

Weatherization Assistance
for Qualified Customers



2015 Annual Report
April 1, 2016

2015

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DESCRIPTION

The Weatherization Assistance for Qualified Customers (WAQC) program provides financial assistance to regional Community Action Partnership (CAP) agencies in Idaho Power's service area. This assistance helps fund weatherization costs of electrically heated homes occupied by qualified customers who have limited incomes. The WAQC program also provides a limited pool of funds for the weatherization of buildings occupied by non-profit organizations serving primarily special-needs populations, regardless of heating source, with priority given to buildings with electric heat. Weatherization improvements enable residents to maintain a more comfortable, safe, and energy-efficient home while reducing their monthly electricity consumption. Improvements are available at no cost to qualified customers who own or rent their homes. These customers also receive educational materials and ideas on using energy wisely in their homes. Local CAP agencies determine participant eligibility according to federal and state guidelines.

BACKGROUND

In 1989, Idaho Power began offering weatherization assistance in conjunction with the State of Idaho Weatherization Assistance Program (WAP). In Oregon, Idaho Power offers weatherization assistance in conjunction with the State of Oregon WAP. Through the WAQC program, Idaho Power provides supplementary funding to state-designated CAP agencies for the weatherization of electrically heated homes occupied by qualified customers and buildings occupied by non-profit organizations that serve special-needs populations. This allows CAP agencies to leverage their federal Low Income Home Energy Assistance Program (LIHEAP) weatherization funds and serve more customers with special needs.

Idaho Power has an agreement with each CAP agency for the WAQC program. The agreement specifies the funding allotment, billing requirements, and program guidelines. Currently, Idaho Power oversees the program in Idaho through five regional CAP agencies. The five regional CAP agencies include CCOA—Aging, Weatherization and Human Services (CCOA), Eastern Idaho Community Action Partnership (EICAP), El Ada Community Action Partnership (EL ADA), South Central Community Action Partnership (SCCAP), and Southeastern Idaho Community Action Agency (SEICAA). In Oregon, Community Connection of Northeast Oregon, Inc. (CCNO), and Community in Action (CINA) provide weatherization services for qualified customers in Idaho Power’s service area.

Idaho Power provides this *Weatherization Assistance for Qualified Customers 2015 Annual Report* in compliance with the Idaho Public Utilities Commission’s (IPUC) Order No. 29505.

This report includes the following topics:

- Review of weatherized homes and non-profit buildings by county
- Review of measures installed
- Overall cost-effectiveness
- Customer education and satisfaction
- Plans for 2016

REVIEW OF WEATHERIZED HOMES AND NON-PROFIT BUILDINGS BY COUNTY

In 2015, Idaho Power made available a total of \$1,325,070 to Idaho CAP agencies. Of the funds provided, \$1,286,911 were paid to Idaho CAP agencies in 2015, while \$38,159 were accrued for future funding. Of the funds paid in 2015, \$1,084,710 directly funded audits, energy efficiency measures, and health and safety measures for qualified customers' homes (production costs) in Idaho, and \$108,471 funded administration costs to Idaho CAP agencies for those homes weatherized. Idaho Power funding provided for the weatherization of 225 Idaho homes and 8 Idaho non-profit buildings in 2015. The production cost of the non-profit building weatherization measures was \$85,208, while \$8,521 in administrative costs were paid for the Idaho non-profit building weatherization jobs. In Oregon, Idaho Power paid \$30,884 in production costs for 10 qualified homes and \$3,088 in CAP agency administrative costs for homes in Malheur County. Table 1 shows each CAP agency, the number of homes weatherized, production costs, the average cost per home, administration payments, and total payments per county made by Idaho Power.

