

NEEA Energy Efficiency Roundtable

October 24, 2008

First Resource, Next Resource

Stephen Bicker, Energy Conservation Manager

Support from Senior Management

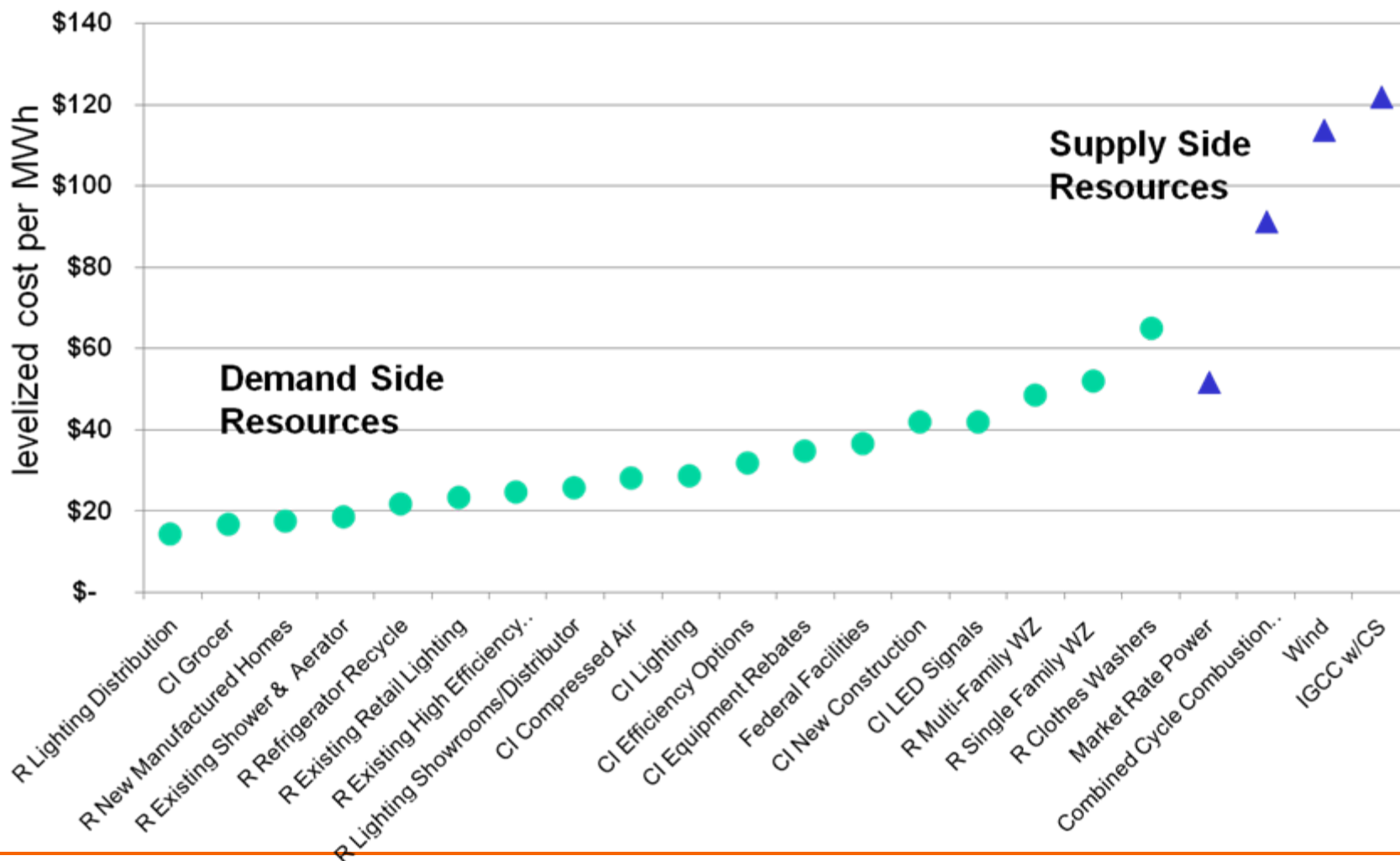


“Through our Integrated Resource Planning process, we have determined that conservation should be our first energy resource. It can be less expensive and more readily available than any other available new resource. And saving electricity where we can is the right thing to do.”

