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# Chelan PUD Quarterly Board Update Operating and Financial Review

May 10, 2010





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# Discussion Topics

- ❑ Energy Planning & Trading update
- ❑ First quarter financial results
- ❑ Medium-term financial outlook

*No action required today*



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# Energy Planning & Trading

## Q1 2010 in Review

- Jan – Jul Columbia runoff
  - Official 74% of average water year
  - ESP 67% is median water year (up 1% from last week when financial numbers were run)
- Record breaking low river flows last fall and in Q1 2010
- Natural gas prices keeping electricity prices low
  - Storage balances are very high, demand is low
- 2010 net wholesale revenue projection

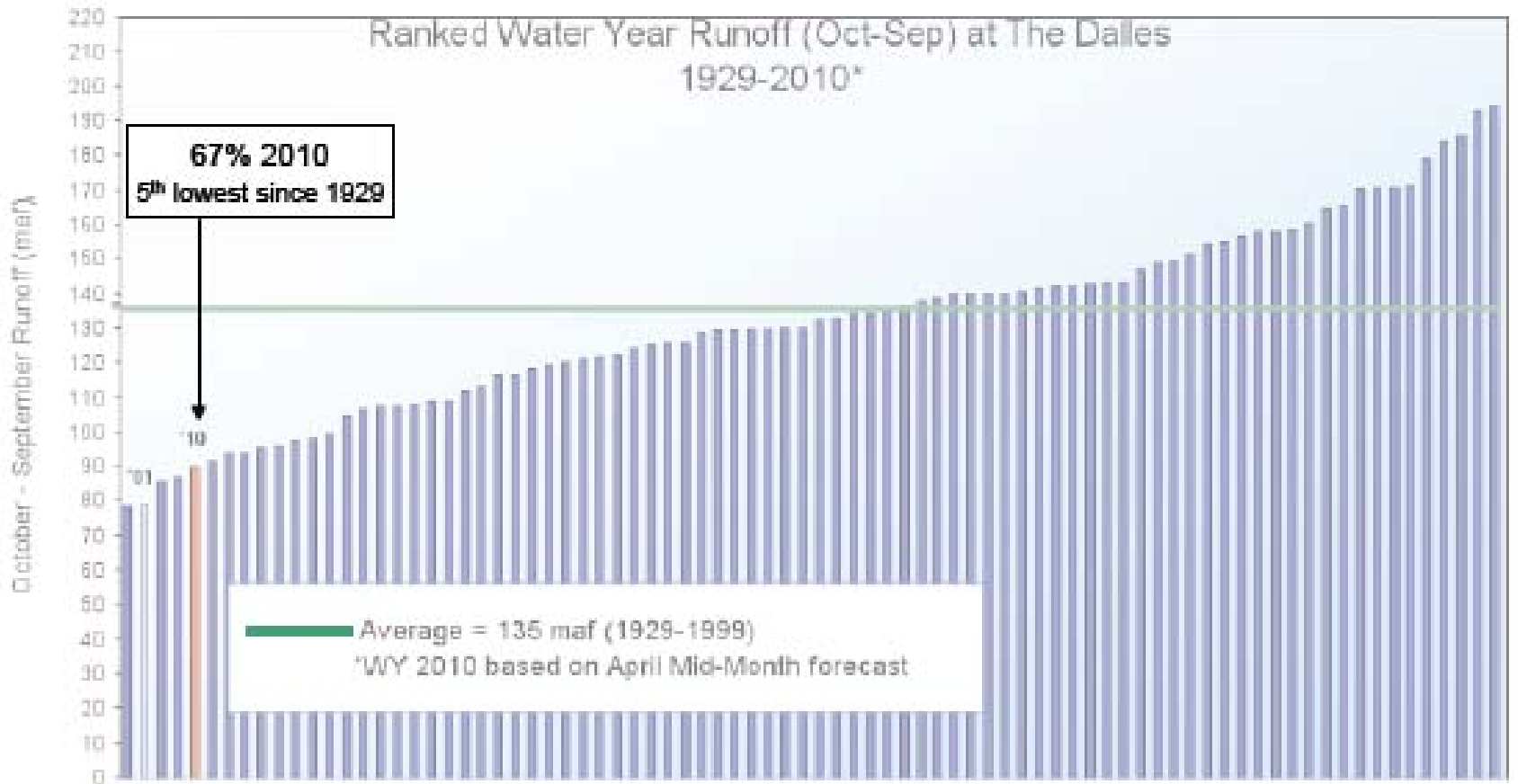


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# Low Flows during Q1 2010

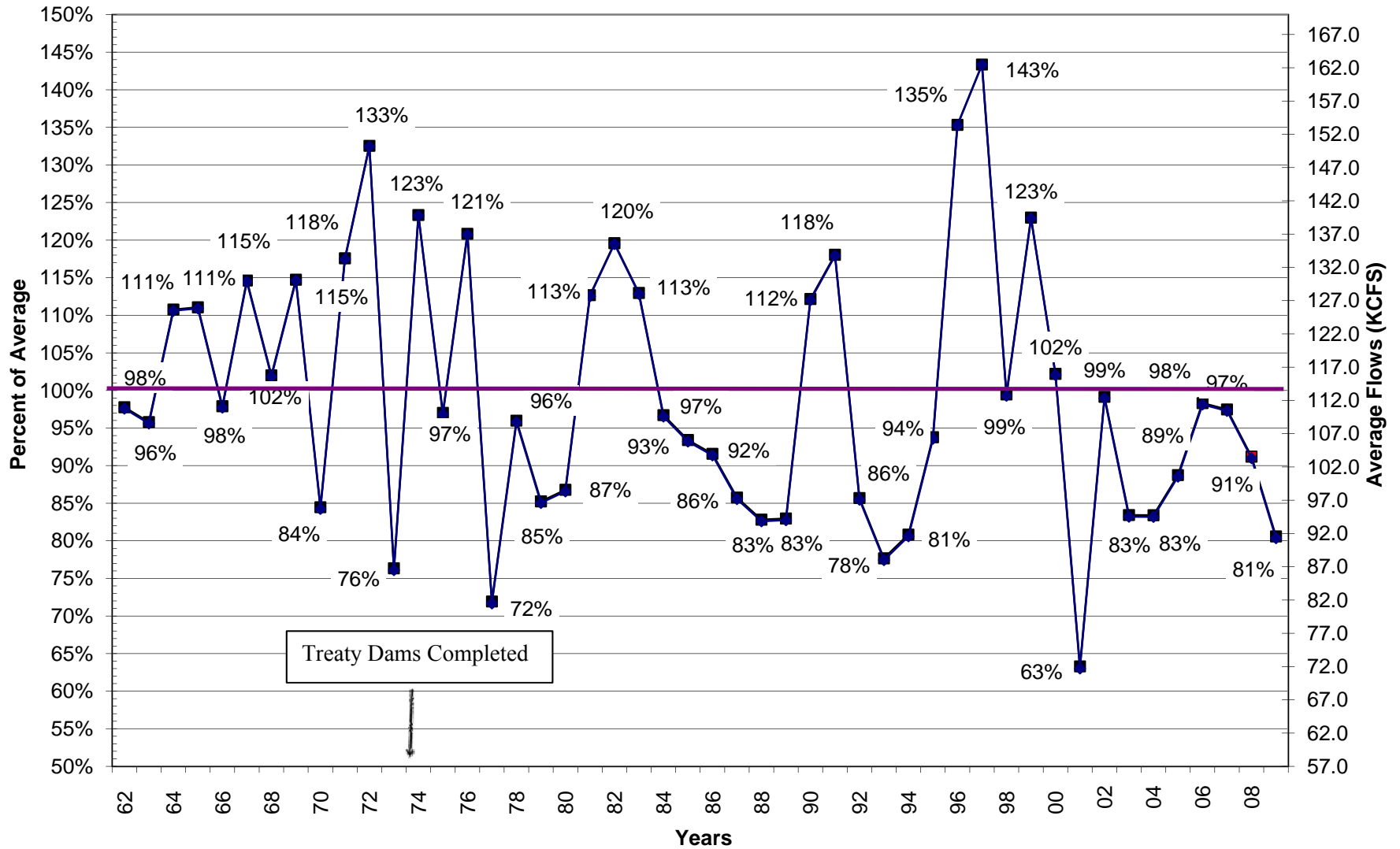
- Lowest Q1 flows ever (compared to 1971-2009)
  - January 2010 **record** low flows – 71.4 kcfs when average monthly flow is 114 kcfs
  - February 2010 **near record** low flows – 72.1kcfs when average monthly flow is 112kcfs (70 kcfs is lowest on record)
  - March 2010 **record** low flows - 65.2 kcfs when average monthly flow is 105 kcfs.
  - April 2010 very low flows - 69.5 kcfs which is **4<sup>th</sup> lowest** on record since 1974

