



Los Angeles  
Department of  
Water & Power



**BUILDING A NEW LOS ANGELES**

# **WATER & POWER**

**BUDGET PRESENTATION**

Fiscal Year 2010-2011



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The Los Angeles Department of Water & Power will provide customers with Reliable, Safe and Affordable Water and Power.

The LADWP will operate in an Environmentally Responsible manner.

The LADWP will maintain Transparency, Accountability and Financial Discipline for the benefit of its customers and the City of Los Angeles.

# Action Plan

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Fiscal Year (FY) 2010-2011 Budget – Early June

Long-Term Strategic Plan – Mid/Late June

- Long-Term Resource Plan
  - Power
  - Water
- Simplification of Rate Structure
  - Proposed Structure for Power and Water
  - Revised Budget for FY 2010-11

Business, Operations & Financial Review – Ongoing, Completion during FY 2010-11

- Customer Service
- Operating Costs
- Information Systems
- Supply Chain Management
- Risk Management
- Renewable Energy Investment
- Balance Sheet, Working Capital and Cash Management

Establishment of Ratepayer Advocate - Ongoing

# Size and Scale of DWP

## Power Business

Number of Customers	1,434,425
Employees	6,303
Transmission Miles	3,655
Distribution Miles	11,031

## Water Business

Number of Customers	665,976
Employees	3,188
Delivered Volume (Million Gallons)	199,000
Trunk Line Miles	500
Main Line Miles	6,700



LADWP's Operations Extend Across Seven States, Affecting Four Million People

# Summary Financial Statement

	2010-2011 (in millions)	
Revenue		
Power	\$3298	
Water	929	
Total Revenue	<u>4,227</u>	
Purchased Power	907	
Purchased Fuel	433	→ \$1,513 million
Purchased Water	173	
Labor	977	
Materials	325	→ \$1,838 million
Depreciation	536	
Other	4	
Interest	385	
Total Expense	<u>3,740</u>	
Net Income	\$487	
City Transfer	254	
Capital Investment		
Power	1,017	
Water	568	
Total Capital Investment	<u>\$1,585</u>	

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# Power System

# Priorities – Power System

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Reliability

Regulatory Compliance

Power Generation Resource

- Reduce Carbon Emissions
- Investments in Renewable Energy

Financial Stability

## Ensuring Reliability: Pole Replacement

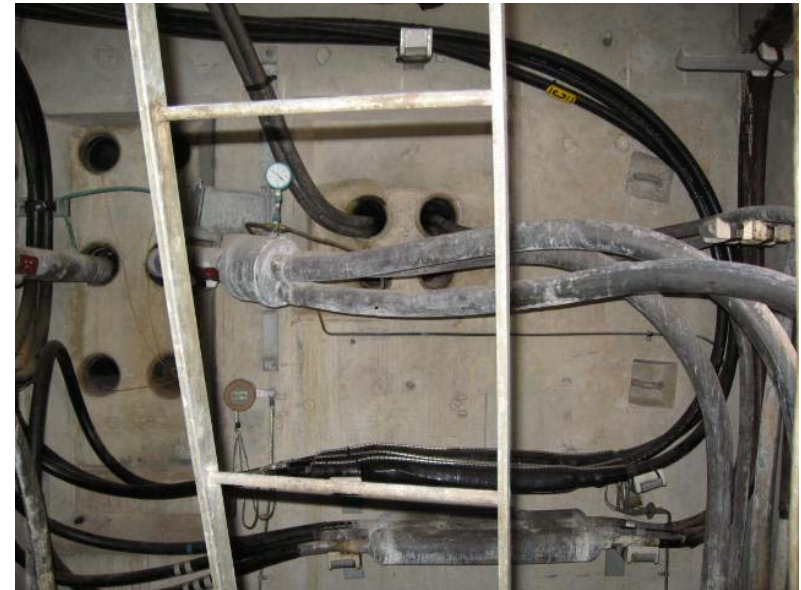
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	<u>10 years ago</u>	<u>5 years ago</u>	<u>2010-2011</u>
Number of Poles	284,920	290,000	289,000
Number of Poles Replaced	1,385	2,169	2,600
Percent of Poles greater than 50 years old	26%	30%	53%
Cost of Replacement (in millions)	\$14	\$24	\$34

- The cost of replacing an average pole is \$13,000 including direct labor and materials.
- Undergrounding a cable costs about five times more than overhead pole distribution.