- Bill Gaines, Director of Utilities and CEO

What's the Next Acquisition?

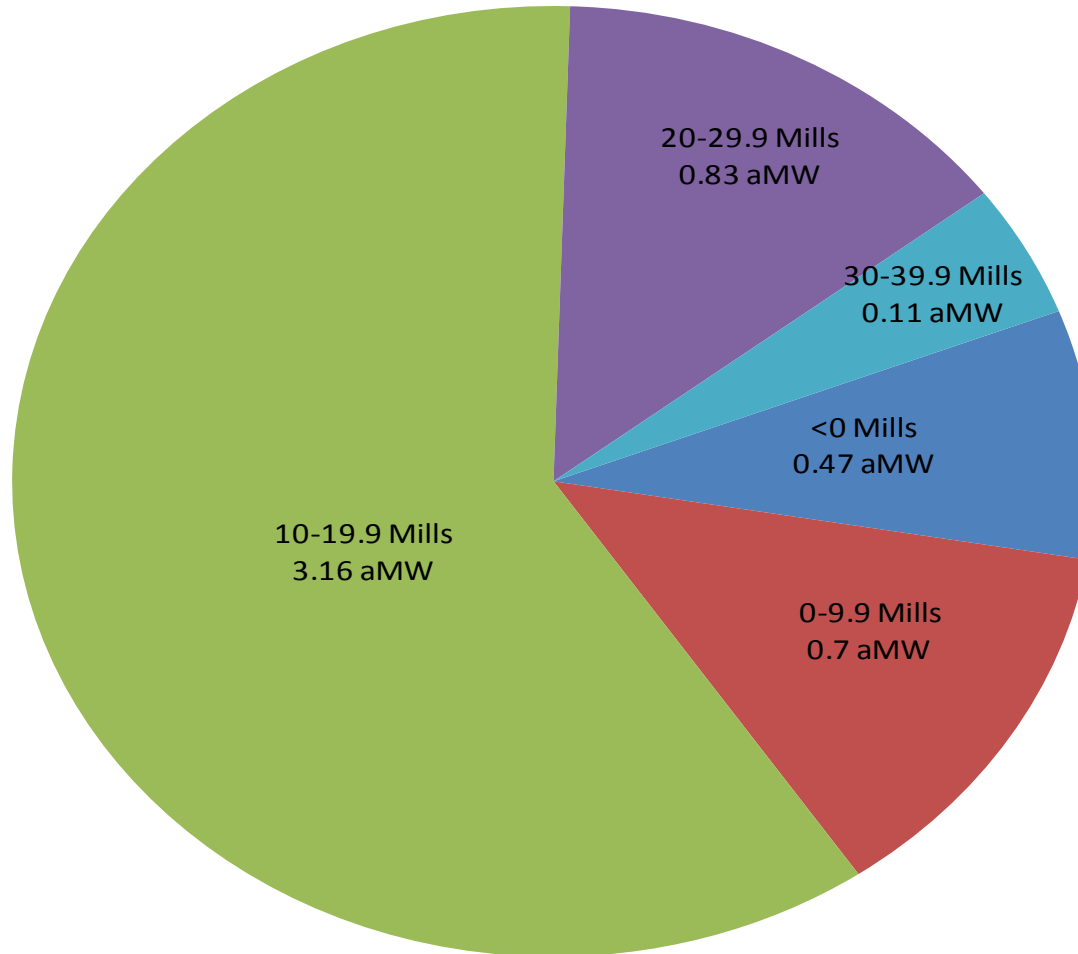
2009 estimated cost of resources



What's Your Budget?

Utility Cost Test Results

5.57 aMW First Year Savings in 10 Mill Bins



Where Does it Come From?