# Water Year Runoff – Historical Ranking



# Rocky Reach Average Yearly Flows 1962 Through 2009

## 78 Year (1929-2006) Reregulated Average of 113.3 KCFS



# Water Supply Seasonal Volume Forecasts (GCDW1) COLUMBIA - GRAND COULEE DAM

[\[Click for Normals and Adjustments\]](#)

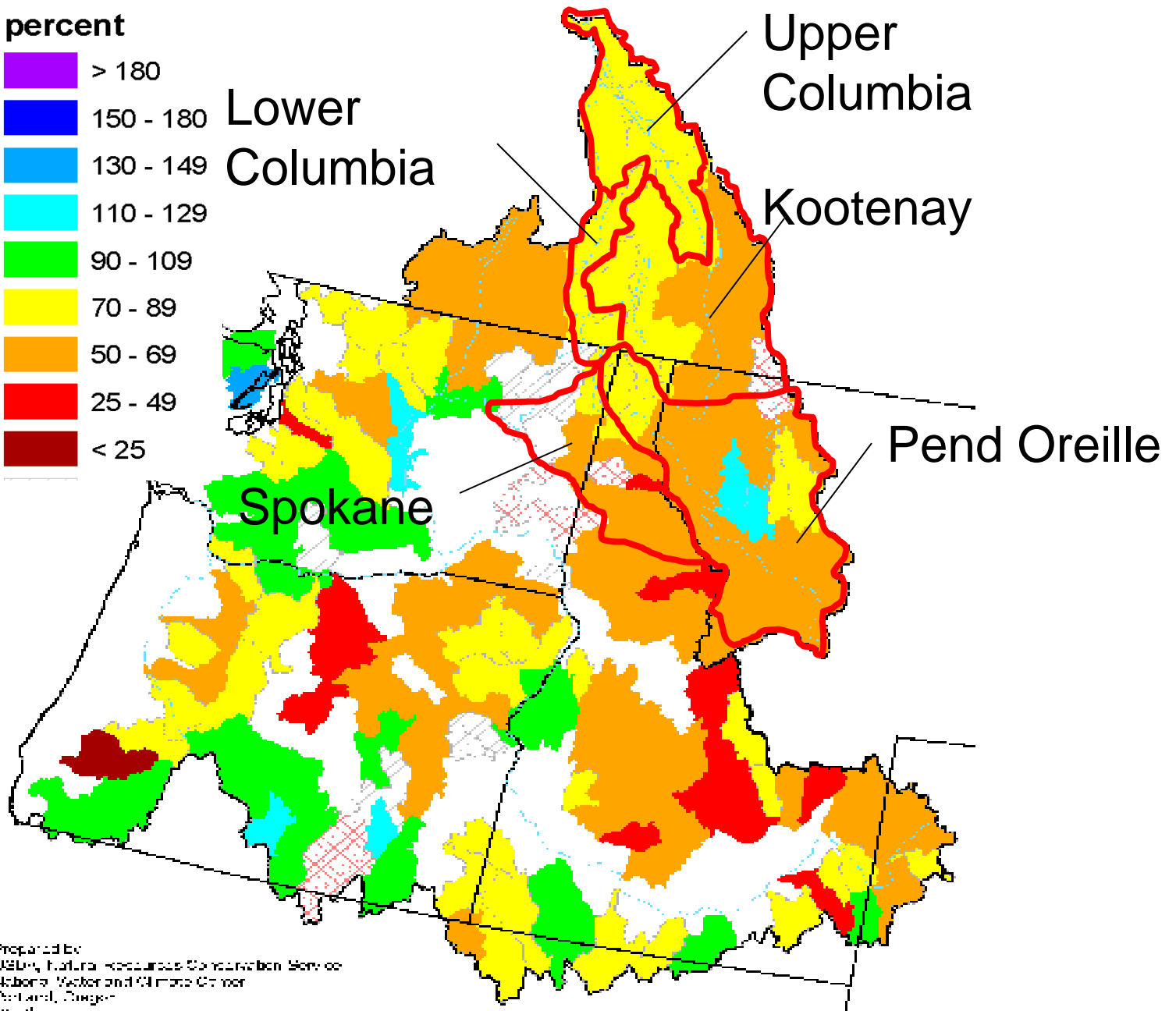
The Official Statistical Water Supply forecast is issued between the middle of December and July 1st.  
Ensemble Predicted forecasts are issued weekly. A comparison continues to be made  
between the two forecasts through the end of September.

67%

COLUMBIA - GRAND COULEE DAM (GCDW1) Forecasts for WY 2010															
Official Forecast (Regression) <i>Issued: 2010-05-07</i> (Description)								ESP Forecasts <i>Issued: 2010-05-04</i>							
Period	Forecast (KAF)	% of Average	5% Forecast	95% Forecast	30yr (1971-2000) Average	Max of Record	Min of Record	Forecast Period	ESP Forecasts for Forecast Period (KAF)					Obs Flow From Start of Period To 5/3/2010	
									90 % Exceedance Probability	70 % Exceedance Probability	50 % Exceedance Probability	30 % Exceedance Probability	10 % Exceedance Probability		
JAN-SEP	53900.0	74	60655.0	47145.0	73040.0	103500.0	44000.0	JAN-SEP	47013.4	49173.4	51051.4	52458.8	54496.3	11025.0	
MAY-SEP	42900.0	76	49655.0	36145.0	56700.0			MAY-SEP	35988.4	38148.4	40026.4	41433.8	43471.3	0.0	
APR-JUL	40600.0	75	47355.0	33845.0	53850.0	76239.0	31885.0	APR-JUL	33584.2	34986.1	36167.7	37318.5	39801.2	5190.0	
APR-SEP	48100.0	75	54855.0	41345.0	63990.0	88512.0	39829.0	APR-SEP	41178.4	43338.4	45216.4	46623.8	48661.3	5190.0	
MAY-JUL	35400.0	76	42155.0	28645.0	46560.0			MAY-JUL	28394.2	29796.1	30977.7	32128.5	34611.2	0.0	
JAN-JUL	46400.0	74	53155.0	39645.0	62900.0	91140.0	34760.0	JAN-JUL	39419.2	40821.1	42002.7	43153.5	45636.2	11025.0	
APR-AUG	45300.0	75	52055.0	38545.0	60290.0	84080.0	37442.0	APR-AUG	38276.7	40599.9	42010.2	42986.0	45147.5	5190.0	
JAN-AUG	51200.0	74	57955.0	44445.0	69340.0			JAN-AUG	44111.7	46434.9	47845.2	48821.0	50982.5	11025.0	
MAY-AUG	40200.0	76	46955.0	33445.0	53000.0			MAY-AUG	33086.7	35409.9	36820.2	37796.0	39957.5	0.0	