# Ensuring Reliability: Cable Replacement

	<u>10 years ago</u>	<u>5 years ago</u>	<u>2010-2011</u>
Total Miles of Cable	3,081	3,290	3,479
Miles of Cables Replaced	3	20	27
Replacement Cycle (in years)	1,027	165	129
Cost of Replacement (in millions)	\$1	\$9	\$14



## Reliability: Average Service Interruptions Per Customer

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	<u>10 years ago</u>	<u>5 years ago</u>	<u>Today</u>
Los Angeles Department of Water & Power	0.50 times/yr	0.85 times/yr	0.78 times/yr
Pacific Gas & Electric	1.39	1.38	1.33
Southern California Edison	1.08	1.13	1.07
San Diego Gas & Electric	0.70	0.62	0.55

# Regulatory Compliance: Significant Investment Will Be Required

Regulation and background	Action	Cost
<p>South Coast Air Quality Management District (SCAQMD)</p> <ul style="list-style-type: none"> <li>- Agreement with SCAQMD in 2003</li> <li>- Reduce LA generating station emissions</li> </ul>	<p>Replace in-basin generating station units by 2013</p>	<p>\$1.1 billion</p>
<p>Local Water - EPA Phase II 316(b)</p> <ul style="list-style-type: none"> <li>- Reduce ocean water cooling of power plants</li> <li>- New rules adopted May 2010</li> <li>- Modify power plants by 2015, 2019 and 2020</li> </ul>	<p>Replace generating units or install cooling towers at three stations</p>	<p>\$1.7 billion</p>
<p>Greenhouse Gas - AB32</p> <ul style="list-style-type: none"> <li>- Generate 33 percent of energy from renewables</li> <li>- Compliance by 2020</li> </ul>	<p>Reduce carbon emissions Invest in renewable generation Upgrade transmission lines</p>	<p>Up to \$10 billion</p>

# Source of Energy

	<u>Power Generated</u>	<u>Carbon Emissions</u>
Coal	39 %	70
Gas	31	30
Renewable	14	0
Nuclear	9	0
Hydro	7	0



# Power Budget

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	<u>2010-2011</u> <u>(in millions)</u>	
Revenue		
Residential	\$1,147	
Commercial and Industrial	2,151	
Total Revenue	<u>3,298</u>	
Purchased Power	907	→ \$1,340 million
Purchased Fuel	433	
Labor	693	→ \$1,338 million
Materials	231	
Depreciation	414	
Other	(9)	
Interest	249	
Total Expense	<u>2,918</u>	
Net Income	\$380	

# Power Capital Investment

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	<u>2010-2011</u> <u>(in millions)</u>
Reliability	
Poles, Cables, Transformers, Conduit	\$281
Substation and Transmission	115
Generation Equipment	97
Smart Grid	47
Information Systems	92
Other	81
Total Reliability	<u>713</u>
Regulatory	
Haynes Repowering	270
Scattergood Repowering	4
Total Regulatory	<u>274</u>
Renewable Energy	30
Total Capital Investment	\$1,017