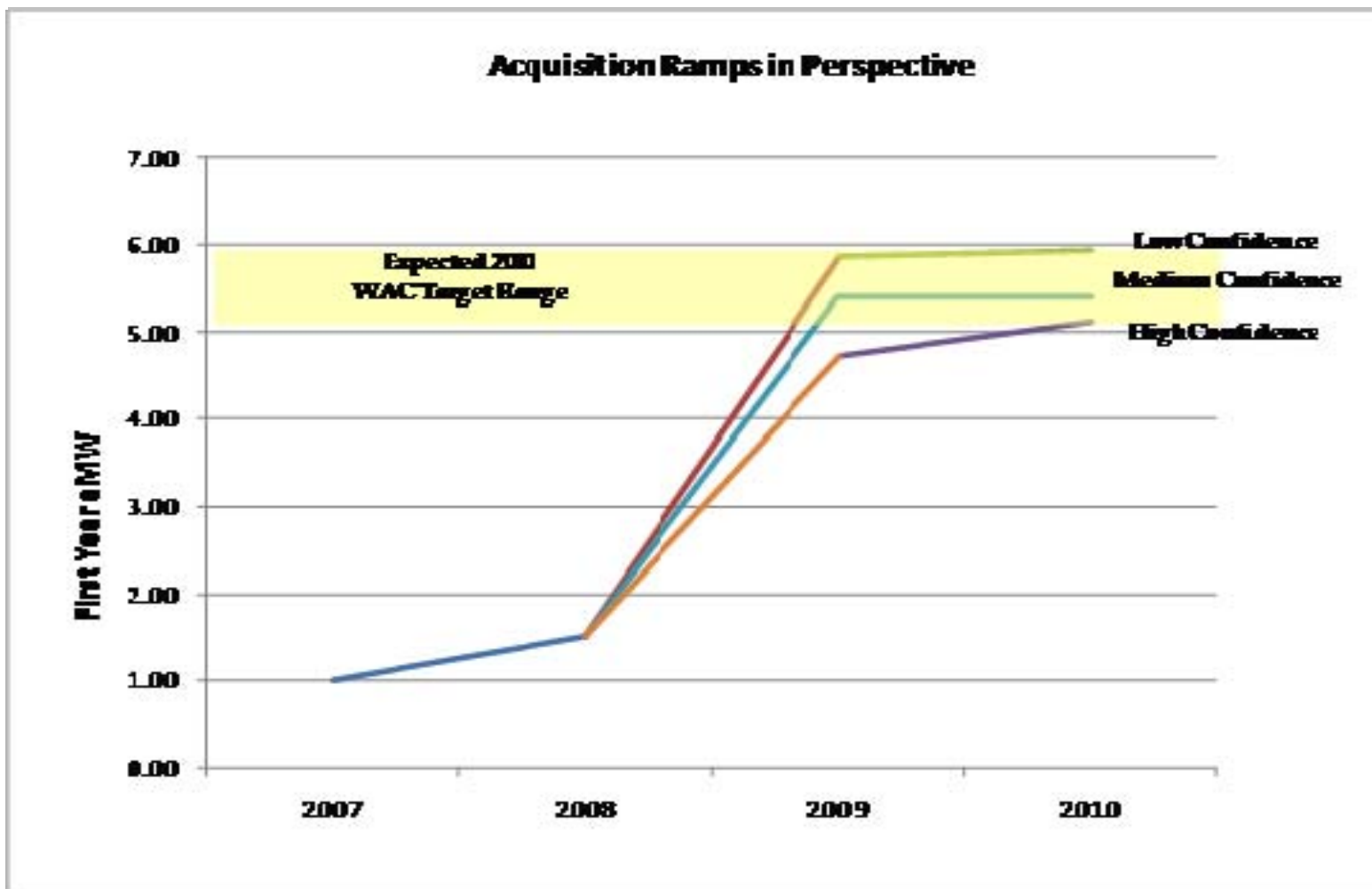
Tacoma's 10-year achievable potential by sector