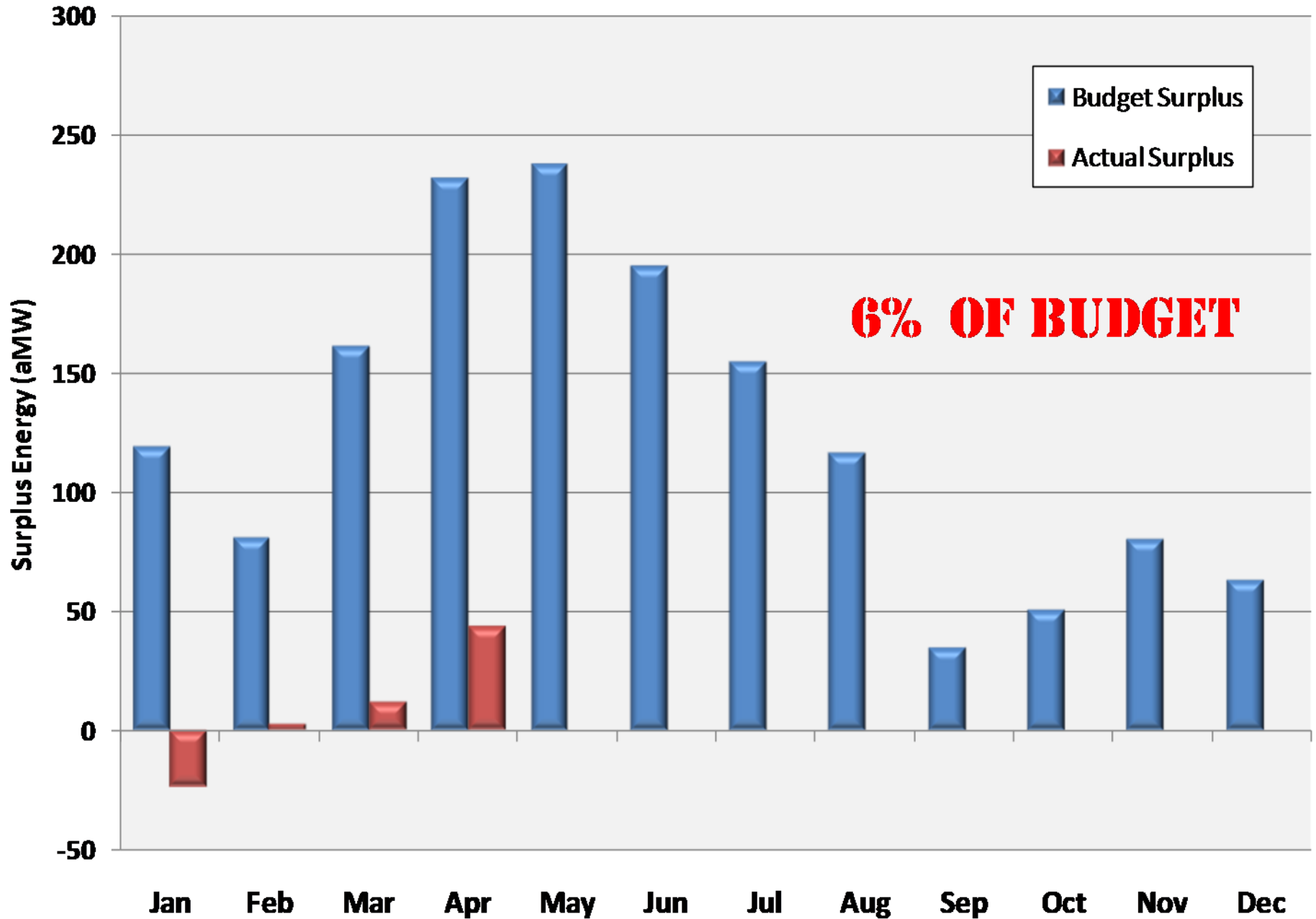
# Columbia River Mountain Snowpack as of May 1, 2010

percent



Prepared by  
JSDU, Natural Resources Conservation Service  
National Water and Climate Center  
Portland, Oregon  
© 2010 Oregon Department of Forestry

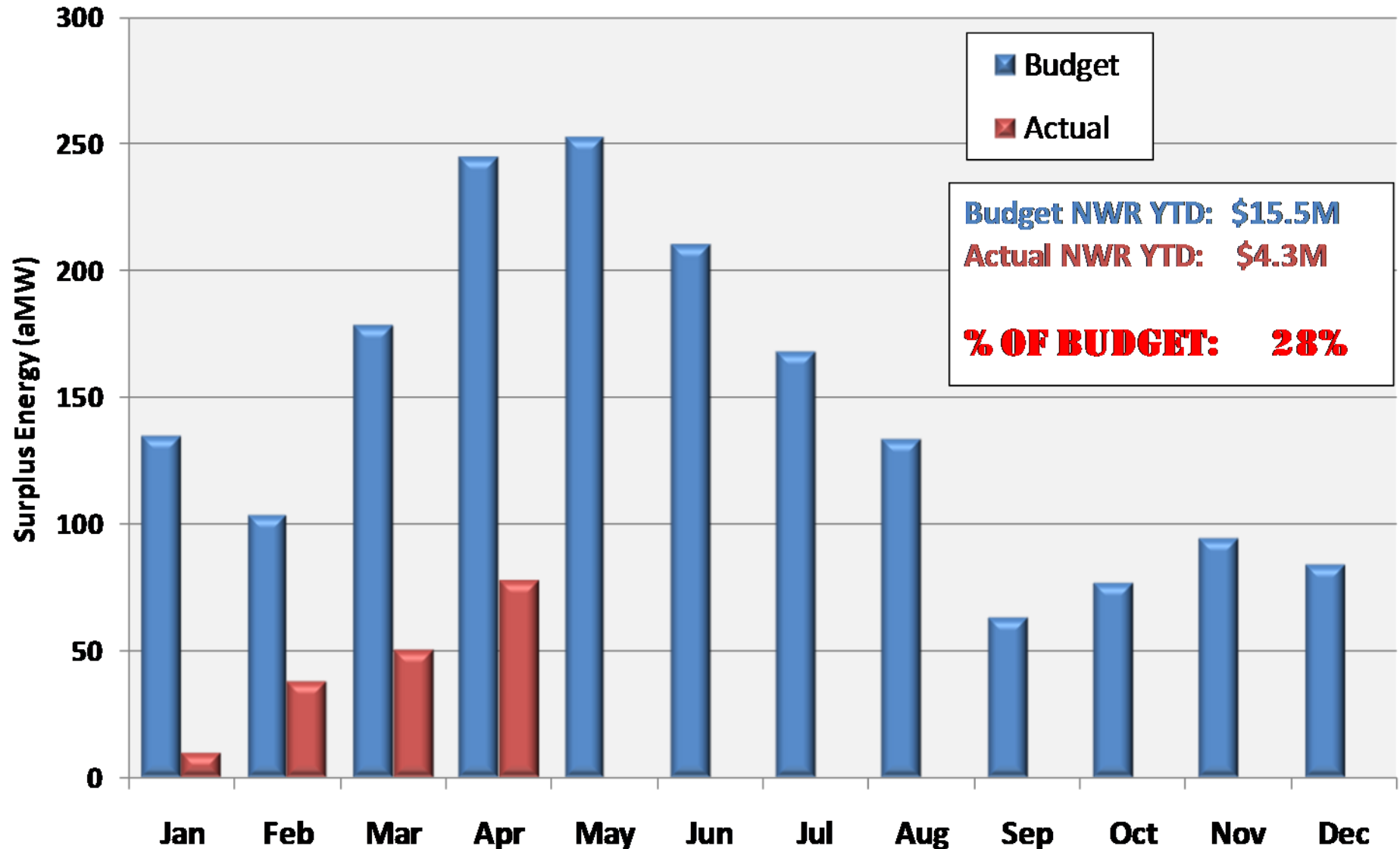
# 2010 Budgeted Surplus Energy vs Actual Surplus