# Financial Stability: Credit and Cash Flow of the Power System

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	2010-2011 (in millions)
Revenue	<u>\$3,108</u>
Operating Expense	<u>(2,218)</u>
Cash Available for Debt Service	890
Interest Expense	(268)
Debt Maturities	(122)
City Transfer	(254)
Capital Investment	<u>(1,017)</u>
Net Funding Needs	(771)
New Borrowing	900
Other Items	<u>(111)</u>
Change in Cash	17
Beginning Cash	<u>408</u>
Ending Unrestricted Cash	425
Debt Reduction Trust Fund	<u>528</u>
Total Cash	<u>\$953</u>

Debt Service Coverage = Cash Available for Debt Service / (Interest Expense + Debt Maturities)

$$= 890 / (268 + 122) = 2.28x$$

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## **Water System**

# Priorities – Water System

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Regulatory Compliance

Infrastructure Reliability

Local Water Resource Development

- Recycling
- Conservation
- Local Resources

Financial Stability

# Infrastructure Reliability: Mainline Pipe Replacement

	<u>10 years ago</u>	<u>5 years ago</u>	<u>2010-2011</u>
Miles of Pipes	7,100	7,100	7,200
Miles of Pipes Replaced	33	10	25
Percent of Pipes greater than 50 years old	42 %	53 %	64 %
Cost of Replacement (in millions)	\$19	\$12	\$42

The Department also maintains, repairs and replaces pumping stations, treatment plants and pressure regulating stations



MULHOLLAND PIPELINE Project - 30065  
(MARCH 2010)

# Regulatory Compliance - Significant Investment Will Be Required

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Regulation and background	Action	Cost
<p>Long Term 2 Enhanced Surface Water Treatment Rule (LT2)</p> <ul style="list-style-type: none"><li>-Reduce potential for illness from micro-organisms in water</li><li>-Compliance April 2022</li></ul>	<p>Requires modifications to distribution systems to cover, re-treat or by-pass the water in the six remaining open reservoirs in the city</p>	<p>\$1,590 million</p>
<p>The Stage 2 Disinfection By-Products Rule</p> <ul style="list-style-type: none"><li>-Compliance required by 2011</li><li>-Extension to 2014 requested</li></ul>	<p>Requires city-wide conversion of water disinfectant from chlorine to chloramines</p>	<p>\$210 million</p>

# Source of Water

Metropolitan Water District	53%
Los Angeles Aqueduct	35
Local Groundwater	11
Recycled Water	1



# Local Water Resource Development

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## Water Recycling

- Harbor Water Recycling Project
- Complete Recycled Water Master Plan

## Water Conservation

- Customer Rebates and Incentives
- Focus on Outdoor Water Use Reduction

## Stormwater Capture

- Coordination with Los Angeles County Flood Control District and other City Departments

# Water Budget

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	<u>2010-2011</u> <u>(in millions)</u>
Revenue	
Residential	\$379
Commercial and Industrial	<u>550</u>
Total Revenue	929
Purchased Water	173
Labor	284
Materials	94
Depreciation	122
Other	13
Interest	<u>136</u>
Total Expense	<u>822</u>
Net Income	\$107

→ \$500 million

# Water Capital Investment

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	2010-2011 (in millions)
Infrastructure	
Mainlines, Trunklines, Services, Meters	\$94
LA Aqueduct, Eastern Sierra, Owens Lake	49
Seismic	17
Fleet Equipment	12
Other	84
Total Infrastructure	<u>256</u>
Regulatory	
Trunkline	131
Reservoir	47
Groundwater Management	23
Other	29
Total Regulatory	<u>230</u>
Security	30
Water Supply	
Harbor Area Recycling	29
Other	23
Total Supply	<u>52</u>
Total Capital Investment	<u>\$568</u>

## Financial Stability: Credit and Cash Flow of the Water System

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	2010-2011 <u>(in millions)</u>
Revenue	\$930
Operating Expense	<u>(578)</u>
Cash Available for Debt Service	352
Interest	(138)
Debt Maturities	(30)
Capital Investment	<u>(568)</u>
Net Funding Needs	(384)
New Borrowing	493
Other	<u>(22)</u>
Change in Cash	87
Beginning Cash	<u>109</u>
Ending Cash	\$196

$$\begin{aligned}\text{Debt Service Coverage} &= \text{Cash Available for Debt Service} / (\text{Interest Expense} + \text{Debt Maturities}) \\ &= 352 / (138 + 30) = 2.09x\end{aligned}$$