Table 1
2015 WAQC activities and Idaho Power expenditures by agency and county

Agency	County	Number of Homes	Production Cost	Average Cost ¹	Administration Payment to Agency	Total Payment
Idaho						
CCOA	Adams	1	\$ 7,394	\$ 7,394	\$ 739	\$ 8,133
	Canyon	32	182,874	5,715	18,287	201,162
	Gem	2	12,112	6,056	1,211	13,323
	Payette	5	24,966	4,993	2,497	27,463
	Valley	4	29,952	7,488	2,995	32,947
	Washington	3	18,517	6,172	1,852	20,369
	Agency Total	47	\$ 275,815	\$ 5,868	\$ 27,581	\$ 303,396
EICAP	Lemhi	3	11,625	3,875	1,163	12,788
	Agency Total	3	\$ 11,625	\$ 3,875	\$ 1,163	\$ 12,788
EL ADA	Ada	93	435,011	4,678	43,501	478,512
	Elmore	10	60,839	6,084	6,084	66,922
	Owyhee	4	20,950	5,237	2,095	23,045
	Agency Total	107	\$ 516,799	\$ 4,830	\$ 51,680	\$ 568,479
SCCAP	Blaine	2	9,253	4,626	925	10,178
	Gooding	4	21,196	5,299	2,120	23,315
	Jerome	8	27,347	3,418	2,735	30,082
	Twin Falls	22	104,370	4,744	10,437	114,807
	Agency Total	36	\$ 162,165	\$ 4,505	\$ 16,216	\$ 178,381
SEICAA	Bannock	20	68,204	3,410	6,820	75,025
	Bingham	8	33,396	4,174	3,340	36,736
	Power	4	16,706	4,176	1,671	18,376
	Agency Total	32	\$ 118,306	\$ 3,697	\$ 11,831	\$ 130,137
Total Idaho Homes		225	\$ 1,084,710	\$ 4,821	\$ 108,471	\$ 1,193,181
Idaho Non-Profit Buildings	Ada	2	16,314	–	1,631	17,945
	Bannock	1	1,465	–	147	1,612
	Bingham	1	9,761	–	976	10,737
	Canyon	1	17,607	–	1,761	19,368
	Owyhee	2	26,416	–	2,642	29,058
	Twin Falls	1	13,645	–	1,364	15,009
Total Idaho Non-Profit Buildings		8	\$ 85,208	\$ 10,651	\$ 8,521	\$ 93,729
Total Idaho		233	\$ 1,169,918		\$ 116,992	\$ 1,286,910

Table 1 (continued)

Agency	County	Number of Homes	Production Cost	Average Cost ¹	Administration Payment to Agency	Total Payment
Oregon						
CCNO	Baker	0	–	–	–	–
	Agency Total	0	–	–	–	–
CINA	Malheur	10	\$ 30,884	\$ 3,088	\$ 3,088	\$ 33,973
	Agency Total	10	\$ 30,884	\$ 3,088	\$ 3,088	\$ 33,973
Total Oregon homes		10	\$ 30,884	\$ 3,088	\$ 3,088	\$ 33,973
Total Program		243	\$ 1,200,803		\$ 120,080	\$ 1,320,883

¹ Average cost is equal to the production cost divided by the number of homes.

Note: Dollars are rounded.

The base funding for Idaho CAP agencies is \$1,212,534 annually, which does not include any carryover from the previous year. Idaho Power's agreements with CAP agencies include a provision that identifies a maximum annual average cost per home up to a dollar amount specified in the agreement between the CAP agency and Idaho Power. The intent of the maximum annual average cost is to allow CAP agency flexibility to service some homes with greater or fewer weatherization needs. It also provides a monitoring tool for Idaho Power to forecast year-end outcomes. The average cost per home weatherized is calculated by dividing the total annual Idaho Power production cost of homes weatherized per CAP agency by the total number of homes weatherized that the CAP agency billed to Idaho Power during the year. The maximum annual average cost per home the CAP agencies were allowed under the 2015 agreement was \$6,000. In 2015, Idaho CAP agencies had a combined average cost per home weatherized of \$4,821. In Oregon, the average was \$3,088 per home weatherized.

There is no maximum annual average cost for the weatherization of buildings occupied by non-profit agencies.

CAP agency administration fees are equal to 10 percent of Idaho Power's per-job production costs. The average administration cost paid to agencies per Idaho home weatherized in 2015 was \$482, and the average administration cost paid to Oregon agencies per Oregon home weatherized during the same period was \$309. Not included in this report's tables are additional Idaho Power staff labor, marketing, home verification, and support costs for the WAQC program totaling approximately \$58,000 for 2015. These expenses were in addition to the WAQC program funding requirements in Idaho specified in IPUC Order No. 29505.

In compliance with IPUC Order No. 29505, WAQC program funds are tracked separately, with unspent funds carried over and made available to CAP agencies in the following year.

In 2015, \$112,536 in unspent funds from 2014 were made available for expenditures in Idaho.

Table 2 details the funding base and available funds from 2014 and the total amount of 2015 spending.