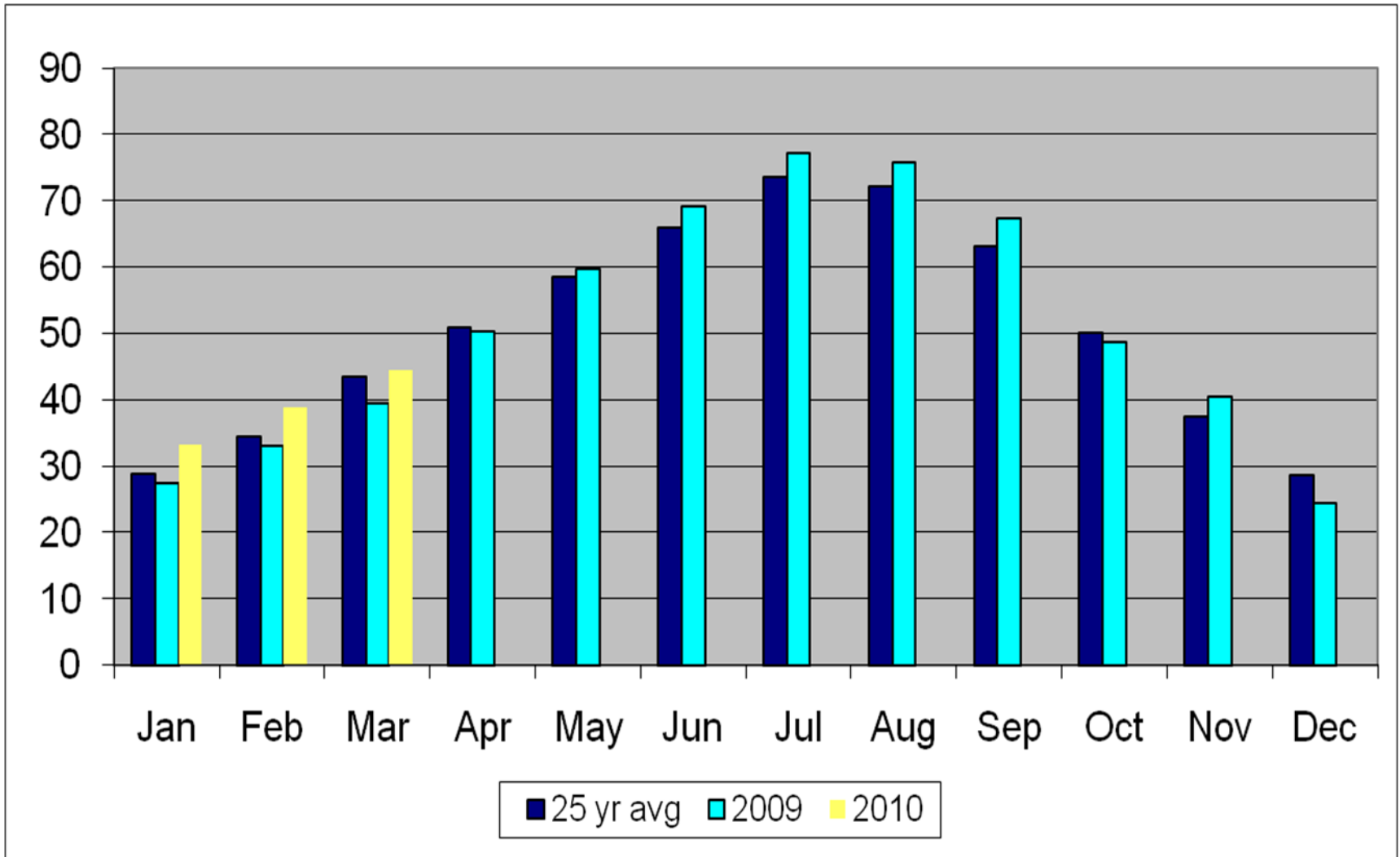
# 2010 Budget Net Wholesale Revenue

vs

## Actual Net Wholesale Revenue

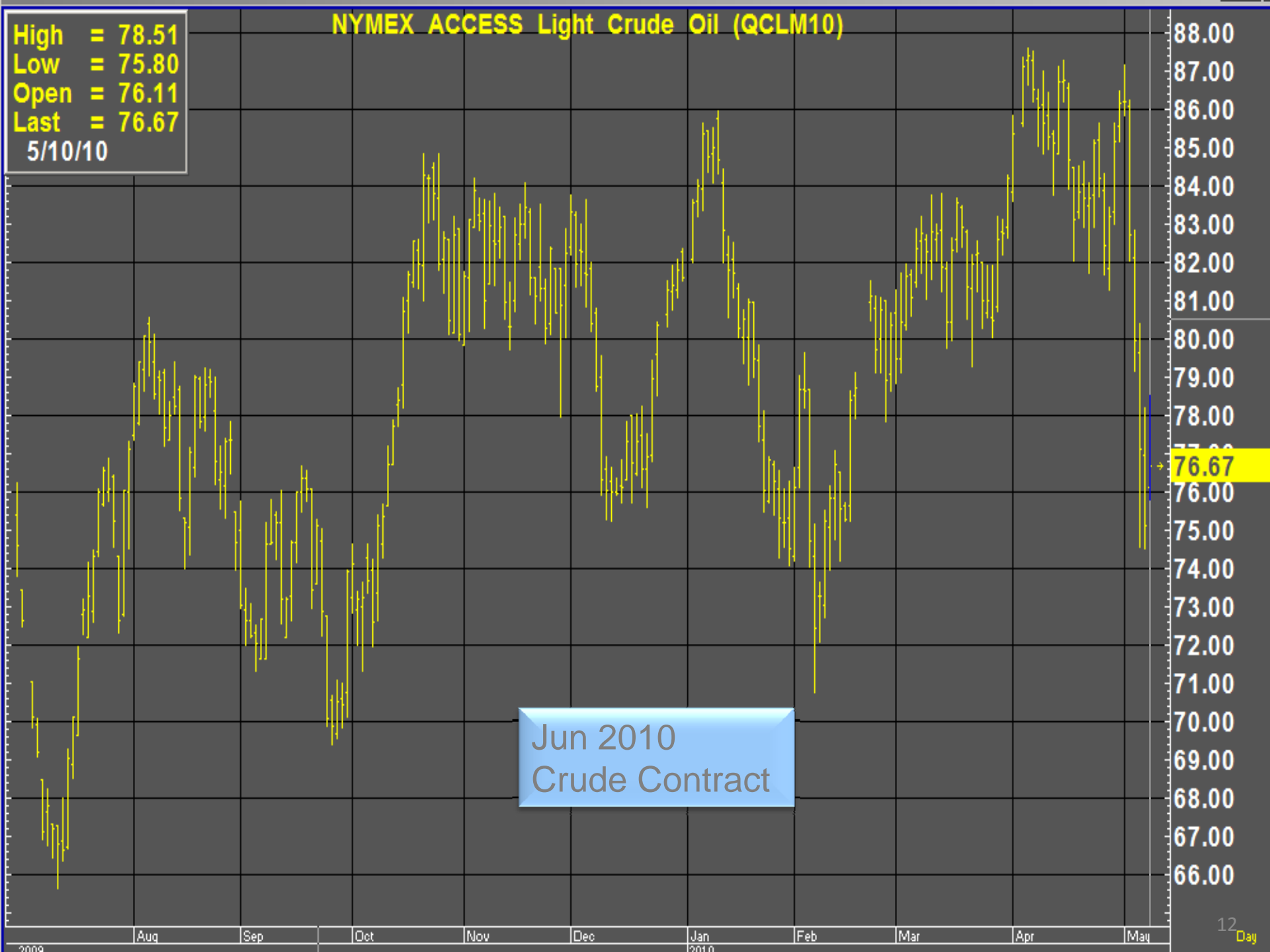


# Average Monthly Temperature



# NYMEX ACCESS Light Crude Oil (QCLM10)

High = 78.51  
Low = 75.80  
Open = 76.11  
Last = 76.67  
5/10/10



Jun 2010  
Crude Contract

88.00  
87.00  
86.00  
85.00  
84.00  
83.00  
82.00  
81.00  
80.00  
79.00  
78.00  
77.00  
76.67  
76.00  
75.00  
74.00  
73.00  
72.00  
71.00  
70.00  
69.00  
68.00  
67.00  
66.00

