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April 25, 2013

Steven King, Acting Executive Director & Secretary  
Washington Utilities and Transportation Commission  
1300 S Evergreen Park Drive SW  
Post Office Box 47250  
Olympia, Washington 98504-7250

**Re: UG - \_\_\_\_\_ - related to Dockets UG-112068 and UG-080546  
2012 Annual Report on NW Natural's Energy Efficiency (EE) Program**

Dear Mr. Danner:

Northwest Natural Gas Company, dba NW Natural ("NW Natural" or the "Company"), hereby submits an original and two copies of its 2012 Annual Report on the Company's Energy Efficiency program. This report is submitted in compliance with the Company's Energy Efficiency Plan ("EE Plan") which is by reference part of the Company's Tariff Schedule G, "Energy Efficiency Services and Programs – Residential and Commercial," and was filed and approved in Docket UG-112068.

The Company's Energy Efficiency program is monitored by the interested parties who have formed the Energy Efficiency Advisory Group (EEAG) in compliance with the stipulated agreement approved in Order 04 in the Company's last rate case, Docket UG-080546 and the Company's Energy Efficiency Plan.

If you have any questions, please call me at (503)226-4211, extension 3590.

Sincerely,

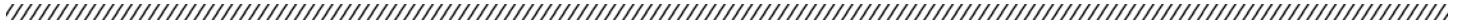
*/s/ Jennifer Gross*

Jennifer Gross

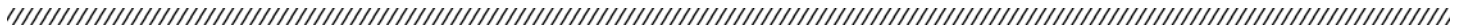
cc: EEAG

Enclosures

# 2012 Annual Report NW Natural Washington



**ENERGY TRUST OF OREGON**  
**APRIL 25, 2013**



**Energy Trust of Oregon**  
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## **I INTRODUCTION, BACKGROUND, OVERSIGHT AND GOALS**

### **A. Introduction**

This report covers 2012, the third full year that Energy Trust of Oregon provided services and incentives to residential and commercial customers of NW Natural in Washington.

It addresses progress toward annual goals, information on revenues and expenditures, number of completed measures and incentives paid during the year and highlights of program activity.

### **B. Background**

At the request of NW Natural and following approval granted by the Washington Utilities and Transportation Commission, WUTC, Energy Trust began administering NW Natural's demand-side management programs in southwest Washington on October 1, 2009. The first year was viewed as a pilot. Satisfied with results from the pilot year, in 2011 the WUTC approved Energy Trust's continued administration of conservation programs for NW Natural in Washington.

### **C. Oversight**

The Energy Efficiency Advisory Group, EEAG, was created, at the direction of the WUTC, to provide advice and oversight for NW Natural/Energy Trust energy-efficiency offerings in Washington. The advisory group is comprised of representatives from NW Natural, Energy Trust, WUTC, Washington Public Counsel, Northwest Industrial Gas Users and the Northwest Energy Coalition.

### **D. Goals**

NW Natural, in collaboration with the EEAG, established performance metrics for the 2012 program year. This report presents Energy Trust's performance against those goals (see page 4).

## II. ANNUAL REPORT HIGHLIGHTS

### A. Summary

- **Gas efficiency measures installed in 2012** by NW Natural's Washington customers saved 213,486 annual therms of natural gas—including 107,764 annual therms in Existing Buildings, 66,810 annual therms in Existing Homes and 38,912 annual therms in New Homes. In total, this was an increase of 4.5 percent over 2011 savings.
- **Total 2012 savings met the minimum savings goal**, as detailed in NW Natural's 2012 Energy Efficiency Plan. Total program spending, including incentives, delivery and administration, was well within budget.
- **An energy efficiency services group**, comprised of Clark County stakeholders, continued meeting in 2012 to identify collaboration opportunities, including joint incentive offerings and coordination on outreach events and marketing. The group includes representatives from Energy Trust, Clark Public Utilities, Planet Clark, Clark County Department of Environmental Services and Clark County Community Development's Weatherization Program.
- **As part of Energy Trust's commitment to competitive process** regarding the use of program management contractors, in 2012 all three of the Washington programs were rebid through a competitive Request for Proposals process. While there were many attractive proposals, including those from two long-time incumbents, all three of the programs were awarded to new bidders. To create administrative and cost efficiencies, both of the residential programs (Existing Homes and New Homes) will be delivered by one contractor beginning in 2013.