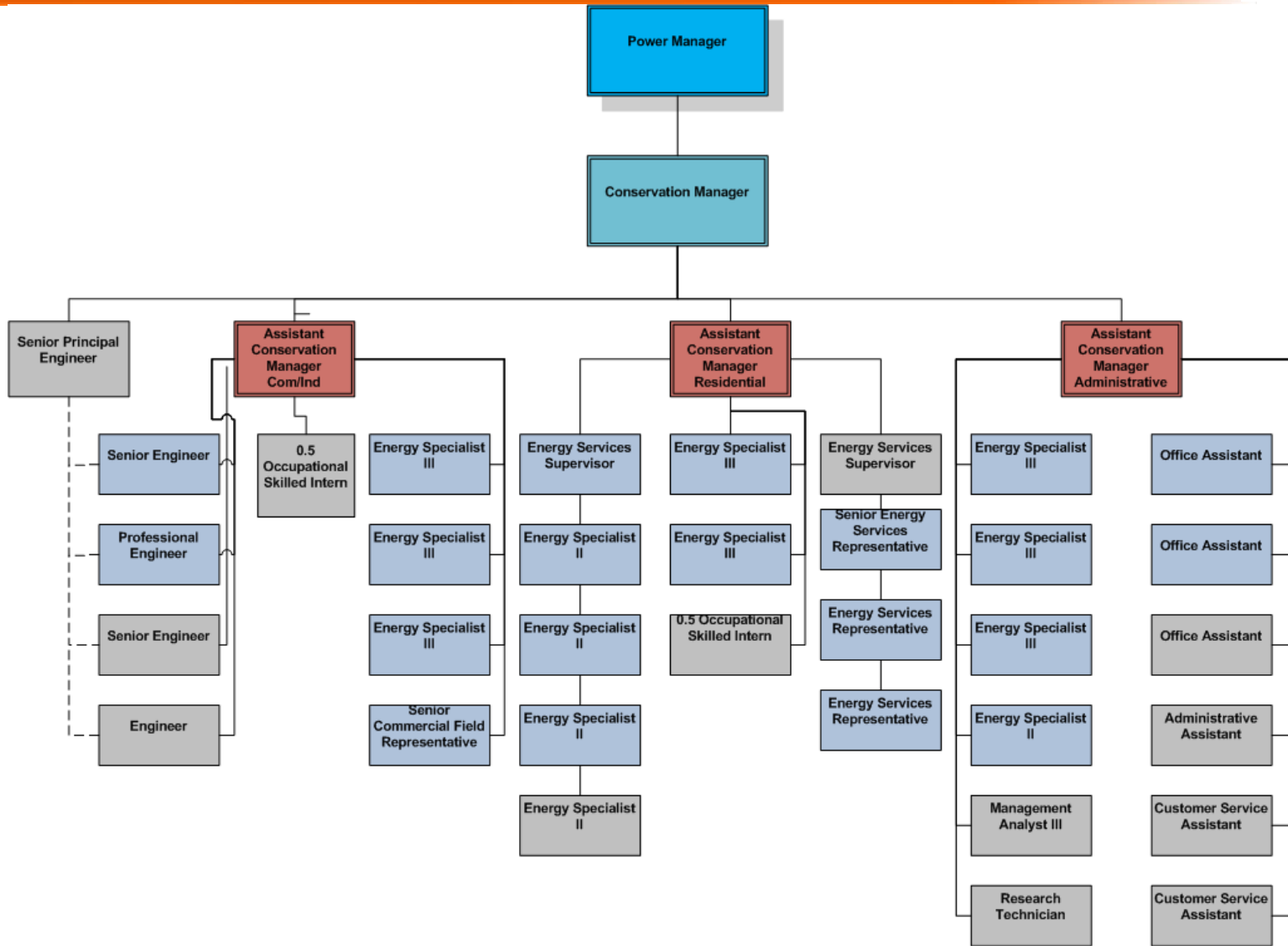
Economic and Achievable Potentials (in aMW)

Sector / Segment	20 Year Economic Potential	20 Year Achievable Potential	10 Year Achievable Potential	Percent of Potential
Residential	42.3	29.3	22.7	40%
Existing Retrofit	33.4	23.1	20.1	
Existing Equipment Replacement	4.2	2.9	1.2	
New Construction and Equipment	4.7	3.2	1.4	
Commercial	34.6	23.8	16.8	33%
Existing Retrofit	24.6	16.9	13.4	
Existing Equipment Replacement	3.9	2.7	1.1	
New Construction and Equipment	6.1	4.2	1.7	
Industrial	22.5	15.6	11.6	21%
Military	5.8	4.0	2.9	6%
<i>Totals</i>	105.2	72.7	54.0	