# NYMEX Natural Gas (NGM10)

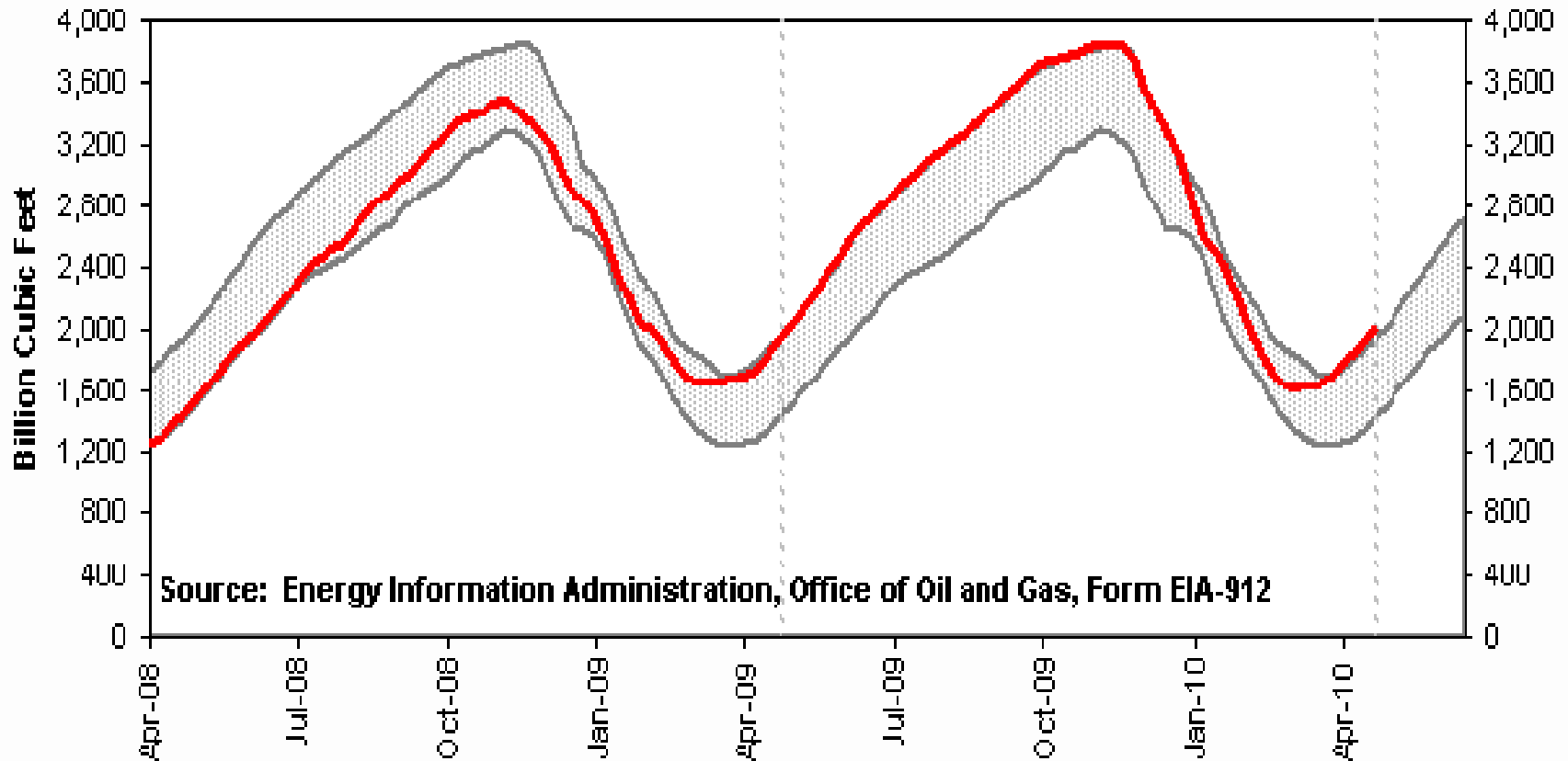
High = 4.130  
Low = 4.120  
Open = 4.130  
Last = 4.120  
5/10/10



Jun 2010 Nat. Gas Contract

4.120

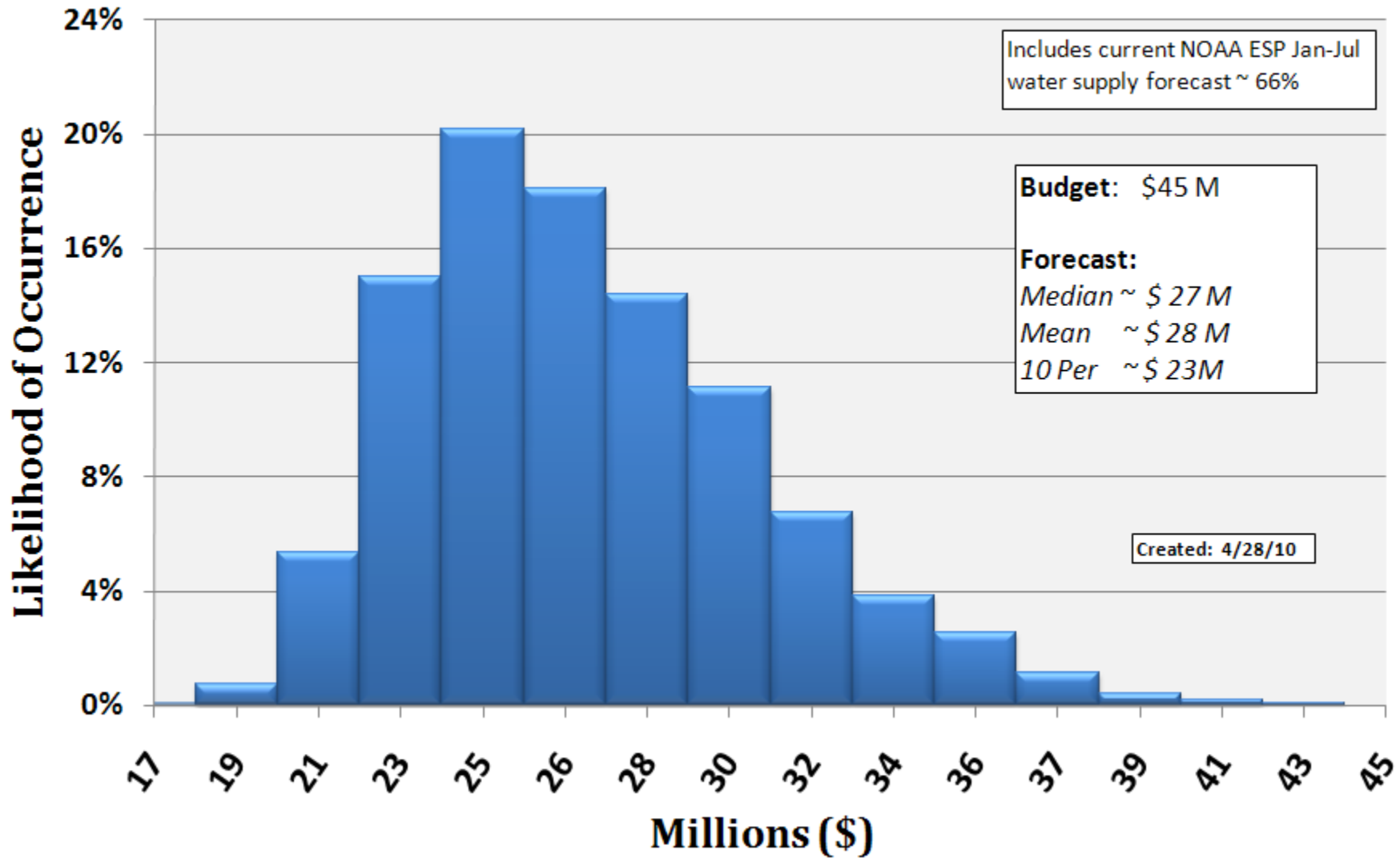
## Working Gas in Underground Storage Compared with 5-Year Range