### B. Washington Utilities and Transportation Commission Performance Metrics

The table below compares 2012 annual results to 2012 program goals, as established in NW Natural's Energy Efficiency Plan for Washington (updated December 2011).

#### 2012 Results Compared to Goals

Metrics	Goal	2012 Total	Q1 Results	Q2 Results	Q3 Results	Q4 Results
Therms Saved	212,550 – 250,000	213,486	47,496	36,173	19,675	110,142
Total Program Costs	\$1,431,460 – \$1,614,980	\$1,156,509	\$191,747	\$266,693	\$231,991	\$466,078
Average Levelized Cost Per Measure	Less Than \$0.65	\$0.482	\$0.336	\$0.594	\$0.940	\$0.417
Dollars Spent Per Therm Saved	Less Than \$6.50	\$5.42	\$4.04	\$7.37	\$11.86	\$4.23
Total Resource Cost and Utility Costs at Portfolio Level	Greater than 1.0	1.25 / 1.07	Reported Annually	Reported Annually	Reported Annually	Reported Annually

**2012 Utility Cost and Resource Cost by Program**

Program	Utility Cost	Total Resource Cost
Existing Buildings	1.3	1.0
Existing Homes	1.0	1.2
New Homes	1.0	1.5
<b>Overall</b>	<b>1.07</b>	<b>1.25</b>

**2012 Total Utility Cost and Resource Cost**

Program	Utility Cost	Total Resource Cost
NW Natural Washington Portfolio	1.1	1.2
NW Natural Washington Low Income	0.8	0.6
<b>Overall</b>	<b>1.06</b>	<b>1.20</b>

**C. Commercial sector highlights***Existing Buildings*

- **Existing Buildings achieved savings of 107,764 annual therms** in 2012, falling short of the conservative goal of 121,678 annual therms, as development timelines on three substantial projects were delayed and shifted to 2013. This has contributed to a strong 2013 project pipeline.
- **A collaborative agreement with Clark Public Utilities** to offer joint rooftop HVAC unit tune-up incentives was signed in 2012. The cost share on incentives and delivery expense allows the program to capture more therms at a significantly lower cost per therm. There is no additional work required to achieve the electric savings.
- **Rooftop unit tune-ups were the biggest driver of savings in 2012**, as 177 units were completed, totaling more than 56,000 therms or 52 percent of total Existing Buildings savings.
- **Pipe insulation was also an important and cost-effective measure in 2012**, as nearly 35,000 therms were saved for less than \$16,000 in incentive spending.
- **While K-12 schools helped drive savings in 2011, public school projects slowed in 2012** in anticipation of energy-efficiency project funding awards in late 2012 and early 2013 through the Washington State 2012 Jobs Now Act. The program anticipates savings from multiple school district projects in 2013.
- **Few custom projects completed in 2012**, partially due to the slowdown in school projects. Consequently, the program will be restructuring its custom offering in 2013 to allow for increased funding of custom studies and better project collaboration opportunities with Clark Public Utilities.
- **Commercial customers expressed satisfaction with their experience with Energy Trust.** Four of five respondents surveyed were satisfied or very satisfied with their overall program experience.

**D. Residential sector highlights**

- **Residential programs achieved total savings of 105,723 annual therms** in 2012, of which Existing Homes accounted for savings of 66,810 annual therms, while New Homes saved 38,912 annual therms. These results exceeded the Existing Homes conservative goal of 63,373 annual

therms and exceeded the New Homes stretch goal of 34,876 annual therms by 12 percent. In total, the residential sector achieved savings that were 27 percent higher than 2011.