Table 2
2015 WAQC base funding and unspent funds made available

Agency	2015 Base Funding	Available Funds from 2014	Total 2015 Allotment	Total 2015 Spending
Idaho				
CCOA.....	\$ 302,259	\$ 1,138	\$ 303,397	\$ 303,397
EICAP.....	12,788	–	12,788	12,788
EL ADA.....	568,479	–	568,479	568,479
SCCAP.....	167,405	56,406	223,811	178,381
SEICAA.....	111,603	\$ 21,792	133,395	130,137
Non-profit buildings.....	50,000	33,200	83,200	93,729
Idaho Total.....	\$ 1,212,534	\$ 112,536	\$ 1,325,070	\$ 1,286,911
Oregon				
CCNO.....	\$ 6,750	\$ 5,572	\$ 12,322	\$ 0
CINA.....	38,250	–	38,250	33,973
Oregon Total.....	\$ 45,000	\$ 5,572	\$ 50,572	\$ 33,973

Note: Dollars are rounded.

REVIEW OF MEASURES INSTALLED

Table 3 details home counts for which Idaho Power paid all or a portion of the measure costs during 2015. The Home Counts column represents the number of times any percentage of that measure was billed to Idaho Power during the year. If totaled, measure counts would be higher than total homes weatherized because the number of measures installed in each home varies. For example, Table 3 shows 59 homes in Idaho received a compact fluorescent lamps (CFL) measure. Each home received more than one bulb. Consistent with the Idaho WAP, the WAQC program offers several measures that have costs but do not necessarily save energy or for which the savings cannot be measured. Included in this category are health and safety measures, vents, furnace repairs, other, and home energy audits. Health and safety measures are necessary to ensure weatherization activities do not cause unsafe situations in a customer's home or compromise a home's existing indoor air quality. Other non-energy-saving measures are allowed under this program because of their interaction with the energy-saving measures. Examples of items included in the "other" measure category include vapor barriers, dryer vent hoods, and necessary electrical upgrades. The EA5 energy audit program (EA5) is a software program approved for use by the United States (US) Department of Energy (DOE). The Idaho Department of Health and Welfare (IDHW) uses the EA5 for the Idaho WAP and therefore, the Idaho CAP agency weatherization managers use the EA5. The EA5 includes material costs, labor costs for installation, agency and contractor support costs, and estimated savings for individual measures.

Table 3
2015 WAQC review of measures installed

	Home Counts		Production Costs
Idaho Home and Non-Profit Measures			
Windows.....	142	\$	182,997
Doors.....	94		62,568
Wall insulation.....	17		4,762
Ceiling insulation.....	103		75,123
Vents.....	17		1,136
Floor insulation.....	85		85,086
Infiltration.....	127		30,138
Ducts.....	52		24,687
Health and safety.....	44		16,650
Other.....	44		13,118
Water heater.....	7		6,431
Pipes.....	58		3,271
Refrigerator.....	10		7,948
Furnace tune.....	2		791
Furnace repair.....	21		17,203
Furnace replace.....	160		622,001
CFL.....	59		3,269
Audit.....	126		12,740
Total Idaho Homes and Non-Profit Measures		\$	1,169,918
Oregon Home Measures			
Windows.....	4	\$	5,914
Doors.....	3		1,216
Ceiling insulation.....	5		6,904
Vents.....	5		2,048
Floor insulation.....	4		7,152
Infiltration.....	10		2,188
Ducts.....	4		2,664
Health and safety.....	7		2,323
Pipes.....	1		57
CFL.....	4		419
Total Oregon Homes Measures		\$	30,884

Note: Dollars are rounded.

Annually, Idaho Power physically verifies approximately 10 percent of the homes weatherized under the WAQC program. This is done through two methods. The first method includes the Idaho Power program specialist participating in Idaho's and Oregon's state monitoring process that reviews weatherized homes. The process involves utility representatives; weatherization personnel from the CAP agencies; Community Action Partnership Association of Idaho, Inc. (CAPAI); and representatives from the IDHW or Oregon Housing and Community Services (OHCS) reviewing homes weatherized by each of the CAP agencies.

The second method involves Idaho Power contracting with two companies—The Energy Auditor, Inc. (The Energy Auditor), and Momentum, LLC (Momentum)—that employ certified building performance specialists to verify installed measures in customer homes. The Energy Auditor verifies homes weatherized for the WAQC program in Idaho Power's eastern and southern Idaho regions. The owner of The Energy Auditor is certified by Performance Tested Comfort Systems and is an ENERGY STAR[®] home performance specialist. Momentum verifies weatherization services provided through the WAQC program in the Capital and Canyon regions of Idaho and in the company's Oregon service area. The owner of Momentum is a Residential Energy Services Network (RESNET[®]) certified home energy rater. After these companies verify installed measures, any required follow-up is done by the CAP agency personnel.