Planned Ramp Up 2009-2010

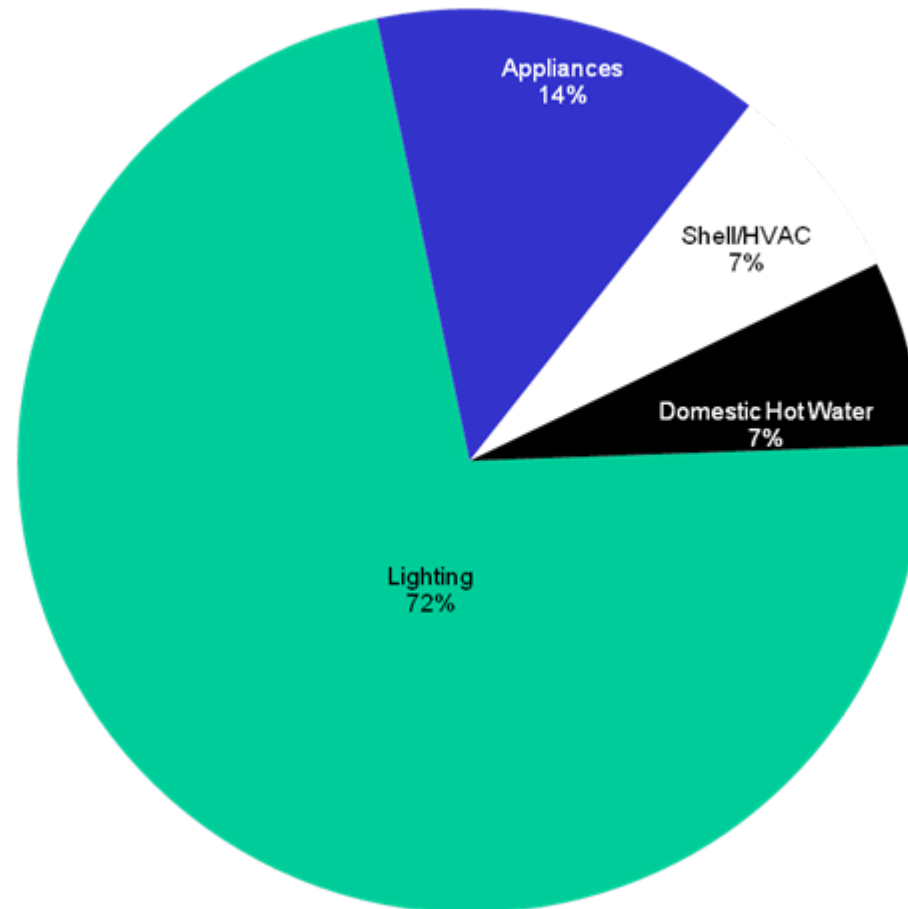


Growing to Meet the Demand



Residential Conservation

Residential 3.05 aMW
by Major End-Use



Residential Programs ***existing***



- **Weatherization – Pre 1988 SF & MF**
- **Refrigerator Recycling - \$30 for old working refrig/freezers**
- **Heat Pumps - 8.5 HSPF/14 SEER \$400 plus packaged duct sealing incentives)**
- **Showerhead – mailed out upon request**
- **Energy Star fixtures - \$20 per fixture (NC & Exist / SF & MF)**
- **CFL retail – instant discounts through large retail**
- **CFL distribution – workshops, events, info center, audits**
- **SF new construction – up to \$975 to exceed code**
- **Manufactured homes - \$300 for E* + \$100 sales incentive**

Residential Programs

new , improved or explorations in 2009



- **Multi-family lighting – E* CFLs, fixtures, T-5 or better**
- **SF/MF Weatherization – discussions with CAPs toward expanding services to low income customers**
- **Compliant heat pumps with commissioning**
- **Exploring dishwashers and refrigerators in MF – working with property management to measure potential savings in units and common areas**
- **Exploring ductless mini-split heat pumps**