#### *Existing Homes*

- **The program heavily promoted gas fireplaces in 2012**, paying incentives on 76 installations, a 75 percent increase over 2011.
- **With 152 units installed, high-efficiency gas furnaces accounted for 16 percent of program savings** in 2012, compared to 18 percent in 2011 and 43 percent in 2010, the pilot year. This is a positive trend, given the planned federal standard change to a minimum of 90 percent annual fuel utilization efficiency (AFUE) on May 1, 2013, and potential loss of the furnace incentive when high efficiency furnaces become the norm.
- **The program paid 52 water heater incentives in 2012**, compared with 29 in 2011. The newly offered 0.67 efficiency factor (EF) water heaters started to show some uptake, in part due to a summertime co-promotion with NW Natural that generated 28 installations. Due to cost-effectiveness concerns, the tankless water heater incentive will not be offered for Existing Homes in 2013.
- **Efficient window installations significantly increased in 2012**, saving more than 3,800 therms compared to 2,000 therms in 2011.
- **The program delivered 992 Energy Saver Kits in 2012**, compared with 1,757 in 2011. This decrease was intended, as the program focused more on promoting core equipment improvements and weatherization measures. The program also launched the Build-Your-Own Energy Saver Kit functionality, which includes an online ordering process that allows customers to tailor the kits to fit their specific needs. This increases the likelihood of installation and the amount of energy savings that can be claimed per savings device.
- **Public outreach events were notably more successful in 2012** compared with 2011, with more than 240 customers signing up for Home Energy Reviews.
- **In 2012, the program began utilizing online media campaigns** through The Oregonian, The Columbian and Comcast as a means for reaching new customers. The ads are relatively inexpensive to purchase and have proven successful in other programs.
- **Customer satisfaction surveys show 89 percent of Existing Homes participants were satisfied** or very satisfied with their experience with Energy Trust in 2012—up from 86 percent in 2011. The 143 program participants were surveyed by telephone shortly after completing energy-efficiency upgrades and receiving an incentive check.

#### *New Homes*

- **A total of 189 ENERGY STAR® new homes** received incentives in 2012.
- **Market share for the year was approximately 17 percent**, a notable drop from just over 31 percent in 2011. This is likely due to increased ENERGY STAR documentation requirements that took effect in 2012, as well as the significant increase in total housing starts from 667 in 2011 to 1,117 in 2012. Due to lengthy construction timelines, it is not known how many of these new 2012 housing starts will be built to ENERGY STAR standards in 2013.
- **In 2012 642 high-efficiency gas clothes washers received incentives** in a joint incentive offer with Clark Public Utilities. This successful collaboration will continue in 2013.
- **Four tankless water heater incentives** were processed in 2012.

- **Clark County Food Bank agreed to deliver Energy Saver Kits through its food pantry locations.** This initiative launched in Q4 and distributed 178 kits.

### **E. Trade Ally Network**

- **Energy Trust's Trade Ally Network serving Washington customers** continued its steady growth in 2012.
- **By year end, 189 trade allies served Washington,** 29 more than had been enrolled at the end of 2011 and 57 more than had been enrolled by the end of 2010. Of the 189 trade allies, 78 were based in Washington—21 more than at the end of 2011.
- **Breakfast meetings exclusively for Washington trade allies** serving Existing Buildings and Existing Homes were held in Vancouver in June and December. These breakfasts have proved to be excellent forums, particularly on the residential side, where attendance and engagement by trade allies continues to increase.
- **Builders receiving ENERGY STAR incentives were required to become Energy Trust trade allies** as of July 1, 2012, to ensure that proper insurance coverage is maintained by builders. This requirement had little impact on participation.



### III. ANNUAL RESULTS

#### A. Activity highlights—sites served

	Q1	Q2	Q3	Q4	Total
<b>Existing Commercial</b>					
School/college retrofits	4	3	--	2	<b>9</b>
Other commercial retrofits	2	1	6	43	<b>52</b>
Studies	--	--	--	--	--
<b>Existing Homes</b>					
Weatherization (insulation, air and duct sealing and windows)	27	43	35	74	<b>179</b>
Gas hearths	16	19	9	32	<b>76</b>
Gas furnaces	41	32	14	63	<b>150</b>
Water heaters	8	5	16	22	<b>51</b>
Home Energy Reviews	32	11	40	69	<b>152</b>
<b>New Homes</b>					
Builder Option Package	30	13	37	109	<b>189</b>
Clothes washers	139	151	156	196	<b>642</b>

#### B. Revenues

Source	Actual Revenue YTD	Budgeted Revenue YTD
NW Natural	\$ 1,261,914	\$ 1,261,914

#### C. Expenditures

		Actual Expenditures YTD	Budgeted Expenditures YTD	Variance
<b>Commercial Programs</b>	Existing Buildings	\$ 401,357	\$ 599,880	\$ 198,523
	<b>Subtotal</b>	\$ 401,357	\$ 599,880	\$ 198,523
<b>Residential Programs</b>	Existing Homes	\$ 453,644	\$ 525,614	\$ 71,971
	New Homes	\$ 262,977	\$ 316,275	\$ 53,297
	<b>Subtotal</b>	\$ 716,621	\$ 841,889	\$ 125,268
<b>Administration</b>		\$ 38,530	\$ 49,187	\$ 10,657
<b>TOTAL</b>		\$ 1,156,509	\$ 1,490,957	\$ 334,448

The favorable spending variances in Existing Homes and New Homes reflect success in acquiring savings at a lower cost than budgeted. The favorable variance in the Existing Buildings program was driven in part by a shift in completion dates for three larger projects into 2013. As a result, these incentives will be paid in 2013.