OVERALL COST-EFFECTIVENESS

In customer homes, the Idaho CAP agency weatherization auditor uses the EA5 to conduct the initial audit of potential energy savings for a home. The EA5 compares the efficiency of the home prior to weatherization to the efficiency after the proposed improvements and calculates the value of the efficiency change into a savings-to-investment ratio (SIR). The output of the

EA5 SIR is similar to the participant cost test (PCT) ratio. If the EA5 computes an SIR of 1.0 or higher, the CAP agency is authorized to complete the proposed measures. The weatherization manager then is able to split production costs between Idaho Power and WAP with a maximum charge of 85 percent of production costs to Idaho Power.

The program was not cost-effective in 2015, with a total utility cost (UC) benefit-cost (BC) ratio of 0.54 and a BC ratio from the total resource cost (TRC) perspective of 0.43. In 2015, Idaho Power claimed an average of 2,263 kilowatt-hour (kWh) per-home or project, which provides real and substantial savings on a per-unit basis and provides measurable benefits for the residents. However, due to the costs of comprehensive whole-house weatherization, it is difficult for the value of the savings to outweigh the costs. WAQC offers several measures that have costs but do not save energy or for which savings cannot be measured.

In 2014, Idaho Power conducted a billing analysis on 2012 participants' actual usage data and applied these results to report savings for 2015 program year projects. The company conducted the data analysis to increase Idaho Power's understanding of savings resulting from the program and to update billing savings provided by a third-party impact evaluation completed in 2012 using 2011 projects. The total claimed estimated savings for 2015 projects were 550,021 kWh, with 139,590 kWh from single-family homes and 372,360 kWh from manufactured homes. An additional 38,071 kWh savings resulted from weatherization projects at non-profit sites.

Idaho Power used savings of 1.03 kWh per-square-foot of weatherized heated space for the eight WAQC non-profit projects in 2015, based on the average decrease in annual energy intensity from the 2012 single-family homes billing analysis. Conducting a billing analysis on

non-profit projects is not applicable due to the small number of projects and their lack of homogeny.

The company plans to continue monitoring realized energy savings from WAQC through periodic billing analyses. Idaho Power began a new billing analysis in 2015 for completion in 2016. The new analysis will assess current program savings impacts related to increased use of furnace replacements with heat pumps during the 2013 to 2014 program years. Idaho Power will use the results for possible program improvement and to understand how different measure combinations may impact overall household savings.

The Regional Technical Forum (RTF) conducted a billing analysis in 2015 on Idaho Power's manufactured-home weatherization projects from 2011 to 2012, and their analysis validated Idaho Power's internal analysis completed in 2012. The RTF analysis led to increased collaboration of statistical software programming and data cleaning recommendations between RTF contract analyst staff and Idaho Power.

The following recommendations from the IPUC staff's report and IPUC Order No. 32788 were used for the 2015 cost-effectiveness analysis:

- Applying a 100-percent net-to-gross (NTG) value to reflect the likelihood that WAQC weatherization projects would not be initiated without the presence of a program
- Claiming 100 percent of project savings
- Including an allocated portion of the indirect overhead costs
- Applying the 10-percent conservation preference adder

- Claiming \$1 of benefits for each dollar invested in health, safety, and repair measures
- Amortizing evaluation expenses over a three-year period

CUSTOMER EDUCATION AND SATISFACTION

Idaho Power provides materials to each CAP agency to help educate qualified customers who receive weatherization assistance on using energy efficiently. Included in the materials are copies of the Idaho Power booklet *30 Simple Things You Can Do to Save Energy* and *Energy Saving Tips*, which describes energy conservation tips for the heating and cooling seasons, and a pamphlet that describes the energy-saving benefits of using CFL, light-emitting diodes (LED) lamps, and other tips for choosing the right bulb. Idaho Power actively informs customers about WAQC through energy and resource fairs and other customer contacts. Idaho Power's Customer Service Center regularly informs customers about the program.