**Note:** The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2005 through 2009.

**Source:** Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

## Possible 2010 Net Wholesale Revenue Outcomes (A Probabilistic View)




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# First quarter results



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- # Board Governing Financial Policies
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- Provide integrated utility services
- Target a positive Change in Net Assets (bottom line) by 2011
- Maintain a minimum utility services cash and investment reserve level of \$130 million
- Target an overall operating ratio of 80%-100% by 2011
- Limit the potential surcharge to 14% under unusual circumstances (10% probability of this outcome or worse in any year)



# Bad News – Good News

- Revenues down
- Expenses down
- Execution of mitigation plans in progress
  - Remaining in preservation mode
  - Implement long-term hedging strategy
  - Secure line of credit
  - Extended 9% surcharge effective May 1<sup>st</sup>
  - Delayed rate design changes until after surcharge expires
- Strategic planning in progress
  - Revisit financial policies
  - Explore additional financial tools



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# First Quarter Highlights

- Fully loaded cost per kWh delivered: 4.71 cents/kWh
  - Budgeted at 5.18 cents/kWh (year-to-date)
  - Use 5 year average kWh delivered
- Combined cost per MWh delivered: \$18.00 MWh
  - Budgeted at \$18.10 MWh (year-to-date)
  - Use probabilistic model for average MWh delivered
- Overall interest earnings rate: 2.08%
  - Budgeted at 2.17%

# Combined Utility Services

## First Quarter Results

(in \$000s)	YTD	YTD	Budget to Actual	
	03/31/10 Actuals	03/31/10 Budget	Over/(Under) \$	%
Operating Revenue	22,666	30,355	(7,689)	(25%)
Operating Expenses	(29,897)	(31,365)	(1,468)	(5%)
Operating Loss	(7,231)	(1,010)	(6,221)	(616%)
Non-Op Exp (Inc)	(85)	155	240	155%
<b>Change in Net Assets before CIAC</b>	<b>(7,146)</b>	<b>(1,165)</b>	<b>(5,981)</b>	<b>(513%)</b>
Capital Contributions	386	725	(339)	(47%)
Change in Net Assets	(6,760)	(440)	(6,320)	(1437%)

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- Combined Utility Services - Wholesale Activity
- First Quarter Results

(in \$000s)	YTD	YTD	Budget to Actual	
	03/31/10 Actuals	03/31/10 Budget	Over/(Under) \$	%
Sales for Resale	15,335	20,602	(5,267)	(26%)
Less: Douglas County Sales	(386)	(372)	14	4%
Less: Alcoa Sales	(4,263)	(4,300)	(37)	(1%)
External Purchased Power	(8,097)	(5,681)	2,416	43%
<b>Net Wholesale Revenue</b>	<b>2,589</b>	<b>10,249</b>	<b>(7,660)</b>	<b>(75%)</b>
Internal Purch Power, other	(4,397)	(5,076)	(679)	(13%)
<b>Net Wholesale Margin</b>	<b>(1,808)</b>	<b>5,173</b>	<b>(6,981)</b>	<b>(135%)</b>

# Combined Utility Services- Retail Activity

## First Quarter Results

(in \$000s)	YTD	YTD	Budget to Actual	
	03/31/10 Actuals	03/31/10 Budget	Over/(Under) \$	%
Operating Revenue	20,077	20,106	(29)	-%
Operating Expenses	(25,500)	(26,289)	(789)	(3%)
Operating Inc (Loss)	(5,423)	(6,183)	(760)	(12%)
Non-Op Exp (Inc)	(85)	155	(240)	(155%)
<b>Retail Operating Results</b>	<b>(5,338)</b>	<b>(6,338)</b>	<b>(1,000)</b>	<b>(16%)</b>
<b>Net Wholesale Margin</b>	<b>(1,808)</b>	<b>5,173</b>	<b>(6,981)</b>	<b>(135%)</b>
<b>Change in Net Assets before CIAC</b>	<b>(7,146)</b>	<b>(1,165)</b>	<b>(5,981)</b>	<b>(513%)</b>
Capital Contributions	386	725	(339)	(47%)
Change in Net Assets	(6,760)	(440)	(6,320)	(1437%)

# Combined Hydros

## First Quarter Results

(in \$000s)

	YTD	YTD	Budget to Actual	
	03/31/10 Actuals	03/31/10 Budget	Over/(Under) \$	%
Operating Revenue	40,702	41,499	(797)	(2%)
Operating Expenses	20,467	22,185	(1,719)	(8%)
Depreciation/Amort.	7,454	7,709	(255)	(3%)
Operating Income	12,782	11,605	1,177	10%
Non-Op Exp (Inc)	12,338	12,196	142	1%
<b>Change in Net Assets before CIAC</b>	443	(592)	1,035	175%
Capital Contributions	135	30	105	350%
Change in Net Assets	578	(562)	1,140	203%

*Cost per MWh*

*\$25.70*

*\$18.10*

2010 YTD  
Normalized  
**\$18.00**

# 2010 Capital Expenditures

## First Quarter Results

(in \$000s)	YTD 03/31/10 Actuals	YTD 03/31/10 Budget	YTD % Spent
Distribution	732	1,501	49%
Networks	581	1,060	55%
Water	93	438	21%
Wastewater	0	4	-%
Rocky Reach	726	1,220	59%
Rock Island	1,204	3,331	36%
Lake Chelan	2,983	4,368	68%
Internal Service	411	965	43%
<b>Total</b>	<b>6,731</b>	<b>12,885</b>	<b>52%</b>

# Combined Utility Services

## 2010 Forecast

(in \$000s)	2010 Forecast	2010 Adopted Budget	Budget to Forecast Over/(Under)	
			\$	%
Operating Revenue	96,848	112,607	(15,759)	(14%)
Operating Expenses	(123,012)	(125,562)	(2,550)	(2%)
Operating Loss	(26,164)	(12,955)	(13,209)	(102%)
Non-Op Exp (Inc)	457	554	(97)	(18%)
<b>Change in Net Assets before CIAC</b>	<b>(26,621)</b>	<b>(13,509)</b>	<b>(13,112)</b>	<b>(97%)</b>
Capital Contributions	2,662	2,900	(238)	(28%)
Change in Net Assets	(23,959)	(10,609)	(13,351)	(126%)
<i>Cost per kWh (normalized)</i>	5.05 ¢	5.18 ¢		

# Combined Hydros

## 2010 Forecast

(in \$000s)

	2010 Forecast	2010 Adopted Budget	Budget to Forecast Over/(Under)	
			\$	%
Operating Revenue	167,620	171,664	(4,044)	(2%)
Operating Expenses	(87,139)	(89,595)	(2,456)	(3%)
Depreciation/Amort.	(29,670)	(30,837)	(1,167)	(4%)
Operating Income	50,810	51,232	(422)	(1%)
Non-Op Exp (Inc)	47,887	48,677	(790)	(2%)
<b>Change in Net Assets before CIAC</b>	<b>2,924</b>	<b>2,555</b>	<b>369</b>	<b>14%</b>
Capital Contributions	555	120	435	363%
Change in Net Assets	3,479	2,675	804	30%