**D. Incentives paid**

		<b>Actual Incentives YTD</b>
<b>Commercial Programs</b>	Existing Buildings	\$ 173,116
	<b>Subtotal</b>	\$ 173,116
<b>Residential Programs</b>	Existing Homes	\$ 162,801
	New Homes	\$ 147,609
	<b>Subtotal</b>	\$ 310,410
<b>TOTAL</b>		\$ 483,526

Incentives paid account for just under 50 percent of year-to-date program expense, when total program expense is adjusted down by 15 percent to account for costs that a utility-delivered program would recover through rates. This percentage would have been higher if savings had been acquired at a higher cost per therm.

**E. Savings**

		<b>Therms Saved YTD</b>	<b>Annual Goal (Conservative)</b>	<b>% Achieved YTD</b>	<b>\$/Therm</b>	<b>Levelized Cost/Therm</b>
<b>Commercial Programs</b>	Existing Buildings	107,764	121,678	89%	\$ 3.85	40.8 ¢
	<b>Subtotal</b>	107,764	121,678	89%	\$ 3.85	40.8 ¢
<b>Residential Programs</b>	Existing Homes	66,810	63,373	105%	\$ 7.02	55.6 ¢
	New Homes	38,912	29,645	131%	\$ 6.99	54.2 ¢
	<b>Subtotal</b>	105,723	93,018	114%	\$ 7.01	55.0 ¢
<b>TOTAL</b>		213,486	214,696	99%	\$ 5.42	48.2 ¢

While the rooftop unit tune-up savings were achieved cost effectively, particularly due to collaboration with Clark Public Utilities, the shorter measure lives of these improvements led to a higher levelized cost of savings for the Existing Buildings program than experienced in prior years. In total, the levelized cost is well below the \$0.65 per therm performance metric set by the WUTC.

## APPENDIX 1: 2012 Energy Efficiency Measure Counts and Savings

**Table 1: Residential Sector Measures**

Category	Measure	Measures Installed	Total Therms Saved
Air Sealing	Air Sealing	28	715
	Blower Door Test	40	0
	<b><i>Air Sealing Total</i></b>	<b>68</b>	<b>715</b>
Duct Sealing and Insulation	Duct Insulation	9	132
	Duct Sealing	65	2,176
	Duct Testing	78	0
	<b><i>Duct Sealing and Insulation Total</i></b>	<b>152</b>	<b>2,308</b>
Energy Saver Kits	<b><i>Energy Saver Kits Total</i></b>	<b>992</b>	<b>28,485</b>
Home Energy Reviews	<b><i>Home Energy Reviews Total</i></b>	<b>153</b>	<b>0</b>
Shell Insulation	Ceiling Insulation	32	3,160
	Floor Insulation	15	1,108
	Wall Insulation	9	506
	<b><i>Shell Insulation Total</i></b>	<b>56</b>	<b>4,774</b>
Space Heating	Boiler	1	44
	Furnace	152	10,655
	Gas Fireplace	76	7,784
	<b><i>Space Heating Total</i></b>	<b>229</b>	<b>18,483</b>
Water Heating	Tank Water Heater	35	981
	Tankless Water Heater	17	1,105
	Water Heater Thermostat Set-Back	19	138
	Showerheads Left Behind at Home Energy Review	191	2,424
	Showerwands Left Behind at Home Energy Review	49	633
	Faucet Aerators Left Behind at Home Energy Review	300	2,547
	Cold Water Detergent Left Behind at Home Energy Review	39	226
	Water-Saving Device Installed by Plumber	15	178
		<b><i>Water Heating Total</i></b>	<b>665</b>
Windows	<b><i>Windows Total</i></b>	<b>84</b>	<b>3,812</b>
New Homes	ENERGY STAR New Home	189	18,494
	Tankless Water Heater	4	260
	Low-Income Energy Saver Kit	178	1,282
	Showerheads Sold at Retail	1,828	16,354
	High-Efficiency Clothes Washer	642	2,523
	<b><i>New Homes Total</i></b>	<b>2,841</b>	<b>38,912</b>
	<b><i>Grand Total</i></b>	<b>5,240</b>	<b>105,723</b>