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**Work Force**

# Investing in our Workforce

	<u>Total Positions</u>	<u>Number within 5 years of retirement</u>	<u>Average time to train</u>
Power			
Electric Distribution Mechanic (Lineworker)	588 (92 current vacancies)	224	36 months
Electric Mechanic (High Voltage Electrician)	415 (83 current vacancies)	235	36 months
Water			
Mainline Worker	403 (61 current vacancies)	185	18 - 24 months
Water Treatment Operator	43 (6 current vacancies)	15	12 months

LADWP plans to invest \$131 million in training

- Power System will spend \$75 million on craft (lineworker, mechanics) training
- Water System will spend \$1 million on craft training
- LADWP will spend \$27 million on Safety Training
- Technical and Other Training represents \$28 million of costs

# Budget Changes

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<u>Cost Reductions (in millions)</u>	<u>Amount</u>
Labor	\$21
Materials	40
Contracting	128
Total Reductions	<u>\$189</u>
<u>Spending Deferrals</u>	
Materials	11
Contracting	63
Total Spending Deferrals	<u>\$74</u>
Total Savings	\$263

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**Customer Service**

# Investing in our Customers

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## Billing

- Current IT billing system is in COBOL programming, system to change by 2012

## Renewed Customer Focus

- Online Bill Pay and Interactive Website
- Revised bill design scheduled to launch in December 2010
- Promotion of Low-Income Discount Program

## Energy Efficiency/Water Conservation

- Expansions of programs to help customers save energy and water and reduce their bills
- Use of federal stimulus grants for home and business efficiency programs