*Cost per MWh (normalized)*

*\$18.00*

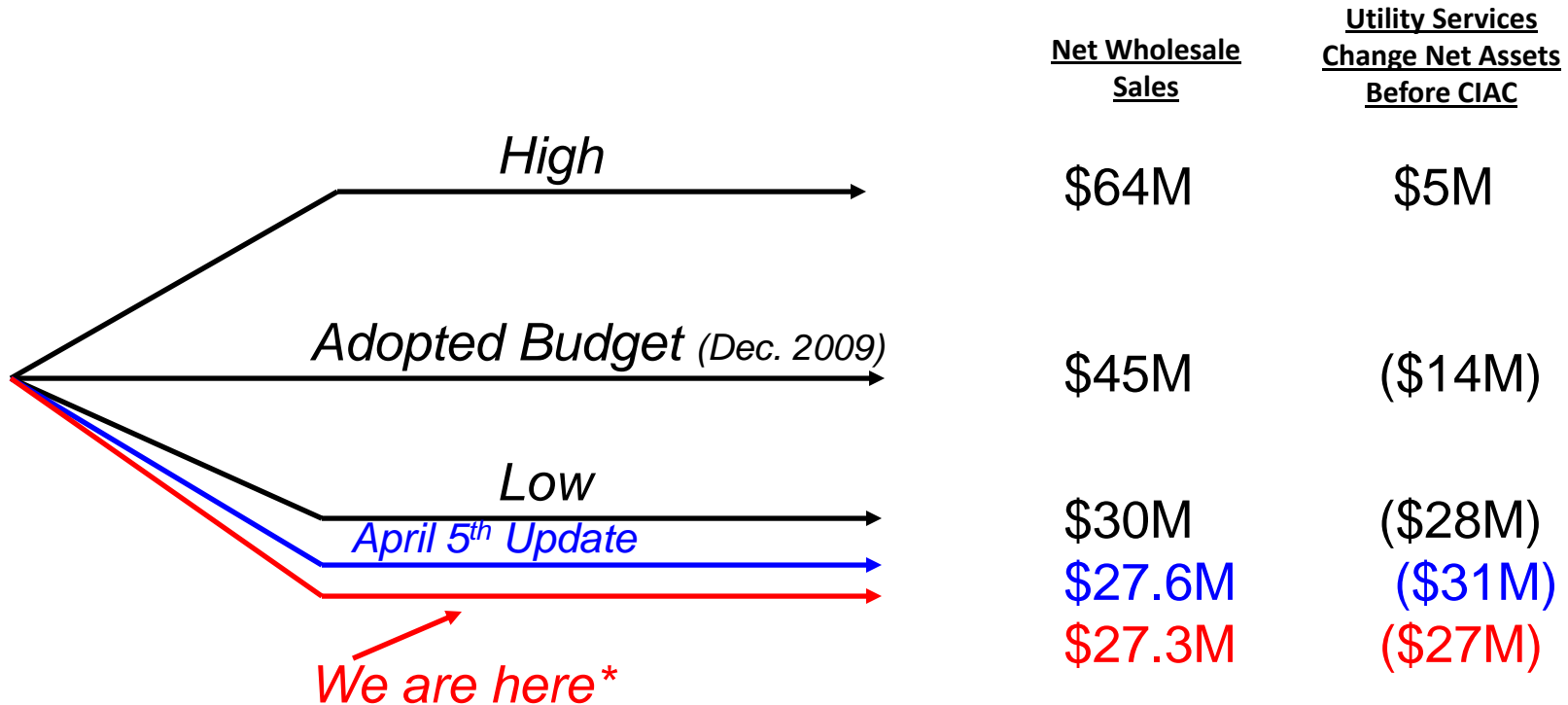
*\$18.40*

# 2010 Capital Expenditures

(\$000s)

	2010 Forecast	2010 Adopted Budget	% Spent
Distribution	10,076	10,345	97%
Networks	5,100	5,450	94%
Water	3,019	3,019	100%
Wastewater	210	210	100%
Rocky Reach	4,682	5,595	84%
Rock Island	24,832	24,755	100%
Lake Chelan	11,951	11,785	101%
Internal Service	3,969	4,166	95%
Total	63,839	65,325	98%

# 2010 Forecast Compared to Budget



\* - Based on net wholesale revenue forecast median as of 4/28/10

“High” budget revenue has a 10% probability of occurring,  
 “Adopted Budget” revenue has a 50% probability of occurring  
 “Low” budget revenue has a 10% probability of occurring



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Looking out for the next few years

# Change In Net Asset Forecast

- (Utility Services Including Net Wholesale Margin, before CIAC)

(\$ millions)	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Expected Conditions (50% probability)	(\$27)	(\$8)	\$43	\$46	\$58
Unusual Conditions (10% probability)	(\$31)	(\$25)	(\$5)	(\$20)	(\$17)
Stress Case (75% Water - \$30 Power)		(\$44)	(\$36)	(\$43)	(\$42)

Target: Positive Change in Net Assets (bottom line) by 2011

# Utility Services Reserves Forecast

(Utility Services Cash and Investments, End of Year Balances)

(\$ millions)	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Expected Conditions (50% probability)	\$209	\$194	\$201	\$180	\$174
Unusual Conditions (10% probability)	\$205	\$177	\$154	\$114	\$100
Stress Case (75% Water - \$30 Power)		\$157	\$120	\$90	\$74

Policy: Maintain minimum Utility Services reserves of \$130 million

# Operating Ratio Forecast

(Utility Services Including Net Wholesale Margin)

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Expected Conditions (50% probability)	121%	105%	84%	85%	83%
Unusual Conditions (10% probability)	125%	117%	102%	109%	109%
Stress Case (75% Water - \$30 Power)		135%	120%	121%	122%

Target: Overall operating ratio of 80%-100% by 2011

# Surcharge Potential Forecast

(Utility Services Including Surplus Wholesale)

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Expected Conditions (50% probability)	<b>18%</b> In addition to implemented 9% surcharge	-	-	-	-
Unusual Conditions* (10% probability)	<b>25%</b> In addition to implemented 9% surcharge	14%	-	-	-
Stress Case* (75% Water - \$30 Power)		51%	29%	39%	41%

Target: Limit the potential surcharge to 14% at a 90% confidence level

(Escrow solution removed the stress of this individual metric for 2010)

\* - Individual year results, not cumulative

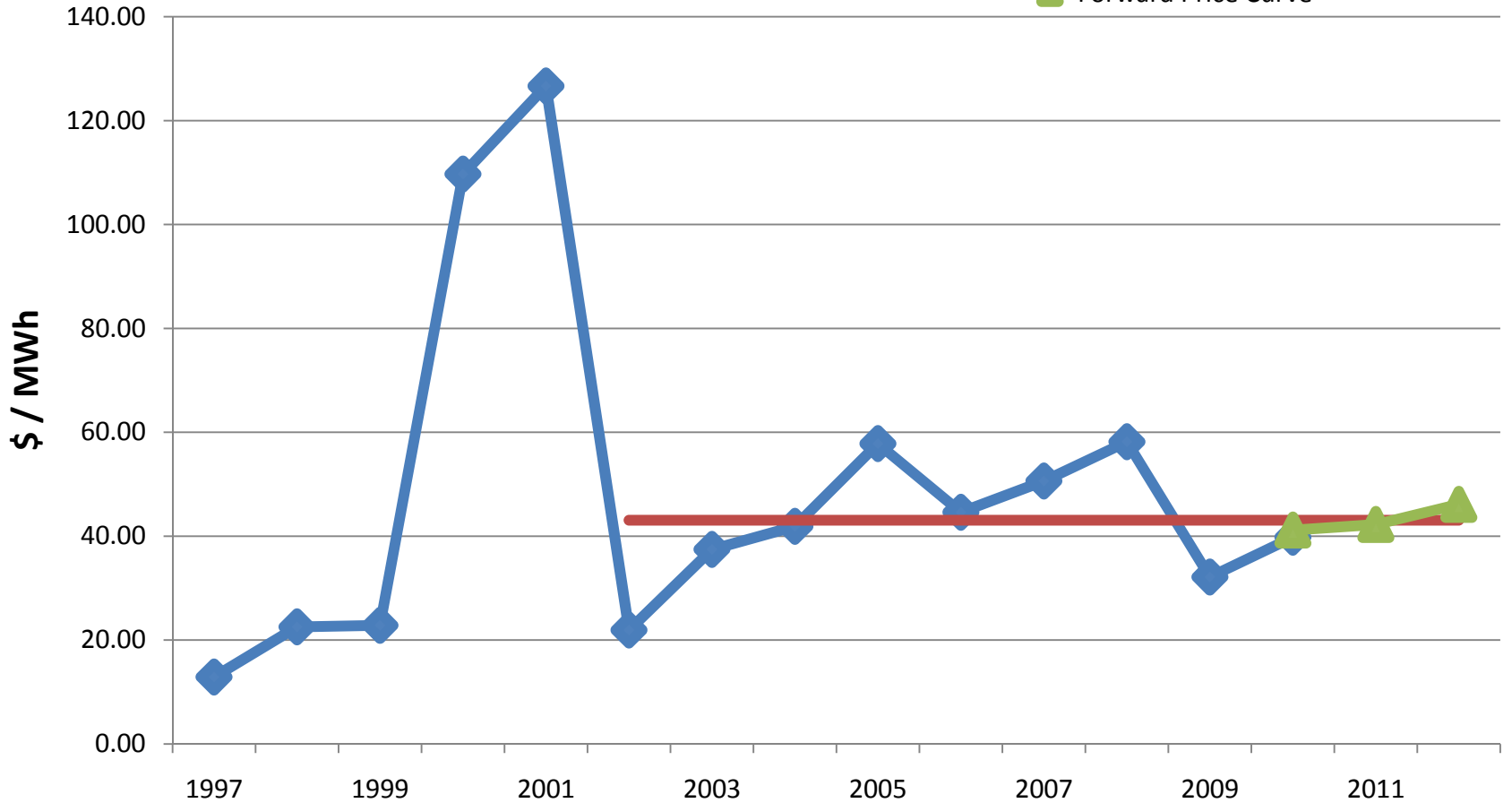
# Funding Gaps

(Utility Services - \$million)