**Table 2: Commercial Sector Measures**

<b>Category</b>	<b>Measure</b>	<b>Measures Installed</b>	<b>Total Therms Saved</b>
Foodservice Equipment	Gas Fryer	5	2,845
	<b><i>Foodservice Equipment Total</i></b>	<b>5</b>	<b>2,845</b>
Shell Insulation	Ceiling Insulation	2	1,049
	<b><i>Shell Insulation Total</i></b>	<b>2</b>	<b>1,049</b>
Space Heating	Boiler	5	10,074
	Boiler Pipe Insulation	12	34,904
	<b><i>Space Heating Total</i></b>	<b>17</b>	<b>44,978</b>
Water Heating	Conventional Condensing Tank	8	1,224
	Tankless Water Heater	1	196
	<b><i>Water Heating Total</i></b>	<b>9</b>	<b>1,420</b>
Rooftop HVAC Tune-up	Rooftop HVAC Unit Tune-up DCV Control	177	56,330
	<b><i>HVAC Tune-up Total</i></b>	<b>177</b>	<b>56,330</b>
Custom	Building Operator Certification	1	1,142
	<b><i>Custom Total</i></b>	<b>1</b>	<b>1,142</b>
	<b><i>Grand Total</i></b>	<b>211</b>	<b>107,764</b>

## APPENDIX 2: Customer Satisfaction

In 2012, Energy Trust continued short telephone surveys of NW Natural customers in Washington who had participated in Energy Trust programs. Energy Trust attempted to reach 150 residential customers (participants in the Existing Homes program) and all commercial customers served in NW Natural's Washington service territory to determine satisfaction with their engagement in Energy Trust programs. Results from 143 residential customers and 5 commercial customers indicate a generally high level of customer satisfaction for both groups.

**Table 1: NW Natural Washington Residential Customer Satisfaction January 1-December 31, 2012**

Residential (n=143)	Dissatisfied	Neutral	Satisfied/Very satisfied
Overall	3%	8%	89%
Incentive application	2%	8%	90%
Turnaround time to receive incentive	11%	11%	78%

We were able to interview only 5 commercial customers (all participated in Q1 or Q2 2012) due to low project volume. Four of five respondents were satisfied or very satisfied with their overall program experience, interaction with program representative, and performance of equipment installed. All respondents were satisfied with the incentive amount and ease of applying for the incentive.

**Table 2: NW Natural Washington Commercial Customer Satisfaction January 1-December 31, 2012**

Commercial (n=5)	Dissatisfied	Neutral	Satisfied/Very satisfied
Overall	-	1	4
Incentive amount	-	-	5
Ease of applying for incentive	-	-	5
Interaction with program representative	1	-	4
Performance of equipment installed	-	-	4
Turnaround time to receive incentive	-	2	3

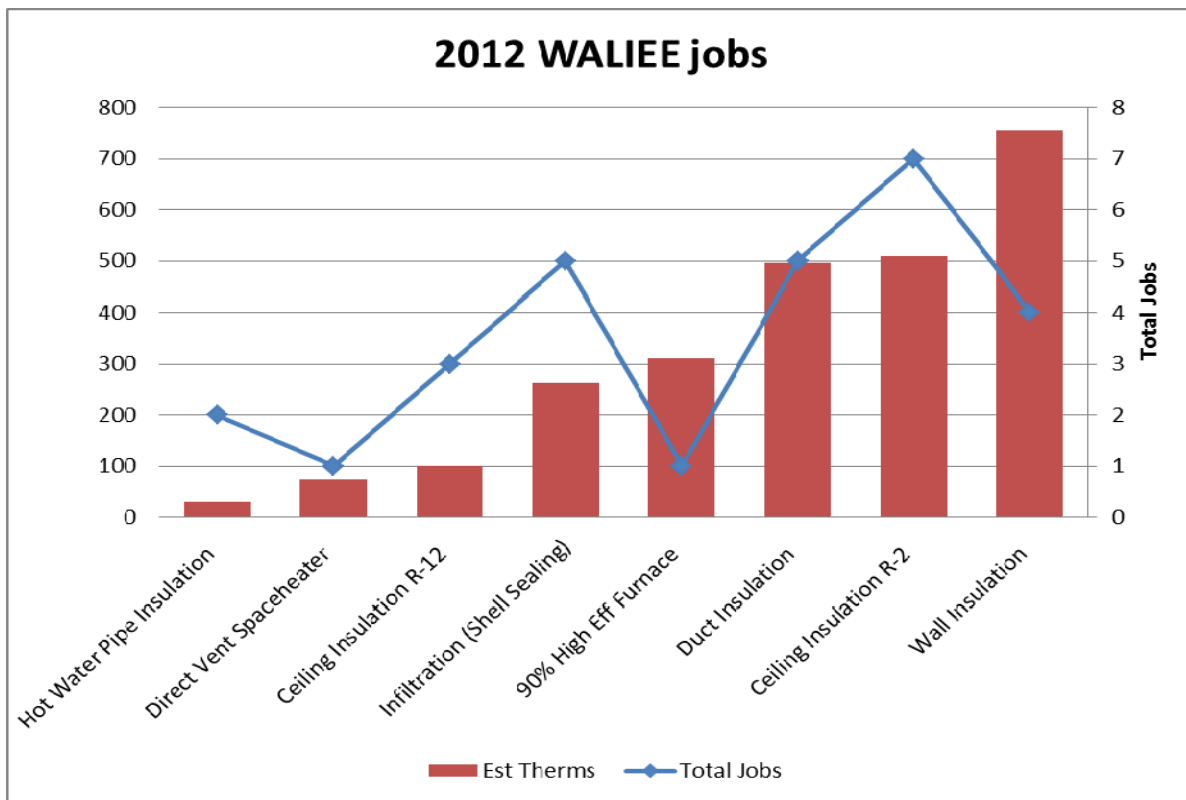
## Washington Low Income Energy Efficiency Program 2012 Program Results

