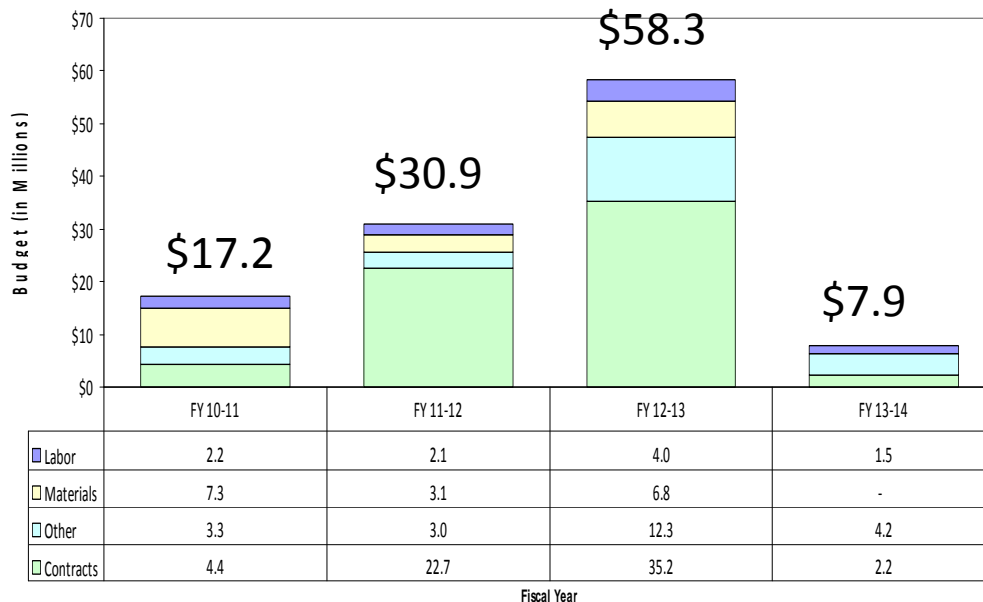
- ❑ The Castaic Power Plant Modernization Project includes:
 - The mechanical upgrade of Units 2 through 6 (five units)
 - ❑ The mechanical upgrade will improve unit reliability, capacity (an increase of 21MW per unit), and efficiency (increase by approximately 3% in pump mode and 1% in generating mode)
 - Replacing unit transformers
 - Upgrading the hard-wired control system with a Digital Control System (DCS) for Units 1 through 6
 - ❑ The DCS upgrade began in May 2010 with completion expected in May 2013



2011-12 Fiscal Year Basic Needs Budget Reliability Improvements: Castaic Power Plant Modernization Project

- The Castaic Power Plant Modernization Project includes:
 - Unit 7 Reliability Improvement Project consists of replacing the existing turbine-generator unit and its auxiliaries. The unit is primarily used to pump-start the main pump units as well as a load regulating unit to stabilize the power system.

Total Project Cost: \$275 M





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Water & Power

2011-12 Fiscal Year Basic Needs Budget Customer Information System Replacement Project

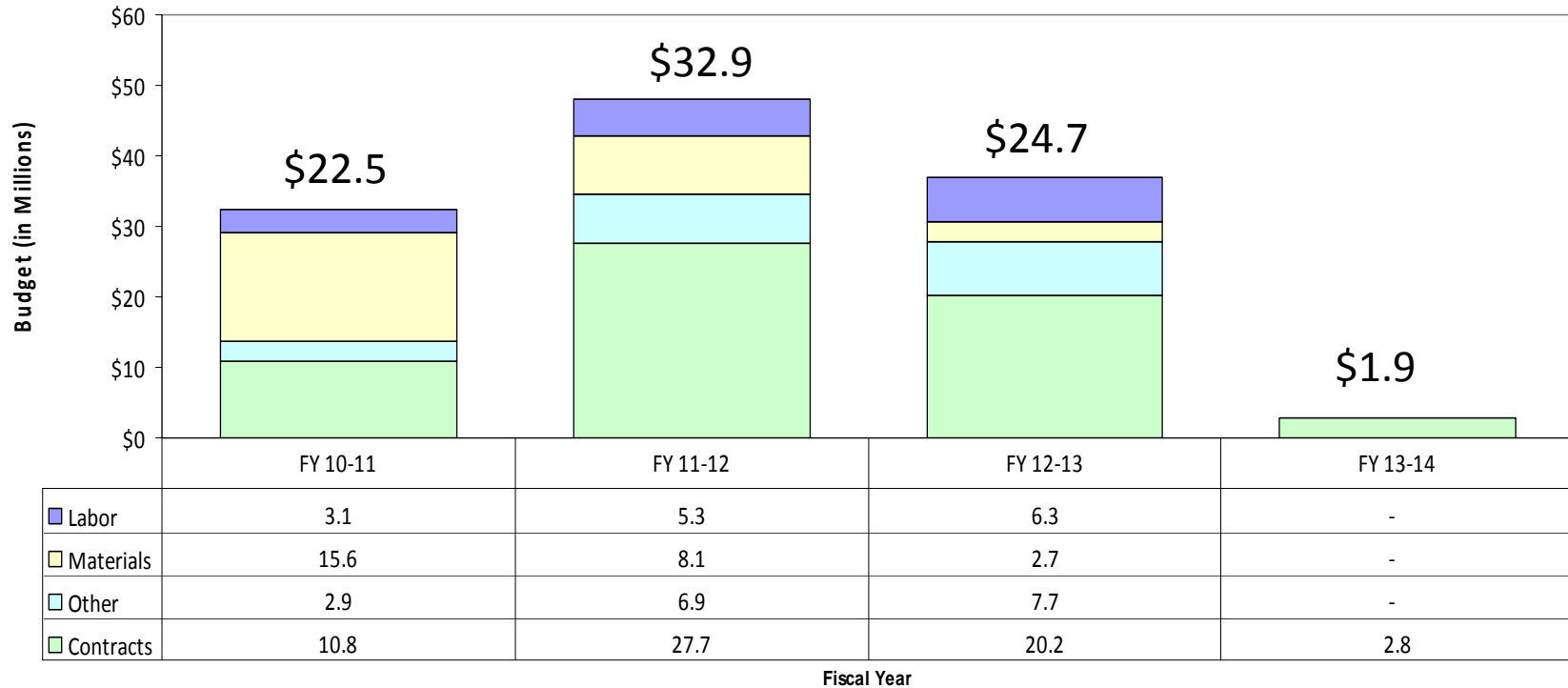
- Replace the 37 year old COBOL-based system with an Oracle Platform which includes:
 - Customer Care & Billing
 - Mobile Workforce Management
 - Meter Data Management

- Expected Benefits:
 - Provide foundation for future business needs
 - Enhance customer service
 - Efficient access to customer information
 - Standardization
 - Allows Monthly Billing for Residential Customers



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Total Project Cost: \$125 M



Yearly totals include reimbursement from Water System for share of project