To stay current with new programs and services, Idaho Power attends state and federal energy assistance/weatherization meetings and other weatherization-specific conferences. Idaho Power is also active in the Policy Advisory Council, helping advise and direct Idaho's state weatherization application for funding to the US DOE.

Idaho Power uses independent, third-party verification companies. Home verifiers ensure the stated measures were installed in the homes of participating customers and discuss the program with these customers. Home verifiers visited 28 homes, requesting feedback about the program in 2015. When asked how much customers learned about saving electricity, 22 customers answered they learned "a lot" or "some." When asked how many ways they tried to save electricity, 25 customers responded "a lot" or "some."

As recommended by Johnson Consulting in the 2013 process evaluation, a customer survey was again used to assess major indicators of customers' satisfaction throughout the service area.

The 2015 Weatherization Programs Customer Survey was provided to all program participants in all regions upon completion of weatherization in their homes. Survey questions gathered information about how customers learned of the program, reasons for participating, how much customers learned about saving energy in their homes, and the likelihood of household members changing behaviors to use energy wisely.

Idaho Power received survey results from 211 of the 235 households weatherized by the program in 2015. Of the 211 surveys received back from customers, 201 were from Idaho customers and 10 were from Oregon customers. Some highlights include the following:

- Almost 46 percent of respondents learned of the program from a friend or relative, and another almost 22 percent learned of the program from an agency flyer. Nearly five percent learned about the weatherization program by receiving a letter in the mail.
- Over 86 percent of the respondents reported that their primary reason for participating in the weatherization program was to reduce utility bills, and over 44 percent wanted to improve the comfort of their home.
- Almost 82 percent reported they learned how air leaks affect energy usage, and just over 68 percent indicated they learned how insulation affects energy usage during the weatherization process. Over 54 percent of respondents said they learned how to use energy wisely.

- Over 83 percent reported they were very likely to change habits to save energy, and just over 82 percent reported they have shared all of the information about energy use with members of their household.
- Over 93 percent of the respondents reported they think the weatherization they received will significantly affect the comfort of their home and over 98 percent said they were very satisfied with the program.
- Over 85 percent of the respondents reported the habit they were most likely to change was turning off lights when not in use and nearly 65 percent said that washing full loads of clothes was a habit they were likely to change to save energy. Turning the thermostat up in the summer was reported by over 51 percent and turning the thermostat down in the winter was reported by over 66 percent as a habit they and members of the household were most likely to change to save energy.

A summary of the report is included in the *Demand-Side Management 2015 Annual Report Supplement 2: Evaluation* available online at idahopower.com/EnergyEfficiency/reports.cfm.

PLANS FOR 2016

As in previous years, unless directed otherwise, Idaho Power will continue to provide financial assistance to CAP agencies while exploring changes to improve program delivery and continue to provide the most benefit possible to special-needs customers while working with Idaho and Oregon WAP personnel.

Idaho Power will continue to participate in the Idaho and Oregon state monitoring process of weatherized homes and will continue to verify approximately 10 percent of the homes weatherized under the WAQC program via certified home-verification companies.

Idaho Power will continue its involvement with the State of Idaho's Policy Advisory Council that serves as an oversight group for weatherization activities in Idaho as well as review state grant applications for federal funding.

Idaho Power plans to selectively market the WAQC program throughout 2016. The program is to be promoted at resource fairs, community special-needs populations' service-provider meetings, and CAP agency functions to reach customers who may benefit from the program.

Additional marketing for this program will be conducted in cooperation with weatherization managers.

Idaho Power will continue working in partnership with the IDHW, OHCS, CAPAI, and individual CAP agency personnel to maintain the targets and guidelines and improve the overall WAQC program.

In 2016, Idaho Power will support the whole-house philosophy of the WAQC program and the Idaho and Oregon WAP by continuing to contract a \$6,000 annual maximum average per-home cost. Based on the required funding, Idaho Power estimates 192 homes in Idaho and Oregon and approximately 4 non-profit buildings in Idaho will be weatherized in 2016. In Idaho during 2016, Idaho Power expects to fund the base amount plus available funds from 2015 to total approximately \$1,251,000 in weatherization measures and agency administration fees. Of this amount, approximately \$39,500 will be provided to the non-profit pooled fund to weatherize buildings housing non-profit agencies that primarily serve qualified customers in Idaho.

Service-area wide, Idaho Power will provide the WAQC program approximately \$1,313,000 in funding in 2016 for the weatherization of homes and buildings of non-profit agencies serving qualified customers.