Examples of Res Success



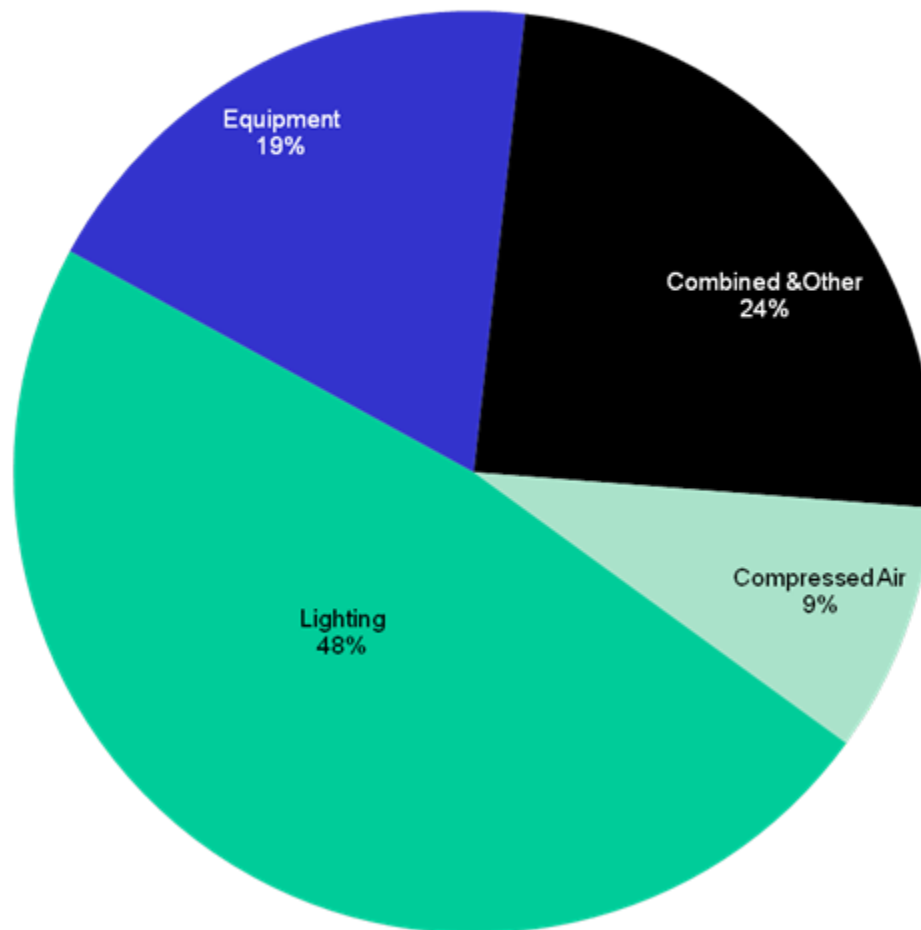
- **Energy Star Compact Fluorescent Lamps- through 9/2008**
 - **14,230 CFL's distributed (energy audits, workshops, special events – Tully's coffee promotion, installed by multifamily maintenance staff)**
 - **97,200 CFL's sold as part of BPA's Change A Light**
 - **Savings: 3,656 MWh**
- **Energy Star Fixtures– through 9/2008**
 - **5,744 fixtures sold (showrooms and electrical distributors)**
 - **New construction and existing residences, esp. low income projects**
 - **Savings: 568 MWh**

C&I Conservation Programs

includes Ft Lewis and McChord AFB



Commercial/Industrial 2.05 aMW
by Major End-Use



C&I Conservation Programs ***existing***



- **Bright Rebates – lighting improvements for existing C&I (high intensity fluorescents in high bay applications, T8/5 in retail in offices and retail)**
- **Compressed air – audits identify supply and demand side problems, efficient technology incentives (e.g. VSDs)**
- **EnergySmart Grocer – audits, rebates and tech assist through contractor**
- **LED traffic signals – working with municipalities to save 90% of traffic signal energy**
- **Loans – interest free up to \$500,000 or 70% of project cost**
- **New Construction – for exceeding Tacoma codes – design assistance, and incentives (prescriptive and custom)**

C&I Conservation Programs

new , improved or explorations in 2009



- **Building retro-commissioning –pilot to examine potential program offering engineering studies, improvements to buildings through operational improvements and training**
- **Efficiency Options – for existing facilities not eligible for rebates, complex & customized with engineering analysis, requires verification**
- **Equipment rebates – prescriptive incentives based on equipment size and efficiency (e.g. HVAC, VSDs, motors, appliances, office equipment, etc.)**
- **Resource Conservation Manager Pgm – Pilot to explore training RCMs in large C&I facilities or campuses, where significantt electrical savings potential exists**