## Transparency

- Increased community outreach
- Improved outreach to City Council

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## **Rates**

# 2010-2011: Rate Assumptions

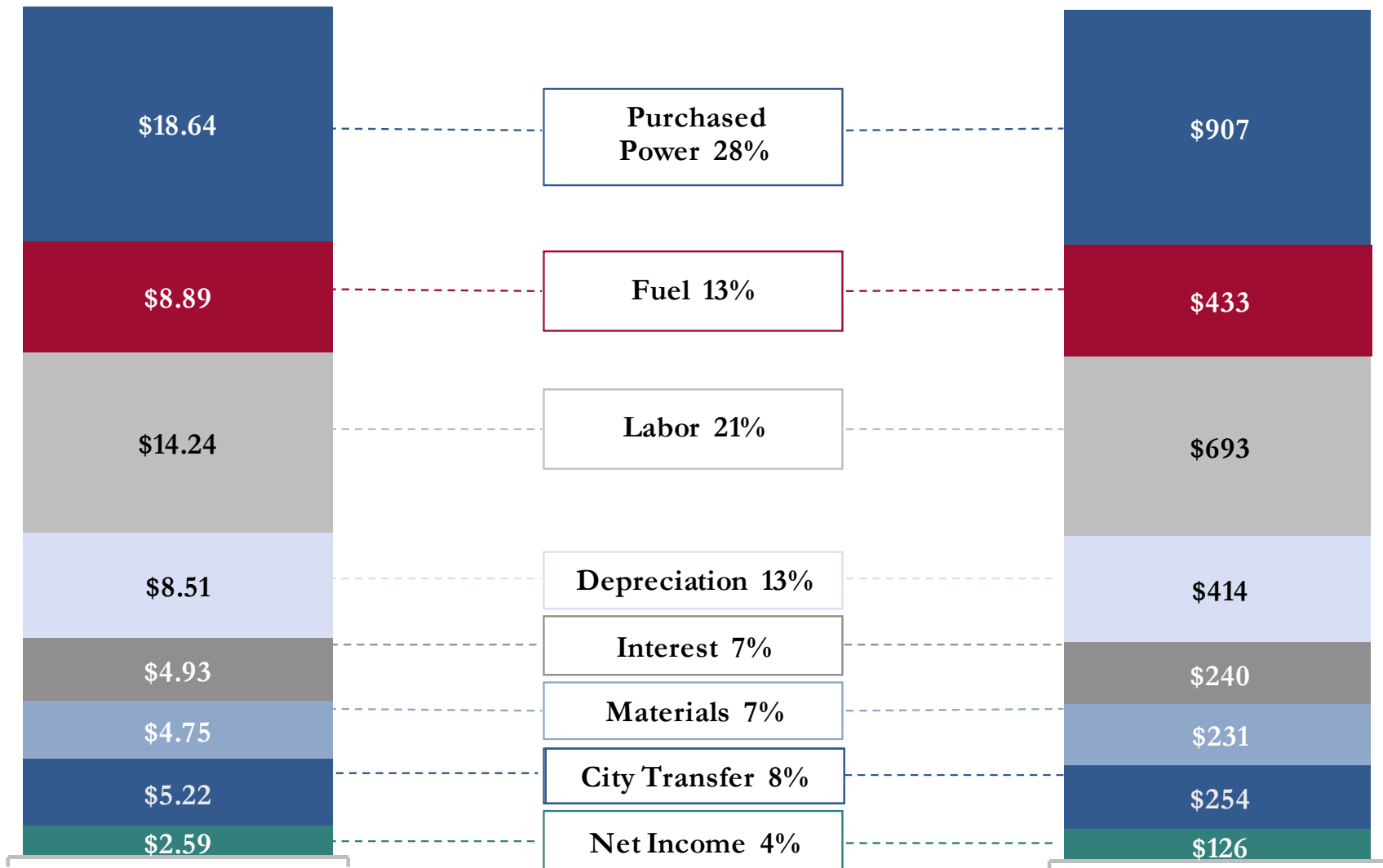
Subject to Modification pending Long-Term Strategy Approval

	Adjustment	Percent Increase	Comments
Power			
Regulatory Compliance/Reliability			
Base Rates	None	0.0%	
RPS/Energy Efficiency (Regulatory Compliance)			
ECAF	0.6 cents per kWh effective July 1	5.0	Approved April 2010
ECAF	0.1 cents per kWh effective October 1, January 1, April 1	0.9	Being Reviewed as part of Long-Term Plan
Water			
Regulatory Compliance/Reliability			
Base Rates	None	0.0	
Water Security/Quality	Increases every Quarter based on costs effective January 1	3.0	Request approval from Board in October and Council in November
Revise 2nd Tier	To add Purchased Water effective January 1	2.0	Request approval from Board in October and Council in November
Local Resource Development			
Water Recycling/DSM	Increases every Quarter based on costs	5.9	Being Reviewed as part of Long-Term Plan
Purchased Water	None	-3.5	
Low Income Subsidy	Annually	0.8	Increased number of Low Income Customers