	2008	2009	2010 Budget	2010 Forecast	2011	2012
Retail Electric	(\$11.6)	(\$13.5)	(\$20.9)	(\$26.2)	(\$21.1)	(\$22.3)
Networks	(6.9)	(7.6)	(7.6)	(7.6)	(9.3)	(10.4)
Water	(0.5)	(0.4)	(0.6)	(0.5)	(0.8)	(1.2)
Wastewater	(0.3)	(0.4)	(0.5)	(0.5)	(0.5)	(0.6)
Other	1.7	1.4	(0.3)	0.2	(0.2)	2.4
Terms of new power contracts					1.5	10.7
<b>Total Funding Gap</b>	<b>(17.8)</b>	<b>(20.0)</b>	<b>(29.8)</b>	<b>(34.6)</b>	<b>(30.4)</b>	<b>(21.3)</b>
Net Wholesale Revenues	45.6	25.4	45.1	27.3	54.9	127.6
Cost of Power - Surplus Sales	23.0)	(20.4)	(28.7)	(19.3)	(32.8)	(63.6)
Net wholesale margin	22.6	5.0	16.3	8.0	22.0	64.0
Change in Net Assets before CIAC	\$4.8	(\$15.0)	(\$13.5)	(\$26.6)	(\$8.4)	\$42.6
Jan- July Columbia runoff %	95%	79%	100%	66%	100%	100%
Projected surplus sales (1,000 MWh)	1,097	861	1,275	689	1,417	2,820
Mid C flat prices	\$59	\$32	\$41	\$41	\$42	\$ 46
Breakeven flat price (estimate)			\$53	\$82	\$49	\$31

# Mid C Prices

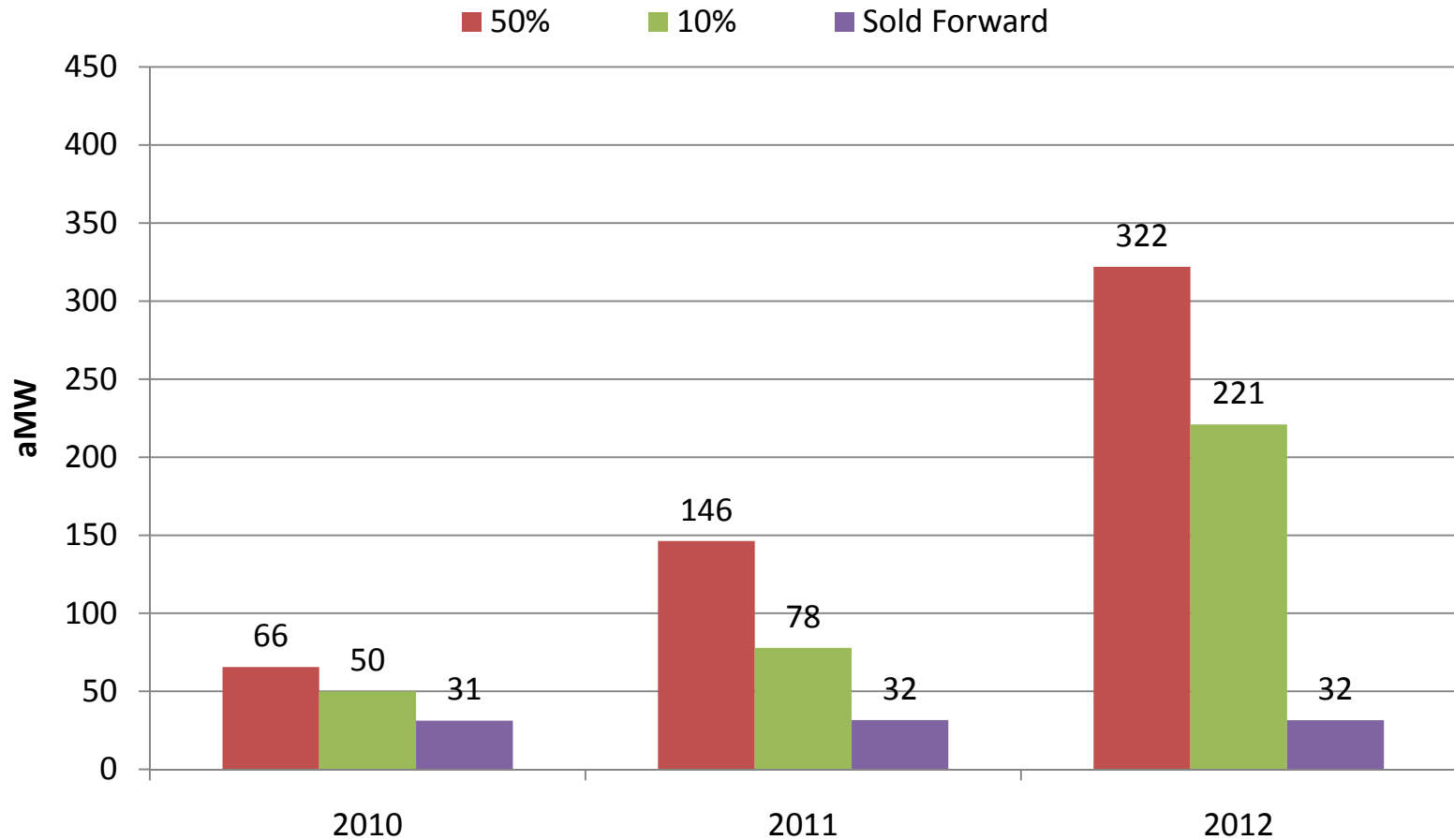
- ◆ Average Dow Jones Mid-C Price
- Average post-2001
- ▲ Forward Price Curve



Source: History Dow Jones daily index, Forward Price Curve from broker market

# Chelan PUD

## Surplus Generation & Forward Energy Sales



Model Run: 4.28.10

# Board Governing Financial Policies

## Are We On Track?

 Provide integrated utility services

 Target a positive Change in Net Assets (bottom line) by 2011

 Maintain a minimum utility services cash and investment reserve level of \$130 million

 Target an overall operating ratio of 80%-100% by 2011

 Limit the potential surcharge to 14% under unusual circumstances (10% probability of this outcome or worse in any year)



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# Known unknowns

- Snowpack and stream flows
- Wholesale electricity prices
- Retail load growth
- Capital markets – access and interest rates
- Climate change
- Cost of complying with existing regulations (e.g., HCP targets, I-937)
- Impact of new laws or regulations
- Impact of new accounting regulations
- Impact of new technology (e.g., fiber program)
- Impact of inflation (materials and labor costs)
- Impact of national and international economic imbalances (value of \$US relative to other major currencies)



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# Summary

- Committed to maintaining rates consistent with a financially healthy utility – today and into the future
- Focus on keeping the PUD strong and reliable
- Financial results stressed for the next few years
- Operating levels not sustainable over the long-term
- Strategic planning efforts to align long-term plans
- Continue to closely monitor 2010 forecasts to determine if further cost cutting and surcharge actions are necessary this year