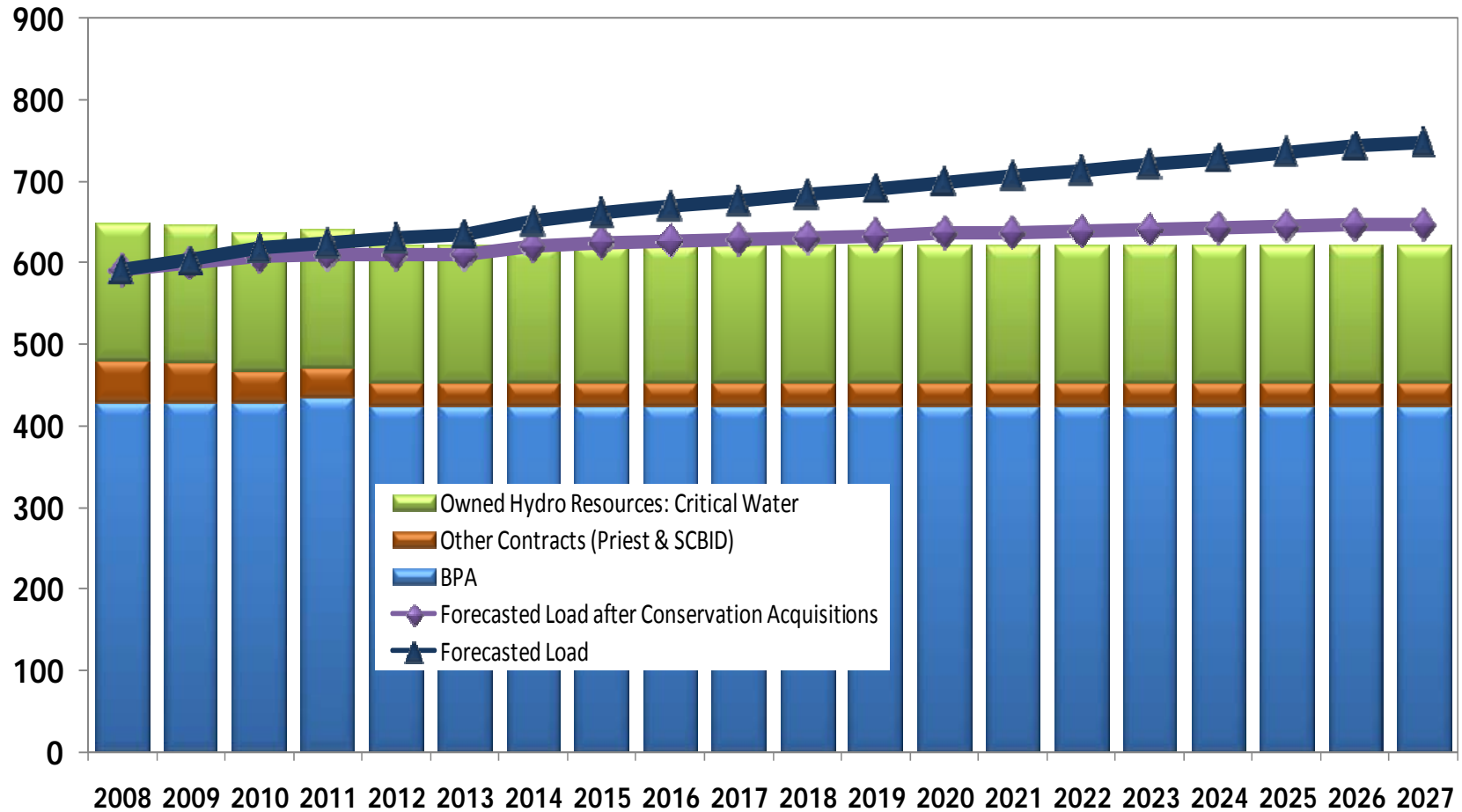
Examples of C&I Success



- **Compressed Air (05-08)**
 - **Marketed to 50 companies**
 - **40 employees from 30 companies trained**
 - **18 DSM assessments**
 - **9 ECMs yielded .36 aMW**
 - **Incentives = \$346K**
- **Bright Rebates**
 - **59 projects**
 - **1.29 aMW savings**

Conservation Can Make a Big Difference

the effect of conservation in the resource portfolio



Contact Information



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