# Where Does the Money Go? Power

**AVERAGE MONTHLY RESIDENTIAL  
-----POWER-BILL: \$67.77**

**TOTAL PROJECTED FY2011  
POWER REVENUES: \$3,298  
(\$ in millions)**

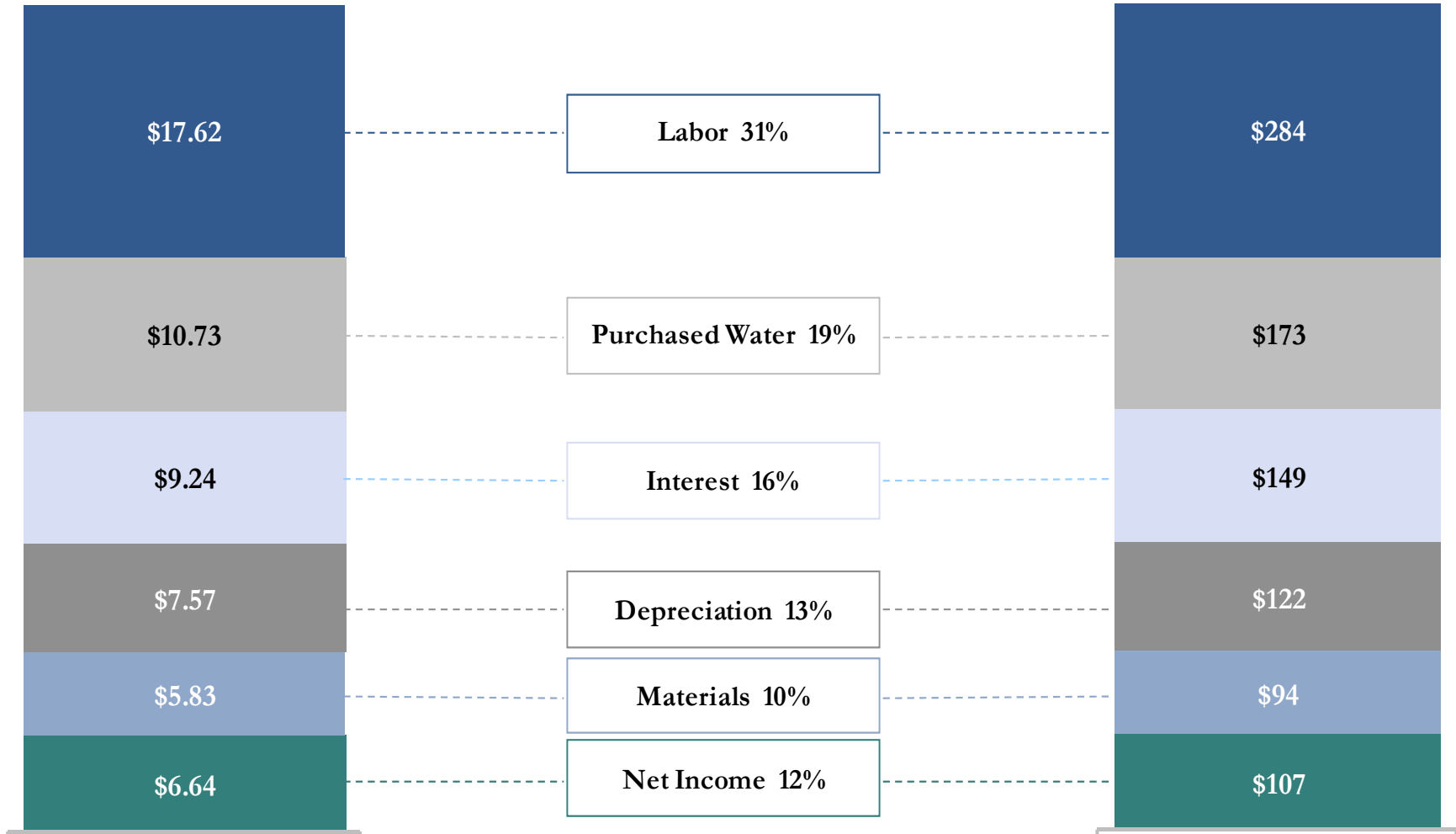


# Where Does the Money Go? Water

**AVERAGE MONTHLY SINGLE FAMILY WATER BILL: \$57.63**

**TOTAL PROJECTED FY2011 WATER REVENUES: \$929**

(\$ in millions)



## Summary

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- Developed Action Plan for FY 2010-11
- Proposed Cost Reductions of \$189 million and Spending Deferrals of \$74 million
- Preparing Long-Term Strategic Plan
- Launched Business, Operations and Financial Review
- Implementing Rate Payer Advocate