NWN partners with Clark County’s Community Development Office and Skamania-Klickitat Community Action to administer its Washington Low Income Energy Efficiency (WA-LIEE) program. While offerings are available in Skamania and Klickitat counties, the agency that serves these counties rarely sees gas customers and did not provide services to any through WA-LIEE during 2012. Results below are specific to Clark County’s Department of Community Services.

The WA-LIEE program reimburses 90% of all cost-effective measures up to \$3500 per home. The agencies are also allotted 15% of job costs (up to the cap) for administrative costs and an average of \$440 per home for Health, Safety, and Repair (HSR), which are not subject to cost effectiveness tests. A WA-LIEE job could cost the program no more than \$4465.

### Measure Analysis:

For a breakout of how often individual weatherization and efficiency measures were completed and the savings associated with these measures in total refer to the figure below:



## Washington Low Income Energy Efficiency Program 2012 Program Results

### 2012 Results:

Performance Metric	Goal	Actual
Estimated homes served	20-40	8
Estimated Average Cost of per home	\$4465	\$3845
Total Estimated Program Cost	\$89,300 to \$178,600	\$30,761
Estimated average therms saved per home	211	319 <sup>1</sup>
Total estimated therms saved	4220 to 8440	2538
Estimated Cost per Therm	\$21	\$12

While actual completions are markedly below goal, significant efforts were taken to reach more low income gas-heat customers and analyze why income-eligible residents did not receive weatherization service. These include:

- In its November bill-insert newsletter (the *Comfort Zone*) NW Natural highlighted the WA-LIEE program and invited customers to participate. The distribution reached 54,400 customers, yet Clark County Weatherization department received only 12 inquiries.
- Customers receiving bill assistance are already income-qualified, yet not all opt for weatherization services. In 2012, the agency attempted a more proactive approach and assessed the dwelling eligibility of these applicants according to WA-LIEE. Of the 627 low income gas-heat customers who received bill assistance from November 1, 2011 through September 30, 2012, 201 had qualifying homes and were invited to receive weatherization services through WA-LIEE; only 10 responses were received from this mailing.
- The Energy Trust provided 1000 energy saver kits (no cost/low-cost direct install items) to the Clark Co Food Bank for distribution. In partnership with the Trust, the County created straightforward, highly visual postcard depicting weatherization, outlining the income requirements and inviting customers to participate. Only 154 kits were distributed (reason for this is unknown) but of these, no customers called the County for weatherization services.

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<sup>1</sup> An impact evaluation has not been conducted on these homes so the actual per therm savings has not been verified. 325 is based on modeling software estimates.

## **Washington Low Income Energy Efficiency Program 2012 Program Results**

NW Natural and the County will continue to target this customer segment and understand why efforts to date have not made a greater impact so that we can adjust outreach and make a bigger impact in 2013 in a community that could benefit significantly from warmer homes and lower bills.